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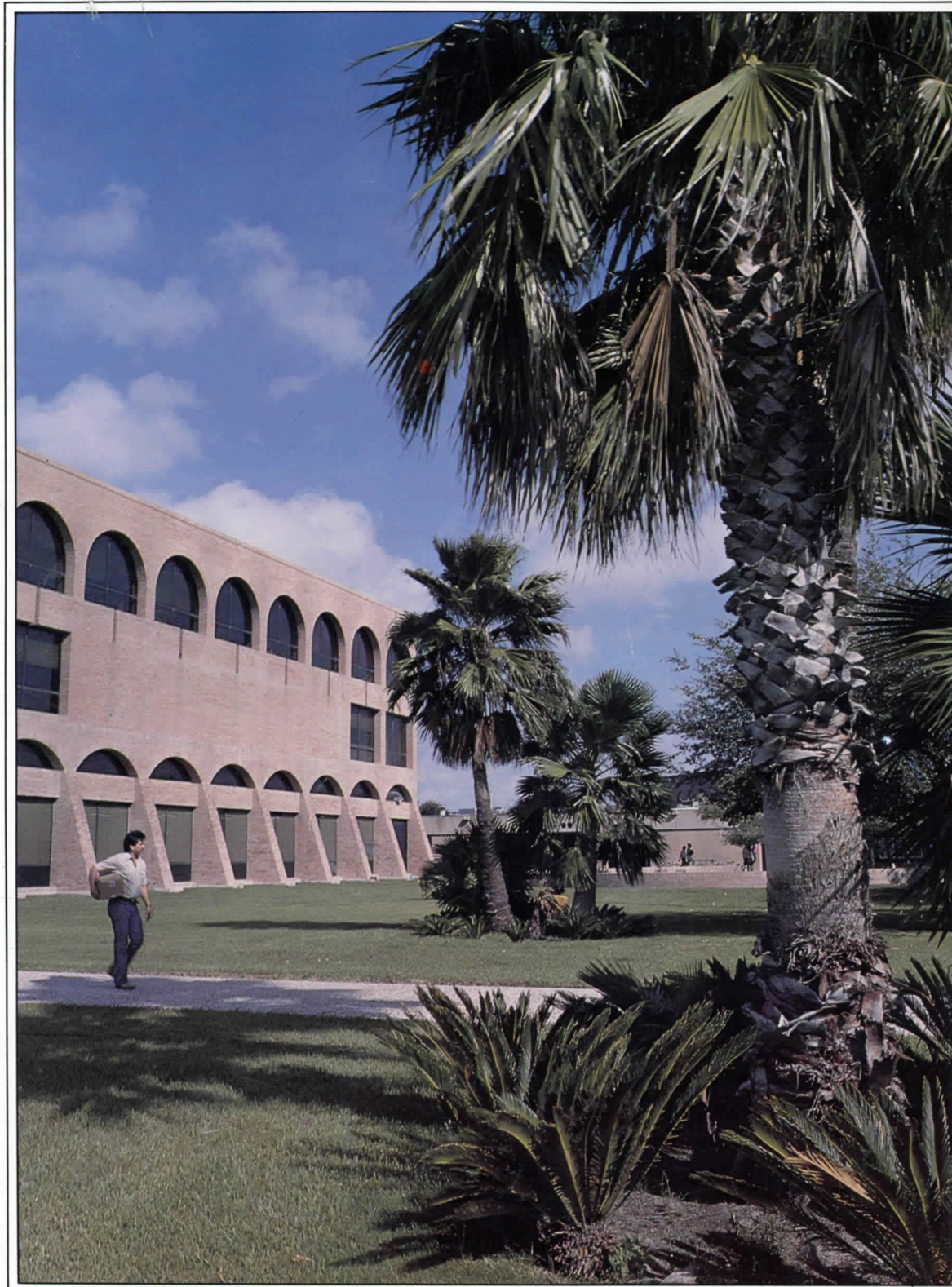
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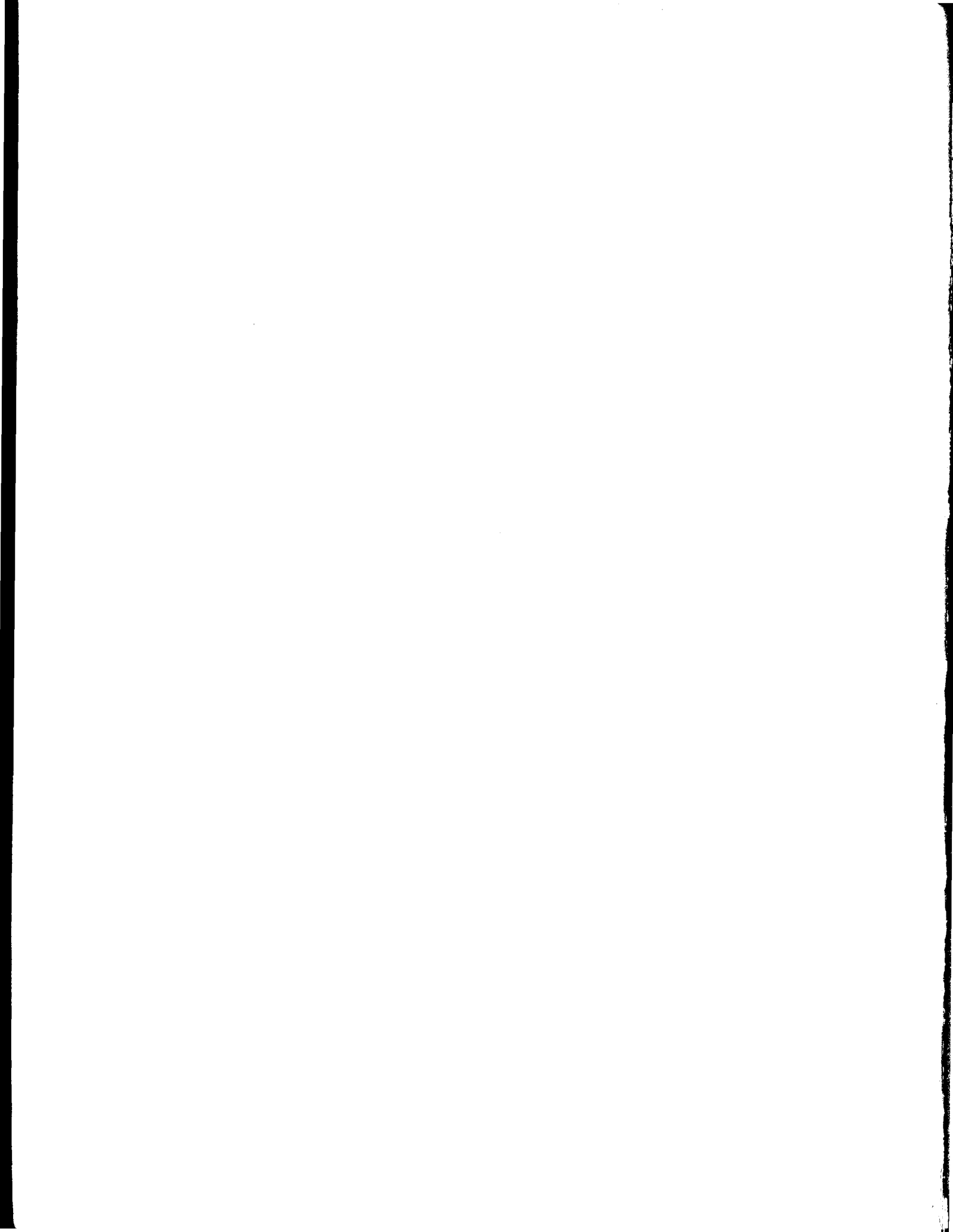
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Pan American University

1988/1990





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Bulletin
of
Pan American University

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American Association of Schools, Colleges, Universities
American Council on Education
American Association of Colleges for Teacher Education
Southern Association of Colleges and Schools
Approved for Teacher Education by the
Texas Education Agency

Pan American University is accredited by
the Commission on Colleges of the
Southern Association of Colleges and Schools

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While this bulletin was prepared on the basis of the best information available at the time, Pan American University reserves the right to change any information, including statement of fees, course offerings, and admission and graduation requirements, without notice or obligation, in keeping with the policies of the Board of Regents and in conformance with the laws of the State of Texas.

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PAN AMERICAN UNIVERSITY CALENDAR 1988-89

Dates and deadlines for applications for student loans, scholarships, or other financial aid are set up in the Financial Aid office and are listed in the Student Affairs section of this bulletin.

For ACT, GRE, GMAT, and other test information contact the Testing Office.

The Brownsville Campus calendar does not coincide with this calendar in all respects. Refer to the Brownsville supplement for further information.

FIRST SEMESTER, 1988

August 1, Monday

Application for admission and supporting documents (transcript of credits and ACT test results for freshmen or GRE test scores for graduate students, also, GMAT scores for graduate business students) must be received by the Office of Admissions and Records by this date to insure processing for admission to the Fall Semester. Prospective students should file documents as early as possible before this deadline.

August 28, Sunday

Dormitories open for occupancy at 1:00 p.m.

August 30, Tuesday

Brownsville campus registration by appointment.

August 31, Wednesday

1. Registration by appointment for evening classes.
2. Dining Service opens for Breakfast (Meal Plan or Cash).

September 1-2, Inclusive

Registration by appointment.

September 5, Monday

Labor Day, No Classes

September 6, Tuesday

1. Classes begin.
2. Schedule changes and late registration.

September 8, Thursday

Last day for schedule changes and late registration.

September 21, Wednesday

Twelfth class day.

September 24-25, Inclusive

Tentative dates for disbursement of financial aid checks.

October 3, Monday

Deadline for submission of financial aid application for Spring Semester awards.

October 5, Wednesday

Last day to drop a course or to withdraw from the University without having a grade recorded. Last day to change to Non-Credit.

October 10, Monday

Deadline for filing Application for Degree form with the Office of Admissions and Records for baccalaureate students expecting to graduate in May 1989, and for graduate students expecting to receive a master's degree in May 1989.

November 7, Monday

Deadline for filing completed signed thesis with Dean of major school for students expecting to receive a master's degree in December 1988.

November 24-26, Inclusive

Thanksgiving.

- December 8, Thursday
Last day to officially drop or withdraw through the Office of Admissions and Records.
- December 15-21, Inclusive
First semester final examinations for night classes.
- December 15-16, Inclusive
1. Limited departmental final examinations.
 2. Dead Days.
- December 17-22, Inclusive
First semester final examinations for day classes begin with Saturday.
- December 22, Thursday
Dining Service closes at 6:30 p.m.
- December 23, Friday
1. Grade reports due in Office of Admissions and Records by 10:00 a.m.
 2. End of first semester.
 3. Dormitories close at noon.
- December 23, Friday
Commencement exercises.
-

SECOND SEMESTER, 1989

- December 5, Monday
Application for admission and supporting documents (transcript of credits and ACT test results for freshmen or GRE test scores for graduate students, also, GMAT scores for graduate business students) must be received by the Office of Admissions and Records by this date to insure processing for admission to the spring semester. Prospective students should file documents as early as possible before this deadline.
- January 10, Tuesday
1. Brownsville campus registration by appointment.
 2. Dormitories open at 12 noon.
- January 11, Wednesday
Registration for Edinburg campus by appointment for evening classes.
- January 12-13, Inclusive
1. Registration by appointment.
 2. Dining Service open for breakfast (Meal Plan or Cash).
- January 16, Monday
1. Classes begin
 2. Schedule changes and late registration.
- January 18, Wednesday
Last day for schedule change and late registration.
- February 6, Monday
Deadline for filing Application for Degree form with the Office of Admissions and Records for baccalaureate students expecting to graduate in August 1989 and graduate students expecting to receive a master's degree in August 1989.
- January 31, Tuesday
Twelfth class day.
- February 8-9, Inclusive
Tentative dates for disbursement of financial aid checks.
- February 14, Tuesday
Last day to drop a course or to withdraw from the University without having a grade recorded. Last day to change to Non-Credit.
- March 1, Wednesday
1. Deadline for submission of financial aid applications for summer awards.
 2. Deadline for scholarship applications for 1989-90.
- March 17, Friday
1. Dining Service closes at 6:30 p.m.
 2. Dormitories close.
- March 20-25, Inclusive
Spring Break and Easter
- March 26, Sunday
Dormitories reopen.
- March 27, Monday
Dining Service opens at breakfast.

- April 10, Monday
Deadline for filing completed signed thesis with the Dean of Major School for students expecting to receive a Master's Degree in May 1989.
- April 27, Thursday
Last day to officially drop or withdraw through the Office of Admissions and Records.
- May 1, Monday
Deadline for submission of financial aid application for Fall Semester awards.
- May 4-10, Inclusive
Second semester final examinations for night classes.
- May 4-5, Inclusive
1. Limited departmental final examinations.
 2. Dead Days.
- May 6-11, Inclusive
Second semester final examinations for day classes.
- May 11, Thursday
Dining Service closes at noon.
- May 12, Friday
1. Dormitories close at noon.
 2. Grade reports due in Office of Admissions and Records by 10:00 a.m.
- May 12, Friday
Commencement exercises.

SUMMER SESSION, 1989

- April 24, Monday
Application for admission and supporting documents (transcript of credits and ACT test results for freshmen or GRE test scores for graduate students, also, GMAT scores for graduate business students) must be received by the Office of Admissions and Records by this date to insure processing for admission for the summer session. Prospective students should file documents as early as possible before this deadline.
- June 1, Thursday
1. Brownsville campus registration by appointment
 2. Dormitories open at 12 noon.
- June 2, Friday
1. Registration by appointment for first summer term.
 2. Dining Service opens for breakfast (Meal Plan or Cash).
- June 5, Monday
Classes begin.
- June 19, Monday
Deadline for filing an application for degree form with the Office of Admissions and Records for baccalaureate students expecting to graduate in December 1989 and for graduate students expecting to receive a master's degree in December 1989.
- June 7, Wednesday
Last day to register or make changes in class schedules.
- June 8, Thursday
Fourth class day.
- June 14, Wednesday
Last day to drop or withdraw without having a grade recorded.
- June 30, Friday
Last day to officially drop or withdraw through the Office of Admissions and Records.
- July 4, Tuesday
Independence Day, no classes.
- July 8, Saturday
Dormitory closes for students not returning for the second summer session.
- July 10, Monday
1. First term final examinations on Edinburg campus.
 2. Brownsville campus registration by appointment.
 3. Dining Service closes at 6:30 p.m. for those students not returning for the second summer session.
- Dormitory closes for students not returning for the second summer session.

July 11, Tuesday

Registration by appointment for second summer term.

July 12, Wednesday

Grade reports due in Office of Admissions and Records by 11:00 a.m.

July 13, Thursday

Classes begin.

July 17, Monday

1. Last day to register or make changes in class schedule.
2. Deadline for filing completed and signed thesis with the Dean of major school for students expecting to graduate in August 1989.

July 18, Tuesday

Fourth class day.

July 21, Friday

Last day to drop or withdraw without having a grade recorded.

August 8, Tuesday

Last day to officially drop or withdraw through the Office of Admissions and Records.

August 16, Wednesday

1. Second term final examinations.
2. Dining Service closes at 6:30 p.m.

August 18, Friday

1. Grade reports due in Office of Admissions and Records by 10:00 a.m.

PAN AMERICAN UNIVERSITY CALENDAR 1989-90

Dates and deadlines for applications for student loans, scholarships, or other financial aid are set up in the Financial Aid office and are listed in the Student Affairs section of this bulletin.

For ACT, TASP, GRE, GMAT, and other test information contact the Testing Office.

The Brownsville Campus calendar does not coincide with this calendar in all respects. Refer to the Brownsville supplement for further information.

FIRST SEMESTER, 1989

August 7, Monday

Application for admission and supporting documents (transcript or credits and ACT and TASP test results for freshmen or GRE test scores for graduate students, also, GMAT scores for graduate business students) must be received by the Office of Admissions and Records by this date to insure processing for admission to the Fall Semester. Prospective students should file documents as early as possible before this deadline.

August 20, Sunday

Dormitories open for occupancy at 1:00 p.m.

August 22, Tuesday

Brownsville campus registration by appointment.

August 23, Wednesday

1. Registration by appointment for evening classes.
2. Dining Service opens for Breakfast (Meal Plan or Cash).

August 24-25, Inclusive

Registration by appointment.

August 28, Monday

1. Classes begin.
2. Schedule changes and late registration.

August 31, Thursday

Last day for schedule changes and late registration.

September 4, Monday

Labor Day, no classes.

September 13, Wednesday

Twelfth class day.

September 20-21, Inclusive

Tentative dates for disbursement of financial aid checks.

September 27, Wednesday

Last day to drop a course or to withdraw from the University without having a grade recorded. Last day to change to Non-Credit.

October 2, Monday

Deadline for submission of financial aid application for Spring Semester awards.

October 9, Monday

Deadline for filing Application for Degree form with the Office of Admissions and Records for baccalaureate students expecting to graduate in May 1990 and for graduate students expecting to receive a master's degree in May 1990.

November 6, Monday

Deadline for filing completed signed thesis with Dean of major school for students expecting to receive a master's degree in December 1989.

November 22, Wednesday

Dining Service closes at 6:30 p.m.

November 23-25, Inclusive

Thanksgiving.

November 29, Wednesday

Last day to officially drop or withdraw through the Office of Admissions and Records.

December 7-8, Inclusive

1. Limited departmental final examinations.
2. Dead days.

December 9-14, Inclusive

First semester final examinations.

December 14, Thursday

Dining Service closes at 6:30 p.m.

December 15, Friday

1. Grade reports due in Office of Admissions and Records by 10:00 a.m.
2. End of first semester.
3. Dormitories close at noon.

December 17, Sunday

Commencement exercises.

SECOND SEMESTER, 1990

December 4, Monday

Application for admission and supporting documents (transcript of credits and ACT and TASP test results for freshmen or GRE test scores for graduate students, also, GMAT scores for graduate business students) must be received by the Office of Admissions and Records by this date to insure processing for admission to the spring semester. Prospective students should file documents as early as possible before this deadline.

January 9, Tuesday

1. Brownsville campus registration by appointment.
2. Dormitories open at 12 noon.

January 10, Wednesday

Registration for Edinburg campus by appointment for evening classes.

January 11-12, Inclusive

1. Registration by appointment.
2. Dining Service opens for breakfast (Meal Plan or Cash).

January 15, Monday

1. Classes begin.
2. Schedule changes and late registration.

January 17, Wednesday

Last day for schedule change and late registration.

February 5, Monday

Deadline for filing an Application for Degree form with the Office of Admissions and Records for baccalaureate students expecting to graduate in August, 1990, and for graduate students expecting to receive a master's degree in August 1990.

January 30, Tuesday

Twelfth class day.

February 7-8, Inclusive

Tentative dates for disbursement of Financial aid checks.

February 13, Tuesday

Last day to drop a course or to withdraw from the University without having a grade recorded. Last day to change to Non-Credit.

March 1, Tuesday

1. Deadline for submission of financial aid applications for summer awards.
2. Scholarship application deadline for 1990-91.

March 9, Friday

1. Dining Service closes at 6:30 p.m.
2. Dormitories close.

March 12-17, Inclusive

Spring Break.

- March 18, Sunday
Dormitories reopen.
- March 19, Monday
Dining Service opens at breakfast.
- April 13-14, Inclusive
Easter
- April 9, Monday
Deadline for filing completed signed thesis with the Dean of major school for students expecting to receive a master's degree in May, 1990.
- April 25, Wednesday
Last day to officially drop or withdraw through the Office of Admissions and Records.
- May 1, Tuesday
Deadline for submission of financial aid application for Fall Semester awards.
- May 3-4, Inclusive
1. Limited departmental final examinations.
 2. Dead days.
- May 5-10, Inclusive
Second semester final examinations.
- May 10, Thursday
Dining Service closes at 6:30 p.m.
- May 11, Friday
1. Dormitories close at noon.
 2. Grade reports due in Office of Admissions and Records by 10:00 a.m.
- May 13, Sunday
Commencement exercises.

SUMMER SESSION, 1990

- April 23, Monday
Application for admission and supporting documents (transcript of credits and ACT and TASP test results for freshmen or GRE test scores for graduate students, also, GMAT scores for graduate business students) must be received by the Office of Admissions and Records by this date to insure processing for admission to the summer session. Prospective students should file documents as early as possible before this deadline.
- May 31, Thursday
1. Brownsville campus registration by appointment.
 2. Dormitories open at 12 noon.
- June 1, Friday
1. Registration by appointment for first summer term.
 2. Dining Service opens for breakfast (Meal Plan or Cash).
- June 4, Monday
Classes begin.
- June 6, Wednesday
Last day to register or make changes in class schedules.
- June 7, Thursday
Fourth class day.
- June 18, Monday
Deadline for filing an Application for Degree form with the Office of Admissions and Records for baccalaureate students expecting to graduate in December 1990, and for graduate students expecting to receive a master's degree in December, 1990.
- June 13, Wednesday
Last day to drop or withdraw without having a grade recorded.
- July 2, Monday
Last day to officially drop or withdraw through the Office of Admissions and Records.
- July 4, Wednesday
Independence Day, No classes.

July 7, Saturday

Dormitory closes for students not returning for the second summer session.

July 9, Monday

1. First term final examinations on Edinburg campus.
2. Brownsville campus registration by appointment.
3. Dining Service closes at 6:30 p.m. for those students not returning for the second summer session.

July 10, Tuesday

Registration by appointment for the second summer session.

July 11, Wednesday

First summer grades due in Office of Admissions and Records by 9:00 a.m.

July 12, Thursday

Classes begin.

July 16, Monday

Last day to register or make changes in class schedule.

Deadline for filing completed and signed thesis with the dean of major school for students expecting to graduate in August, 1990.

July 17, Tuesday

Fourth class day.

July 20, Friday

Last day to drop or withdraw without having a grade recorded.

August 7, Tuesday

Last day to officially drop or withdraw through the Office of Admissions and Records.

August 15, Wednesday

Second term final examinations.

August 17, Friday

1. Second summer grades due in Office of Admissions and Records by 10:00 a.m.
2. Dining Service closes at 6:30 p.m.
3. Dormitories close.

Pan American At a Glance:

Character: A four-year, state-supported institution.

Location: Edinburg, Texas; close to the Mexican border and the Gulf of Mexico.

History: Pan American University is a comprehensive, public co-educational institution. Pan American University originated in 1927 as Edinburg College, a two-year community college. In 1933, the school 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 1948, the college was designated a Regional College, separating 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 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.

On September 1, 1963, Pan American College became part of the Texas System of Colleges and Universities. On September 1, 1965, the college became the 22nd institution of higher learning in Texas, receiving full state assistance. In 1970, Pan American College was approved to offer graduate instruction. And, in 1971, the institution was renamed Pan American University.

In 1973, Pan American University began offering off-campus instruction in Brownsville. In 1977, the Texas Legislature authorized the establishment of Pan American University at Brownsville (Chapter 112.51, Texas Education Code).

Pan American University is accredited by the Southern Association of Colleges and Schools with the latest evaluation occurring in 1986. Associate degrees are offered in two program areas and baccalaureate degrees are available in 48 major areas. Master's degrees are awarded in 19 fields. Programs at Pan American University are also accredited by the American Assembly of Collegiate Schools of Business, National League for Nursing, Board of Nurse Examiners for the State of Texas, National Association of Social Workers, Committee on Allied Health Education and Accreditation of the American Medical Association, National Council for Accreditation of Teacher Education and American Dietetic Association. All academic programs are located in one of four academic units, College of Arts and Sciences, School of Education, School of Business Administration, and Division of Health-Related Professions.

Academics: A multitude of courses available with major areas of study including:

- Fine Arts
- Business
- Education
- Health Related Professions
- Humanities
- Science and Mathematics
- Social Sciences

Graduate degrees available in:

- Business Administration
- Bilingual/Bicultural (Elementary)
- Communication Disorders
- English as a Second Language
- Reading (Elementary and Secondary)
- Education (Elementary and Secondary)
- Counseling and Guidance (Elementary and Secondary)

Diagnostic Education (Elementary)
Supervision (Elementary and Secondary)

Health and Kinesiology

Educational Administration

English

History

Interdisciplinary Studies: Concentrations in English, History,
Mathematics, and Spanish

Biology

Admissions: Pan American University maintains an open admissions policy at the undergraduate level.

Pan American University

Mission Statement: Pan American University

Pan American University, as a state-supported institution of higher learning, is committed to providing quality academic programs based on liberal arts traditions. In the belief that an educated citizenry is essential to the development and maintenance of a free democratic society, Pan American endeavors to provide access for all who wish to participate in the pursuit of knowledge and ideas. Pan American University seeks to contribute to the examination of ideas and the dissemination of knowledge for the benefit of its students and society, with full awareness and appreciation of the multi-lingual, multi-cultural, and multi-faceted world in which we live. While teaching, research and service are all fundamental elements of the institutional mission, the first priority is teaching.

Pan American University strives to fulfill its responsibilities by providing strong academic programs for selected professions at the undergraduate and graduate levels, providing access to all who wish to participate in the pursuit of knowledge and ideas, offering a variety of quality programs leading to associate, baccalaureate, and graduate degrees, basing those programs on broad general education requirements solidly grounded in liberal arts traditions, providing strong curricula leading to career opportunities and to graduate and professional study beyond the undergraduate level, and demanding completion requirements which ensure competency in basic skills and program areas. In serving the state, the institution strives to provide professional and pre-professional offerings as well as other instructional and continuing education programs designed to serve the needs of citizens throughout the service area.

Pan American University is committed to an open-admissions policy at the undergraduate level and to the highest academic standards in all of its programs. The University pledges itself to the fullest development of human talent by providing appropriate developmental and support services for those underprepared for the demands of college, offering enriched programs for those of exceptional ability, seeking financial assistance for those of limited means, maintaining the library, computer and physical resources necessary to support the programs, and evaluating responsibly and consistently the effectiveness of the instructional programs.

Pan American University seeks to complement the instructional programs of the institution by providing a wide range of extra-curricular activities and experiences which enhance the intellectual, cultural, civic, social, and physical environment, maintaining services that fulfill personal needs and that enrich the academic development of students; involving the institution in the community by providing services, programs, cultural experiences, and expertise to the community-at-large; giving the community-at-large opportunities to contribute to the effectiveness of their University; participating in regional consortia and inter-institutional activities to maximize educational opportunity for the people of the state through the sharing of resources; providing programs and organizational units directed toward meeting the human resource needs of an industrial/technological society and assisting in the area's economic growth; and maintaining a research mission that promotes continued intellectual curiosity, encourages the discovery and refinement of knowledge, and addresses the unique character and special needs of the region in which the University is located.

Non-Discrimination Policy Statement

Pan American University declares and reaffirms a policy of administering all of its educational programs and related supporting services and benefits in a manner which does not discriminate because of a student's or prospective student's race, color, creed or religion, sex, national origin, age, handicap, or other characteristics which cannot be lawfully 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 student organizations.

Pursuant to this policy statement, Pan American University 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, and Sections 503 and 504 of the Rehabilitation Act of 1973.

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Admissions

Methods of Admissions

Undergraduate Admission

Students are admitted to Pan American University through the Office of Admissions and Records. They may gain admission by:

1. Presentation of a transcript of the high school record showing that the student is a graduate of an accredited high school, rank in class, and that he has earned at least 21 accredited high school units. Included among the 21 units must be: four units in English; three units in mathematics, at least one of which must be in algebra; two in science, one in world history, one in U.S. history, one-half in U.S. government, one half in economics, one and one-half in physical education, one-half in health education, and seven elective.
2. A graduate of a nonaccredited high school must submit G.E.D. scores that would qualify for the issuance of a Texas high school certificate or submit a composite A.C.T. score of at least 19.
3. A person who has never graduated from an accredited high school may enter by qualifying for the issuance of a Texas high school certificate based on GED test results.
4. Any student who has ever been enrolled in another college must have on file in the Office of Admissions and Records an official transcript sent directly from each college previously attended before the student can be considered for admission to Pan American University. *Failure to submit such transcripts is grounds for immediate dismissal from this university when admission has been gained by ignoring previous college work. (Students transferring less than 30 semester hours of acceptable college work must meet the requirements of section 1 above.) An 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 Pan American University 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.*

A student holding 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 schools and is subject to all rules and regulations of that school. Application for Special Student status is made by completing the undergraduate application form and having an official transcript showing the awarding of at least a bachelor's degree sent to the Office of Admissions and Records from the awarding institution.

A student's previous college work will be evaluated in terms of Pan American University standards. Students who are on academic suspension by these standards will not be granted admission during the regular 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 admission to a regular semester while on suspension, see the section on scholastic suspension in this bulletin.

It should be noted that Pan American University 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 or handicap.

Procedure for Undergraduate Admission

Any student entering Pan American University for the first time must submit the following:

1. A completed Pan American University application for admission form.
2. *Complete official transcript.*
 - a. Beginning Freshmen: An official high school transcript.
 - b. Transfer Students: See Section 4 under Methods of Admission.
3. Scores from the American College Testing Program tests are preferred, but CEEB's SAT scores are acceptable. (Required of all students with less than 30 semester credit hours of transferable college-level work.) Test scores must be on file in the PAU Office of Admissions and Records before the student will be able to register for any semester.
4. The Texas State Education Code requires that all students "... who enter public institutions of higher education in the fall of 1989 and thereafter must be tested for reading, writing and mathematics skills." This includes all "... full-time and part-time freshmen enrolled in a certificate or degree program ...", any non-degree students prior to the "accumulation of nine or more (college) credit hours or the equivalent," and "any transfer students with fewer than 60 semester credit hours or the equivalent who has not previously taken the tests." Performance on the test will not be used as a condition of admission. A student may not "... enroll in any upper division course (the) completion of which would give the student 60 or more semester credit hours or the equivalent until the student's test results meet or exceed the minimum standards in all test scores." Other assessment procedures may be used in exceptional cases to allow a student to enroll in upper division courses "... in cases where student test results do not meet minimum standards" (Texas Education Code, Sec. 51.306). The test fee will be paid by the student.

University Credit for High School Students

The Program for Concurrent Enrollment at Pan American University is offered to give outstanding high school students who have completed their sophomore year an opportunity to attend under a university-supervised program and earn college credit. Course enrollment will be limited to a maximum of 7 hours each summer term and 9 hours each regular semester. This program provides enrichment of education by allowing students to take courses which they might not normally have time to schedule. Early enrollment should also afford financial savings to students since they will be ready to accept employment sooner.

To be admitted to the Program for Concurrent Enrollment, students must have completed their sophomore year at an accredited¹ high school and have a composite ACT score of at least 21, or be in the top 10% of their class, or have an academic average[‡] of at least 90% (GED not accepted for this purpose). Students must submit an Application for Admission form and an Application for Concurrent Enrollment which must be signed by a high school counselor and approved by the high school principal.

Students taking courses for either deferred or dual credit will be graded in the same manner as are other college students, but no University credit will be given until the student graduates from high school. 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. The Director of the Honors Studies Program and the head of the department in which the student plans to major will help prepare the student's academic program. The regular student fees will be assessed in accordance with current rates set for all other students.

Graduate Admission

Students seeking admission may obtain application forms by writing to the Office of Admissions and Records. To insure processing of an application for a given semester, the applicant should have on file in the Office of Admissions and Records the application for admission with all supporting documents by the dates indicated in this bulletin. Failure to have applications with supporting documents on file by these dates will result in

¹Pan American University requires that the institution be accredited by the regional accreditation association responsible for the area in which the institution is located.
[‡]Academic average is to be based on a student's grades in academic courses such as English, math, natural sciences and social sciences. Non-academic courses such as physical education, music, vocational and related courses will not be considered.

restrictive admission or denial of admission at that time. Supporting documents include the following:

- official transcript(s)* of all prior undergraduate and graduate work, an official score report of the Graduate Record Examination (Aptitude Test only) and, for business administration majors, scores on the Graduate Management Admissions Test.
- a transcript of TOEFL scores for foreign students.

Applicants should request that registrars of colleges previously attended and the Educational Testing Service send the transcripts directly to the *Office of Admissions and Records*. GRE and GMAT scores more than five years old are out of date and may not be acceptable.

Admission is only for the semester requested and does not imply automatic admission for later semesters. A student who has been enrolled in a graduate program at Pan American University, but who has not been in attendance for the previous regular semester, should *apply for readmission at least thirty (30) days prior to registration for the semester in which he plans to resume graduate study.*

Basic Requirements for Graduate Admission

1. Must hold a bachelor's degree or its equivalent from a college or university accredited by the regional accrediting association for the region in which the institution is located.
2. Must meet admission criteria established by the Council of Deans.

Clear Admission

1. The applicant must have a 3.0 Graduate Admission GPA or more on a 4.0 scale and provide a minimum composite G.R.E. score of 600 or more (sum of verbal and quantitative) or provide a minimum GMAT score of 350 or more, or
2. The applicant must have a composite score of 1000 or more on the GRE or a GMAT score of 470 or more and have completed all transcript requirements, or
3. The applicant must meet requirements for changing "Probationary" to "Clear," or
4. The applicant must hold a Master's Degree from an accredited¹ university and have completed all transcript requirements.
5. Prospective MBA students who do not satisfy the above criteria must submit a GRE score in addition to a GMAT score for determination of university graduate admission classification.

Tentative Admission

The "Tentative" admission classification is not applicable to graduate students in the School of Business.

A minimum Graduate Admission GPA of at least 2.5 on a 4.0 scale, a formal application and an unofficial transcript(s), admission limited to one regular semester or one summer session of twelve weeks with a maximum of 6 semester hours of graduate work. At the end of one semester of tentative admissions a student must be classified as "Clear," "Probationary," or "Denied" based on admission requirements.

Official Interpretation: At the end of one semester of "Tentative" admission a student must first be classified as "Probationary," "Clear," or "Denied" based on the admission requirements. To be granted further admission at this time, he must have completed his admission file and must meet the admission standards.

Probationary Admission

A student who does not meet clear admission requirements, but has a score of 1200 or more based upon the following formula: 200 times the Graduate Admission GPA + the sum of the verbal and quantitative parts of the GRE will be granted probationary admission. This minimum entrance score must be met prior to registration. Probationary admission is limited to a maximum of 12 hours. If at the end of the semester in which a student's total earned graduate hours are 9 or more and the student's graduate GPA is 3.0 or better, admission classification will be changed to clear.

¹Pan American University requires that the institution be accredited by the regional accreditation association responsible for the area in which the institution is located.

Denied Admission

A student is denied admission to the Graduate School of Pan American University for failure to meet minimum admission requirements.

"Denied Admission" may be altered by meeting admission requirements such as, improving GRE scores and/or Graduate Admission GPA or by appealing to the Council of Deans for an alternative procedure in a letter to the dean of the appropriate school which details extenuating circumstances.

Transfer Admission

A transfer graduate student may take 12 graduate hours for transfer to another graduate school by supplying the Office of Admissions and Records with the following:

1. An Application for Admission.
2. A letter of approval sent directly to the PAU Office of Admissions and Records by the Dean of the graduate school to which the work is to be transferred.

Departmental Admission Requirements

Each department sets the departmental admission requirements for its graduate majors with the approval of the Graduate Council. Consult the bulletin section referring to your major department for these requirements.

All undergraduate leveling work must be satisfactorily completed prior to taking graduate courses or at least be completed during the first semester of enrollment in graduate courses.

Reservation of Work by Undergraduates for Graduate Credit

It is possible for undergraduate students to register in graduate courses in their last semester under the following conditions:

1. The undergraduate must lack no more than twelve (12) semester hours of work to complete all requirements for his (first) bachelor degree.
2. These twelve (12) hours (or less) must be completed in the same semester or summer session (12 weeks) in which he is taking the graduate courses.
3. Total registration for all work must not exceed fifteen (15) semester hours in a regular semester or twelve (12) semester hours in a summer session (12 weeks).
4. The application for such graduate courses must be submitted to the Office of Admissions and Records *sixty (60) days before the session begins*. Graduate Record Examinations, Aptitude Test, scores and undergraduate grade-point averages must meet those standards for regular admission to the Graduate School. Business administration students must also take the Graduate Management Admissions Test.

The undergraduate cannot count his work in graduate courses toward his bachelor's degree. It will be reserved for credit toward a graduate degree.

Procedure After Admission

The successful applicant will receive a letter of acceptance from the Office of Admissions and Records, whereupon he should contact the head of his major department, who will appoint a graduate advisor to counsel with the student concerning the details of his registration, degree program, and other required procedures. The student should have his course program approved each semester by his advisor (or an approved substitute) before registering for courses.

Definitions

Graduate Admission GPA — Section 61.074 of the Texas Education Code required the Coordinating Board to establish a mandatory uniform method of calculating official grade-point averages of students seeking admission to a graduate or professional school. The following method used at Pan American University effective the Fall 1982, is in compliance with this policy.

Procedures for calculating the grade-point average for students seeking admission to a graduate program at Pan American University will be as follows:

1. Only official transcripts sent directly to the Office of Admissions and Records, Pan American University, from accredited¹ institution of higher education shall be accepted for evaluation and grade-point calculation for admission to a

¹Pan American University requires that the institution be accredited by the regional accreditation association responsible for the area in which the institution is located.

- graduate program at Pan American University.
2. All academic work undertaken and grades or symbols assigned at each institution shall be reflected on the student's official transcript(s). No student's grade may be expunged from his or her record.
 3. All grades assigned, including all grades in courses which have been repeated, for academic course work will be used in calculating the grade-point average, except that Pan American shall base the calculation on the last 60 semester credit hours (or equivalent) of college work which include any previous work in a graduate or professional school.
 4. A four-point scale will be used in computing the grade-point average (e.g.: A, 4 points per semester hour; B, 3.0; C, 2.0; D, 1.0; F, 0.0).
 5. A grade or symbol indicating failure (i.e.: F, WF, DF) will count as hours undertaken, but no grade points will be earned.
 6. Excluded from the grade-point average will be any credit by examination: CR; Quit (Q); Withdrew (W); Withdrew Passing (WP); Incomplete (I); and a pass grade within a pass/fail system.
 7. The grade-point average will be computed by multiplying each grade point (see paragraphs (4) and (5) of this section) by the semester or quarter credit hours earned per course and totaling the products. The semester or quarter hours of courses undertaken will then be totalled. The total of the products will be divided by the total semester or quarter hours. The result is to calculate to the hundredth place, giving the official cumulative grade-point average for admission to graduate studies.
 8. Academic work at foreign colleges, universities, or preparatory schools shall be excluded from the calculation. In such cases, the grade-point average and credit shall be evaluated and computed by the Office of Admissions and Records in consultation with the graduate program to which the student is applying.

GRE Composite Score — Sum of the verbal and quantitative scores of the graduate record exam.

Admission File — Application, official transcripts of all undergraduate and graduate work mailed directly to Pan American University from the Registrar's Office of the institution issuing the transcripts, and GRE scores.

Foreign Students

Admission of Foreign Students

There are two additional admission requirements for foreign or international students wishing to enroll in either the undergraduate or graduate programs. They are:

1. Foreign students from countries whose native language is not English will ordinarily be expected to take the Test of English as a Foreign Language. Students scoring below 500 on the TOEFL will normally be denied admission, while those scoring between 500 and 550, but otherwise meeting department requirements, will be expected to take prescribed courses in English.

Further information on the Test of English as a Foreign Language, the Graduate Record Examination, and the Graduate Management Admissions Test may be obtained by writing

The Educational Testing Service
20 Nassau Street
Princeton, New Jersey 08540

2. A financial deposit equal to the cost of room and board in our dormitory (*This is not a reservation for the dormitory. Student must contact the Housing Office for information concerning the dormitory.*) for one semester must be received prior to a student visa (I20) being issued. This deposit must be in the form of a money order or cashier's check. This deposit must also be made prior to enrollment for each future semester. Students on scholarship are excluded from this financial requirement. In addition, as a "University for all the Americas", students from the Western Hemisphere will be excluded from this financial requirement.
3. All supporting documents must be on file in the Office of Admissions and Records 60 days prior to the beginning of the semester.

Transfer Credit

Policy Governing the Transfer of Credit from Other Institutions

Transfer of regular academic credit from another institution to Pan American University 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 Pan American.
3. The appropriateness and applicability of credit earned to the programs offered by 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. Pan American University requires that the institution be accredited by the regional accreditation association responsible for the 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 Pan American University 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.

There may be some differences between the acceptance of credit for admission purposes and the applicability of credit for degree purposes. Pan American University 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. shall be used as the guide for evaluating postsecondary work from foreign institutions.

There are some courses which do not transfer to Pan American University. These may be grouped as follows:

- A. Sub-college courses such as remedial reading, developmental reading, speed reading, remedial science, and orientation are not transferable.
- B. 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.
- C. 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, machinshop, 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.) Nursing work taken at Junior Colleges or from hospitals is normally considered to be terminal and does not transfer.
- D. 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.
- E. No credit will be given for "life experience". (There will be limited exceptions to this rule in the case of the Bachelor of Applied Arts and Sciences degree when this credit has been validated and placed on their transcript by a Junior College/Technical institution.)

Transfer of Credits — Graduate

A maximum of twelve (12) semester hours of appropriate graduate work earned at other institutions, subject to the approval of the chair of the major's department and certification by the Office of Admissions and Records, may be transferred for degree credit. Credit may not be transferred for:

1. Courses which would not have received graduate credit at Pan American University.
2. Courses with grades less than B.
3. Correspondence courses.
4. Extension courses.
5. Courses taken at such a date that would exceed the seven-year limit of the student's program.

Transfer of graduate credit hours is not automatic. The student must submit a written request for approval of transfer to the chair of the major department, who determines whether all the conditions for transfer have been met before adding the hours to the graduate degree program. The transfer is completed when the Student's Admission to Candidacy form is approved by the Dean of the School (providing that the student graduates within the seven-year time limit).

Fees and Deposits

Student Expenses

The cost of attending Pan American University is relatively low approximately \$324.00 per semester of required tuition and fees for a resident of Texas. A large student financial aid program offering part-time employment, scholarships and loans helps most students at Pan American meet the costs of attending college and living expenses.

Financial Responsibility

State Universities cannot extend credit; therefore 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 class or laboratory until all their fees have been paid. (Exception: See "Payment by Installment") Other charges are due within ten 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 (1) registration privileges (2) official transcripts, and (3) degrees.*

Initial payment of registration fees may be made by personal check, money order payable to Pan American University or cash. Students are advised to exercise care in paying fees by check. (See "Returned Checks") When a bad check for registration fees is returned to the University, a five dollar (\$5.00) return check service charge is assessed, and the student is given two days from date of notice to make full payment by cash, cashier's check, or money order. Failure to comply will result in cancellation of the student's registration.

Residency Classifications and Tuition Rates†

Shown in the Fee Table are required registration fees each semester including:

- tuition
- student service fees (computed at \$7.00 per semester credit hour up to a maximum of \$90.00 per regular semester or \$45.00 per summer semester)
- building use fees (computed at \$4.00 per semester credit hour)

For example, by reading from the Fee Table, a student who is a resident of Texas and who enrolls for 12 semester credit hours in a fall or spring semester would pay \$324.00 of required registration fees.

The Fee table does not include required laboratory fees or individual instruction fees which are listed with the individual course descriptions.

†At the time of publication of this bulletin the tuition rates and fees were as shown, but are subject to change without notice or obligation, in keeping with the policies and actions of the Board of Regents and in conforming with the laws of the State of Texas.

Student Service Fees support student activities such as Intramural and Inter-collegiate Athletics, Student Newspaper and Annual, Band, Choir, Orchestra, Student Health Service, Student Accident Insurance, University Center Program Council, Drama, Debate, Dance Group, and other student services as determined by the Board of Regents.

1988-89

FEE TABLE ‡

	Semester Credit Hours Enrolled for	Residents of Texas	Non- Resident Students (See Note 1)
Each	1	\$111.00	\$131.00
Fall	2	122.00	262.00
or	3	133.00	393.00
Spring	4	144.00	524.00
Semester	5	155.00	655.00
	6	166.00	786.00
	7	189.00	917.00
	8	216.00	1,048.00
	9	243.00	1,179.00
	10	270.00	1,310.00
	11	297.00	1,441.00
	12	324.00	1,572.00
	13	350.00	1,702.00
	14	370.00	1,826.00
	15	390.00	1,950.00
	16	410.00	2,074.00
	17	430.00	2,198.00
	18	450.00	2,322.00
	19	470.00	2,446.00
	20	490.00	2,570.00
	Each additional hour add	20.00	124.00
Each	1	\$61.00	\$131.00
Six-	2	72.00	262.00
Weeks	3	83.00	393.00
Summer	4	108.00	524.00
Session	5	135.00	655.00
	6	162.00	786.00
	7	185.00	913.00
	8	205.00	1,037.00
	9	225.00	1,161.00
	Each additional hour add	20.00	124.00

‡At the time of publication of this bulletin the tuition rates and fees were as shown, but are subject to change without notice or obligation, in keeping with the policies and actions of the Board of Regents and in conforming with the laws of the State of Texas.

Note 1: Students who are residents of a state other than Texas or are citizens of a foreign country are classified as "Non-Resident Students".

1989-90

FEE TABLE ‡

	Semester Credit Hours Enrolled for	Residents of Texas	Non- Resident Students (See Note 1)
Each	1	\$111.00	\$131.00
Fall	2	122.00	262.00
or	3	133.00	393.00
Spring	4	144.00	524.00
Semester	5	155.00	655.00
	6	174.00	786.00
	7	203.00	917.00
	8	232.00	1,048.00
	9	261.00	1,179.00
	10	290.00	1,310.00
	11	319.00	1,441.00
	12	348.00	1,572.00
	13	376.00	1,702.00
	14	398.00	1,826.00
	15	420.00	1,950.00
	16	442.00	2,074.00
	17	464.00	2,198.00
	18	486.00	2,322.00
	19	508.00	2,446.00
	20	530.00	2,570.00
	Each additional hour add	22.00	124.00
Each	1	\$61.00	\$131.00
Six-	2	72.00	262.00
Weeks	3	87.00	393.00
Summer	4	116.00	524.00
Session	5	145.00	655.00
	6	174.00	786.00
	7	199.00	913.00
	8	221.00	1,037.00
	9	243.00	1,161.00
	Each additional hour add	22.00	124.00

Payment by Installment

Texas House Bill 1147 of the 1985 Legislature provides for payment by installment of tuition and mandatory fees in the fall and spring semesters.

Eligibility: Students already receiving some form of financial aid, including scholarships, are not eligible to pay by installment.

Options: Eligible students may elect one of three options during fall and spring registration.

Option A	Full payment at Registration
Option B	Half at Registration Half before the 8th classweek
Option C	One-fourth at Registration One-fourth before the 4th classweek One-fourth before the 8th classweek One-fourth before the 12th classweek

Once selected an option may not be changed; however, advanced payments will be accepted.

‡At the time of publication of this bulletin the tuition rates and fees were as shown, but are subject to change without notice or obligation, in keeping with the policies and actions of the Board of Regents and in conforming with the laws of the State of Texas.

Note 1: Students who are residents of a state other than Texas or are citizens of a foreign country are classified as "Non-Resident Students".

Incidental

Charge: each installment will be increased to include a non-refundable incidental charge of \$7.50, to defray the cost to the University of providing this delayed-payment service.

Payment of the entire unpaid balance will preclude any further incidental charges.

*Collection**After*

Registration: House Bill 1147 requires collection of the second and any subsequent installment before the classweek indicated above.

Late Payment: Late installments will be accepted during the first three class days of the classweek indicated above, but a non-refundable late payment charge of \$5.00 will be assessed in addition to the installment amount and incidental charge.

Withdrawal: After the third class day of the classweek indicated above, students who have failed to pay will be considered withdrawn and action will be taken to bar them from classes.

Reinstatement: Late installments will be accepted even then, but a non-refundable reinstatement charge of \$25.00 will be assessed in addition to the installment amount and incidental charge.

Failure to Pay by

End of Semester: Failure to pay before the end of the semester will result in no credit for that semester, and transcripts will be held. Additionally, the student will continue to owe the installment balance, incidental charge; and reinstatement charge, all of which must be paid before any future registration.

Exemptions From Tuition

Fees for students registering concurrently at two Texas public institutions of higher education.

1. A student must register first at the institution with the lower minimum tuition and pay the full tuition charge.
2. 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 not less than the hourly rate.

General fees, student service fees, building use fees, and optional fees are billed by each institution at its regularly authorized rates.

Mexican Tuition Waiver

Non-Resident Tuition Waiver for Mexican Citizens:

Citizens of Mexico may apply at the Financial Aid Office (SSB 186) for a Non-Resident Tuition Waiver a minimum of 30 days before registration.

Hazelwood 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 are exempted from payment of tuition fees, laboratory fees and individual instruction fees but are not exempted from payment of student service fees, building use fees nor other fees and deposits.

To obtain the exemption of tuition under this act, an approved application must be on file with the Student Financial Aid Office 15 days prior to registration.

Other Fees*Catalog*

The first University Catalog is provided free to each undergraduate and graduate student; subsequent catalogs will cost \$2.00 each.

Vehicle Registration and Operation Permit

All students, whether full or part-time, who will operate a motor vehicle in the campus area must register the vehicle with the Campus Traffic and Security Office. A sticker 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 \$12.00 if paid during the fall semester, \$8.00 if paid during the spring semester, and \$4.00 each summer session. Vehicle operation regulations are available at the Dean of Students' Office or the Campus Traffic and Security Office.

General Property Deposit

Students must pay a one-time general property deposit of \$10.00.

Laboratory Fees

For each laboratory course a fee of \$2.00 to \$8.00, depending upon cost of material used, is charged.

Individual Instruction Fees

For courses in art, communications or music, which provide individual coaching or instruction, a fee of \$20.00 for a one or two hour course or \$35.00 for a four hour course is charged. Class Piano and Class Voice courses each have a \$10.00 fee.

Auditing Fees

If auditing a course is permitted by the instructor, a non-refundable fee of \$20.00 will be charged.

Graduation Fee

A non-refundable fee of \$15.00 is charged for undergraduate and graduate degrees. This fee is payable at the time the candidate presents his application for graduation to the Office of Admissions and Records. This fee is used to pay for: processing 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 will be required to pay an additional \$5.00 fee for each time they transfer.

Transcript Copy Charge

The first official copy of a transcript of a student's grades is provided free; subsequent official copies are \$1.00 per copy. A student with overdue unpaid obligations to the University will not be provided an official transcript copy unless satisfactory payment arrangements have been made.

Unofficial copies of the student's transcript will be provided for a fee of .25;

Physical Education Activity Course Fees

A fee is charged for some two hour physical education activity courses. The fees for individual courses are listed in the course descriptions and in the tentative schedule. In the case of Bowling, Golf, and Horsemanship there is a required fee for the use of non-university facilities and equipment which is paid directly to the provider of these facilities.

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 \$15.00.

Thesis Microfilming Fee

Each Master's Thesis is microfilmed and placed in the University Library. The cost will be approximately \$20.00 depending on length of thesis.

Advanced Standing Examination Fee

A fee of \$20.00 is charged for each Advanced Standing Examination.

ACT Residual Test Fee

A fee of \$15.00 is charged for ACT Tests administered at a time other than a regularly scheduled test date. The regular fee for nationally scheduled tests is \$9.00.

Special Tests and Examinations

Fees for tests such as entrance tests, credit by examination tests and other test services may be charged. Please inquire at the Office of Career Planning, Placement and Testing.

Late Registration Charge

Any student who, with proper permission, registers after the appointed days for regular registration (see calendar), will be required to pay a special non-refundable charge of five dollars (\$5.00) to defray the costs of the extra services required to effect his or her late registration.

Returned Check Charge

A non-refundable service charge of five dollars (\$5.00) will be assessed to a student for each bad check. (See "Financial responsibility") 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.).

ID Card Replacement Fee

Entering students are provided a free University Photo Identification Card. A non-refundable fee of \$5.00 is charged for a replacement of this card. The fee is subject to change.

Tuition Installment Incidental Charge

Any eligible student who elects either the one-half or one-fourth options to pay fall or spring semester tuition and mandatory fees will be charged an additional \$7.50 with

each payment to defray the cost to the University of providing this service. This fee is non-refundable.

Residence Hall or Meals Only Installment Charge

Students who elect to pay residence hall or meal contract charges in monthly installments will be assessed an additional \$5.00 with each payment to defray the cost of this service. This fee is non-refundable.

Late Payment Charges

Payment of fall or spring tuition installments and residence hall or meals only installments after the scheduled deadline and within the next three class days will require an additional \$5.00 late payment charge. This fee is non-refundable.

Reinstatement Charge

Payment of fall or spring tuition installments after the third class day of the fourth, eighth, or twelfth classweek (as applicable) will require an additional \$25.00 reinstatement charge. This fee is non-refundable.

Change of Meal Plan Service Charge

Once a meal ticket is issued, students may change that meal plan only through arrangement with the Payments and Collections Office, Administration Building Room 137, upon payment of a \$3.00 service charge. This fee is non-refundable.

The following fees to defray the cost of providing certain services are non-refundable:

Audit Fees

Graduation Fee

Late Registration Charge

Returned Check Charge

ID Card Replacement Fee

Tuition Installment Incidental Charge

Residence Hall or Meals Only Installment Charge

Late Payment Charges

Reinstatement Charge

Change of Meal Plan Service Charge

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 registration fees actually paid according to the following scale:

- 100 per cent before the first day of classes
- 80 per cent during the first five class days
- 70 per cent during the second five class days
- 50 per cent during the third five class days
- 25 per cent during the fourth five class days
- No refund during the fifth five class days or thereafter.

Refund of fees during a summer term to students withdrawing officially and completely will be made according to the following scale:

- 100 per cent before the first day of classes
- 80 per cent during the first three class days
- 50 per cent during the fourth, fifth and sixth class days
- No refund after the 6th class day

Students officially dropping courses but remaining enrolled at the University receive a full refund of registration fees actually paid for the dropped classes through the twelfth class day during a fall or spring semester or the fourth class day during a summer term.

Refund checks will be mailed within 45 days to the student's 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. All refunds for current semester classes must be requested by the 12th class day during a fall or spring semester or the fourth class day during a summer term through the Office of Admissions and Records, Student Services Building, Room 108.

Note: Class days refer to days the University schedules classes, not the individual student's schedule.

Residence Hall Fees¹

Residence Hall Room and Board is available on campus for 380 students in modern air-conditioned facilities.

During fall and spring semesters there are four boarding plans available: a 20 meal per week plan from Monday breakfast through Sunday lunch, a 15 meal per week plan from Monday breakfast through Friday supper, and two 10 meal per week plans: breakfast and lunch from Monday through Friday (10A), and breakfast or lunch and dinner from Monday through Friday (10B). During summer terms only the 20 meal per week plan is available. The residence hall fees are:

	<i>10A Meal Plan</i>	<i>10B Meal Plan</i>	<i>15 Meal Plan</i>	<i>20 Meal Plan</i>
Fall or Spring Semester	\$890.00	\$940.00	\$990.00	\$1040.00
Summer Session	(NA)	(NA)	(NA)	\$ 400.00

Residence Hall fees may be paid in monthly installments (Arrangements are made at the Payments and Collections Office, Administration Building Room 137) with an additional non-refundable charge of \$5.00 per month. Residence hall fees for the summer terms are payable in full before the student moves in. Each semester the first installment payment is payable before the student moves in. The remaining payments are scheduled as follows:

	<i>10A Meal Plan</i>	<i>10B Meal Plan</i>	<i>15 Meal Plan</i>	<i>20 Meal Plan</i>
Fall Semester				
First Payment	\$227.50	\$240.00	\$252.50	\$265.00
Second Payment, Oct. 1st ...	227.50	240.00	252.50	265.00
Third Payment, Nov. 1st	227.50	240.00	252.50	265.00
Fourth Payment, Dec. 1st	227.50	240.00	252.50	265.00
Spring Semester				
First Payment	\$227.50	\$240.00	\$252.50	\$265.00
Second Payment, Feb. 1st ...	227.50	240.00	252.50	265.00
Third Payment, March 1st ...	227.50	240.00	252.50	265.00
Fourth Payment, April 1st ...	227.50	240.00	252.50	265.00
First Summer Session				
One Payment				\$400.00
Second Summer Session				
One Payment				\$400.00

Cafeteria Meal Tickets¹

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. The same meal plans are available, under virtually the same conditions.

	<i>10A Meal Plan</i>	<i>10B Meal Plan</i>	<i>15 Meal Plan</i>	<i>20 Meal Plan</i>
Fall or Spring Semester	\$353.00	\$373.00	\$500.00	\$550.00
Summer Session	(NA)	(NA)	(NA)	218.00

Meals only contracts may be paid in monthly installments (Arrangements are made at the Payments and Collections Office, Administration Building Room 137) with an additional non-refundable charge of \$5.00 per month except for the summer sessions. The first installment payment is payable before the first meal. The remaining payments are scheduled as follows:

¹NOTE: Once a meal ticket is issued, that meal plan may be changed during the first twelve days of classes only and upon payment of a \$3.00 non-refundable service charge at the Payments and Collection Office.

	10A Meal Plan	10B Meal Plan	15 Meal Plan	20 Meal Plan
Fall Semester				
First Payment	\$93.25	\$103.25	\$130.00	\$142.50
Second Payment, Oct 1st	93.25	103.25	130.00	142.50
Third Payment, Nov 1st	93.25	103.25	130.00	142.50
Fourth Payment, Dec 1st	93.25	103.25	130.00	142.50
Spring Semester				
First Payment	93.25	103.25	130.00	142.50
Second Payment, Feb 1st	93.25	103.25	130.00	142.50
Third Payment, March 1st ...	93.25	103.25	130.00	142.50
Fourth Payment, April 1st ...	93.25	103.25	130.00	142.50
First Summer Session				
One Payment				\$218.00
Second Summer Session				
One Payment				\$218.00

Any student who withdraws officially from the University may receive a refund for the remaining portion of the room and board fee computed on a daily basis. A student who cancels the residence hall lease for any reason other than an official withdrawal will be charged for one-fourth of the remaining unexpired portion of the room and board fee. The termination date of a lease will be the end of the boarding week in which the occupant officially notifies the Dean of Students of the termination.

Telephone Payments

All arrangements and payments for phone service in the residence halls are made directly with Southwestern Bell Telephone Company.

Residence Hall Reservation and Room Deposits

Applications for residence hall room reservations are made in the Housing office. A check for \$35.00 must accompany the request. This will serve as a reservation fee and a damage deposit. This fee is retained on deposit throughout the period of residence of the student as a guarantee against damage and breakage. The deposit will be refunded, less any property or breakage charges, at the end of residence in the hall. Should a student decide not to reside in the residence hall the deposit will be refunded if a written application for refund is made by the following dates:

<u>Semester</u>	<u>Refund Request not later than:</u>
Fall Semester	First week of August
Spring Semester	First week of January
First Summer Session	Second week of May
Second Summer Session	First week of July

Reservations are made on a first-come first-serve basis. Students may be placed on a waiting list until space is available through cancellations and no shows.

Holidays and breaks are not included as part of the room and board plan and have been deducted from the fees.

SUMMARY OF USUAL STUDENT EXPENSES PER SEMESTER

A resident of Texas attending Pan American University and living in a University Residence Hall should expect the following expenses:

	<u>Each Fall or Spring Semester</u>	<u>Each Summer Session</u>
Required Fees for Resident of Texas enrolled in		
15 (6 in summer) hours	\$390.00	\$162.00
Estimated Laboratory Fees ...	4.00	2.00
Books and Supplies	200.00	100.00
Residence Hall		
Room and Board	1040.00	400.00
Total	\$1634.00	\$664.00

This summary does not include discretionary and personal expenditures such as for entertainment, transportation or clothing.

Graduation

Curricula and Degrees – Undergraduate

Pan American University offers five types of undergraduate curricula: (1) those leading to one of the nine Bachelor Degrees (B.A., B.A.A.S., B.B.A., B.S.C.J., B.F.A., B.G.S., B.S., B.S.N., or B.S.W.) conferred by Pan American University; (2) those leading to the Associate of Applied Science (A.A.S.) in Nursing Education and Physical Therapist Assistant; (3) those satisfying the requirements leading toward degrees offered at other institutions, such as: curricula leading to the degrees in law, engineering, pharmacy, medicine, and other specialized fields; (4) courses satisfying requirements for a minor field; and, (5) courses meeting requirements for teachers in education.

The School of Business Administration awards the Bachelor of Arts (B.A.) degree in Economics and the Bachelor of Business Administration degree (B.B.A.) in eight areas of Business:

1. Accounting
2. Management Information Systems
3. Economics
4. Finance
5. General Business
6. Management
7. Marketing
8. Administrative Information Systems

The School of Education awards the Bachelor of Science (B.S.) degree with majors in:

1. Elementary Education¹
2. Health Education¹
3. Kinesiology¹
4. The School also offers curricula meeting the certification requirements for teaching in secondary schools.¹

The Division of Health Related Professions awards the Associate of Applied Science (A.A.S.) degree in Nursing Education, and Physical Therapist Assistant, Bachelor of Science (B.S.) degree with a major in Medical Technology, Dietetics, or Rehabilitative Services, and Bachelor of Science in Nursing (B.S.N.).

The College of Arts and Sciences awards

- the Bachelor of Arts (B.A.) degree with majors in:
 1. Art
 2. Communications
 3. English
 4. Government
 5. History
 6. Music
 7. Philosophy
 8. Psychology
 9. Sociology
 10. Spanish
 11. Speech and Hearing
- the Bachelor of General Studies (B.G.S.) degree.
- the Bachelor of Applied Arts and Sciences (B.A.A.S.) degree.
- the Bachelor of Fine Arts (B.F.A.) degree with a major in Art.

- the Bachelor of Science (B.S.) degree with majors in:
 1. Biology
 2. Chemistry
 3. Computer Science
 4. Mathematics
 5. Physics
 6. Psychology
- the Bachelor of Science in Criminal Justice (B.S.C.J.) degree with majors in:
 1. Corrections
 2. Police Administration
- the Bachelor of Social Work (B.S.W.) degree with a major in Social Work
- The College also offers curricula meeting the requirements for pre-engineering (two years), pre-dental (with a major in Biology or Chemistry), pre-pharmacy (two years), pre-medical (with a major in Biology or Chemistry for pre-professional work), and pre-optometry.

Minors are offered in most of the fields which offer majors; in addition, minors are offered in Anthropology, Computer Science, Geology, Bilingual/Bicultural Education, Generic-Special Education, French, Statistics, ROTC, Anthropology, and Mexican American studies.

Supporting courses in a variety of fields are available in the various departments including Astronomy, Geography, and German.

Curricula and Degrees — Graduate

Pan American University is authorized to offer the following graduate degrees and certification programs:

Master of Arts (Majors: Communication Disorders, English, English Second Language, History, Interdisciplinary Studies)

Master of Business Administration

Master of Education (Majors: Bilingual/Bicultural; Counseling and Guidance; Diagnostician; Elementary; Educational Administration; Physical Education; Reading; Secondary; Supervision)

Master of Science (Majors: Biology and Interdisciplinary Studies)

Cooperative Ed.D. Program with the University of Houston

School Administrator's Certificate Programs (Middle Management and Superintendency)

Minor work for the degree may be done in the following fields:

Biology	Government	History
Education	Health and Kinesiology	Mathematics
English		Spanish
<i>Support Areas</i>		
Art	Music	Sociology
Business	Physics	Communications
Chemistry	Psychology	

Associate Degree

Requirements for the Associate of Applied Science Degrees

1. Satisfactory completion of the prescribed curriculum as specified in the bulletin.
2. A minimum grade of "C" in each required course in the appropriate curriculum with a minimum of one-third (1/3) of the course work completed in residence.
3. Only courses completed in programs approved by the appropriate state or accrediting agency will be considered for transfer credit. See the appropriate department for information and procedures regarding the transfer of credit.
4. During the first semester of residence, students must consult the appropriate department and develop a degree plan, which must receive all appropriate approvals and be placed on file.
5. An acceptable 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.

Bachelor's Degree

General Requirements for a Bachelor's Degree

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 this bulletin by the respective departments of the University. STUDENTS SHOULD CONTACT THEIR MAJOR DEPARTMENT OFFICE FOR FURTHER DETAILS. Required semester hours for which specific courses are not prescribed are listed as elective hours.

While the degree requirements in the various disciplines may differ to a considerable extent, there are several general requirements for a bachelor's degree which are common to all degree programs. These are:

GENERAL EDUCATION PROGRAM¹

A. Humanities (24 Hours)

1. *English* — 6 hours of Freshman English
Eng 1301 and 1302 (Eng 1387 and 1388 for the Honors Program)
Eng 1406 for foreign students replaces Eng 1301.
2. *English* — 6 hours of literature.
Eng 2300, 2301, 2302, 2303, 2305, 2307, 2308, 2313. (Eng 2387 and 2388 for the Honors Program.)
3. *Language Other Than English* — 6 hours in the same language.
Fr 1321, 1322 or higher level courses.
Ger 1331, 1332 or higher level courses.
Port 1361, 1362 or higher level courses.
Span 1301, 1302, 1303, 1304 or higher level courses.
4. *General Topics* — 6 hours to be selected from 2 of the following 3 areas:
 - a. Area 1: The Arts
Art 1301, 3381
Comm (Theatre) 2312
Mus 1301, 1302, 2307, 2308, 3311
 - b. Area 2: Communications
Comm (Speech) 1303 or 1313
 - c. Area 3: Philosophy
Phil 1310, 1320, 2320, 2330, 2380

B. Science (8 Hours)

Natural Science (8 hours in same discipline)
Astr 1401 and 1402
Biol 1405 and 1406; 1401 and 1402; 2403, 2404
Chem 1401 and 1402
Geol 1401 and 1402
Phys 1401 and 1402
Psci 1421 and 1422

C. Computer Literacy (3 hours to be selected from the following).

CS 1300, 1380, 2325
CIS 1301

D. Kinesiology (4 Hours)

Four semester hours of Physical Education or RCTC courses taken at the freshmen and sophomore level. (NOTE: Physical Education, four semester hours of activity courses to be taken during the freshmen and sophomore years. Only twelve semester hours of activity courses may be counted toward graduation. Only ROTC courses taken at the freshmen and sophomore level may be substituted for required hours of physical education on the basis of one ROTC credit for one credit of PE).

HE 2301 is required if a WAIVER of this requirement is obtained under the following circumstances: NOTE: (a) 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 on the basis of one semester hour for each six months of military service or major fraction thereof. (b) 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

¹Effective Fall 1990, Math 1340 (College Algebra) or higher will become a University College/General Education (UC/GE) requirement for graduation.

effect. (c) A woman student who is a mother with her child or children in her care may obtain a waiver of required physical education hours. (d) A student who is at least 25 years of age at time of initial admission, or at time of readmission after an absence from college of at least two years, may obtain a waiver from PE. Any other student is required to take physical education activity courses after reaching age 25 **ONLY TO THE EXTENT** that he has failed to earn one PE credit during each semester of his freshmen and sophomore year completed prior to reaching age 25.

E. *Social Sciences*

1. *State Requirements (12 Hours)*
 - a. *History (6 hours)*
Hist 2313 or 2333, 2314 (2387, 2388 Honors Plan)
 - b. *Political Science (6 Hours)*
Pols 2313, 2314 (Pols 2387, 2388 Honors Plan)
2. *General Topics II* 6 hours to be selected from 2 of the following 4 areas:
 - a. *Anthropology*
Anth 1323, 1324, 2323, 2342, 2353
 - b. *Economics*
Eco 1301, 2353
 - c. *Psychology*
Psy 1313, 1323 (1387, 1388 Honors Plan)
 - d. *Sociology*
Soc 1313, 1323, 2333

Students seeking an associate degree are exempt from the foregoing requirements, but only to the extent approved by the School in which the degree is to be earned.

Graduation Requirements

As noted under the heading *Curricula and Degrees*, Pan American University offers nine types of bachelor degrees. The general requirements for graduation are the same for each degree and are listed below. Associate degrees are exempt from these provisions to the extent approved by the School in which the degree is conferred. Specific requirements for each major field are listed in the catalog sections dealing with these majors. It is the responsibility of the student to be familiar with all the requirements for the degree he seeks.

1. A minimum of 124 semester hours of work is required, with an overall minimum grade point average of 2.00.
2. A minimum grade point average of 2.00 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 or secondary teachers must have a minimum grade point average of 2.25 in each case.
3. A minimum grade of "C" must be achieved in each of the two required freshman English courses (those specified under *General Requirements for a Bachelor's Degree*, above).
4. The completed course work required for the degree must include a minimum of 36 semester hours of advanced-level work. Some degrees require additional advanced hours (See the appropriate department.).
5. All requirements listed under the heading *General Requirements for a Bachelors' Degree*, above, must have been met.
6. The work must include a minimum of 30 semester hours of work in a major field of concentration (a department may specify not more than 36 hours), including at least 15 hours of advanced-level work, and 18 semester hours in a minor field, including at least 6 semester hours of advanced-level work. A minimum of 48 semester hours of work in a broadly integrated area (such as Business Administration, Law Enforcement Science, 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. A course may not be used to satisfy a requirement for both a major and a minor, or for two majors or for two minors.
7. For those seeking secondary teacher certification, a minimum of 24 semester hours is required in each of two teaching fields, except that a second teaching

field is not required in the broadly integrated areas (see *major field* departmental area, *Secondary Plan II* for the major and certification requirements).

8. The major-minor or broad-field major course distribution must follow the requirements set forth by the various departments, subject to any limitations and requirements noted under *General Requirements for a Bachelor's Degree* and these *Graduation Requirements*, or in published form issued by the various departments or schools of the University.
9. The student must complete a minimum of 24 semester hours of work in residence during the senior year. If he has not established credit in courses at Pan American University prior to his senior year, he must complete 30 semester hours in residence. A minimum of 6 semester hours of advanced work in the major must be completed in residence. For the Baccalaureate in General Studies, a minimum of six advanced hours in each of the three College of Arts and Sciences areas of specialization must be completed in residence.
10. For Medical Technology majors the last 30 semester hours of college work must be completed at Pan American University; they must include at least eight semester hours of biology or chemistry, and a minimum of six advanced semester hours.
11. A *Degree Plan* approved by the student's Department Chair and Dean must be on file in the office of the Dean of his School. This requirement is normally to be accomplished as soon as possible after the close of the sophomore year. In any event, the *Degree Plan* must be on file before the deadline for making application for a degree.
12. An acceptable *Application for a Degree* must be filed by the student with the Office of Admissions and Records on or before the date specified in the University calendar.

Additional Baccalaureate Degrees

A student from Pan American University may receive an additional bachelor's degree from Pan American University of a different type and major.

A student holding a baccalaureate degree from another accredited institution may receive an additional bachelor's degree in a different major from Pan American University.

Such a student continues to be classified as an undergraduate and must:

1. Complete an additional minimum of 30 semester hours of credit in Pan American University courses (of which at least 12 must be advanced and a minimum of six of these must be in the major field; in the case of a double major a minimum of six advanced hours is required in each major field) for each baccalaureate degree sought beyond the first.
2. Complete all requirements for the additional major(s), as set forth in this catalog.
3. Complete all requirements for the additional degree(s), including grade-point average requirements, university college, general education requirements, elective courses, and advanced courses, as set forth in this catalog.

Non-Traditional Education Credit

A maximum of 45 semester hours of college credit will be accepted towards a Bachelor Degree by any combination of extension, examination and correspondence with an 18-hour limit on correspondence credit. No credit will be awarded for "life experience."

Master's Degree

Requirements for All Master's Degrees

1. Thirty-six (36) hours of course work or with the thesis option twenty-four (24) hours of course work plus six (6) hours for the thesis will be required.
2. During or at the end of the student's final semester of work, he will be given a comprehensive written examination.
3. All degree programs will allow a student the option to include a minimum of six (6) semester hours of work which is not a part of his major field. It is the option of each graduate program to determine if graduate courses taken outside of the school are acceptable.
4. A maximum of eighteen (18) hours in 5000 level courses may be taken for graduate credit toward a master's degree.

Special requirements for the MA/MS Interdisciplinary Studies degree

1. At least 12 hours but no more than 18 of graduate work must be taken in one of four areas of concentration: English, history, mathematics, or Spanish.
2. At least 6 hours of coursework in the area of concentration must be upper level graduate work (6000 level).
3. At least 3 hours of coursework must be taken in research methods or statistics in the area of concentration.
4. At least 12 hours must be taken outside the field of concentration. These courses must be taken from at least two additional disciplines.
5. No more than 12 hours of coursework may be taken from the professional schools: Business Administration (A maximum of six semester hours may be taken in the School of Business Administration) and Education.
6. Advisement will be the responsibility of the department chair in the area of concentration selected by students. Advisement for certification will be the responsibility of the School of Education.
7. Students seeking the MA/MS degree in Interdisciplinary Studies must successfully complete 36 hours of graduate work (30 if they choose to conduct a thesis) and meet all other university and program requirements.
8. Admission to the MA/MS Interdisciplinary Studies program presumes that students have met general admissions requirements to the PAU graduate school.

Additional Master's Degrees

A student from Pan American University may receive an additional master's degree from Pan American University of a different major.

A student seeking an additional master's degree is classified as a special graduate and must:

1. Complete a minimum of 30 semester hours of additional graduate credit (or 24 additional graduate semester hours in the thesis option) in Pan American University courses for each master's degree sought beyond the first.
2. Complete all requirements for the additional major, including admissions, as set forth in this catalog.
3. Complete all requirements for the additional degree, including grade-point average requirements, elective courses, etc., as set forth in this catalog.

Special Procedure and Regulations for Completion of Graduate Degree

Time Limits

All requirements for a master's degree must be completed *within one seven-year period*. Work over seven years old is lost and can be reinstated only by special permission of the Council of Deans, upon recommendation of the student's graduate advisory committee.

Graduation Under a Particular Catalog

General and specific requirements for degrees in Graduate School may be altered in successive catalogs, but the student is bound only by the requirements of the catalog in force at the time of his admission, within a seven-year limit. At his discretion the student may choose to fulfill the requirements of a subsequent catalog.

Thesis Requirements

Graduate programs at Pan American University have a thesis and a non-thesis option. Some program faculties encourage the thesis option, while others encourage the non-thesis option. A graduate student should consult with the school and the graduate faculty in the school or discipline concerning their philosophies and options early in the program. However, any graduate student who is contemplating doctoral study is encouraged to consider the thesis option.

Each school and/or department has its own guidelines for the development and completion of the thesis. A student considering the thesis option should contact the department head or graduate studies director in their school for specific procedures. In addition, a manual that details the University requirements for the format and submission of a thesis is available at the University Bookstore.

The candidate for the master's degree writes a thesis (if the thesis option is selected) under the direction of a supervising instructor who is chairman of the supervisory committee appointed by the Dean. The thesis subject requires the approval of both the supervisory committee and the Dean. The researching and writing of the thesis carries with it six semester hours of credit. Prior to enrolling in thesis hours, a student must have received credit for a minimum of twelve semester graduate hours. *Once a student registers for 7600, he must continue to register each succeeding semester or summer session until the thesis is completed. Credit is counted only once and then only upon successful completion of the master's program.* Registration for 7600 is not counted in determining load limit for a semester or summer session.

The original thesis and three copies (signed by the student's committee) must be submitted to the Dean of the School thirty (30) days prior to graduation. (See calendar in front of bulletin for exact date.) A department may require additional copies of the thesis (at additional binding expense to the student).

Individual department deadlines for submission of a thesis to the student's supervisory committee will be established to complement the thesis time schedule for the Dean of the School.

Before qualifying for graduation, the student must pay a fee for microfilming and binding the thesis and the publication of the thesis abstract in Masters Abstracts. If a student wishes to copyright his thesis, a fee will provide this service by arrangement with Microfilms Incorporated. A receipt for these fees must be presented to the Dean of the School before the thesis will be processed.

Two copies of a non-illustrated abstract which does not exceed 150 words in length must accompany the signed thesis. This abstract is to be printed in Masters Abstracts.

If a student wishes to have additional copies of his thesis bound for his personal use, he may do so at an additional cost.

General Academic Information

Advanced Level Work: Courses numbered either 3000 or 4000 are called advanced or upper division courses. Normally, a student with fewer than 60 semester hours of credit may enroll in 3000 or 4000 courses only when his schedule includes enough lower level (1000 and 2000 courses) work to total at least 60 semester hours, in addition to the upper level courses for which he wishes to enroll. Approval of the Department Chair or Dean of the School is required if the conditions given above are not met for advanced level enrollment.

Auditor: A student who has special permission (For graduate courses, student must be eligible to enroll in the course for credit before he/she will be allowed to audit.) to audit or visit a class without receiving academic credit is listed as an auditor. One may enroll as an auditor at any time by obtaining the proper audit form from the Office of Admissions and Records, having it approved by the instructor of the class to be audited, paying the required fee to the University Cashier and 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 (or nonstudent) 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 are non-refundable.

Change of Address and/or Telephone: If a student, after application, changes his local address or telephone number, he is expected to notify the Office of Admissions and Records in writing at once. *He will be held responsible for any communication from the University offices sent to him at the address last given to the Office of Admissions and Records and may not claim indulgence on the plea of having moved his lodgings and, therefore, of not having received the communication.*

Class Load: Normally 18 semester hours in a regular semester or 7 semester hours in a summer semester is the maximum load that a student can carry and maintain satisfactory grades.

Classification of Students: Students are classified according to the number of semester hours of college credit they have earned.

A student is classified as a *freshman* if he has fewer than 30 semester hours of college credit.

Sophomores have 30-59 semester hours of semester credit.

Juniors have credit for 60-89 semester hours of credit.

Seniors are students who have credit for 90 or more semester hours.

Specials are students who hold at least a bachelor's degree and are enrolled in undergraduate courses.

Graduates are students who have an undergraduate degree and have been accepted in a Master's Degree program.

Special Graduates are students who have a graduate degree and are continuing in a graduate program.

Clubs and Organizations

A wide array of clubs and organizations offer the Pan American student friendship, relationships with people of similar interests, and avenues for organized and meaningful service.

HONOR SOCIETIES

Alpha Psi Omega (Drama)
Beta Gamma Sigma (Business)
Alpha Chi

PROFESSIONAL SOCIETIES

Alpha Kappa Psi
American Society for Personnel Administrators
Association for Computing Machinery
Data Processing Management Association
National Student Speech, Language and Hearing Association

DEPARTMENT CLUBS

Accounting Society
American Humanics
Bilingual Education Student Organization
Bronc Cadet Corps
Chemistry Club
Criminal Justice Club
Financial Management Association
French Club
Pan American Advertising Club
Pan American Marketing Association
Philosophy Club
Society for Medical Technologists
Pan American Student Reading Organization
Political Science Association
Pan American Student Dietetic Association
Pre-Med Bio-Med Society
Social Work Club
Sociology Student Organization
Student Publications Association
Texas Student Nurses Association

SERVICE ORGANIZATIONS

Intercollegiate Knights
Ladies of Camelot
Pan American University Student Government Association
University Program Board
Pan American University Ambassadors

RELIGIOUS ORGANIZATIONS

Baptist Student Union
Catholic Campus Ministry
Intervarsity Christian Fellowship
Latter Day Saints Students Association
United Methodist Campus Ministry

MISCELLANEOUS

Border Association Refugees of Central America
College Republicans
International Student Association
Rodeo Club
Pan American University Young Democrats
Pre-Law Association
Residence Hall Association
Upward Bound Alumni Association

FRATERNITIES

Kappa Sigma
Phi Sigma Kappa

SORORITIES

Delta Zeta Sorority

Youth Competency Basic Skills Program

This program is sponsored by the Private Industry Council of Cameron County and coordinated by the Learning Assistance Center. The goal of the program is to help beginning freshmen with special tutoring, counseling and other support services that will increase the chances of succeeding in their freshman year at Pan American University. Other services include additional financial aid to help offset educational expenses.

Students must be 18-21 years of age and determined eligible for financial aid. Students selected for the program must also meet eligibility requirements specified by the Private Industry Council.

Course Numbers: Courses are numbered to 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 merely departmental designations.

1000 courses are at the freshman level.

2000 courses are at the sophomore level.

3000 courses are at the junior level and limited to junior level or above students.

4000 courses are at the senior level and limited to junior level or above students.

5000 courses are at the graduate level and limited to graduate students only and are usually offered with a 4000 level course. (Student can not receive credit in the 5000 level course if the student already has credit for the comparable 4000 level course.)

6000 courses are at the graduate level and limited to graduate students only.

7000 courses are at the graduate level and limited to graduate students only.

For example the catalog entry, Spanish 1301, shows that the course is given in the freshman year and carries three hours of credit per semester. All courses ending in the numbers 87 and 88 are honors courses.

Credit by Examination

Pan American University offers college credit to qualified students by examination as follows:

College Entrance Examination Board
Advanced Placement
and
Achievement Examinations

American History

1. Credit for three hours in American history (History 2313) is given with College Entrance Examination Board (CEEB) Advanced Placement Test scores of 4 or 5. A grade of A is given for a 5; a grade of B for a 4. If the score is 3, the faculty reviews the examination and decides whether or not to give credit for History 2313.
2. Credit without a grade for three hours in American history is given with a score of 550 or higher on the College Entrance Examination Board (CEEB) Achievement Test in American history.

Biology

1. Credit for eight hours of biology (Biology 1401-1402) is given with College Entrance Examination Board (CEEB) Advanced Placement Test scores of 4 or 5. A grade of A is given for a 5; a grade of B for a 4.
2. If the score is 3, the faculty reviews the examination and decides whether or not to grant credit for either Biology 1401 or 1402.

Chemistry

1. Credit for eight hours of chemistry (Chemistry 1401-1402) is given with College Entrance Examination Board (CEEB) Advanced Placement Test scores of 4 or 5. A grade of A is given for a 5; a grade of B for a 4.
2. If the score is 3, the faculty reviews the examination and decides whether or not to grant credit for either Chemistry 1401 or 1402.
3. Students with scores of 600 or more on CEEB Achievement Test in Chemistry may enroll for Chemistry 1402 as independent credit without the prerequisite of Chemistry 1401. No credit is given for Chemistry 1401. If the CEEB Achievement Test score is 550 but less than 600, the student may request reconsideration of the Chemistry Department Chair to waive the Chemistry 1401 prerequisite on the basis of his score, the ACT score, and the high school record.

English

1. Credit for six hours in English (English 1301-1302) is given with College Entrance Examination Board (CEEB) Advanced Placement Test scores of 4 or 5. A grade of A is given for a 5; a grade of B is given for a 4.
2. If the score is 3, the faculty reviews the examination and decides whether or not to give credit for either English 1301 or 1302.

European History

1. Credit for six hours in European history (History 1333-1334) is given for College

Entrance Examination Board (CEEB) Advanced Placement Test scores of 4 or 5. An A is given for a 5; a B for a score of 4.

2. If the score is 3, the faculty reviews the examination and decides whether or not to grant credit for either History 1333 or 1334.

Mathematics

1. Credit for three hours in mathematics (Math 1360) is given for College Entrance Examination Board (CEEB) Advanced Placement Mathematics Form AB Test scores of 4 or 5. An A is given for a 5; a B for a 4.
2. If the score on the Mathematics Form AB Test is 3, the faculty reviews the examination and decides whether or not to grant credit for Math 1360.
3. Credit for six hours in mathematics (Math 1370-2342) is given for College Entrance Examination Board (CEEB) Advanced Placement Mathematics Form BC Test scores of 4 or 5. An A is given for a 5; a B for a 4.
4. If the score on the Mathematics Form BC Test is 3, the faculty reviews the examination and decides whether or not to grant credit for either Math 1370 or 2342.

Nursing

1. Credit for N ED 1701 may be given if a licensed vocational nurse (LVN) passes a challenge examination administered by the ADN program.
2. If an LVN successfully challenges N ED 1701, the LVN may take a challenge examination to receive credit for N ED 1802.
3. Credit for 24 semester credit hours in nursing (lower level) may be given after passing an entrance examination administered by the BSN program.

Physics

1. Credit for eight hours in physics (Physics 1401, 1402) is given for College Entrance Examination Board (CEEB) Advanced Placement Physics B or C Test scores of 4 or 5. An A is given for a 5; a B is given for a 4.

Advanced Placement based on American College Testing Program Scores

English

A student scoring 26 or 27 on the English section of the ACT may receive three semester hours credit in freshman English 1301. A student scoring 28 or higher on the English section of the ACT may receive six semester hours credit in freshman English 1301 and 1302. Credit will be given when the student earns at least 6 hours of academic credit at Pan American University.

See the Department of English for details.

High school seniors anticipating advanced placement 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 by the faculty before first registration period begins. Inquiries and requests for credit should be addressed to the Office of Admissions and Records.

College Level Examination Program — Subject Examinations

Application forms, examination dates and examination descriptions may be obtained from the Pan American University Testing Center.

Successful completion of a Subject Examination will be recorded on the student's official transcript as credit received "CR." Unsuccessful attempts to earn credit by examination will not be recorded on the student's official transcript.

The CLEP Subject Examination List, along with the minimum examination scores for credit and the number of credit hours, are available in the Pan American University Testing Center.

Advance Standing Examinations

To be eligible to receive credit by means of an Advanced Standing Examination, a student must meet the following conditions:

1. He must satisfy the Department Chair that he has the proper background to qualify for the test over which he desired to be examined. The application for the test must be approved by the appropriate school dean.
2. He must make a minimum grade of "B" in order to receive credit for the course. Successful completion of an advanced standing examination will be recorded on the student's official transcript as credit received "CR". Application forms may be obtained from the Pan American University Testing Center.

Degree Plan: In general, a student may follow the degree requirements listed in this

catalog by the respective Departments of the University, thus planning his own 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 his Department Chair on the proper form as soon as possible after the close of the sophomore year, before any advanced courses are taken. This will preclude the possibility of taking courses which will not satisfy requirements for the degree which he seeks. This precaution is particularly appropriate in the case of transfer students and those who have changed their major.

Upon request, the Department Chairs will aid students in preparing Degree Plans that may be required by institutions or agencies other than Pan American University. As an illustration, some public school systems require prospective teachers who have not completed their degrees to file an approved Degree Plan in the superintendent's office.

Dropping a Course: To drop a course a student must execute a formal drop procedure through the Office of Admissions and Records at least two weeks prior to the end of a regular semester and one week prior to the end of a summer semester.

A student dropping a course during the first 30 days of the semester (10 days in a summer session) will receive a DR on his permanent record for the course that he has dropped. If he drops a course later in the semester, he will be given a grade of DP or DF by the instructor for the course he dropped.

Educational Talent Search: The purpose of this public, nonprofit program which has been contracted to Pan American University by the Department of Education is to encourage and assist students in their quest for a college education after completion of their high school studies.

We provide students throughout the Rio Grande Valley with extensive and specific information on educational opportunities, including college scholarships, grants, and loans for access to higher education. Talent Search advisors assist students in applying for financial assistance, help youths make contact with the college of their choice and cooperate with college personnel in both admissions and financial aid offices in helping students in college placement. Talent Search advisors also help high school counselors in their tasks of acquainting students with career opportunities, as well as lending a hand in helping them register for college placement exams.

Talent Search has accumulated a library which includes all types of information on post-secondary educational programs and the various financial aid opportunities that exist.

Talent Search is open Monday through Thursday from 8:00 a.m. to 5:30 p.m. and Friday 8:00 a.m. to noon to offer guidance and assistance to students seeking help in mapping out their plans for the future. Call 381-3651 for more information.

Exclusion of "F" grades: All "F" grades in undergraduate courses seven or more years old shall be excluded from grade point average computation, except in determining Graduate Admission GPA (See graduate section for additional information).

Faculty Artists Series: During the school year, the Music Department presents a series of performances by regular faculty members along with student recitals. Included in these recitals are pianists, violinists, and professional singers. Also performing for students and the general public is the choir, the PAU Dancers, the stage band, and the Valley Symphony Orchestra.

Family Education Rights and Privacy Act of 1974:

Institutional Policy The Family Educational Rights and Privacy Act of 1974 is a Federal law which states (a) that a written institutional policy must be established and (b) that a statement of adopted procedures covering the privacy rights of students be made available. The law provides that the institution will maintain the confidentiality of student education records.

Pan American University accords all the rights under the law to all students. No one outside the institution shall have access to nor will the institution disclose any information from students' education records without the written consent of students except to personnel within the institution, to officials of other institutions in which students seek to enroll, to persons or organizations providing students financial aid, to accrediting agencies carrying out their accreditation function, to persons in compliance with a judicial order, and to persons in an emergency in order to protect the health or safety of students or other persons. All these exceptions are permitted under the Act.

Within the Pan American University community, only those members, individually or collectively, acting in the students' educational interest are allowed access to student education records. These members include personnel in the Office of Admissions and

Records, Business Affairs, Student and University Affairs, and academic personnel within the limitations of their need to know.

At its discretion the institution may provide Directory Information in accordance with the provisions of the Act to include: student name, address, telephone number, date and place of birth, major field of study, dates of attendance, degrees, honors and awards received, the most recent previous educational agency or institution attended by the student, participation in officially recognized activities and sports, and weight and height of members of athletic teams. Students may withhold Directory Information by notifying the **Office of Admissions and Records** in writing during the first twelve (12) class days of a fall or spring semester, or the first four (4) class days of a summer semester.

Request for non-disclosure will be honored by the institution for **only the current enrollment period**; therefore, authorization to withhold Directory Information must be filed each semester or term in the **Office of Admissions and Records**.

The law provides students with the right to inspect and review information contained in their education records, to challenge the contents of their education records, to have a hearing if the outcome of the challenge is unsatisfactory, and to submit explanatory statements for inclusion in their files if they feel the decisions of the hearing panels to be unacceptable. The **Assistant to the Vice President for Academic Affairs** at Pan American University has been designated by the institution to coordinate the inspection and review procedures for student education records, which include admissions, personal, academic, financial, cooperative education, and placement records. Students wishing to review their education records must make written requests to the **Assistant to the Vice President for Academic Affairs** listing the item or items of interest. Only records covered by the Act will be made available within forty-five days of the request. Students may have copies made of their records with certain exceptions, (e.g., an official copy of the academic record for which a financial "hold" exists, or a transcript of an original or source document which exists elsewhere). These copies would be made at the students' expense at prevailing rates which are listed in the current catalog. Education records do not include records of instructional, administrative, and educational personnel which are the sole possession of the maker and are not accessible or revealed to any individual except a temporary substitute, records of the law enforcement unit, student health records, employment records or alumni records. Health records, however, may be reviewed by physicians of the students' choosing.

Students may not inspect and review the following as outlined by the Act: financial information submitted by their parents; confidential letters and recommendations associated with admissions, employment or job placement, or honors to which they have waived their rights of inspection and review; or education records containing information about more than one student, in which case, the institution will permit access only to that part of the record which pertains to the inquiring student. The institution is not required to permit students to inspect and review confidential letters and recommendations placed in their files prior to January 1, 1975, provided those letters were collected under established policies of confidentiality and were used only for the purposes for which they were collected.

Students who believe that their education records contain information that is inaccurate or misleading, or is otherwise in violation of their privacy or other rights may discuss their problems informally with the **Assistant to the Vice President for Academic Affairs**. If the decisions are in agreement with the students' requests, the appropriate records will be amended. If not, the students will be notified within a reasonable period of time that the records will not be amended; and they will be informed by the Assistant to the Vice President for Academic Affairs of their right to a formal hearing. Student requests for a formal hearing must be made in writing to the Dean of Students.

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. Further, students who believe that their rights have been abridged, may file complaints with The Family Educational Rights and Privacy Act Office (FERPA), Department of Health, Education, and Welfare, Washington, D.C. 20201, concerning the alleged failures of Pan American University to comply with the Act.

Revisions and clarifications will be published as experience with the law and institution's policy warrants.

In compliance with P. L. 93-380 Education Amendments of 1974, the following information is provided concerning student records maintained at Pan American University:

- I. *Areas in which student records are maintained.*
 - A. **Academic Records**
 1. Office of Admissions and Records — David Zuniga
 2. Schools, Department and Faculty Offices
 3. Foreign Student Advisor's Office — Judy Vinson
 - B. **Student Affairs Records**
 1. Placement and Testing Office — Derly Guajardo
 2. Dean of Students, Foreign Student Advisor, and Housing Director's Office — Judy Vinson
 3. Student Health Service Office — Dora Castillo
 4. Student Government Office
 - C. **Financial Records**
 1. Business Affairs Office — Esequiel Granado
 2. Financial Aid Office — Arnoldo Trejo
- II. *Directory Information* — This is information which may be released to the general public without the written consent of the student. A student may request that all of the directory information be withheld from the public by making written request to the Office of Admissions and Records during the first 12 class days of a fall or spring semester, or the first 4 class days of a summer term. This request will apply only to the current enrollment period. The following is to be included as directory information:
 - A. Name
 - B. Current and Permanent Address
 - C. Date and Place of Birth
 - D. Telephone
 - E. Major(s) or Minor(s)
 - F. Current Class Schedule
 - G. Number of Hours Enrolled Current Semester
 - H. Classification
 - I. Participation in Officially Recognized Activities and Sports
 - J. Height and Weight of Members of Athletic Teams
 - K. Dates of Attendance
 - L. Degrees and Awards Received
 - M. All Previous Educational Agencies or Institutions Attended.
- III. *Review of Record* — Any student who desires to review his record may do so upon request to the appropriate office immediately responsible for the record.
- IV. *Challenge to accuracy of record-keeping* — any student who desires to challenge the accuracy of his record should follow the procedure outlined in the Pan American University Student Handbook.

Full-Time Undergraduate Student: An undergraduate student who is enrolled for at least 12 semester hours of credit during a regular semester or at least 6 semester hours of credit during a summer session. (A student officially accepted in the Nursing Program and enrolled for at least 9 semester hours credit in Nursing Education courses shall be considered a full-time student. This does not include students receiving V.A. Educational benefits.)

Full-time Graduate Student: A graduate student who is enrolled for at least 9 semester hours of graduate credit during a regular semester or at least 4 semester hours of graduate credit during a summer session. Half-time graduate student is enrolled for at least 6 hours of graduate credit during the regular semester or 3 hours of graduate credit during a summer session

Grade Point Average: The grade point average is computed by dividing the total grade points earned by the total semester hours attempted. (See the sections on Quality of Work: (1) Grading System and (2) Grade Points.) (See Graduate Section for special grade-point calculation method for admission to graduate school.)

Grading System and Grade Points

The following grades are used to designate achievement in classwork. Their corresponding grade values are indicated.

- A — Excellent (4 grade points per semester hour)
 - B — Good (3 grade points per semester hour)
 - C — Satisfactory (2 grade points per semester hour)
 - D — Below average (1 grade point per semester hour)
- not applicable to graduate level courses.

- F — Failure (0 grade points per semester hour)
- P — Pass (not considered in calculating grade points or hours)
- NP — No Pass (not considered in calculating grade points or hours)
- I — Incomplete (not considered in calculating grade points)
- CR — Credit (not considered in calculating grade points, however, hour(s) are counted in total earned hours)
- NC — No credit (not considered in calculating grade points)
- DR — Course dropped (not considered in calculating grade points)
- DP — Drop Passing (not considered in calculating grade points)
- DF — Drop Failing (considered an F in calculating grade points)
- W — Withdrawal from school (not considered in calculating grade points)
- WP — Withdrawal Passing (not considered in calculating grade points)
- WF — Withdrawal Failing (considered an F in calculating grade points)

Grade reports are sent to the student's local mailing address at the end of each semester.

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 term 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 or it will automatically be recorded as an "F" on the official transcripts.

Improper use of the "I" Grade — A student must not be given an "I" grade to permit the student (1) time to prepare course work in addition to that assigned the entire class, (2) time to repeat the entire course, or (3) opportunity to raise a grade for any reason other than the above approved reasons. Incomplete grades are not issued for student or faculty convenience; they may be issued for the reasons stated above only in the case of compelling, nonacademic circumstances beyond the student's control.

Graduation under a specific bulletin: The student may meet the requirements for graduation that are listed in the bulletin of the year in which he enters college or some later bulletin. However, the student must graduate within seven years from the academic year of entrance or he will be placed under the provisions of a later bulletin. Any changes in his degree plan to comply with a later bulletin must be approved by his Department Chair and the Dean of his school.

GRE and GMAT Tests

The GRE and GMAT are administered by the Testing office several times a year. The dates are set by the Educational Testing Service. Applications must be received in Princeton, New Jersey, about a month before the scheduled test date. Check with the Testing Office for application blanks and exact test dates.

Financial Responsibility: State universities cannot extend credit, therefore, 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 class or laboratory until all their fees have been paid. Other charges are due within ten 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 (1) registration privileges, (2) official transcripts, (3) degrees, and/or (4) withdrawal from the University.*

Initial payment of registration fees may be made by personal check, money order payable to Pan American University or cash. Students are advised to exercise care in paying fees by check. (See "Returned Checks") When a bad check for registration fees is returned to the University, a five dollar (\$5.00) return check service charge is assessed, and the student is given five days from date of notice to make full payment by cash, cashier's check, or money order. Failure to comply can result in cancellation of the student's registration.

Grade Change: If an error in computation, evaluation, or recording warrants a grade change, the instructor may process a grade change form through the Office of the Dean of his school. 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, recommendation of the school dean, and be approved by the Council of Deans.

Honor Roll: After each regular semester an honor roll is published listing the names of all full-time undergraduate students who have a grade point average of 3.5 or better for courses taken that semester.

Honors: At graduation, students are listed with "Honors" in accordance with the following standards based on their final over-all grade point average:

Cum Laude — A grade point average of 3.5 to 3.69

Magna Cum Laude — A grade point average of 3.7 to 3.89

Summa Cum Laude — A grade point average of 3.9 or more.

Identification Cards: are issued through the supervision of the Assistant Dean of Students. Use of the student ID card is governed by the following conditions:

1. It remains the property of Pan American University and must be surrendered to any faculty member, administrative official, or security officer of the University on demand.
2. It must be presented for:
 - (a) Any school or faculty sponsored activity.
 - (b) Admission to all varsity and freshman athletic events.
 - (c) Identification for cashing checks on the campus.
 - (d) Authorization to resell books to the Book Store or Student Book Exchange.
 - (e) Checking out equipment from the University Center recreation room checkout counter.
 - (f) Identification for receipt of transcripts at Office of Admissions and Records.
3. This card is non-transferable. Loss or mutilation must be reported to the Office of Student Development, University Center Room 205, A CHARGE OF \$5.00 WILL BE MADE FOR REPLACEMENTS. FEES ARE SUBJECT TO CHANGE.

Learning Assistance Center: The purpose of the Learning Assistance Center is to assist PAU students in their efforts to acquire and to develop both the academic and personal skills necessary for successful college work. All services of the LAC are provided to PAU students at no cost.

Tutoring and Academic Skills Development

1. **Tutoring**
Small group and individual tutoring are provided in many freshman and sophomore courses including:

Biology	History
Chemistry	Math
English	
2. **Mini-Courses**
Short Courses lasting between 1 and 6 hours are provided in the following topics.
Exam Review: helps students review material several days prior to major exams
Term Paper: assists students in learning to identify subjects, to use research material, and to organize information.
3. **Individualized Learning Materials**
Audio-cassette tapes are available for students who want basic skills instruction. In addition, several professors in other areas have provided lectures for students to use. Cassettes can be checked out to students.

Counseling Services

1. **Group Counseling**
In order to assist students in their social and personal development, group counseling sessions are conducted in the following areas. Group participants are limited to twelve students, and groups generally meet once per week for 10 weeks.

Assertion Training:	helps students develop confidence and express themselves in an assertive rather than an aggressive manner.
Communication:	helps participants to become aware of their feelings and to communicate them to others in a coherent manner.
Self Awareness:	examines the need for self-understanding and allows participants to explore feelings toward the self.
Value Clarification:	allows participants to explore their own value system and to determine whether their own values are freely chosen or imposed by others.
Effective Parenting:	develops knowledge, skills, and attitudes that will lead to more effective parenting.

2. Individual Counseling

Students can receive individual assistance in such areas of personal concerns as: home and family matters, interpersonal conflicts; self-concept; alienation and isolation; and friendships and dating. All information discussed with professional counselors is kept in strict confidence.

Academic Advisement

The advisement program will assure that students with a wide range of academic abilities are provided the opportunity to successfully complete their educational, personal, and career goals.

Beginning freshmen are assigned an advisor who will meet with them approximately three times a year to discuss the student's academic options, personal needs, career goals, and help them design a schedule of classes to best meet their needs.

Orientation

The orientation program is geared to welcome incoming freshmen to Pan American University and to acquaint students with the campus. Students are briefed on college requirements and definitions, and are helped to schedule their first semester's classes.

Reading Improvement and Study Skills

Reading Lab activities are individualized according to the student's needs, and the lab provides reinforcement and application of vocabulary and comprehension skills.

1. Reading Lab Services

The Reading Laboratory services are also available to any University student who wishes to improve his reading skills. These services seek to aid the student in improving his reading ability through guidance and practice. He may work selectively on improving vocabulary, reading comprehension, or any other area of need.

2. The Reading Lab assists students in identifying their own strengths and weaknesses in studying, and orients students to other LAC services that can improve study skills.

Maximum Course Load: The normal load for a full time graduate student is nine (9) semester hours. A student may be permitted to enroll for fifteen (15) semester hours with the approval of his graduate advisor and the Dean of the School.

Name Change: A student may change the full, legal name on his or permanent academic record by presenting to the Office of Admissions and Records the appropriate documentation. To correct the spelling or the proper sequence of the name, the student must present a copy of his or her birth certificate. To change a legal name to a new legal name, the student must present the proper name change form and a copy of the signed court order showing the authorized new legal name. To assume her husband's name by repute following marriage, the student must present the proper name change form and a copy of the marriage certificate. A female student who wishes to discontinue the use of her married name and resume the use of her former maiden name, or another name, must present a divorce decree or signed court order showing court restoration of the maiden, or other, name. A former student (not currently enrolled) may change a legal name to a new legal name by following the above procedure.

Military Science: The Army maintains a senior division of the Reserve Officers' Training Corps (ROTC) at Pan American University. Both the four-year program and the 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 (high school) ROTC may be given placement credit for one year of the basic course regardless of academic classification at the discretion of the PMS. Veterans may also be given advanced placement for the basic course at the discretion of the PMS. Students given advanced placement may be commissioned in the U.S. Army, Army Reserve, or National Guard upon completion of the Advanced Course, regardless of academic classification so long as they continue their enrollment in a 4-year institution of higher learning and are working towards a baccalaureate degree. Upon attainment of the degree, they may compete for a tour of active duty as regular or reserve officers depending on their record as a cadet.

Successful students, when graduates, are 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 3 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 \$100 per month.

A special two-year program is available for fulltime 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. Students receive transportation allowance, to and from the camp, uniforms, room, and board and paid approximately \$700 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 Military Science Department, Southwick Hall Room 207, 512-381-3600.

Non-credit Enrollment: A student who enrolls in a course for credit may change his enrollment to non-credit. Any change in credit status must be made through the Office of Admissions and Records not later than 30 days in a regular semester or ten days in a summer semester from the date classes begin. The student may take tests, have papers graded and receive the same classroom attention given students enrolled for credit, but may not receive credit for the course at the close of the semester.

Quality of Work for Undergraduates

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 he expects to graduate. Pan American University has certain specific grade requirements also. For example, the student must make a C in his required freshman English courses. He must also make an average of C in both his major and minor fields.

Students who expect to be certified as teachers are required to have a grade point average of 2.25 in both the major and minor fields. This applies to applicants for the elementary certificate and to those planning to teach under a secondary certificate.

Calculation of Grade Point Average. An illustration of the method of calculating the grade point average follows:

<i>Method of Calculating</i>					
Course	No.	Grade		Grade Points	Grade Points
English	1301	C	3 sem. hrs.	X 2 pts. per hr.	= 6
Mathematics	1327	D	3 sem. hrs.	X 1 pt. per hr.	= 3
History	2313	B	3 sem. hrs.	X 3 pts. per hr.	= 9
Chemistry	1401	F	4 sem. hrs.	X 0 pts. per hr.	= 0
Phys. Ed.	1201	A	2 sem. hr.	X 4 pts. per hr.	= 8
Total Hrs.	15			Total grade points	26
				Total Grade Points	26
Grade point average					= 1.73
				Total semester hrs.	15

Payment of fees as a part of registration: A student is not registered in the University and is not entitled to University privileges until 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. A person who fails to pay registration fees during the assigned time for registration will have his or her classes cancelled.

Placement, Testing and Cooperative Education

In a time when heavy academic emphasis is being placed on career oriented programs, Pan American University's Office of Placement, Testing and Cooperative Education is an important component of any student's preparation.

Through this office, students gain a new insight into their future career plans — what the trends are, the different job opportunities, average pay scales, and many other useful pieces of information. A 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 Pan American Office of Placement, Testing and Cooperative Education puts students in jobs in two ways. During a student's college years, the Office will assist them in locating part-time employment. As graduation draws closer, a large number of top employers visit the campus to recruit new employees. Major employers such as Mobil

Oil, IBM, National Bank Examiners, J.C. Penney's, Exxon, Haskins & Sells, and Southwestern Bell Telephone, as well as many others, recruit at Pan American.

Placement: A placement credential service and on-campus employment interviews are available for seniors. Special activities are also held for all PAU students and alumni in preparation for the career search. These include Career Day, Teacher Job Fair, Nursing Career Day, Job Interview Skills Seminars, as well as a variety of other activities.

Career Information Center: The Career Information Center houses various sources of occupational information, registers and directories, and information on hundreds of different companies, school districts, government agencies, fellowship/scholarship information and graduate/professional school catalogs.

Student Employment Services: A number of local businesses and agencies contact the office for the purpose of seeking students for part/full-time employment. The Student Employment Service operates a referral system to match these employers with PAU students.

Institutional Testing Service: Pan American University is a test center for numerous national and specialized examinations such as the American College Test (ACT), Graduate Record Examination (GRE), National Teachers Examination (NTE), Graduate Study in Management (GMAT), Test of English as a Foreign Language (TOEFL), Credit by Examination Testing Program (CLEP), Law School Admissions Test (LSAT), Miller's Analogy Test (MAT), General Educational Development Test (GED), the Local Advanced Placement (LAP) tests, and a number of others.

Cooperative Education Program: The Cooperative (Co-Op) Education Program at Pan American University offers students an opportunity to gain actual work experience in an area related to the student's major course of study. Pan American students should meet the following qualifications:

1. Student must have completed at least 30 hours, but not more than 100 hours;
2. Students must be enrolled at least half-time (6 hours); and
3. Students must have a 2.0 or better grade point average.

The Co-Op Program has three options: 1) students may alternate semesters or six month terms of study with semesters or six month terms of full-time employment with a major corporation or federal agency; 2) students may work part-time and attend school on a full-time or half-time basis; and 3) students may work with major corporations during the summer as summer interns.

The Co-Op student is eligible for academic free elective credit under certain departments. Refer to catalog for course descriptions.

The Co-Op Program offers students an opportunity to:

- A. Work in an area related to the student's major;
- B. Test their career choices and explore other careers; and
- C. Finance part of their education.

American Humanics: The American Humanics Program at Pan American University provides a unique opportunity for students interested in careers in Youth Agency Administration to receive a specific, practical, educational emphasis in this area. They will include internships, workshops, conferences, and field trips with specific courses in fund raising, working with volunteers, community organization, and other areas relevant to youth and human-service voluntary agencies.

American Humanics is a national program based on 15 university campuses. The major thrust of the program is to provide selective recruiting, career preparation, and placement for those students interested in youth agency administration careers. Scholarships and loans are also available for students interested in this program.

Prerequisite: This term means that specified requirements must be met before one can enroll in a course. Specific prerequisites are listed in course descriptions.

Repeated Courses: When an undergraduate course is repeated, only the last grade and hours attempted are used to calculate the grade point average; except in determining Graduate Admission GPA (See graduate section for additional information.).

Probation: A student is placed on scholastic probation when he fails to achieve the required overall grade point average. A student may be placed on disciplinary probation for infraction of any University regulation. In either case, he must satisfy specific requirements placed on him before he can return to a non-probationary status.

Registration for courses: The only way to become a member of a class is to register for it through the proper registration procedure, or to add a course during the schedule change period. In either case, the instructor receives the student's name by official notice

from the Office of Admissions and Records and in no other way. A student may not receive credit for a course for which he or she is not officially registered.

Regular Attendance Policy: Regular attendance in all meetings of courses for which a 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 advises the student of the action taken.

A student who enrolls for a course and then does not attend is considered absent from class until he officially drops the course or until he has accumulated an excessive number of absences and is dropped by the instructor.

Satisfactory Progress

At the beginning of the first regular semester in which a student enrolls with an excess grade point deficiency, the student will be notified that satisfactory progress is not being made and failure to remove the excess deficiency in grade points by the end of the semester will terminate certification of satisfactory progress until such a time as the excess grade point deficiency is removed. This is an addition to the University's scholastic probation and suspension policy.

Satisfactory Progress for Financial Aid Recipients

INTRODUCTION

Federal regulations state that students receiving financial assistance under Title IV programs must be maintaining satisfactory progress whether or not the student was receiving financial aid during the period of prior enrollment. It is the institution's responsibility to define satisfactory progress. The institution must certify annually that the student is maintaining satisfactory progress in his course of study.

POLICY

A student may receive financial assistance until the completion of a baccalaureate degree or the minimum semester hours required for a degree within the time frame and increments noted below. Should a student exceed the time frame he will no longer be eligible for financial assistance. A student who fails to meet the incremental requirements will be ineligible for aid until such time as he again satisfies the incremental requirements of this policy.

*TIME FRAME**

<i>Enrollment Status</i>	<i>Years to receive F. A.</i>
	Undergraduate
Full-time	6 years
Three quarter time	9 years
Half-time	12 years
Combination	Calculated proportionately (Not to exceed 12 yrs.)
	Graduate
Full-time	2 years
Half-time	4 years
Combination	Calculated proportionately (Not to exceed 4 yrs.)

*One year equals two semesters. The two summer sessions equal one semester. Attendance one summer session will count as one half semester. Students who have a non-enrollment period of five years or more will not be penalized for semesters prior to the five years on the increment measurement.

Increments

<i>Academic years completed</i>	1	2	3	4	5	6
<i>Number of semester hours completed</i>	18	39	60	81	102	**

**Maximum semester hours required for completion of baccalaureate degree.

Effective May 1989, all students who have earned sixty (60) semester hours must maintain a 2.0 grade point average. Returning students with a non-enrollment period of five or more years at an institution of post-secondary education will not be penalized for academic deficiencies upon re-admission and will be awarded one year before being required to meet a 2.0 grade point average.

PROCEDURES

- Warning:** A student who is in danger of losing eligibility will be warned of his status after the twelfth class day each semester. This warning will include incremental status and GPA.
- Suspension:** A student will be placed on financial aid suspension when he is not at the prescribed GPA or increment for the number of years of enrollment based on the time frame in the policy. Students not meeting the 2.0 GPA requirement at the end of the spring semester may receive financial assistance for the summer session while they attempt to bring up their grade point average.
- Reinstatement:** A student may remove suspension by successfully completing the number of semester hours which will place him at the proper increment based on the prescribed time frame.

DEFINITIONS

- Financial aid:** Includes grants, loans, work-study and need based scholarships. Examples of programs covered by this policy include, but are not limited to: Pell Grant, Supplemental Educational Opportunity Grants, Perkins (formerly National Direct Student Loans), Hinson-Hazlewood Student Loans, College Work-Study, Guaranteed Student Loans, Texas Public Educational Grant, Pan American University Scholarships and Tuition Scholarships.
- Enrollment Status:** Refers to the number of hours a student is enrolled as of the twelfth class day:
- | | | |
|--------------------|---|---|
| | Undergraduate (Regular Semester) | |
| Full-time | | 12 semester hours or more |
| Three quarter time | | 9 - 11 semester hours |
| Half-time | | 6 - 8 semester hours |
| | Graduate (Regular Semester) | |
| Full-time | | 9 semester hours or more |
| Half-time | | 6 semester hours |
| | Undergraduate (Summer Sessions) | |
| Full-time | | 6 semester hours or more |
| Half-time | | 3 semester hours |
| | Graduate (Summer Sessions) | |
| Full-time | | 4 semester hours or more |
| Half-time | | 3 semester hours |
| | Special | |
| | | Students who have already received a baccalaureate degree, but are not accepted into a Graduate Program will be treated as an undergraduate for financial aid purposes in so far as enrollment status is concerned. |
- Regular Semester:** Refers to the fall and spring terms. Two (2) summer sessions will be treated as one (1) semester if the student enrolled full-time both sessions.

APPEALS

Exceptions to the rule will be reviewed on an individual basis. Appeals will be presented in writing and substantiated by verifiable documentation to the Financial Aid Director. The Director will schedule appeal hearings with the Financial Aid Committee at least once a semester.

CANCELLATION OF FINANCIAL AID

Pan American University reserves the right to review and cancel financial aid awards at any time for the following reasons:

1. Failure to maintain satisfactory progress.
2. Changes in the financial status of the recipient or his family.
3. Availability of funds for the number of qualified applicants.
4. Student's ineligibility to register for courses at the University.

When a student accepts financial aid, it is understood that the student is aware of the conditions under which the aid is offered and agrees to all necessary requirements.

Scholastic Probation and Suspension — Undergraduate

1. Scholastic probation or suspension will be determined annually on the basis of the student's cumulative grade point average. The term "grade point deficiency," as used here refers to the number of grade points less than *twice* the total hours attempted with Drop and Drop Pass hours not counted. The student will be placed on probation for the spring semester if at the time of registration in January:
 - a. His accumulated hours earned are 59 or less and his grade point deficiency is 12 or more; or
 - b. His accumulated hours earned are 60 hours or more and his grade point deficiency is six or more.
2. During this semester of probation, the student must remove his excessive deficiency in grade points or be placed on a one year academic suspension September through May of the following year.
3. A student on suspension may not enroll for the next two regular semesters.
4. A student on suspension may enroll for summer sessions to remove excess grade point deficiencies. This can be most efficiently accomplished by only enrolling for courses in which he has earned a low or failing grade.
5. A student on suspension who removes his excess grade point deficiency during the summer will be reinstated as a student in good standing upon applying to the Office of Admissions and Records for reinstatement.
6. If a student who has been suspended for failure to meet scholastic probation requirements feels that unusual circumstances warrant a review of his case, he 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. Such a petition should detail his reasons for thinking the circumstances of his case warrant special consideration and should indicate valid reasons why the circumstances will not re-occur. The Committee will reinstate a suspended student, who has not served the period of suspension, only when it is convinced the best interests of both the University and the student will be served by such action.

Warning: Each student is responsible for knowing whether he is eligible to continue at the University. An ineligible student who nevertheless registers at the University shall be dropped and cannot attend classes; and the student shall not receive special consideration on his plea of lack of knowledge of his scholastic status, regardless of whether he registered or preregistered and paid his fees.

Scholastic Probation and Suspension — Graduate

Grade points are assigned graduate students as follows: 4 for each semester hour of A, 3 for B, 2 for C, 0 for F (D is not given.) *All grades earned (including those for repeated courses) will be used to compute the gradepoint average.* A minimum grade-point overall average of 3.0 (B) is required for a graduate degree. Every semester hour of C, therefore, must be balanced by one of A, since an overall average of B is required for a degree. Should a graduate student make less than a B average in a given semester, he will be placed on scholastic probation and warned that his continuance is in jeopardy. *During the following semester or summer school, he must recoup an overall B average or be automatically suspended.* He may be readmitted only after petitioning the Dean of the School and receiving his approval and that of the Council of Deans.

Students with other than clear admission are subject to criteria set forth under *General Admission Requirements*.

Selection of Courses

The student should plan to satisfy during his freshman and sophomore years not only the *General Requirements for a Bachelor's Degree*, but any introductory or prerequisite courses in his major and minor field, as specified by the departments. Also, he must, unless excused by waiver, enroll in one activity course in physical education *each* semester until he has satisfied these required hours.

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. While the departments may not specify more than 36 hours in the major field (60 hours in the broad-field major) nor more than 18 hours in the minor field, students may take additional hours of work in both the major and minor fields if

they wish to use elective hours. The student should develop his own outline of courses which he is required to take, supplementing it with those courses he wishes to take in satisfaction of any elective hours allowed him by his department. Any deviation from courses required must be approved by his department chair and by the Dean of his School, and must be incorporated into his Degree Plan. If deviations are made which subsequently are not approved, the student may find that these will merely add hours to his graduation requirements.

Many courses listed in the catalog are not offered every semester. This is particularly the case with upper-level courses. In planning his program the student should ascertain that there is a likelihood that a particular course will be offered during the semester he plans to take it. Further, he should determine that his planned sequence of courses provides that any prerequisite courses will be taken by the time the course for which they are prerequisite is scheduled to be taken. The same precaution is advised with reference to semester-hour (that is, class standing) prerequisites.

When a student enters this University with the expectation of subsequently transferring to another institution, he should be certain to obtain a copy of the catalog of that other institution and use it as a guide of courses for which he will register at Pan American University. It is his responsibility to check the requirements for his program, though a faculty advisor will be glad to help him interpret requirements of other colleges.

Students who plan to graduate from Pan American University should consult the catalog sections on: *General Requirements for a Bachelor's Degree*, *Graduation Requirements*, and the specific requirements and suggestions listed under their respective schools and departments to insure that all required work is satisfied. The department chairs and deans will be glad to help clarify matters about which the student may be uncertain.

It is expected that all beginning freshmen will meet with academic advisors prior to or at the time of actual registration and that they will be counseled concerning the best selection of courses. Deans and department chairs are in their offices the week preceding registration for the purpose of advising students about course selections and schedules. Those above the freshman level who can do so are urged to seek advice during the year because of the difficulty of obtaining appointments the week before registration.

Semester Hour: College credit is measured in terms of semester hours. Ordinarily, a class that meets one 50-minute period per week for a regular semester will carry a credit of one semester hour. Since the majority of classes meet three periods, or their equivalent, each week, these classes carry three semester hours of credit. Two or three laboratory hours per week are usually required for one semester hour of laboratory credit.

Student Financial Aid

Financial Aid has changed rapidly in the past couple of years. Despite all the changes, financial aid continues to play a vital role at Pan American University. The College Work-Study program, Educational Opportunity Grants and Loan programs are still available to qualified students.

A large percentage of students at Pan American University receive some type of financial assistance because of the low income area in which the University is located. Tuition and fees are significantly lower than private colleges and equal to, or lower than, most public colleges. This, together with the availability of financial aid funds, makes Pan American University a very reasonable cost institution.

Financial Aid General Information

Pan American University 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, ethnic origin, religion, age or handicap.

An applicant will be approved for financial assistance if he/she meets the following criteria:

- a) is a U.S. citizen or permanent resident;
- b) has filed an affidavit which states that all funds received from financial aid programs will be used solely for educational or educationally related purposes;
- c) is enrolled for a minimum of 16 hours as an undergraduate, or 4 hours as a graduate in each of the regular sessions; or for a minimum of 3 hours in each of the summer sessions;

- d) is not in default on any loan, either long term or short term; and does not owe a refund on any grant program;
- e) demonstrates financial need, except when applying for funds from a program which does not call for financial need;
- f) is in satisfactory standing, and making satisfactory progress at the University; (Satisfactory progress is defined by institutional policy.)
- g) be enrolled in an eligible program offered by the institution;
- h) have application and all required documentation on file by appropriate deadline.

Financial assistance will be awarded to all eligible applicants on a first applied, first completed application basis. In the event where two or more completed applications are submitted on the same date, priority will be given to those students with exceptional need. The general application and Student Aid Report (SAR) should be submitted to the Financial Aid Office located in Room 186, Student Service Building.

Students who receive financial aid and withdraw during the semester are required to reimburse part of their financial aid in accordance with an approved repayment schedule.

There are several sources of student aid: through employment at the University, placement in part-time jobs off campus, scholarships, grants and loan funds.

Application Deadlines

Deadline for submission of applications, to insure processing **before** registration, for the Perkins Loan (formerly the National Direct Student Loan), Educational Opportunity Grants, Work-Study and Hinson-Hazlewood Student loan are as follows:

<i>Fall Awards</i>	<i>Spring Awards</i>	<i>Summer Awards</i>
May 1st	October 1st	March 1st

All applications received after these deadlines are considered only if money is available to cover the request and, if eligible, will receive the award **during the semester**. With few exceptions, one application can and should be used for all assistance. It is highly recommended that the application process begin in early Spring for the upcoming Fall semester.

Work-Study Program

The College Work-Study program enables the University to employ a sizable number of students. To qualify for the program a student must satisfy both the economic and scholastic requirements set forth under the program. Employment is available under the Work-Study program both on-campus and off-campus. Students work for an average of 12 hours a week when classes are in session and for a maximum of 40 hours a week during periods of non-enrollment. It is possible to combine the Work-Study program with other types of financial aid in order to help secure adequate funds for a student's university expenses.

Grants

Pell Grants: This grant is available by completing an ACT Financial Aid Application, which is mailed directly to the processing center in Iowa. 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 available to students enrolled for at least half-time. They are not available to students who have already received a Bachelor's degree.

Supplemental Educational Opportunity Grants (SEOG): The Federal Government established this program for students with great financial need. The grant may not exceed \$2,000 per year, and the minimum that may be awarded is \$200 per year. Graduate students or undergraduates who have already received a baccalaureate degree are not eligible for S.E.O.G. The actual amount and qualification is determined after the family financial statement, completed on the financial aid application, is processed.

TPEG Resident and Non-Resident/Foreign: Texas Public Education Grants are also available to Pan American University students from the funds collected for tuition payments. The amount of funds available will depend on the tuition that is collected from students. Eligibility for TPEG resident/non-resident/foreign will be determined by the Financial Aid Office in accordance with policies set forth by the Coordinating Board for Texas Colleges and Universities. Amounts will be based on the funds available and students eligible for the funds.

Loans

Perkins Loan (formerly National Direct Student Loan): Recognizing the fact that loans are an increasingly important aspect of financing an education, Pan American University by participating in the Perkins Loan program, has funds available with which a student may finance a substantial part of his education. Interest and repayment of funds borrowed begins six months from the last date of attendance, as a half-time student, in an accredited institution of higher learning if the student is a previous borrower or begins nine months after attendance if the student is a new borrower 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.

Hinson-Hazlewood Student Loan (TOP): The State of Texas, recognizing its responsibilities to the residents of Texas, established this loan program. A student may borrow a maximum of \$2,265 the freshman and sophomore years, \$4,000 the junior and senior years, \$7,500 as a graduate or professional, depending on the student's need analysis. Repayment of funds borrowed does not start until the student is no longer attending an accredited institution of higher learning, at least half-time. Applicants are considered on the basis of financial need and demonstrated academic ability, and must be residents of Texas. Further information and application forms may be obtained from the Financial Aid Office.

Texas Guaranteed Student Loan (TGSL): This loan is handled through the student's local bank or credit union, and it is the responsibility of each applicant to work with the bank to secure the loan. The Financial Aid Office certifies that the student is or has been accepted for enrollment during the period the application covers, and recommends the amount of loan that the student would need in order to meet his educational costs. A student may borrow a maximum of \$2,625 the freshman and sophomore years, \$4,000 the junior and senior years, \$7,500 as a graduate or professional per year, depending on the student's need analysis. Additional information and application forms may be obtained at the Financial Aid Office.

College Short-Term Loans: These loan funds have been 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 said funds are borrowed. The loans are designed to aid students who do not have sufficient funds to pay tuition, purchase books and supplies, and other such items, or to assist students when emergencies arise. A \$5.00 charge is assessed against each loan.

Emergency Loans: Emergency loans are available to Pan American University students needing assistance in paying for registration costs. Funds for the emergency loans must be paid back to the University during the semester. Student must be making satisfactory academic progress to be considered for the loan. Fee for processing the loan is 5% of the loan amount. Students who pay resident tuition may borrow up to the amount of registration costs. Out-of-state or foreign students may borrow up to \$500.00 for registration purposes.

Scholarships

There are many scholarships given directly to students from specific organizations in their home towns that are not available for listing at this time. A partial list of these scholarships follows:

TYPE & NAME	LOCATION
Art & Music	
Music Scholarship	Music Dept
Lemont Wilcox Scholarship	Financial Aid Office
Business	
AICPA	School of Business
Central Power & Light Scholarship	Financial Aid Office
Exxon Scholarship	School of Business, (for internship only)
Mobil Scholarship	School of Business
Kraft Foods Co. Scholarship	School of Business

Communications

Drama Scholarship
 Carl McGovern Communicative
 Disorders Endowed Scholarship

Communications Department

Criminal Justice

Lambda Alpha Epsilon
 Scholarship

Criminal Justice Dept.

Foreign Students

Good Neighbor Scholarship

International Student Advisor

Geology

Magic Valley Gem & Mineral
 Society Scholarship

Physical Science Dept.
 Mr. Robert Rodgers

Military Science

Three-year Scholarship (ROTC)
 Two-year Scholarship (ROTC)
 Two-year Scholarship (Basic Camp)
 Catholic War Veterans Scholarship

Military Science Dept.
 Military Science Dept.
 Military Science Dept.
 Military Science Dept.

Pre-Engineering & Related

TAME-Texas Alliance for
 Minorities in Engineering
 Harry Wilcox Scholarship

High School Counselors
 Physical Science Dept.

Veterans

Hazlewood Act

Financial Aid Office

Unrestricted Majors

Haggar Scholarship
 Handicapped Scholarship
 Honors Scholarship
 James Cullen Looney Scholarship
 Joe & Jess Crump Scholarship
 Legislative Academic Scholarship
 President Leadership Scholarship
 Valedictorian Scholarship

Financial Aid Office
 Division of Vocational Rehabilitation
 Honors Program Office
 Financial Aid Office
 Financial Aid Office
 Financial Aid Office
 Financial Aid Office
 High School Counselors

Students interested in applying for any of the above scholarships should contact the locations listed for necessary applications and deadlines. In general, application process should be initiated in early Spring for the Fall Semester. Financial Aid Office scholarship deadline is March 1 of each year for the upcoming academic year.

Student Health Service**Health Care**

The Student Health Service provides medical and nursing service to any enrolled Pan American University student. The service is financed by Student Service fees paid at registration and generally involves no extra charge to the student. Three registered nurses (R.N.) and a full-time physician (M.D.) provide treatment for the wide range of conditions which affect students - from colds, flu, and sore throats to gynecological examinations such as Pap tests for cancer detection. Emergency and follow-up care are provided for injuries of all kinds. Immunizations and Tuberculosis (TB) skin tests are available, as are pregnancy testing and an array of other lab tests including urinalysis, diabetes, and anemia screening. The Student Health Service lends crutches and heating pads and is the office to which persons needing handicapped parking spaces apply for their permits.

Health Information Consultant

While all the Health Service personnel provide health information and counseling, the service of the Health Information Consultant is available to all persons associated with the University (students, faculty, and staff). In addition to personal consultation with individuals, the consultant will present programs to groups or classes upon request. Information and literature can be obtained on all medical/health matters including substance abuse, preventable disease, blood pressure/heart disease, stress management, birth control, sexually transmitted diseases, AIDS, and cancer detection (self-examination for breast and testicular cancer). Special consideration is given to alcohol and drug abuse prevention. Persons wanting help with problems of substance abuse or

those concerned about substance abusing in others around them may see the Health Information Consultant and be assured of the confidentiality of the contact. Student Health Services, both health care and health information consultation, are available on the first floor of Emilia Hall. *All services are confidential.* The hours of service are those of the University. Call 381-2511 for more information.

Student Housing

On-Campus Housing

Two Residence Halls are provided on the Pan American University campus for housing:

Residence Hall for Women	192 students
Residence Hall for Men	192 students

The Residence Halls are air-conditioned and centrally heated for year-around comfort. For reservations and further information contact the Housing Office, University Center, Room 102.

Rules and Regulations

Residence hall students must comply with University regulations as stated above and, in addition, are subject to specific regulations governing each hall.

Directions for making room reservations, the schedule of fees, deposits, and other details concerning residence halls will be found under the section of the catalog headed STUDENT EXPENSES.

Student Insurance

Enrollment at Pan American University and payment of Student Service fees automatically provides each student accidental injury, and death or dismemberment insurance. Coverage relates to students injured on campus or while engaged in any University sponsored activity. If the student has other medical insurance, this policy pays only as a back-up, when all the other policy's payments have been made. Claims must be filed within 30 days of the accident or injury. Consultation with the Student Health Service doctor when the injury first occurs may result in the student's not having to pay the usual deductible. Specific details regarding the policy limits, and filing instructions may be obtained by inquiring at the Student Health Service located on the first floor of Emilia Hall, or by calling 381-2511.

An optional medical insurance plan designed for university students is available on an individual basis. Forms and brochures are available at the Student Health Service waiting room located on the first floor of Emilia Hall.

Student Publications

"The Pan American"

Pan American University students write and edit the University's weekly newspaper. Communications students and others may make contributions and work as volunteers on the staff. Writing, editing and picture-taking usually starts prior to the opening of classes in the fall semester.

Some positions on the paper are compensated and volunteer workers are sought as reporters, copy-readers and headline writers. The office is at Emilia Hall 100. Transfer students and beginning freshmen should contact the Student Publications office before registering.

"Rio"

"Rio" is the University's All-American feature magazine, which is written and produced camera-ready by students. Applications are available in Emilia Hall 100. Some positions are paid; others are volunteer. Any student may apply.

Student Responsibility

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.

Procedural changes, as well as changes in regulations and requirements, may be made

from time to time after notice to the student body or to the individuals concerned. For this reason, a student is responsible for keeping the Office of Admissions and Records advised on his local mailing address.

The student should work directly with the person in his major department who is assigned the responsibility of supervising his program 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 School, who notifies the student of the decision pertaining to his request.

Students become responsible to deans: Each student, by registering, enters some school or division of the University and, except as to conduct, is thereafter under the jurisdiction of the dean or director of that school or division. This involves jurisdiction over the student's program of study and degree requirements.

Summer Session

As a part of its regular program, the University offers a Summer Session consisting of two five and one-half week terms. Classes given in the summer are arranged to meet the requirements of students who need to do summer work and are selected on the basis of the requests made by those who are enrolled during the spring term.

Teaching Certificates

Consult the office of the Dean of the School of Education for full details on all certification requirements. Students may pursue work toward professional certification simultaneously with work toward a graduate degree.

Candidates for the Master of Education degree should complete the academic requirements for the professional certificate as a classroom teacher, a counselor, an educational diagnostician, a supervisor, or an administrator. Candidates for the Master of Arts or the Master of Science degree should complete the academic requirements for the professional certificate in the major field selected for the degree.

Candidates who already hold the master's degree may qualify for the professional certificate and are particularly urged to do so as their individual educational objectives will be furthered by professional certification.

Applicants for the professional certificate must hold the provisional certificate, must have completed three years of satisfactory teaching experience (except for the administrator's certificate, which requires only two years of satisfactory teaching experience) and must have completed all of the requirements for the appropriate master's degree. Because the provisional certificate is based upon the bachelor's degree, no more than six semester hours of the work used to obtain the master's degree may apply toward this certificate. These six hours may not also be applied toward the professional certificate.

An application for the professional certificate should be made in the Certification Office of the School of Education during the semester in which the certification requirements will be completed. Students may not qualify for a professional certificate at Pan American University unless they already hold the master's degree or have also completed all of the requirements for the appropriate master's degree.

Texas Rehabilitation Commission

The Texas Rehabilitation Commission is a state agency which provides handicapped individuals with services that will enable them to enter or return to gainful employment. Eligibility depends on two criteria: (1) there is a disability (physical or mental) that constitutes or results in a substantial handicap to employment; (2) vocational rehabilitation services may reasonably be expected to benefit the individual in terms of employment. Available services include evaluation, counseling and guidance, interpreter services for the deaf, medical treatment, assistive devices, tuition costs, room, board, and transportation, tools, supplies and licenses, placement and follow-up. For further information contact the Texas Rehabilitation Commission offices in McAllen or Harlingen.

Transcripts

A student may secure an official transcript of his or her Pan American University record at a cost of \$1.00 per copy. Unofficial copies of transcripts from other institutions are furnished, in accordance with the Texas Open Records Act, upon payment of a fee at the Office of Admissions and Records. 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 Pan American University. 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.

V.T.C.A., Education Code, Title One, Section 4.29, provides that "no person may buy, sell, create, duplicate, alter, give, or obtain or attempt to buy, sell, create, duplicate, alter, give, or obtain a diploma, certificate, academic record, certificate of enrollment, or other instrument which purports to signify merit or achievement conferred by an institution of education in this state with the intent to use fraudulently such document or to allow the fraudulent use of such document."

"A person who violates this Act or who aids another in violating this Act is guilty of a misdemeanor and upon conviction is punishable by a fine of not more than \$1,000 and/or confinement in the county jail for a period not to exceed one year."

Varsity Athletes

To be in compliance with Division I NCAA eligibility requirements for athletic participation and/or athletically related financial aid, a student athlete must meet the following "progress towards graduation" requirements in addition to the University's grade point progress requirements stated above:

1. Enrollment during each regular semester must not drop below 12 semester 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 baccalaureate degree in a designated program of studies must be accumulated since the beginning of the student athlete's last season of competition.

Veterans' Program

Veterans Educational Outreach Program

The Veterans Educational Opportunity Program (VEOP) provides the following services:

- A. Information and referrals
- B. Individualized V.A. tutoring
- C. Income verification
- D. Explanation of educational benefits
- E. Assistance with V.A. educational benefit applications.

G.I. BILL EDUCATIONAL BENEFITS

(G.I. bill rates are subject to change by Congressional Legislation)

	Credit Hours Graduate Hour Equivalents in Parenthesis	Reg. Sem. 12 Hours (9) or More	Sum. Sem. 6 Hours or More	No depen- dent	One depen- dent	Two depen- dents	Each addit. depen- dent
Full Time				\$342	\$409	\$466	\$29
¾ Time		9-11 Hours (6)					
½ Time		6-8 Hours (4)	3 Hours	\$172	\$205	\$233	\$16

Less than half-time enrollment payment received for tuition and fees only.
For further information, contact the Veterans Coordinator at 381-2281.

NOTE: Students receiving V.A. Educational Benefits must make progress towards a degree as specified in this bulletin under *Satisfactory Progress* and *Scholastic Probation and Suspension — Undergraduate*.

Withdrawal

To withdraw from school a student must execute 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 semester.

A student withdrawing during the first thirty days (10 days in a summer session) will receive a "W" on his permanent record for each course in which he was enrolled. If he withdraws later in the semester, he will be given a grade of "WP" or "WF" by the instructor for each course in which he was enrolled.

The University College/ General Education Requirements

A Liberal Arts Education

Your education at Pan American University 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 Pan American's University College/General Education requirements you should understand the established goals. These are the characteristics you should gain from your work and study here.

The Goals of a Liberal Arts Education

1. An inquiring attitude which 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. 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.
3. The ability to use words and numbers accurately and effectively, and communicate clearly through spoken and written word as well as through the symbols of mathematics.
4. 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.
5. A general knowledge and appreciation of nature, science and technology.
6. A general knowledge and appreciation of the fine and performing arts and of literature.
7. An understanding of self, along with the empathy for the strengths, weaknesses, rights and needs of others, as well as the ability to relate to others with human understanding.
8. 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.
9. Knowledge of the economic and geographical inter-relationships of regions and nations and their resources.

These are the goals of a liberal arts education and the qualities that distinguish a liberally educated person. These are the skills and characteristics that we hope to nurture in our students through the University College/General Education Requirements.

The University College and General Education Requirements

The University College and General Education Requirements apply to all students who enter Pan American University in the Fall semester of 1984 or thereafter. Together, the requirements total 57 semester credit hours of work in the humanities, the social sciences, and the natural sciences. These 57 hours must be completed before graduation. Twenty-seven of these 57 hours including 6 hours of Freshman English plus Math 1335 or higher level mathematics course make up the 27 hour University College requirement which must be completed within the first 60 hours of college work.¹

General Education Requirements¹

HUMANITIES (24 hours)

- A. 6 semester hours of Freshman English
- B. 6 semester hours of sophomore literature
- C. 6 semester hours of the same foreign language
- D. 6 semester hours from two of these areas: the arts, communication, and philosophy

SCIENCE (8 hours)

- A. 8 semester hours of a laboratory science

COMPUTER LITERACY

- A. 3 semester hours

PHYSICAL EDUCATION

- A. 4 semester hours of physical education or ROTC 1200 through ROTC 2299

SOCIAL SCIENCE (18 hours)

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

University College Requirements

The University College requirements constitute any 27 hours of the 57 hours of requirements listed above and Math 1334 or higher level mathematics.² These 27 hours must be completed in your first 60 hours of college-level coursework.

Junior level students may begin taking upper-division courses — those on the junior and senior levels — once they have completed their University College requirements with at least a 2.0 grade point average. Students who fail to complete the University College requirements with a 2.0 average may not enroll in other courses until they do so.

All students must earn 6 hours of Freshman English and successfully complete mathematics for the University College requirement, and they will not be allowed to take upper-division courses until they do. Students must register for Freshman English and mathematics every semester until they satisfactorily meet those requirements with at least a grade of C (2.0 grade point) in each course.

Transfer Students

Transfer students with 30 or more hours but without the University College approved courses or courses deemed comparable by Pan American University 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 six hours of Freshman English or equivalent and 3 hours of mathematics with grades of at least C in each course must complete these requirements within their first two semesters at Pan American University.

¹Effective Fall 1990, Math 1340 (College Algebra) or higher will become a University College/General Education requirement for graduation.

²Students with ACT math subtest scores of 16 or higher are not required to complete Math 1334.

Specific Courses that meet the University College and General Education Requirements:

A. Humanities (24 hours)

1. *English* — 6 hours of Freshman English
Eng 1301 and 1302 (Eng 1387 and 1388 for the Honors Program)
Eng 1406 for foreign students replaces Eng 1301.
2. *English* — 6 hours of literature
Eng 2300, 2301, 2302, 2303, 2305, 2307, 2308, 2313. (Eng 2387, 2388 for the Honors Program.)
3. *Language Other Than English* — 6 hours in the same language.
Fr 1321, 1322 or higher level courses.
Ger 1331, 1332 or higher level courses.
Por 1361, 1362 or higher level courses.
Span 1301, 1302, 1303, 1304 or higher level courses.
4. *General Topics* — 6 hours to be selected from 2 of the following 3 areas:
 - a. **Area 1: The Arts**
Art 1301, 3381
Comm (Theatre) 2312
Music 1301, 1302, 2307, 2308, 3311
 - b. **Area 2: Communications**
Comm (Speech) 1303, 1313
 - c. **Area 3: Philosophy**
Phil 1310, 1320, 2330, 2380

B. Science (8 hours)

1. *Natural Science* (8 hours in same discipline)
Astr 1401 and 1402
Biol 1405 and 1406; 1401 and 1402; 2403, 2404
Chem 1401 and 1402
Geol 1401 and 1402
Phys 1401 and 1402, 1405 and 1406
PSci 1421 and 1422

C. Computer Literacy (3 hours selected from:)

C S 1300, 1380, 2325, CIS 1301 or an appropriate computer course.

D. Physical Education (4 hours)

Any 2 PE activity courses or equivalent Military Science courses. Students excused from PE courses or equivalent Military Science courses must take H.E. 2301.

E. Social Sciences (18 hours)

1. *State Requirements* (12 hours)
 - a. **History (6 hours)**
Hist 2313 or 2333, 2314 (2387, 2388 Honors Plan)
 - b. **Political Science (6 hours)**
PolS 2313, 2314 (PolS 2387, 2388 Honors Plan)
2. *General Topics II* — 6 hours to be selected from 2 of the following 4 areas:
 - a. **Anthropology**
Anth 1323, 1324, 2323, 2342, 2353
 - b. **Economics**
Eco 1301, 2353
 - c. **Psychology**
Psy 1313, 1323 (1387, 1388 Honors Plan)
 - d. **Sociology**
Soc 1313, 1323, 2333

Suggested Course Sequence for University College and General Education Requirements

Freshman Year

First Semester:

Course:	Credits:
English 1301 (1)	3
Math 1334 (1)	0
Foreign Language	3
Humanities	3
History	3
P.E. (2)	2
Total	14

Second Semester:

Course:	Credits:
English 1302 (1)	3
Computer Literacy	3
Foreign Language	3
Humanities	3
History	3
P.E. (2)	2
Total	17

Total credit hours for the University College and General Education requirements to be taken during the Freshman year: 31

Sophomore Year

First Semester:

Course:	Credits:
Science	4
Political Science	3
Social Sciences	3
Literature	3
Total	13
Other	3-6
Total	16-19

Second Semester:

Course:	Credits:
Science	4
Political Science	3
Social Sciences	3
Literature	3
Total	13
Other	3-6
Total	16-19

Total number of credit hours to be taken for the University College and General Education requirements during the Sophomore year: 26.

Total for the University College and General Education requirements: 57.

(1) All students must pass English 1301, 1302, and Math 1334 or their equivalents with a grade of "C" in the first 60 hours of work to proceed to upper level classes. Students should register in these classes every semester until they have met these requirements.

(2) P.E. can be taken at a later time if student must start a major during the Freshman year.

Texas Academic Skills Program

The Texas State Education Code requires that all students "who enter public institutions of higher education in the fall of 1989 and thereafter must be tested for reading, writing, and mathematics skills." This includes all "full-time and part-time freshmen enrolled in a certificate or degree program", any non-degree students prior to the "accumulation of nine or more college credit hours or the equivalent," and "any transfer students with fewer than 60 semester credit hours or the equivalent who have not previously taken the tests."

Performance on the test will not be used as a condition of admission.

A student may not "enroll in any upper division course the completion of which would give the student 60 or more semester credit hours or the equivalent until the student's test results meet or exceed the minimum standards in all test scores." Other assessment procedures may be used in exceptional cases to allow a student to enroll in upper division courses "in cases where student test results do not meet minimum standards." (Texas Education Code, Sec. 51.306).

Students with deficiencies as measured by the test will be required to enroll in developmental courses or academic support programs.

Academic Programs

College, Schools, Departments, and Courses of Study

The College of Arts and Sciences

Dr. Ernest Baca, Dean

Dr. Mark Glazer, Associate Dean for University College/General Education

Dr. Sylvia Lujan, Staff Associate Dean for the Learning Assistance Center

The College of Arts and Sciences includes disciplines traditionally considered to be the liberal arts in American higher education. It includes the Departments of Art, Biology, Chemistry, Communications, Criminal Justice, English, Foreign Languages, History, Mathematics and Computer Science, Military Science, Music, Physical Sciences, Political Science, Psychology, and Sociology and Social Work. Degree options are explained in detail in the departmental descriptions that follow this section of the catalog.

All Pan American students, regardless of major, first study for a broad, or liberal education. The term "liberal arts" comes from classical usage by the early Greeks and Romans, from a time when only free men were allowed to study such subjects. Hence, the word "liberal," relating to freedom or liberty. The classical liberal arts included seven subjects: grammar, logic, rhetoric, arithmetic, geometry, music, and astronomy. The modern term encompasses much more. We encourage you to read and to think about the goals of a liberal arts education listed in the previous section. These are also the goals of the College of Arts and Sciences.

The School of Business Administration

Dr. F. J. Brewerton, Dean

The School of Business Administration at Pan American University was established in 1965 to offer professional training in business. The number of students enrolled in the School has grown to approximately 2,500.

The undergraduate and masters programs of the School of Business Administration are fully accredited by the American Assembly of Collegiate Schools of Business.

Statement of Objectives

The primary purpose of the School of Business Administration is to provide professional academic training which prepares its graduates for administration of private and public institutions and organizations both nationally and internationally. In addition, the school exists and is organized to provide for the research and service needs of the various publics it serves.

Pan American University is a regional university located in the center of diverse cultures and economies that directly influence the programs of the School of Business Administration. The primary service area of the institution is a region of South Texas known as the Lower Rio Grande Valley. This region, covering an area of more than 4,000 square miles, is populated by approximately 700,000 people, primarily of Hispanic origin, and is economically and culturally distinct from the remainder of the state and nation. The local economy depends primarily upon agriculture, tourism, trade and government activities. The business establishments are typically small and are concentrated in the retail and service sectors of the economy. These factors have caused the School of Business Administration to develop programs and curricula which recognize this unique situation, capitalizing upon its strengths and compensating for its limitations.

The basic purpose of this University is to help perpetuate the best of American cultural heritage and to blend with it the outstanding features of Latin American culture. The academic program of the School of Business Administration supports this philosophy by providing its students with a broad foundation in the Liberal Arts and Sciences in addition to specialized professional business curricula. This training enables students to cope with the varied demands of business and society while recognizing the unique environmental characteristics of the institution and its constituents. As a professional school, several additional goals are recognized as necessary in the development of graduates from this area to fulfill their role in society. They include:

- The development of a critical thinking ability coupled with a logical problem solving approach.
- The development of a professional attitude and an appreciation of the role of business and business-persons in a free enterprise economy.
- The development of basic quantitative skills and the expansion of analytical abilities.
- The development of basic written and oral communications 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 School of Business Administration. Student and faculty research are focused on regional concerns. Programs, short courses and seminars are conducted for the area business community and governmental agencies as needs are recognized.

In 1975, the Master of Business Administration degree program was established and a new Business Administration Building was completed. The School conducts research for state, county and city agencies and private firms and holds short courses, seminars and workshops for business and governmental agencies. These non-credit programs have served thousands of persons in the Valley and have provided opportunities for students to work for and with the business world.

Other special programs and activities enrich and augment the regular curriculum of the School. Among such programs are a Small Business Institute, an Executive-in-Residence Program, the Small Business Development Center, the Center for Entrepreneurship and Economic Development, and the Bureau of Business and Economic Research.

Chapters of Alpha Kappa Psi, a professional fraternity, and Beta Gamma Sigma, a national honor fraternity, are open to all business administration majors. Pi Omega Pi, a national honor society for business education is also on campus. A chapter of Data Process Management Association (DPMA) is open to business and CIS majors. The American Society of Personnel Administrators chapter is also available.

A Business Advisory Council, composed of 15 business leaders, provides assistance and advice for the school, serves as a liaison with the business community, and helps provide job opportunities for graduates and a foundation for financial support for the School.

Business Advisory Council --1986

- Mr. Thomas Backus, Manager of Plans & Controls
International Business Machines Corp. Corporation — Austin
- Mr. Frank Birkhead, Executive Vice President
McAllen Industrial Board — McAllen
- Mr. H. E. Butt, III, Division Manager
H.E.B. Food Stores — San Antonio
- Mr. Eddie Cano, President
Cano Coors Distributing Co. — McAllen
- Mr. Joe G. Garza, President
Valley Federal Savings & Loan — McAllen
- Mr. Ruben Hinojosa, Executive Vice-President
H & H Meats — Mercedes
- Mr. Gasper Mir III, Certified Public Accountant
Mir, Fox & Rodriguez — Houston
- Dr. Darrell Piersol, Associate Dean, School of Business Administration
Southwest Texas State University — San Marcos
- Mr. F. Neal Runnels
Valley Beverage Company — McAllen
- Mr. Mark L. Rigg, Vice President of Human Resources
The Southland Corporation — Dallas
- Mr. Glen Roney, President
Texas Regional Bancshares, Inc. — McAllen
- Mrs. Betty Winn — McAllen

Mr. Ron Wornick, Owner
 Right Away Foods Corporation — California
 Ms. Letty G. Gavito, Staff Manager
 AT&T Communications — New Jersey
 Mr. Cullen Looney — Edinburg
 Mr. Jan Klinck
 Klinck Stores — McAllen

The School of Education

Dr. Jerry L. Pulley, Acting Dean

Statement of Mission

The School of Education, recognizing its unique multi-cultural setting, supports the written purposes of Pan American University and commits itself to:

- Preparing, through exemplary teaching, professional educators for positions at local, state, and national levels.
- Engaging in research designed to improve the quality of education.
- Providing continuing education activities, both credit and non-credit, for educational practitioners.
- Fostering cooperation with local schools by implementing the concepts of teacher centering.
- Assisting local schools by engaging in consultative activities.
- Demonstrating program quality by continuing accreditation through state, regional, and national bodies.
- Encouraging faculty to serve as officers and participants in local, state, and national professional organizations.
- Providing students with academic and career advisement.
- Sponsoring pre-professional student educational organizations.
- Cooperating with other divisions/schools of Pan American University in the achievement of institutional goals.

The School of Education includes the Department of Curriculum and Instruction Elementary and Secondary, the Department of School Services and Counseling, the Department of School Administration and Supervision, and the Department of Health and Kinesiology.

At the undergraduate level, the School offers a Bachelor of Science degree with majors in Elementary Education, Kinesiology, and Health Education. Students are encouraged to see the Departments early in their program for specific degree requirements and development of degree plans.

At the graduate level the School of Education also offers a Master of Education degree with specializations in Elementary Education, Reading, Educational Diagnostician, Bilingual Education, Counseling and Guidance, Educational Administration, Supervision, and Physical Education. 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. Although a student may complete some M. Ed. programs at Pan American University without meeting all the specific certification requirements, the eighteen (18) semester hours of undergraduate education requirements may not be waived. Please consult with the director of each program for more specific guidelines and information.

Credit for a 5000 level course is not given to a student with previous undergraduate credit in a similar course.

All programs in the School of Education are fully accredited by the Texas Education Agency.

Certificate Requirements for Teachers¹

Teachers in Texas elementary (grades 1-6) and secondary (grades 7-12) schools are required by law to hold a valid Texas teacher's certificate at the level in the teaching field and delivery system to which they are assigned.

Candidates for secondary certification must have *two teaching fields/delivery systems*, one with a minimum of 30 hours, the other with a minimum of 24 hours. Candidates for elementary certification must have in addition to the 36 hour elementary major, an 18 to 24 hour area of specialization/delivery system, 12-18 semester hours in combinations of subjects and a minimum of 12 semester hours of electives, 30 hours are required for *degree* and certification, however, if degreed only 24 hours in two fields are required. NOTE: EDCI 1301 Introduction to Teaching is a prerequisite to all Teacher Education courses.

The requirements and applications for degree and/or certification programs under the current catalog must be completed prior to September 1, 1991. Students pursuing teacher certification after August 31, 1989 must enter under those programs prescribed by the new standards for teacher education. Prospective teacher education students should consult with their major advisors and the appropriate department in the School of Education.

General Requirements for Texas Teaching Credentials

- (1) State Board of Education rule requires an individual to have the following qualifications in order to receive a certificate:
 - (2) 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.
 - (2) A competency examination of basic skills will be required for entrance into a teacher education program after May 1, 1984. Satisfactory performance on a comprehensive examination as a condition for teacher certification, as well as for certification as a superintendent or other administrator, will be required for certification after May 1, 1986. Persons seeking certification based on valid out-of-state certificates will also be required to pass the comprehensive examinations after May 1, 1986.
 - (3) Teacher certificates are issued to individuals who meet the above requirements, who complete approved programs at approved Texas institutions of higher learning, and who are recommended for certification by the institutions.

Texas Testing Requirements:

ADMISSIONS:

"To be admitted to an approved teacher education program, students must achieve a satisfactory level of performance on a competency examination of basic skills. The basic skills areas have been identified as mathematics, reading, and writing/composition. The Pre-Professional Skills Test by Educational Testing Service shall be the test of basic skills required as a criterion for admission into an approved teacher education program. This requirement shall apply to all persons admitted into an approved teacher education program after May 1, 1984."¹

CERTIFICATION:

"Beginning May 1, 1986, in order to be approved for the provisional or professional teacher's certificate, the superintendent's certificate, or other administrative 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 of Education."

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 to be recommended for certifications.

Criminal Records:**NOTICE:**

"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 criminal felony or misdemeanor convictions should contact the Certification Officer immediately to seek clarification of their certification status.

Admission to Teacher Education

The requirements and applications for degree and/or certification programs under the current catalog must be completed prior to September 1, 1991. Students pursuing teacher certification after August 31, 1989 must enter under those programs prescribed by the 1987 Standards for Teacher Education. Prospective teacher education students should consult with their major advisors and the appropriate department in the School of Education.

Effective May 1, 1984, a student must meet the following criteria for Clear Admission to the Teacher Education Program in the School of Education:

1. Must satisfactorily pass reading, writing and mathematics in the Pre-Professional Skills Test as approved by the State Board of Education.
Minimum Scores on P-PST: (Subject to change by State Board)
Reading 172
Writing 173
Mathematics 171
2. Junior status or above (60+ semester hours).
3. Minimum 2.0 GPA in major, minor, and over-all.
4. Successful completion of the "core" course requirements for students admitted to Pan American University Fall, 1981 thru August 31, 1984.
Elementary Education majors:
Eng 1301 & 1302(C in each)
Hist 2313 or 2333
Hist 2314
PolS 2313 & 2314
Math 2306 & 2307
for Secondary Certification:
Eng 1301 & 1302(C in each)
Hist 2313 or 2333
Hist 2314
PolS 2313 & 2314
Math 1334
For those enrolled after September 1, 1984:
Successful completion of the following courses from the University College and General Education requirements:
Eng 1301 & 1302(C in each)
6 semester hours of foreign language
8 semester hours of laboratory science(same science)
at least 3 semester hours of MATH beyond the level of 1334
5. EDCI 1301 — Introduction to Teaching(with a grade of "C" or better)
6. An official departmental degree plan for elementary majors; a copy of an official departmental degree plan for those seeking secondary certification; a copy of a deficiency plan for those seeking certification through the Certification Office.
7. Transfer students must delay application until successful completion of above requirements.

A student may apply for Admission to Teacher Education at any time after completion of 60+ semester hours.

Application for Admission to Teacher Education must be filed in the School of Education.

The University Teacher Education Committee

All departments which offer certificate programs at Pan American University maintain membership on the University Teacher Education Committee. The basic functions of the committee are as follows:

1. Approve any teacher education program changes originating in the School of Education or in departments offering certification programs.
2. Approve any changes in courses which are part of any university certification program.
3. Approve candidates for elementary, secondary and all-level student teaching.
4. Approve appeals made by prospective student teachers who had previously been denied, dropped or failed student teaching.

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 and/or minor teaching field.

The Pan American University Local Cooperative Teacher Center Advisory Board

The Advisory Board is composed of faculty members and administrators from both the University and public school districts. Typical membership is as follows:

- 3 University representatives
- 3 Public school district administrators
- 3 Public school teachers representing 3 different professional organizations
- 1 Region I ESC representative

The purpose of the Advisory Board is to advise the University on matters regarding admission and certification requirements, course offerings, program changes, field experience and student teaching.

Graduate School requirements by the School of Education

In addition to the general admission requirements set out elsewhere in this bulletin, the following specific requirements must be met:

1. Applicants for admission will be required to have completed eighteen semester hours of undergraduate work in their proposed graduate major field. These eighteen hours will include a minimum of twelve hours of advanced work. Each minor graduate field presented will require evidence of completion of twelve hours of undergraduate work, of which six must be advanced hours.
2. The choice of courses in the major and minor fields, as well as the nature of the supporting work, will be determined through consultation between the student and his graduate advisor.
3. Requirements for admission to certification programs in Educational Administration are specifically outlined in the Educational Administration section of this catalog.
4. Satisfactory completion of an oral examination following the completion of twelve-eighteen (12-18) semester hours of graduate work.
5. Satisfactory completion of a written comprehensive examination during the last semester of graduate work.
6. The student must also complete any specific admission, program, and exit requirements by the program he/she wishes to pursue.

Business Core

Course	Hours
FINA 3383	3
GENB 3335, 3337, 4330, 4369	12
MANA 2341, 3342, 3361, 3390, 4363	15
MARK 3371	3
	<u>33</u>

NOTE: Before being allowed to enroll in 3000 or 4000 level business courses, a student must complete the following: CIS 1301, ECO 2353, ECO 2354, ACC 2421, ACC 2329 and either

- 1) attain a "C" grade in each course, or
- 2) a GPA of 2.25 or higher on the five courses.

CIS 1301, ECO 2353, 2354, ACC 2421 and 2329

Degree Requirements**Major in Accounting**

The admission and graduation requirements for an accounting major involves two steps: First, all students desiring an accounting degree must initially specify "Pre-Accounting" as their major. This designation would be effective for all changes in major; transfer students, special students, and entering freshmen. Second, the student then applies to the Accounting Admission Committee 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 time of application at least ten semester hours of accounting, including Acc 2421, 2329 and 3321, with an accounting grade point average of 2.2 for all accounting courses taken at the time of application.
3. Admission of the applicant to the accounting concentration will be determined by the Accounting Admission Committee or their designated representative(s).
4. Students who have been denied admission to the accounting program can appeal to the Dean of the School of Business Administration according to his appeal requirements.

In addition to 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.

General Education and Business Foundation, and
Business Core Courses

109 hours

ACCOUNTING SPECIALIZATION COURSES

ACC 3321	Intermediate Accounting I	
ACC 3322	Intermediate Accounting II	
ACC 3329	Intermediate Accounting III	
ACC 3323	Income Tax Procedure	
ACC 3324	Cost Accounting	
ACC 4330	Advanced Accounting I	
ACC 4324	Auditing	21 hours

ACCOUNTING ELECTIVES* - Select 9 hours from:

ACC 3325	Fund Accounting	
ACC 3326	Accounting Information Systems	
ACC 3328	Advanced Cost Accounting	
ACC 4331	Advanced Accounting II	
ACC 4323	Contemporary Accounting Theory	
ACC 4327	Auditing II	
ACC 4329	Advanced Income Tax Procedure	

9 hours 30 hours

Total Requirements 139 hours

*Selection of accounting elective courses should be made by the student in accordance with his interest in either public practice or industry/government practice. All 4000 - level accounting courses are limited to students who have been admitted to the Accounting Major or to special students who are in conformity with Accounting Major admission standards.

Course Descriptions

Accounting

ACC 2421 INTRODUCTION TO FINANCIAL ACCOUNTING

Fall, Spring, Summer

The course discusses the accounting environment; the accounting model; business transaction analysis and financial statement preparation; financial statement analysis; accounting for assets, liabilities, and owners' equity in proprietorships and corporations; mandate lab, two hours per week.

Prerequisite: Three semester hours of college math with a grade of "C" or better.

ACC 2329 FUNDAMENTALS OF MANAGERIAL ACCOUNTING

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.

ACC 3321 INTERMEDIATE ACCOUNTING I

Fall, Spring

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

Continuation of the examination of the accounting process with emphasis on noncurrent 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 3324 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 3325 FUND ACCOUNTING

On Demand

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

On Demand

Basic concepts and techniques associated with the analysis, design, and installation of manual and computerized accounting information systems.

Prerequisite: ACC 3321 and CIS 1301.

ACC 3328 ADVANCED COST ACCOUNTING

On Demand

A continuation of ACC 3324. 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 3324 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.

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 4330 ADVANCED ACCOUNTING I

Fall, Spring

A study of the theory and techniques of accounting for partnerships and consolidated financial statements. (Formerly ACC 4321)

Prerequisite: ACC 3322 with grade of "C" or better.

ACC 4331 ADVANCED ACCOUNTING II

Spring

A study of selected accounting topics. This course will have variable content and may be repeated for credit with consent of instructor. (Formerly ACC 4320)

Prerequisite: ACC 3322 with a grade of "C" or better.

ACC 4323 CONTEMPORARY ACCOUNTING THEORY

On demand.

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 the professional and governmental agencies.

Prerequisite: ACC 3322 with grade of "C" or better; credit for ACC 4324 (or concurrent enrollment therein with the permission of the instructor).

ACC 4324 AUDITING I

Fall, Spring

A survey of auditing standards and procedures applied by public accountants and internal auditors in examining financial statements and verifying underlying data. The scope of this course includes elements of operational auditing.

Prerequisite: ACC 3322 with a grade of "C" or better and credit or concurrent enrollment in MANA 3342.

ACC 4327 AUDITING II

On Demand

An advanced study of selected standards of auditing. The course will emphasize: 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 4324 with a grade of "C" or better.

ACC 4329 ADVANCED INCOME TAX PROCEDURE

On Demand

Tax regulations applicable to partnership and corporations, together with the preparation of federal tax returns for such businesses. Federal Gift, Estate and Inheritance taxes are considered.

Prerequisite: ACC 3323 with a grade of C or better with permission of the instructor.

Economics

Full-time Faculty

Cardenas, Gilbert (Ph D, Illinois 1977; prof.) Economics

Ellard, Charles J. (Ph D, Houston 1974; prof.) Economics

Patrick, J. Michael (Ph D, Michigan State 1977; assoc. prof.) Economics

Vento, Edward (Ph D, Texas A&M 1972; assoc. prof.) Economics

Major in Economics

Economics Major – BBA

University, College, General Education, Business Foundation
and Business Core Courses

109 hours

ECONOMICS SPECIALIZATION COURSES

ECO 3351 Macroeconomic Theory

ECO 3352 Microeconomic Theory

ECO 4359 History of Economic Thought

9 hours

ECONOMIC ELECTIVES (UPPER DIVISION)

15 hours

Total Requirements

24 hours

133 hours

Economics Major — BA (Minor Required)		
General Education and Economics BA Foundation*		73 hours
MANA 2341		3 hours
ECONOMICS SPECIALIZATION COURSES		
ECO 2353	Principles of Economics I	
ECO 2354	Principles of Economics II	
ECO 3351	Macroeconomic Theory	
ECO 3352	Microeconomic Theory	
ECO 4359	History of Economic Thought	15 hours
ECONOMICS ELECTIVES (UPPER DIVISION)		<u>15 hours</u>
Electives (including minor hours)		<u>27 hours</u>
Total Requirements		133 hours

*The General Education and Economics BA Foundation includes all requirements as stated in the General Education and Business Foundation except GENB 1331 and ACC 2329 are not required.

Minor in Economics

A minor in Economics is available to students from all areas within the University and requires 18 hours of economics that includes 6 hours of economics electives.

Minor in Economics

ECO 2353	Principles of Economics I
ECO 2354	Principles of Economics II
ECO 3351	Macroeconomic Theory
ECO 3352	Microeconomic Theory
ECO	Electives (6 hours)

Total minor requirements 18 hours

Course Descriptions

Economics

ECO 1301 INTRODUCTION TO ECONOMICS

Fall, Spring, Summer

Economics for students who have active interests in fields other than business administration or economics. Primary emphasis is given to developing an understanding of man in relation to his economic environment. Students will gain a knowledge of the purpose, functions and results of a capitalistic system and understanding of current economic problems.

ECO 2353 PRINCIPLES OF ECONOMICS, I

Fall, Spring, Summer

An introduction to basic microeconomic concepts and methods. The competitive market system. Problems of resource allocation and economic efficiency in the market economy. Government regulation and the public sector. (Formerly ECO 2352, may not be repeated for credit.)

Prerequisite: MATH 1334 or equivalent.

ECO 2354 PRINCIPLES OF ECONOMICS, II

Fall, Spring, Summer

An introduction to basic macroeconomic concepts of aggregate supply and demand and income determination. Money and banking. Unemployment, inflation and economic policy. International economics and comparative economic systems. (Formerly ECO 2351; may not be repeated for credit.)

Prerequisite: ECO 2353.

ECO 3336 THE POLITICAL ECONOMY OF MEXICO

On Demand

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.

Prerequisite: ECO 2353 and 2354.

ECO 3351 MACROECONOMIC THEORY

Fall, Spring, Summer

An analysis of the construction, character and operational uses of macro-economic models of classical, keynesian, and monetarist origin. Applications of the foregoing models to problems of inflation, unemployment, interest rates and investment in the United States economy.

Prerequisite: ECO 2353 and 2354.

ECO 3352 MICROECONOMIC THEORY*Fall, Spring, Summer*

The theory of consumer demand and the theory of the firm. Supply and demand analysis, distribution theory and imperfect competition.

Prerequisite: ECO 2353 and 2354.

ECO 3353 INTERNATIONAL TRADE*On Demand*

The mechanism of international trade and its effects on a national economy. Foreign investments, cartels, international output and price controls.

Prerequisite: ECO 2353 and 2354.

ECO 3355 ECONOMIC DEVELOPMENT*On Demand*

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.

Prerequisite: ECO 2353 and 2354.

ECO 3357 ECONOMICS OF POVERTY*On Demand*

Causes and social consequences of poverty, natures and effectiveness of income transfer programs, includes topics such as welfare reform, social security, pension plans, medicare, national health and negative income tax programs.

Prerequisite: ECO 2353 and 2354.

ECO 3358 LABOR ECONOMICS*On Demand*

Labor market structures and processes; patterns and determinants of work and wages; labor force participation, unemployment, discrimination, and human capital. Public policy on manpower development and utilization.

Prerequisite: ECO 2353 and 2354.

ECO 3359 MEXICAN-AMERICAN LABOR*On Demand*

This course is designed to analyze the role and contribution of Mexican-Americans in the U.S. labor market. Employment patterns of Mexican-Americans will be studied. Special emphasis will be given to such issues as the relationship between education, work and poverty; discrimination; human resources development; and the labor market along the United States-Mexico Border.

Prerequisite: ECO 2353 and 2354.

ECO 4357 REGIONAL-URBAN ECONOMICS*On Demand*

Introduction to economic theories and policies associated with regional and urban development. The role of the policy making, government agencies and firms in regional urban development. Includes topics such as industrial development, poverty, housing and transportation.

Prerequisite: ECO 2353 and 2354.

ECO 4359 HISTORY OF ECONOMIC THOUGHT*On Demand*

A survey of the entire field of economics. Prescientific, classical and contemporary works will be studied to gain a knowledge of the development of economic theory and view of current direction and scope.

Prerequisite: ECO 2353 and 2354.

ECO 4361 STUDIES IN ECONOMICS*On Demand*

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.

Prerequisite: ECO 3351 and 3352.

Anthropology

See Department of Psychology

Department of Art

Richard P. Hyslin, Chair

Full-Time Faculty

- Browne, Norman A. (Ed.D., Indiana University, 1968, professor), biological illustration, painting, design, elementary and middle school art education, drawing
- Field, Philip S. (MFA, Rhode Island School of Design, 1965, assistant professor), printmaking, painting, aesthetics
- Hyslin, Richard P. (MA, University of New Mexico, 1968, associate professor and chair), ceramics, sculpture, drawing
- Manuella, Frank R. (MS, Pratt Institute, 1982, associate professor), advertising art, design
- Moyer, Nancy J. (Ph.D., Southern Illinois University, 1970, professor), drawing, metal/jewelry design, art education
- Nichols, Edward E. (MFA, University of Kansas, 1959, associate professor), drawing, painting and watercolor
- Swenson, Sandra (MA, University of Northern Colorado, 1964, instructor), History of Western Art, Pre-Columbian Art

The Department of Art includes nine subjects, advertising art, art education, art history, ceramics, jewelry, painting, drawing, printmaking and sculpture.

A major and a minor in art are available. The Bachelor of Arts Degree is offered in Art Education (all-level teaching plan). The Bachelor of Fine Arts Degree is offered in Studio Art and Secondary Art Education. A specialization in Advertising Art and a specialization in Biological Illustration are also available.

After graduation, an undergraduate who chooses the studio major may continue his studies in graduate school or work as an artist. The art education major will be certified to teach art in the secondary or elementary schools. The Bachelor of Fine Arts (BFA) major with specialization in Advertising Art may freelance, work for an advertising agency or work on his/her own. Art courses are also offered for students seeking certification in a second teaching field at the elementary or secondary levels.

Although all majors are required to take courses in drawing, design and art history, studio courses and education courses are chosen in compliance with the student's interest and goals.

Degree Requirements

Major in Art Education

(BA, All-level Certification)

Fifty one (51) semester hours in art, of which 24 semester hours must be advanced; including ART 1311, 1331, 2303, 2312, 2321 or 2322, 2332, 2351 and 2352; Art 3381, 3382, 3383, 4383, three (3) additional hours in art history, and 12 semester hours in studio courses (at least nine (9) advanced hours).

Twenty-one (21) hours in education are required, of which 18 must be advanced, including EDCI 1301, 3302, 3311, 3312, 4332; EDCI 4311; EDCI 4398.

Major in Art

(BFA, Studio)

Sixty seven (67) semester hours in art, of which 37 semester hours must be advanced; including ART 1311, 1312, 1331, 2312, 2332, 2351, and 2352; nine (9) semester hours from Art 2321 or 2322, 2341, 2361, 2303, and 2371; 12 semester hours of advanced studio; 12 semester hours from Art History; 12 semester hours of advanced art electives; ART 4193.

(BFA, Studio — 18-hour Specialization in Advertising Design)

Sixty one (61) semester hours in art, of which 31 semester hours must be advanced; including ART 1311, 1331, 1332, 2312, 2321 or 2322, 2331, 2332, 2334, 2351 and 2352, 3331, 3333, 4333, 4334, 4391 and 4392; six (6) semester hours of advanced art history and six (6) hours of advanced art electives; ART 4193.

Fourteen (14) semester hours in communications are required, of which seven (7) semester hours must be advanced, including COMM 1308, 2404, 4321 and 4417.

(BFA Studio — 15 hour Specialization in Biological Illustration)

Sixty-one (61) hours of Studio Art, of which 31 semester hours must be advanced including ART 1311, 1331, 1332, 2312, 2321 or 2332, 2351, 2352, 3331, 3332, 4333, 4334; six (6) advanced hours of Art History; twelve (12) semester hours of Biological Illustration as offered in ART 4311 - Advanced Drawing; ART 4391 will be taken for a minimum of 3 hours as Biological Illustration. Additionally nineteen or twenty (19 or 20) hours of Biological Sciences would be required and chosen as follows: 8 hours of the general lower division natural science general education requirements to come from either Biology 1401 and 1402 (General Biology) or 2303 and 2404 (Anatomy and Physiology). The remaining eleven or twelve (11 or 12) hours to come from the following: 4 hours from Biology 2401 (Vertebrate Zoology) or 3414 (Invertebrate Zoology); 4 hours Biology 3408 (Plant Morphology); 3 or 4 hours, depending on course chosen from the following: Biology 4303, 4304, 4309, 4319, 4402, 4410, 4412, 4415.

Any substitution for the chosen Biology course must be approved by the Art Department.

Major in Art Education**(BFA, Secondary Certification)**

Sixty-four (64) semester hours in art, of which 34 semester hours must be advanced, including ART 1311, 1331, 2312, 2332, 2351 and 2352; 12 semester hours from ART 2303, 2321 or 2322, 2341, 2361, 2371; 3383, 4383; 9 semester hours of advanced studio; and 9 semester hours of art history, 9 semester hours of advanced art electives; ART 4193.

Twenty-one (21) semester hours in education are required, of which 18 semester hours must be advanced, including EDCI 1301, 3301, 3302, 4332; three (3) semester hours from EDCI 3303, 3312, 4318, 4351 and 4353; and 4641.

Minor in Art

Eighteen (18) semester hours in art, of which nine (9) semester hours must be advanced, including ART 1311, 1331, 2332, 4353, and six (6) semester hours of advanced art history or studio.

Teacher Certification in Art as a Minor Field

Elementary Plan I: 18 semester hours in Art, of which 9 semester hours must be advanced; must include Art 1311, 1331, 2332, 3381, 4353.

Elementary Plan II: 24 semester hours in Art, of which 12 semester hours must be advanced; must include Art 1311, 1331, 2321, 2332, 3381, 3382, 4353 and 3 advanced semester hours in Art History or studio.

Secondary Plan I: 24 semester hours in Art, of which 12 semester hours must be advanced; must include Art 1311, 1331, 2321 or 2322, 2332, 4353, 3383, 4383, and 3 advanced semester hours from Art History.

Departmental Requirements

Transfers: Students wishing to transfer into Art at the junior level or above must submit a portfolio of their work and meet with the Art faculty for program planning.

Majors: Students majoring in Art are required to have an interview with the Art faculty at the end of their junior year.

Exhibits: Senior Art majors are required to exhibit examples of their work during their senior year. B.F.A. studio majors will be included in a 1- or 2-person show during their senior year. A grade of C or better in Art 4193 as determined by a faculty studio panel, is required for the B.F.A. degree.

The letter grade "C" will be the minimum prerequisite grade for continuing Studio courses in sequence.

Course Descriptions**ART 1301 ART APPRECIATION**

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*Fall, Spring, Summer*

Introduction to drawing, including work in a variety of drawing media. Basic concepts are explored. A minimum of three hours of outside assignments per week is required. \$4 laboratory fee.

ART 1312 DRAWING II*Fall*

Continuation of ART 1311 with problems in illumination, foreshortening, perspective and chiaroscuro as expressive concepts. A minimum of three hours of outside assignments per week is required. \$4 laboratory fee.

*Prerequisite: ART 1311***ART 1331 DESIGN I***Fall, Spring*

Principles of design and development of design structures on two-dimensional surfaces. A minimum of three hours of outside assignments per week is required. \$4 laboratory fee.

ART 1332 LETTERING*Fall, Spring*

Introduction to lettering for reproduction. Basic serif, sans serif and formal script typefaces are practiced and studied. Emphasis is placed upon built-up letters, as used for signage and contemporary printing reproduction. A minimum of three hours of outside assignments per week is required. \$4 laboratory fee.

ART 2303 JEWELRY/METALWORKING I*Fall*

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 may be considered. A minimum of three hours of outside assignments per week is required. \$4 laboratory fee.

ART 2304 JEWELRY/METALWORKING II*Fall*

The continuance of portable art includes techniques such as stone setting, plastics, fabrication and casting. A minimum of three hours of outside assignments per week is required. \$4 laboratory fee.

*Prerequisite: ART 2303***ART 2312 DRAWING III***Spring and on demand*

The human figure as expressive subject matter in drawing. A minimum of three hours of outside assignments per week is required. \$4 laboratory fee.

*Prerequisite: ART 1311***ART 2313 TECHNICAL DRAWING***On demand*

Acquaints the student with tools and symbols used in professional drafting. Methods of drawing to scale are presented. \$4 laboratory fee.

*Prerequisite: Six semester hours of drawing***ART 2321 PAINTING I***Fall, Spring, Summer*

Introduction to water painting media involving individual development and invention. A minimum of three hours of outside assignments per week is required. \$4 laboratory fee.

*Prerequisites: ART 1311, 1331***ART 2322 PAINTING II***Spring and on demand*

An introduction to oil and/or acrylic painting techniques working from nature and the living model. Observation and interpretation are stressed. A minimum of three hours of outside assignments per week is required. \$4 laboratory fee.

*Prerequisite: ART 1331***ART 2331 ILLUSTRATION***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 three hours of outside assignments per week is required. \$4.00 laboratory fee.

Prerequisite: ART 1311, 1331, 2312

ART 2332 DESIGN II*Spring and on demand*

Three-dimensional design includes investigation into the phenomena existing in the three-dimensional arts. A variety of materials handling and creative methods for the purposes of creating a three-dimensional form are considered. A minimum of three hours of outside assignments per week is required. \$4 laboratory fee.

*Prerequisite: ART 1331***ART 2334 PHOTOGRAPHY AS AN ART FORM***On demand*

Introduction to photography as a means of personal expression. The history of photography as an art form is included. Emphasis is on black and white processes. Students must furnish their own cameras. A minimum of three hours of outside assignments per week is required. \$4 laboratory fee.

*Prerequisite: ART 1331***ART 2341 SCULPTURE I***Spring*

Introductory course in sculptural concepts through basic sculptural media. A minimum of three hours of outside assignments per week is required. \$4 laboratory fee.

*Prerequisite: ART 2332***ART 2342 SCULPTURE II***Spring*

Continuation of ART 2341 with emphasis on individual development. A minimum of three hours of outside assignments per week is required. \$4 laboratory fee.

*Prerequisite: ART 2341***ART 2351 ART SURVEY I***Fall*

Historical survey of art from Paleolithic through the Middle Ages.

ART 2352 ART SURVEY II*Spring*

Historical survey of art from the Renaissance through modern times.

ART 2361 PRINTMAKING I*Fall, Spring*

Introduction to Printmaking with concentration on intaglio processes. A minimum of three hours of outside assignments per week is required. \$4 laboratory fee.

*Prerequisites: ART 1311, 1331***ART 2362 PRINTMAKING II***Fall, Spring*

Introduction to color with continuation of intaglio and relief printing systems. A minimum of three hours of outside assignments per week is required. \$4 laboratory fee.

*Prerequisite: ART 2361***ART 2371 CERAMICS I***Fall, Spring*

Introduction to ceramic design concentrating on handbuilding. Some work with potter's wheel, glazing and firing. A minimum of three hours of outside assignments per week is required. \$4 laboratory fee.

ART 2373 CERAMICS II*Fall, Spring*

Emphasis on basic wheel-thrown shapes and introduction to glaze calculation. A minimum of three hours of outside assignments per week is required. \$4 laboratory fee.

*Prerequisite: ART 2371***ART 3303 JEWELRY/METALWORKING III***Spring*

Introduction of techniques in silversmithing such as raising, fabricating, smithing and casting. These are pursued in the production of expressive holloware. Additional materials are considered. A minimum of three hours of outside assignments per week is required. \$4 laboratory fee.

*Prerequisite: ART 2304***ART 3304 JEWELRY/METALWORKING IV***Spring*

Continued exploration of metalsmithing techniques, die forming, electroforming and machining are included. A minimum of three hours of outside assignments per week is required. \$4 laboratory fee.

Prerequisite: ART 3303

ART 3321 ADVANCED PAINTING*Fall, Spring*

Advanced studio problems in painting. (May be repeated for a total of 12 hours' credit) A minimum of three hours of outside assignments per week is required. \$4 laboratory fee.

Prerequisite: ART 1331 and 1331

ART 3331 VISUAL COMMUNICATIONS I*Fall*

The translation of verbal language into visual language through a variety of media. A minimum of three hours of outside assignments per week is required. \$4 laboratory fee.

Prerequisite: ART 3333

ART 3333 DESIGN AND PRODUCTION*Fall*

Introduction to graphic design and production. This course develops the awareness of graphic images and teaches the tools and techniques of preparing camera-ready duplication. A minimum of three hours of outside assignments per week is required. \$4 laboratory fee.

Prerequisites: ART 1331, 1332

ART 3341 ADVANCED SCULPTURE*Spring and on demand*

Advanced studio problems in sculpture. (May be repeated for a total of 12 hours' credit) A minimum of three hours of outside assignments per week is required. \$4 laboratory fee.

Prerequisite: ART 2342

ART 3351 MEDIEVAL AND RENAISSANCE ART*Alternate years*

Art history beginning with the Christian era after the fall of Rome through the Byzantine, Romanesque, Gothic, Renaissance, Baroque and Rococo styles.

Prerequisites: ART 2351 and 2352 or 3350

ART 3352 CONTEMPORARY ART*Alternate years*

Art history from the 19th century in Europe until modern times. Development and growth of today's arts and aesthetics.

Prerequisites: ART 2351 and 2352 or 3350

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.

Prerequisite: ART 3350 or ART 2351 and 2352

ART 3361 ADVANCED PRINTMAKING*Fall, Spring*

Advanced studio problems in printmaking. (May be repeated for a total of 12 hours' credit) A minimum of three hours of outside assignments per week is required. \$4 laboratory fee.

Prerequisite: ART 2362

ART 3371 ADVANCED CERAMICS*Fall, Spring*

Advanced studio problems in ceramics. (May be repeated for a total of 12 hours' credit) A minimum of three hours of outside assignments per week is required. \$4 laboratory fee.

Prerequisite: ART 2373

ART 3381 PERCEPTION AND EXPRESSION IN ART I*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*Spring and on demand*

Emphasis on further studio development in depth.

Prerequisite: ART 3381 or permission of instructor

ART 3383 INTRODUCTION INTO RESEARCH IN THE VISUAL ARTS*Fall*

A survey of visual arts research and its possible applications to studio learning.

Prerequisites: Junior standing; prerequisite for student teaching

ART 4193 SENIOR EXHIBIT*Fall, Spring*

A one-or two-person studio show.

Prerequisite: Senior standing

ART 4301 PHILOSOPHIES OF ART*On demand*

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.

ART 4311 ADVANCED DRAWING*On demand*

Topics covered include biological illustration, pastel portraiture, advanced figure drawing and other advanced drawing problems. (May be repeated for a total of 12 hours' credit) A minimum of three hours of outside assignments per week is required. \$4 laboratory fee.

*Prerequisite: Consent of instructor***ART 4333 GRAPHIC DESIGN I***Fall and on demand*

A systematic approach to design problem-solving, with a series of studio assignments and critiques relating directly to two- and three-dimensional graphic design. Student develop creative and technical ability by the production of professional assignments. A minimum of three hours of outside assignments per week is required. \$4 laboratory fee.

*Prerequisite: ART 3333***ART 4334 GRAPHIC DESIGN II***Spring and on demand*

A series of advanced problems and intensive critiques relating to graphic design to condition students to think in terms of "client-designer" relationships in simulated working conditions. Assignments criticized by professional standards will ideally result in portfolio pieces. A minimum of three hours of outside assignments per week is required. \$4.00 laboratory fee.

*Prerequisite: Art 4333***ART 4335 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 three hours of outside assignments per week is required. \$4.00 laboratory fee.

*Prerequisite: Art 1331***ART 4351 LATIN AMERICAN ART: PRE-CONQUEST***Fall*

An in-depth historical study of the arts of Mexico, Central and South America prior to the Spanish Conquest.

ART 4352 LATIN AMERICAN ART: POST-CONQUEST*Spring*

Mexican art under the Spanish influence is discussed from the Colonial period to the present.

ART 4353 AMERICAN ART*Fall and on demand*

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 2352 or 3350***ART 4383 RESEARCH IN THE VISUAL ARTS***Spring*

Investigation into creative and perceptual findings in the visual arts at a concentrated and advanced level.

*Prerequisite: Junior standing***ART 4391 INDIVIDUAL PROBLEMS/INTERNSHIP/CO-OP***Fall, Spring, Summer*

Advanced problems in an art area of the student's choice and/or internship with an art professional in the field of interest. (May be repeated for a total of 12 hours credit.)

*Prerequisite: Art 1332, 3333 (for Internship/Co-Op); all courses in the area of choice***ART 4392 INDIVIDUAL PROBLEMS***Fall, Spring, Summer*

Advanced problems in the area of student's choice.

*Prerequisite: ART 4391***ART 5383 SEMINAR IN ART EDUCATION***On demand*

Issues in art education will be discussed in conjunction with methods of research and writing about art. Independent directions within this framework will be encouraged.

Astronomy

See Department of Physical Science

Bible

See Department of History

Department of Biology

Dr. S.L. Sides, Chair

Full-Time Faculty

Allison, Terry C. (PhD. Texas A&M University 1967; prof.) Parasitology, Marine Zoology
de la Pena, Antonio M. (MS. Texas A&I University 1969; inst.) Physiology, Curriculum
development

Edwards, Robert J. (PhD. The University of Texas at Austin 1980; assoc. prof.)
Ichthyology, Ecology, Population Biology.

Farooqui, Mohammed Y. H. (PhD. University of Illinois 1979; assoc. prof.) Physiology,
Toxicology, Entomology, Cell Biology.

Judd, Frank W. (PhD. Texas Tech University 1973; prof.) Ecology, Ecological Physiology.

Lonard, Robert I. (PhD. Texas A&M University 1970; prof.) Plant Taxonomy, Grass
Systematics.

Ortega, Jacobo (PhD. The University of Minnesota 1960; prof.) Plant Pathology,
Mycology.

Savage, Norman L. (PhD. University of Oklahoma 1966; prof.) General and Medical
Microbiology.

Sides, Sammie L. (PhD. North Carolina State University 1972; prof. and chair) Plant
Anatomy, Phycology

The Department offers a major 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 student is expected to furnish his own transportation for all courses requiring
laboratory sessions and field work.)

The Department of Biology 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 portion of the catalog or the
Chair of the Biology Department.

Degree Requirements

Major in Biology

30 semester hours in Biology, of which 15 semester hours must be advanced: must
include Biology 1401, 1402, 4100, and at least 3 semester hours from each of the following
areas: Cellular Biology or Microbiology — 3401, 3412; Genetics or Evolutionary
Biology — 2306, 3303; Developmental or Morphological Biology — 2401, 2402, 3405,
3407, 3408, 4306; Organismal or Environmental Biology — 2305, 3409, 3414, 4314, 4407,

3403, 4412, 4303, 4304, 4402, 4406, 4408, 4309, 4410, 4415, 4416; Physiology — 2403, 3411, 4305; additional requirements include 6 semester hours of Mathematics 1334 and 2330 or 6 semester hours from 1340, 1356, 1360, 1370, 2330. Chemistry 1401, 1402, and 3401. Computer Information Systems 1301 and Computer Science 2325 (or higher level courses in Computer Science). Physics or Geology 1401 and 1402 are recommended.

Biology majors who are pre dental or premedical students should include Biology 2402 in their major, should minor in Chemistry, and should include in their programs: Chemistry 2401, 3401, 3404; Physics 1401, 1402; Psy. 1313; and Calculus I required for the University of Texas Medical Schools. (Math not required for admission to Baylor College of Medicine or to Dental Schools.)

Major in Biology with Teacher Certification:

30 semester hours in Biology, of which 15 semester hours must be advanced; must include Biology 1401, 1402, 4100 and one course from each of the following areas: Cellular Biology or Microbiology — 3401, 3412; Genetics or Evolutionary Biology — 2306, 3303; Vertebrate Morphology or Physiology — 2401, 2402, 2403, 3411; Environmental Biology — 2305, 2407, 4401, 4402, 4410; Advanced Zoology — 3414, 4407, 4412, 3405, 3407, 4303, 4304; Advanced Botany — 3403, 3408, 4305, 4309, 4314, 4406, 4408.

Minor in Biology

Eighteen semester hours in Biology, of which six semester hours must be advanced.

Teacher Certification in Biology:

Elementary Plan I: 18 semester hours, at least nine of which are advanced to include: Biology 1405 and 1406 or 1401 and 1402; one course from Biology 2305, 2306, 2401, 2402, 2403; Biology 3414, 4314 or 3408; Biology 3409; plus additional advanced hours to complete requirements.

Elementary Plan II: 24 semester hours, at least 12 of which are advanced to include: Biology 1405 and 1406 or 1401 and 1402; One course from Biology 2305, 2306, 2401, 2402, 2403; Biology 3414, 4314 or 3408; Biology 3409; plus additional advanced hours to complete requirements.

Secondary Plan I: 24 semester hours, at least 12 of which are advanced to include: Biology 1401 and 1402; one course from Biology 2305, 2306, 2401, 2402, 2403; Biology 3414, 4314 or 3408; Biology 3409; plus additional advanced hours to complete requirements.

The Department of Biology Graduate Program

The Department of Biology offers courses leading to a Master of Science in Biology and providing minor and support areas for degrees in other fields.

Undergraduate requirements for a minor or specialization area: 12 semester hours of Biology, 6 hours of which must be advanced.

Credit for a 5000 level course is not given to a student with previous undergraduate credit in a similar course. Only 15 hours of 5000 level courses may count toward a graduate degree.

Students pursuing a Master's degree in related fields can include 12 to 18 hours of work in Biology for a minor.

Students pursuing the Master of Science degree with a major in Biology can include 6 to 9 hours of work in an approved minor or support area.

Requirements by the Department of Biology

1. Acceptance by the Graduate School of Pan American University.
2. Admission to the graduate program with a major in Biology requires a minimum of 24 hours of undergraduate Biology with at least 12 hours at the advanced level. As undergraduate preparation each student should have completed the following courses or their equivalents: Genetics (Biol 3303), Cell Biology (Biol 3412) or Bacteriology (Biol 3401), Ecology (Biol 3409), and Mammalian Physiology (Biol 3411) or Plant Physiology (Biol 4305). Entering graduate students that have deficiencies in one or more areas must remove them the first time that the course(s) is offered.
3. Full-time graduate students, who must meet the above requirements, may take up to 9 semester hours of leveling work while taking a limited number of graduate hours. (Refer to Item 5.)
4. A minimum grade point average of 2.75 in upper level undergraduate Biology courses (based upon a 4.0 system) is required.
5. Special requirements:

- a. During the first semester, all new graduate students majoring in Biology are required to take an examination covering the major conceptual areas of Biology. The results of this examination will be used to advise and counsel the student in his graduate program. It will not be a "pass-fail" examination.
- b. **Biological Problems:**
One biological problem will be required of all, and for those choosing the thesis plan, a biological problem should be successfully pursued prior to starting the thesis.
- c. Biol. 6101 and 6305 will be required.
6. For those enrolled in the thesis program:
 - a. Graduate students selecting the thesis option must complete 30 semester hours with a thesis. The choice of courses in major, minor and support areas will be determined through consultation between the student and his graduate advisor and have the approval of the Chair of the Department.
 - b. During the first semester of study following admission to graduate study, the student should choose from the Graduate Faculty a major professor who will serve as chairman of his Graduate Committee and two other faculty members chosen in conference with the major professor and the Chair of the Department. This Committee will approve a plan of study for the student which must be approved by, and a copy filed with, the Department Chair and the Dean of the School. The major professor and student should each retain a copy.
 - c. A thesis topic and plan for research will be chosen by the student and his major professor, subject to approval by the Committee.
 - d. The research will culminate in a thesis written in the style approved by the Graduate Committee and should be worthy, in whole or in part, of submission for publication in a reputable journal. Approval must be affirmed by the Chair of the Department and the Dean of the School.

Following acceptance of the thesis, evidenced by the signatures of the committee members and by the administrators indicated above, four copies should be presented for binding and a fee to cover the cost of binding should be paid to Pan American University. The four bound copies will be distributed as follows: the first (original) and second copy in the library, the third copy with the Department of Biology, and the fourth copy with the student.

A non-thesis student must complete 27 or 30 hours of Biological Sciences and may include in his program a maximum of 6 to 9 hours in a related field for a total of 36 hours.

A member of the Graduate Faculty will be chosen by the student as a major professor. In conference the student, the major professor and the Head of the Department will choose two other members of the Graduate Faculty to form a committee of three which will plan the student's overall program, oversee his progress and supervise the required comprehensive examination. As previously stated, these students must successfully complete at least one graduate research problem.

Master of Science Degree

Major Biology		Thesis
MAJOR		(12 hours)
BIOLOGY GRADUATE SEMINAR		
BIOL 6100		(3 hours)
BIOLOGICAL PROBLEMS FOR GRADUATE STUDENTS		
BIOL 6305	Biometry	
BIOL 6365	Graduate Biological Research Problems	
BIOL 7300	Thesis	
BIOL 7301	Thesis	6 Hours
		(12 hours)
		(9-18 hours)

Electives in major area:

BIOL 5304	Advanced Ichthyology
BIOL 5307	Host-Parasite Relationships
BIOL 5309	Advanced Herpetology
BIOL 5311	Ecological Physiology
BIOL 5312	Advanced Ornithology
BIOL 5314	Advanced Plant Systematics

BIOL	5315	Advanced Entomology
BIOL	5316	Advanced Toxicology
BIOL	5344	Advanced Mammalogy
BIOL	5345	Advanced Plant Physiology
BIOL	5408	Advanced Plant Pathology
BIOL	5410	Marine Plant Science
BIOL	5446	Advanced Mycology
BIOL	5452	Advanced Marine Zoology
BIOL	6302	Special Topics in Biology-Marine Ecology
BIOL	6303	Advanced Ecology
BIOL	6308	Special Topics in Biology-Freshwater Phycology
BIOL	6309	Special Topics in Biology-Marine Phycology
BIOL	6310	Special Topics in Biology-Immunology
BIOL	6313	Advanced Cell Biology & Physiology
BIOL	6316	Advanced Genetics

Approved minor or support areas.

TOTAL (6-9 hours)
30 hours

Master of Science Degree

Major
Biology

Non-Thesis

MAJOR

(27-30 hours)

Required Courses:

(3 hours)

BIOLOGY GRADUATE SEMINAR

BIOL 6100

BIOLOGICAL PROBLEMS FOR GRADUATE STUDENTS

BIOL 6305 Biometry

BIOL 6365 Graduate Biological Research Problems

Electives in major areas:

BIOL 5304 Advanced Ichthyology

BIOL 5344 Advanced Mammalogy

BIOL 5307 Host-Parasite Relationships

BIOL 5309 Advanced Herpetology

BIOL 5408 Advanced Plant Pathology

BIOL 5410 Marine Plant Science

BIOL 5311 Ecological Physiology

BIOL 5312 Advanced Ornithology

BIOL 5314 Advanced Plant Systematics

BIOL 5445 Advanced Plant Physiology

BIOL 5446 Advanced Mycology

BIOL 5452 Advanced Marine Zoology

BIOL 6302 Special Topics in Biology-Marine Ecology

BIOL 6303 Advanced Ecology

BIOL 6308 Special Topics in Biology-Freshwater Phycology

BIOL 6309 Special Topics in Biology-Marine Phycology

BIOL 6310 Special Topics in Biology-Immunology

BIOL 6313 Advanced Cell Biology and Physiology

BIOL 6316 Advanced Genetics

Approved minor or support area

TOTAL (6-9 hours)
36 hours

Course Descriptions

Biology

BIOL 1401 GENERAL BIOLOGY

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, and Mendelian genetics, evolution, and the structure and function of bacteria, viruses, protozoan, algae, fungi and plants. Three hours lecture and three hours laboratory. \$3.00 laboratory fee.

BIOL 1402 GENERAL BIOLOGY*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.

Prerequisite: Biol 1401. Three hours lecture and three hours laboratory. \$3.00 laboratory fee.

BIOL 1405 BIOLOGY FOR ELEMENTARY TEACHERS*Fall, Spring, Summer (alternate years)*

A basic introductory course stressing fundamental zoological principles and concepts. It is designed to acquaint the future elementary teacher with the various structures, functions, life histories and occurrence of local animals. Credit cannot be given for Biol 1305, 1401, 1405. Three hours lecture and three hours laboratory. \$3.00 laboratory fee.

BIOL 1406 BIOLOGY FOR ELEMENTARY TEACHERS*Fall, Spring, Summer (alternate years)*

An introductory course stressing basic botanical principles and concepts. It is designed to acquaint the future elementary teacher with the anatomy, physiology, development and distribution of the local flora. Credit cannot be given for both Biol 1306, 1402, 1405. Three hours lecture and three hours laboratory. \$3.00 laboratory fee.

BIOL 1487 (HONORS BIOLOGY)*Fall, Summer*

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 Program or by permission of the instructor. \$3.00 laboratory fee.

BIOL 1488 (HONORS BIOLOGY)*Spring, Summer*

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 Program or by permission of the instructor. \$3.00 laboratory fee.

BIOL 2305 MAN AND HIS ENVIRONMENT*Spring (alternate years)*

A consideration of the biological problems of population expansion, environmental destruction and resource conservation as they relate to man's past, present and future. Three hours lecture and two hours laboratory. \$3.00 laboratory fee.

BIOL 2306 BIOLOGICAL EVOLUTION*Spring, Summer (alternate years)*

Genetic, ecological and paleontological aspects of evolution, including that of man.

Prerequisite: Biol 1401-1402 or permission of the instructor. Three hours lecture.

BIOL 2401 VERTEBRATE ZOOLOGY*Fall, Spring*

A basic introductory course dealing with the fundamental biological principles and concepts. Designed to acquaint the student with structure, physiology and life histories of representative vertebrate types. Three hours lecture and three hours laboratory.

Prerequisite: Biol 1305 or 1401 or 1405. \$4.00 laboratory fee.

BIOL 2402 COMPARATIVE VERTEBRATE ANATOMY*Fall, Spring, Summer*

Comparative studies of the morphological, embryological and physiological relationships among vertebrates, with inclusion of histological and paleontological data. Three hours lecture and three hours laboratory.

Prerequisite: Biol 1305 or 1401 or 1405. \$5.00 laboratory fee.

BIOL 2403 ANATOMY AND PHYSIOLOGY*Fall, Spring, Summer*

A study of the structure and function of the human body includes cells, tissues, and organs of the following systems: Integumentary, skeletal, muscular, nervous system and special senses. Three hours lecture and three hours laboratory.

Prerequisite: Consent of instructor. \$4.00 laboratory fee.

BIOL 2404 ANATOMY AND PHYSIOLOGY*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. Three hours lecture and three hours laboratory. \$4.00 Laboratory fee.

Prerequisite: Biol 2403.

BIOL 3303 GENETICS*Fall*

Introduction to Genetics. Topics will include Mendelian genetics (Principles of segregation, independent assortment, and probability in inheritance), cell mechanics (cell cycle, mitosis, meiosis, spermatogenesis, oogenesis, plant fertilization), sex determination and sex linkage, DNA structure and function, linkage, crossing over, mapping, mutation, regulation of gene expression and development, chromosome aberrations and variation in numbers, population genetics and evolution.

Prerequisite: Biology 1401 and 1402. Chemistry 1401 and 1402.

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: Biology 1401 and 1402; Chemistry 1401 and 1402. \$4.00 laboratory fee.

BIOL 3403 MEDICAL MICROBIOLOGY AND IMMUNOLOGY*Spring*

A study of microorganisms that cause disease and immune response 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. Three hours lecture and three hours lab.

Prerequisite: BIOL 3401. \$4.00 lab. fee.

BIOL 3405 HISTOLOGY*Fall*

Lectures in this offering will place major emphasis on the structure and function of major tissue types and their cellular components. The laboratory will provide an opportunity for first-hand experience in examining the microscopic structure of the major tissue types and their relationships in organ structure. Three hours lecture and three hours laboratory.

Prerequisites: 12 semester hours of Biology including 4 hours from 2401, 2402 or 2403.

BIOL 3407 COMPARATIVE EMBRYOLOGY*Spring, Summer*

Developmental studies from the zygote through embryological stages (chiefly concerned with amphibians, birds and mammals). Three hours lecture and three hours laboratory.

Prerequisite: Nine semester hours of Biology, including four hours from 2401, 2402 or 2403. \$4.00 laboratory fee.

BIOL 3408 PLANT MORPHOLOGY*Spring*

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. Three hours lecture and three hours laboratory.

Prerequisites: Nine semester hours of biology, including biology 1306 or 1402 or 1406. \$4.00 laboratory fee.

BIOL 3409 ECOLOGY*Fall (alternate years)*

A study of the basic environmental factors affecting plants and animals, and their relation to economic and conservation problems. Three hours lecture and three hours laboratory and field work.

Prerequisite: 12 semester hours of Biology. \$4.00 laboratory fee.

BIOL 3411 MAMMALIAN PHYSIOLOGY*Spring*

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. Three hours lecture and three hours lab.

Prerequisites: 12 semester hours of Biology including 4 hours from 2401, 2402 or 2403 and 6 hours chemistry.

BIOL 3412 CELL BIOLOGY*Fall*

A study of cell structure and function with emphasis on bio-energetics, membranes, genes and genetic control, cell division and its regulation, and cellular differentiation. Three hours lecture and three hours lab. (Formerly Biol 4403, may not be repeated for credit.)

Prerequisite: Biol 1401 and 1402 or 1305 and 1306; one semester or organic chemistry. \$4.00 lab 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, 4407, 4415, and 5316.
Prerequisite: 6 to 8 hours of Biology.

BIOL 4100 BIOLOGY SEMINAR*Fall, Spring, Summer*

A study of current biological literature and the discussion of research in progress. Required of all Biology majors in their senior year, open only to nonmajors by permission.

BIOL 4201 BIOLOGY PROBLEMS*Offered on Demand*

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. The class meets each week equivalent to one hour lecture and two hours laboratory.

Prerequisite: Major in Biology with at least a junior standing. \$4.00 laboratory fee.

BIOL 4202 BIOLOGY PROBLEMS*Offered on Demand*

A continuation of Biology 4201.

Prerequisite: Biol 4201. \$4.00 laboratory fee.

BIOL 4303 MAMMALOLOGY*Fall (alternate years)*

A study of anatomy, evolution, distribution, systematics, ecology and physiology of mammals of North America with special emphasis on local forms. Two hours lecture and three hours laboratory.

Prerequisite: Nine semester hours of Biology. \$4.00 laboratory fee.

BIOL 4304 ICHTHYOLOGY*Offered on Demand*

Ecology, physiology, morphology and taxonomy of marine and fresh water fishes. Includes practical application of modern fishery management techniques. Two hours lecture and three hours laboratory.

Prerequisite: Nine semester hours of Biology. \$4.00 Lab fee.

BIOL 4305 PLANT PHYSIOLOGY*Fall*

An introduction of the basic principles of the physiology, growth and development of plants. Three hours lecture and three hours laboratory.

Prerequisites: Six hours of Biology. \$5.00 laboratory fee.

BIOL 4309 HERPETOLOGY*Fall (alternate years)*

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. Two hours lecture and three hours laboratory.

Prerequisites: Biol 1401, 1402 or 1305, 1306 or 1405, 1406 and 2401 or 2402. \$4.00 laboratory fee.

BIOL 4311 ECOLOGICAL PHYSIOLOGY*Spring (alternate years)*

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 semester hours of Biology including Biol 2401 or 2402. \$4.00 laboratory fee.

BIOL 4314 PLANT TAXONOMY*Fall, Summer*

Identification of vascular plants, with emphasis on native flowering plants. Two hours lecture and three hours laboratory. (Formerly Biol 3309, may not be repeated for credit.)

Prerequisites: Nine semester hours of Biology, including Biol 1306 or 1402 or 1406. \$4.00 laboratory fee.

BIOL 4402 MARINE ZOOLOGY*Summer*

A study of the common marine animals, especially invertebrates in coastal waters, particular attention is to be given to structural and physiological relationships. Three hours lecture and three hours laboratory and field work.

Prerequisite: 12 semester hours of Biology; Biol 3414 recommended. \$4.00 laboratory fee.

BIOL 4404 ELECTRON MICROSCOPY

A survey of procedures used in transmission electron microscopy. The course includes practical and theoretical work in fixation, embedding, sectioning and staining of biological material as well as operation of the electron microscope and photographic procedure. Two hours of lecture and six hours of laboratory. \$8.00 laboratory fee.

Prerequisite: Biol 3405.

BIOL 4406 MYCOLOGY

Fall

Morphology, physiology, taxonomy and culture of selected fungi. Emphasis will be given to those having economic significance. Three hours lecture and three hours laboratory.

Prerequisites: 12 hours of Biology including Biol 3401. \$4.00 laboratory fee.

BIOL 4407 ANIMAL PARASITOLOGY

Spring

Introduction to study of parasitic protozoa and worms (especially trematodes, cestodes, nematodes and acanthocephala). Three hours lecture and three hours laboratory. (Formerly Biol 3402, may not be repeated for credit.)

Prerequisite: Nine semester hours of Biology including four hours from 2401, 2402, 2403, 2407 or 3414. \$4.00 laboratory fee.

BIOL 4408 PLANT PATHOLOGY

Spring

An introductory course on the causes, nature and control of plant diseases. Emphasis will be given to diseases of plants of economic importance. Three hours lecture and three hours laboratory.

Prerequisite: Six hours of Biology. \$4.00 laboratory fee.

BIOL 4410 MARINE BOTANY

Fall, Summer

A study of the common local marine flora with emphasis on the microscopic algae forms. Three hours lecture and three hours laboratory. The student is expected to furnish his own transportation to nine or ten field laboratory sessions.

Prerequisites: Nine semester hours of Biology, including Biol 1306 or 1402 or 1406. Credit may not be earned under the new course number if previously earned under the old number. \$4.00 laboratory fee.

BIOL 4412 ORNITHOLOGY

Spring

Principles of avian classification, morphology and ecology, including migration, distribution and relation to man. Three hours lecture and three hours laboratory and field work. (Formerly Biol 3404, may not be repeated for credit.)

Prerequisites: Nine semester hours Biology, including four hours from 2401, 2402, or 2403. \$4.00 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. Three hours lecture and three hours laboratory.

Prerequisite: Biology 3414. \$5.00 laboratory fees.

BIOL 4416 ENVIRONMENTAL TOXICOLOGY

Spring

A survey of interaction of environmental pollutants with living systems. Laboratory consists of toxicological evaluation of selected environmental chemicals. Three hour lecture and three hours laboratory.

Prerequisite: Biology 3412 and 6 hours of organic or biochemistry. \$5.00 laboratory fee.

BIOL 5304 ADVANCED ICHTHYOLOGY

Fall, alternate years

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. Two hours lecture and three hours laboratory. \$4.00 laboratory fee.

Prerequisite: Nine semester hours of Biology.

BIOL 5307 HOST-PARASITE RELATIONSHIPS

Spring

A comprehensive analysis of the interrelationships between host and parasite. Modern laboratory techniques essential to understanding these interrelationships will be considered. Three hours lecture and three hours laboratory. \$4.00 laboratory fee. (Formerly Biol 6304, may not be repeated for credit.) Credit cannot be given if Biol 3402 or 4407 has been taken.

BIOL 5309 ADVANCED HERPETOLOGY*Fall (alternate years)*

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. Two hours lecture and three hours laboratory.

Prerequisites: Biol 1401, 1402 or 1305, 1306 and 2401 or 2402. \$4.00 laboratory fee.

BIOL 5311 ADVANCED ECOLOGICAL PHYSIOLOGY*Spring (alternate years)*

A comparative study of the physiological adaptations of animals to their environments. Emphasis will be placed on physiological basis of animal distribution and evolution.

\$4.00 laboratory fee. (Formerly Biol 6311, may not be repeated for credit.)

BIOL 5312 ADVANCED ORNITHOLOGY*Offered on Demand*

Studies in avian biology with emphasis on concepts of speciation, behavior, and ecology. Three hours lecture and three hours laboratory. Previous course in Biol 3404

recommended. *\$4.00 laboratory fee. (Formerly Biol 6312, may not be repeated for credit.)*

BIOL 5314 ADVANCED PLANT SYSTEMATICS*Fall*

A study of literature and methods of experimental plant systematics, phylogenetic considerations, procedures in monograph preparation, field and herbarium techniques and modern biosystematic approaches applied to selected taxa will be emphasized. *\$4.00 laboratory fee. (Formerly Biol 6314, may not be repeated for credit.)*

BIOL 5315 ADVANCED ENTOMOLOGY*Spring*

An advanced treatment of the science of entomology. Includes applied aspects of insect morphology, physiology, classification and pest management. Laboratory consists of insect identification supported by field trips. Three hours lecture and three hours laboratory.

Prerequisite: Biology 3414. \$5.00 laboratory fees.

BIOL 5316 ADVANCED TOXICOLOGY*Spring*

An advanced treatment of physiological and systematic interactions of environmental pollutants with biological systems. Laboratory consists of toxicological evaluations of selected chemicals. Three hours lecture and three hours laboratory.

Prerequisite: Biology 3412 and 6 hours of organic or biochemistry. \$5.00 laboratory fee.

BIOL 5344 ADVANCED MAMMALOLOGY*Fall (alternate years)*

A study of Anatomy, Evolution, Distribution, Systematics, Ecology and Physiology of mammals of North America. A collection and research project are required. Critical review of current literature and studies of recent advances in Mammalogy are emphasized. *\$4.00 laboratory fee.*

BIOL 5345 ADVANCED PLANT PHYSIOLOGY*Fall*

Physiology of plants; cell structure and function, nutrition, metabolism, and factors influencing growth and development.

Prerequisite: Graduate standing. \$5.00 laboratory fee.

BIOL 5408 ADVANCED PLANT PATHOLOGY*Spring*

The causes, nature and control of plant diseases. Principles of plant disease development. Three hours lecture and three hours of laboratory.

Prerequisite: Graduate standing. \$4.00 laboratory fee.

BIOL 5410 MARINE PLANT SCIENCE*Fall, Summer*

The common local marine flora with emphasis on the macroscopic algal forms. Three hours lecture and three hours laboratory. *\$4.00 laboratory fee.*

BIOL 5446 ADVANCED MYCOLOGY*Fall*

Detailed studies of the fungi, including biological aspects of selected genera, culturing techniques and laboratory methods. Not open to students with previous credit for Biol 4406. *\$4.00 laboratory fee.*

Prerequisite: 18 semester hours of Biology.

BIOL 5452 ADVANCED MARINE ZOOLOGY*Summer*

Structural, physiological and ecological relationships of common marine animals, stressing invertebrates of coastal waters. Three hours lecture and three hours laboratory. Biol 3414 recommended. *\$4.00 laboratory fee.*

BIOL 6101 BIOLOGY GRADUATE SEMINAR*Fall, Spring, Summer*

All graduate students will be required to enroll for credit in Biology Graduate Seminar three separate semesters. All Biology graduate students are strongly encouraged to attend seminar each semester they are enrolled in graduate school. Each student, when enrolled for credit will, with the approval of the seminar director, select some particular aspect of current biological research and present a scholarly review of it before seminar participants, other graduate students and the Biology faculty.

BIOL 6302 SPECIAL TOPICS IN BIOLOGY/MARINE ECOLOGY*On Demand*

A study of current topics in Biology, may be repeated for credit as topics change. \$4.00 laboratory fee.

Prerequisite: Consent of Instructor.

BIOL 6303 ADVANCED ECOLOGY*Spring (alternate years)*

Utilization of modern techniques to analyze interrelationships between plants, animals and the environment. Terrestrial and freshwater environments will be considered. Three hours lecture and three hours laboratory. \$4.00 laboratory fee.

BIOL 6305 BIOMETRY*Fall*

Statistical analysis and principles as applied to biological problems. Three hours lecture and three hours laboratory. \$4.00 laboratory fee. Recommended: undergraduate statistics course.

BIOL 6308 SPECIAL TOPICS IN BIOLOGY – FRESHWATER PHYCOLOGY*On Demand*

A study of current topics in Biology, may be repeated for credit as topics change. \$4.00 laboratory fee.

Prerequisite: Consent of Instructor.

BIOL 6309 SPECIAL TOPICS IN BIOLOGY – MARINE PHYCOLOGY*On Demand*

A study of current topics in Biology, may be repeated for credit as topics change. \$4.00 laboratory fee.

Prerequisite: Consent of Instructor.

BIOL 6310 SPECIAL TOPICS IN BIOLOGY – IMMUNOLOGY*On Demand*

A study of current topics in Biology, may be repeated for credit as topics change. \$4.00 laboratory fee.

Prerequisite: Consent of Instructor.

BIOL 6313 ADVANCED CELL BIOLOGY AND PHYSIOLOGY*Fall, alternate years*

Detailed lecture and laboratory analysis of typical cellular structure and dynamics with emphasis on the anatomical and physiological mechanisms underlying the functioning of selected specialized cells. Two hours lecture and three hours laboratory. \$4.00 laboratory fee.

Prerequisite: Biol 3412.

BIOL 6316 ADVANCED GENETICS*Fall*

Lectures and laboratory dealing with facts of modern genetics, and developments in molecular nature of hereditary determinants.

Recommended: BIOLOGY 3303 and ORGANIC CHEMISTRY. \$4.00 laboratory fee.

BIOL 6365 GRADUATE BIOLOGICAL RESEARCH PROBLEMS

The student in conference with a member of the graduate faculty will define an independent research problem. The subject of the research may be in the area of botany, microbiology or zoology. The student's committee or the Department Head, if the student has not yet formed a committee, will approve the problem prior to enrollment. If undertaken in a summer, the student should enroll in no other course that summer term. The student's report will be written and in an approved thesis style. One copy will be retained by the faculty member directing the research and one copy will be placed in the student's file in the departmental office. A maximum of 3 (three) credit hours undertaken in graduate biological research problems will count towards a Master's Science degree in Biology.

BIOL 7300 THESIS**BIOL 7301 THESIS**

Business Administration, Master's Degree (MBA)

Dr. Vern Vincent, Director

Full-time Graduate Faculty

Assefa, Zewdineh (PhD, Illinois, 1980; assoc. prof.) Finance
 Brewerton, Francis J. (DBA, Louisiana State 1968; prof.) Management, Business Policy
 Cardenas, Gilbert (PhD, Illinois 1977; prof.) Economics
 Crews, Michael R. (PhD, Utah State 1981; assoc. prof.) Economics
 de los Santos, Gilbert (PhD, Texas 1972; prof.) Marketing
 De Merville, Wig (PhD, Texas Tech 1978; Prof.) Accounting
 Ellard, Charles J. (PhD, Houston 1974; prof.) Economics
 Gratz, Jerre E. (Ed.D, Houston 1961; prof.) Business Communications
 Greene, Walter E. (PhD, Arkansas 1976; assoc. prof.) Business Policy and Business
 Administration
 Lee, Daniel (Phd, Florida 1977; prof.) Management Information Systems
 Nasif, Ercam (PhD, North Texas State 1988; asst. prof.) Management
 Patrick, Michael (PhD, Michigan State 1977; assoc. prof.) Economics
 Petrie, George A. (PhD, Louisiana State University 1970; assoc. prof.) Accounting
 Platzer, Willard B., Jr. (PhD, Arkansas 1973; prof.) Marketing
 Prock, Jerry D. (DBA, Arizona 1970; prof.) Finance
 Rydl, Lester M. (PhD, Texas A&M, 1978; assoc. prof.) Management Information Systems,
 Quantitative Methods
 Vento, Edward (PhD, Texas A&M 1972; assoc. prof.) Economics
 Vincent, Vern C. (PhD, Northern Colorado 1972; prof.) Quantitative Methods

Graduate Program

Purpose

The graduate studies program of the School of Business Administration provides for advanced study leading to the Master of Business Administration Degree.

The program is designed for those who desire to pursue advanced study as a means of enhancing their business and administrative careers. Specifically, the program is designed to aid in meeting the career needs of those:

1. in business, industry, and government;
2. in the service industries as well as those seeking careers in these industries;
3. who wish to broaden their knowledge to become more effective as teachers of business subjects; and
4. who are just starting their business careers or who plan to continue their study leading to the Doctor of Philosophy or Doctor of Business Administration Degree.

Scope

The MBA degree is a broad-based, highly structured program designed to give the student exposure to management and analytical decision-making skills necessary to function in a changing business environment. The Pan American MBA program is for those individuals who have a bachelor's degree in either a business or non-business discipline; however, MBA prerequisite courses need to be completed prior to enrolling in the graduate program. The graduate program requires 36 semester hours of study and generally is completed within two academic years of study.

A student may enter the program at the beginning of either semester or summer session provided all admission criteria are satisfactorily completed. The MBA courses are scheduled to start in the early evening hours to accommodate the large number of students with full-time jobs.

Admission to the MBA Program

In order to be admitted to the MBA program, the student must first meet all requirements for admission to the Graduate School of Pan American University, as well as MBA requirements specified below. Application for admission to the University must be made to the Office of Admissions and Records, Pan American University, Edinburg, Texas 78539.

All students applying for admission to the MBA program are required to provide the Director of Graduate Studies in the School of Business Administration the following:

1. A Graduate Management Admission Test (GMAT) which must be provided before a student is allowed to enroll in the MBA program;
2. Graduate Record Examination (GRE), if necessary, (see University Graduate Admission requirements);
3. Official transcripts; and
4. If necessary, catalog(s) for evaluation of transcript(s).

Student Classification and Admission Criteria for the MBA Program

The student should note that classification and admission criteria to the MBA program are different than that for admission to the University's graduate school.

- I. Special Student Admission — student with an undergraduate or graduate degree from a regionally accredited institution recognized by the Council on Postsecondary Accreditation (COPA) but lacking one or more of the following:
 - A. Official Transcripts of all undergraduate and graduate work
 - B. MBA prerequisite courses
 - C. GMAT score (minimum acceptable score 350)
 - D. Graduate Record Exam (GRE) score, (required only if overall grade point average is less than 3.0 (4.0 system) or GMAT score is less than 470

Students in this classification will *not* be permitted to enroll in the MBA program and take graduate courses.

- II. Graduate Student Admission Classification students that in addition to meeting the Special Student admission criteria must be classified according to the following for admission to the MBA program.

Unconditional Admission to MBA Program

Students should have 1000 points or more based on the following formula: 200 times the Graduate Admission Grade Point Average (4.00 system) + GMAT score. The minimum acceptable GMAT score for entrance in the MBA program is 350 regardless of student classification.

Conditional Admission

In addition, a minimum number of students who do not initially meet the MBA Admission criteria may be granted Conditional Admission status in the MBA program if other indicators of success can be provided.

Examples of indicators of success include:

- A. High GRE or high unofficial GMAT score.
- B. Relevant work and leadership experience.
- C. Supporting documentation of potential success through letters of recommendation.

Conditional Admission status must be removed at the end of the semester in which a student is initially enrolled. In order for a student to continue in the MBA program, the student must meet the unconditional admission requirement.

Denied Admission

A student is denied admission to graduate study in the School of Business Administration for failure to meet the above admission criteria. Denied Admission status can only be changed by improving test scores or undergraduate grade point average.

Tentative Admission

The University's Tentative Admission category does not apply to students interested in graduate study in the School of Business Administration.

Students classified under Tentative Admission in other degree programs will not be allowed to enroll in graduate level courses in the School of Business Administration.

Special Graduate Students

Students who already have a graduate degree in business and are interested in taking additional graduate business courses for professional improvement purposes are permitted to enroll in graduate business courses.

Admission of Foreign Students

Foreign students from countries whose native language is not English will be expected to take the Test of English as a Foreign Language (TOEFL). Students scoring below 540 on the TOEFL will be denied admission, while those scoring between 540 and 560, but otherwise meeting MBA admission requirements, will be expected to take prescribed courses in English.

MBA Degree Requirements

The number of semester hours required for an MBA degree will vary depending upon a student's prior academic coursework and how the student elects to fulfill the MBA foundation course requirements.

In addition to fulfilling general requirements for a master's degree specified by the Pan American University Graduate School, candidates for the MBA will be required to complete successfully the MBA foundation courses plus 30 semester hours of graduate courses of which 24 semester hours are required core courses.

MBA Foundation Courses

	Undergraduate Semester Hours	Graduate Semester Hours
GENB 3337 (Business Law)	3	
MANA 3361 (Principles of Management)	3	
MARK 3371 (Principles of Marketing)	3	
FINA 3383 (Managerial Finance)	3	
GENB 4330 (International Business)	3	
ACC 6301 (Accounting Foundations) OR ACC 2421 (Introduction to Financial Accounting) and ACC 2329 (Fundamentals of Managerial Accounting)	7	3
ECO 6302 (Economic Foundations) OR ECO 2353 (Principles of Economics, I) and ECO 2354 Principles of Economics, II)	6	3
MANA 6303 (Statistical Foundations) OR MANA 2341 (Elementary Business and Economic Statistics) and MANA 3342 (Intermediate Business & Economic Statistics)	6	3
GENB 6310 (Business Research Foundations)		3

Foundation coursework semester hours: minimum 27 hours; maximum of 37 hours

Additionally, students must provide evidence of proficiency in the following areas:

Mathematics: Successful completion of a differential calculus course is required. Students lacking this course proficiency will be required to complete Math 1317.

Computer Literacy: Students are required to be knowledgeable about computer terminology and applications. Students without this background must enroll in CIS 1301.

Degree applicability of coursework from business programs which are not accredited by the American Assembly of Collegiate Schools of Business (AACSB) must be determined through appropriate validation procedures and/or examination. Final approval of non-AACSB accredited coursework will be determined by the Graduate Studies Director or Dean of the Business School.

MBA Core Courses

A graduate student is expected to meet all graduate admission criteria prior to enrollment in any graduate course, either the foundation coursework or coursework in the MBA program.

MBA Core Courses	Semester Hours
ACC 6320 Financial and Managerial Accounting	3
MANA 6330 Management Theory & Organizational Behavior	3
FINA 6340 Financial Administration	3
ECO 6350 Managerial Economics	3
MANA 6360 Operations Management	3
MARK 6370 Marketing Policy and Management	3

MIS	6380	Computer Decision Support Systems	3
GENB	6390	Administrative Policy and Strategy	3
		Subtotal	24
		Graduate Electives	6
		TOTAL	30

Total MBA semester hours: minimum 57 hours; maximum of 67 hours.

The student will select the remaining 6 semester hours from approved graduate offerings of the University. Six hours may be taken from offerings outside the School of Business Administration with the approval of the Director of Graduate Studies. However, three of the six hours must be in 6000 or 7000 level courses. A student may elect to write a thesis in lieu of the six hours of graduate elective course work.

Comprehensive Written Examination

Each candidate for the Masters of Business Administration (MBA) degree is required to satisfactorily pass a comprehensive written examination over the MBA core curriculum. The purpose of the examination is to evaluate the ability of the student to articulate the application and integration of the MBA core courses through a comprehensive written examination. In order for a student to be eligible to take the examination, the student must be in good standing in accordance with the Three "C" Rule.

Three "C" Rule

A master's candidate is ineligible to continue in the program or to take the comprehensive written examination whenever a grade of "C" or lower is received in three or more of the following core courses, even if the course is repeated and an "A" or "B" grade is attained:

1. Financial and Managerial Accounting
2. Management Theory and Organizational Behavior
3. Financial Administration
4. Managerial Economics
5. Operations Management
6. Marketing Policy and Management
7. Decision Support Systems

If the possibility exists that a student could have three "C" grades in core courses based on a combination of previously earned "C" grades, current enrollment or future required core courses, then the student will be denied permission to take the comprehensive written examination until such time core course grades are determined.

MBA Degree Program

Recommended Schedule

1st Term — Fall

GENB 6310 Business Research
 ACC 6320 Financial and Managerial Accounting
 MANA 6330 Management Theory and Organizational Behavior

2nd Term — Spring

FINA 6340 Financial Administration
 ECO 6350 Managerial Economics
 MANA 6360 Operations Management

3rd Term — Fall

MARK 6370 Marketing Policy and Management
 MIS 6380 Decision Support Systems
 Graduate Business Elective

4th Term — Spring

GENB 6390 Administrative Policy and Strategy
 Graduate Business Elective
 Graduate Business Elective

Business Graduate Course Descriptions

MBA Graduate Foundation Courses

ACC 6301 PRINCIPLES OF ACCOUNTING

An intensive examination of financial and managerial accounting theory and procedures and their application in the generation of data for integrated financial and managerial accounting information systems. Topics include an overview of the accounting cycle, analysis of financial statements, income determination and inventory valuation cost allocation, and interpretation of financial information for managerial decision-making and control purposes.

Prerequisites: Admission to the MBA Program.

ECO 6301 PRINCIPLES OF ECONOMICS

An introduction to basic economic concepts and methods. The competitive market system, problems in resource allocation and economic efficiency, government regulation and the public sector, money and banking, unemployment and inflation in economic policy making and internal economics.

Prerequisite: Admission to the MBA Program.

MANA 6303 STATISTICAL FOUNDATIONS

An introduction to statistical methodology to include: probability concepts, inference techniques, analysis of variance, regression analysis, chi square, and other non-parametric analyses. This course focuses on the use of the computer in performing statistical analysis.

Prerequisite: Admission to the MBA Program.

GENB 6310 BUSINESS RESEARCH FOUNDATIONS

Fall

Business research techniques and methodologies. Topics include scientific method, business information sources, research proposal development and evaluation, research design, scaling and instrument design, sampling design, statistical packages and applications, research reporting and writing, and ethical considerations in business research.

Prerequisite: Admission to the MBA Program

MBA Core Courses

ACC 6320 FINANCIAL AND MANAGERIAL ACCOUNTING

Fall

A study of the principles, conventions and concepts underlying internal and external reporting of accounting information by business organization, and the application of these principles in evaluation, interpretation and utilization of accounting data for managerial decisions. (Since this course replaces ACC 6326, a student cannot receive credit for both courses.)

Prerequisite: ACC 2322 or 2339, FINA 3383.

MANA 6330 MANAGEMENT THEORY AND ORGANIZATIONAL BEHAVIOR

Fall

An analysis of formal organizational theory and the interrelationship of individuals in organizations. A study of the organization as a system of authority, status, leadership, direction, culture, ethics, communication and influence, includes readings, cases and special reports. (Since this course replaces MANA 6361, a student cannot receive credit for both courses.)

Prerequisites: MANA 3361.

MIS 6380 DECISION SUPPORT SYSTEMS

On Demand

The purpose of this course is to study how computers can be used to enhance the decision making process in organizations and current implementation of decision support systems in U.S. business. Students studying decision support systems will be exposed to models, databases, expert systems, fourth generation languages, data communication, and organizational management. The main emphasis of this course is to increase the productivity of the decision makers with the assistance of computers.

FINA 6340 FINANCIAL ADMINISTRATION

Spring

Management of the flow of funds in the firm. Analysis for obtaining the optimum utilization of funds, behavior of financial institutions and markets. (Since this course replaces FINA 6381, a student cannot receive credit for both courses.)

Prerequisites: FINA 3383.

ECO 6350 MANAGERIAL ECONOMICS*Spring*

The application of economic analysis to management in the business firm. Considers demand analysis, production costs, pricing policies and investment planning. Extensive use is made of case problem analysis. (Previously Eco 5352 and Eco 6359, may not be repeated for credit.)

Prerequisite: ECO 2353.

MANA 6360 OPERATIONS MANAGEMENT*Spring*

This course focuses on the role of the production function in business systems and the study of production system operations. Emphasis is placed on production system design, integration of system inputs, outputs, and transformations, and computer applications to decision processes utilized in managing operations and achieving optimal production. (Since this course replaces MAN 5363, a student cannot receive credit for both courses.)

Prerequisite: MATH 2317 or the equivalent.

MARK 6370 MARKETING POLICY AND MANAGEMENT*Fall*

A study of marketing policy and decision making based upon a consumer orientation; innovation and creative adaptation to change; cultural implication of marketing action; and the role of theory in marketing. (Since this course replaces MARK 6377, a student cannot receive credit for both courses.)

Prerequisite: MARK 3371.

GENB 6390 ADMINISTRATIVE POLICY AND STRATEGY*Spring*

A study of management problems under dynamic conditions, including culture and ethics. Comprehensive, integrative cases will be studied and analyzed. Decision making and involvement in the management process could be provided through a computerized management simulation. (Since this course replaces GENB 6369, a student cannot receive credit for both courses.)

Prerequisite: 18 semester hours of MBA core courses.

MBA Elective Courses**GENB 6316 BUSINESS RESPONSE TO GOVERNMENT REGULATIONS***On Demand*

Review of government laws and regulations affecting the business operation including anti-trust, mergers and investments, consumer rights and safety, wage and hour law, industrial relations, health and safety and equal employment opportunity as well as business response to deregulation laws; with a view toward minimizing compliance cost. (Since this course replaces GENB 6329, a student cannot receive credit in both courses.)

GENB 6317 ADMINISTRATIVE COMMUNICATION*On Demand*

Interdisciplinary study of the communication processes in business. Includes systems and technologies, and the organizational and psychological processes. Formulating, conducting and reporting a significant research project in communications. (Since this course replaces GENB 6335, a student cannot receive credit for both courses.)

ACC 6321 ADVANCED MANAGERIAL ACCOUNTING*On Demand*

The purpose of this course is to explore systematically the use of accounting measures as performance evaluation mechanisms within an organization. Motivation aspects will be emphasized, along with the development of a framework for designing and analyzing evaluation mechanisms based on accounting data.

Prerequisite: Acc 6320.

ACC 6323 ACCOUNTING SEMINAR*On Demand*

A study of current and special topics concerning accounting. Emphasis will be toward literature from the professional public accounting societies and governmental agencies.

Prerequisite: Recommend 15 hours of accounting, including ACC 3321, 3323, 3324 or its equivalent.

MANA 6331 PERSONNEL ADMINISTRATION AND INDUSTRIAL RELATIONS*On Demand*

An analysis of the functions of personnel administration and of the relationship between the personnel-industrial relations system and the total organization system.

Contemporary industrial relations, philosophies and practices. (Since this course replaces MANA 6362, a student cannot receive credit for both courses.)

Prerequisite: MANA 6330.

MANA 6332 MANAGEMENT SEMINAR*On Demand*

The development of management thought and practice with emphasis on current trends and problems in management. (Since this course replaces MANA 6366, a student cannot receive credit for both courses.)

Prerequisite: 12 semester hours of graduate credit.

MIS 6334 DATA COMMUNICATIONS AND NETWORKING*On Demand*

Communication facilities, network configurations, and system design considerations.

Prerequisite: CIS 3335, 3336.

MIS 6335 SEMINAR IN MANAGEMENT INFORMATION SYSTEMS*On Demand*

Latest development and theory in information technologies.

Prerequisite: CIS 3335, 3336.

MIS 6336 ADVANCED DATABASE MANAGEMENT SYSTEMS*On Demand*

Purpose of this course is to study advanced topics such as (1) database security, (2) recovery, (3) concurrent control, (4) distributed databases, and (5) database machines.

Prerequisite: CIS 3335.

FINA 6341 FINANCE SEMINAR*On Demand*

Readings, reports and discussion of selected topics in finance.

Prerequisite: 12 semester hours of graduate business courses.

ECO 6351 ECONOMICS SEMINAR*On Demand*

Readings and discussion of selected topics in economics. Course may be repeated for credit.

MARK 6371 MARKETING SEMINAR*On Demand*

A study of historical and current thought in marketing theory and practice.

MARK 6372 MARKETING STRATEGY*On Demand*

A study of current promotion management techniques for consumer products. Skills will be developed in utilizing consumer research, sales analysis, and mass media data for promotion planning, creation, execution, and evaluation. (Since this course replaces MARK 5372, a student cannot receive credit for both courses.)

GENB 7600 THESIS*On Demand*

Research and writing of the thesis.

Department of Chemistry:

Dr. Jose P. Castrillon, Chair

Full-Time Faculty:

Baca, Ernest J. (PhD, University of New Mexico, 1969; Prof.) Physical Chemistry.
Castrillon, Jose P. (PhD, University of Buenos Aires, 1951; Assoc. Prof. and Chair)

Organic Chemistry

Estrada, Andres (MS, Texas A & I University, 1959; Prof.) Analytical Chemistry
Mondal, Jalal U. (PhD, University of New South Wales, 1979, Inst.) Inorganic Chemistry
Otken, Charles C. (PhD, Cornell University, 1954; Prof.) Biochemistry
Villarreal, John R. (PhD, Texas A & M University, 1976; Assoc. Prof.) Physical Chemistry

The Department of Chemistry offers a major and a minor in chemistry.

In addition to a program of study for those students interested in the profession of chemistry, the department also offers a program for predoctoral and premedical students which leads to the Bachelor of Science Degree in Chemistry.

The Department of Chemistry also has a plan of study for pre-pharmacy students and for students interested in teacher certification. The departmental course offerings also serve as supporting courses for other majors that require a knowledge of Chemistry.

The laboratories of the Chemistry Department are well equipped for undergraduate chemistry courses. The following major instruments are available: infrared and ultraviolet and visible spectrophotometers, nuclear magnetic resonance and mass spectrometers, gas chromatographs and high pressure liquid chromatograph. In addition to the formal laboratory work offered in the department, the Chemistry major may choose to work on an independent research project under the supervision of a faculty member.

Degree Requirements

Chemistry majors should include eight semester hours of Physics, eight semester hours of Biology, Math 1370, and C.S. 2325 in their programs.

Major in Chemistry:

31 or 32 semester hours of chemistry; must include Chemistry 2401, 3301, 3401, 3402 or 4488, 3404, 4401, 4402 and one or two from 3403, 4301, 4302, 4488, 4403. NOTE: Chem. 1402 or its equivalent under CEEB or CLEP is a prerequisite for all other courses in Chemistry.

Major in Chemistry with Biology Minor:

(Pre dental or Pre medical):

Same as a major in Chemistry (above) and must also include: 18 semester hours in biology, including Biology 1401, 1402, 2402, and six advanced semester hours, Physics 1401, 1402 and Psychology 1313.

Minor in Chemistry:

18 semester hours of which 6 must be advanced.

Teacher Certification in Chemistry:

Secondary Plan I: 36 semester hours in Chemistry of which 21 must be advanced.

Secondary Plan II: 24 semester hours in Chemistry of which 12 must be advanced.

Suggested Curriculum

Prepharmacy

Freshman Year

Biol. 1401, 1402

Chem. 1401, 1402

Eng. 1301, 1302¹

Math 1340, 1356, 1360

1370¹

Hist. 2313, 2314

P.E. 2 hours¹

A knowledge of typing is expected.⁴

See Chemistry Department for other specifics, since curricula at other institutions change.

Sophomore Year

Eng. (Soph. Lit.) 6 hours²

Chem. 3401, 3404

Phys. 1401, 1402¹

Eco. 1301¹

Govt. 2313, 2314

Biol 3401³

P.E. 2 hours¹

Course Descriptions

Chemistry

CHEM 1401 GENERAL CHEMISTRY

Fundamental principles of pure and applied chemistry. Includes theories of the physical and chemical structure of elements, compounds and mixtures. Three hours lecture and three hours laboratory.

Prerequisite: Four years of high school Mathematics or MATH 1334. \$3.00 laboratory fee.

¹English 1302, Mathematics 1370, Physics 1401 and 1402, Economics 1301 and Physical Education are not required by the University of Texas.

²The University of Texas requires only 3 hours of sophomore English.

³The University of Texas recommends but does not require Biology 2403 and 2404.

⁴The University of Houston also requires social sciences electives, 3 hours, and cultural heritage electives, 6 hours, while the University of Texas requires 5 hours of social and behavioral sciences and 3 hours of fine arts and humanities.

CHEM 1402 GENERAL CHEMISTRY

A continuation of Chemistry 1401 including ionic equilibrium, oxidation-reduction, qualitative analysis, inorganic and introductory organic chemistry. Three hours lecture and three hours laboratory.

Prerequisite: CHEM. 1401. \$3.00 Laboratory Fee.

CHEM 2401 QUANTITATIVE ANALYSIS

An introductory study of methods, equipment and practices of quantitative inorganic chemistry. Both volumetric and gravimetric procedures will be covered in the laboratory work. Two hours lecture and six hours of laboratory.

Prerequisite: CHEM. 1402. \$4.00 Laboratory Fee.

CHEM 3301 INORGANIC CHEMISTRY

An introductory study of the elements other than carbon and their compounds based on the periodic classification and certain related theoretical concepts explaining structure and reactivity. Three hours lecture.

Prerequisite: 12 hours of chemistry.

CHEM 3401 ORGANIC CHEMISTRY

A study of carbon compounds including an introduction to aromatic compounds. This course is either terminal or continuous with chemistry 3404. Laboratory work is mainly basic techniques and preparation and purification of compounds. Three hours lecture and three hours laboratory.

Prerequisite: CHEM. 1402. \$4.00 Laboratory Fee.

CHEM 3402 QUANTITATIVE ANALYSIS

A continuation of Chemistry 2401 covering the more advanced quantitative methods, with special emphasis on separation and analysis of mixtures. Two hours lecture and six hours laboratory.

Prerequisite: A "C" or better in CHEM. 2401. \$4.00 Laboratory fee.

CHEM 3403 BIOCHEMISTRY

An elementary course in physiological chemistry or biochemistry. Three hours lecture and three hours laboratory.

Prerequisite: CHEM. 3401. \$4.00 Laboratory Fee.

CHEM 3404 ORGANIC CHEMISTRY

A continuation of Chemistry 3401. Coverage of compounds is detailed. Three hours lecture and three hours laboratory.

Prerequisite: CHEM. 3401. \$5.00 Laboratory Fee.

CHEM 4201 CHEMISTRY PROBLEMS

A course adapted to the study of special topics in chemistry. 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 chemistry with at least junior standing. \$4.00 Laboratory Fee.

CHEM 4202 CHEMISTRY PROBLEMS

A continuation of Chemistry 4201.

Prerequisite: CHEM. 4201. \$4.00 Laboratory Fee.

CHEM 4301 HISTORY AND PHILOSOPHY OF CHEMISTRY

A study of the historical and philosophical development of chemical concepts. Three hours lecture.

Prerequisite: 12 semester hours of chemistry.

CHEM 4302 BIOCHEMISTRY

The reactions of intermediary metabolism. Three hours lecture.

Prerequisites: CHEM. 3401 and CHEM. 3403.

CHEM 4378 SPECIAL TOPICS IN CHEMISTRY

A course designed to cover in more detail the more specialized areas in the field of chemistry.

Prerequisite: Twelve hours of chemistry.

CHEM 4401 PHYSICAL CHEMISTRY

Explanation and mathematical development of the theories and principles of chemistry with attention to the subjects of atomic structure, the gas laws, thermodynamics, the phase rule and similar topics. Three hours lecture and three hours laboratory.

Prerequisites: Six semester hours of calculus. \$4.00 Laboratory Fee.

CHEM 4402 PHYSICAL CHEMISTRY

A continuation of Chemistry 4401. Three hours lecture and three hours laboratory.

Prerequisite: CHEM. 4401. \$4.00 Laboratory Fee.

CHEM 4403 MOLECULAR SPECTROSCOPY

The interpretation of infrared, ultraviolet, nuclear magnetic and mass spectra, particularly in regard to applications in organic chemistry. Laboratory work deals mainly with problems which require the reading of spectra from available reference data. Three hours lecture and three hours laboratory.

Prerequisite: CHEM. 3401. \$4.00 Laboratory Fee.

CHEM 4488 INSTRUMENTAL ANALYSIS

A study of measurement techniques and methods using instruments to obtain qualitative and quantitative information. Includes a study of instrument modules, transducers, amplifiers, control and readout devices. Will usually include computer application either to instrument control or data reduction. Two hour lecture and six hours laboratory. Lab fee \$5.00.

Prerequisite: A knowledge of quantitative analytical technique.

CHEM 5301 BIOCHEMISTRY

The reactions of intermediary metabolism. Three hours lecture.

Prerequisites: CHEM. 3401 and CHEM. 3403.

Clinical Laboratory Science

See Division of Health Related Professions

Department of Communications

Marian F. Monta, Acting Chair

COMMUNICATION DISORDERS

Cancel, Cruz (Ph.D., Ohio State, assoc prof.) Speech-Language Pathology, Audiology (Fellow, CCC-Sp/A)

Higdon, Lawrence (M.S., Texas A&I University, 1968; asst. prof.) Audiology (Fellow, CCC-A)

Leach, Edwin A. (Ph.D., University of Kansas, 1965; assoc. prof.) Speech-Language Pathology (Fellow, CCC-Sp)

Valles, Luciano, (M.S., Texas Christian University, 1983, asst. prof.) Speech-Language Pathology (CCC-Sp)

JOURNALISM

Davis, Vernon (M.A., E. Texas 1969; prof.) journalism

SPEECH COMMUNICATION

Applbaum, Ronald L. (Ph.D., Penn. State, 1969; professor) group and organizational communication

Courtney, Janice Ray (M.F.A., Texas 1961; asst. prof.) interpersonal communication

McLemore, George (Ph.D., University of Pittsburg, 1985; asst. prof.) speech communication, rhetorical criticism, media analysis

Rieke, R. Neal (M.S., M.P.A., North Texas State University 1976; asst. prof.) organizational communication, human resources management

THEATRE AND TELEVISION

Cummins, Doug (Ph.D., Texas Tech 1980; asst. prof.) acting, directing, theatre management

Grabowski, Thomas (M.F.A., Illinois 1981) technical director and designer

Hawley, James A. (Ph.D., Ohio State 1967; assoc. prof.) design, criticism, and photography

Monta, Marian F. (Ph.D., Cornell 1971; prof.) acting, directing, literature
 Stanley, Jack R. (Ph.D., Michigan, 1973, assoc. prof.) television film production

The Department offers two majors and a minor.

There is a major in communication disorders which consists of Comm 1309, 2309, 2310, 2311, 3319, 3321, 3420, 3422, 4410, 4311, 4312, and Ed 4372 plus 200 approved clinical practicum hours supervised by ASHA certified personnel. Eligibility for practicum assignment requires a 2.5 GPA in the following course: Comm 1309, 2309, 2310, 2311, and 3319. A minor in psychology, biology, Spanish or computer science is encouraged for communication disorders majors.

There is a major in communications which is a broad-based major of 51 semester hours from the speech communication, theatre-television and journalism areas, of which 42 must be advanced. All communications majors must take Comm 1301 and 3350. Comm 1301 should be the first communications course taken within the major, and 3350 should be the first advanced communications course taken within the major. The required 30 semester hours concentration, 18 semester hours of which must be in advanced coursework, will be chosen from one of the areas of speech communication, journalism or theatre-television. The required 15 semester hours in support courses will be advanced coursework chosen from one or both of the remaining areas.

Students may certify for teaching in the areas of speech communication, theatre, or journalism by taking the required courses listed under Degree Requirements.

Students choosing a communications minor will complete 18 semester hours, of which 9 semester hours must be advanced coursework, in a SINGLE area of communications. Communications majors do not need to select a minor.

The Communications Department has the following honorary fraternity as a chapter on campus:

Alpha Psi Omega — national theatre honorary

Degree Requirements

Communications Major:

51 semester hours of which 42 must be advanced. Communications majors are not required to take minors. The following courses are required of all majors: Comm 1301 and Comm 3350.

Elementary theatre certification:

25 semester hours as follows: 3 hours practicum, plus COMM 1310, 1411 or 1412, 1305, 3308, 3309, 3317, 4305.

Secondary theatre certification:

36 semester hours of theatre, of which 21 hours must be upper division with an additional 12 hours in a directly supporting field. Courses required: 1305, 1310, 1411, 3311 or 3323, 3350, 4301, 4302, 4315, 4316, and 3 hours of advanced practicum (4101).

Elementary speech certification:

24 semester hours of speech as follows; 3 hours practicum, plus COMM 1303, 1307, 2309, 3308, 3314, 3316, 3317.

Secondary Speech Communication Certification:

30 semester hours of speech communication as follows: 3 hours practicum plus Comm 1301, 1307 or 2302, 1310, 2404, 3314, 3316, 3301 or 4308, 3315 and 3330.

Speech-language therapy certification:

39 semester hours of speech therapy as follows: COMM 1309, 2309, 2310, 2311, 3319, 3321, 3420, 3422, 4410, 4311, 4312, and EDCI 4372 and education requirements, EDCI 1301, 3301, 3302, 3303, 3311, 3312, 3323, 4332, 4613, and 200 clock-hours of supervised clinical practicum.

Secondary journalism certification:

42 semester hours of journalism as follows: 3 hour practicum plus Comm 1301, 1304, 1306, 1408, 2404, 3304, 3305, 3306, 3307, 3403, 4313, 4326, 4327.

Speech-Language Therapy Certification:

18 semester hours of undergraduate Education courses as follows: Ed 1301, 3301, 3302, 3312, and 4613 plus 39 semester hours of undergraduate Communication Disorders courses as follows: Comm 1309, 2309, 2310, 2311, 3319, 3321, 3420, 3422, 4410, 4311, 4312, and Ed 4372 plus completion of a Master's degree in Communication Disorders.

Communications Minor:

18 semester hours of which 9 must be advanced.

GRADUATE PROGRAM IN COMMUNICATION DISORDERS

Purpose

The graduate studies program of the Communications Department provides for advanced study leading to the Master of Arts Degree in Communication Disorders. The program is designed for those students who desire advanced studies ultimately leading to professional certification by the American Speech-Language-Hearing Association. Specifically, the program is designed to meet the career needs of those students who wish to:

- 1) Provide diagnostic, remedial and professional clinical services;
- 2) Obtain the Texas Education Agency Certificate as a public school speech and hearing clinician;
- 3) Satisfy the academic and clinical practicum requirements for the American Speech-Language-Hearing Association Certificate of Clinical Competence;
- 4) Specialize in the study of communication disorders among Spanish/English bilingual/bicultural populations;
- 5) Enhance career opportunities for professional services delivery in hospital settings, rehabilitation centers, and community clinics;
- 6) Continue studies leading to the Doctor of Philosophy Degree.

Scope

The Master of Arts degree in Communication Disorders is a broadbased, highly specialized program designed to provide the student exposure to analytical decision-making and clinical management skills necessary to function either in private clinical enterprises or public and non-profit organizations utilizing speech-language pathologists and audiologists. The Pan American University Master of Arts degree program is for those individuals who hold the baccalaureate degree in speech-language disorders or in related disciplines such as biology, allied health, or psychology. However, prerequisite courses and supervised clinical practicum requirements need to be completed prior to enrollment in the graduate program. Thirty-six semester hours of study and a minimum of 150 supervised graduate clinical practicum are required and are generally completed within a year and a half period of time. A student may enter the program at the beginning of either semester or during the summer sessions. Graduate courses are generally scheduled during the early evening hours to accommodate the needs of students employed during the day.

Admission to the Communication Disorders Graduate Program

All students who wish to enroll in this graduate program must first meet the graduate admission requirements for Pan American University. Application for admission to the university may be made by contacting the Office of Admissions and Records, Pan American University, Edinburg, Texas 78539. In addition, the Coordinator for Communication Disorders, Department of Communications, must be supplied with the following information along with a letter stating the intention to enroll:

1. A copy of the Graduate Record Examination scores;
2. Official transcripts of all previous undergraduate and graduate academic coursework;
3. Copies of all clinical practicum hours earned in other academic programs;
4. Evidence of having completed all requisite undergraduate coursework or its equivalent as shown below:

A. Phonetics	3 semester hours
B. Anatomy and Physiology of Speech/Hearing Mechanism	3 semester hours
C. Survey of Normal Communication Process	3 semester hours

D. Articulatory Disorders	3 semester hours
E. Normal Language Development	3 semester hours
F. Organic Disorders	3 semester hours
G. Diagnostic Procedures	4 semester hours
H. Basic Audiology	4 semester hours
I. Auditory/Visual Communication	4 semester hours

Degree Requirements:

The Master of Arts degree in Communication Disorders requires 36 semester hours plus 3 hours of practicum enrollment of which 30 semester hours must be in courses numbered 6000 or higher. In addition, all candidates will complete a minimum of 150 graduate practicum hours in order to complete the practicum requirements as outlined by the American Speech-Language-Hearing Association. Candidates within 12 semester hours of completing the master's degree must take and pass satisfactorily both a written and oral examination administered by the Program's faculty. The graduate courses of the Department are listed below.

Communication 5303	Communication Research
Communication 6301	Speech Sciences
Communication 6302	Communication Development of Bilingual/Bicultural Children
Communication 6303	Language Disorders
Communication 6304	Orofacial Pathologies and Voice Disorders
Communication 6305	Stuttering
Communication 6306	Behavior Modification in Speech Pathology
Communication 6307	Language Development of Bilingual/Bicultural Populations
Communication 6308	Language Disorders of Bilingual/Bicultural Populations
Communication 6309	Assessment of Communication Disorders of Bilingual/Bicultural Populations
Communication 6310	Clinical Management of Bilingual/Bicultural Communicatively Handicapped
Communication 6311	Seminar in Communication Disorders
Communication 6312	Clinical Audiology
Communication 6313	Management of Bilingual/Bicultural Hearing Impaired
Communication 6314	Seminar in Audiology
Communication 7300-7301	Thesis

Course Descriptions

Following each entry in the course inventory is a code which lists the concentration to which the course can be applied. The code is as follows:

CD speech-language therapy/communication disorders
 CO communications courses required of all communications majors
 JO journalism
 SP speech
 TH theatre
 TV television-film

COMM 1301 INTRODUCTION TO COMMUNICATIONS I

Fall

A survey of the areas of communications, including but not limited to speech, speech therapy, drama, journalism, television, film, radio, public relations, and advertising. Career possibilities and employment opportunities are discussed. Students are given projects in each of the various areas to aid in their understanding of the requirements of each field. Some diagnostic testing to aid students in career choices and in appreciation of the qualities of each discipline. Two hours lecture and two hours lab. Required of all majors in communications. CO

COMM 1303 PRESENTATIONAL SPEAKING

Every Semester

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. Logical thinking as a basis for formulation of the communications message is stressed. CO SP
 all majors in communications. CO SP

COMM 1304 REPORTING I*Fall*

A study of news sources, newswriting and news values, including finding, gathering, evaluating and writing news for print, radio and television. The student newspaper is used as a laboratory for the course, with students submitting material to the newspaper. Required of all majors in communications. CO JO

COMM 1305 ACTING I*Fall*

Improvisational acting techniques and the application of these principles to stage, TV and film. Required of all majors in communications. CO TH

COMM 1306 REPORTING II*Spring*

A continuation of COMM 1304, with increased emphasis on specialized types of news reporting. The student newspaper is used as a laboratory for this course.

Prerequisite: COMM 1304 (C average) CO JO

COMM 1307 INTERPERSONAL COMMUNICATION*Fall*

Instruction and activities in the principles of human communication and interaction. Includes self-concept, self-disclosure and risk, defensiveness, perception, empathy, semantics and abstraction, language, attitudes and behavior, nonverbal communication, listening and feedback, relational communication, assertiveness and conflict resolution. SP

COMM 1408 PHOTOGRAPHY*Fall, Spring*

An introduction to the techniques of taking photographs and the processes of developing, printing, enlarging, cropping and dodging. JO TV

COMM 1309 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 learn to recognize and analyze production of speech sounds and to modify speech production. Course is designed for speech therapy majors and prospective elementary teachers. CD

COMM 1310 ORAL INTERPRETATION*On Demand*

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. SP TH

COMM 1313 FUNDAMENTALS OF SPEECH COMMUNICATION

Theory and application of the various elements of the speech communication process; through lecture, class discussion and active participation students develop skills in specific types of communication behavior including listening, interviewing, small group interaction and public speaking. CO SP

COMM 1315 SURVEY OF RADIO/TV BROADCAST/CABLE

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 critical consumer. TV

COMM 1387 SPEECH COMMUNICATION (HONORS PLAN)

Theory and intensive application of various elements of the Speech Communication process. Through lecture, class discussion and active participation, students develop skills in communication behavior including listening, interviewing, small group interaction, audio-visual aid use, and public speaking. Course substitutes for UC/GE option in Communication. Credit may not be received for Comm 1387 and 1303 or 1313. SP

COMM 1400 SPEECH IMPROVEMENT*Fall, Spring*

Analysis of student speech, concentrated drill on English speech sounds, bilingual language interference, language intonation patterns, and body movement. Three hours lecture and two hours lab.

COMM 1411 TECHNICAL PRODUCTION I*Alternate Fall*

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. (three hours lecture and three hours arranged lab) TH TV

COMM 1412 TECHNICAL PRODUCTION II*Alternate Spring*

A continuation of COMM 1411. Instruction and practical experience in production problems, including light and sound. (three hours lecture and three hours lab) TH TV

COMM 1414 CHILDREN'S THEATRE WORKSHOP

An intensive workshop course in which students will act as assistants in 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. TH

COMM 1616 SUMMER TELEVISION WORKSHOP

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. TV

COMM 1615 SUMMER THEATRE WORKSHOP*Summer I*

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. TH

COMM 2101 PRACTICUM - THEATRE*Fall, Spring, Summer I*

Participation in theatre 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. TH

COMM 2102 STAGE MOVEMENT*Fall, Spring, Summer I*

Work on pantomime, special techniques and exercises designed to improve motor activity for stage purposes. Students are expected to provide practice clothes for the course. The class will meet three hours per week. May be repeated for credit a maximum of four times. TH

COMM 2103 PRACTICUM - FORENSICS*Fall, Spring*

Participation in forensic 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. SP

COMM 2104 PRACTICUM - PRINT MEDIA*Fall, Spring*

Participation in print media 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. JO

COMM 2105 PRACTICUM - RADIO-TV-FILM*Fall, Spring*

Participation in radio-TV-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. TV

COMM 2106 PRACTICUM - SPEECH THERAPY*Every Semester*

Participation in speech therapy 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. CD

COMM 2302 COMMUNICATION THROUGH GROUP PROCESS*Spring*

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, preparation of agendas, rules of order, and committee procedures and regulations. SP

COMM 2305 CINEMATOGRAPHY*Spring*

Introduction to the tools, theory and techniques of motion picture photography and film production. Planning, continuity, filming and editing for film. Three hours lecture and one hour lab. JO TV

COMM 2306 ACTING II*Spring*

Intensive study of the techniques of building and developing a characterization. TH

COMM 2308 HISTORY AND SIGNIFICANCE OF MOTION PICTURES*On Demand*

A historical survey of movies and picture techniques from 1890 to the present. Focus on styles and techniques. Viewing of movies of various periods, styles, genres, including foreign films. TV

COMM 2309 INTRODUCTION TO SPEECH CORRECTION*Fall*

Designed to acquaint the student with various types of communication disorders and their etiologies, identification, basic intervention and remediation procedures.

Recommended for speech therapy majors, elementary and special education majors. CD

*** COMM 2310 ANATOMY AND PHYSIOLOGY OF THE SPEECH AND HEARING MECHANISM***Spring*

A detailed study of the anatomical and physiological structure and function of the speech and hearing mechanism, including neurological aspects. CD

COMM 2311 SPEECH PATHOLOGY I*Fall*

In depth investigation of disorders of articulation, voice and rhythm, with emphasis on the practical applications of theory. Therapy techniques are presented and material developed.

*Prerequisite: COMM 1309, 2309 and 2310. CD***COMM 2312 THEATRE APPRECIATION***Fall, Spring*

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. Three hours lecture, one hour lab. Designed for non-majors.

COMM 2313 READINGS IN DRAMATIC LITERATURE*Fall, Spring*

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. Can be counted as English or Communications. TH

COMM 2320 RHETORICAL AND COMMUNICATION THEORY

Comprehensive overview and analysis of the various significant theories of rhetoric and communication, with an historical grounding but emphasizing modern themes and perspectives. Rhetorical theorists to include I.A. Richards, Richard Weaver, Stephen Toulmin, Chaim Perelman, Kenneth Burke, Marshall McLuhan. Communication theorists to include Erving Goffman, Paul Watzlawick, Charles Osgood, Norbert Wiener, Alfred Korzybski, George Herbert Mead. SP

COMM 2404 TELEVISION PRODUCTION*Fall, Spring*

Introduction to television studio operation with emphasis on television production. Covers cameras, microphones, lights, setting and performers. Three hours lecture and three hours lab. TV

COMM 2407 MAKEUP AND COSTUMING*On Demand*

A study of makeup for stage, film and television camera. Includes the study of makeup design and application and special effects makeup. A study of costume design and construction with emphasis on problems encountered in designing clothes for theatre, television and dance. Students must provide their own makeup for the course. Three hours lecture and three hours lab. TH TV

COMM 2409 ACTING III

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. Two hours lecture and four hours lab. TH

COMM 2410 ACTING IV

Working with particular acting problems, such as characterization in the musical, individuation in group scenes, commercials, supporting partners, et cetera. Two hours lecture and four hours lab. TH

COMM 3301 THE RHETORIC OF TELEVISION*Spring*

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. SP TV

COMM 3302 SPEECH FOR STAGE AND SCREEN*Spring*

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. TH TV

COMM 3304 ADVERTISING*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. JO

COMM 3305 EDITING*Fall*

Copyreading, headline writing and planning newspaper makeup; processing articles for the university newspaper.

Prerequisite: COMM 1304. JO

COMM 3306 FEATURE WRITING*Spring*

Interpreting trends in reader appeal; analyzing feature story structure; finding ideas for gathering materials; writing and selling feature articles.

Prerequisite: COMM 1304. JO

COMM 3307 EDITORIAL WRITING AND INVESTIGATIVE REPORTING*Fall*

Determining editorial policies for print and broadcast media; studying the major types of editorial; writing editorials for particular purposes and different audiences; conducting investigations leading to significant news stories; analyzing and interpreting situations and timely events.

Prerequisite: COMM 1304. JO

COMM 3308 CREATIVE DRAMATICS*On Demand*

A study of informal drama in its application to the elementary class room. Development of creativity through original dramatizations by children. Of special interest to the elementary teacher. TH

COMM 3309 ADVANCED TECHNICAL PRODUCTION AND DESIGN*Alternate Fall*

Principles of design as applied to modern stage and television production. TH TV

COMM 3310 LIGHTING FOR THE STAGE, FILM AND TELEVISION*Alternate Spring*

Problems of lighting design and execution as applied to the various media — stage, screen and television. TH TV

COMM 3311 CONTEMPORARY DRAMA*Alternate Spring*

A study of trends and movements in 20th century American, British and European drama with emphasis on works of major playwrights.

Prerequisite: 12 semester hours of English (may be counted as Eng 3311) TH

COMM 3312 CINEMATOGRAPHY/VIDEOGRAPHY

Principles of single camera "film style" location video production. Using video equipment, students will produce short productions based on careful preproduction planning (scripting and storyboarding). Major stress on post-production editing and quality of finished product. 3 hours lecture, 1 hour lab. TV

COMM 3314 PERSUASIVE COMMUNICATION*Summer I*

Persuasive techniques and rhetorical principles as they apply to verbal and nonverbal communications 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. JO SP

COMM 3315 COMMUNICATION IN HUMAN RELATIONS*Spring*

Application of the speech communication perspective as a dynamic process of human interaction. Significant issues and topics in interpersonal and organizational communication such as family communication, male/female communication, social conflict and communication, communication in education, in law enforcement, in health professions, in business, and in government. SP

COMM 3316 INTERCULTURAL COMMUNICATION*On Demand*

Study of the symbolic and relativistic nature of culture and the resultant problems in attempting to communicate meaning across cultural lines. JO SP

COMM 3317 SPEECH FOR THE ELEMENTARY TEACHER*On Demand*

A study of communication acts in the elementary classroom which will prepare the teacher to diagnose problems, assess communications skills, and teach techniques to enable the child to communicate more effectively. A projects course which includes a study of Communications Disorders, the phonetic alphabet, the child's self-image, assertiveness in the classroom, language, games to build vocabulary, critical listening, giving factual reports, story-telling, creative dramatics, play-making and effective self expression. CD

COMM 3319 SPEECH PATHOLOGY II*Spring*

Further investigation of communication disorders including aphasia, neurologically related disorders and physical anomalies. Emphasis on the multiple handicapped child. Prerequisite: COMM 2309 and 2310. CD

COMM 3321 LANGUAGE DEVELOPMENT*Spring*

A review of the theories of speech and language development including psycholinguistic considerations. Includes description of developmental norms of speech and language and information pertaining to the acquisition of language in the bilingual child. Relationship between language, sensory and motor development is presented. Special emphasis on the diagnosis and treatment of delayed language development. May be counted as Ed 4301. CD

COMM 3323 WORLD DRAMA

Study of trends and movements in dramatic literature from ancient Greece through World War I. Emphasis on the works of major playwrights. Prerequisite: 12 semester hours of English. (May be counted as English 3323.) TH

COMM 3325 MOTION PICTURE HISTORY AND SIGNIFICANCE*Fall and Spring*

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. TV

COMM 3330 ARGUMENTATION AND DEBATE

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. (Formerly Comm 2303.) SP

COMM 3331 PRINCIPLES OF INTERVIEWING

Theory, application and selected practice of the interview process in a variety of situations. 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. SP

COMM 3332 COMMUNICATION AND ORGANIZATIONAL BEHAVIOR

Communication as an aid in the development and maintenance of organizations. Stresses communication, management and organizational structure and theory. Includes interaction, motivation and leadership, developing human resources, managing change, and increasing organizational communication, performance and managerial effectiveness within organizations. (Formerly Comm 4306; may not be repeated for credit. SP

General:

COMM 3350 RESEARCH IN COMMUNICATIONS

Major methods of research used in speech communication, journalism, theatre, radio/television/broadcasting and communication disorders. Each student is responsible for the successful completion of a research project. (Replaces all presently listed communications research courses.) Prerequisite: 24 semester hours in Communication. CO

COMM 3403 TELEVISION NEWS PRODUCTION AND REPORTING

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 1314, 2404 and 2406. JO TV

COMM 3412 ARTS MANAGEMENT AND PUBLICITY*On Demand*

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. Three hours lecture, three hours lab. JO TH

COMM 3420 AUDIOLOGY*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. Three hours lecture and three hours lab.

Prerequisite: COMM 2309 and 2310. CD

COMM 3422 DIAGNOSTIC PROCEDURES*Spring*

Study of diagnostic techniques and specific testing instruments utilized in the evaluation of disorders of communications with special emphasis on the evaluation of communication disorders in the bilingual child.

Prerequisite: COMM 2309, 2311 and 3321. CD

COMM 3623 PROFESSIONAL INTERNSHIP - COOPERATIVE EDUCATION - THEATRE*On Demand*

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. TH

COMM 3624 PROFESSIONAL INTERNSHIP - COOPERATIVE EDUCATION - FORENSICS*On Demand*

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. SP

COMM 3625 PROFESSIONAL INTERNSHIP - COOPERATIVE EDUCATION - PRINT MEDIA*On Demand*

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. JO

COMM 3626 PROFESSIONAL INTERNSHIP - COOPERATIVE EDUCATION - RADIO-TV-FILM*On Demand*

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. TV

COMM 3627 PROFESSIONAL INTERNSHIP - COOPERATIVE EDUCATION - SPEECH THERAPY*On Demand*

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. ST

COMM 4101 COMMUNICATIONS PRACTICUM - THEATRE*Fall, Spring, Summer I*

Participation in University Theatre activities or another theatre 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. TH

COMM 4102 STAGE MOVEMENT*Fall, Spring, Summer I*

Advanced study of movement on the stage for the actor. Students will provide practice clothes for the course. May be repeated for credit a maximum of four times. TH

COMM 4103 COMMUNICATIONS PRACTICUM - FORENSICS*Fall, Spring*

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. SP

COMM 4104 COMMUNICATIONS PRACTICUM - PRINT MEDIA*Fall, Spring*

Participation in the yearbook, student newspaper or another print program approved by the advisor. 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. JO

COMM 4105 COMMUNICATIONS PRACTICUM - RADIO-TV-FILM*Fall, Spring*

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. TV

COMM 4106 COMMUNICATIONS PRACTICUM - SPEECH THERAPY*Every Semester*

Participation in the therapy clinic of the University or any other therapy program approved by the instructor. One hour of credit requires 60 hours of satisfactory participation, plus any additional requirements set by the instructor. May be repeated for credit a maximum of four times. CD

COMM 4301 DIRECTING I*Alternate Fall*

Study, observation and practice in selecting scripts and working with problems, methods, and techniques of direction and production. Two hours lecture, two hours lab. TH TV

COMM 4302 DIRECTING II*Alternate Spring*

A continuation of Directing I with stress upon student direction and production of plays and television programs. One hour lecture, four hours lab. TH TV

COMM 4304 SCRIPTWRITING FOR STAGE AND SCREEN*On Demand*

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 a different medium. TH TV

COMM 4305 CHILDREN'S THEATRE*On Demand*

Play selection, casting, direction and supervision of a children's theatre production. Students work with and in a children's production and each student is required to design a project for staging with youngsters. May be counted for credit as Ed 4320. TH

COMM 4307 CONTEMPORARY RHETORIC OF SOCIAL AND POLITICAL MOVEMENTS*On Demand*

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, films, music, nonverbal symbols and body rhetoric. Includes such movements as the far right, new left, black power, Chicano movements and women's liberation. JO SP

COMM 4308 SPECIAL PROBLEMS IN RHETORICAL CRITICISM*On Demand*

Significant issues and topics in rhetorical criticism. Principles of criticism applied to political and social communication behavior. May be repeated once for credit. JO SP

COMM 4311 CLINICAL PRACTICUM I*Fall, Summer I*

A minimum of 60 clock hours of actual supervised clinical practice with communicatively handicapped individuals. Involves application of diagnostic, prescriptive and therapeutic techniques. CD

COMM 4312 CLINICAL PRACTICUM II*Spring, Summer II*

A minimum of 60 clock hours of actual supervised clinical practice with communicatively handicapped individuals. Involves application of diagnostic, prescriptive and therapeutic techniques. CD

COMM 4313 ETHICS AND LAW OF MASS COMMUNICATIONS*On Demand*

Rights, privileges and responsibilities of news, editorial and advertising personnel; other legal implications, planning guides of conduct for mass communications. JO

COMM 4314 ADVANCED TV/FILM PRODUCTION*Spring*

Advanced level course stressing the application of basic arts and skills developed in COMM 2304 and making use of advanced students in directing, technical crafts, performance and scriptwriting. Repeatable for credit with new production. TH TV

COMM 4315 HISTORY OF THE THEATRE I*On Demand*

A thorough study of the history of theatre from its origins until the end of the Jacobean era. TH

COMM 4316 HISTORY OF THE THEATRE II*On Demand*

A thorough study of the history of theatre from the Restoration until the present. TH

COMM 4321 PUBLIC RELATIONS*On Demand*

Planning and preparation of publicity materials for various media application of public relations techniques, and clinical study of current public relations campaigns. Some laboratory work in the Communications department. JO

COMM 4326 PHOTOJOURNALISM*On Demand*

Principles and practices of photo communication. Topics include general and spot news photography, news portraits, picture stories and essays, layout and other techniques of photojournalism. Further experience with exposure and development controls of black and white photography. Emphasis placed on actual newspaper and yearbook assignments. Participation in campus publications is encouraged. Laboratory required.

Prerequisite: COMM 1308. JO

COMM 4327 HISTORY OF MASS MEDIA*On Demand*

Study of the development of American journalism and mass media from colonial times to the present. Emphasis is on the role and influence of the media in the historical development of American society and culture, the contributions of important individual personalities associated with various media, technical advances in the print and electronic media, and the growth of the concept of freedom of the press. JO

COMM 4330 COMMUNICATION CONSULTING AND TRAINING

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. SP

COMM 4331 SENIOR SYNTHESIS SEMINAR IN SPEECH COMMUNICATION

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 experiential situations. Prerequisites: Comm 1301, 3350, 24 hours in Speech Communication, including nine hours advanced. SP

COMM 4332 MAGAZINE WRITING AND EDITING

A complete study of the art of magazine production, ranging from the writing style to computer editing. Actual page layouts will be completed, showing placement of body copy, headlines, pictures, cutlines and advertising. Focus will be placed upon production and marketing of magazine advertising. Prerequisites: Comm 3305 and 3306. JO

COMM 4333 COMMUNICATION FOR THE SECONDARY TEACHER

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.) CO

COMM 4334 ADVANCED PUBLIC RELATIONS

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 communications channels. Assignments will include an in-depth study of a public relations agency. Prerequisite: Comm 4321. JO

COMM 4335 ADVANCED ADVERTISING

A continuation of Advertising Procedures. The study of various forms of advertising research techniques and retail advertising. Assignments include an in-depth study of the modern full-service advertising agency. Prerequisite: Comm 3304. JO

COMM 4410 AUDITORY AND VISUAL COMMUNICATION*Spring*

Methods and techniques utilized in the aural rehabilitation or habilitation of the acoustically handicapped. Three hours lecture and three hours lab. CD

COMM 4414 CHILDREN'S THEATRE WORKSHOP

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. TH

COMM 4417 RADIO AND TELEVISION ADVERTISING PRODUCTION*Spring*

Application of principles of advertising to production of radio and television commercials. Three hours lecture and three hours lab.

Prerequisite: COMM 2404 and 3304 JO TV

COMM 4418 THEORY AND STYLES OF ACTING*Alternate Fall*

Techniques of period acting styles and exploration of major theories of acting techniques. Two hours lecture and four hours lab. TH

COMM 4419 PROBLEMS IN ACTING*Alternate Spring*

Acting techniques to adapt performance to varying situations such as large and small proscenium, film, television, etc. preparation of audition material and problems in developing range of characterization. Two hours lecture and four hours lab. TH

COMM 4615 SUMMER THEATRE WORKSHOP

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. TH

COMM 5303 COMMUNICATIONS RESEARCH

Major methods of research used in the various fields of communication. Each student is responsible for the successful completion of a research project. CD CO

COMM 5304 SCRIPTWRITING

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 a different medium.

COMM 5311 CONTEMPORARY DRAMA

Trends and movements in 20th century American, British and European drama, with emphasis on works of major playwrights. TH

COMM 5615 SUMMER THEATRE WORKSHOP

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, and theatre business management. 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. TH

COMM 6106 GRADUATE CLINICAL PRACTICUM

Supervised clinical practicum with communicatively handicapped individuals. Involves application of diagnostic, prescriptive and therapeutic techniques. Designed to meet supervised clinical practicum requirements of the American Speech-Language and Hearing Association. One credit hour requires a minimum of sixty hours of satisfactory performance as established by instructor. May be repeated as necessary.

Prerequisite: Graduate Standing. CD

COMM 6301 SPEECH SCIENCES

A study of the relation of embryology and neurology to the speech and language processes; physics of sound; psychology of communication; linguistics, dialectology, and modern studies and research in the sciences related to speech and language.

Prerequisites: Comm 2310 or equivalent and Graduate Standing. CD

COMM 6302 COMMUNICATION OF BILINGUAL BICULTURAL CHILDREN

The study of communication in the bilingual bicultural child, and the effects of second language learning on the phonological, semantic, syntactic-morphologic, prosodic and pragmatic systems. Emphasizes language function as the rubric for attaining communicative competence in second as well as first language usage.

Prerequisite: Comm 3321 or equivalent and Graduate Standing. CD

COMM 6303 LANGUAGE DISORDERS

An indepth investigation of current assessment methodologies and remediation techniques for language disordered children and adults, emphasizing development of diagnostic, appraisal, and intervention strategies for language disorders.

Prerequisites: Comm 2309 and 3321 or equivalent and Graduate Standing. CD

COMM 6304 OROFACIAL PATHOLOGIES

The study of cleft palate and other orofacial anomalies and pathologies of speech, language, voice and hearing disorders. Diagnosis and treatment of disorders of speech due to deviations in the dental, skeletal and muscular systems.

Prerequisites: Comm 2309, 3319, 3422 or equivalent and Graduate Standing. CD

COMM 6305 STUTTERING

The study of various theories, research findings, rationales and methodologies for therapies for stuttering in children and adults. Observation of stuttering behavior and methods of remediation.

Prerequisites: Comm 2309, 2311 or equivalent and Graduate Standing. CD

COMM 6306 BEHAVIOR MODIFICATION IN SPEECH PATHOLOGY

Indepth study of theories of behavior as they relate to and underlie speech and hearing remediation procedures. Participation in advanced clinical activities with applications of theoretical concepts to various communication disorders.

Prerequisites: Psychology 3305 or equivalent and Graduate Standing. CD

COMM 6307 LANGUAGE DEVELOPMENT IN BILINGUAL BICULTURAL POPULATIONS

An indepth review of the theories of bilingual bicultural speech and language acquisition and development including psycholinguistic considerations. Includes description of developmental norms of speech and language acquisition in the biligual bicultural child. Relationships between sensory, motor, and language development. Emphasis on recognition of delayed language development in bilingual bicultural children.

Prerequisites: Comm 2309, 3321 or equivalent and Graduate Standing. CD

COMM 6308 LANGUAGE DISORDERS IN BILINGUAL BICULTURAL POPULATIONS

Indepth study of the development of delayed language; disorders of language associated with emotional problems, mental retardation, neuromotor dysfunction, brain injury, and anatomical anomalies; development of diagnostic, appraisal, and intervention strategies for language disorders in bilingual bicultural speakers.

Prerequisites: Comm 2309, 2310, 3319 or equivalent and Graduate Standing. CD

COMM 6309 ASSESSMENT OF COMMUNICATION DISORDERS IN BILINGUAL BICULTURAL POPULATIONS

The study of current assessment methodologies, specific testing instruments, and techniques of assessment of communication disorders in bilingual bicultural children and adults. Application of theoretical evaluation concepts through participation in supervised clinical assessment and appraisal of communicatively handicapped bilingual bicultural children and adults.

Prerequisites: Comm 2309, 2311, 3319, 6302, 6308 or equivalent and Graduate Standing. CD

COMM 6310 CLINICAL MANAGEMENT OF BILINGUAL BICULTURAL COMMUNICATIVELY HANDICAPPED

Indepth investigation of strategies for early identification of bilingual bicultural children predisposed to communication disorders. Emphasis on development of primary clinical intervention procedures and techniques applicable to disorders of articulatory production, voice, fluency, and language comprehension and expression in bilingual bicultural children and adults, other than those associated with hearing impairment.

Prerequisites: Graduate Standing and twelve hours of graduate studies in Communication Disorders. CD

COMM 6311 SEMINAR IN COMMUNICATION DISORDERS

The study of principles, methods, and procedures for communication disorders. Subject matter varies from semester to semester, so that specific communication problems may be studied in depth by a group. May be repeated when subject matter changes. Maximum credit: 6 hours.

Prerequisite: Graduate Standing and twelve hours of graduate studies in Communication Disorders. CD

COMM 6312 CLINICAL AUDIOLOGY

Theories and principles of advanced audiological diagnostic measurement. Participation in advanced clinical activities with application of theoretical concepts to various hearing impairments in children and adults.

Prerequisites: Comm 2309, 3420 or equivalent and Graduate Standing. CD

COMM 6313 MANAGEMENT OF BILINGUAL BICULTURAL HEARING IMPAIRED

An indepth investigation of procedures and methodologies for identifying bilingual bicultural hearing impaired children and adults. Emphasis upon appropriate linguistic stimulation and initiation of appropriate amplification during the critical period of language acquisition. Includes amplification selection and fitting procedures for hearing impaired adults.

Prerequisites: Comm 2309, 3420, 4410 or equivalent, and Graduate Standing. CD

COMM 6314 SEMINAR IN AUDIOLOGY

Principles, methods, and procedures for diagnostic audiological measurement, and/or aural habilitation/rehabilitation. Subject matter varies from semester to semester, so that specific theories, measurement, or management techniques or methodologies for use with hearing-impaired persons may be studied in depth by a group. May be repeated when subject matter changes. Maximum credit: 6 hours.

Prerequisites: Graduate standing and twelve hours of graduate studies in Communication Disorders. CD

COMM 7600 (7300-7301) Thesis

Research and writing of the thesis. (3-6 credits)

Department of Criminal Justice

Daniel K. Dearth, Chair

Full-Time Faculty

Dearth, Daniel K. (Ph.D., Sam Houston State 1984; assoc. prof. and chair) police administration, correctional administration, and policing issues

O'Daniel, Linda J. (MA, Sam Houston State, 1974; asst. prof.) correctional systems, probation, parole, and juveniles

Ethridge, Philip (M.S., Eastern Kentucky University 1981; asst. prof.) criminal justice generalist, police-community relations, privatization.

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 criminal justice.

The Department of Criminal Justice is one of the largest in Texas and enjoys an excellent reputation. Graduates have been successfully placed in various 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 such areas as political science, sociology, psychology, business and related disciplines.

Students interested in a Criminal Justice career may select one of two majors: (1) Police Administration or (2) Corrections. For further information on the requirements of these majors, please contact the department. 381-3566. (All degree requirements are in addition to the University College/General Education Requirements.)

Degree Requirements**Major: Corrections**

The Bachelor of Science Degree in Corrections is designed to prepare students to enter a career in various aspects of adult and juvenile corrections whether at institutions, probation, parole, or other forms of community-based correctional treatment. The Criminal Justice degree in Corrections is normally a four year degree program. The Corrections major is broadfield requiring 66 semester hours from the course lists below. At least 35 semester hours in the major must be advanced (3000-4000 level). A minor is not required, however, one can be earned at the student's discretion.

Among the unique elements of this degree program are contemporary coursework in Corrections, flexibility to tailor courses to a student's career interests, and incorporation of both interdisciplinary and social science support courses.

CRIMINAL JUSTICE CORE COURSES (14 hours):

CRIJ	1301	Introduction to the Criminal Justice System
CRIJ	3303	Nature of Crime
CRIJ	3402	Current Literature and Research in Criminal Justice
CRIJ	4401	Practicum Field Experience

CORRECTIONS CONCENTRATION COURSES (19 hours):

CRIJ	2303	The Juvenile Justice System
CRIJ	2342	Correctional Systems and Practices
CRIJ	3331	Legal Aspects of Corrections
CRIJ	3345	Correctional Administration
CRIJ	4441	Correctional Casework and Counseling
CRIJ	4343	Seminar of Issues in Corrections

CRIMINAL JUSTICE ELECTIVES (Choose any 4 courses 12 hours):

CRIJ	2331	Fundamentals of Criminal Law
CRIJ	2332	Legal Aspects of Law Enforcement
CRIJ	3341	Probation and Parole
CRIJ	3344	Interviewing Techniques & Processes for Correctional Agencies
CRIJ	3361	Crime and Justice in America
CRIJ	4361	International Study of Crime and Justice
CRIJ	4362	Special Topics in Criminal Justice*
CRIJ	4363	Directed Readings and Independent Studies in Criminal Justice*
CRIJ	4402	Specialized Internship for Criminal Justice

*CRIJ 4362 AND CRIJ 4363 MAY EACH BE TAKEN TWICE FOR CREDIT.

SOCIAL SCIENCE SUPPORT COURSES (12 hours):

Choose One course from Each Group:

Group 1 (Sociology 3 hours)

SOC	1313	Principles of Sociology
SOC	1323	Study of Social Problems

Group 2 (Psychology 3 hours)

PSY	1323	General Psychology
PSY/SOC	2324	Social Psychology

Group 3 (Political Science 3 hours)

POLS	4321	American Constitutional Law: Civil Liberties
POLS	4367	American Judicial Process

Group 4 (Sociology 3 hours)

SOC	3313	Criminology
SOC	3333	Urban Sociology
SOC	3353	Juvenile Delinquency
SOC	4313	American Minorities
SOC	4314	Sociology of Deviance
SOC	4323	The Mexican American People
SOC	4343	Social Demography
SOC	4380	Social Protest and Social Movement

INTERDISCIPLINARY SUPPORT COURSES (9 hours):

Choose any **three** courses from **one** of the course groups below. (NOTE: It is recommended that the student consider enrolling in the remaining courses in the selected group as free electives.)

Group A—Interpersonal Relations

ANTH	1323	Introduction to Cultural Anthropology
COMM	1307	Fundamentals of Interpersonal Communication
PSY/SOC	2301	Statistics for the Behavioral Sciences
PSY/SOC	2324	Social Psychology
PSY	3305	Behavior Management and Modification
PSY	3343	Tests and Measurements in Psychology
PSY	4313	Abnormal Psychology
PSY	4333	Theories of Personality
SOC	2333	Marriage and Family
SOC	4352	Social Inequality

Group B—Health and Social Services

HE	2371	Health Problems in the use of Alcohol, Tobacco, and Narcotics
HRP	3301	Introduction to Social and Legal Aspects of Alcoholism
PSY	2340	Psychology of Substance Abuse
PSY/SOC	2324	Social Psychology
SOC	3324	Sociology of Health
PSY/SOC	3326	Contemporary Issues in Social Psychology
SOC	3393	Social Gerontology
SOCW	1313	Introduction to Social Work
SOCW	2324	Human Behavior and the Social Environment
SOCW	3314	Social Welfare Policy and Programs

Major: Police Administration

The Bachelor of Science degree in **Police Administration** is designed to prepare students to enter a career in law enforcement at any level of government. The Criminal Justice degree in Police Administration is normally a four-year degree program. The **Police Administration** major is broadfield requiring 65 semester hours from the course lists below. At least 35 semester hours in the major must be advanced (3000-4000 level). A minor is not required. However, one can be earned at the student's discretion.

Among the unique elements of this degree program are contemporary coursework in Police Administration, flexibility to tailor courses to a student's career interests, and incorporation of both interdisciplinary and social science support courses.

CRIMINAL JUSTICE CORE COURSES (14 hours):

CRIJ	1301	Introduction to the Criminal Justice System
CRIJ	3303	Nature of Crime
CRIJ	3402	Current Literature and Research in Criminal Justice
CRIJ	4401	Practicum Field Experience

POLICE ADMINISTRATION CONCENTRATION COURSES (18 hours):

CRIJ	1313	Police Systems and Practices
CRIJ	2331	Fundamentals of Criminal Law
CRIJ	2332	Legal Aspects of Law Enforcement
CRIJ	4311	Advanced Police Organization and Administration
CRIJ	4312	Principles of Law Enforcement Supervision
CRIJ	4313	Seminar of Issues in Law Enforcement

CRIMINAL JUSTICE ELECTIVES (Choose any 4 courses 12 hours):

CRIJ	2303	The Juvenile Justice System
CRIJ	2304	Police-Community Relations
CRIJ	2323	Criminal Investigation
CRIJ	3314	Overview of Public and Private Security
CRIJ	3361	Crime and Justice in America
CRIJ	4361	International Study of Crime and Justice
CRIJ	4362	Special Topics in Criminal Justice*
CRIJ	4363	Directed Readings and Independent Studies in Criminal Justice*

CRIJ 4402 Specialized Internship for Criminal Justice

*CRIJ 4362 AND CRIJ 4363 MAY EACH BE TAKEN TWICE FOR CREDIT.

SOCIAL SCIENCE SUPPORT COURSES (12 hours):

Choose **one** course from **each** Group:

Group 1 (Sociology 3 hours)

SOC	1313	Principles of Sociology
SOC	1323	Study of Social Problems

Group 2 (Psychology 3 hours)

PSY	1323	General Psychology
PSY/SOC	2324	Social Psychology

Group 3 (Political Science 3 hours)

POLS	4321	American Constitutional Law: Civil Liberties
POLS	4367	American Judicial Process

Group 4 (Sociology 3 hours)

SOC	3313	Criminology
SOC	3333	Urban Sociology
SOC	3353	Juvenile Delinquency
SOC	4313	American Minorities
SOC	4314	Sociology of Deviance
SOC	4323	The Mexican American People
SOC	4343	Social Demography
SOC	4380	Social Protest and Social Movement

INTERDISCIPLINARY SUPPORT COURSES (9 hours):

Choose any **three** courses from **one** of the course groups below. (NOTE: It is recommended that the student consider enrolling in the remaining courses in the selected group as free electives.)

Group A—General Management and Personnel Administration

CIS	1301	Computer Systems and Basic Programming
MANA	3332	Human Relations in Management
MANA	3361	Principles of Management
MANA	3362	Personnel Management
MANA	4361	Human Behavior in Organization

Group B—Accounting

ACC	2421	Principles of Accounting I
ACC	2322	Principles of Accounting II
ACC	2329	Managerial Accounting
ECO	1301	Introduction to Economics
ECO	2353	Principles of Economics: I
ECO	2354	Principles of Economics: II
FINA	3390	Public Finance
MANA	3361	Principles of Management

Group C—Labor Management and Public Administration

FINA	3390	Public Finance
MANA	3332	Human Relations in Management
MANA	3365	Wage and Salary Administration
MANA	4361	Human Behavior in Organization
POLS	3323	Introduction to Public Administration
POLS	3324	Government Organization and Administrative Theory
POLS	4312	Urban and Metropolitan Planning
POLS	4365	American Administrative Process
SOC	3334	Sociology of Work

Group D—Community Services and Interaction

PSY	3325	Psychology of Adjustment
PSY	3373	Sensation and Perception
PSY	4313	Abnormal Psychology
PSY	4333	Theories of Personality
PSY/SOC	2324	Social Psychology
SOC	3333	Urban Sociology
SOCW	2324	Human Behavior and the Social Environment
SOCW	3314	Social Welfare Policy and Programs

Minor in Criminal Justice

The minor in Criminal Justice is directed toward those students whose primary academic expertise could benefit from a specified concentration of Criminal Justice coursework.

19 semester hours of Criminal Justice, 10 hours of which must be advanced (3000 or 4000 level); must include CRJ 1301 and CRJ 3402.

Course Description**Criminal Justice****CRJ 1301 INTRODUCTION TO THE CRIMINAL JUSTICE SYSTEM**

The history, development and philosophy of professional law enforcement; an overview of law enforcement and civil rights; discussion of jurisdictional responsibilities in law enforcement; A survey of the criminal justice system and its administration; career opportunities.

CRIJ 1313 POLICE SYSTEMS AND PRACTICES

The police profession; organization of law enforcement systems; the police role; police discretion; current and future issues. (Formerly: CRIJ 1312 Police Organization and Administration, credit cannot be received for both.)

CRIJ 2303 THE JUVENILE JUSTICE SYSTEM

An overview of the nature of juvenile delinquents; the detection and apprehension of juvenile delinquents; the theory and practice of juvenile courts. A general discussion of leading case law concerning juvenile rights; crime prevention through officer interaction with juveniles.

CRIJ 2304 POLICE – COMMUNITY RELATIONS

A study of the problems involving law enforcement agencies and the community; how to make effective use of the mass media to furnish information regarding law enforcement activities; 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 image; principles and techniques of crime prevention and various approaches to crime prevention programs.

CRIJ 2323 CRIMINAL INVESTIGATION

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.

CRIJ 2331 FUNDAMENTALS OF CRIMINAL LAW

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. (Formerly: Legal Aspects of Law Enforcement).

CRIJ 2332 LEGAL ASPECTS OF LAW ENFORCEMENT

Police authority; responsibilities; constitutional restraints; laws of arrest, search and seizure; police liability. (Formerly: Criminal Evidence and Procedure.)

CRIJ 2342 CORRECTIONAL SYSTEMS AND PRACTICES

Corrections in the criminal justice systems; correctional role; institutional operations, alternatives to institutionalization; treatment and rehabilitation; current and future issues. (Formerly: Overview of Correctional Philosophies, CRIJ 3342, credit cannot be received for both.)

CRIJ 3303 NATURE OF CRIME

Provides an overall perspective of the crime problem with special emphasis given to philosophical and theoretical ideas pertaining to crime and its control. Includes examination of victim and criminal typologies.

CRIJ 3314 PUBLIC AND PRIVATE SECURITY

Study of security measures taken by industry, retail stores, private policing agencies, military services, and the United States Government. Distinguishes between law enforcement and security responsibilities.

CRIJ 3331 LEGAL ASPECTS OF CORRECTIONS

Legal problems and principles from conviction to release. To include consideration of convictions, imprisonment, sentencing, conditional release, post conviction procedures, prisoner rights, probationers rights and validity of conviction.

CRIJ 3341 PROBATION AND PAROLE

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 INTERVIEWING TECHNIQUES AND PROCESSES FOR CORRECTIONAL AGENCIES

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

Fundamental concepts of management, organization, and administration as specifically applicable to correctional institutions, field services, and community-based corrections. (Formerly CRIJ 2344, credit cannot be received for both courses.)

CRIJ 3361 CRIME AND JUSTICE IN AMERICA

This course is designed to give both majors and non-majors a broad overview of crime and the Criminal Justice System in the United States. Materials presented on an issue basis, address system capabilities and responses, the dynamics of criminal incidence and reporting, and the future of crime and criminal justice.

CRIJ 3402 CURRENT LITERATURE AND RESEARCH IN CRIMINAL JUSTICE

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.

CRIJ 4311 ADVANCED POLICE ORGANIZATION AND ADMINISTRATION

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

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 morals; duties and responsibilities of command level personnel; law enforcement budgeting procedures, supervisory problems and responsibilities relating to discipline and internal affairs investigations.

CRIJ 4313 SEMINAR OF ISSUES IN LAW ENFORCEMENT

Analysis and discussion of contemporary issues in policing with particular attention to current developments, service delivery, and the changing police role. Integration of established scientific knowledge with practical police experiences in various areas of the policing function.

CRIJ 4343 SEMINAR OF ISSUES IN CORRECTIONS

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 concern in corrections.

CRIJ 4361 INTERNATIONAL STUDY OF CRIME AND JUSTICE

The study of criminal justice programs and institutions outside of the United States through in-country visitations supplemented by assigned readings, papers, discussion, and dialogue with leading in-country criminal justice personnel. The course permits students to obtain a realistic comparative study of criminal justice in countries other than the United States through first-hand experiences.

CRIJ 4362 SPECIAL TOPICS IN CRIMINAL JUSTICE

Designed to give advanced undergraduate student academic flexibility and opportunity to study contemporary issues in crime and criminal justice. May be retaken once for credit upon approval of the Director of the Criminal Justice Program.

CRIJ 4363 DIRECTED READINGS AND INDEPENDENT STUDIES IN CRIMINAL JUSTICE

Designed for advanced students who are capable of independent study and research to examine an issue or project of specific interest. Registration upon approval of the Director of the Criminal Justice Program and the professor directing the course. May be retaken once for credit upon approval.

CRIJ 4401 PRACTICUM-FIELD EXPERIENCES

Three hours per week learning job interview techniques and resume 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.

CRIJ 4402 SPECIALIZED INTERNSHIP FOR CRIMINAL JUSTICE

This course consists of an Internship under special curricular conditions. The Internship may involve compensated support for agency work under special instructional programs, cooperative education, research internships, or other specialized experiential learning. *Prerequisite: CRIJ 4401 and Consent.*

CRIJ 4441 CORRECTIONAL CASEWORK AND COUNSELING

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. This course requires a minimum of 30 hours of casework experience in addition to regular coursework. (Formerly CRIJ 4341, credit cannot be received for both courses.)

NOTE: The entire course inventory is not offered each semester. Students are advised to plan ahead when making decisions about their semester schedules.

Department of Curriculum and Instruction — Elementary and Secondary

Ricardo J. Perez, Chair

Full-Time Faculty

- Dowell, Nancy (M.Ed., East Texas State 1967; Assistant Professor) Elementary, Early Childhood, Kindergarten (Post Masters, East Texas State) Early Childhood
- Gonzalez, George (Ph.D., University of New Mexico, 1973, Professor), Curriculum and Instruction and Bilingual Education
- Gratz, Elizabeth (Ph.D., University of Iowa 1973; Professor) English Education, Curriculum and Instruction, Child and Adolescent Literature
- McBride, John (Ed.D., Houston 1977; Associate Professor) Elementary, Science Education, Math Education
- Muniz, Amadita (Ph.D., East Texas State 1982; Assistant Professor) Education, Reading, Counseling and Guidance
- Perez, Ricardo (Ph.D., University of Michigan, 1979, Associate Professor), Curriculum and Instruction, Bilingual Education and Social Sciences
- Reeve, Robert (Ph.D., Florida State University, 1965; Professor) Science Education, Biology, Educational Research, Curriculum and Instruction.
- Solis, Juan (Ed.D., Houston 1977; Associate Professor) Curriculum and Instruction, Spanish, Reading, Social Sciences
- Tevis, Martha (Ph.D., Texas 1967; Professor) The History and Philosophy of Education (Cultural Foundations of Education and Latin)
- Tolar, Roger (Ph.D., Texas 1971; Associate Professor) Elementary Curriculum and Instruction, Early Childhood, Counseling and Guidance

The Department of Curriculum and Instruction offers a Bachelor of Science degree with a major in Elementary Education. Students seeking an Elementary Education major under this catalog must complete program requirements prior to September 1, 1991. As part of the degree and provisional teacher certification requirements in Elementary Education, the following specializations and delivery systems are available:

Specializations

Art
Biology
Earth Science
English
Health Education
History
Mathematics
Music
Physical Education
Physical Science
Reading
Social Studies
Spanish
Speech Communication
Theatre Arts

Delivery Systems

Bilingual Education
Generic Special Education
Early Childhood Education

In addition, endorsements to Texas teacher certificates are offered in Bilingual Education, English as a Second Language and Kindergarten. A provisional special education certificate is also offered in Speech and Language Therapy.

Provisional teacher certification at the secondary level is offered in the following teaching fields and delivery systems:

Teaching Fields

Art
 Biology
 Business Composite
 Business Secretarial
 Chemistry
 Computer Information Systems
 Earth Science
 English
 Government
 Health Education
 History
 Journalism
 Mathematics

Music
 Kinesiology
 Physical Science
 Physics
 Psychology
 Reading
 Science Composite
 Social Studies Composite
 Sociology
 Spanish
 Speech Communications
 Theatre Arts

Delivery Systems

Generic Special Education

All-level provisional teacher certification is offered in Art, Music and Physical Education. Specific requirements for all certification programs at the secondary level may be located under program descriptions under individual departments located throughout this catalog.

The fact that a degree in education from the University may lead to a certificate to teach in the public schools of the state imposes a singular obligation on the part of the University to determine the suitability of the candidate for the profession of teaching. A great deal more than mere scholastic ability is involved. Physical and mental health, moral ideals, and professional attitudes are among these additional considerations. The right is reserved, therefore, to restrict the teacher education curriculum to those who measure up to these criteria in the considered professional opinion of the Dean and faculty of the School of Education.

UC/GE Requirements for Teacher Education Majors

Students pursuing a Bachelor of Science degree in Elementary Education and teacher certification at the elementary level are required to take the following courses in the UC/GE requirements as specified by the State Board of Education and the Texas Education Agency:

The requirements and applications for degree and/or certification programs under the current catalog must be completed prior to September 1, 1991. Students pursuing teacher certification after August 31, 1989, must enter under those programs prescribed by the new standards for teacher education. Prospective teacher education students should consult with their major advisors and the appropriate department in the School of Education.

English 1301, 1302 (Grade of "C" or better in both)

English — Sophomore Literature - 6 sem. hrs.

Language Other Than English - 6 sem. hrs.

(Span. 2301, 2302 or Span. 2307, 2308 for Bilingual Education Majors)

Communication 1313

Math 1340, (2306, 2307 - Elementary Education majors only)

Laboratory Science 8 sem. hrs. (in same science)

Computer Science 1300

History 2313, 2314

Political Science 2313, 2314

Six semester hours from:

Art 3381

Music 3311

Philosophy 1310, 1320, 2330, 2380

Six semester hours from 2 of the following 4 areas:

Anthropology 1313, 1323, 2323, 2353

Economics 1301, 2353

Psychology 1313, 1323

Sociology 1313, 1323, 2333

Degree/Certification Requirements for Elementary

Major in Elementary Education with Provisional Elementary Certification:

Professional Development Sequence: 33 upper division semester hours, including EDCI 1301, 3301, 3302, 3303, 3305, 3311, 3312, 3328, 3331, 3332, and EDCI 4611 (EDCI 4311 and 4312 for Kindergarten endorsement; ED 4311 and 4312 for Generic Special Education certification; EDCI 4310 for English as a Second Language endorsement)

Specializations/Delivery Systems for Elementary Education majors: Elementary (Grades 1st-6th) OPTION I: 2-12 semester hour (minimum) Academic Specializations: (6 semester hours upper division in each)

Art
Earth Science
English
Health Education
History
Mathematics
Physical Education
Spanish

Elementary (Grades 1st-6th) OPTION II: 1-18 semester hour (minimum) Academic Specialization: (9 semester hours upper division)

Art
Biology
Earth Science
English
Health Education
History
Mathematics
Music
Kinesiology
Reading
Spanish
Speech Communication
Theatre Arts

Elementary (Grades 1st-6th) OPTION III: 1-24 semester hours (minimum) Academic Specialization or Delivery System (12 semester hours upper division)

Bilingual Education
Generic Special Education
Physical Science
Social Science

Elementary (Pre/K—6th) OPTION IV: 1-24 semester hours Delivery System (12 semester hours upper division)

Early Childhood Education

Combination of Subjects

for OPTION I and OPTION III above: 12 semester hours

EDCI 3323
EDCI 3325
P E 3356 or 3357
and 3 semester hours from:
Art 3381
Mus 3311
Comm 1303 or 2312

for OPTION II above 18 semester hours

EDCI 3323
EDCI 3325
P E 3356 or 3357
Geog 2301 or 2313
and 6 semester hours from:
Art 3381
Mus 3311
Comm 1303 or 2312

for OPTION IV above 12 semester hours

KIN 3356 or 3357

H E 2352

Geog 2301 or 2313

and 3 semester hours from:

Art 3381

Mus 3311

Comm 1303 or 2312

Electives: 12 semester hours of electives for Elementary Education majors from the following:

6 semester hours from 2 of the following areas:

Art 1301

Comm 1303 or 2312

Phil 1310, 1320, 2330, 2380

6 semester hours from 2 of the following areas:

Anth 1313, 1323, 2323, 2353

Eco 1301, 2353

Psy 1313, 1323

Soc 1313, 1323, 2333

The following Specializations, Delivery Systems and Endorsements for Elementary Education majors are offered through the School of Education:

Delivery System (Option III): Bilingual Education- EDCI 3315, 3316, 3322, 3324, 4304, Eng 3319, Span 3330 and Hist 2363 or Soc 4323.

Delivery System (Option IV): Early Childhood Education- EDCI 4304, 4314, 4390, 4391, 4392, 4393, H E 2372, and Psy 2335.

Delivery System (Option III): Generic Special Education- ED 1305, 2304, 4301, 4302, 4303, 4309, 4371, and 4372.

Specialization (Option II): Reading- EDCI 3314, 3316, 3329, 4351, 4367, and 4369. In addition, the following 6 semester hours of support courses are required in the combination of subjects: EDCI 3323, 3325.

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 Central Education Agency.
 - A. Oral proficiency shall be determined by the Language Proficiency Interview (LPI) 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 semester hours at the graduate or undergraduate level earned *after* the bachelor's degree as follows: undergraduate: EDCI 3315, 3316, 3324, 4304. graduate: ED 6309, 6316, 6324, 6335.
3. One year of successful teaching experience on a permit in an approved bilingual education program.
4. ExCET/Bilingual.

Endorsement: Kindergarten

The kindergarten endorsement may be added to valid provisional teacher certificates with elementary or all-level options and provisional special education certificates. The professional developmental sequence for the kindergarten endorsement consists of: (1) 12 semester hours: EDCI 4390, 4391, 4392, 4393. (2) 3 semester hours of kindergarten student teaching (EDCI 4312-Student Teaching-Kindergarten); or one year of successful kindergarten teaching experience on a permit in an accredited school and three additional semester hours (EDCI 4314-Seminar and Practicum in Kindergarten Education) of kindergarten education. Teaching or student teaching in a multi-age class which 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: (1) 12 semester hours: Eng 3319, 3330, 4328; EDCI 3324, (EDCI 4310-Student

Teaching: ESL). A Provisional Special Education certificate with a Specialization in Speech and Language Therapy is offered through the College of Arts and Sciences Department of Communications. Check under the appropriate department in this bulletin for details.

Degree/Certification Requirements for Secondary

For the prospective secondary teacher, Pan American University offers bachelor degrees (B.A., B.S., B.F.A., or B.B.A.) in various academic disciplines with secondary certification through the School of Education.

The University College and General Education requirements for the various academic disciplines are specified by the departments in this bulletin.

In addition to the University College and General Education requirements, for students seeking Provisional Teacher Certificates at the secondary level, the following requirements also apply:

Professional Development Sequence—27 semester hours upper division, including (EDCI 1301-Introduction to Teaching is a prerequisite for the Professional Development Sequence) EDCI 3301, 3302, 3303, 3312, 4332, 4333, 4351, and 4641 (and/or appropriate student teaching course number for Generic Special Education).

The School of Education offers Provisional Teacher Certification Secondary in the following teaching fields and delivery systems:

Secondary (Grades 7th-12th) Option I: 1-36 semester hour (minimum) teaching field (21 semester hours upper division)

- Biology
- Business
- Chemistry
- Computer Information Systems
- English
- Government
- History
- Mathematics
- Music
- Spanish

Secondary (Grades 7th-12th) Option II: 2-24 semester hour (minimum) teaching fields/delivery systems (12 semester hours upper division in each)

- Art
- Biology
- Chemistry
- Computer Information Systems
- Earth Science
- English
- Generic Special Education
- Government
- Health Education
- History
- Journalism
- Mathematics
- Music
- Kinesiology
- Physical Science
- Physics
- Psychology
- Reading
- Spanish
- Sociology
- Speech Communication
- Theatre Arts

Secondary (Grades 7th-12th) Option III: 1-48 semester hour (minimum) broad teaching field (24 semester hours upper division)

- Art
- Business Composite

Secondary (Grades 7th-12th) Option IV: 1-48 semester hour (minimum) composite teaching field (24 semester hours in one area of which 12 semester hours in upper division)

Electives: 12 semester hours electives

6 semester hours from 2 of the following areas:

Art 1301
Comm 1303
Phil 1310, 1320, 2330, 2380

6 semester hours from 2 of the following areas:

Anth 1313, 1323, 2323, 2353
Eco 1301, 2353
Psy 1313, 1323
Soc 1313, 1323, 2333

The following teaching fields/delivery systems are offered in the School of Education for those seeking a provisional teacher certificate secondary:

Delivery System (Option II): Generic Special Education ED 1305, 2304, 4301, 4302, 4303, 4309, 4371, 4374; P E 4351

Teaching Field (Option II): Reading Eng 1320; EDCI 3323, 3325, 3316, 3329, 3351, 4367, and 4369

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 by appropriate departments elsewhere in this bulletin; however, the professional development (30 upper division semester hours) sequence for provisional teacher certificate All Level, offered through the School of Education is as follows: (EDCI 1301-Introduction to Teaching is a prerequisite to the professional development sequence)EDCI 3301, 3302, 3303, 3311, 3322, 3323, 4332, 4333, 4311-Student Teaching Elementary, and 4398-Student Teaching Secondary

Student Teaching

The Department of Curriculum and Instruction - Elementary and Secondary offers the directed teaching experience as a critically important component in the preparation of competent teachers.

The requirements and applications for degree and/or certification programs under the current catalog must be completed prior to September 1, 1991. Students pursuing teacher certification after August 31, 1989, must enter under those programs prescribed by the new standards for teacher education. Prospective teacher education students should consult with their major advisors and the appropriate department in the School of Education.

Elementary Education

1. Minimum of 90 semester hours total university course work completed.
2. Minimum overall Grade Point Average (GPA) of 2.0.
3. General Education required courses complete.
4. English 1301 and 1302 completed with a minimum of "C" in each.
5. Completed minimum of 3/4 of total semester hours required in Major.
6. Minimum of 2.25 Grade Point Average (GPA) in Major.
7. Satisfactory completion of the following courses in Elementary Education 3302, 3311, 3323, 3325, 3328.
8. In addition for Kindergarten endorsement, Ed 4391.
9. Completed minimum of 1/2 of total semester hours required in minor.
10. Minimum of 2.25 Grade Point Average (GPA) in Minor.
11. (For Bilingual minors) Satisfactory completion of Education 3302, 3305, 3322, 4304, 3315, 3316, 3324.

Secondary Education

1. Minimum of 90 semester hours total university course work completed.
2. Minimum overall Grade Point Average (GPA) of 2.0.
3. General Education required courses complete.
4. English 1301 and 1302 completed with a minimum of "C" in each.
5. Completed minimum of 3/4 of total semester hours required in Major teaching field.
6. Minimum of 2.25 Grade Point Average (GPA) in Major.
7. Additional requirements as specified by Major department.
8. Completed minimum of 1/2 of total semester hours required in Minor teaching field (Minimum 18 hours if student teaching in minor is recommended).
9. Minimum of 2.25 Grade Point Average (GPA) in Minor.
10. Additional requirements as specified by Minor department.

11. 12 semester hours in Secondary Professional Education of which 3 semester hours must be EDCI 4332.
12. Minimum of 2.25 Grade Point Average (GPA) in Secondary Professional Education courses.

All requirements for student teaching must be met before a student is given a Clear Admission status for student teaching.

Graduate Program

The Department of Curriculum and Instruction - Elementary and Secondary offers a Master of Education degree in Elementary Education, Elementary Bilingual Education, Secondary Education, and Reading.

M.ED. Degree in Elementary Education and Reading

Master of Education Degree (36 Hour Non-Thesis Program)

Major

Elementary Education

Non-Certification

(12 hours)

CONTENT COURSES

ED	6308	Foundations of Reading Instruction
ED	6309	Topics in Reading
ED	6310	Child and Adolescent Literature
ED	6323	Problems in the Teaching of Reading
ED	6325	Practicum in Reading Instruction
ED	6326	Science in the Elementary School Curriculum
ED	6327	Social Studies in the Elementary School Curriculum
ED	6328	Mathematics in the Elementary School Curriculum
ED	6329	Diagnostic Teaching of Reading
ED	6330	The Curriculum in the Elementary School

PROFESSIONAL DEVELOPMENT

(9 hours)

ED	5314	Practicum in Kindergarten Education
ED	5390	Advanced Studies in the Development of Young Children
ED	5391	Constructing Curriculum for Early Childhood Centers
ED	5392	Research and Development of Creative Activities For Young Children
ED	5393	Advanced Studies of Cultural Diversity in Early Childhood Centers
ED	6301	Instructional Media in Teaching
ED	6302	Advanced Educational Psychology
ED	6303	Advanced Philosophy of Education
ED	6306	The Supervision of Student Teaching
ED	6307	Comparative Education
ED	6308	Foundation of Reading Instruction
ED	6311	Advanced Child Psychology
ED	6313	Individual Educational Testing
ED	6316	Perceptual Basis of Language Development
ED	6317	Perceptual Motor Development in Young Children
ED	6318	Diagnostic and Prescriptive Teaching
ED	6322	The Bilingual Child
ED	6330	The Curriculum in the Elementary School
ED	6360	Introduction to Guidance and Counseling
ED	6367	Statistical Methods
ED	6370	Supervision of Instruction
ED	6390	Education of Young Children

RESOURCE AREAS

(9 hours)

ED	5372	Individual Differences: Survey and Treatment
ED	6302	Advanced Educational Psychology
ED	6306	The Supervision of Student Teaching
ED	6336	Problems in Education

ED 6390 Education of Young Children
 ED 6397 Analysis of Teaching Behavior
 PSY 5318 Learning Theories
 PSY 5333 Theory of Personalities

Or 6 hours from any of the graduate level courses outside the major or minor fields may be taken as resource area courses.

DEGREE REQUIREMENTS (6 hours)

ED 6312 Educational Measurement
 ED 6300 Introduction to Research

Total 36 hours

**Master of Education Degree
 (30 Hour Thesis Program)**

Major

Elementary Education

Non-Certification

CONTENT COURSES

(12 hours)

ED 6308 Foundations of Reading Instruction
 ED 6309 Topics in Reading
 ED 6323 Problems in the Teaching of Reading
 ED 6325 Practicum in Reading Instruction
 ED 6326 Science in the Elementary School Curriculum
 ED 6327 Social Studies in the Elementary School Curriculum
 ED 6328 Mathematics in the Elementary School Curriculum
 ED 6329 Diagnostic Teaching of Reading
 ED 6330 The Curriculum in the Elementary School

PROFESSIONAL DEVELOPMENT

(12 hours)

ED 5314 Practicum in Kindergarten Education
 ED 5372 Individual Differences: Survey and Treatment
 ED 5390 Advanced Studies in the Development of Young Children
 ED 5391 Constructing Curriculum for Early Childhood Centers
 ED 5392 Research and Development of Creative Activities for Young Children
 ED 5393 Advanced Studies of Cultural Diversity in Early Childhood Centers
 ED 6301 Instructional Media in Teaching
 ED 6302 Advanced Educational Psychology
 ED 6303 Advanced Philosophy of Education
 ED 6306 The Supervision of Student Teaching
 ED 6307 Comparative Education
 ED 6308 Foundations of Reading Instruction
 ED 6311 Advanced Child Psychology
 ED 6313 Individual Educational Testing
 ED 6322 The Bilingual Child
 ED 6360 Introduction to Guidance and Counseling
 ED 6367 Statistical Methods
 ED 6370 Supervision of Instruction
 ED 6390 Education of Young Children
 ED 6397 Analysis of Teaching Behavior

or

RESOURCE AREA

The student may substitute 6 hours from any of the graduate level courses outside the field of education for the 6 hours of professional development courses.

THESIS

(6 hours)

ED 7300, 7301 Thesis

DEGREE REQUIREMENTS

(6 hours)

ED 6312 Educational Measurement
 ED 6300 Introduction to Research

TOTAL 30 hours

**Master of Education Degree
36 Hour Non-Thesis Program**

Major			Certificate
Elementary Education			Professional Elementary
SPECIALIZATION AREA (minor)			(12 hours)
12 hours of graduate level courses in one of the following fields or a combination of two divided 9-3 or 6-6. Biology, English, Government, Health and Kinesiology, History, Mathematics, Spanish.			
PROFESSIONAL DEVELOPMENT			(6-12 hours)
ED	5314	Practicum in Kindergarten Education	
ED	5372	Individual Differences: Survey and Treatment	
ED	5390	Advanced Studies in the Development of Young Children	
ED	5391	Constructing Curriculum for Early Childhood Centers	
ED	5392	Research and Development of Creative Activities for Young Children	
ED	5393	Advanced Studies of Cultural Diversity in Early Childhood Centers	
ED	6301	Instructional Media in Teaching	
ED	6302	Advanced Educational Psychology	
ED	6303	Advanced Philosophy of Education	
ED	6306	The Supervision of Student Teaching	
ED	6307	Comparative Education	
ED	6308	Foundations of Reading Instruction	
ED	6311	Advanced Child Psychology	
ED	6313	Individual Educational Testing	
ED	6322	The Bilingual Child	
ED	6330	The Curriculum in the Elementary School	
ED	6360	Introduction to Guidance and Counseling	
ED	6367	Statistical Methods	
ED	6370	Supervision of Instruction	
ED	6397	Analysis of Teaching Behavior	
RESOURCE AREAS		(6 Hours Minimum)	(6-12 hours)
ED	6323	Problems in the Teaching of Reading	
ED	6325	Practicum in Reading Instruction	
ED	6326	Science in the Elementary School Curriculum	
ED	6327	Social Studies in the Elementary School Curriculum	
ED	6328	Mathematics in the Elementary School Curriculum	
ED	6329	Diagnostic Teaching of Reading	
ED	6336	Problems in Education	
or 6 hours from any of the graduate level courses outside the major or minor fields may be taken as resource area courses.			
DEGREE REQUIREMENTS			(6 hours)
ED	6312	Educational Measurement	
ED	6300	Introduction to Research	
		TOTAL	36 hours

**Master of Education Degree
36 Hour Non-Thesis Program for students holding an
Elementary Provisional Certificate.**

Major			Certificate
Reading All-level			Reading Specialis
READING AREA			(18 hours)
ED	6308	Foundations of Reading Instruction	
ED	6309	Topics in Reading	
ED	6310	Child and Adolescent Literature	
ED	6323	Problems in the Teaching of Reading	
ED	6329	Diagnostic Teaching of Reading	
ED	6325	Practicum in Reading Instruction	

RESOURCE AREA			(6 hours)
SOC	5313	American Minorities	
ENG	6350 ¹	Introduction to Descriptive Linguistics	
PROFESSIONAL DEVELOPMENT			(6 hours)
ED	5351	Teaching Reading to the Secondary Student	
ED	6341	Advanced Adolescent Psychology or	
ED	6331 ²	Curriculum in the Secondary School	
DEGREE REQUIREMENTS			(6 hours)
ED	5313	Reading Tests	
ED	6300	Introduction to Research	
TOTAL			36 hours

**Master of Education Degree
36 Hour Non-Thesis Program for students holding a
Secondary Provisional Certificate**

Major			Certificate
Reading All-level			Reading Specialist
READING AREA			(18 hours)
ED	6308	Foundations of Reading Instruction	
ED	6309	Topics in Reading	
ED	6310	Child and Adolescent Literature	
ED	6323	Problems in the Teaching of Reading	
ED	6329	Diagnostic Teaching of Reading	
ED	6325	Practicum in Reading Instruction	
RESOURCE AREA			(6 hours)
SOC	5313	American Minorities	
ENG	6350 ¹	Introduction to Descriptive Linguistics	
PROFESSIONAL DEVELOPMENT			(6 hours)
ED	5351	Teaching Reading to the Secondary Student	
ED	6311	Advanced Child Psychology or	
ED	6331	Curriculum in the Secondary School	
DEGREE REQUIREMENTS			(6 hours)
ED	5313	Reading Tests	
ED	6300	Introduction to Research	
TOTAL			36 hours

**Master of Education Degree
30 Hour Thesis Program**

Major			Certificate
Elementary Education			Professional Elementary
SPECIALIZATION AREA			(12 hours)
12 hours of graduate level courses in one of the following fields or a combination of two divided 9-3 or 6-6: Biology, English, Government, Kinesiology, History, Mathematics, Spanish.			
PROFESSIONAL DEVELOPMENT			(6 hours)
ED	7301	Thesis	
RESOURCE AREA			(6 hours)
ED	5314	Practicum in Kindergarten Education	
ED	5372	Individual Differences: Survey and Treatment	
ED	5390	Advanced Studies in the Development of Young Children	
ED	5391	Constructing Curriculum for Early Childhood Centers	
ED	5392	Research and Development of Creative Activities for Young Children	

¹If student has credit for Eng 3319, substitute Eng 6351.

²If student has credit for Ed 4351, substitute approved elective.

ED	5393	Advanced Studies of Cultural Diversity in Early Childhood Centers
ED	6306	The Supervision of Student Teaching
ED	6322	The Bilingual Child
ED	6323	Problems in the Teaching of Reading
ED	6325	Practicum in Reading Instruction
ED	6326	Science in the Elementary School Curriculum
ED	6327	Social Studies in the Elementary School Curriculum
ED	6328	Mathematics in the Elementary School Curriculum
ED	6329	Diagnostic Teaching of Reading
ED	6330	The Curriculum in the Elementary School

Or 6 hours from any other graduate level courses outside the major or minor fields may be taken as resource area courses.

DEGREE REQUIREMENTS		(6 hours)
ED	6312	Tests and Measurements for the Elementary Classroom Teacher
ED	6300	Introduction to Research
TOTAL		30 hours

**Professional Certificate with
Master of Arts Degree or
Master of Science Degree**

Major	Certificate
Biology	Professional Elementary
English	

SPECIALIZATION AREA (12 hours)
12 hours of graduate level courses in one of the following areas: Biology, English

PROFESSIONAL DEVELOPMENT (12 hours)

Required:

ED	6312	Tests and Measurements for the Elementary Classroom Teacher
ED	6311	Advanced Child Psychology
ED	6330	The Curriculum in the Elementary School

3 hours selected from:

ED	6301	Instructional Media in Teaching
ED	6306	Supervision of Student Teaching
ED	6322	Teaching the Bilingual Child
ED	6323	Problems in the Teaching of Reading
ED	6332	Research in Elementary Education
ED	6397	Analysis of Teacher Behavior

RESOURCE AREA (6 hours)

6 semester hours in a second specialization area or
6 semester hours selected from the following:

ED	6308	Foundations of Reading Instruction
ED	6323	Problems in the Teaching of Reading
ED	6325	Directed Practice in Remedial Reading
ED	6326	Science In the Elementary School Curriculum
ED	6327	Social Studies In the Elementary School Curriculum
ED	6328	Math in the Elementary School Curriculum
ED	6329	Diagnostic and Remedial Teaching of Reading

DEGREE REQUIREMENTS

The student should consult the department of his major for specific information on degree requirements, which are in addition to the above certification requirements.

M.Ed Degree in Bilingual Education

The role of the bilingual/bicultural education specialist is that of a leader and master teacher in the field. Such a field includes knowledge, skills, and attitudes which are characterized by language, cultural, and instructional dimensions. The M.Ed Degree with specialization in Bilingual Education provides an opportunity to develop such characteristics.

The following is the program for the M.Ed Degree with specialization in Bilingual Education:

**Master of Education Degree
36 Hour Non-Thesis Program**

Major		Certificates
Elementary Education		Professional Elementary Provisional Bilingual
PROFESSIONAL DEVELOPMENT		(12 hours)
ED 6309	Topics in Reading	
ED 6335	Teaching Elementary School Subjects in the Bilingual School	
ED 6319	Practicum in Bilingual Education	
ED 6324	Second Language Teaching: Theory and Methodology	
SPECIALIZATION AREA		(12 hours)
<i>Language Component</i>		(6 hours)
SPAN 6307	Advanced Spanish Grammar and Composition for the Classroom Teacher	
<i>Select three (3) hours from:</i>		
ENG 6350	Introduction to Descriptive Linguistics for Teachers	
ENG 6351	Problems in Linguistics	
<i>Socio-Historical Component</i>		(6 hours)
<i>Select three (3) hours from:</i>		
SOC 5313	American Minorities	
SOC 5323	The Mexican-American People	
SOC 5324	Demography of the Southwest	
SOC 5353	Social Stratification	
<i>Select three (3) hours from:</i>		
HIST 6306	Studies in Texas and Southwestern History	
HIST 6316	Studies in Mexican and American Heritages	
RESOURCE AREA		(6 hours)
ED 6302	Advanced Educational Psychology	
<i>Choice of (3) hours from:</i>		
ED 6388	Socio-Cultural Foundations of Education	
ED 6322	The Bilingual Child	
DEGREE REQUIREMENTS		(6 hours)
ED 6312	Educational Measurement	
ED 6300	Introduction to Research	
	TOTAL	36 hours

**Master of Education Degree
30 Hours Thesis Program**

Major		Non-Certification
Secondary Education		
SPECIALIZATION AREA		(12 hours)
12 semester hours of graduate level courses in one of the following fields: Biology, Business Administration, English, Government, Health and Kinesiology, History, Mathematics, Psychology, Spanish		
RESOURCE AREA		(6 hours)
6 semester hours from any of the graduate level courses (excluding education and the specialization area) that will improve the classroom teacher's competency		
THESIS		(6 hours)
ED 7300, 7301	Thesis	
DEGREE REQUIREMENTS		(6 hours)
ED 5342	Tests and Measurements for the Secondary Classroom Teacher	
ED 6300	Introduction to Research	
	TOTAL	30 hours

**Master of Education Degree
36 Hour Non-Thesis Program**

Major		Certificate
Secondary Education		Professional Secondary
SPECIALIZATION AREA		(12 hours)
12 semester hours of graduate level courses in one of the following fields: Biology, Business Administration, English, Government, Health and Kinesiology, History, Mathematics, Psychology, Spanish		
RESOURCE AREA		(6 hours)
6 semester hours from any of the graduate level courses (excluding education and the specialization area) that will improve the classroom teacher's competency.		
PROFESSIONAL DEVELOPMENT		(12 hours)
12 semester hours selected from the following for non-thesis programs:		
<i>Required:</i>		
ED 6331	The Curriculum in the Secondary School	
ED 6380	Practicum for Secondary Teachers	
<i>6 hours selected from:</i>		
ED 5351	Teaching Reading to the Secondary Student	
ED 5352	Secondary Classroom Methods and Materials	
ED 6301	Instructional Media in Teaching	
ED 6303	Advanced Philosophy of Education	
ED 6306	Supervision of Student Teaching	
ED 6307	Comparative Education	
ED 6333	Research in Secondary Education	
ED 6336	Problems in Education	
ED 6341	Advanced Adolescent Psychology	
ED 6353	Teaching the Disadvantaged Secondary Learner	
ED 6388	Socio-Cultural Foundations of Education	
DEGREE REQUIREMENTS		(6 hours)
*ED 5342	Tests and Measurements for the Secondary Classroom Teacher	
ED 6300	Introduction to Research	
TOTAL		36 hours

**Master of Education Degree
36 Hour Thesis Program**

Major		Certificate
Secondary Education		Professional Secondary
SPECIALIZATION AREA		(12 hours)
12 semester hours of graduate level courses in one of the following fields: Biology, Business Administration, English, Government, Health and Kinesiology, History, Mathematics, Psychology, Spanish		
RESOURCE AREA		(6 hours)
6 semester hours from any of the graduate level courses (excluding education and the specialization area) that will improve the classroom teacher's competency		
PROFESSIONAL DEVELOPMENT		(6 hours)
<i>Required:</i>		
ED 6331	The Curriculum in the Secondary School	
ED 6380	Practicum for Secondary Teachers	
THESIS		(6 hours)
ED 7300, 7301	Thesis	
DEGREE REQUIREMENTS		(6 hours)
*ED 5342	Tests and Measurements for the Secondary Classroom Teacher	

**Course Descriptions - Additional courses may be found in other
Education Departments**

*If the student had ED 3342 or ED S 3305 at the undergraduate level, he will substitute an elective with the approval of his advisor.

Education

ED 1303 EARLY CHILDHOOD EDUCATION, FIELD EXPERIENCE LEVEL I

On Demand

Field experience in early childhood learning centers to develop, under supervision, competencies in child care giving such as organizing learning centers, maintaining planned arrangement of furniture and materials for motor development and classroom organization and other activities contributing to setting up and maintaining a safe and healthy learning environment.

ED 1304 EARLY CHILDHOOD EDUCATION, FIELD EXPERIENCE LEVEL II

On demand

Field experience in early childhood learning centers designed to develop, under supervision, competencies in advancing physical and intellectual development of children.

ED 1351 ART WORKSHOP FOR TEACHERS

On demand

An activity course designed for the inexperienced pre-school teacher or worker. The fundamentals of art are emphasized with a practical application at the pre-school level.

ED 1352 MUSIC WORKSHOP FOR TEACHERS

On demand

An activity course designed for the inexperienced pre-school (worker, teacher). Fundamentals of music will be taught but emphasis is on building a repertoire of songs and rhythm activities through class participation.

ED 4651 WORKSHOP FOR ELEMENTARY TEACHERS

On Demand

A workshop course designed to assist teachers in planning for an elementary curriculum to meet the needs of migrant and/or disadvantaged children. Special permission must be given to each participant before enrollment in the course.

ED 5313 READING TESTS

Spring

A major function of this course is to help graduate students develop competencies in the selection, administration, scoring and interpretation of standardized tests, with particular emphasis upon their application to reading instruction. Special emphasis will also be given to the development and use of informal evaluative instruments to meet particular reading needs of students.

ED 5314 PRACTICUM IN KINDERGARTEN EDUCATION

Fall, Spring

Guided experiences in an early childhood center, wherein the student develops curricular projects, including planning and implementing discrete learning situations and episodes, for the children in that setting. Student to be in an early childhood center 1/2 day each day of the semester and attend such seminars and conferences as suggested by the course instructor. Available to students seeking the endorsement for teaching in kindergarten.

ED 5321 CAREER EDUCATION

On Demand

The course includes the definition and rationale for the concept of career education as a comprehensive program wherein the student's attention is focused on careers, beginning in early childhood and continuing throughout the adult years. Describes a sequentially developed education program offering career awareness, career exploration and job preparation for all students. For elementary and secondary, the program includes a structuring of basic subjects, grades K-12, around the theme of career opportunities and requirements in the world of work and emphasized the contribution that subject matter can make to a successful career.

ED 5351 TEACHING READING TO THE SECONDARY STUDENT

Spring, Summer

The relation of reading ability to academic achievement, procedures for teaching reading skills needed in content area reading, and reading difficulties encountered by secondary students are included in this course. The student will use diagnostic tools and techniques to determine reading needs of secondary students and will develop reading-learning activities to meet those needs.

ED 5352 SECONDARY CLASSROOM METHODS AND MATERIALS

Fall, Spring, Summer

This course is for students who have had no classroom or student teaching experience and provides students with opportunities (1) to apply modern methods and materials to problems in the secondary classroom and (2) to observe the methods and materials used by classroom teachers. Credit will not be granted for this course if ED 4352 or Ed.S. 3307 has been taken.

ED 5390 ADVANCED STUDIES IN THE DEVELOPMENT OF YOUNG CHILDREN*On Demand*

Review of development of the child from birth to age 8 with foci roots on individuality, origins of behavior and formation of cognitive structures. Survey of early acquisition of language and information skills. Principal course emphases: physical characteristics, modes of learning, management of emotion, self-identification and responsiveness to the demands of social living by children ages 3, 4 and 5. Course activities include observation and interaction with young children, projects, readings and lectures. Credit not offered for both ED 4390 and ED 5390.

ED 5391 CONSTRUCTING CURRICULUM FOR EARLY CHILDHOOD CENTERS*SSI*

Identification of basic beliefs about the nature of young children, assumptions concerning the process of development, theories of learning, sociocultural factors and values upon which curricula are based. Construction of a curriculum in Math, Science, Social Learning and Language for children of ages 3, 4 and 5, including planning both learning environment and daily activities. Frequent observing, assisting and teaching in early childhood centers required. Credit not permitted for both ED 4391 and ED 5391.

ED 5392 RESEARCH AND DEVELOPMENT OF CREATIVE ACTIVITIES FOR YOUNG CHILDREN*Fall*

Opportunities for research and development of creative activities for young children in all areas of curriculum. Specific emphasis on Creative Dramatics, Literature, Art, Music, Creative Play and the development of motor skills. Student research, lectures, readings, projects, and observation. Credit not permitted for both ED 4392 and ED 5392.

ED 5393 ADVANCED STUDIES OF CULTURAL DIVERSITY IN EARLY CHILDHOOD CENTERS*Spring, On Demand*

Designed to investigate facets of cultural diversity in young children and its relationship to child growth and development, instructional competencies of teachers and home-school relationships.

ED 6301 INSTRUCTIONAL MEDIA IN TEACHING*On demand*

An advanced course designed to provide students with skills, insight and practice in the selection, utilization, production and management of modern instructional tools. The course will be helpful to teachers and other persons desiring to direct instructional media centers in public schools.

*Prerequisite: EDCI 3301, or equivalent.***ED 6303 ADVANCED PHILOSOPHY OF EDUCATION***Fall*

The development of American education in relation to political, social and cultural developments. Special attention is given to the influence of movements in the cultural environment upon evolving conceptions of educational theory and practice.

ED 6305 PROBLEMS AND PRACTICES IN COLLEGE TEACHING*On Demand*

A methods course in which systematic instructional processes applied to the teaching of education will be learned. Emphasis will be upon writing and using instructional modules focused on behavioral outcomes. The utilization of instructional technology and evaluation. Required of all teaching assistants in the School of Education. Does not count toward degree or certification.

ED 6306 SUPERVISION OF STUDENT TEACHING*Fall, On Demand*

Practical application of the supervisory role in the supervision of student teachers in a competency based teacher education program.

ED 6308 FOUNDATIONS OF READING INSTRUCTION*Fall*

This course places major emphasis on the nature of the reading process and the essential components of a systematic, sequential program for developmental reading instruction, various approaches for teaching reading will be scrutinized and analyzed.

*Prerequisite: ED 3323 or admission by test placement.***ED 6309 TOPICS IN READING***Spring*

This course is concerned primarily with innovations and current issues in reading instruction. Trainees will select topics of particular interest and concern to them for intensive study. Experiences of the trainee may include action research, working with classroom teachers and other adults in the school community to enhance the reading program. May be repeated once, when emphasis is on study in resource areas or professional areas related to the field of reading.

ED 6310 CHILD AND ADOLESCENT LITERATURE*Fall*

This course is designed to help the trainee gain competence in (1) selecting and recommending literature for children and adolescents and (2) providing leadership and guidance to help students develop maturity in reading. The trainee will be provided with experiences which will enable him to locate and select appropriate literature for students and to apply appropriate strategies for stimulating voluntary participation and continuous growth in independent reading.

ED 6322 THE BILINGUAL CHILD*Fall, Spring, Summer*

A course designed to provide understanding of the problems and strengths of the bilingual child with emphasis on the educational program of the multi-cultural, multi-ethnic elementary school.

ED 6323 PROBLEMS IN THE TEACHING OF READING*Fall*

This course is concerned with analyzing and prescribing materials and techniques for reading instruction to meet common reading problems, integrating reading instruction with other facets of communication, relating reading instruction to socio-cultural and linguistic characteristics of the learner. Recreational reading, grouping, content area reading and other problems are among those considered.

*Prerequisite: ED 6308.***ED 6324 SECOND LANGUAGE TEACHING: THEORY AND METHODOLOGY***Spring, Summer*

A study of the acquisition of languages by the bilingual learner, focusing on the role of the child, the community and the school through various stages of language development and the relationship of linguistic, cultural and conceptual processes within a bilingual/bicultural environment. The evaluation of language methods and materials as these relate to social context and the principles of communication will be stressed.

ED 6325 PRACTICUM IN READING INSTRUCTION*SSI*

Supervised experience in working with individual children who have reading difficulties.

*Prerequisite: ED 6329.***ED 6326 SCIENCE IN THE ELEMENTARY SCHOOL CURRICULUM***SSII*

Deals with the purposes, selections and organization of content, teaching and learning procedures and evaluation of outcomes in elementary school science.

*Prerequisite: A course in physical science and a course in life science.***ED 6327 SOCIAL STUDIES IN THE ELEMENTARY SCHOOL CURRICULUM***SSI*

Instructional procedures and latest theories in elementary school social studies. Techniques of teaching history and geography with emphasis on development of Americanism, conceptual skills, economic and conservation education, use of maps, unit organization, projects and pupil involvement in community problems.

ED 6328 MATHEMATICS IN THE ELEMENTARY SCHOOL CURRICULUM*SSI*

Study is made of recent research in the teaching of mathematics. Application of research finding to the teaching of mathematics is emphasized.

ED 6329 DIAGNOSTIC TEACHING OF READING*Spring*

This course is designed to help the student gain competency in diagnosing reading behavior and in prescribing appropriate reading instruction. The student will develop or select, administer and interpret appropriate diagnostic materials and techniques. He will also be able to make appropriate recommendations for reading instruction on the basis of such diagnosis.

*Prerequisite: ED 6323.***ED 6330 THE CURRICULUM IN THE ELEMENTARY SCHOOL**

Development of the elementary school curriculum, significant factors which help to determine the curriculum and implications of research in curriculum construction are studied. Opportunity to select and organize appropriate learning experiences for the different levels is offered.

ED 6331 THE CURRICULUM IN THE SECONDARY SCHOOL

An overview of theories, principles and issues in curriculum planning for modern educational experiences. In addition to an examination of current curricular practices, particular emphasis will be placed upon promising research ideas and local efforts toward improvement in the secondary school.

ED 6332 RESEARCH IN ELEMENTARY EDUCATION*On Demand*

A course in which each student will be given an opportunity to choose for study special problems to fit his particular needs and interests: research procedures needed in the preparation of a thesis or other research reports; to demonstrate his mastery of these procedures. The student will present a research paper on a selected problem.

ED 6333 RESEARCH IN SECONDARY EDUCATION*On Demand*

An individualized approach to current problems in secondary education. Each student will choose a topic or problem of his choice and summarize available research on it.

ED 6336 PROBLEMS IN EDUCATION*Fall, Spring, Summer*

This course's major emphasis is on current innovations in education. Students will conduct research related to selected problems. Experiences of the student may include conducting action research, working with educational determinants, new education programs, and/or working with classroom teachers and other persons in the community in order to improve the education program. Credit may be applied toward the graduate programs in education when the appropriate problem is chosen by the student. This course may be repeated once for credit.

ED 6380 PRACTICUM FOR SECONDARY TEACHERS*Spring*

Examination of the discipline of the subject-field selected coupled with intensive study of research findings, publications of learned societies and advanced experimentation with the improvement of instruction.

ED 6390 THE EDUCATION OF YOUNG CHILDREN*Fall*

This course is designed for teachers of children of preschool age with emphasis on the developmental tasks and growth and development characteristics of four and five year olds. Special consideration will be given to selection and guidance of curriculum experience which contribute to the development of young children as individuals and in groups, records and reports, working with parents and observation of preschool groups.

*Prerequisite: ED 3311.***Education-Curriculum & Instruction****EDCI 1301 INTRODUCTION TO TEACHING**

This course focuses on the individual as a teacher by examining the role of the teacher in the teaching-learning process. This involves analysis of learners and learning environment as well as preparation for the performance of teaching activities within university and public school classrooms. Students will examine their strengths and weaknesses as teachers. This course will give the students an opportunity to examine the field of teaching and their strengths and weaknesses as teachers with an early entry into the field. Students who choose to continue in the field of teaching will have additional time to build on these strengths and remediate the weaknesses. Prerequisite for EDCI 3000 and 4000 level courses with grade of "C" or better.

EDCI 3301 DESIGN AND MANAGEMENT OF INSTRUCTION

Instructional methods and strategies will be applied to the teaching-learning process. Planning, organizing and managing instruction will be included. Instructional media and technology will be emphasized so that students will be able to use audio, visual, video, and computer systems to teach the essential elements of the school curriculum.

EDCI 3302 TEACHING-LEARNING PROCESS

The principal focus of the course is on major teaching-learning theories. It emphasizes the impact of socio-cultural, ethnic, language, and sex differences upon instructional processes. It includes the unique characteristics and needs of exceptional learners in such areas as assessment, least restrictive alternatives, and the admission-review-dismissal process.

Will meet the requirement as set forth in the following New Standards for Teacher Education in Texas: Teaching-Learning Processes, (1A) and Least restrictive alternatives, admission, review, and dismissal processes as well as the Characteristics and Assessment for Education Programs (1.B.ii), the Impact of Cultural, Ethnic, Language, and Social Differences upon Instructional Processes for Special Learners (1.B.i)

EDCI 3303 THE AMERICAN SCHOOL SYSTEM: HISTORICAL AND PHILOSOPHICAL DEVELOPMENT

A study of the structure, organization, and management of the American school system with emphasis on Texas' state and local structure of schools as influenced by legal, ethnic and pedagogical factors.

EDCI 3305 FOUNDATIONS OF MULTICULTURAL EDUCATION

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 the curriculum.

EDCI 3312 TESTING AND MEASUREMENT

The content of this course will include: derived scores (standard scores, percentiles, grade equivalent, age scores), reliability, and validity as related to the development and interpretation of criterion and norm reference measures, teacher made tests, and systematic observational scales. There will be an emphasis on utilizing appraisal information obtained from tests and observational scales as an integral part of the evaluation and teaching-learning-achievement process. To comply with new certification Standards.

EDCI 3314 THE READING PROCESS

This course examines the nature of reading within the language arts processes. The course requires the student to analyze various instructional approaches and to plan for effective classroom organization and management.

EDCI 3315 TEACHING CONTENT IN THE BILINGUAL SCHOOL

A course designed specifically to meet state Bilingual endorsement requirement for elementary teachers lacking a minor in bilingual/bicultural studies. Emphasis will be given to instructional techniques, educational materials, and curriculum designs in bilingual mathematics, science and social studies. Instruction will be given in the language of the target population.

Prerequisites: Math 2306, 2307 and EDCI 3328.

EDCI 3316 THE TEACHING OF SPANISH READING IN THE BILINGUAL CLASSROOM

This course provides a rationale, goals, and diagnostic/instructional strategies for the teaching/learning of Spanish reading as a first language in a bilingual classroom. Special emphasis will be placed on initial and developmental reading in Spanish and successful transition into English reading.

Prerequisite: EDCI 3323

EDCI 3322 TEACHING THE BILINGUAL CHILD

A study of the cultural, psychological, socio-economic, linguistic, educational, cognitive and curriculum factors affecting the academic achievement of bilingual students. National and state educational guidelines designed to help meet the needs of America's multi-lingual, and multi-cultural student population will be reviewed. Special emphasis will be given to programmatic and instructional approaches used in bilingual instruction.

EDCI 3323 DEVELOPMENTAL READING IN THE ELEMENTARY SCHOOL

The nature of the reading process, beginning reading, and appropriate strategies for the acquisition of basic reading skills. Provisions will be made for the teaching of reading to children who are culturally and linguistically diverse.

EDCI 3324 ENGLISH AS A SECOND LANGUAGE

A study of the acquisition of languages by the child, focusing on the role of the child, the society and the school in early language development, and the interdependence of linguistic and cognitive development. The evaluation of language methods, programs and materials for early childhood and the development of specific competencies and materials suitable for teaching language to children. Meets TEA standards for bilingual and ESL endorsement.

EDCI 3325 FUNCTIONAL READING AND STUDY SKILLS IN THE ELEMENTARY SCHOOL

Methods and materials for developing maturity in reading and study skills, especially in the content areas. Special emphasis is given to the development of interest, individualization of instruction through the matching of students to proper materials, techniques for integrating the teaching of skills with the teaching of content, and the development of flexibility of reading rate. Provisions will be made for the teaching of reading to children who are culturally and linguistically diverse.

EDCI 3328 TEACHING ELEMENTARY SCHOOL MATHEMATICS

Instructional methods and strategies emphasizing practical applications of the teaching-learning process to the teaching of elementary school mathematics. The scope and sequence of the essential elements for elementary school mathematics will be taught. Includes 15 clock-hours of field experience observing and working with children in an elementary school classroom.

EDCI 3329 CORRECTING READING PROBLEMS

This course requires the student to analyze reading difficulties encountered during regular classroom instruction, with emphasis on prevention or early correction. It includes an appraisal of materials and techniques useful to classroom teachers at both elementary and secondary levels.

Prerequisite: EDCI 4367

EDCI 3331 LANGUAGE ARTS/CHILDREN'S LITERATURE IN THE ELEMENTARY CURRICULUM

Methods of teaching the language arts in the elementary school with special emphasis on the communication skills and children's literature. Attention will be given to teaching English as a second language.

EDCI 3332 SOCIAL STUDIES AND SCIENCE IN THE ELEMENTARY SCHOOL

Methods of teaching the social studies and science in the elementary school. Practical applications of the teaching-learning process for teaching the essential elements will be emphasized. Includes 15 clock hours of field experience observing and working with children in an elementary school classroom. Complies with TEA Standards.

EDCI 4304 FIRST AND SECOND LANGUAGE LEARNING IN THE CLASSROOM

Analysis of first and second language acquisition and learning processes as they affect the teaching-learning process in the classroom setting. Meets TEA standards for bilingual certification/endorsement.

EDCI 4310 DIRECTED TEACHING – ESL

(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 1/2 day, Monday through Friday, 1/2 a semester. This work is done under the directions 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 Teacher Education Committee.

EDCI 4311 DIRECTED TEACHING – ELEMENTARY

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, PAU Student Teaching Handbook, and local school districts.

Prerequisite: Approval of PAU Teacher Education Committee.

EDCI 4312 DIRECTED TEACHING – KINDERGARTEN

Course consists of observation, limited participation in teaching, then full teaching responsibility in an elementary public school (TEA accredited) 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, PAU Student Teaching Handbook, and local school districts.

Prerequisite: Approval of PAU Teacher Education Committee.

EDCI 4314 SEMINAR AND PRACTICUM IN KINDERGARTEN EDUCATION

Student will develop and implement curriculum projects in a pre-K and/or Kindergarten. Projects will include planning and managing learning situations for children. Field experience in a TEA accredited pre-K or Kindergarten setting. Emphasizing action research will also be a part of the course. Seminars will be held to guide the student in implementing his or her program. May not be substituted for EDCI 4312, if they are working toward the Kindergarten endorsement as a part of their degree in Elementary Education.

EDCI 4332 SECONDARY CURRICULUM ORGANIZATION AND CLASSROOM MANAGEMENT

This course focuses on curriculum planning, implementing, and evaluating the teaching-learning process in secondary schools within legal and ethical guidelines. Includes basic principles and procedures of classroom management, with emphasis on discipline, teaching techniques, and procedures which include group and individual processes adapted to teacher personality and student needs and ability.

EDCI 4351 TEACHING LITERATURE TO THE ADOLESCENT

Emphasis is on the reading and evaluation of literature written for the reading by young adults (middle, junior and senior high school students). By analyzing reading resources and the reading interests and developmental needs of adolescents, the student will develop the ability to help all students, including those with exceptionalities, to select literature for independent reading. Strategies to stimulate reading for information and for pleasure will include the reading of a wide variety of adolescent literature reflecting cultural, ethnic, social, and sex roles differences in a multicultural society.

EDCI 4367 TEACHING READING TO CHILDREN WITH LIMITED PROFICIENCY IN ENGLISH

This course provides the student with knowledge and instructional strategies for teaching reading to students of diverse cultural/linguistic backgrounds. Special emphasis will be placed on developing oral language proficiency as a prerequisite skill to reading and on instructional strategies designed specifically to meet the needs of such learners.

Prerequisite: EDCI 3316.

EDCI 4369 READING PRACTICUM

The student integrates and implements knowledge and skills gained from all previous courses within the reading specialization program to (1) administer group diagnostic tools and use results to organize the class for effective reading instruction, (2) use individual diagnostic techniques appropriate for classroom instruction, (3) use sound classroom management and organizational techniques in teaching reading efficiently, and (4) use appropriate reading instructional strategies in teaching individual learners effectively.

Prerequisite: EDCI 3329

EDCI 4390 GROWTH AND DEVELOPMENT OF YOUNG CHILDREN

Emphasis on developmental tasks and growth characteristics from birth through the eighth year. Affective development, psychomotor development, social and emotional development will be stressed along with physical and intellectual development. Cultural dynamics of family relationships and reading, lectures, class activities will include day care as well as TEA accredited schools for young children, i.e., pre-kindergarten and kindergarten. 10 hours of field experience.

EDCI 4391 EARLY CHILDHOOD CURRICULUM: ORGANIZATION, METHOD AND MATERIALS

Consideration of curricular experiences that make up the programs: planning a daily program-the learning experiences and activities that provide the young child with a rich environment that will meet his needs, interests and abilities. Emphasis will be on activities and skills to broaden the child's understanding and knowledge of his physical environment-health, safety, science and social studies concepts. Emphasis will be on developmental skills for readiness of number concepts; oral language development; reading centers of interest, of individual, group and class activities. Lectures, readings, class participation and projects, observation. 15 hours of field experience.

EDCI 4392 CREATIVE ACTIVITIES AND PSYCHOMOTOR IN EARLY CHILDHOOD EDUCATION

Consideration of methods of teaching and materials - equipment and supplies - to be used with young children. Experiences emphasized will be literature - pictures - story books, poetry, dramatization theater arts. Other activities considered will be music and art for young children. Consideration will be given to development of motor-coordination through work and play activities (indoor and outdoor) with specific tasks outlined; as well as activities to develop eye-hand coordination and visual-tactile skills. This course will include the Chapter 75 Essential Elements of Fine Arts, and Kinesiology. Lectures, readings, class participation and projects, observation. Field experience will also be a part of this course. 15 hours of field experience.

EDCI 4393 TEACHING YOUNG CHILDREN OF DIVERSE CULTURES

A study and evaluation of methods and techniques used to further the cognitive and linguistic development of young children from diverse cultures. Lectures, readings, class participation and projects, observation. The cultural dynamics of family relationships, nutrition and health; school and family and a survey of day care will be included. 10 hours field experience.

EDCI 4611 DIRECTED TEACHING -- ELEMENTARY

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, PAU Student Teaching Handbook, and local school districts.

Prerequisite: Approval of PAU Teacher Education Committee.

EDCI 4613 DIRECTED TEACHING SPEECH AND HEARING

Course designed for speech and hearing majors. Problems related to the mechanical dimension of listening and speaking and to the conceptual process within language development will be the basis for individual and small group diagnostic/therapeutic work. Emphasis will be placed on clinical experience in a school setting under the supervision of a certified speech therapist and a university supervisor.

EDCI 4641 STUDENT TEACHING – SECONDARY

Student teaching for all options - one 36 hour teaching field, two 24 hour teaching fields, or one 48 hour teaching field in approved subjects - would require a fourteen week program which includes two weeks in class on the university campus and twelve weeks full day student teaching in an approved school with weekly seminars which re-emphasize previous course content and its application to the classroom.

Prerequisites: EDCI 1301, 3301, 3303, 4330, 4331, 4332, 4333. Required for certification.

Drama

See Department of Communications

Economics

See Department of Accounting and Economics

Education

See

- Department of School Administration and Supervision
 - Department of Curriculum and Instruction - Elementary and Secondary
 - Department of Health, Kinesiology and Recreation
 - Department of School Services and Counseling
-

Engineering

See Department of Physical Science

Department of English

Will Davis, Chair

Full-time Faculty

- Anderson-Mejias, Pamela (PhD, Indiana 1980; assoc. prof.) applied linguistics, second language acquisition
- Baltis, Margaret (MA, McNeese State 1967; asst. prof.) Eng. lit., Shakespeare, American lit., rhetoric
- Bloom, Leonard (MA, St. Mary's, San Antonio 1968; instr.) modern American and modern British lit.
- Bothof, Richard (PhD, University of Oklahoma 1980; instr.) composition, reading and developmental skills.
- Cararas, Sandra A. (MA, Northeast Louisiana 1968, asst. prof.) technical writing, Shakespeare, renaissance and 17th century Eng. lit.
- Davidson, Judy (MA, Hardin-Simmons University 1974; instr.) American literature
- Davis, Will (PhD, Rice 1982; assoc. prof.) composition, critical theory, modern poetry
- De La Fuente, Patricia (PhD, Texas, Austin 1976; assoc. prof.) comparative lit., renaissance Eng. lit.
- Dean, Paula (PhD, Auburn 1971; assoc. prof.) American lit.
- Dowell, Bob (PhD, Denver 1962; prof.) American lit., comparative lit.
- Evans, James L. (PhD, Texas, Austin 1967; prof.) American lit. after Civil War, frontier lit., folklore, bibliography
- Frankenberger, Earl (MA, Texas Christian 1967; asst. prof.) 18th century satire, American naturalist and environmental lit., composition and developmental skills
- Fritz, Donald E. (PhD, Missouri, Columbia 1975; assoc. prof.) modern British and American lit., criticism
- Grantz, Carl L. (PhD, Texas, Austin 1968; prof.) English lit., rhetoric, composition
- Hamilton, Lee (PhD, Louisiana State University 1982; asst. prof.) 19th century British lit., William Blake; Jungian criticism; bibliography
- Haule, James M. (PhD, Wayne State 1974; prof.) modern and contemporary British lit.
- Heckler, Edward (PhD, Michigan 1975; asst. prof.) linguistics, ESL
- Lyford, Roland (PhD, California-Davis 1968; prof.) 20th century American lit., structural linguistics
- Mendez-Egle, Beatrice (PhD, Texas A&M 1981; asst. prof.) rhetoric and composition, 19th century British lit., linguistics
- Mitchell, Paul (PhD, Southern Mississippi 1971; assoc. vice president for Academic Affairs) 19th century British lit., rhetoric, composition, linguistics
- Reed, Michael D. (PhD, Oregon 1974; assoc. prof.) colonial and 19th century American lit., Psychoanalytic criticism; logic
- Schmidt, Dorothy (PhD, Bowling Green State 1979; assoc. prof.) American studies, women's studies, creative writing
- Skinner, Izora (MS, Texas A&I University, 1964; instr.) English lit., American lit.
- von Ende, Frederick (PhD, Texas Christian 1972; prof.) medieval Eng. lit., Authurian legend & lit., Milton, 17th century Eng. lit.
- Wade, Seth (MA, Louisiana State 1954; asst. prof.) creative writing and translation; 20th century Eng. and American poetry; American lit

Department of English Undergraduate Programs

The Department of English offers undergraduate major and minor programs in English, with specializations in literature, language, or 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 M.A. in English, the M.A. in Interdisciplinary Studies with a concentration in English and the M.A. in English as a Second Language

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 humans, and to develop literary and language aptitudes of their own. To students who view

education primarily as career training, English programs afford excellent preparation for any profession requiring a high degree of skill and comprehension in oral and written communication.

Major in English:

36 semester hours of English, of which 24 must be advanced. English 2300 and English 2308 (when special topic is "Introduction to Classical Literature" or 2387 and 2388) are recommended sophomore literature courses for English majors. Required courses: Comm. 1313, Eng. 3319, Eng. 3312 or 3313, and Eng 3331 or 3332. In addition, all students majoring in English are required to take the ExCET before graduation.

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 English department.

Offerings in Literature:

2300, 2303, 2305, 2307, 2308 (when special topic is literary), 2313, 2387, 2388, 3301, 3304, 3305, 3306, 3307, 3309, 3310, 3312, 3313, 3317, 3320 (when topic is literary), 3322, 3324, 3331, 3332, 4301, 4306, 4309, 4310, 4312, 4316, 4318.

Offerings in Language (Linguistics):

3319, 3320 (when topic is linguistic) 3321, 3330, 4302, 4308, 4314, 4326, 4330, 4331.

Offerings in English as a Second Language:

3319*, 3321, 3330*, 4326, 4328*, 4329, 4330, 4331.

Offerings in Writing:

1301, 1302, 1320, 1387, 1388, 1405, 1406, 2308 (when special topic is writing), 2309, 3320 (when special topic is writing), 3327, 4322, 4325.

Minor in English:

18 semester hours of English, of which 6 must be advanced. English 2300 and 2308 (when special topic is "Introduction to Classical Literature" or 2387 and 2388) are recommended sophomore literature classes for English minors.

Teacher Certification in English (Secondary):

24 semester hours of English, of which 12 must be advanced and must include English 3319, 4325, 3312 or 3313, and 3331 or 3332. Students wishing certification with a concentration in literature, language, English as a Second Language, or writing may take additional advanced hours and should consult the offerings listed above for English majors. Students seeking certification or an ESL endorsement must have at least a 2.25 GPA in the content area courses.

The Department of English Graduate Program

The Department of English offers courses leading to a Master of Arts in English, a Master of Arts in English as a Second Language, and a Master of Arts in Interdisciplinary Studies with a concentration in English.

In addition, the Department provides support and specialization areas in English for degrees in other fields. Students using English as a support or specialization area must have six advanced undergraduate hours in English.

A person with a Masters in another discipline who wishes to acquire an M.A. in English or an M.A. in ESL must present at least 36 semester hours of graduate work applicable to the second degree and must meet all specific requirements for it. Within this 36 hours, a student may include a maximum of 12 hours that were applied to the first Masters (whether it was received from PAU or elsewhere). The 36 semester hours (including any work that counted on a previous Masters) must include at least 27 hours of English, must include not more than 12 hours of work at other institutions, and must be within the required time period.

*Denotes courses which are required by the State of Texas for ESL endorsement (1982-83). Students taking the ESL Endorsement must also have a 2.25 GPA in English 3319, 3330, 4328, and in addition, must complete EDCI 3324. The required course may change and students should check with their advisors.

Requirements by the Department of English for a Master of Arts Degree with a Major in English

In addition to the general requirements stated elsewhere in this bulletin, the following specific requirements must be met:

1. Applicants for admission will be required to have completed 24 semester hours of undergraduate work in English 12 hours of which must be advanced. Each related graduate field presented will require evidence of completion of 12 hours of undergraduate work, of which 6 must be advanced hours.
2. The choice of courses in English (and related fields, if any) will be determined through consultation between the student and the departmental graduate advisor.
3. To receive a M.A. in English, one must pass two three-hour written exit examinations. Subject areas will be determined in consultation with the departmental graduate advisor.

Master of Arts Degree

Major
English

Thesis

Major

Thirty semester hours including a thesis; at least 24 must be in English.

Requirements:

ENG 6300	Bibliography and Research Methods
ENG 7300, 7301	Thesis

TOTAL 30 hours

Master of Arts Degree

Major
English

Non-Thesis

Major

Thirty-six semester hours and no thesis; at least 27 must be in English.

Requirements:

ENG 6300	Bibliography and Research Methods
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TOTAL 36 hours

Requirements by the Department of English for a Master of Arts Degree with a Major in English as a Second Language

In addition to the general requirements stated elsewhere in this bulletin, the following requirements must be met:

1. A minimum score of 500 on the verbal section of the GRE for native speakers of English; a minimum score of 550 on the Test of English as a Foreign Language (TOEFL) for foreign students who are non-native speakers of English.
2. The choice of courses in the major and related fields will be determined through consultation between the student and the departmental graduate advisor.
3. To receive a M.A. in English as a Second Language, one must pass two three-hour written exit examinations. Subject areas will be determined in consultation with the departmental graduate advisor.

Master of Arts Degree

Major
English as a Second Language

Thesis

Major

Thirty-six semester hours including a thesis, with the option of taking up to 6 hours in one or more other fields.

Requirements

ENG 6300	Bibliography and Research Methods
ENG 6350	Introduction to Descriptive Linguistics for Teachers
ENG 6321	Studies in Language and Culture
ENG 6302	Modern English Syntax
ENG 6328	Introduction to English as a Second Language
ENG 6329	Problems in English as a Second Language

(30 semester hours):

ENG	6352	Practicum in English as a Second Language
ENG	6353	ESL Testing
ENG	7300	Thesis
ENG	7301	Thesis

Electives

(6 semester hours):

ENG	6317	English Phonological Systems
ENG	6325	Studies in Composition Techniques
ENG	6351	Problems in Linguistics
ED	6324	Second Language Teaching: Theory and Methodology
PSY	5318	Learning Theories
PSY	5333	Theories of Personality
SOC	5313	American Minorities
SOC	5360	Sociology of Education
SPAN	6303	Studies in Hispanic Civilization

Electives not from this group must have the approval of the graduate advisor.

TOTAL

36 hours

Master of Arts DegreeMajor
English as a Second Language

Non-Thesis

Major

Thirty-six semester hours and no thesis, with the option of taking up to 9 hours in one or more related fields.

Requirements

(21 semester hours):

ENG	6350	Introduction to Descriptive Linguistics for Teachers
ENG	6321	Studies in Language and Culture
ENG	6302	Modern English Syntax
ENG	6328	Introduction to English as a Second Language
ENG	6329	Problems in English as a Second Language
ENG	6352	Practicum in English as a Second Language
ENG	6353	ESL Testing

Electives

(15 semester hours):

At least 6 semester hours from the following:

ENG	6317	English Phonological Systems
ENG	6325	Studies in Composition Techniques
ENG	6351	Problems in Linguistics

9 additional semester hours. Students are advised to take them from within the English Department or from the following courses:

ED	6324	Second Language Teaching: Theory and Methodology
PSY	5318	Learning Theories
PSY	5333	Theories of Personality
SOC	5313	American Minorities
SOC	5360	Sociology of Education
SPAN	6303	Studies in Hispanic Civilization

TOTAL

36 hours

Requirements by the Department of English for a Master of Arts Degree in Interdisciplinary Studies with Concentration in English

In addition to the general requirements stated elsewhere in this bulletin, the following specific requirements must be met:

1. Applicants who wish to concentrate in English must have completed at least six advanced undergraduate hours in English.
2. The choice of courses in the concentration and other fields will be determined through consultation between the student and the departmental graduate advisor.
3. To receive a M.A. in Interdisciplinary Studies with a Concentration in English, one must pass one three-hour written exit examination. Subject area will be determined in consultation with the departmental graduate advisor.

Master of Arts Degree in Interdisciplinary StudiesConcentration
English

Thesis

Eighteen semester hours in English (including thesis) and eighteen semester hours in other fields.

Requirements:

ENG 6300	Bibliography and Research Methods
ENG 7300, 7301	Thesis

TOTAL 36 hours

Master of Arts Degree in Interdisciplinary StudiesConcentration
English

Non-Thesis

Eighteen semester hours in English without thesis and eighteen semester hours in other fields.

Requirements:

ENG 6300	Bibliography and Research Methods
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TOTAL 36 hours

Course Descriptions**English****ENG 1301 COMPOSITION***Fall, Spring, Summer*

Development of the student's 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: A pass in English 1320. Or satisfactory score on the English portion of the ACT exam.

ENG 1302 RHETORIC*Fall, Spring, Summer*

Development of the student's ability 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, 1387 or 1406.

ENG 1310 READING-VOCABULARY*Fall, Spring, Summer*

Development of student's ability to read college level materials. Emphasis on vocabulary and word recognition skills, comprehension skills, study skills, 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*Fall, Spring, Summer*

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. Required of some students on the basis of their ACT scores. 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 M.T.E.L. is required for entrance.)

ENG 1387 RHETORIC AND COMPOSITION (HONORS PLAN)*Fall*

Study and practice of writing effectiveness, emphasis on expository writing and the research paper.

Prerequisite: Admission to honors studies or by invitation.

ENG 1388 RHETORIC AND LITERATURE (HONORS PLAN)*Spring*

Study and practice of writing effectiveness and literary interpretation. Emphasis on critical analysis of essays, fiction, and poetry.

Prerequisite: ENGLISH 1387 or by invitation.

ENG 1406 ENGLISH FOR FOREIGN STUDENTS*Fall, Spring*

For foreign students or any student born outside the United States who lacks proficiency in English. Expository themes and readings in the essay, with a brief introduction to literature. Includes a language lab. (Student may receive credit once for ENG 1301, 1387, 1406.)

ENG 2300 INTRODUCTION TO LITERATURE*Fall, Spring, Summer*

Introduction to literary genre, with special emphasis on the short story, and novel or novella, drama, and poetry. Requires careful reading and writing critical essays about individual works.

Prerequisite: Minimum grade of "C" in six semester hours of required freshman English.

ENG 2303 READINGS IN AMERICAN LITERATURE*Fall, Spring, Summer*

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 six semester hours of required freshman English.

ENG 2305 READINGS IN ENGLISH LITERATURE*Fall, Spring, Summer*

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 six semester hours of required freshman English.

ENG 2307 READINGS IN WORLD LITERATURE*Fall, Spring, Summer*

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 six semester hours of required freshman English.

ENG 2308 READINGS IN SPECIAL TOPICS*Fall, Spring, Summer*

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 schedule of classes. 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 six semester hours of required freshman English.

ENG 2309 TECHNICAL REPORT WRITING*Fall, Spring, Summer*

A course designed especially for students who desire further training in composition of a practical and advanced character. Exercises in fundamental forms followed by the special types of reports used in engineering, science, and business, one research paper, letter, and oral reports.

Prerequisite: Minimum grade of "C" in six semester hours of required freshman English.

ENG 2313 READINGS IN DRAMATIC LITERATURE*Fall, Spring*

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. May be counted as English or Communications.

Prerequisite (For English credit): Minimum grade of "C" in six semester hours of required freshman English.

ENG 2387 READINGS IN WORLD LITERATURE (HONORS PLAN)*Fall*

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)*Spring*

A study of selected works from western literature: Renaissance through modern.

Prerequisite: Admission to honors studies or by invitation.

ENG 3301 MEDIEVAL LITERATURE*Fall of even years*

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 semester hours of English.

ENG 3304 THE EIGHTEENTH CENTURY*Spring of odd years*

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 semester hours of English.

ENG 3305 THE ROMANTIC PERIOD*Fall of even years*

A study of the development of romanticism in France, Germany and England, with the main emphasis on English writers.

*Prerequisite: 12 semester hours of English.***ENG 3306 THE ENGLISH NOVEL TO 1850***Fall of even years*

A study of the origins and development of the English novel with emphasis on the major novelists.

*Prerequisite: 12 semester hours of English.***ENG 3307 THE ENGLISH NOVEL FROM 1850 TO PRESENT***Spring of odd years*

A study of the continuing development and techniques of the English novel with emphasis on the major novelists.

*Prerequisite: 12 semester hours of English.***ENG 3309 DEVELOPMENT OF THE AMERICAN NOVEL***Spring of odd years*

A study of the American novel from its beginnings to the present, with emphasis on the major novelists.

*Prerequisite: 12 semester hours of English.***ENG 3310 TWENTIETH CENTURY ENGLISH AND AMERICAN POETRY***Summer*

A study of the trends, movements in contemporary poetry, with emphasis on the works of the major writers.

*Prerequisite: 12 semester hours of English.***ENG 3312 SURVEY OF AMERICAN LITERATURE***Fall*

A chronological study of the principal authors, their works and the trends in American literature, from the Colonial period to the Civil War.

*Prerequisite: 12 semester hours of English.***ENG 3313 SURVEY OF AMERICAN LITERATURE***Spring*

A chronological study of the principal authors, their works and the trends in American literature, from the Civil War to the Twentieth Century.

*Prerequisite: 12 semester hours of English.***ENG 3317 THE SHORT STORY AND THE NOVELLA***Fall of odd years*

A study of the development and technique of the short story and novella with emphasis on literary appreciation.

*Prerequisite: 12 semester hours of English.***ENG 3319 INTRODUCTION TO DESCRIPTIVE LINGUISTICS***Fall and Summer*

An introduction to the methods of linguistics science with emphasis on problem solving techniques and the application to specific problems.

*Prerequisite: 12 semester hours of English.***ENG 3320 ADVANCED TOPICS IN ENGLISH***Spring and on demand*

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 semester hours of English.***ENG 3321 LANGUAGE AND CULTURE***Spring of odd years*

Systematic exploration of social aspects of language and language use, including language attitudes, socio-linguistic dynamics of language contact situations, language learning, and the social and linguistic nature of dialects, language variation, and language change.

*Prerequisite: 12 semester hours of English.***ENG 3322 POETRY***Summer*

An in-depth study of the art and nature of poetry, with emphasis on sounds, the forms, the language and the modes of poetry and including a survey of the techniques and terminology of poetry analysis.

Prerequisite: 12 semester hours of English.

ENG 3324 THE LATER NINETEENTH CENTURY*Fall of odd years*

A study of literature from 1832 to the end of the Nineteenth Century, with the chief emphasis upon the great prose writers of Victorian England: Carlyle, Ruskin, Arnold, Huxley, Dickens, Thackeray.

Prerequisite: 12 semester hours of English.

ENG 3327 PRACTICAL WRITING IMPROVEMENT FOR THE NON-ENGLISH MAJOR*On Demand*

A course for the non-English major based on the awareness that writing is both an exploration of the self and a communication with others. Emphasis to be placed on improving style and fluency in analysis, exposition, and argument.

Prerequisite: 12 semester hours of English.

ENG 3330 ENGLISH GRAMMAR*Spring and Summer*

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*On demand*

A chronological study of the principal authors, their works, and the trends in English literature from the Anglo-Saxon period to the beginning of the Romantic movement.

Prerequisite: 12 semester hours of English.

ENG 3332 SURVEY OF ENGLISH LITERATURE*On demand*

A chronological study of the principal authors, their works, and the trends in English literature from pre-Romantic poetry to the Twentieth Century.

Prerequisite: 12 semester hours of English.

ENG 4301 SHAKESPEARE*Spring*

A study of representative plays in comedy, history and tragedy.

Prerequisite: 12 semester hours of English.

ENG 4302 MODERN ENGLISH SYNTAX*Fall of odd years*

Studies in modern English syntax with attention given to investigative methods and findings of contemporary linguistic analysis.

Prerequisite: ENGLISH 3319.

ENG 4306 THE FRONTIER IN AMERICAN LITERATURE*Spring of even years*

A study of the influence of the American frontier on American literature, with special emphasis on the literature and folklore of the southwest and of the cattle kingdom.

Prerequisite: 12 semester hours of English.

ENG 4308 HISTORY OF THE ENGLISH LANGUAGE*Spring of even years*

A history of the English language from the Anglo-Saxon period to the present.

Prerequisite: 12 semester hours of English.

ENG 4309 CHAUCER*Summer*

A study of selected works of the greatest English poet of the Fourteenth Century.

Prerequisite: 12 semester hours of English.

ENG 4310 AMERICAN LITERATURE OF THE SOUTH*Fall of even years*

A study of the works of representative writers of the South.

Prerequisite: 12 semester hours of English.

ENG 4312 MILTON*Spring of even years*

A study of the major poems and selected prose and minor poetry.

Prerequisite: 12 semester hours of English.

ENG 4314 CONTRASTIVE GRAMMAR*Summer of even years*

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. May be counted as English or Spanish 4314.

Prerequisite: ENGLISH 4302 or SPANISH 3305.

ENG 4316 MEXICAN AMERICAN LITERATURE*Fall of odd years*

A study of the literature by and about Mexican Americans, with emphasis on the literary techniques and the cultural reflection in this literature.

Prerequisite: 12 semester hours of English.

ENG 4317 ENGLISH PHONOLOGICAL SYSTEMS*Spring of even years*

A study of the sound structure and system of modern English with attention given to the methods and findings of contemporary linguistics.

Prerequisite: ENGLISH 3319.

ENG 4318 APPROACHES TO LITERATURE*On demand*

A study of the characteristics of poetry, drama, and fiction, and of the major approaches to these genres.

Prerequisite: 12 semester hours of English.

ENG 4322 CREATIVE WRITING I*Spring of even years*

Practice in the writing of poetry and brief prose; with a study of literary forms, techniques and values from the writer's point of view.

Prerequisite: 12 semester hours of English or permission of instructor.

ENG 4325 COMPOSITION TECHNIQUES*Fall, Spring and Summer*

A study of advanced composition techniques, including theories and methods of teaching composition skills.

Prerequisite: 12 semester 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.

ENG 4328 INTRODUCTION TO ENGLISH AS A SECOND LANGUAGE*Fall and Summer*

A study of the process of learning English as a second language. Special attention given to problems encountered in reading, writing, and comprehending English.

ENG 4329 ESL THEORY AND PRACTICE*Spring*

Review and assessment of various current pedagogical theories concerning the teaching of English as a Second Language. Requires tutorial participation in the departmental ESL laboratory.

Prerequisite ENGLISH 4328

ENG 4330 THEORIES OF GRAMMAR, DIALECTS, AND LANGUAGE PERFORMANCE*Fall*

A survey of dialects, language performance, and contrastive analyses of grammar as they are applicable to the bilingual and/or second language learner. Designed for, but not limited to, prospective teachers of students with limited English proficiency and/or teachers of ESL students.

Prerequisites: ENG 3319, 3330, SPAN 3330.

ENG 4331 PROBLEMS IN GRAMMAR, DIALECTS, AND LANGUAGE PERFORMANCE*Spring*

A study of the second language learner's transition from regional Spanish to standard English. Emphasis on the particular characteristics of the English and Spanish dialects of the region and the manner in which they interrelate. The course will treat theory already learned as well as that presented in the course in the light of practical methodological tools.

Prerequisites: SPAN 2302, 2308.

Prerequisites for bilingual certification students: ENG 3319, 3330, SPAN 3330, ENG/SPAN 4330.

ENG 6300 BIBLIOGRAPHY AND RESEARCH METHODS*Spring*

A survey of the chief source materials of literary history and criticism and an introduction to methods and aids in literary research methods. Required of all graduate English majors.

ENG 6302 MODERN ENGLISH SYNTAX*Fall of odd years*

Studies in Modern English syntax with attention given to investigative methods and findings of contemporary linguistic analysis. Special emphasis on the structure of English as a language.

Prerequisite: English 6350, or consent of Instructor.

ENG 6315 WORKSHOP IN CREATIVE WRITING*Spring of even years*

Work in all genres for advanced students with a serious interest in publishing.

ENG 6316 STUDIES IN MEXICAN-AMERICAN LITERATURE*Fall of odd years*

Advanced study of the literature by and about Mexican Americans, with emphasis on the literary techniques and the cultural reflections in this literature.

ENG 6317 ENGLISH PHONOLOGICAL SYSTEMS*Spring of even years*

A study of sound structure and system of modern English with attention given to methods and findings of contemporary linguistics. Special emphasis on the articulatory means and the variables influencing the sound system as it is used.

Prerequisite: English 6350.

ENG 6318 LITERATURE IN THE SECONDARY SCHOOL*Fall and Summer*

Resources available for the teacher of English with consideration of analytical techniques.

ENG 6321 STUDIES IN LANGUAGE AND CULTURE*Spring of odd years*

Advanced study of social aspects of language and language use, including language attitudes, socio-linguistic dynamics of language contact situations, language learning, and the social and linguistic nature of dialects, language variation, and language change. Requires a research project.

ENG 6325 STUDIES IN COMPOSITION TECHNIQUES*Fall, Spring, Summer*

Advanced study of composition theory and techniques and methods of teaching composition, with special emphasis on teaching college freshman English composition. Required of all English graduate teaching assistants.

ENG 6328 INTRODUCTION TO ENGLISH AS A SECOND LANGUAGE*Fall and Summer*

A study of ESL teaching methods and techniques and their application to specific language performance skills. Special emphasis on the linguistic, socio-linguistic, and psycho-linguistic bases for selecting appropriate ESL methods and techniques.

Prerequisite: Eng 3319 or 6350 (Eng 3330 or 6351 recommended for ESL Endorsement students.)

ENG 6329 PROBLEMS IN ENGLISH AS A SECOND LANGUAGE*Spring*

Studies in special problem areas of language and practice which prospective teachers of ESL students will encounter in the classroom. May be repeated once for credit when the topic varies.

Prerequisite: English 6328.

ENG 6344 STUDIES IN GRAMMAR, DIALECTS, AND LANGUAGE PERFORMANCE*Fall*

Studies of grammar, dialects, and language performance as they are applicable to the bilingual and/or second language learner.

ENG 6345 PROBLEMS IN GRAMMAR, DIALECTS, AND LANGUAGE PERFORMANCE*Spring*

A study of the second language learner's transition from regional usage to standard usage. Emphasis upon practical implementation of theories of grammar, dialects, and language performance.

Prerequisite: ENG/SPAN 6344.

ENG 6347 PROBLEMS IN LITERARY CRITICISM*Spring of odd years*

Major aesthetic theories related to exercises in practical criticism.

ENG 6350 INTRODUCTION TO DESCRIPTIVE LINGUISTICS FOR TEACHERS*Fall and Summer*

An introduction to the methods of linguistics science with emphasis on problem solving techniques and the application to specific problems, includes a research project exploring the application of linguistics to specific teaching situations. Not open to students with credit in ENG 3319.

ENG 6351 PROBLEMS IN LINGUISTICS*Spring*

Studies in modern linguistics with emphasis on the practical help which the science offers to the student of the English language. May be repeated once when the emphasis varies. (Special topics to be announced in schedule of classes.)

Prerequisite: ENGLISH 3319, 6350 or consent of the instructor.

ENG 6352 PRACTICUM IN ESL*Spring*

Supervised experience in teaching/working with learners of ESL in (a) English 1406, (b) a tutorial or (c) a laboratory. Actual experience will be based on theoretical principles and methodology of modern language teaching. Sample lesson plans will be developed and tried under the supervision of trained ESL personnel in a university context in order to meet the needs of ESL learners.

Prerequisite: English 6329, or consent of Instructor.

ENG 6353 ESL TESTING*Summer*

Evaluation of second language learners of English following the principles and guidelines for diagnostic, placement, proficiency, and classroom testing in ESL. Areas covered include principles and procedures for (a) selecting (b) preparing (c) administering and (c) interpreting results of tests of ESL learning.

Prerequisite: English 6328, 6329.

ENG 6360 STUDIES IN ENGLISH LITERATURE*Usually 3 per year*

Extensive study in English literature. May be repeated for credit when the topic varies. (Special topics to be announced in schedule of classes.)

ENG 6370 STUDIES IN AMERICAN LITERATURE*Usually 3 per year*

Extensive study in American literature. May be repeated for credit when the topic varies. (Special topics to be announced in schedule of classes.)

ENG 6379 STUDIES IN COMPARATIVE LITERATURE: CLASSICAL TO MEDIEVAL*On Demand*

The comparison of particular topics, motifs, or genres in the literature of two or more languages or cultures.

ENG 6380 STUDIES IN COMPARATIVE LITERATURE: RENAISSANCE TO MODERN*On Demand*

The comparison of particular topics, motifs, or genres in the literature of two or more languages or cultures.

ENG 6390 STUDIES IN SPECIAL TOPICS*On Demand*

Extensive study in topics not limited to American or English literature. May be repeated for credit when the topic varies.

ENG 7300 THESIS*On Demand***ENG 7301 THESIS***On Demand*

Finance

See Department of Marketing, Finance and General Business

French

See Department of Modern Languages & Literatures

General Business

See Department of Marketing, Finance and General Business

Geography

See Department of Physical Science

Geology

See Department of Physical Science

German

See Department of Modern Languages & Literatures

Department of Health and Kinesiology

Dr. Charles Parkinson, Chair

Full-Time Faculty

Methodology

Guerrero, Oton Jr. (M.S., Texas A&I 1955; assoc. prof.) Coaching

*Guinn, Robert (Ph.D., Texas A&M 1974; prof.) Health Education

Hawkins, Jeanette (M.Ed., West Texas State 1966; asst. prof.) Gymnastics

*Jorgensen, Layne (Ph.D. Louisiana State 1971; assoc. prof.) Biomechanics, Research Methods

Ogletree, Alfred H. (M. Ed., Texas A&M 1955; assoc. prof.) Coaching

*Parkinson, Charles (PED, Indiana 1966; prof.) Health Education and Tests and Measurements

*Rabke, Mary Lee (Ph.D., Texas Woman's 1959; prof.) Motor Learning, Coaching, History of Physical Education

*Semper, Thomas (Ph.D., Texas A&M 1971; assoc. prof.) Physiology of Exercise, Secondary School Methods

Sturdivant, Diane F. (M.S. Kansas State Teacher's 1955, asst. prof.) Movement Education, Elementary School Methods

Williams, Walter S. (M.S. North Texas State 1955; prof.) Sports Education

The Department of Health and Kinesiology offers a Bachelor of Science degree with majors in Health and Kinesiology. The department 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 Physical Education.

In teacher certification the following plans are offered:

Health

Elementary Option I

Elementary Option II

Secondary Option II

Kinesiology

Elementary Option I

Elementary Option II

Secondary Option II

All-Level Kinesiology Option II

The University College requirement for all students is four semester hours of credit in kinesiology. This requirement is met during the freshman and or sophomore years. Students who are unable to participate in physical activity courses are required to take HE 2301 to satisfy the requirement.

Special UC/GE Requirements for Bachelor of Science Degrees in Health and Kinesiology

Natural Science

Biol. 2403 and 2404 required

PE 1201 and 1200 or 2252 or 2280 (for Kinesiology majors only)

Health Degree Requirements

The requirements and applications for degree and/or certification programs under the current catalog must be completed prior to September 1, 1991. Students pursuing teacher certification after August 31, 1989, must enter under those programs prescribed by the new standards for teacher education. Prospective teacher education students should consult with their major advisors and the appropriate department in the School of Education.

Major in Health

30 semester hours in Health of which 15 semester hours must be advanced; 2403 and 2404 are required.

Minor in Health:

18 semester hours in Health, of which 6 semester hours must be advanced.

Teacher Certification in Health

Elementary Option I: 12 semester hours in Health of which 6 semester hours must be advanced; must include HE 1354, HE 2352, and 6 semester hours from HE 3373, 3374, or 3375. 8 semester hours of biological science are required, preferably Biology 2403 and 2404.

Elementary Option II: 18 semester hours in Health, of which 9 semester hours must be advanced; must include HE 1352, 1354, HE 2352, and 6 semester hours from HE 3373, 3374, or 3375 and 3 semester hours of electives. 8 semester hours of biological science are required, preferably Biology 2403 and 2404.

Secondary Option II: 24 semester hours in Health of which 12 semester hours must be advanced; HE 1354, HE 4350, and 4352. Elect 3 semester hours from HE 3374, 3375, 4357, or 4358 and 12 semester hours of electives.

30 semester hours of professional education. Must include EDCI 1301, 3301, 3302, 3303, 3312, 4332, 4333, 4351 and 4641. Biology 2403 and 2404 are required.

Kinesiology Degree Requirements

The requirements and applications for degree and/or certification programs under the current catalog must be completed prior to September 1, 1991. Students pursuing teacher certification after August 31, 1989, must enter under those programs prescribed by the new standards for teacher education. Prospective teacher education students should consult with their major advisors and the appropriate department in the School of Education.

Major in Kinesiology

42 semester hours in Kinesiology are required. 30 semester hours are in professional Kinesiology, of which 15 semester hours must be advanced; must include PE 1351, 1354 or 3352, 2354, 3312, 3319, 3353, 4351, and 9 semester hours (6 advanced) electives. 12 semester hours are in Kinesiology activity courses in addition to the Kinesiology requirement in General Education; must select 4 semester hours from each of the three areas:

- (1) 1250/2202; 1255/2201/2221
- (2) 2203/2213; 2204/2256/2264
- (3) 2206/2216; 2207/2208/2273; 2225/2226; 2257/2258/2259/2241/2242.

Biology 2403 and 2404 are required.

Minor in Kinesiology

18 semester hours in professional Kinesiology, of which 6 semester hours must be advanced.

Teacher Certification in Kinesiology

Elementary Option I: 12 semester hours in professional Kinesiology of which 6 semester hours must be advanced. Must include PE 3310, 3313, 3317, and 3356.

Elementary Option II: 18 semester hours in professional Kinesiology of which 9 semester hours must be advanced. Must include PE 3310, 3313, 3317, 3356, 3357, and elect 3 semester hours from PE 3300, 3302, 3303, 3305, 3320.

Secondary Option II: 42 semester hours in Kinesiology are required. 24 semester hours are in professional Kinesiology of which 12 semester hours must be advanced; must include PE 1351, 1354 or 3352, 2354, 3312, 3319, 3353, 4351, 4354 and 6 semester hours elected from PE 3300, 3302, 3303, 3304, 3305, 3320, 4351. 12 semester hours are in Kinesiology activity courses; must select 4 semester hours from each of the three areas:

- (1) 1250/2202; 1255/2201/2221
- (2) 2203/2213; 2204/2256/2264
- (3) 2206/2216; 2207/208/2273; 2225/2226; 2257/2258/2259/2241/2242.

30 semester hours of professional education. Must include EDCI 1301, 3301, 3302, 3303, 3312, 4332, 4333, 4351, and 4641.

Biology 2403 and 2404 are required.

All-Level Option II: 48 semester hours in Kinesiology are required. 36 semester hours are in professional Kinesiology of which 18 semester hours must be advanced; must include PE 1351, 1354 or 3352, 2354, 3312, 3319, 3353, 3356, 3357, 4351, 4354, and 6 semester hours elected from PE 3300, 3302, 3303, 3304, 3305, 3320. 12 semester hours are in Kinesiology activity courses; must select 4 semester hours from each of the three areas:

(1) 1250/2202; 1255/2201/2221

(2) 2203/2213; 2204/2256/2264

(3) 2206/2216; 2207/2208/2273; 2225/2226; 2257/2258/2259/2241/2242.

33 semester hours of professional education. Must include EDCI 1301, 3302, 3303, 3311, 3312, 3323, 4332, 4333, 4311, and 4641.

Biology 2403 and 2404 are required.

Athletic Coaching Specialization

In an effort to meet the demand for men and women coaches in all sports, an Athletic Coaching Specialization program is offered. With the completion of this program, a Departmental Certificate is awarded. The student need not be either a major or minor in Physical Education 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)

PE	2354	Biomechanics
PE	3352	Care and Prevention of Athletic Injuries
PE	3353	Physiology of Exercise
HE/PE	1354	First Aid

SELECT FOUR FROM THE FOLLOWING: (12 hours)

PE	3300	Theory of Coaching Football
PE	3302	Teaching Individual Sports
PE	3303	Theory of Coaching Basketball
PE	3304	Theory of Coaching Baseball
PE	3305	Theory of Coaching Track and Field
PE	3320	Theory of Coaching Volleyball

Graduate Program

The Department of Health and Kinesiology offers a Master of Education Degree with a specialization in Physical Education. Students must meet minimum Graduate School and School of Education entrance requirements, complete an oral examination following the completion of twelve semester hours of graduate work, and pass a comprehensive written examination at the end of the program.

Master of Education Degree in Physical Education

Major		Certificate
Physical Education		Professional
SPECIALIZATION AREA		(24 hours)
Required:		(12 hours)

PE	6301	History and Philosophy of Physical Education
PE	6302	Methods of Research in Physical Education
PE	6303	Applied Tests and Measurements in Physical Education
PE	6304	Scientific Foundations of Physical Education

Electives in Major Area: (12 hours)

PE	6305	Curriculum Construction in Physical Education
PE	6306	Planning and Use of Facilities for Physical Education
PE	6307	Psychology of Motor Learning
PE	6308	Current Readings in Physical Education
PE	6309	Advanced Techniques for Teaching Motor Skills, Elementary Level
PE	6310	Advanced Techniques for Teaching Motor Skills, Secondary Level
PE	6311	The Teaching of Physical Education Activity Classes
PE	6312	Organization and Conduct of Dance in Education
PE	6320	Independent Research
PE	5313	Workshop in Physical Education
PE	5351	Physical Education for the Handicapped Student
PE	5357	Health Education Seminar
PE	7300, 7301	Thesis

PROFESSIONAL EDUCATION	(6 hours)
ED 6388 Socio-Cultural Foundations of Education	
3 hours from:	
ED 6302 Advanced Educational Psychology	
ED 6311 Advanced Child Psychology	
ED 6341 Advanced Adolescent Psychology	
RESOURCE AREA	(6 hours)
<i>Electives:</i>	
<i>With the approval of his advisor, the student will select 6 semester hours of graduate level courses other than those offered in Education and in Health and Physical Education to complete his degree requirements.</i>	
TOTAL	36 hours

Course Descriptions

Health Education

H E 1352 COMMUNITY AND ENVIRONMENTAL HEALTH

Fall

Basic community health problems with emphasis upon communicable disease, waste disposal, safe water, food and drug control and the improvement of community health education.

H E 1354 SAFETY AND FIRST AID

Fall, Spring

Basic knowledges 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.

H E 2301 PERSONAL HEALTH APPRAISAL

Fall, Spring

Introduction to personal health risk appraisal procedures that are intended to provide the intellectual and motivational base for positive health related behavior modification.

H E 2352 THE HEALTH PROGRAM IN THE ELEMENTARY SCHOOL

Fall, Spring

Basic principles of school health education, methods of teaching and the administration of the health program in the elementary school. For elementary majors only.

H E 2371 HEALTH PROBLEMS IN THE USE OF ALCOHOL, TOBACCO AND NARCOTICS

Spring

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.

H E 2372 NUTRITION AND HEALTH

Fall

Study of food constituents relating to human nutritive needs and sources through the span of life, infancy through later adulthood. Meets Texas Education Agency, Chapter 75 essential health elements.

H E 2373 GROWTH, DEVELOPMENT, AND FITNESS

Spring

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.

H E 3373 SOCIAL HEALTH AND FAMILY LIFE

Spring

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.

H E 3374 CHRONIC AND DEGENERATIVE DISEASE

Fall

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.

H E 3375 CONSUMER HEALTH*Spring*

Selection, evaluation and understanding of health information, medical services, health product and advertising and socio-cultural factors in consumer health protection.

H E 4350 SECONDARY SCHOOL HEALTH PROGRAM*Fall*

Organization and structure of the secondary school health program. Delineation and function of the various phases of the program, and examination of alternative teaching techniques and methodologies.

Prerequisite: 15 hours of Health Education.

H E 4352 PRACTICUM IN HEALTH Curriculum Writing*Spring*

The development of curriculum materials appropriate to current methodologies. Special emphasis are placed upon Texas Education Agency recommended guidelines and teaching demonstrations of designed units.

Prerequisite: H E 4350

H E 4357 HEALTH WORKSHOP*Summer II alternating 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.

H E 4358 CURRENT HEALTH READINGS AND REPORTED RESEARCH*Fall, Spring*

Extensive gleaning of the literature to identify the latest concepts and research findings to provide the basis for discussion and the analysis of the relevance of such to the school health education program.

Physical Education**ACTIVITY COURSES****KIN 1160 DANCE PERFORMANCE-FOLKLORIC**

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 physical education requirement. May be repeated for credit.

KIN 1161 DANCE PERFORMANCE-CONCERT ENSEMBLE

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 physical education requirement. May be repeated for credit.

KIN 1200 SWIMMING I**KIN 1201 FITNESS AND MOTOR DEVELOPMENT****KIN 1250 SPEEDBALL-SOCCER****KIN 1255 SOFTBALL****KIN 2117 RULES AND OFFICIATING OF INDIVIDUAL SPORTS**

The teaching of officiating, study of DGWS rules. Laboratory experience required.

KIN 2201 FLAG FOOTBALL

\$3.00 fee.

KIN 2202 VOLLEYBALL

\$3.00 fee.

KIN 2203 BADMINTON I

\$6.00 fee.

KIN 2204 TENNIS I

\$6.00 fee.

KIN 2206 WEIGHT TRAINING I

\$5.00 fee.

KIN 2207 TRACK AND FIELD**KIN 2208 GYMNASTICS I**

\$3.00 fee.

KIN 2213 BADMINTON II

\$6.00 fee.

- KIN 2216** **WEIGHT TRAINING II**
\$6.00 fee.
- KIN 2221** **BASKETBALL**
\$3.00 fee.
- KIN 2223** **SPANISH DANCE I**
\$6.00 fee.
- KIN 2225** **FOLK AND SQUARE DANCE**
\$3.00 fee.
- KIN 2226** **MODERN DANCE I**
\$3.00 fee.
- KIN 2227** **TAP DANCE I**
\$3.00 fee.
- KIN 2228** **MODERN DANCE II**
\$3.00 fee.
- KIN 2230** **MODERN JAZZ DANCE I**
- KIN 2231** **MODERN JAZZ DANCE II**
\$3.00 fee.
- KIN 2232** **AEROBIC DANCE**
\$3.00 fee.
- KIN 2235** **MEXICAN FOLKLORIC DANCE**
- KIN 2236** **BALLET I**
\$3.00 fee.
- KIN 2237** **BALLET II**
\$3.00 fee.
- KIN 2241** **RACQUETBALL I**
\$6.00 fee.
- KIN 2242** **RACQUETBALL II**
\$6.00 fee.
- KIN 2252** **SWIMMING II**
- KIN 2253** **SOCIAL DANCE**
- KIN 2256** **TENNIS II**
\$6.00 fee.
- KIN 2257** **GOLF**
There is a fee required to be paid directly to the golf course for the use of non-university facilities. At the time of publication of this bulletin the fee was \$10.00.
- KIN 2258** **ARCHERY**
\$8.00 fee.
- KIN 2259** **BOWLING**
There is a fee required to be paid directly to the bowling alley for the use of non-university facilities. At the time of publication of this bulletin the fee was \$50.00.
- KIN 2264** **FENCING**
\$5.00 fee.
- KIN 2273** **GYMNASTICS II**
\$3.00 fee.
- KIN 2280** **ADVANCED LIFE SAVING**
\$5.00 fee.
- KIN 2281** **WATER SAFETY INSTRUCTION**
Prerequisite: P E 2280 or current senior life saving certificate.
\$5.00 fee.
- KIN 2291** **HORSEMANSHIP**
There is a fee required to be paid directly to the stables for the use of non-university facilities. At the time of publication of this bulletin the fee was \$280.00.

THEORY COURSES

- KIN 1351** **INTRODUCTION TO HEALTH AND KINESIOLOGY**
Fall, Spring
Orientation to the field of health, physical education and recreation, its scope, organization of professional activities, vocational opportunities and professional qualifications.

KIN 1354 SAFETY AND FIRST AID*Fall, Spring*

Basic knowledges 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.

KIN 2354 BIOMECHANICS*Fall, Spring*

A study of the structural and mechanical factors which interact with human movement.
Prerequisite: BIOL 1402, 2403.

KIN 3300 THEORY OF FOOTBALL*Fall, Alternate years*

A study and participation in the fundamentals and techniques, rules and strategies of football.

KIN 3302 TEACHING INDIVIDUAL SPORTS*On demand*

The current theories of teaching selected individual/dual sports.

KIN 3303 THEORY OF BASKETBALL*Spring*

A study and participation in the fundamentals, techniques, rules and strategies of basketball.

KIN 3304 THEORY OF BASEBALL*Spring, Alternate years*

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*Spring alternate years*

A study involving the use of theory in the analysis and interpretation of coaching techniques and fundamentals in track and field.

KIN 3310 MODIFIED TEAM AND INDIVIDUAL SPORTS*Fall alternate years*

Analysis and presentation of sports in a modified form appropriate for the elementary school.

KIN 3312 DANCE ACTIVITIES IN THE SECONDARY SCHOOL*Fall, Spring*

Analysis of skill and techniques in teaching social, folk, and square dance.

KIN 3313 DANCE FOR CHILDREN*Fall, Spring*

This course is intended to provide both theory and practice in planning, organizing and presenting dance activities appropriate for grades K-6. Special emphases are placed upon the techniques of teaching rhythm skills, creative rhythms, singing games, and folk dances appropriate for children enrolled in the elementary school.

KIN 3317 GYMNASTICS IN THE ELEMENTARY SCHOOL*Fall, Spring*

Analysis of skills and techniques of teaching gymnastics-related activities to elementary level students. Safety procedures in the use of playground facilities are stressed. This course is designed primarily for elementary education majors who are minoring in physical education.

KIN 3319 TUMBLING AND GYMNASTICS*Fall, Spring*

Analysis of skills and techniques in teaching basic tumbling and gymnastics.

KIN 3320 THEORY OF VOLLEYBALL*Fall*

A study involving the use of theory in the analysis and interpretation of coaching techniques and fundamentals of volleyball.

KIN 3352 CARE, TREATMENT AND PREVENTION OF ATHLETIC INJURIES*Fall*

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*Fall, Spring*

Basic systemic adaptations to exercise with specific emphasis on teaching physical education, and on training and conditioning athletes.

Prerequisite: KIN 2354.

KIN 3356 MOVEMENT EDUCATION*Fall, Spring*

A problem solving approach to the optimal development of human movement. The underlying principles, methods and techniques of movement education at the elementary level are presented.

KIN 3357 PHYSICAL EDUCATION IN THE ELEMENTARY SCHOOL*Fall, Spring*

Curriculum construction, material selections and methods of presenting physical education activities in the elementary school.

KIN 4313 WORKSHOP IN KINESIOLOGY*Fall, Spring*

This course is designed to provide in-depth experiences for the prospective teacher, coach and recreation leader in the development of both current theories and practices in presenting selected areas of physical education such as aquatics, dance, gymnastics and/or sports. The course may be repeated for credit, up to nine semester hours, when topic is different.

KIN 4351 THE ADAPTED KINESIOLOGY PROGRAM*Fall, Spring*

The selection and planning of physical education for students whose activity must be adapted due to demands by gravity, trauma, injury, congenital defect, illness, or disease.

KIN 4354 PHYSICAL EDUCATION FOR THE SECONDARY SCHOOLS*Fall, Spring*

A survey of activities for program planning in junior and senior high schools including unit construction, lesson planning, class organization, special programs and sources of materials. Laboratory experience to be arranged.

GRADUATE THEORY COURSES**KIN 5313 WORKSHOP IN PHYSICAL EDUCATION***Fall, Spring*

This course is designed to provide in-depth experiences for the prospective teacher, coach and recreation leader in the development of both current theories and practices in presenting selected areas of physical education such as aquatics, dance, gymnastics and/or sports. The course may be repeated for credit, up to nine semester hours, when the topic is different.

Prerequisite: 12 semester hours of physical education or approval of the instructor.

KIN 5351 PHYSICAL EDUCATION CURRICULUM FOR THE HANDICAPPED STUDENT

The selection and planning of physical education for students whose activity must be adapted due to demands imposed by gravity, trauma, injury, congenital defect, illness or disease. Laboratory work with students will be scheduled.

KIN 5357 HEALTH EDUCATION SEMINAR*Summer II alternating years*

For administrators, teachers, nurses, and community leaders. Topical discussion areas will center around the interests and needs of the participants and the communities.

KIN 6301 HISTORY AND PHILOSOPHY OF PHYSICAL EDUCATION*Spring*

Historical development of Physical Education from primitive to modern times. Philosophy of modern Physical Education with application to present day educational programs.

KIN 6302 METHODS OF RESEARCH IN PHYSICAL EDUCATION*Fall*

Introduction to methods and materials of research in the field. Approved methods of writing term papers and research papers.

KIN 6303 APPLIED TESTS AND MEASUREMENTS IN PHYSICAL EDUCATION*Fall*

A critical consideration of the importance and limitations of measurements in physical education. Emphasis placed on those measurements that are most needed today. The statistical treatment and interpretation of research data.

KIN 6304 SCIENTIFIC FOUNDATIONS OF PHYSICAL EDUCATION*Spring*

Background of physical education from biological, anatomical, and physiological aspects.

KIN 6305 CURRICULUM CONSTRUCTION IN PHYSICAL EDUCATION*Summer I alternate years*

A critical study of principles, problems and procedures in the construction of a physical education program. Attention will be given to the application of these principles in the construction of a course of study for a specific situation.

KIN 6306 PLANNING AND USE OF FACILITIES FOR HEALTH AND PHYSICAL EDUCATION*Summer I alternate years*

Principles, terminology and standards for planning construction, use and maintenance of facilities.

KIN 6307 PSYCHOLOGY OF MOTOR LEARNING

A study of the application of principles of psychology to learning situations involved in competitive sports. Emphasis will be given both to the general learning situations involved in the mastery of motor skills and to the special situations involved with individual and group problems of motivation and response.

KIN 6308 CURRENT READING IN PHYSICAL EDUCATION*On demand*

Extensive readings and discussion of selected topics in the field.

KIN 6309 ADVANCED TECHNIQUES FOR TEACHING MOTOR SKILLS, ELEMENTARY LEVEL*Summer II alternate years*

Practical and theoretical study of technique in presenting motor activity.

KIN 6310 ADVANCED TECHNIQUES OF TEACHING MOTOR SKILLS, SECONDARY LEVEL*Summer II alternate years*

Practical and theoretical study of technique in presenting motor activity.

KIN 6311 THE TEACHING OF PHYSICAL EDUCATION ACTIVITY CLASSES*Fall*

Designed to discuss problems of organization, evaluation, use of facilities, and other problems with teaching activity courses on the college level. Required of all graduate assistants.

KIN 6312 ORGANIZATION AND CONDUCT OF DANCE IN EDUCATION*On demand*

This course is intended to provide both theory and practice in presenting dance in the educational setting. It includes historical background programs of dance for grades K-12, conduct of performing groups, and production of public performances.

KIN 6320 INDEPENDENT RESEARCH*Fall, Spring*

Individual investigation of a problem in physical education that involves one of the techniques of research. Students will work under a designated faculty member and must have their research approved prior to registering.

KIN 7300 THESIS*On demand***KIN 7301 THESIS***On demand***Recreation****REC 2351 INTRODUCTION TO COMMUNITY RECREATION***On demand*

Scope of community recreation; its organization, and relation to other social institutions; program content and leadership.

REC 4655 PROFESSIONAL FIELD WORK*On demand*

Practical field experience working in a community recreation department under recreation director and faculty supervision.

Division of Health Related Professions

Julian Castillo, Director

Recognizing the need for the University to take a leading role in the education of the nurse and allied health professional, the Division, with the assistance and the cooperation of the Valley's Health Care Delivery Systems, is dedicated to providing

educational programs necessary to meet the needs for competent health workers in the Lower Rio Grande Valley and Texas.

The Division of Health Related Professions offers Associate of Applied Science degrees in Nursing Education, and Physical Therapist Assistant; Bachelor of Science in Dietetics, Medical Technology, Nursing Education, and Rehabilitative Services. General Admission requirements conform with those of the University. Specific variations of requirements are stated with each program description. In conjunction with the Rehabilitative Services program, the Division operates a Vocational Evaluation Center.

Interdisciplinary courses in health related professions are offered to: (1) promote and provide understanding of the role of personnel involved in the delivery of health care, (2) focus on the team approach to patient care, and (3) introduce the student to the wide range of health careers available.

The faculty and staff of the Division provide academic advisement and assistance to students pursuing health careers. Curricula for all health related programs are structured to provide theory as well as clinical learning experience. In order to provide the proposed clinical practicum, the University negotiated affiliation agreements with a number of health service facilities in the tri-county area.

Courses in health related professions are offered to: (1) promote and provide understanding of the role of personnel involved in the delivery of health care, (2) focus on the team approach to patient care, and (3) introduce the student to the wide range of health careers available.

Faculty:

Castillo, Julian (Ed.D., University of Houston)

Garcia, Rebecca H. (B.S., Pan American University; Division of H.R.P.)

Course Descriptions

Health Related Professions

HRP 1302 INTRODUCTION TO NURSING

Spring and 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 patient/client care.

Prerequisite: Approval of department.

HRP 1401 INTRODUCTION TO HEALTH RELATED PROFESSIONS

Fall & Spring

A survey of careers within the health service industry, their educational and clinical practice requirements, and employment opportunities. Correlated health service organization, history and trends, terminology, ethics, legal aspects, professional affiliations, team roles and relationships. Lecture/discussions will be designed to provide the student with specific information concerning the health related professions' roles in the provision of health care services. Three hours lecture and four hours lab per week. No prerequisite.

HRP 2301 INTRODUCTION TO SOCIAL AND LEGAL ASPECTS OF ALCOHOLISM

Fall & Spring

Introduction to traditional and contemporary bi-cultural aspects of alcoholism and alcohol abuse as related to family and social dysfunction. Identification of alcohol abuse characteristics which relate social deterioration to law enforcement and judicial systems. 3 hours lecture.

HRP 2351 INTRODUCTION TO CLINICAL NUTRITION

Fall, Spring, Summer

Basic principles of human nutrition with emphasis on the nutrients and factors which 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. Three hours lecture per week.

HRP 2352 FOOD PREPARATION

Fall and 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 meal service, and food economics. Three hours lecture and three hours laboratory per week.

HRP 2402 MEDICAL TERMINOLOGY*Fall & Spring*

This course is designed to introduce the student to analysis techniques, correct spelling and pronunciation of medical terms. The student will acquire a medical vocabulary, develop skills in recognizing medical terms by analyzing their elements and relating them to the corresponding anatomical site. Three hours of lecture and four hours of lab per week.

HRP 3303 CURRENT HEALTH LEGISLATION OF NATIONAL HEALTH POLICY SEMINAR*Fall*

Health legislation and its effect on health care and administration will be reviewed and implications for providers and consumers of services will be explored. Issues of liability, responsibility, malpractice insurance, health labor law and others will be examined. Titles XVIII, XIX, and XX of the Social Security Act will be studied. The most current national insurance bills before Congress will be reviewed. Three lecture hours.

Prerequisite: Approval of department, or Advanced Standing.

HRP 3310 SPECIAL TOPICS IN PATIENT CARE ISSUES*Arrangement*

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.

HRP 4342 SUBSTANCE ABUSE COUNSELING IN INSTITUTIONS*Fall*

Provides the student with a practical and applied knowledge of approaches to Alcohol and drug detoxification, effects of psychopharmacology, health problems requiring medical intervention, Milieu therapy, the team approach to treatment, individual and group therapy, uses of video taping and feedback evaluation of treatment effectiveness and legal/ethical issues in service delivery.

Prerequisite: Official admission into certificate program in substance abuse services. Concurrent enrollment in HRP 4443.

HRP 4443 INSTITUTIONAL PRACTICUM IN SUBSTANCE ABUSE COUNSELING

Provides a structured format for the concurrent integration and application of theory and practice learned in HRP 4342, Substance Abuse Counseling in Institutions. Institutional settings emphasize approaches to the treatment and rehabilitation of the individual, focusing on the personal and interpersonal problems of substance abuse. Placement in institutional settings are designed to expose the student to residential and nonresidential programs through the provision of direct patient care.

Prerequisite: Concurrent enrollment in HRP 4342.

Clinical Laboratory Science

Ashwood, Jeanette (Ed.D., Houston; M.T., Colorado; assist. prof.)

Hall, Shari L. (M.S., Corpus Christi State; M.T., UCLA Medical Center; assist. prof.)

Medical Technology is a profession in which theoretical knowledge in the fields of Biology, Chemistry, and Physics are applied in analysis of various cells, tissues, and body fluids from patients for diagnostic purposes. Medical Technologists assist in diagnosis, treatment, and prognosis of disease conditions through laboratory procedures in Hematology, Microbiology, Immunology, Blood Banking, Clinical Chemistry, and Urinalysis.

The pre-professional curriculum is composed of 99 semester hours of general education requirements, biology, and chemistry courses. Admission to the professional portion (senior year) of the Medical Technology program is limited; therefore, students are urged to keep high standards of performance during their pre-professional years.

In order to be accepted into the senior year professional medical technology curriculum, the student must make application to the Medical Technology Program upon completion of 70 semester hours of pre-professional course work, but no later than May 31st of each year. The Admissions Committee meets twice a year, in April and June. In their April

meeting the committee will consider all applications received before March 31st. Applications received after March 31st are considered on a space available basis. A completed application must contain official transcripts, three letters of reference, entrance examination scores, and a complete medical evaluation. Those Pan American University students not accepted into the program may satisfy their degree requirements by completing a one-year training program in a CAHEA accredited hospital-based Medical Technology program.

A student who does not wish to receive a degree from Pan American University, but who wishes to attend the professional portion of the curriculum must either:

hold a baccalaureate degree from an accredited institution and have completed 20 semester hours of Biology including a course in Microbiology and Immunology, 16 semester hours of Chemistry including a course in Biochemistry, and 3 semester hours of college level Mathematics.

OR

have at least 90 semester hours of college credits completed, with 20 semester hours of Biology including a course in Microbiology and Immunology, 16 semester hours of Chemistry including a course in Biochemistry or Organic Chemistry, and 3 semester hours of college level Mathematics.

The student should also produce a notarized letter from the registrar of his or her parent university stating that upon satisfactory completion of the Medical Technology curriculum offered at Pan American University, the student will be awarded a baccalaureate degree.

Medical Technology Advisory Council

Dr. Larry Dahm, Pathologist, Valley Baptist Medical Center, Harlingen, Texas

Dr. Richard Ballard, Pathologist, McAllen Methodist Hospital, McAllen, Texas

Mr. Clive Horn, Administrative Director of Pathology, McAllen Methodist Hospital, McAllen, Texas

Mr. Robert Vanderveer, Administrator, Knapp Memorial Methodist Hospital, Weslaco, Texas

Mr. John Mims, Administrator, McAllen Methodist Hospital, McAllen, Texas

Dr. Rodolfo Garza, Pathologist, Knapp Memorial Methodist Hospital, Weslaco, Texas

Mr. Bill Burns, Administrator, Rio Grande Regional Hospital, McAllen, Texas

Mr. Bill Elliot, Educational Director, Valley Baptist Medical Center, Harlingen, Texas

Mr. David Almquist, Laboratory Manager, Rio Grande Regional Hospital, McAllen, Texas

Mr. Jim Parrot, Chief Technologist, Valley Baptist Medical Center, Harlingen, Texas

Dr. Ernest Baca, Dean of Science and Math, Pan American University, Edinburg, Texas

Dr. David Flory, Medical Director, Valley Baptist Medical Center, Harlingen, Texas

Dr. Domingo Useda, Medical Director, Rio Grande Regional Hospital, McAllen, Texas

Mr. Ricardo Medina, Chief Technologist, Knapp Memorial Methodist Hospital, Weslaco, Texas

Degree Requirements:

A total of 142 semester hours including

24 semester hours in Biology, 20 semester hours in Chemistry, 8 semester hours of Physics or Clinical Laboratory Instrumentation, and 46 semester hours of Clinical Laboratory Sciences. Required courses are outlined in the curriculum below.

Certification Requirements:

Baccalaureate degree including 16 semester hours of Biological Sciences, 16 semester hours of Chemistry, 3 semester hours of College Algebra, and completion of the accredited Medical Technology program. Microbiology, Immunology, and Organic Chemistry courses should be part of the curriculum.

General Education Requirements for Bachelor of Science Degree in Medical Technology:

English (Freshman)	6 hours
English (Sophomore)	6 hours
Biology	24 hours

Chemistry	20 hours
College Algebra	3 hours
Political Science	6 hours
History	6 hours
P.E. Activities	4 hours
Computer Literacy	3 hours
Designated Electives:	6 hours

Six hours from one of the following:

- Foreign language
or
- Psy 1313, 2301, Soc 1313, 2301, Anth 1323, Art 1301

TOTAL 84 hours

Departmental Requirements:

HRP 1401 or 2402	4 hours
CLSC 3401, 3402 or Physics (8)	8 hours

TOTAL 12 hours

PROGRAM REQUIREMENTS

CLSC 4214, 4222, 4301, 4302, 4303, 4304, 4313, 4332, 4410, 4412, 4420, 4421, 4430, 4431
(total hours: 46).

SUGGESTED CURRICULUM

Medical Technology Major

Freshman Year
ENG 1301, 1302
BIOL 1401, 1402
CHEM 1401, 1402
PE 2 hours
HRP 1402 or 2402
MATH 1340

Junior Year
POLS 2313, 2314
ENG (Soph Lit) 6 hours
BIOL² 3401, 3403
CHEM 3401, 3403⁴
CLSC 4301
Electives 6 hours
Apply to Medical Technology
Program

Sophomore Year
HIST 2313, 2314
CLSC¹ 3401, 3402
BIOL Electives (8)
CHEM 2401
PE 2 hours
Elective 3 hours

Senior Year³
CLSC 4214, 4222, 4301, 4302,
4303, 4304, 4313, 4332, 4410,
4412, 4420, 4421, 4430, 4431
(See Special Notes Below)

Special Notes:

- Medical Technology Program is exempt from the University College General Education Requirements.
- Senior year courses include clinical practicum. Incomplete grades will be carried until completion of rotation in the appropriate clinical department.

Course Descriptions

Clinical Laboratory Science

CLSC 3401 CLINICAL LABORATORY INSTRUMENTATION I

Fall

Basic clinical chemistry instrumentation such as colorimeters, spectrophotometers, flame photometers, atomic absorption photometers, fluorometers, gamma counters, centrifuges, incubators, gas analyzers, and electrophoretic equipment will be dealt with. Basic laboratory mathematics, statistics, and electronics for general understanding, operation, and quality control of these instruments will also be presented. Students of Biology, Bio-chemistry, and Health Related Professions will find this course extremely useful.

Three hours of lecture and four hours of laboratory per week. Lab fee \$4.00.

Prerequisite: MATH 1340, CHEM 1401, 1402, and BIOL 1401, 1402, or Special Approval.

¹Physics 1401, 1402 may be substituted

²Upper level course in immunology may be substituted for BIOL 3403

³May attend an accredited Hospital-based MT program

⁴Second part of Organic (CHEM 3402) may be substituted for CHEM 3403

CLSC 3402 CLINICAL LABORATORY INSTRUMENTATION II*Spring*

Continuation of CLSC 3401. Automated clinical laboratory instruments in Chemistry, Hematology, Coagulation, Blood Banking, and Microbiology, and brief introduction to data handling. Three hours of lecture and four hours of laboratory per week. Lab fee \$4.00.

Prerequisite: CLSC 3401 or Special Approval.

CLSC 4214 IMMUNOHEMATOLOGY II*SS II*

Continuation of Immunohematology I to include clinical application. One hour lecture and three hours laboratory.

Prerequisite: Admission into Medical Technology Program, or Special Approval.

CLSC 4222 CLINICAL CHEMISTRY III*Spring*

Continuation of Clinical Chemistry II to include special chemistries. One hour lecture and three hours laboratory.

Prerequisite: Admission into Medical Technology Program, or Special Approval.

CLSC 4301 GENERAL INTRODUCTION TO THE CLINICAL LABORATORY*SS II*

Specimen collection and processing, basic microscopic techniques in Urinalysis, Microbiology, and Hematology. Two hours of lecture and three hours of laboratory. Lab fee \$4.00.

Prerequisite: Admission into Medical Technology Program, or Special Approval.

CLSC 4302 SEROLOGY*Fall*

Serodiagnostic tests for syphilis and febrile diseases; identification of antistreptococcal, antinuclear, and antihyroid antibodies; serologic procedures for C reactive proteins, rheumatoid arthritis, and parasitic and fungal infections. Two hours lecture and three hours laboratory. Lab fee \$4.00.

Prerequisite: Admission into Medical Technology Program, or Special Approval.

CLSC 4303 MEDICAL LABORATORY LEADERSHIP*SS I*

General principles of management, supervision, education, research, record keeping, and legal aspects of laboratory medicine will be presented. Overall review of all professional techniques and procedures and a comprehensive final examination will be administered.

Prerequisite: Admission into Medical Technology Program, or Special Approval.

CLSC 4304 URINALYSIS*Spring*

Lectures present the physiology of urine formation and the relationship of abnormalities in the urine of renal and systemic disease. Chemical tests and microscopic examination are utilized in the laboratory. One hour lecture and six hours laboratory.

Prerequisite: Admission into Medical Technology Program, or Special Approval.

CLSC 4313 IMMUNOHEMATOLOGY I*Fall*

Theoretical aspects of the immune response, its relation to the diagnosis of disease and to blood banking are presented. Detection, identification, and characterization of antibodies, blood grouping, and typing and compatibility testing are presented by laboratory experiments. Two hours lecture and three hours laboratory.

Prerequisite: Admission into Medical Technology Program, or Special Approval.

CLSC 4332 CLINICAL PARASITOLOGY*Spring*

Lecture and laboratory study on animal parasites producing disease in the human with emphasis on life cycle, identifying characteristics, and the pathology these parasites provoke in men. Two hours lecture and three hours laboratory.

Prerequisite: Admission into Medical Technology Program, or Special Approval.

CLSC 4410 HEMATOLOGY I*Fall*

Studies on the formation, function, and identifying characteristics of the cellular elements of blood in health. Lecture and laboratory emphasize the enumeration, morphology, and staining characteristics of normal blood cells. Two hours of lecture and six hours laboratory.

Prerequisite: Admission into Medical Technology Program, or Special Approval.

CLSC 4412 HEMATOLOGY II*SS I*

Continuation of Hematology I to include disease states and abnormal cells. Lecture and laboratory studies in blood coagulation physiology and methods of detecting defects are presented. Two hours lecture and six hours laboratory.

Prerequisite: Admission to Medical Technology Program, or Special Approval.

CLSC 4420 CLINICAL CHEMISTRY I*Fall*

Studies in clinical chemistry with emphasis on the physiology of normal and abnormal metabolism. Manual and automated laboratory procedures for the quantitation of body constituents employing gravimetric, volumetric, gasometric, titrametric, and spectrophotometric techniques. Two hours lecture and six hours laboratory.

Prerequisite: Admission into Medical Technology Program, or Special Approval.

CLSC 4421 CLINICAL CHEMISTRY II*Spring*

Continuation of Clinical Chemistry I. Two hours lecture and six hours laboratory.

Prerequisite: Admission into Medical Technology Program, or Special Approval.

CLSC 4430 CLINICAL MICROBIOLOGY I*Fall*

Lecture and laboratory studies of human pathogenic bacteria. Emphasis on staining, cultural and differential biochemical characteristics, methods of isolation from body fluids, and susceptibility to therapeutic agents. Two hours lecture and six hours laboratory.

Prerequisite: Admission into Medical Technology Program, or Special Approval.

CLSC 4431 CLINICAL MICROBIOLOGY II*Spring*

Continuation of Clinical Microbiology I including fungi, viruses, and rickettsia. Two hours lecture and six hours laboratory.

Prerequisite: Admission into Medical Technology Program, or Special Approval.

COORDINATED UNDERGRADUATE PROGRAM IN DIETETICS

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, nutritional needs throughout the life cycle, the management of group feeding, and the relationships between diet and disease. Dietitians, by their education, training, and knowledge of the interrelationships of food, nutrition and health, are uniquely qualified to help individuals and society meet these needs.

The Coordinated Undergraduate 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 or 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. Pan American University's dietetic program is unique in that it combines the two into their four-year program. Completion of the dietetics program leads to a Bachelor of Science degree in Dietetics, membership in the American Dietetic Association and, eligibility to write the registration/licensure examination.

Requirements for Admissions into the Dietetics Program

- A. Submission of the following:
 1. Completed application for admission to the Dietetics program (Call 381-2291 for information.)
 2. Official transcript revealing:
 - a. Completion of at least 60 credit hours with a minimum of 2.00 grade point average to include (or to include at start of the program):
 - English 1301, 1302
 - Math 1340 (or equivalent)
 - Biology 2403, 2404, 3401
 - Chemistry 1401, 1402, 3401
 - HRP 1401 or 2402*, 2351, 2352
 - *Preferred for CUP students
 3. Three letters of recommendation
 4. Letter written by applicant stating reason for interest in the Dietetics program

- B. Be selected by the Admissions Committee. Selection is based upon the following:
1. Completion and submission of the required material by the first Monday in April.
 2. Grade point average.
 3. Evaluation of selected references.
 4. Responses to the student interview with the Admissions Committee.

Suggested Curriculum:***FRESHMAN YEAR**

Eng 1301, 1302
 Math 1340
 Biol 2403
 Chem 1401 & 1402
 HRP 2402
 Soc 1313 or ANTH 1323
 P E (2 hours)
 *Designated Electives (3 hours)

***SOPHOMORE YEAR**

Chem 3401
 Biol 2404, 3401
 PolS 2313
 Eco 1301
 HRP 2351
 HRP 2352
 Eng (6 hours) Sophomore Level
 P E (2 hours)
 Foreign Language (6 hours)

Total: 33

Total: 38

JUNIOR

First Summer Session

Hist 2313 or 2333

Second Summer Session

Diet 3451

Fall
 Diet 3453
 Diet 3452
 Chem 3403
 Mana 3361
 Hist 2314

Spring
 Diet 3354
 Diet 3655
 CS 1300
 Ed 3302

Total: 18

Total: 15

SENIOR

Fall
 Diet 4351
 Diet 4652
 Diet 4353
 Diet 4254

Spring
 Diet 4655
 Diet 4256
 PolS 2314
 Diet 4257
 *Designated Electives (3 hours)

Total credit hours for graduation - 141 hours.

Fulltime Faculty:

Cabrera, Melisa (M.S., Andrews University of Michigan, Registered/Licensed Dietitian (ADA), Assistant Professor)

Mays, Mary H. (Ph.D, Texas Tech University, Registered/Licensed Dietitian (ADA), C.H.E., Assistant Professor)

COURSE DESCRIPTION**DIET 3451 GENERAL DIETETICS PRACTICUM I***Summer*

Introduction to the practice of all aspects of dietetics through weekly observation and experience in health care facilities and food institutions. Introduction to history, philosophy, organization and practice in the American Dietetic Association. Two hour lecture and six hours clinical experience per week.

Prerequisite: Admission to the Coordinated Undergraduate Program in Dietetics.

DIET 3452 QUANTITY FOODS PRODUCTION*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. Two hours lecture and six hours clinical experience per week.

Prerequisites: HRP 2352, Biol 3401 and student in Coordinated Undergraduate Program in Dietetics.

DIET 3453 ADVANCED NUTRITION*Fall*

Study of biological, physiological, sociological, and environmental aspects of nutrition science. Includes an in-depth study of maternal and child nutrition. Controversial issues in nutrition are examined. Medical terminology is stressed. Clinical includes learning and practice of skills related to interviewing, dietary assessment, exchange lists, the problem oriented medical record, and case studies. Two hours lecture and three hours clinical experience per week.

Prerequisites: Chem 3403 or concurrent enrollment, HRP 2351, Biol 2403 and student in Coordinated Undergraduate Program in Dietetics.

DIET 3354 FOOD SYSTEMS MANAGEMENT*Spring*

Organization and management of a food service system; basic operational subsystems (procurement, inventory, production, distribution, sanitation and fiscal control). Three hours lecture per week.

Prerequisite: Diet 3452, student in Coordinated Undergraduate Program in Dietetics.

DIET 3655 FOOD SYSTEMS MANAGEMENT PRACTICUM*Spring*

Selected problems and clinical experiences directly correlated to "Food Systems Management". Eighteen hours clinical experience per week.

Prerequisite: Student in Coordinated Undergraduate Program in Dietetics, concurrent enrollment in Diet 3354.

DIET 4351 DIET AND DISEASE*Fall*

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. Three hours lecture.

Prerequisites: Diet 3353, Chem 3403, student in the Coordinated Undergraduate Program in Dietetics.

DIET 4652 CLINICAL NUTRITION PRACTICUM*Fall*

An introduction to the role of the clinical dietitian in the health care environment. Selected problems and clinical experiences directly correlated to "Diet and Disease". Eighteen hours clinical experience per week.

Prerequisites: Senior in Coordinated Undergraduate Program in Dietetics, concurrent enrollment in Diet 4351.

DIET 4353 EXPERIMENTAL FOODS*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. Two hour lecture and three hour laboratory experience per week.

Prerequisites: HRP 2352, Chem 3401, student in the Coordinated Undergraduate Program in Dietetics.

DIET 4655 COMMUNITY NUTRITION PRACTICUM*Spring*

Survey of major problems arising from food habits of population groups including the study of the Mexican American culture. Techniques for effective nutrition teaching to groups. Clinical experience includes observation and participation with selected community agencies and schools. Two hours lecture and 12 hours clinical experience per week.

Prerequisites: Diet 4351, Soc 1313, senior in Coordinated Undergraduate Program in Dietetics.

DIET 4254 FOOD SYSTEMS DESIGN*Fall*

Layout planning of a quantity food production system and its basic operational subsystems, including, work flow, planning, selection and placement of equipment. Two hours lecture per week.

Prerequisites: Senior in Coordinated Undergraduate Program in Dietetics, Diet 3354 and Diet 3655.

DIET 4257 SEMINAR IN DIETETICS*Spring*

Introduction to interpretation and evaluation of nutrition literature. Study of planning techniques and instructional strategies essential for nutrition education. Students to present seminars focusing on trends and issues in professional dietetics to include management, clinical nutrition and community nutrition. Two hours lecture per week.

Prerequisite: Senior in Coordinated Undergraduate Program in Dietetics.

DIET 4256 GENERAL DIETETICS PRACTICUM II*Spring*

Integration of nutritional care and dietetic service into various systems of health-care delivery. Under close supervision students will assume the role of the generalist dietitian. Thirty-two hours clinical experience per week for four weeks.

Prerequisite: Senior in Coordinated Undergraduate Program in Dietetics.

Physical Therapist Assistant Program

Physical therapy is a health care profession dealing with the evaluation, treatment, and prevention of pain and a variety of physical disabilities. These include congenital and developmental disabilities such as cerebral palsy and scoliosis, neurological conditions such as strokes and spinal cord injuries, certain post-surgical conditions, orthopedic disorders such as arthritis and low-back pain, burns and open wounds, sports injuries such as sprains and tendonitis, and cardiac and respiratory disorders.

In general, the major goals of physical therapy are to relieve pain, to prevent or limit the development of physical disability, and to improve the existing physical and functional status of the patient. These goals are approached by treatments involving exercises for strength, flexibility, endurance, coordination and balance, by functional training, and by fitting and training in the use of assistive and supportive devices. Also, these goals are addressed with patient education programs, and through the use of certain "modalities" such as electrical stimulation, ultrasound, whirlpool, and hot and cold applications. Very frequently, physical therapy functions as part of the health care team; that is, physical therapy works closely together with other health care professionals toward a common goal of improving a patient's overall health status.

Physical therapy personnel work in a variety of settings and with a great diversity of people. Common work settings include general acute care hospitals, rehabilitation hospitals, home health services, nursing homes, schools, and out-patient clinics of various types. Physical therapy patients range from infants to the very elderly, from the bedridden to physically active athletes, and from those who have had minor injuries to those who have had traumatic and devastating illnesses or injuries.

The physical therapist assistant (P.T.A.) is responsible for implementing the various physical therapy treatments, providing patient education, communicating the status of the patient to the physical therapist, and providing other support services. As the title implies, the P.T.A.'s function is to assist the physical therapist, and by law the P.T.A. must work only under the direction of a physical therapist. Physical therapist assistants must pass a state licensure examination to practice legally in the state. To be eligible to take the state examination, P.T.A. candidates must successfully complete an associate degree from an accredited physical therapist assistant program. The Physical Therapist Assistant Program at Pan American University is fully accredited by the American Physical Therapy Association.

The Physical Therapist Assistant Program at P.A.U. is an associate degree program. This program includes a one-year preparatory phase of prerequisite coursework, followed by a 12-month professional phase of lecture, laboratory and clinical coursework. Students can take the prerequisite courses at P.A.U. or another academic institution during their first year. Students must apply for the second year/professional phase of the program and, if accepted, will complete the P.T.A. courses at P.A.U. during the following 12 months, beginning in June.

Application

Applicants to the P.T.A. Program must meet the following pre-admission requirements:

1. Have completed a minimum of 12 semester credit hours selected from the required prerequisite courses, including 4 hours of Anatomy and Physiology. A minimum of a "C" grade must be achieved in each of these courses.
2. Demonstrate an 11th grade reading level on the Nelson-Denny Reading Test.
3. Achieve a combined score of 24 in the English and Social Studies sections of the ACT Test.
4. Students should request an application folder from the P.T.A. Program Coordinator or Division of HRP secretaries.
5. The application folder should be completed and returned to the P.T.A. Program by March 15.

Selection:

1. Personal interviews with program faculty are required.
2. Selection is based on a numerical ranking system reflecting the level of accomplishment in the 3 selection criteria: prerequisite course G.P.A., Anatomy and Physiology course grade, and interview.
3. The top-ranked 16 applicants are offered admission to the program and will be notified by mail before May 1.
4. If students have been accepted before completing all of the prerequisite courses, acceptance will not be official until all courses are completed with the minimum grade requirement of "C".

Required Prerequisite Courses

The following fall semester and spring semester contain the prerequisite courses. This is only a suggested sequence, and students may take these courses over a longer period of time or in a different order if allowed by the department through which the course is taken. Courses may be transferred from other institutions if the courses are accepted by the PAU Registrar and are determined by the Physical Therapist Assistant Program Coordinator to be the equivalent of Pan American University prerequisite courses.

Fall

BIOL 2403
ENG 1301
PSY 1323
COMM 1307

Spring

BIOL 2404
ENG 1302
PSY 2331
Elective*

*ELECTIVE: Students should consult with the program coordinator for recommendations and approval regarding selection of the elective course.

The remainder of the curriculum plan that follows is to be considered only by those students who have met the application requirements and have been officially accepted into the P.T.A. Program.

Summer

First Session: PTSC 2201
PTSC 2310

Second Session: PTSC 2320
PTSC 2421

Fall

PTSC 2225
PTSC 2430
PTSC 2340
PTSC 2450
PTSC 2311

Spring

PTSC 2451
PTSC 2570
PTSC 2571
PTSC 2260

Course Descriptions**PTSC 2201 INTRODUCTION TO PHYSICAL THERAPY***Summer*

An introduction to the profession of physical therapy and its role within the health care system. The content includes the history of physical therapy, functions of the physical therapist and physical therapist assistant, legal and ethical concerns, common diagnoses, treatments, and practice settings in physical therapy. Students must be admitted into the Physical Therapist Assistant Program. Lecture, two hours.

PTSC 2310 PHYSICAL THERAPY PROCEDURES I*Summer*

Basic patient handling techniques, transporting patients, transfers, wheelchairs, architectural barriers, preparing treatment areas and equipment for use, preparing patients for treatment, positioning, bed mobility, safety procedures, body mechanics, vital signs. To be taken concurrently with PTSC 2201. Lecture, one hour; lab, three hours.

PTSC 2311 PHYSICAL THERAPY PROCEDURES II*Fall*

Gait training; application of orthotics and prosthetics; application of external bandages, dressings, and support; wound care and debridement; amputee training. Students must have successfully completed previous PTSC courses. Lecture, one hour; lab, four hours.

PTSC 2320 THERAPEUTIC MODALITIES I*Summer*

Application of therapeutic modalities in physical therapy, including heat, cold, traction, ultraviolet, intermittent compression, ultrasound and diathermies. Indications, contraindications, physiological effects and therapeutic efficacy will be discussed, as well as the parts, function and upkeep of modality equipment. Instruction in patient-therapist interaction is included. Students must have successfully completed previous PTSC courses. Lecture, one hour; lab, three hours.

PTSC 2421 THERAPEUTIC MODALITIES II*Summer*

An expansion of PTSC 2320 to include background knowledge and application of massage, electrotherapy, and hydrotherapy. To be taken concurrently with PTSC 2320. Lecture, one hour; lab, four hours.

PTSC 2225 CLINICAL PRACTICUM I*Fall*

Students will be assigned to a physical therapy facility for a minimum of 80 hours to work under the supervision of a clinical instructor. Students must have successfully completed all previous PTSC courses.

PTSC 2430 KINESIOLOGY*Fall*

Functional aspects of the musculoskeletal system, especially as it applies to physical therapy. Includes goniometry and muscle testing. Students must have successfully completed the previous PTSC courses. Lecture, three hours; lab, three hours.

PTSC 2340 CLINICAL PATHOLOGY*Fall*

Survey of conditions commonly encountered in the practice of physical therapy. Includes etiology, signs, symptoms, progression and therapeutic management of disease entities and injuries. Introduction to surgical and pharmacological treatment. Students must have successfully completed the previous PTSC courses. Lecture, three hours.

PTSC 2450 THERAPEUTIC EXERCISE I*Fall*

Principles, theory, scientific basis and application of exercises for strength, flexibility, muscular endurance and cardiovascular fitness. Specific exercise regimens for selected orthopedic and surgical conditions. Cardiac rehabilitation. Respiratory exercise. Students must have successfully completed previous PTSC courses. Lecture, two hours; lab, four hours.

PTSC 2451 THERAPEUTIC EXERCISE II*Spring*

A continuation of PTSC 2450. Background knowledge and application of exercises for selected neurological conditions. Includes training in activities of daily living. Students must have successfully completed previous PTSC courses. Lecture, two hours; lab, four hours.

PTSC 2260 COMMUNICATIONS AND ADMINISTRATION IN PHYSICAL THERAPY*Spring*

Note writing; home programs; teaching patients and families; administration of physical therapy; organization and function of the health care system. Students must have successfully completed previous PTSC courses. Lecture, two hours.

PTSC 2570 CLINICAL PRACTICUM II*Spring*

Students will be assigned to a physical therapy facility for a minimum of 200 hours to work under the supervision of a clinical instructor. Students must have successfully completed all previous PTSC courses.

PTSC 2571 CLINICAL PRACTICUM III*Spring*

Students will be assigned to a physical therapy facility for a minimum of 200 hours to work under the supervision of a clinical instructor. Students must have successfully completed all previous PTSC courses.

Rehabilitative Services Program

Full-time Faculty

McCollum, Katrena J. (M.S., Oklahoma State, 1983; Certified Rehabilitation Counselor, Licensed Professional Counselor, National Board Certified Counselor) Program Coordinator and Assistant Professor

Hurt, Pamela S. (M.S., Oklahoma State, 1982; Certified Rehabilitation Counselor, National Board Certified Counselor) Assistant Professor

Standifer, F. Ken (M.S., University of Arizona, 1969) Coordinator, Vocational Evaluation Center

Rehabilitation is the provision of any kind of service provided individuals to correct, avoid, or compensate for their handicapping problems. 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

The Rehabilitative Services Program at Pan American University 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 learn to help people with handicaps, through a series of services designed to conserve, develop or restore the ability of the handicapped individual to become financially independent, by having a chance to become employable, and/or by becoming independent in daily living skills. In short, students will be trained to help others overcome handicaps through the process of rehabilitation.

The Rehabilitative Services Curriculum at Pan American University is designed to provide the student with a general understanding of human behavior in relation to the medical, psychological, social, economic, educational, and vocational circumstances disability can generate in life. Specific curriculum will address the various competencies listed below:

- 1) Informational: knowledge of the content of rehabilitative services work including: history, philosophy, legislation, theories, principles, terminology, developmental processes, culture, etc.;
- 2) Intellectual: creative thinking, problem-solving, decision-making, reasoning, analyzing, comparing and integrating information;
- 3) Interpersonal: relating to others, communication skills, working with and through others, giving and getting supervision, etc.;
- 4) Intrapersonal: values clarification, attitudes, motivations, personality style, reaction patterns, etc.;
- 5) Interventional: interviewing techniques, helping skills, ethics, evaluation, consulting, utilizing resources, case management, etc.

The curriculum and the program are complemented by a Vocational Evaluation Services Center and Student Laboratory, where students gain insight and exposure to the rehabilitation process through supervised laboratory assignments. Within the other laboratories and programs of the Division of Health-Related Professions, a student has the opportunity to examine various health and allied health professions, and to observe the importance of an interdisciplinary approach to the provision of rehabilitation services.

A supervised practicum in a rehabilitation setting is required during the last semester of study, which provides practical, hands-on experience.

Degree Requirements

Bachelor of Science Degree in Rehabilitative Services
(124 Total Hours)

General Education Requirements (60 hours)

MATH 1340 and fifty-seven (57) hours of General Education Requirements must include the following:

FOREIGN LANGUAGE

- Six (6) hours of Spanish

NATURAL SCIENCE

- At least four (4) hours of Anatomy and Physiology, or consent of Program Coordinator

- Psychology 1313

- Anthropology 2323

Designated Electives (21 hours)

Comm 1307: Fundamentals of Interpersonal Communication

Psy 1323: General Psychology

Psy 2301: Statistics for Behavioral Sciences

Psy 3325: Psychology of Adjustment

Psy 4313: Abnormal Psychology

Comm 3315: Communication in Human Relations

or

Comm 3316: Intercultural Communications

Mana 3361: Principles of Management and Organizational Behavior

or

Mana 3332: Human Relations in Management

Rehabilitative Services Concentration Courses (30 hours)

*REHS 2301: Introduction to Rehabilitation

*REHS 2302: Occupational Aspects of Employment and Disability

*REHS 2331: Psychology of Disability (Psy 2331)

*REHS 3330: Medical Aspects of Disability

REHS 4301: Vocational Evaluation

REHS 4302: Work Adjustment and Job Placement

REHS 4303: Rehabilitation Case Management

REHS 4330: Special Topics

REHS 4602: Clinical Practicum

Electives (16 hours)**Minor in Rehabilitative Services**

18 hours are required to earn a minor in Rehabilitative Services.

*12 hours are specified, and six hours are to be chosen from the remaining concentration courses, except for REHS 4602.

Rehabilitative Services Program**Course Descriptions****REHS 2301 INTRODUCTION TO REHABILITATION**

Fall

A presentation of the theory and practice of rehabilitation including its philosophical, historical, and legislative bases. Within this context, the course will introduce public and private sector rehabilitation service systems and processes, as well as alternative approaches such as independent living centers, as they presently are serving various disability groups. It will describe the roles and functions of various professional, paraprofessional and peer providers in these systems. Introductory exposure to service systems through trips to peer support group meetings, public and private agencies, and interviews with service providers will supplement traditional classroom lectures.

Prerequisite: Psy 1313.

REHS2302 OCCUPATIONAL ASPECTS OF EMPLOYMENT AND DISABILITY

Fall

Provides an overview to occupational information resources, such as the *Dictionary of Occupational Titles and Occupational Outlook Handbook*, and an analysis of work classification systems. Addresses issues regarding the implications of disability on employment, including job accommodation and task analysis.

Prerequisite: Concurrent enrollment in REHS 2301 or departmental consent.

REHS 2331 PSYCHOLOGY OF DISABILITY

Provides a survey of psychological and social aspects of disability, with emphasis on severe mental and physical disability. Describes major disability groups focusing on the general and specific psychological processes that are observed in individuals and their families as they cope with the consequences of disability. Disability groups will include sensory impairments, major neurological and muscular conditions, cardiovascular and endocrine system disorders, digestive system disorders, developmental and learning disabilities, mental retardation, and major psychiatric conditions. May be counted as Psy 2331.

Prerequisite: Psy 1313 and 1323.

REHS 3330 MEDICAL ASPECTS OF DISABILITY

Provides an understanding of medical and pharmacological (effects and side-effects) aspects of disabilities, and particularly their implications for independent living or vocational rehabilitation, including respiratory disorders, spinal cord injuries (para and quadriplegia), endocrine systems disorders (thyroid, parathyroid, kidney-renal failure, sex, pituitary, lymph, and diabetes), cerebrovascular (stroke, CVA), muscular disabilities (cerebral palsy, muscular dystrophy), psychiatric disorders, mental retardation, developmental disabilities (including autism and learning disabilities), sensory impairments (visual and hearing) types, causes, and accommodations (such as visual aids), digestive system (ulcers, cancer of the colon), and neurological problems (closed head injury and epilepsy).

Prerequisite: Biol 2403 or 2404, REHS 2301, REHS 2302, REHS 2331.

REHS 4301 VOCATIONAL EVALUATION

Provides an orientation to the vocational evaluation and psychometric procedures being used in rehabilitation. Critical review of cases from the field will be conducted, within a case study approach, to provide an understanding of the vocational evaluation of several disability groups with diverse needs: mental retardation, physical handicaps, neurological impairment, mental impairment, and sensory deficits. Modifications of assessment procedures for specific types of disabilities, such as for visual and hearing impairment, will be presented, including culture.

Prerequisite: Psych 2301, REHS 3330 and REHS 2331 (or concurrent enrollment).

REHS 4302 WORK ADJUSTMENT AND JOB PLACEMENT

Provides an understanding of work adjustment and job placement procedures being used in rehabilitation. Recent advances in occupational exploration, prevocational training, and the development of functional competencies will be studied. Job placement procedures and practical issues, such as placements in employment options, will also be explored. Critical review of cases from the field will be conducted, along with completion of case studies, based on these reviews, and demonstration of job finding and placement strategies.

Prerequisite: REHS 3330, REHS 4301 (or departmental consent).

REHS 4303 REHABILITATION CASE MANAGEMENT

Focuses on the development of beginning level interpersonal interviewing, intervention and case recording skills integrated within the process of rehabilitation case management. Analysis of the individual written rehabilitation plan and review of client case records will be discussed, emphasizing those variables identified to be important to the handicapped Hispanic. Legal and ethical issues in service delivery will be discussed.

Prerequisites: REHS 2331, REHS 3330, REHS 4302.

REHS 4330 CLINICAL TOPICS IN REHABILITATION

This course will focus on priority clinical issues and provide concentrated study in specific areas in rehabilitative services which 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 2331, REHS 3330, REHS 4301, REHS 4302 or concurrent enrollment.

REHS 4602 CLINICAL PRACTICUM IN REHABILITATION

Supervised field-based clinical experience in a public or private rehabilitation agency, transitional care facility, sheltered workshop, hospital, or independent living center serving the disabled. Learning experiences are structured and supervised by both university faculty and a designated professional staff at the practicum location.

Prerequisites: REHS majors only and approval of Program Coordinator.

Department of History and Philosophy

Dr. Rondel V. Davidson, Chair

History

Full-time Faculty

Davidson, Rondel V. (PhD, Texas Tech 1970; prof. and chair) modern Europe, European intellectual
 Fleming, William J. (PhD, Indiana 1976; assoc. prof.) South America, Mexico
 Gormly, James (PhD, Connecticut 1977; assoc. prof.) U.S. diplomatic
 Miller, Christopher L. (PhD, University of California, Santa Barbara 1981; assoc. prof.)
 U.S. Colonial, 19th Century, Native American
 Miller, Hubert J. (PhD, Loyola 1965; prof.) Mexico, Central America
 Neitzel, Sarah C. (PhD, Texas Tech 1974; assoc. prof.) Germany, Russia, European social
 and cultural
 Prather, Charles (MA, North Texas State 1969; asst. prof.) U.S. colonial
 Rocha, Rodolfo (PhD, Texas Tech 1981; assoc. prof.) borderlands, Chicano, Mexico
 Salmon, Roberto M. (PhD, New Mexico 1978; assoc. prof.) U.S. Southwest, Chicano
 studies
 Vassberg, David (PhD, Texas 1971; prof.) Spain, Brazil, early modern Europe
 Welch, Raymond P. (PhD, Pennsylvania 1970; asst. prof.) U.S. intellectual, U.S. recent

The Department of History and Philosophy offers both a major and a minor in history. In addition, it offers courses for students seeking a second teaching field for teacher certification. On the graduate level, the Department of History offers a Master of Arts in History and a Master of Arts in Interdisciplinary Studies with a concentration in History. Students majoring or minoring in history may become teachers or seek employment in business or government. History is excellent background for those who wish later to go to law school or enter journalism.

Beginning history majors are urged to take *Civilization Through the Centuries*, *American Heritage*, and *Texas history* early in their academic career. 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 interesting courses in *Mexican-American Heritage*, *Russia*, or a wide assortment of courses in *Latin American*, *American*, and *European history*.

In addition to the major and minor in history, the department offers a major and minor in philosophy.

Degree Requirements

Major in History

(with or without Teacher Certification):

30 semester hours in history. Must include HIST 1333, 1334, 2313, * 2314,* and 2333.

Fifteen advanced hours required, and must include at least three semester hours from each of the three fields of American, European, and Latin American history.

Minor in History

18 semester hours of which 6 must be advanced. Must include 1333 or 1334, 2313, * 2314,* and 2333.

Teacher Certification in History

Secondary Plan I: 36 semester hours of history, of which 15 semester hours must include Hist 1333, 1334, 2313, 2314, and 2333. The remaining 21 hours must be advanced and include 6 semester hours from each of the three fields: American, Latin-American and European history. No second teaching field is required.

Secondary Plan II: 24 semester hours of history, of which 12 semester hours must include Hist 1333 or 1334, 2313, 2314, and 2333. The remaining 12 hours must be advanced and include 3 advanced semester hours from each of the three fields: American, Latin-American and European.

Secondary Plan IV, Composite Social Studies Certification: 48 semester hours in the social sciences. Must include Hist 1333 or 1334, 2314, 2333, 2363, and 18 advanced semester hours with 6 hours from each of the American, Latin-American, and European fields of history; PolS 2313, 2314; Eco 1301, 2354; and Geog 2301, 2313.

Elementary Plan I, History Specialization: 12 semester hours history, which must include Hist 1333 or 1334, 2363 and six advanced hours in history.

Elementary Plan II, History Specialization: 18 semester hours of history, which must include Hist 1333, 1334, and 2333, and 9 advanced semester hours with 3 semester hours from each of the American, Latin-American and European fields of history.

Elementary Plan III, Social Studies Specialization: 24 semester hours in social studies. Must include Hist 3313 or 3324 or 4343, Hist 4322 or 4325, Hist 4303 or 4313 or 4395, PolS 2313, 2314, Eco 1301, 3336, Geog 2313, 3333.

Department of History Graduate Program

The Department of History offers courses leading to a Master of Arts in History with a specialization in Teaching, and a Masters of Arts in Interdisciplinary Studies with a concentration in History and providing minor and support areas for degrees in other fields.

Departmental Requirements for the Master of Arts Degree in Interdisciplinary Studies

Before admission to candidacy by the department of history, applicants must have completed or must complete as leveling work 24 semester hours of undergraduate history courses, half of which must be at the upper division level.

Full time graduate students, who must meet the above requirements, should take up to 9 semester hours of such leveling work while taking a limited number of graduate hours.

Graduate history majors are required to consult with the departmental graduate advisor concerning course work and schedules until admitted to candidacy.

Candidates may elect one of two options to complete the Master of Arts degree with a concentration in History.

1. Thesis program: 30 semester hours degree with 18 hours in history, including the thesis which is required. Candidates must select the remaining 12 hours from 2 or more related fields such as political science, sociology, English, economics, Spanish, education, or business.
2. Non-thesis program: 36 semester hours degree with 18-21 hours in history. Candidates must select the remaining 15-18 hours from 2 or more related fields. Candidates must also pass a comprehensive examination administered by the department.

Master of Arts Degree Interdisciplinary Studies

Concentration	Thesis
History	
CONCENTRATION	(12 hours)
A minimum of 12 semester hours of course work in history with no more than half at the 5000 level.	
History 6300 required of all students.	
THESIS	(6 hours)
HIST 7300,	
7301 Thesis	
RESOURCE AREAS	(12 hours)
A minimum of 12 semester hours selected from 2 or more related areas.	
TOTAL	30 hours

**Master of Arts Degree
Interdisciplinary Studies**

Concentration History		Non-Thesis
CONCENTRATION		(18-21 hours)
18 to 21 semester hours of History with no more than half at the 5000 level. History 6300 required of all students.		
RESOURCE AREAS		(15-18 hours)
15 to 18 hours selected from 2 or more related areas, with not more than 12 hours from education and business.		
TOTAL		36 hours

Departmental Requirements for Master of Arts Degree in History with a Specialization in Teaching

In addition to the general requirements set out elsewhere in this bulletin for graduate admission, the following requirements must be met:

1. Applicants for admission must have completed, or must complete as leveling work, 24 semester hours of undergraduate history courses, half of which must be at the upper division level.
2. The choice of courses in the History Core and History elective field and Education elective will be determined through consultation between the student and the history department graduate advisor.

Master of Arts Degree

Major: History		Thesis
Specialization: Teaching		
History Core:		(6-9)
HIST 6304	Teaching History in the Junior High School	
HIST 6305	Teaching History in the Senior High School	
HIST 6300	Historiography, required for all students	
History Electives: ¹		(15-18)
HIST 6301	Seminar and Problems Study in Eras in American History to 1860	
HIST 6303	Seminar and Problems Study in Eras in American History Since 1860	
HIST 6306	Studies in Texas and Southwestern History	
HIST 6307	Seminar and Problems Study in the History of South America	
HIST 6309	Seminar and Problems Study in the History of Middle America	
HIST 6311	Seminar and Problems Study in Modern European History	
HIST 6316	Studies in Mexican and American Heritages	
HIST 6380	The Golden Age of Spain and Portugal, 1300 to 1700	
HIST 7300	Thesis	
HIST 7301	Thesis	
Education Electives:		(0-6)
TOTAL		30

The choice of courses in the Education Elective field will be determined through consultation with the graduate advisor.

Master of Arts Degree

Major: History		Non-Thesis
Specialization: Teaching		
History Core:		(6-9)
HIST 6304	Teaching History in the Junior High School	
HIST 6305	Teaching History in the Senior High School	
HIST 6300	Historiography, required for all students	
History Electives: ¹		(18-21)
HIST 6301	Seminar and Problems Study in Eras in American History to 1860	

¹5000 level courses may be substituted with approval of graduate advisor.

HIST	6303	Seminar and Problems Study in Eras in American History Since 1860
HIST	6306	Studies in Texas and Southwestern History
HIST	6307	Seminar and Problems Study in the History of South America
HIST	6309	Seminar and Problems Study in the History of Middle America
HIST	6311	Seminar and Problems Study in Modern European History
HIST	6316	Studies in Mexican and American Heritage
HIST	6380	The Golden Age of Spain and Portugal, 1300 to 1700

Education Electives:

TOTAL

(0-9)
36

The choice of courses in the Education Elective field will be determined through consultation with the graduate advisor.

Candidates for the non-thesis degree must also pass a comprehensive examination administered by the department.

Course Descriptions

History

HIST 1333 CIVILIZATION THROUGH THE CENTURIES

Fall & Summer

A thorough survey of the political, social and cultural history of the world through the treaty of Utrecht. Emphasis will be given to the contributions of Greece and Rome to the western world, the fall of Rome, the beginning of feudalism and the rise of national states, the Renaissance and the Protestant reformation. Major developments in world history will be related to these periods of European history.

HIST 1334 CIVILIZATION THROUGH THE CENTURIES

Spring & Summer

A continuation of History 1333 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 Twentieth Century. Major developments in world history will be related to these periods of European history.

HIST 2313 AMERICAN HERITAGE I

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 have completed HIST 2333 or who enter with a credit in American History from high school. Credit may be received in only one of HIST 2313, 2387.

HIST 2314 AMERICAN HERITAGE II

Fall, Spring, Summer

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. Open to freshmen who have completed HIST 2333 or who enter with a credit in American History from high school. Credit may be received in only one of HIST 2314, 2388.

HIST 2333 A GENERAL SURVEY OF THE HISTORY OF TEXAS

Fall, Spring, Summer

A survey of the history of Texas from the period of Spanish ownership to the present. Open to freshmen. May be substituted for HIST 2313 to meet state requirement for students expecting to graduate from Pan American University.

HIST 2335 THE AMERICAN MILITARY EXPERIENCE

Fall

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

Fall, Spring, Summer

An interpretation of the historical heritage of the Mexican American in the United States. (Previously HIST 3373; may not be repeated for credit.)

Prerequisite: Six semester hours of History.

HIST 2387 AMERICAN HERITAGE I Honors Plan

Fall

An integration of social, political and economic history of the United States with attention directed to geography and its influences. The approach is by problems which move chronologically from the earliest Colonial Period through the Civil War.

Prerequisite: Admission to honors studies or by invitation.

Credit may be received in only one of HIST 2313, 2387.

HIST 2388 AMERICAN HERITAGE II Honors Plan

Spring

An integration of social, economic and political history of the United States with attention to the geographical influences. The approach is by problems which move chronologically from Reconstruction to the present.

Prerequisite: Admission to honors studies or by invitation.

Credit may be received in only one of HIST 2314, 2388

HIST 3301 THE HISTORY OF IDEAS

Spring

A study of major beliefs and patterns of thought in Western culture, emphasizing, the development of the arts and sciences, social thought and religion.

Prerequisite: Six semester hours of history.

HIST 3313 AMERICAN COLONIAL ERA TO 1783

Fall

A study of American Colonial history from the founding of the first colony through the American Revolution with emphasis given to the development of American civilization; causes, course and results of the American Revolution.

Prerequisite: six semester hours of History.

HIST 3324 FORMATIVE PERIOD OF THE AMERICAN NATION, 1783-1840

Fall

A study of the early years of the American nation from the critical period to the adoption of the Constitution and launching of the new government through the transformation of American society by the Jacksonian Era of the Common Man.

Prerequisite: six semester hours of History.

HIST 3333 COLONIAL MEXICO, CENTRAL AND SOUTH AMERICA

Spring

A study of the establishment of Spanish dominion; geography and natural resources; institutional and social development; cultural aspects and contribution.

Prerequisite: Six semester hours of History.

HIST 3335 HISTORY OF SPAIN

Spring

The historical development of the Spanish nation from earliest times to the present. Emphasis will be given to the evolution of the political, economic and social institutions that are important to the conquest and colonization of the Americas.

Prerequisite: Six semester hours of history.

HIST 3341 HISTORY OF ENGLAND I, TO 1686

Fall

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: Six semester hours of History.

HIST 3342 HISTORY OF ENGLAND II, AFTER 1686

Summer

The period of the Glorious Revolution to the British Empire and common-wealth of nations.

Prerequisite: Six semester hours of History.

HIST 4303 THE EMERGENCE OF MODERN AMERICA, 1877-1917

Fall

A study of the growth of American business and industry, the emergence of the United States as a world power, the populist protest and progressive reform movements.

Prerequisite: Six semester hours of History.

HIST 4313 TWENTIETH CENTURY AMERICA, 1917 TO THE PRESENT

Fall

A study of the history of the United States from World War I to the present with emphasis on domestic and foreign affairs in their relationship to and effect on each other.

Prerequisite: Six semester hours of History.

HIST 4322 THE SPANISH SOUTHWEST TO 1821

Spring

A study of the northward colonization of Mexico with emphasis on institutions and the settlement of the interior provinces of Texas, New Mexico, Arizona and California.

Prerequisite: Six semester hours of History (was HIST 3322, may not be repeated for credit).

HIST 4325 THE AMERICAN SOUTHWEST AFTER 1821*Summer*

The American penetration of Texas and the Mexican War, subjugation of the Indians, extension of mining, railroad, cattle industry, and farming across the Southwest; and the transition from raw frontier to modern states of the Southwest.

Prerequisite: Six semester hours of History (was HIST 3325, may not be repeated for credit).

HIST 4343 ERA OF SECTIONAL CONFLICT, 1840-1877*Spring*

United States history from 1840 to 1877 with emphasis upon the development of sectionalism, Southern nationalism, the breakdown of American political parties, Civil War and Reconstruction.

Prerequisite: six semester hours of History.

HIST 4345 MEXICO'S FIRST CENTURY AS AN INDEPENDENT REPUBLIC*Fall*

A study of the political, social and economic development of Mexico from the independence movement to the Revolution of 1910. A study of the problems of Mexico and the various distinct eras of its first century as a republic.

Prerequisite: Six semester hours of History (was HIST 3343, may not be repeated for credit).

HIST 4352 BRAZIL AFTER INDEPENDENCE*Fall*

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.

HIST 4353 HISTORY OF MEXICAN CULTURE*Spring*

A study of the Mexican people, including development of their social institutions, thinking, concepts, attitudes, values, reactions, and sensitivities.

Prerequisite: Six semester hours of History.

HIST 4354 CONTEMPORARY MEXICO*Spring*

A study of the nature and impact of the social, political and economic transformations since the revolutionary epoch of 1910-1917; greatest emphasis on the contemporary factors that have made Mexico's experience unique.

Prerequisite: Six semester hours of History.

HIST 4355 SPANISH SOUTH AMERICA SINCE INDEPENDENCE*Fall*

The historical development of the major Hispanic South American republics; general trends in their social, economic and political growth.

Prerequisite: Six semester hours of History. History 3333 is recommended to precede this course (was HIST 3353, may not be repeated for credit).

HIST 4363 UNITED STATES — LATIN AMERICAN RELATIONS*Summer*

The development of a distinctive system of international relations economic, cultural, and political between the nations of Latin America and the United States.

Prerequisite: six semester hours of history.

HIST 4370 THE RENAISSANCE AND THE REFORMATION, 1300 to 1650*Fall*

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: Six semester hours of History with HIST 1333 recommended.

HIST 4371 RUSSIA SINCE 1905*On Demand*

Russia from the precursors of the Revolution through the Revolutions of 1905, 1917 and the development of the Soviet regime to current trends.

Prerequisite: Six semester hours of History with HIST 1334 recommended. (was HIST 3371, credit cannot be received if HIST 3371, or HIST/GOVT 3372 have previously been completed).

HIST 4374 THE CARIBBEAN AND CENTRAL AMERICA*Summer*

A study of the nineteenth-century efforts of these nations to emerge as separate entities and an evaluation of their twentieth-century experiences.

Prerequisite: Six semester hours of History with HIST 3333 recommended.

HIST 4375 ABSOLUTISM AND ENLIGHTENMENT IN EUROPE, 1650-1789*Summer*

Traces the development of the Absolutist State, benevolent despotism, and the intellectual and scientific trends of the Enlightenment.

Prerequisite: Six semester hours of History with HIST 1334 recommended. (was HIST 3375, may not be repeated for credit).

HIST 4376 REVOLUTIONARY EUROPE, 1789-1850*On demand*

A study of Europe of this period with emphasis on the growth of democratic institutions from the beginning of the French Revolution through the Revolution of 1848.

Prerequisite: Six semester hours of History with HIST 1334 recommended. (was HIST 3374, may not be repeated for credit).

HIST 4383 EUROPE'S AGE OF IMPERIALISM, 1850-1919*Summer*

A study of European History through the period of growing nationalism and imperialism leading to World War I.

Prerequisite: Six semester hours of History with HIST 1334 recommended. (was HIST 3383 may not be repeated for credit).

HIST 4393 CONTEMPORARY EUROPE, 1919 TO PRESENT*Spring*

A study of the causes of World War II, its resulting problems, and current trends.

Prerequisite: Six semester hours of History with HIST 1334 recommended. (was HIST 3393, may not be repeated for credit).

HIST 4395 SPECIAL TOPICS IN HISTORICAL STUDY*On demand*

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: Six semester hours of history.

HIST 5343 ERA OF SECTIONAL CONFLICT, 1840-1877*Spring*

United States History from 1840-1877 with emphasis upon the development of sectionalism, Southern nationalism, the breakdown of American political parties, Civil War, and Reconstruction.

HIST 5345 MEXICO'S FIRST CENTURY AS AN INDEPENDENT REPUBLIC*Fall*

A study of the political, social and economic development of Mexico from the independence movement through the revolutionary movement of 1910-1917. A study of the problems of Mexico and the various eras of its first century as a republic.

HIST 5363 UNITED STATES - LATIN AMERICAN RELATIONS*Summer*

The development of a distinctive system of international relations economic, cultural, and political between the nations of Latin America and the United States.

HIST 5383 EUROPE'S AGE OF IMPERIALISM, 1850-1919*Summer*

A study of European history through the period of growing nationalism and imperialism leading to World War I.

HIST 6300 HISTORIOGRAPHY AND HISTORICAL METHOD*Fall*

A description of the chief source materials of history and bibliography; methods of the aids in historical research; and explanations of generally accepted usages in historical composition. (This course is required of all graduate students majoring and minoring in history and should be taken at the start of the graduate's program.)

HIST 6301 SEMINAR AND PROBLEMS STUDY IN ERAS IN AMERICAN HISTORY TO 1860*Spring*

A survey and critique of the bibliography and problems of various eras in American history before the Civil War. May be repeated for credit when topic varies.

HIST 6303 SEMINAR AND PROBLEMS STUDY IN ERAS IN AMERICAN HISTORY SINCE 1860*Fall*

A survey and critique of the bibliography and problems of various eras in American history since 1860. May be repeated for credit when topic varies.

HIST 6304 TEACHING HISTORY IN THE JUNIOR HIGH SCHOOL*Summer*

This course will explore selected themes in World, United States, Texas and local history, and examine how such topics can be better integrated into junior high school (grades 6 through 9) curricula. Emphasis will be focused on creative teaching techniques designed to stimulate student interest in learning history. May be repeated for credit when the topic varies.

HIST 6305 TEACHING HISTORY IN THE SENIOR HIGH SCHOOL*Summer*

This course will explore selected themes in World, United States, Texas and local history, and examine how such topics can be better integrated into senior high school (grades 9 through 12) curricula. Emphasis will be focused on creative teaching techniques designed to stimulate student interest in learning history. May be repeated for credit when the topic varies.

HIST 6306 STUDIES IN TEXAS AND SOUTHWESTERN HISTORY*Spring*

An intensive investigation of selected problems in southwestern history with emphasis on Texas. May be repeated for credit when topic varies.

HIST 6307 SEMINAR AND PROBLEMS STUDY IN THE HISTORY OF SOUTH AMERICA*Spring*

An investigation and critique of the problems and contributions made by the various South American countries in the 19th and 20th centuries and their roles in Inter-American relations. May be repeated for credit when topic varies.

HIST 6309 SEMINAR AND PROBLEMS STUDY IN THE HISTORY OF MIDDLE AMERICA*Fall*

An investigation and critique of the problems and contributions made by Mexico, the Central American, and Caribbean Island nations in the 19th and 20th centuries and their roles in Inter-American relations. May be repeated for credit when topic varies.

HIST 6311 SEMINAR AND PROBLEMS IN MODERN EUROPEAN HISTORY*Fall*

A survey and critique of the bibliography associated with investigations of selected era studies and problems experienced by modern Europe. May be repeated for credit when topic varies.

HIST 6316 STUDIES IN MEXICAN AND AMERICAN HERITAGES*Spring*

An intensive investigation of selected historical problems in the Mexican-American and Anglo-American cultural heritages and the fusion and clash of these cultures.

HIST 7300 THESIS

Research and writing of the thesis.

HIST 7301 THESIS

Research and writing of the thesis.

Philosophy

Full-time Faculty

Carter, David K. (Ph.D. Yale, 1982; asst. prof.) ethics, American philosophy
 Frodeman, Robert L. (Ph.D. Penn State, 1988; asst. prof.) Continental and American philosophy, ethics

The Department of History and Philosophy offers a major and a minor in philosophy. The study of philosophy can serve many useful purposes, but perhaps the most important are these: 1. 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. 2. The 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:

36 semester hours in Philosophy. Must include the following 24 hours: Phil 1310, 1320, 2310; 2330 or 2350; 3310 or 3320; 3360, 3361, 3362. Beyond the 24 semester hour core

requirements, all students majoring in philosophy will be required to take 12 additional hours in philosophy, nine of which must be upper division, for a total of 36 hours.

Minor in Philosophy:

18 semester hours in Philosophy, of which 6 hours must be advanced; must include PHIL 1310 or 2330, and 1320.

Philosophy

PHIL 1310 INTRODUCTION TO PHILOSOPHY

Fall, Spring, Summer

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. (Formerly PHIL 2313, may not be repeated for credit.)

PHIL 1320 INTRODUCTION TO LOGIC

Fall, Spring, Summer

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. (Formerly PHIL 2343, may not be repeated for credit.)

PHIL 2310 METAPHYSICS

On demand

An examination of selected metaphysical problems of historical and contemporary importance, such as freedom and determinism, the nature and existence of God, time, and space, causality, mind and matter, knowledge and truth.

PHIL 2320 PHILOSOPHY OF SCIENCE

On demand

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.

PHIL 2330 ETHICS

On demand

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. (Formerly PHIL 1330, 2323, may not be repeated for credit.)

PHIL 2340 PHILOSOPHY OF THE PERSON

On demand

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 mind and its place in the world, and the the nature mind and its place in the world, and the question of "human nature". (Formerly PHIL 3340; may not be repeated for credit.)

PHIL 2350 SOCIAL PHILOSOPHY

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. (Formerly PHIL 2380; may not be repeated for credit.)

PHIL 3310 THEORIES OF KNOWLEDGE

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. Prerequisite: Three semester hours of philosophy or consent of instructor.

PHIL 3320 SYMBOLIC LOGIC

On demand

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 3360 HISTORY OF PHILOSOPHY: ANCIENT AND MEDIEVAL

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 Aquinas. Prerequisite: Three semester hours of philosophy or consent of instructor.

PHIL 3361 HISTORY OF PHILOSOPHY: MODERN

A study of the history of philosophy from the Renaissance through the Eighteenth Century, with particular emphasis on Descartes, Spinoza, Leibniz, Hobbes, Locke, Berkeley, Hume and Kant. Prerequisite: Three semester hours of philosophy or consent of instructor.

PHIL 3362 HISTORY OF PHILOSOPHY: CONTEMPORARY

A study of the history of philosophy during the Nineteenth and Twentieth Centuries, with particular emphasis on phenomenology, existentialism and the analytic tradition. Prerequisite: Three semester hours of philosophy or consent of instructor.

PHIL 3370 PHILOSOPHY OF RELIGION

On demand

A philosophic study of the nature and varieties of religious experience, the meaning and validation of religious belief, the act of faith, the nature and existence of God, the problem of evil, mysticism, immortality, religious belief and moral conduct, religion and myth, and religion and culture.

Prerequisite: Three semester hours of philosophy.

PHIL 3380 LATIN AMERICAN THOUGHT

On demand

An examination of some of the most important and influential contributions to Latin American thought. Material to be studied will be drawn from both past and contemporary sources. Prerequisite: Three semester hours of philosophy.

PHIL 4390 AMERICAN PHILOSOPHY

On demand

An examination of the contributions of great American thinkers to the philosophical deposit of the world. (Formerly PHIL 3313, may not be repeated for credit.)

Prerequisite: Three semester hours of Philosophy.

PHIL 4390 SPECIAL TOPICS IN PHILOSOPHY

A study of selected issues or figures in philosophy; content will vary. May be repeated for up to nine semester hours credit as content changes. Prerequisite: Three semester hours of philosophy or consent of instructor.

Bible Chairs

Richard Batchelor, Acting Director

Bible courses are taught for full college credit at church centers adjacent to the campus at no expense to the University. A total of twelve hours of Bible may be applied as electives toward a degree. When a student's professional objectives require additional hours in Bible or religion, the Department Head and the Vice-President for Academic Affairs may allow the student to enroll for additional credit.

Course Descriptions

Bible

BIBL 1310 OLD TESTAMENT SURVEY

A survey of the history and literature of the Old Testament. Particular emphasis is placed upon the teaching 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

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

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

An historical study of the beginning and extension of Christianity, based on the Book of Acts.

BIBL 2301 THE LIFE OF CHRIST

A study of the life of Christ as contained in the Gospels.

BIBL 2302 THE LIFE AND LETTERS OF JOHN

A study of the life and works of John. A special emphasis given to his gospel and epistles with a brief review of Revelation.

BIBL 2303 THE LIFE AND LETTERS OF PAUL

A detailed study of the life and teachings of the Apostle Paul as depicted in the Book of Acts and the Letters of Paul. The missionary journeys and expansion of Christianity will be given major attention.

BIBL 2304 COMPARATIVE RELIGION

A nonsectarian approach to and a comparison of, the great religions or systems of personal philosophies of the world including Judaism, Buddhism, Islam, Confucianism, Christianity and some less-known faiths or philosophies.

Latin American Studies

Dr. Lino Garcia, Jr., Director

Full-time Faculty

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

General Description

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 LAS 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 Latin American Studies Center is charged with developing, implementing, and enhancing the Latin American Studies major. The Center began work on reforming the old Inter-American Studies major (see previous catalogues) in the Fall, 1983. Those responsible for the reforms expected to have coursework available leading to the LAS major by the Fall, 1984 that would permit students to combine studies in the Humanities and Social Sciences with such professional areas as Business, Health, and Communications. Students wishing to take advantage of the unique LAS major should consult with the Director of the Center for the most recent opportunities and degree requirements. In addition to the unique degree options being developed a basic major in Latin American Studies is available. 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, must include:

1. 12 hours from HIST 3333, 3335, 4322, 4345, 4352, 4353, 4354, 4355, 4363, 4374
2. SPAN 1301-1302, or 1303-1304; and 2301-2302, or 2307-2308
3. SPAN 3303 or 3304
4. 9 hours from SPAN 3310, 3311, 3316, 4307, 4326, 4327, 4329
5. GOVT 4383 or 4386
6. 9 hours from ART 4351, ECO 3336, 3353, SOC 3343, 4323, 4373

Students taking a major in Latin American Studies may apply for secondary certification in History or Spanish. Please consult with Director for specific course requirements. Grade point average of 2.25 required for certification.

Law (Pre-law)

See Department of Political Science

Department of Management, Computer Information Systems, and Administrative Information Systems

Dr. Michael Crews, Chair

Full-time Faculty

- Allison, Margaret (M.Ed., 1976; University of Houston; asst. prof.) Administrative Information Systems.
- Brewerton, F. J. (DBA, 1968, Louisiana State University; prof. and dean) Production Management, Business Policy.
- Brough, Charles (MBA, 1983; Pan American University) Computer Information Systems
- Crews, Michael (Ph.D., 1982, Utah State University; assoc. prof.) Management Information Systems
- Greene, Walter E. (Ph.D., 1976; University of Arkansas; assoc. prof. and Director Small Business Institute) Business Policy and Business Administration
- Hodges, DeWayne L. (Ph.D., 1984, University of Northern Colorado; asst. prof.) Statistics
- Lee, Daniel (Ph.D., 1977, University of Florida; prof.) Management Information Systems
- Medina, Indalecio, (M.A. 1975 Pan American University)
- Nasif, Ercan (Ph.D., 1988; North Texas State University; asst. prof.) Management
- Rydl, Lester M. (Ph.D., 1978, Texas A & M University, CDP; assoc. prof.) Statistics
- Strong, Charles (Ph.D., 1973; University of Alabama; prof.) Management
- Vincent, Vern C. (Ph.D., 1972, University of Northern Colorado; assoc. prof.; Director of Graduate Program; School of Business Administration) Research, Statistical Methodology
- Wilson, James M. (Ph.D., 1971, University of Arkansas; assoc. prof.) Management

As may be implied from the department name, students majoring in this department may select between a management, computer information systems and administrative information systems options. The curricula for options are shown below. In addition to completing The University College/General Education courses as outlined in the Pan American University catalog, the student will be responsible for fulfilling the requirements of his selected option.

A minor in Computer Information Systems is available to students from all areas of the University and is designed to prepare the student for entry-level positions in computer data processing.

Degree applicability of coursework from business programs which are not accredited by the American Assembly of Collegiate Schools of Business (AACSB) must be determined through appropriate validation procedures and/or examination. Final approval of non-AACSB accredited coursework will be by the Department Chairman or Dean of the Business School.

NOTE: Students **MUST** file a degree plan at the beginning of their Junior year before their application for graduation will be processed. Each student shall have full responsibility for meeting this requirement. This responsibility does not lie with the department.

Curriculum in Management — Computer Information Systems — Administrative Information Systems

The coursework leading to the BBA degree is classified as follows:

Major in Management

		Hours
General Education, Business Foundation, Common Body of Knowledge Courses		109
		<u>12</u>
Management Specialization Courses		
MANA 3332	Human Relations in Management	
MANA 3362	Personnel Management	
MANA 4364	Societal Problems in Business	
CIS	Elective above CIS 1301	
Management Electives - Select 12 hours from:		12
MANA 4300	Topics	
MANA 4361	Human Behavior in Organization	
MANA 3365	Wage and Salary Administration	
MANA 3364	Organizational Theory	
MANA 4366	Small Business Management	
MANA 4368	Industrial Relations (new title)	
ECO 3351	Macroeconomic Theory	
Total Requirements		<u>133 hours</u>

Major in Computer Information Systems

		Hours
General Education, Business Foundation, Common Body of Knowledge Courses		106
		<u>27</u>
Computer Information Systems Specialization Courses		
CIS 2310	COBOL Programming	
CIS 2311	Advanced Programming Techniques	
CIS 2312	Microcomputer Concepts with Business Applications	
CIS 2308	Structured Programming Concepts	
CIS 3335	Data Base Management Systems	
CIS 3336	Systems Analysis	
CIS 4333	Information Systems	
CIS	Electives (6 semester hours)	
Total Requirements		<u>133 hours</u>

Minor in Computer Information Systems

ACC 2421	Principles of Accounting I	
MANA 3361	Principles of Management	
CIS 2308	Structured Programming Concepts	
CIS 2310	COBOL Programming	
CIS	Electives (6 semester hours) at 3000 or 4000 level	
Total Minor Requirements		19 hours

Course Descriptions**Administrative Information Systems****AIS 1301 KEYBOARDING FOR INFORMATION PROCESSING**

Offers basic instruction on keyboarding techniques suitable for operating electronic office equipment. Students will build basic skills in various business applications such as business letters, manuscripts, and tabulated formats through the use of word processing software. Input and retrieval of information quickly and efficiently will be emphasized. This replaces GENB 1301 and credit may not be obtained in both courses.

AIS 1305 ELEMENTARY SHORTHAND

Fall, Spring, Summer

For students who desire a mastery of the principles of Gregg shorthand. The writing of shorthand, intensive vocabulary building, elementary dictation and transcription. May not be counted for major or minor credit in business administration. This replaces GENB 1305 and credit may not be obtained in both courses.

AIS 1306 INTERMEDIATE SHORTHAND*Fall, Spring*

A continuation of AIS 1305. Review of the principles of Gregg shorthand, vocabulary building, dictation and transcription. A student should be able to acquire a dictation speed of 70-90 words per minute by the end of this semester. For those in the secretarial sequence of Business Education, this course must be taken prior to student teaching. This replaces GENB 1306 and credit may not be obtained in both courses.

Prerequisites: AIS 1301 or equivalent and AIS 1305 or equivalent.

AIS 2301 ADVANCED INFORMATION PROCESSING

Offers increasing skill development in keyboarding techniques utilizing various software packages on electronic office equipment. Emphasizes business document preparation, editing, and proofreading. Other topics include distribution, telecommunications, networking, and information storage and retrieval.

Prerequisite: AIS 1301, high school typewriting course, or consent of instructor.

AIS 3308 OFFICE SYSTEMS PROCEDURES

Advanced office information systems course. Analysis of responsibilities in the technologically-advanced office. Emphasizes advanced concepts in communications processing, the design and implementation of information processing, dictation/transcription, telecommunications, reprographics, information storage and retrieval systems, and the interfacing of word processing and other office systems.

Prerequisite: AIS 2301.

AIS 3310 ELECTRONIC FILE AND RECORDS MANAGEMENT

A study of methods and systems of storing and retrieving information; managing a company-wide records system; organizing a records program, securing personnel, developing operating procedures, and controls; and merging people, procedures, and machines. Other topics include electronic storage systems, reprographics, communications distributions, person/machine interfaces, and appraisal of current and future technological trends.

Prerequisite: AIS 2301.

AIS 4312 ADMINISTRATIVE CONCEPTS IN THE ELECTRONIC OFFICE

Feasibility study; selection of word processing equipment; designing the word processing center; selection, training, and motivation of word processing personnel; job descriptions and career paths. Management of word processing centers, determination of standards and measurement of production will be emphasized.

Prerequisite: MANA 3361.

Management**MANA 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.

Prerequisite: MATH 1316, CIS 1301

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. (Previously MANA 4332. A student cannot receive credit in both courses.)

Prerequisite: MANA 3361 or consent of instructor.

MANA 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.

Prerequisite: GENB/MANA 2341, MATH 1317.

MANA 3361 PRINCIPLES OF MANAGEMENT AND ORGANIZATIONAL BEHAVIOR*Fall, Spring, Summer*

A study of the management functions of planning, organizing, 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 the instructor.

MANA 3364 ORGANIZATIONAL THEORY AND DESIGN*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*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.

Prerequisite: MANA 3361 and 3362 or consent of instructor.

MANA 3390 MANAGEMENT INFORMATION AND DECISION SUPPORT SYSTEMS*Fall, Spring*

A study of business information systems which includes the role, analysis, design, development and implementation of financial, technical, and strategic information systems. These systems use computer hardware and software, decision models and data bases to provide managers with information used in the decision making process.

Prerequisite: MANA 2341, MANA 3361

MANA 4300 TOPICS IN MANAGEMENT*On Demand*

A course of supervised independent study and research into management theory and practice.

Prerequisite: 9 hours of Management courses with at least a 3.0 GPA in these courses.

MANA 4361 HUMAN BEHAVIOR IN ORGANIZATION*Fall, Spring*

Development of management theory with emphasis on the investigation of individual and group behavior in organizations.

Prerequisite: MANA 3361 or consent of instructor.

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.

Prerequisite: MANA 3342

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.

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 day by day administration of company and union relations.

Prerequisite: MANA 3361 and MANA 3362

MANA 4369 BUSINESS POLICY*Fall, Spring, Summer*

A broad course in business management designed to integrate earlier studies in business to include culture and ethics. Comprehensive case problems are studied, with student participation in decision making related to business operations under conditions of uncertainty. A computerized business simulation provides for decision making under dynamic conditions.

Prerequisite: ACC 2322 or 2329, MANA 3361, 4363; MARK 3371; FIN 3383

MANA 4399*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 as a consulting team. Course emphasis will be directed toward an analysis of the basic business functions of accounting, finance, production, marketing, and management as they pertain to the successful operation of a business.

Prerequisite: Senior standing and consent of instructor

Computer Information Systems**CIS 1301 COMPUTER SYSTEMS AND BASIC PROGRAMMING***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: Math 1334 with a grade of "C" or better or 17 on ACT math area.

CIS 2308 INTRODUCTION TO STRUCTURAL PROGRAM DESIGN AND DEVELOPMENT PROGRAM DESIGN

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 1316 and computer literacy skills

CIS 2310 COBOL PROGRAMMING

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, operating systems facilities for support of batch programs.

Prerequisite: CIS 2308

CIS 2311 ADVANCED PROGRAMMING TECHNIQUES

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.

CIS 2320 MEDIUM SIZE COMPUTER SYSTEMS AND RPG PROGRAMMING

This course emphasizes the structured design and development of medium sized business computer systems using RPGII programming language. Extensive experience with the solution of business problems will be gained with a report generation language.

Prerequisite: At least one programming language course in high level language and CIS 2308.

CIS 3335 DATA BASE MANAGEMENT SYSTEMS*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. The relational, hierarchical, and network models will be covered. The student will learn the rudiments of the construction of database schema via laboratory experiences stressing application development through advanced programming techniques and a database language.

Prerequisite: 6 hours of CIS, C S courses.

CIS 3336 SYSTEMS ANALYSIS*Fall*

This course is concerned with the critical analysis of data processing operations in an organization and their redesign vis-a-vis computer applications.

Prerequisite: Six hours of CIS or C S courses.

CIS 3338 DISTRIBUTED DATA PROCESSING AND TELECOMMUNICATION*Spring*

An introduction to the characteristics, feasibility and design of distributed data processing. Focus is both on the business and elementary technical aspects of distributed processing. The business aspects will include implementation strategies, security, control, and selection of distributed data processing. Elementary technical aspects will include data communication, technology, hardware configurations and application software.

Prerequisite: Six hours of CIS or C S courses.

CIS 4330 INFORMATION RESOURCE MANAGEMENT*Fall*

Introduces the concept of resource management into information processing. Issues related to resource management of information processing such as planning development, control, evaluation, and personnel in Information Center are covered. Societal and technological issues are discussed from a managerial perspective.

Prerequisite: Database Management and System Analysis.

Presents a systematic approach to the study of programming languages, thus providing the student with the knowledge necessary to learn and evaluate such languages, formal definition of programming languages including specification of syntax and semantics. Simple statements including precedence, infix and postfix notation, global properties of Algorithmic languages, including scope of declarations, storage allocation, grouping of statements, binding time of constituents, subroutines, coroutines, and tasks, list processing, string manipulation, data description and simulation languages, run time representation of program and data structures. (Previously CS 4330, may not be repeated for credit.)

Prerequisite: CIS 3335, 3336 and senior standing.

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.

Prerequisite: CIS 3335, 3336.

CIS 4340 TOPICS IN COMPUTER INFORMATION SYSTEMS*Fall, Spring, Summer*

Topics or problems in computer information systems, subject matter changes from semester to semester. May be repeated once for credit. (Previously CS 4340, maximum of six hours credit allowed.)

Prerequisite: Consent of Instructor.

Department of Marketing, Finance and General Business

Dr. Jerry Prock, Chairman

The department of Marketing, Finance and General Business houses four BBA degree programs and two minor programs. The major programs are: Marketing, Finance, General Business, and Office Administration. A student may minor in Business Administration or may elect a second teaching field in Business Administration.

Full Time Faculty

Assefa, Zewdineh (Ph.D., 1980; University of Illinois; associate professor) Finance
Buitenbos, Clara (M.Ed., 1956, University of South Dakota; associate professor) Business
Education

de los Santos, Gilberto (Ph.D., 1972, University of Texas at Austin; professor) Marketing
 Fox, Harold (Ph.D., 1967 Rutgers; professor) Marketing
 Gratz, Jerre G. (Ed.D., 1961, University of Houston; professor) Business Education
 Jarvis, Susan S. (J.D., 1974, Tulane University; School of Law; associate professor)
 Business Law
 Platzer, Willard B., Jr. (Ph.D., 1973, University of Arkansas; professor) Marketing
 Prock, Jerry D. (Ph.D., 1970, Arizona State; professor) Finance

Curriculum in Marketing, Finance and General Business

The coursework leading to the B.B.A. degree is classified as follows:

A. General Education and Business Foundation Courses	76 hours
B. Business Core Courses	33 hours
C. Specialization (Major) Courses	24 hours
Total Degree Requirements	133 hours

Degree applicability of coursework from business programs which are not accredited by the American Assembly of Collegiate Schools of Business (AACSB) must be determined through appropriate validation procedures and/or examination. Final approval of non-AACSB accredited coursework will be by the Department Head or Dean of the Business School.

General Education and Business Foundation

Course	Hours
English - 1301, 1302 plus 6 hours of sophomore literature	12
GENB 1331(Not required of those who score 17 or more on ACT)	3
CIS 1301	3
ECO 2353, 2354	6
ACC 2421 plus 2322 or 2329	7
Foreign Languages - 6 hours in same language	6
COMM 1303	3
MATH 1316, 1317	6
Natural Science - 8 hours in same discipline	8
History 2313 or 2333 plus 2314	6
Political Science - POLS 2313, 2314	6
PE - 4 hours - Any 2 activity courses	4
3 hours from: ANTH 1313, 1323, 2323, 2353, PSY 1313, 1323, SOC 1313, 1323, 2333	3
3 hours from: ART 1301, 3301, COMM 2312, MUSIC 1301, 1302, 2307, 3311, PHIL 1310, 1320, 2330, 2380	3
	<u>76</u>

Business Core Courses

Course	Hours
FINA 3383	3
GENB 3335, 3337, 4330	12
MANA 2341, 3342, 3361, 3390, 4363, 4369	15
MARK 3371	3
	<u>33</u>

Specialization (Major) Courses

In addition to the University College General Education Program requirements, the business foundation courses and the common body of knowledge covering majors in the Department of Marketing, Finance and General Business must comply with the following requirements.

Major in Marketing

General Education, Foundation and Business Core Courses	109 hours
Marketing Specialization Courses Required	12 hours
MARK 3372 Consumer Behavior	
MARK 3374 Marketing Strategy	
MARK 4377 Marketing Management	
MARK 4378 Marketing Research	

Advanced Professional Electives (recommend MANA 4399)	6 hours
All 3000 & 4000 courses taught in the School of Business Administration	
Marketing Electives - Select 6 hours from:	6 hours
MARK 2373 Principles of Salesmanship	
MARK 3373 Industrial Marketing	
MARK 3375 Retailing	
MARK 4330 International Marketing	
MARK 4372 Promotion Management	
MARK 4379 Special Problems in Marketing	
Total Requirements	133 hours

Major in Finance

General Education Foundation and Business Core Courses	109 hours
Finance Specialization Courses Required	15 hours
FINA 3381 Money and Banking	
FINA 3382 Investment Principles	
FINA 3386 Financial Institutions and Markets	
FINA 4381 International Finance	hours
ACC 3321 Intermediate Acct or	
3322 Cost Accounting	
One of the groups (A, B, C or D)	9 hours
A. FINA 4382 plus 6 hours advanced Finance electives or MANA 4399	
B. FINA 4383 plus 6 hours advanced Finance electives or MANA 4399	
C. FINA 3384, 3387 plus 3 hours advanced Finance electives or MANA 4399	
D. FINA 4389, 4386 plus 3 hours advanced Finance electives or MANA 4399	
Total Requirements	133 hours

Major in General Business

General Education Foundation and Business Core Courses	109 hours
MANA 4366 Small Business Management	3 hours
Eighteen hours from the following with at least one course from each of the five groups	18 hours
a. ACC 3323, 3324; CIS 2310	
b. ECO 3352, 3353, 4357	
c. FINA 3382, 4383; GENB 3356	
d. MANA 3362, 3332, 4399; AIS 4312	
e. MARK 2373, 3372, 3375	
Professional Electives	3 hours
Total Requirements	133 hours

Minor in Business Administration

ACC 2329 Managerial Accounting	
ACC 2421 Principles of Accounting I	
ECO 2353 Principles of Economics I	
MANA 3361 Principles of Management	
MARK 3371 Principles of Marketing	
FINA 3383 Managerial Finance	
Total Requirements	19 hours

Teacher Certification in Business Administration

All majors in the School of Business Administration may obtain certification to teach in Texas secondary schools by completing the following:

1. Any major in the School of Business Administration
2. AIS 2301 Advanced Information Processing
3. GENB 3315 Seminar in Understanding Business Subjects
4. AIS 1306 Intermediate Shorthand (Optional and required only if student desires certification in shorthand.)
5. The required hours in Education courses from the School of Education
6. Must have a 2.50 GPA in major field

Course Descriptions

Finance

FINA 1381 PERSONAL FINANCE

Fall, Spring, Summer

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 is studied. (Was BA 1381, may not be repeated for credit.)

FINA 3381 MONEY AND BANKING

Fall

The components, nature, functions, creation and destruction of money and credit; financial institutions and their functions; introduction to monetary theory and policy for the purpose of establishing the framework of the monetary economy.

Prerequisite: ECO 2354

FINA 3382 INVESTMENT PRINCIPLES

On Demand

Analysis and valuation of investment securities of corporations and governmental agencies. The purchase and sale of securities through brokerage houses and investment banking firms will be studied. (Was BA 3382, may not be repeated for credit.)

FINA 3383 MANAGERIAL FINANCE

Fall, Spring, Summer

The finance function in the firm and the specific responsibilities of the firm's financial manager. Emphasis is on financial decisions using managerial information systems as an integrating force to deliver planned results. This includes but is not limited to decisions affecting the internal management of the firm and the acquisition of new assets and funds.

Prerequisite: 6 semester hours of accounting, 6 semester hours of economics, and 3 semester hours of statistics.

FINA 3384 FUNDAMENTALS OF REAL ESTATE

Fall, Summer

Physical and economic characteristics of real estate, applicable law, taxation, appraisal, marketing and finance.

FINA 3385 PRINCIPLES OF INSURANCE

Spring

Identification and control of risks facing the individual and the business firm, and the use of insurance and other mechanisms in dealing with them. Risk analysis, loss prevention, personal and property insurance, insurance programs and estate plans.

FINA 3386 FINANCIAL INSTITUTIONS

On Demand

The dynamics of financial markets and their interaction with suppliers of funds, particularly financial intermediaries.

Prerequisites: 6 semester hours each of accounting and economics, FINA 3381.

FINA 3387 REAL ESTATE FINANCE

On Demand

An analysis of the nature and problems of developing the financing of real estate. Involved is 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 4389 COMMERCIAL BANKING

On Demand

The principles and policies affecting the services, organization and management of funds in the commercial bank; policy formulation is emphasized; coordination with general economic and money market conditions is covered. (Previously FINA 3389. A student cannot receive credit in both courses.)

Prerequisite: FINA 3381 and FINA 3386 or consent of instructor.

FINA 3390 PUBLIC FINANCE

On Demand

Public expenditures, their nature, changes and classifications, sources of public revenues, debt management, introduction of fiscal theory and policy.

Prerequisites: 6 semester hours each of accounting and economics.

FINA 4300 TOPICS IN FINANCE

On Demand

A special 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 4310 ESTATE PLANNING

Study of advantages of estate planning and types of instruments involved (wills, gifts, trusts); analysis of tax consequences of various approaches of estate planning, state and federal laws applicable to estates.

Prerequisites: GENB 3337 and consent of instructor.

FINA 4381 INTERNATIONAL FINANCE

On Demand

Application of finance principles in the international environment; 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 investing, financing, and work capital management within a multinational firm.

Prerequisites: 6 hours of Advanced Finance.

FINA 4382 PORTFOLIO MANAGEMENT

On Demand

Provides the theoretical framework, techniques and applications of investment management. Develops models for performance evaluation emphasizing optimum combination of risk and return.

Prerequisites: FINA 3382.

FINA 4383 ADVANCED MANAGERIAL FINANCE

On Demand

Considers the commitment of funds to asset purchases and the measuring and influencing of cost of capital. Emphasizes the development of tools and techniques utilizing quantitative methods for the analytical study of financial administration and applications in the major problem areas of corporate finance.

Prerequisite: FINA 3383.

FINA 4386 MANAGEMENT IN FINANCIAL INSTITUTIONS

On Demand

An analysis of the policy and operating decisions needed by the management of financial institutions to maximize shareholder benefits.

Prerequisites: FINA 3381, 3386.

General Business

NOTE: Typewriting (word processing), shorthand, and other office systems courses are now listed under AIS (Administrative Information Systems) in the Management and CIS Department.

GENB 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 formation 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 17 or more are exempt from the Introduction to Business course.)

GENB 2335 FUNDAMENTALS OF BUSINESS COMMUNICATIONS

On Demand

A thorough application of writing principles to the various types of business letters, including statements of policy, inter-office memos and procedural minutes, informal report writing and the practicing of dictation.

GENB 2346 COOPERATIVE PROGRAMS IN BUSINESS ADMINISTRATION

On Demand

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.

GENB 3315 SEMINAR IN UNDERSTANDING BUSINESS SUBJECTS

Fall

Examines theories related to the understanding of Business Topics in order to integrate business subjects into a comprehensive entity. Psychological aspects of psycho-motor, cognitive, and effective domains are all investigated. Two independent, in-depth business projects are required.

Prerequisite: AIS 2301.

GENB 3335 ORGANIZATIONAL COMMUNICATIONS*Fall, Spring, Summer*

A systems approach to information processing which concerns itself with the psychological and practical aspects of communication applied to organization networks, research. Inter- and intra-personal communications are stressed along with the informal channels of communication in the various corporate cultures. Basic applied and experimental research projects are encouraged/required.

Prerequisite: Satisfaction of general requirements for freshman English.

GENB 3337 BUSINESS LAW I*Fall, Spring, Summer*

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.

GENB 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: GENB 3337.

GENB 3339 CONSUMER LAW

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: GENB 3337 or consent of instructor.

GENB 3340 REAL ESTATE LAW

Study of laws and regulations affecting real estate ownership/use. Estates and interests in land; security devices for real estate creditors; earnest money contracts, land use contracts.

Prerequisite: GENB 3337 or consent of instructor.

GENB 3356 BUSINESS ENTERPRISE AND PUBLIC POLICY*On Demand*

The nature, scope and effect on the business community of governmental involvement and regulation in the functioning of the economy. Emphasis is on the impact of federal legislation as it pertains to antitrust enforcement and the maintenance of competition, the regulation of public utilities and inter-regional transport, agricultural adjustment, labor relations and public ownership. Designed to give a broad understanding of the many ways in which business and economic life are shaped and influenced by government.

GENB 4330 INTERNATIONAL BUSINESS*On Demand*

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.

Prerequisite: MANA 3361, MARK 3371, FINA 3383.

GENB 4346 TOPICS IN GENERAL BUSINESS*On Demand*

Designed to give students professional experience in actual business situations or applied research into business and economic problems. This course does not count for the CO-OP program; see GENB 2346.

Prerequisite: Consent of instructor and 12 hours advanced Business Administration courses.

Marketing**MARK 2373 PRINCIPLES OF SALESMANSHIP***Fall, Spring*

Modern salesmanship, the product, the buyer, planning the presentation, meeting the prospect, the interview, overcoming resistance, closing the sale, building good will. Practical applications of selling in the form of structured class participation.

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, Summer*

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*On Demand*

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.

Prerequisites: MARK 3371 or consent of the instructor.

MARK 3374 MARKETING STRATEGY*On Demand*

Applications of marketing principles to strategy formulation. Topics include: target market selection, market mix development, and new product planning. Both consumer and industrial marketing is stressed through the use of cases, readings and special projects. Recommended as the second course in marketing.

Prerequisite: MARK 3371 or consent of instructor.

MARK 3375 RETAILING*Fall, Summer*

Principles and methods buying, 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 4372 PROMOTIONS MANAGEMENT*On Demand*

Management of the promotional mix. Analysis and application of advertising and sales promotion methods through mass communications and management of the sales force for both consumer and industrial goods.

Prerequisite: MARK 3371 or consent of instructor.

MARK 4377 MARKETING MANAGEMENT*Spring*

Emphasis on acquiring a knowledge of various tools and models that may be useful in assisting the marketing manager in his decision-making process. All areas of marketing are discussed within the decision-making framework, with practical application of techniques emphasized.

Prerequisites: MARK 3371.

MARK 4378 MARKETING RESEARCH*Fall, Spring*

Quantitative research procedures and techniques utilized in business today. Problems definition, sources of research data, survey methods, questionnaire design and sampling techniques. Practical application of procedures and techniques is emphasized through class research projects.

Prerequisite: MANA 3342, MARK 3371.

MARK 4379 SPECIAL PROBLEMS IN MARKETING*On Demand*

An in-depth study of some problems in marketing. A weekly conference is scheduled with the supervising faculty member.

Prerequisite: 12 hours in marketing and consent of instructor.

Mass Media

See Department of Communications

Department of Mathematics and Computer Science

Joseph E. Chance, Chair

Full-time Faculty

- Abraham, John P. (EdD, University of Houston; assoc. prof.) computer science
 Alvarado, Jose F., (MEd, Texas A & M University 1983; instructor) curriculum & instruction
 Arnold, Sharon T., (MA, North Texas State University 1977; instructor) mathematics, computer science
 Bernard, John E. (Ph.D., University of Texas 1978; assoc. prof.) mathematics, mathematics education
 Brazier, Gerald (PhD, Ohio State University 1974; assoc. prof.) mathematics education.
 Brazier, Pearl W., (MS, Virginia Polytechnic Institute and State University 1981; asst. prof.) computer science
 Chance, Joseph E., (PhD, University of Texas, 1971; prof.) mathematics, computer science
 Egle, David L. (MS, Texas A & M University 1977; instructor) approximation theory, numerical analysis, computer science
 Gilpin, Jerry M., (MS, Syracuse University 1966; instructor) administrative engineering
 Goodier, Benjamin G., (MS, University of New Mexico 1960; instructor) mechanical engineering
 Necochea, Alejandro, (PhD, University of Massachusetts at Amherst 1984; asst. prof.) transformation groups, algebraic topology
 Paredes, Miguel (PhD, University of Utah 1985; asst. prof.) mathematical economics and mathematical modeling.
 Petticrew, James W. (Ph.D., Illinois Institute of Technology, 1969; asst. prof.) foundations of geometry, algebra, computer science
 Pontius, Paul (MA, University of Illinois, 1965; asst. prof.) mathematics education.
 Poorkarimi, Hushang, (PhD, University of Texas 1985; asst. prof.) differential equations, applied mathematics
 Ramirez, Olga M., (PhD, Texas A & M University 1985; asst. prof.) mathematics education
 Schaefer, Sister M. G. (PhD, University of Texas 1967; prof. emeritus) mathematics education.
 Skow, Donald P., (MS, East Texas State University 1971; asst. prof.) mathematics
 Taylor, Monty B. (PhD, University of Houston, 1988; instructor) commutative algebra, multiplicative lattices
 Torres, J. Rene, (MS, Texas A & I University 1972; instructor) mathematics education
 Watkins, William (PhD, University of Wyoming 1980; assoc. prof.) topology, semigroups, microcomputers.
 Wiener, Bella, (MS, Vitebsk State University, USSR 1968; asst. prof.) mathematics education, European methods
 Wiener, Joseph (PhD, University of Leningrad 1964; prof.) differential and integral equations, mathematical analysis.

The Department of Mathematics and Computer Science offers majors in mathematics, computer science, and minors in mathematics, elementary mathematics, computer science and statistics. In addition, it offers courses for students seeking a second teaching field for teacher certification in mathematics or computer science.

Three distinct plans are available for the mathematics major—Plan I, a conventional major in mathematics without teacher certification, Plan II, a major in applied mathematics with a minor in statistics, and Plan III, a major in mathematics with teacher certification for prospective secondary teachers. Each major must complete the requirements of one of these plans.

An undergraduate specializing in mathematics begins with a study of calculus. Each of the three plans available for a major in mathematics requires coursework in calculus, computer science, linear algebra, 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 wisely.

The minor in applied statistics is available for students in mathematics and science as well as for students in other disciplines needing statistics as a tool. Course work in statistics using advanced mathematics, however, is available.

The minor in elementary mathematics is available for prospective elementary teachers seeking a specialization in mathematics. This minor focuses on the mathematical needs of the teacher in the elementary classroom.

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 with lower prices for hardware and better software, applications are found in almost all human activities from art to zoology. Presently, employment opportunities are excellent for those broadly trained in computer science. The computer science major is designed to provide the student with marketable expertise in computer science and/or to prepare the student to pursue graduate study in computer science. The computer science major can be completed with or without teacher certification. Both a 36-hour Option I plan and a 24-hour Option II plan are offered for secondary certification in computer science.

Many of the more challenging positions in mathematics require study beyond a bachelor's degree. The department offers a Master of Science in Interdisciplinary Studies degree with a concentration in mathematics for qualified and interested students.

Degree Requirements

A. Major in Mathematics:

Plan I: Major in Mathematics Without Teacher Certification

Students wishing to major in mathematics must complete the following as specified below: I. University College, General Education, and Special Requirements; II. Mathematics requirements; and III. Requirements for related minor.

I. University College, General Education, and Special Requirements	HOURS
English - 6 semester hours of Freshman English	6
English - 6 semester hours of sophomore literature	6
English 2309	3
Language other than English - 6 semester hours in same language	6
Comm 1303 recommended	3
Phil 1320 recommended	3
Mathematics - Math 1360 recommended beginning course	3
Natural Science - Phys 1401, 1402 required. In addition, 8 semester hours chosen from the same discipline	16
Computer Literacy - C S 1380 or 2325 recommended	3
Physical Education	4
Hist 2313 or 2333, 2314 (2387, 2388 Honors)	6
PolS 2313, 2314 (2387, 2388 Honors)	6
6 hours to be selected from 2 of the following 4 areas:	6
Anth 1313, 1323, 2323, 2353	
Eco 1301, 2353	
Psy 1313, 1323 (1387, 1388 Honors)	
Soc 1313, 1323, 2333	

II. Mathematics Requirements

36 hours of mathematics are required of which 21 must be advanced; these must include:

Math 1360	Differential Calculus
Math 1370	Integral Calculus I
Math 2342	Integral Calculus II
Math 2345	Computational Linear Algebra (C S 1380 or 2325 prereq)
Math 3347	Calculus III
Math 3337	Applied Statistics I (or Math 4339)
Math 3349	Differential Equations
Math 4351	Modern Algebra (grade of C or better)
Math 4357	Real Analysis (grade of C or better)

and nine additional hours in mathematics, six of which must be advanced but other than Math 3303, 3311, 3312, 3313, 3314, 3315, 3318, and 4316.

For majors and minors in mathematics, a grade of C or better is required for courses

Math 3304, 4351, 4357, and 4364 to count toward graduation. Students intending to work in applied mathematics should choose their advanced electives from Math 3337, 3338, 3368, 3373, 4339, 4340, and 4379.

Plan II: Major in Mathematics with a Minor in Statistics

Students wishing to major in mathematics with a minor in statistics must complete the following as specified below: I. University College, General Education, and Special Requirements and II. Mathematics and Statistics Requirements.

I. University College, General Education, and Special Requirements
Same as Plan I

II. Mathematics Requirements

45 semester hours of mathematics and statistics of which 27 must be advanced including:

Math	1360	Differential Calculus
Math	1370	Integral Calculus I
Math	2342	Integral Calculus II
Math	2345	Computational Linear Algebra (C S 1380 or 2325 prereq)
Math	3347	Calculus III
Math	3349	Differential Equations
Math	3368	Numerical Methods
Math	4357	Real Analysis (grade of C or better)
Stat	2330	Survey of Elementary Statistics
Stat	3337	Applied Statistics I
Stat	4336	Sampling

and nine additional hours in mathematics, six of which must be advanced but other than Math 3303, 3311, 3312, 3313, 3314, 3315, 3316, 3318, and 4316. For majors and minors in mathematics, a grade of C or better in Math 3304, 4351, 4357, and 4364 is required for those courses to count toward graduation.

Plan III: Major in Mathematics with Teacher Certification

Students wishing to major in mathematics with secondary teacher certification must complete the following as specified below: I. University College, General Education, and Special Requirements, II. Mathematics requirements with a 2.25 GPA, and III. Professional Education requirements. The program described below is referred to as Option I and does not require a second teaching field; students are encouraged to seek a second field, however. The Option II certification program does not lead to a degree and is described in the section on minors below.

I. University College, General Education, and Special Requirements	Hours
English - 6 semester hours of Freshman English	6
English - 6 semester hours of sophomore literature	6
Language other than English - 6 hour in same language	6
Comm 1303 or 1313 required	3
Phil 1320 recommended	3
Mathematics - Math 1360 recommended beginning course	3
Natural Science - 8 hours in same discipline	8
Computer Literacy - C S 1380 or 2325 recommended	3
Physical Education	4
Hist 2313 or 2333, 2314 (2387, 2388 Honors)	6
PolS 2313, 2314 (2387, 2388 Honors)	6
6 hours to be selected from 2 of the following 4 areas:	6
Anth 1313, 1323, 2323, 2353	
Eco 1301, 2353	
Psy 1313, 1323 (1387, 1388 Honors)	
Soc 1313, 1323, 2333	

II. Mathematics Requirements

36 hours of mathematics are required of which 21 must be advanced; these must include:

Math	1360	Differential Calculus
Math	1370	Integral Calculus I
Math	2342	Integral Calculus II
Math	2345	Computational Linear Algebra (C S 1380 or 2325 prereq)
Math	3304	Geometric Structures (grade of C or better)
Math	3311	Mathematics for Secondary Teachers
Math	3314	Geometry for Secondary Teachers
Math	4351	Modern Algebra (grade of C or better)

nine advanced hours in mathematics other than Math 3312, 3313, 3315, 3316, and 3318, and three other hours above the level of Math 1340.
For majors and minors in mathematics, a grade of C or better is required for courses Math 3304, 4351, 4357, and 4364 to count toward graduation.

III. Professional Education Requirements

30 semester hours of coursework including EDCI 1301, 3301, 3302, 3303, 3312, 4332, 4333, 4351, and 4641.

B. Major in Computer Science

Students wishing to major in computer science must complete the following as specified below: I. University College, General Education, and Special Requirements, II. Computer Science Core, and III. Requirements for a Related Minor. It is recommended that students wishing to pursue graduate study in computer science complete the calculus sequence.

Students wishing to complete the 36-hour Option I plan for secondary education certification in computer science must complete C S 3311, and may substitute C S 3351 for C S 3334 in the computer science core.

I. University College, General Education, and Special Requirements	Hours
English - 6 semester hours of Freshman English	6
English - 6 semester hours of sophomore literature	6
English 2309	3
Language other than English - 6 hours in same language	6
Comm 1303 recommended	3
Phil 1320 recommended	3
Mathematics - 9 hours minimum. Additional hours may be required depending on choice of minor.	
a. 6 hours from Math 1357, 1360, 1370 or from Math 1316, 1317	6
b. Math 3373 required	3
Natural Science - 8 hours in the same discipline	8
Physics recommended for Math minors	
Computer Literacy(C S 1380 or 2325 recommended)	3
Physical Education	4
Hist 2313 or 2333, 2314 (2387, 2388 Honors)	6
PolS 2313, 2314 (2387, 2388 Honors)	6
6 hours to be selected from 2 of the following 4 areas:	6
Anth 1313, 1323, 2323, 2353	
Eco 1301, 2353	
Psy 1313, 1323 (1387, 1388 Honors)	
Soc 1313, 1323, 2333	

II. Computer Science Core Requirements

36 semester hours of which 21 must be advanced. Must include

C S 1380	Introduction to Computer Science (Pascal)
C S 2380	Computer Science II (Advanced Pascal)
C S 2333	Computer Organization and Machine Language
C S 3333	Data Structures
C S 3334	Systems Programming
C S 3336	Organization of Programming Languages

and 18 additional hours of which 12 must be advanced selected from:

C S 2325	Survey of Elementary Scientific Programming
CIS 2310	Cobol Programming
C S 3340	Software Design and Development
C S 3350	Numerical Methods
C S 3351	Survey of Microcomputer Systems
C S 4334	Operating Systems
C S 4335	Computer Architecture
CIS 3335	Data Base Management Systems, or any advanced C S course other than C S 3311

III. Recommended Related Minors

A minor approved by the department is recommended to be selected from one of the following (see appropriate department for required course list for each minor):

1. Mathematics (Department of Mathematics and Computer Science)
Math 3349 or 3337 recommended.
Math 3368 or C S 3350 required.

2. Statistics (Department of Mathematics and Computer Science)
3. Physics (Department of Physical Science)
Phys 3403 recommended.
4. Other Natural Sciences (Department of Biology or Chemistry)
5. Computer Information Systems (Department of Management and Computer Information Systems)
Students selecting this minor should substitute an advanced CIS course for CIS 3330.

C. Minors in Computer Science, Mathematics, Statistics and Elementary Mathematics Education

Minor in Mathematics Without Teacher Certification

24 semester hours of mathematics of which 9 must be advanced including MATH 1360, 1370, 2342, 2345**, 3347 and 9 hours in mathematics above the level of Math 1340, six hours of which must be advanced and not including MATH 3303, 3311, 3312, 3313, 3314, 3315, 3318, and 4316.

Minors in Mathematics With Teacher Certification

Elementary Plan I:

24 semester hours in mathematics of which 12 hours must be advanced; must include MATH 1357, 1360, 1370 and 2342.

Elementary Plan II:

21 semester hours of which 12 must be advanced; must include Math 2306, 2307, 1340 and 12 hours from Math 3312, 3313, 3315, 3316, and 3318.

Secondary Plan I:

24 semester hours in mathematics of which 12 must be advanced including MATH 1360, 1370, 2342, 2345**, 3304, 3311, 3314, and 3 additional advanced hours in mathematics other than MATH 3312, 3313, 3315, 3316 and 3318.

***Minor In Statistics Without A Mathematics Major**

22 semester hours of which 9 must be advanced including:

- I) MATH 1360 and 2345**.
- II) STAT 2330, 3337 and 4336
- III) C S 2325

Minor in Computer Science without Teacher Certification

18 semester hours of which 6 must be advanced

- I) C S 1380, 2380, 2333, 3333, 3334
- II) 3 additional hours from CIS 2310, C S 2325, CIS 3335, or any advanced C S course other than C S 3311.

Minor in Computer Science with Teacher Certification (Option II)

24 semester hours of which 12 must be advanced including:

- I) C S 1380, 2380, 2333, 3311, 3333
- II) 3 hours from C S 1300, C S 2325, CIS 1301, or CIS 2310.
- III) 6 hours from C S 3351 or C S 3334, any advanced C S course, Math 3317, or CIS 3335.

Minor in Elementary Mathematics Education

21 semester hours of which twelve must be advanced including:

- I) MATH 2306, 2307, 1340
- II) 12 hours from MATH 3312, 3313, 3315, 3316 and 3318.

Department of Mathematics Graduate Program

The Department of Mathematics offers courses leading to a Master of Science in Interdisciplinary Studies with a concentration in Mathematics and provides courses for minor and support areas for degrees in other fields.

*The minor in statistics is intended to be a service minor for those majoring in business, education, health fields, the social sciences or the natural sciences. Those wishing to incorporate a statistics minor with a mathematics major should consult Plan II in above section listing requirements for a major in mathematics.

**CS 1380 or CS 2325 prerequisite.

Department Requirements for the Master of Science Degree in Interdisciplinary Studies

Before admission to candidacy by the Department of Mathematics, applicants must have completed or must complete as leveling work 24 semester hours of undergraduate mathematics, half of which must be at the upper division level, and include MATH 4351.

**Master of Science
Interdisciplinary Studies**

Concentration

Mathematics

Non-Thesis

CONCENTRATION

(18 hours)

A minimum of 18 semester hours of graduate course work in mathematics* including MATH 6351, 6357 and 6390.

RESOURCE AREA

(18 hours)

A minimum of 18 semester hours selected from 2 selected areas. At least half of the hours must be at the 6000 level. No more than 12 hours may be taken from Business Administration and Education.

TOTAL 36 hours

Course Descriptions

Computer Science

C S 1300 COMPUTER AND SOCIETY

A general computer literacy course to develop student 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 and ethical issues involving computers, history, algorithms and elementary programming in a higher level language, usage of packaged software, hardware and software terminology.

C S 1380 INTRODUCTION TO COMPUTER SCIENCE

Fall, Spring

An introduction to computer science and computer programming. The fundamentals of the Pascal programming language will be introduced. Methods of problem-solving, techniques of algorithmic development, and concepts of structured programming will be emphasized.

Prerequisite: Concurrent enrollment in or grade of "C" or better in MATH 1340 or 1316.

C S 2320 COMPUTER PROGRAMMING IN A SECOND LANGUAGE

Computer Programming in two high-level programming languages selected from languages such as C, Ada, Modula-2, or LISP. Designed for students who already know how to program in a high-level language. May be repeated once when languages change.

Prerequisite: C S 1380 or C S 2325 or consent of instructor

C S 2333 COMPUTER ORGANIZATION AND MACHINE LANGUAGE

Fall, Spring

An introduction to computer organization, machine language programming and use of assembly language programming systems, Basic instructional sets, arithmetic and logical operations, indexing, indirect addressing, Macro definition and interpreters. Several computer programming projects are included.

Prerequisite: C S 2380 or consent of instructor

C S 2380 COMPUTER SCIENCE II

Fall, Spring

A second programming course using Pascal to illustrate problem solving by structured design; to provide an introduction to elementary data structures including linked lists, stacks, queues, trees, and graphs; and to teach advanced programming techniques including recursion, sorting, and searching.

Prerequisites: C S 1380 with a grade of "C" or better.

C S 2325 SURVEY OF ELEMENTARY SCIENTIFIC PROGRAMMING

Fall, Spring

An introduction to computer programming and problem solving in the Fortran language with special emphasis on problems from science and mathematics.

Prerequisite: Concurrent enrollment in or grade of "C" or better in MATH 1340 or 1316

C S 3311 COMPUTER PROGRAMMING FOR SECONDARY TEACHERS*Spring*

This course provides secondary education majors with the background necessary to teach computer programming and/or computer mathematics in the high school. Topics include applications of programming to areas in mathematics and science as well as techniques of data processing.

Prerequisite: 12 hours of Computer Science

C S 3333 DATA STRUCTURES*Spring*

Data structures not covered in C S 2380. Topics include recursion, threaded trees, general tree, balanced trees, B trees, Huffman trees, graphs, analysis of sorting and searching algorithms, and storage management.

Prerequisites: C S 2380 and C S 2333

C S 3334 SYSTEMS PROGRAMMING*Fall*

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.

Prerequisite: C S 2333

C S 3336 ORGANIZATION OF PROGRAMMING LANGUAGES*Spring*

Introduction to the specification analysis and implementation of programming languages, including the runtime behavior, desirable features, and limitations of various languages.

Prerequisite: C S 2380 and programming experience in two high-level languages.

C S 3340 SOFTWARE DESIGN AND DEVELOPMENT*On Demand*

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: C S 2380 and, ENG 2309

C S 3350 NUMERICAL METHODS*Spring, Alternate Years*

This course includes interpolation, numerical integration, numerical solutions to differential equations and a study of numerical solutions to systems of equations.

Prerequisite: MATH 1370 and C S 2380 or C S 2325 or consent of the instructor. This course is the same as Math 3368. A student may not receive credit for both C S 3350 and Math 3368.

C S 3351 SURVEY OF MICROCOMPUTER SYSTEMS*On Demand*

A survey of the hardware and software specifications of a variety of microcomputers. A study of the applications of microcomputers to a variety of fields.

Prerequisite: C S 2380

C S 3390 PRACTICUM IN COMPUTER SCIENCE*On Demand*

Practical experience in management of computer laboratories and administration of computer systems. Students will assist in the operation of computing facilities. Course will include 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.

Prerequisite: Junior standing and 12 hours of Computer Science

C S 4333 DATABASE DESIGN AND IMPLEMENTATION*Spring Alternate Years*

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: C S 3333

C S 4334 OPERATING SYSTEMS*Fall Alternate Years*

Detailed study of operating system principles, including procedure activation, memory management, process management, resource allocation, and protection.

Prerequisite: C S 3333, 3334

C S 4335 COMPUTER ARCHITECTURE*Fall Alternate Years*

Computer organization and architecture of computer systems, basic logic design, coding, and micro-programming.

Prerequisite: CS 3334.

C S 4341 TOPICS IN COMPUTER SCIENCE*On Demand*

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.

C S 4350 ARTIFICIAL INTELLIGENCE*On Demand*

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.

Prerequisites: C S 2380 and C S 3333

C S 4390 SENIOR PROJECT*On Demand*

Students will construct a software product, following it through the stages from initial specification to the final completed project including user manual.

Prerequisite: C S 3340 and consent of instructor.

Math**MATH 1300 BASIC MATHEMATICS***Fall, Spring, Summer*

A course designed for the student with a minimal background in mathematics. This course should prepare one for the basic algebra or other mathematics coursework recommended for the student in education, fine arts, the humanities or social science. Topics include basic arithmetical operations on whole numbers, fractions and signed numbers, decimal arithmetics, percentages, elementary geometry, measurements, consumer mathematics, and an introduction to algebra. This course may not be used to satisfy any general university graduation requirements.

Prerequisite: This course does not count toward a student's hours for graduation or in the determination of hours attempted or earned.

MATH 1316 BUSINESS ALGEBRA*Fall, Spring, Summer*

This course is designed for students who plan to major within the School of Business Administration. Topics include a review of basic algebra, quadratic functions and equations, series and sequences, math of finance applications, matrices and determinants, inequalities, linear programming, logarithms, and exponential functions. Use of electronic calculators and microcomputers emphasized to perform numerical computations.

Prerequisite: MATH 1334 with a grade of "C" or better or satisfactory score on ACT or placement exam. Credit may not be received for both MATH 1340 and 1316

MATH 1317 BUSINESS CALCULUS*Fall, Spring, Summer*

This course is designed for students who plan to major within the School 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 1316 with a grade of "C" or better.

MATH 1334 BASIC ALGEBRA*Fall, Spring, Summer*

A course in beginning algebra designed to prepare the student for College Algebra. Topics include a review of basic mathematics, polynomials, special products and factors, rational expressions, linear equations and graphs, simple quadratics, and introduction to functions, systems of linear equations in two unknowns, and elementary inequalities.

Prerequisite: This course does not count toward a student's hours for graduation or in the determination of hours attempted or earned. This course replaces MATH 1303. A student may use MATH 1334 to replace a grade in MATH 1303; however, one may not receive credit for both MATH 1303 and MATH 1334. Student completing Math 1334 beginning Summer 1986 will have any hours attempted or earned removed from their records for previous attempts of 1303 or 1334.

MATH 1340 COLLEGE ALGEBRA*Fall, Spring, Summer*

Topics include a review of basic algebra, functions, quadratic and polynomial equations, systems of equations, inequalities, exponents and radicals, logarithms, complex numbers, and binomial theorem.

Prerequisite: MATH 1334 with a grade of C or better or satisfactory score on ACT or placement exam. This course replaces a grade received in MATH 1304 or 1316; however, one may receive credit only for one of MATH 1304 or 1340 or 1316.

MATH 1356 TRIGONOMETRY*Fall, Spring, Summer*

Topics include circular functions, identities, special angles, trigonometric equations, and graphs.

Prerequisite: MATH 1340 or its equivalent with a grade of "C" or better or satisfactory score on ACT or placement exam. The course replaces MATH 1305; however, one may not receive credit for both MATH 1305 and MATH 1356.

MATH 1357 PRECALCULUS MATHEMATICS

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 1360 DIFFERENTIAL CALCULUS

Topics include limits, the derivative, extrema problems, curve sketching, and applications.

Prerequisite: MATH 1357 with a grade of "C" or better or appropriate high school background and/or placement scores.

MATH 1370 INTEGRAL CALCULUS I*Fall, Spring, Summer*

Topics include antiderivatives, the definite integral, applications, and exponential/logarithmic functions.

Prerequisite: MATH 1360 with a grade of "C" or better

MATH 1387 PRECALCULUS - HONORS STUDIES*On demand*

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 College Algebra and Trigonometry and some essential topics of Analytical Geometry and Differential Calculus. A student may receive credit in only MATH 1387 or 1340 and 1356.

Prerequisite: Consent of instructor

MATH 2306 MATHEMATICS FOR ELEMENTARY TEACHERS I*Fall, Spring, Summer*

This course provides the mathematical background for meaningful teaching of number concepts, precise definitions, fundamental operations and problem solving in elementary school mathematics. The structure of the real number system is developed through the use of elementary logic and set theory.

Prerequisite: MATH 1334 with grade of "C" or better or satisfactory score on ACT or placement exam. This course is open to elementary education majors only. This course replaced 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.

MATH 2307 MATHEMATICS FOR ELEMENTARY TEACHERS II*Fall, Spring, Summer*

This course is a continuation of MATH 2306. Topics include measurement, geometry, probability, statistics, elementary algebra and problem solving.

Prerequisite: Grade of "C" or better in MATH 2306 or its equivalent. This course replaces 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.

MATH 2330 SURVEY OF ELEMENTARY STATISTICS*Fall, Spring*

This course is intended to provide the student with an elementary overview of the nature and uses of descriptive and inferential statistics. Recommended for majors or minors in Biology, Business, Community Services, Law Enforcement, Political Science, Psychology, Sociology and others who need the ability to interpret data and make simple statistical inferences. Topics include descriptive statistics, measures of central tendency and dispersion, simple probability, tests of hypotheses and estimation for both large and small samples, comparisons, chi-square tests, regression and correlation.

Prerequisite: MATH 1334 with a grade of "C" or better. This course replaces MATH 1313 and is the same as STAT 2330. A student may use MATH 2330 to replace a grade received in MATH 1313, however, one may receive credit for no more than one of MATH 1313, MATH 2330 or STAT 2330.

MATH 2342 INTEGRAL CALCULUS II*Fall, Spring*

Topics include methods of integration, indeterminate forms, improper integrals, sequences, and series.

Prerequisite: MATH 1370 with a grade of "C" or better

MATH 2345 COMPUTATIONAL LINEAR ALGEBRA*Fall*

Topics include systems of linear equations, matrices and their algebraic properties, determinants, vectors, Euclidean N-space, introduction to linear transformations and their matrix representations, and applications to business and the sciences. Emphasis is given to computer application of the above topics.

Prerequisite: C S 2325 or 1380 and MATH 1356. This course replaces 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.

MATH 3303 HISTORY OF MATHEMATICS*On demand*

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 2342.

MATH 3304 GEOMETRIC STRUCTURES*Fall*

This course studies one or many abstract geometric systems for the purpose of developing the students' understanding of and ability to create mathematical proofs.

Prerequisite: MATH 2342.

MATH 3311 MATHEMATICS FOR SECONDARY TEACHERS*Fall*

This course includes a study of mathematics education in the United States, an examination of curricular recommendations, experimental programs and teaching strategies. Throughout the course an integration of content and pedagogy is maintained.

Prerequisite: 12 semester hours of Mathematics including MATH 1370. This course replaces MATH 3304. A student may not receive credit for both MATH 3304 and MATH 3311.

MATH 3312 MEASUREMENT AND GEOMETRY FOR ELEMENTARY TEACHERS*On demand*

An in-depth study of measurement and geometry relevant to grades K-8. Topics will include length, area, volume, the metric system, transformations, symmetry, congruency, similarity, and coordinate systems. This course can be used only for elementary math certification.

Prerequisite: Grade of "C" or better in MATH 2307 or equivalent.

MATH 3313 ALGEBRAIC STRUCTURES FOR ELEMENTARY TEACHERS*On demand*

Algebraic concepts and structures relevant to elementary school mathematics will be examined with an emphasis on the group and field properties. This course can only be used for elementary math certification.

Prerequisite: Grade of "C" or better in MATH 1340.

MATH 3314 GEOMETRY FOR SECONDARY TEACHERS*Spring*

This course is designed to prepare junior and senior high school mathematics teachers to teach geometrical concepts. Topics include axiomatic geometry, symmetry, congruency, similarity, transformations, and measure.

Prerequisite: 12 semester hours of Mathematics including MATH 1370. This course replaces MATH 3306. A student may use MATH 3314 to replace a grade received in MATH 3306, however, one may not receive credit for both MATH 3306 and MATH 3314.

MATH 3315 PROBABILITY AND STATISTICS FOR ELEMENTARY TEACHERS*On demand*

An in-depth study of probability and statistics relevant for grades K-8. Topics include constructing and interpreting tables, graphs, and charts; descriptive measures; and elementary concepts of probability. This course can be used only for elementary math certification.

Prerequisite: Grade of "C" or better in MATH 1340 or equivalent.

MATH 3316 MICROCOMPUTERS IN ELEMENTARY MATHEMATICS*On demand*

This course surveys the available microcomputer hardware and discusses its impact on the elementary mathematics curriculum. Special attention is given to the ways in which microcomputers can be used to demonstrate selected mathematical topics. Programs are written that are directly applicable to the elementary mathematics class.

Prerequisite: MATH 2306 and 2307 and a knowledge of a programming language.

MATH 3317 MICROCOMPUTERS IN SECONDARY MATHEMATICS*On demand*

This course is designed to provide pre and in-service mathematics teachers with a broad background in the fields of microcomputer hardware and software. Evaluation of available hardware and software is conducted. The feasibility of developing custom software to supplement the secondary mathematics curriculum is discussed and, where feasible, such software is written.

Prerequisite: Knowledge of a programming language.

MATH 3318 DIAGNOSIS AND REMEDIATION IN ELEMENTARY SCHOOL MATHEMATICS*On demand*

An in-depth study of the diagnosis of mathematical difficulties experienced by elementary school children and of related remediation procedures. This course can be used only for elementary math certification.

Prerequisite: Grade of "C" or better in each MATH 2306, 2307, and ED 3328 or equivalent.

MATH 3337 APPLIED STATISTICS I*Fall*

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.

Prerequisite: Junior level standing, and either MATH 1365, 1370, or 1317. It is highly recommended that the student have some knowledge of statistics such as offered in MATH 2330. 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 at most one of MATH 3308, MATH 3337, or STAT 3337.

MATH 3338 APPLIED STATISTICS II*Spring*

This course is a continuation of MATH 3337 and includes special designs, analysis of variance and covariance, multiple comparisons, and coding.

Prerequisite: MATH or STAT 3337. This course replaces MATH 3309 and is the same as STAT 3338. A student may use MATH 3338 to replace a grade received in MATH 3309, however, one may receive credit for at most one of MATH 3309, MATH 3338 or STAT 3338.

MATH 3347 CALCULUS III

Topics include calculus of several variables: partial derivatives and multiple integrals.

Prerequisite: MATH 2342 with a grade of "C" or better

MATH 3349 DIFFERENTIAL EQUATIONS*Fall*

This course contains a study of ordinary differential equations, and applications.

Prerequisite: MATH 3347. This course replaces MATH 3301. A student may use MATH 3349 to replace a grade received in MATH 3301, however, one may not receive credit for both MATH 3301 and MATH 3349.

MATH 3368 NUMERICAL METHODS*Spring*

This course includes interpolation, numerical integration, numerical solutions to differential equations, and a study of numerical solutions to systems of equations.

Prerequisites: MATH 1370 and C S 2380 or C S 2325 or consent of instructor

MATH 3373 DISCRETE STRUCTURES*Fall*

This course is an introduction to discrete mathematics, studying enumeration, lattices, graphs and other topics in combinatorics. Particular emphasis is given to those structures applicable in Computer Science. (Formerly MATH 4373, may not be repeated for credit.)

Prerequisite: MATH 1340 and junior standing.

MATH 4302 THEORY OF NUMBERS*On demand*

This course includes a study of Peano's postulates, prime and composite integers, divisibility properties of the integers, congruence, and diophantine equations.

MATH 4339 MATHEMATICAL STATISTICS I*Fall*

This course introduces the student to the mathematical theory of statistics and probability. Topics include probability densities, mathematical expectation, the distribution of linear combinations of random variables and the central limit theorem.

Prerequisite: MATH 2342 with a grade of "C" or better. This course replaces MATH 4308 and is the same as STAT 4339. A student may use MATH 4339 to replace a grade received in MATH 4308, however, one may receive credit for at most one of MATH 4308, MATH 4339, or STAT 4339.

MATH 4351 MODERN ALGEBRA*Spring*

This course provides an introduction to algebraic structures. Topics to be taken from groups, rings and fields.

Prerequisite: MATH 2342. This course replaces MATH 4303. A student may use MATH 4351 to replace a grade received in MATH 4304, however, one may not receive credit for both MATH 4303 and MATH 4351.

MATH 4357 REAL ANALYSIS*Spring*

This course presents a rigorous introduction to the elements of real analysis. Topics include sequences, series, functions, limits, continuity, and derivatives.

Prerequisite: MATH 2342. This course replaces MATH 4315. A student may use MATH 4357 to replace a grade received in MATH 4315, however, one may not receive credit for both MATH 4315 and MATH 4357.

MATH 4364 SPECIAL PROBLEMS IN MATHEMATICS*On demand*

This course covers special undergraduate topics in mathematics which are not taught elsewhere in the department. May be repeated for credit.

Prerequisite: Consent of instructor.

MATH 4379 SPECIAL PROBLEMS IN APPLIED MATHEMATICS*On demand*

This course covers special undergraduate topics in applied mathematics which are not taught elsewhere in the department. May be repeated for credit when topic is different.

Prerequisite: Consent of instructor. This course replaces MATH 4311. A student may use MATH 4379 to replace a grade received in MATH 4311, however, one may not receive credit for both 4311 and MATH 4379.

MATH 6306 DIAGNOSTIC AND CORRECTIVE PROCEDURES IN ELEMENTARY SCHOOL MATHEMATICS*On demand*

This course is a study of diagnostic and corrective procedures for children experiencing difficulty in elementary school mathematics. This course cannot be used toward a mathematics concentration for a Master of Science degree in Interdisciplinary Studies.

Prerequisite: Grade of "C" or better in MATH 2306, 2307, and ED 3328 or equivalent.

MATH 6308 TOPICS IN ALGEBRA FOR TEACHERS*On demand*

This course examines algebraic structures and investigates research and recent trends in the teaching of algebra.

Prerequisite: MATH 4351 or equivalent.

MATH 6312 TOPICS IN GEOMETRY FOR TEACHERS*On demand*

This course examines geometric structures and investigates research and recent trends in the teaching of geometry.

Prerequisite: MATH 3314 or consent of instructor.

MATH 6320 COMPUTER APPLICATIONS IN SECONDARY MATHEMATICS*On demand*

The purpose of this course is to explore the impact of computer technology in our society, to examine computer assisted instruction, to study the function of the computer as an instructional tool and modeling device for teaching secondary mathematics, and to review computer concepts and techniques that will strengthen the understanding of mathematics.

Prerequisite: Knowledge of programming and consent of instructor.

MATH 6328 SPECIAL PROBLEMS IN TEACHING MATHEMATICS*On demand*

A critical analysis of issues, trends, and historical developments in elementary and/or secondary mathematics teaching with emphasis on the areas of curriculum and methodology. This course may be repeated for credit when topic changes.

MATH 6351 TOPICS IN ALGEBRA*On demand*

Topics selected from abstract and linear algebra. May be repeated for credit when the topics change.

Prerequisite: MATH 4351 and consent of instructor.

MATH 6357 TOPICS IN ANALYSIS*On demand*

Topics selected from real, complex, and abstract analysis.

Prerequisite: MATH 4357 and consent of instructor.

MATH 6390 MATHEMATICS SEMINAR*On demand*

Introduction to the methods and tools of mathematical research. The work of the course consists in the solution by students of assigned problems in various fields of mathematics and presentation of these solutions in both written and oral form.

Prerequisite: Twelve hours of graduate Mathematics.

Statistics**STAT 2330 SURVEY OF ELEMENTARY STATISTICS**

This course is intended to provide the student with an elementary overview of the nature and uses of descriptive and inferential statistics. Recommended for majors or minors in biology, business, community services, law enforcement, political science, psychology, sociology, and others who need the ability to interpret data and make simple statistical inferences.

Topics include descriptive statistics, measures of central tendency and dispersion, simple probability, tests of hypotheses and estimation for both large and small samples, comparisons, chi-square tests, regression and correlation.

Prerequisite: MATH 1334 with a grade of "C" or better. This course is the same as MATH 2330. A student may not receive credit for both STAT 2330 and MATH 2330.

STAT 3337 APPLIED STATISTICS I

This course concerns itself with probabilistic models, regression analysis, nonparametric statistics, and the bases of experimental design. Computer laboratory experience will be an important part of the course.

Prerequisite: Junior level standing, and either MATH 1365, 1370 or 1317. It is highly recommended that the student have some knowledge of statistics such as offered in STAT 2330. This course is the same as MATH 3337. A student may not receive credit for both STAT 3337 or MATH 3337.

STAT 4336 SAMPLING

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.

Mexican American Heritage

See Department of History

Department of Military Science

Army Reserve Officers' Training Corps (ROTC)

Lieutenant Colonel Patrick H. Orell, Chair

Full-time Faculty

Luna, Jessie G., Captain (B.S., Park College) Military Science
Sanchez, Oscar I., Captain (B.A., University of Texas at Austin) Military Science
Orell, Patrick H., LTC (M.S., University of Wisconsin) Military Science.

The Military Science Department offers a minor in Military Science and a commission as an officer in the U.S. Army through the Reserve Officer Training Corps (ROTC) program at the Edinburg campus. Commissions may be offered in the Active Army, Army Reserve or Army National Guard.

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 who complete the program will have:

1. Enhanced their leadership and managerial potential
2. A basic understanding of military fundamentals and national security
3. A clear understanding of the concept of military art and science
4. Developed 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 14 faculty advisors from different departments, serves as liaison with the ROTC department, and helps provide guidance on career opportunities with the Army or Reserve/National Guard for students of other departments at Pan American University.

ROTC Faculty Advisory Committee

Dr. Carl R. Carlan (Chairman) — School Administration & Supervision
 Mrs. Gwendolynne Skinner — Nursing Education
 Dr. Dean R. Canty — Music
 Mr. Donald Skow — Math
 Dr. Samuel E. Giuoco — Physical Science
 Mr. Ruben Vela — Orientation/Recruitment
 Dr. Roger L. Tolar — Curriculum & Instruction
 Ms. Elvie Davis — Assistant Dean of Students
 Dr. Mark Winkel — Psychology
 Mr. Oscar Salinas — English
 Mr. James H. McKone — Public Information Coordinator
 Mrs. Linda Freeman — Assistant Director, Admissions and Records
 Mrs. Susan Hancock — Library

Army Scholarship Program

Any student who meets prerequisites may compete for nationally-awarded U.S. Army scholarships which pay for tuition, books, fees, and other purely educational costs and a tax-free monthly subsistence allowance for ten months of each year the scholarship is in effect.

Veteran's Assistance

Veterans who enroll in upper level Military Science receive a tax-free monthly subsistence allowance for ten months each of the two years, in addition to benefits provided by the Veteran's 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 baccalaureate 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, the Dining-out, JROTC Day Olympics, field trips to military installations, high school recruiting visits, flag football, volleyball, and Color Guard ceremonies.

Army Training (Airborne, Air Assault, and Jungle Warfare)

Selected cadets enrolled in the course may be eligible to compete for attendance at either the Airborne, Air Assault, or Jungle Warfare schools. Selection is based upon motivation, physical condition, and performance in Military Science.

Minor in Military Science

The Military Science Department 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 at 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, Basic Leadership, Land Navigation, and Survival, which provide the opportunity to increase individual skills and knowledge in leadership and management techniques in and outside the classroom.

Requirements for Advanced Military Science Standing and Commissioning

1. Complete four semesters of lower level ROTC courses or have advanced credit as a Veteran, from USAR/ARNG Basic Training, ROTC Basic Camp, or JROTC credit and approval.
2. Maintain full-time student status.
3. Pass a military physical examination.
4. Pass the ROTC Physical Aptitude Examination.
5. Pass the Officer Selection Battery.
6. Maintain an overall grade point average of 2.0.
7. Sign an Advanced ROTC and Commissioning Agreement.
8. Successfully complete 4 semesters of Advanced ROTC courses.
9. Successfully complete ROTC Advanced Camp
10. Successfully complete an undergraduate degree program.

Minor Requirements

Twenty-four semester hours: HIST 2335; plus nineteen hours in Military Science instruction, of which sixteen hours must be advanced.

Course Descriptions

ROTC

ROTC 1203 MARKSMANSHIP AND FIRST AID

Studies the fundamentals of rifle and pistol marksmanship and provides practical experience in marksmanship in an indoor range. In-depth study of weapons safety. Examines basic first aid procedures and is supplemented by approved training in cardio-pulmonary resuscitation (CPR). Two hours lecture and a leadership laboratory. Optional weekend field training exercise is offered.

ROTC 1204 SURVIVAL TRAINING

An introduction to basic military science. Studies basic leadership principles at the lowest organizational level and examines the organization and role of the United States Army at the lower levels of command. Emphasis is placed on methods and techniques of survival in various situations, but is also designed to enhance self confidence and physical fitness through active participation in rappelling and adventure training. Two hours lecture and a leadership laboratory. Optional weekend field training exercise is offered.

ROTC 1205 DRILL AND CEREMONIES

An application of the techniques of conducting individual and small unit drill up to company level and studies the history and methods of ceremonial drill. It emphasizes physical conditioning, instructional techniques, use of command voice, active student participation and provides leadership experience. Two hours lecture and a leadership laboratory. Optional weekend field training exercise is offered.

ROTC 1207 LAND NAVIGATION

A continuation of basic military science and leadership training with primary emphasis on land navigation providing the student with practical experience in terrain association and the use of a map and compass. Further provides an introduction to basic rifle marksmanship and first aid and provides the student an opportunity to build self confidence and physical fitness through active participation in rappelling and adventure training. Two hours lecture and a leadership laboratory. Optional weekend field training exercise is offered.

ROTC 2203 BASIC MILITARY LEADERSHIP & TACTICS I*Fall ONLY*

An application of leadership principles and basic military skills. Provides instruction in fire team and squad level tactics and examines the organization and role of the U.S. Army up to company level with increased emphasis on advanced land navigation and first aid techniques and weapons systems. Stresses physical fitness and provides adventure training in leadership positions. Two hours lecture and a leadership laboratory. Optional weekend field training exercise is offered.

ROTC 2204 BASIC MILITARY LEADERSHIP & TACTICS II*Spring ONLY*

A continuation of the application of leadership principles and basic military skills. Personnel management and motivational techniques are studied through placement of students in positions of small unit leadership given assigned missions. Introduction to military communications equipment and procedures. Studies the organization of the U.S. Army through Battalion level and more advanced weapons systems. Stresses physical fitness and provides adventure training in leadership positions. Two hours lecture and a leadership laboratory. Optional weekend field training exercise is offered.

ROTC 3401 ADVANCED MILITARY LEADERSHIP*Fall ONLY*

This course introduces the student to the responsibilities, character, and uniqueness of the commissioned officer as a profession. Topics include the roles of the small unit leader and staff officer, advanced military leadership and training management as well as tactical operations and comparative adversary weapons systems. Three hours lecture and a leadership laboratory. Weekend field training exercise.

Prerequisite: Advanced ROTC Standing.

ROTC 3403 SMALL UNIT TACTICS*Spring ONLY*

Analysis of the leaders' role in directing and coordinating the efforts of individuals and platoon size units in the execution of offensive and defensive tactical missions, communications, weapons systems, land navigation and terrain association. Three hours lecture and a leadership laboratory. Weekend field training exercise.

Prerequisite: Advanced ROTC Standing.

ROTC 4402 TRAINING AND STAFF MANAGEMENT*Fall ONLY*

An examination of the garrison and administrative responsibilities of the commissioned officer. In depth analysis of staff procedures, military correspondence, training programs and procedures, and the decision making process. Three hours lecture and a leadership laboratory. Weekend field training exercise.

Prerequisite: Advanced ROTC Standing.

ROTC 4404 ADVANCED MILITARY SCIENCE*Spring ONLY*

This course delves into the ethical and professional responsibilities of the commissioned officer and studies the military justice system as well as the Army Personnel Management and Logistics Systems. Three hours lecture and a leadership laboratory. Weekend field training exercise.

Prerequisite: Advanced ROTC Standing.

Department of Modern Languages and Literatures

Dr. Lino Garcia, Jr., Chair

Academic Instructional Staff*

Contreras, Victoria (Ph.D, Texas, 1988; asst. prof.) Spanish
 Dominguez, Sylvia M.* (Ph.D, Arizona 1971; prof.) Spanish
 Garcia, Lino* (Ph.D, Tulane 1981; assoc. prof.) Spanish
 Heartfield, Gilbert* (Ph.D, New Mexico 1972; assoc. prof.) Spanish
 Maloney, James C.* (Ph.D, Arizona 1973; assoc. prof.) Spanish
 Mejias, Hugo* (Ph.D, New York State 1978; assoc. prof.) Spanish
 Rea, Ramiro R. (M.A, Sam Houston State 1969; asst. prof.) Spanish
 Sanchez, Encarnacion (M.A, Sam Houston State 1970; inst.) Spanish

The Department of Modern Languages consists of the subject areas of Spanish, French, German, and Portuguese.

A major is offered in Spanish. A minor is offered in Spanish and in French. Beginning courses are offered in German and Portuguese. Teacher certification plans in Spanish and French are available at both the elementary and secondary level. The department also offers a graduate major program leading to a concentration in Spanish within the Master of Arts in an Interdisciplinary Studies Degree.

Departmental Requirements

Art Appreciation 1301 or Music Appreciation 2307 and Comm 1303 or 1313.

Major in Spanish (with certification)

36 semester hours of Spanish of which 24 semester hours must be advanced; must include 1301, 1302, or 1387, 1388 or 1303, 1304; 2301, 2302 or 2307, 2308; 3303 or 3304, 3306, 3330 or 4336; 4316; 6 hours from 3301, 3302, 3310, 3311; 6 hours from 3309, 3316, 3321, 4303, 4304, 4305, 4306, 4307, 4308, 4309, 4317, 4318, 4325, 4326, 4327, 4329, 4330, 4331.

Major in Spanish

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

Minor in Spanish

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

Minor in Spanish (with certification)

Elementary Plan I: 21 semester hours of Spanish of which 9 must be advanced; must include 1301 and 1302 or 1303 and 1304; 2301 and 2302 or 2307 and 2308; 3303 or 3304; 3306, 3330

Elementary Plan II: 24 semester hours of which 12 must be advanced; must include 1301 and 1302 or 1303 and 1304; 2301 and 2302 or 2307 and 2308; 3303 or 3304; 3306; 3330, 3 advanced hours of Spanish electives.

Secondary Plan I: 24 semester hours of which 12 must be advanced; must include 1301 and 1302 or 1303 and 1304; 2301 and 2302 or 2307 and 2308; 3303 or 3304, 3306, 3330, 4316.

Minor in French

18 semester hours in French, of which 6 must be advanced.

Minor in French (with certification)

The course requirements for the secondary teaching minor in French are 24 semester hours of which 12 semester hours must be advanced; must include 1321, 1322, 2321-2322, 3321-3322 and French 4321-4322. Students seeking elementary certification will take French 1321, 1322, 2321, 2322, 3321, 3322 and 4321 or 4322.

Translator Program

The department offers courses in translation leading to the Translator Certificate and to the Translator and Bilingual Administrator Certificate.

Requirements for the Translator Certificate:

1. General Business 1313 and Economics 2353.
2. Fifteen semester hours in translation courses: Spanish 3332, 3333, 3334, 4332 and 4334.

Requirements for the Translator and Bilingual Administrator Certificate:

1. Major in Spanish.
2. Minor in Business Administration.
3. General Business 1313 and Economics 2353.
4. Courses required are Spanish 3332, 3333, 3334, 4332 and 4334.

The Department of Modern Languages Graduate Program

The Department of Modern Languages offers a graduate level concentration in Spanish within the Master of Arts in Interdisciplinary Studies degree program. Students enroll in eighteen hours in Spanish as a concentration, and take the remaining hours in other areas of study.

Special Departmental Requirements

In addition to the general admission requirements set forth elsewhere in this bulletin, the following specific requirements must be met:

1. Applicants who wish to specialize in Spanish must have completed at least 12 semester hours of Spanish at the advanced undergraduate level.
2. Students who do not specialize but wish to take graduate courses in Spanish must have linguistic ability equivalent to that attained on completion of the intermediate level in Spanish. Non-specialists who wish to enroll in literature in translation courses are exempted from the language ability requirement.
3. Specialists will choose courses in Spanish and in related areas through consultation with their advisor.

Master of Arts Degree in Interdisciplinary Studies

Concentration			Thesis
Spanish			
Eighteen semester hours in Spanish including a thesis. Eighteen semester hours in related fields.			
<i>Requirements:</i>			
SPAN 7300	Thesis		
SPAN 7301	Thesis		
		TOTAL	36 hours

Master of Arts Degree in Interdisciplinary Studies

Concentration			Non-Thesis
Spanish			
Eighteen semester hours in Spanish and no thesis. Eighteen hours in related fields.			
		TOTAL	36 hours

Course Descriptions

French

FR 1321 BEGINNING FRENCH

Fall, Spring

A study of the essentials of French grammar, pronunciation, elementary conversation and prose reading.

FR 1322 BEGINNING FRENCH

Fall, Spring

A continuation of French 1321.

Prerequisite: French 1321.

FR 1323 FRENCH CONVERSATION*Fall, Spring*

Designed for students with an elementary knowledge of French who wish to strengthen their oral ability. Contemporary topics will be discussed. Active student participation is required.

Prerequisite: French 1322.

FR 2321-2322 INTERMEDIATE FRENCH

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: French 1322.

FR 3321 FRENCH COMPOSITION I

Practice in writing expository, narrative and descriptive prose.

Prerequisite: French 1322.

FR 3322 FRENCH COMPOSITION II

Practice in writing critical appreciations of selected literary works.

Prerequisite: French 1322.

FR 3120 FRENCH PHONETICS

Survey of the French sound system with intensive practice. A one credit hour lab course designed to improve pronunciation.

Prerequisite: French 1322.

FR 4321 SURVEY OF FRENCH LITERATURE I

Masterpieces of French Literature from the Middle Ages to the French Revolution.

Prerequisite: French 1322.

FR 4322 SURVEY OF FRENCH LITERATURE II

Masterpieces of French Literature from 1800 to the present.

Prerequisite: French 1322.

FR 4323 FRENCH FOR THE PROFESSIONS

Conversation and writing practice based on selected readings in different fields of the sciences and business.

Prerequisite: French 1322.

FR 4339 SPECIAL TOPICS

Special topics from the field of French language and literature.

Prerequisite: French 1322.

German**GER 1331 BEGINNING GERMAN***Fall*

A study of the essentials of German grammar, pronunciation, elementary conversation, and prose reading.

GER 1332 BEGINNING GERMAN*Spring*

A continuation of German 1331.

Prerequisite: German 1331.

Portugese**PORT 1361 BEGINNING PORTUGESE***Fall*

A practical course in listening, reading and writing modern Portugese.

PORT 1362 BEGINNING PORTUGESE*Spring*

A continuation of Portugese 1361.

Prerequisite: PORT 1361.

Spanish**SPAN 1301 BEGINNING SPANISH***Fall, Spring, Summer*

A course designed to develop the ability to understand, speak, read and write the Spanish language. Open only to persons whose native tongue is not Spanish.

SPAN 1302 BEGINNING SPANISH*Fall, Spring, Summer*

A continuation of Spanish 1301.

Prerequisite: SPAN 1301.

SPAN 1303 BEGINNING SPANISH*Fall, Spring, Summer*

A course designed to develop the ability to read and to write the Spanish language. For students whose native language is Spanish but who have not studied it.

SPAN 1304 BEGINNING SPANISH*Fall, Spring, Summer*

A continuation of Spanish 1303.

Prerequisite: Spanish 1303.

SPAN 2301 INTERMEDIATE SPANISH FOR NON-NATIVE SPEAKERS*Fall, Spring, Summer*

Continuation of oral practice with special emphasis on reading and writing skills.

Prerequisite: Spanish 1302.

SPAN 2307 INTERMEDIATE SPANISH FOR NATIVE SPEAKERS*Fall, Spring, Summer*

A comprehensive review of Spanish grammar with special emphasis on writing.

Prerequisite: Spanish 1304.

SPAN 2308 INTERMEDIATE SPANISH FOR NATIVE SPEAKERS*Fall, Spring, Summer*

A continuation of Spanish 2307.

Prerequisite: Spanish 2307.

SPAN 3301 SPANISH LITERATURE (from the beginning to 1750).*Spring*

A survey of the literature of Spain from EL CID to the middle of the 18th Century. Given in Spanish.

Prerequisite: Spanish 2308.

SPAN 3302 SPANISH LITERATURE (1750 to our times)*Spring even year, second Summer II odd year*

A survey of the literature of Spain from Romanticism to the Modern period. Given in Spanish.

Prerequisite: Spanish 2302 or 2308.

SPAN 3303 ADVANCED SPANISH COMPOSITION*Fall odd year, Summer I even year*

Intensive training in Spanish composition. Given in Spanish.

Prerequisite: Spanish 2302 or 2308.

SPAN 3304 ADVANCED SPANISH COMPOSITION*Spring odd year, Summer II even year*

Additional work in composition. Given in Spanish.

Prerequisite: Spanish 2302 or 2308.

SPAN 3306 BASIC CONCEPTS OF SPANISH PHONETICS AND PHONOLOGY*Fall, Summer I*

An analysis of the phonetic and phonological system of Spanish with special emphasis on the relationship between the phonetic system and writing.

Prerequisite: Spanish 2302 or 2308.

SPAN 3310 MASTERPIECES OF SPANISH-AMERICAN LITERATURE, I.*Fall even year, Summer I*

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: Spanish 2302 or 2308.

SPAN 3311 MASTERPIECES OF SPANISH-AMERICAN LITERATURE, II*Spring even year, Summer II*

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. Given in Spanish.

Prerequisite: Spanish 2302 or 2308.

SPAN 3316 THE MEXICAN NOVEL*Fall once every three years*

The study of the major novels of Mexico. Given in Spanish.

Prerequisite: Spanish 2302 or 2308.

SPAN 3330 SPANISH GRAMMAR*Fall, Spring, Summer II*

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: Spanish 2302 or 2308 (Prerequisite for aspirants to bilingual/bicultural endorsement: Spanish 2302 or 2308 and English 3319.)

SPAN 3332 INTRODUCTION TO SPANISH-ENGLISH TRANSLATION*Fall even year*

A basic orientation in the theory and practice of translating a text from Spanish to English, including consideration of both cultural and morpho-syntactical problems.
Prerequisites: English 3330, Spanish 1301, 1302, or 1303, 1304; 2301, 2302, or 2307, 2308; 3303, 3304, 3306 and 3330.

SPAN 3333 INTRODUCTION TO ENGLISH-SPANISH TRANSLATION*Spring even year*

A basic orientation in the theory and practice of translating a text from English to Spanish, including consideration of both cultural and morpho-syntactical problems.
Prerequisites: English 3330, Spanish 1301, 1302, or 1303, 1304; 2301, 2302, or 2307, 2308; 3303, 3304, 3306, and 3330.

SPAN 3334 BUSINESS SPANISH

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: Spanish 2308.***SPAN 4303 SPANISH CIVILIZATION***Fall every three years.*

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: Spanish 2302 or 2308.***SPAN 4304 SPANISH LYRIC POETRY***Spring*

A survey of lyric poetry from the beginning to the present. Given in Spanish.

*Prerequisite: Spanish 2308***SPAN 4305 CERVANTES***Spring once every three years.*

A study of the principal works of Miguel de Cervantes with particular emphasis on the DON QUIXOTE. Given in Spanish.

*Prerequisite: Spanish 2302 or 2308.***SPAN 4307 SPANISH-AMERICAN NOVEL***Fall every three years.*

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: Spanish 2302 or 2308.***SPAN 4308 MEDIEVAL SPANISH LITERATURE***Summer and Spring*

A study of the principal literary works of Spain from EL CID to the ROMANCERO. Given in Spanish.

*Prerequisite: Spanish 2308.***SPAN 4309 CONTEMPORARY SPANISH LITERATURE***Fall and Spring*

A study of the principal literary works of Spain from the Generation of 1898 to the present. Given in Spanish.

*Prerequisite: Spanish 2308.***SPAN 4316 TECHNIQUES AND METHODS OF TEACHING SPANISH***Spring*

A study of methods and techniques utilized in teaching Spanish at the secondary level.

*Prerequisite: Spanish 2302 or 2308.***SPAN 4317 GOLDEN AGE PROSE***Fall*

A critical study of the most representative prose works of Golden Age Spain. Given in Spanish.

*Prerequisite: Spanish 2308.***SPAN 4318 THEATER AND POETRY OF THE GOLDEN AGE***Fall every three years.*

Study of the principal dramatists and poets of the 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: Spanish 2302 or 2308.

SPAN 4326 CONTEMPORARY SPANISH AMERICAN LITERATURE: A NEW ERA
Summer every three years.

An investigation of contemporary Spanish American literature through a four genre study that will include discussions on the following topics: The Quest for identity, the Questions of communication and alienation and the problems of existential man in the universe.

Prerequisite: Spanish 2302 or 2308.

SPAN 4329 MEXICO'S CONTEMPORARY LITERATURE

Fall every three years.

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: Spanish 2302 or 2308.

SPAN 4332 ENGLISH-SPANISH-SPANISH-ENGLISH COMMERCIAL TRANSLATION

Intensive practice in the translation of commercial, financial, and marketing texts, as well as shipping, insurance, and customs house documents. *Prerequisite: Spanish 2308.*

SPAN 4334 ENGLISH-SPANISH-SPANISH-ENGLISH LEGAL TRANSLATION

Intensive practice in the translation of contracts and government regulations, as well as texts relating to both civil and criminal cases.

Prerequisite: Spanish 2308.

SPAN 4336 GRAMMAR AND COMPOSITION

Spring, Summer

The study of the Spanish language applicable to the concerns of the 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: Spanish 2308

SPAN 6307 ADVANCED SPANISH GRAMMAR AND COMPOSITION FOR THE CLASSROOM TEACHER

Summer II odd year

An examination of the Spanish language concerns of public educators as applicable to the elementary classroom. Skills and knowledge in basic communication, its theoretical principles and the varieties of language function and style in the school and communities are elements of this study. A strong application to the Spanish of the bilingual classroom is stressed. Given in Spanish and English. Not recommended for Spanish majors.

SPAN 6313 HISTORY OF THE SPANISH LANGUAGE

Summer II even year

A detailed study of the growth of the Spanish language from the beginning to the present. Given in Spanish.

Prerequisite: Graduate standing and 12 hours of advanced Spanish.

SPAN 6339 SPECIAL STUDIES IN SPANISH-AMERICAN LITERATURE

Spring even year, Summer I odd year

Special topics from the field of Spanish-American literature. This course may be taken three times as the topic varies.

Prerequisite: Graduate standing and 12 hours of advanced Spanish.

SPAN 6341 SPECIAL STUDIES IN SPANISH LITERATURE

Spring odd year, Summer I even year

Special topics from the field of Spanish literature. This course may be taken three times as the topic varies.

Prerequisite: Graduate standing and 12 hours of advanced Spanish.

SPAN 6350 SPECIAL TOPICS IN SPANISH LINGUISTICS

Fall and Summer

Special topics oriented to the field of Spanish linguistics (Applied Linguistics, Sociolinguistics, Psycholinguistics).

Prerequisite: Graduate standing and 12 hours of advanced Spanish.

SPAN 7300 THESIS

SPAN 7301 THESIS

Department of Music

Dr. Carl Seale, Chair

Canty, Dean R. (D.M.A. University of Texas; assoc. prof.)
Crews, Ruth (M.M., University of Texas; instr.)
Grossman, Morley K. (Ph.D. Indiana University; assoc. prof.)
Guerra, Dahlia (M.M., Southern Methodist University; instr.)
Munn, Christopher (M.M., Indiana University; asst. prof.)
Raimo, John* (D.M.A., Eastman School of Music; prof.)
Seale, Carl* (D.M.A., North Texas State University; prof.)
Stover, James A. (M.A., Columbia University; assoc. prof.)
Stover, Marlene (M.S., St. Frances College; asst. prof.)
Tucker, Wallace E. (D.M.A., North Texas State University; asst. prof.)
Worman, Harold L. (M.M.E., University of Wichita; asst. prof.)

The Department of Music offers majors and minors in Applied Music and in Music Education. In addition, it offers teaching areas for majors in both Secondary and Elementary Education.

All majors, in addition to 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 piano, voice, guitar, and all of the instruments of the Band and Symphony Orchestra.

Degree Requirements

Some course numbers, names and content descriptions are subject to change with the implementation of the 1987 Texas Education Agency Standards for Teacher Education Programs.

Major in Music

(Applied Music):

77-96 semester hours in Music of which 35-43 semester hours must be advanced; including Music 1301, 1302, 1401, 1402, 2401, 2402, 3307, 3301, 3302, 3305, 4301, 4303; Applied Music: eight semesters minimum, of which four semesters must be advanced; Music Ensemble: eight semesters minimum, of which four semesters must be advanced; eight semesters minimum of Applied Mus. Lab.; proficiency in Piano; one-half Junior Recital and a full Senior Recital. A minor is not required.

Major in Music Education

(with All-Level Teacher Certification):

74-90 semester hours in Music, of which 33-41 semester hours must be advanced; including Music 1301, 1302, 1401, 1402, 2121, 2122, 2123, 2124, 2125, 2401, 2402, 3307, 3301, 3302, 3305, 3312, 4301, 4303, 4311; Applied Music: eight semesters minimum, of which four semesters must be advanced; Music Ensemble; eight semesters minimum, of which four semesters must be advanced; 2 semesters of Voice, proficiency in Piano, and eight semesters minimum of Applied Music Lab. Second Teaching Field (Minor) is not required.

Major in Music Education

(with Secondary Level Teacher Certification):

71-87 semester hours in Music, of which 30-38 semester hours must be advanced; including Music 1301, 1302, 1401, 1402, 2121, 2122, 2123, 2124, 2125, 2401, 2402, 3307, 3301, 3302, 3305, 4301, 4303, 4311; Applied Music: eight semesters minimum, of which four semesters must be advanced; Music Ensemble: eight semesters minimum, of which four semesters must be advanced; 2 semesters of Voice, proficiency in Piano, and eight semesters minimum of Applied Music Lab. Second Teaching Field (Minor) is not required.

Minor in Music

(Applied Music):

32-36 semester hours in Music, including Music 1301, 1302, 1401, 1402; Music Electives: 6 advanced hours; Applied Music: four semesters; Music Ensemble: four semesters.

Minor in Music Education

(with Elementary Level Teacher Certification):

37-41 semester hours in Music, including Music 1301, 1302, 1401, 1402, 2121, 2122, 2123, 2124, 2125, 3312; Applied Music: four semesters; Music Ensemble: four semesters, and proficiency in Piano.

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 or Music Education.

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 Education 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.

Each full-time Music major must be a member of the large ensemble of his area of concentration each semester during which he is enrolled. These assignments are as follows: Wind and Percussion-Band; Strings-Orchestra; Voice, Piano and others-Choir. Pianists and others who play appropriate instruments 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.

Piano and other instrumental students in Music Education will study either class or applied voice a minimum of two semesters.

Music majors will study privately in their areas of concentration during each semester they are enrolled full-time (12 hrs. 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.

Course Descriptions

Music

MUS 1205/3206 SYMPHONY ORCHESTRA

Fall, Spring

Instrumental music organization open by audition to students who play appropriate instruments. Concerts on and off the campus. Each number may be repeated any number of times.

Number may be counted toward a music degree.

MUS 1204/3205 UNIVERSITY BAND

Fall, Spring

Instrumental music organization open to all university students. Concerts on and off the campus, and other performances on behalf of the University and the Rio Grande Valley. Each number may be repeated any number of times.

MUS 1203/3204 UNIVERSITY CHOIR

Fall, Spring

Vocal music organization open by audition to all university students. Concerts on and off the campus. Each number may be repeated any number of times. Extra rehearsals may be required.

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 number may be repeated any number of times.

MUS 1111/4112 CHAMBER MUSIC

Fall, Spring

Small performing ensembles of voices and/or instruments. Performance literature selected from repertoire appropriate to each ensemble.

MUS 1185/3186 APPLIED MUSIC LAB

Fall, Spring

Music majors enrolled in Applied Music must register for Applied Music Lab. Each number may be repeated any number of times. Only four hours of each number may be counted toward a music degree.

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 of \$10.00

MUS 1222 CLASS PIANO*Fall, Spring*

Piano instruction for students who have had 1221 or equivalent. May be used to satisfy the minimum piano requirements for non-pianist music majors. Three class hours a week. Instructional fee of \$10.00

MUS 1223 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 of \$10.00.

MUS 1224 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 of \$10.00.

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 instrument will be required for this course.

MUS 1226 BEGINNING GUITAR CLASS II*Fall, Spring*

Continuation of MUS 1225. An instrument will be required for this course.

*Prerequisite: MUS 1225.***MUS 1227 LEVEL TWO CLASS GUITAR***Fall, Spring*

Continuation of MUS 1226

*Prerequisite: MUS 1226***MUS 1228 LEVEL TWO CLASS GUITAR***Fall, Spring*

Continuation of MUS 1227

*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 two semester hour credits, or two half-hour lessons per week and two hours minimum daily practice for four semester hours credit. Applied music fee: two semester hour course, \$20.00; four semester hour course, \$35.00. Music majors must register for Applied Music Lab.

MUS 1231, 1431, 3232, 3432	APPLIED PIANO
MUS 1233, 1433, 3234, 3434	APPLIED VOICE
MUS 1235, 1435, 3236, 3436	APPLIED PERCUSSION
MUS 1241, 1441, 3242, 3442	APPLIED TRUMPET
MUS 1243, 1443, 3244, 3444	APPLIED FRENCH HORN
MUS 1245, 1445, 3246, 3446	APPLIED TROMBONE
MUS 1247, 1447, 3248, 3448	APPLIED BARITONE HORN
MUS 1249, 1449, 3250, 3450	APPLIED TUBA
MUS 1261, 1461, 3262, 3462	APPLIED VIOLIN
MUS 1263, 1463, 3264, 3464	APPLIED VIOLA
MUS 1265, 1465, 3266, 3466	APPLIED VIOLONCELLO
MUS 1267, 1467, 3268, 3468	APPLIED STRING BASS
MUS 1271, 1471, 3272, 3472	APPLIED FLUTE
MUS 1273, 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 1301 MUSIC LITERATURE*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 General Topics option of the General Education Program requirements, 4.a.

MUS 1302 MUSIC LITERATURE*Spring*

Continuation of Music 1301. This course meets the General Topics option of the General Education Program requirements, 4.a.

MUS 1401 FIRST YEAR MUSIC THEORY*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 and keyboard skills.

MUS 1402 FIRST YEAR MUSIC THEORY*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 and keyboard skills.

Prerequisite: Music 1401 with grade of C or satisfactory achievement level on 1401 placement exam.

MUS 2121 VOCAL METHODS AND MATERIALS*Fall*

Methods and materials for teaching vocal soloists and vocal groups. Some keyboard ability is required.

MUS 2122 PERCUSSION METHODS AND MATERIALS*Fall*

Methods and materials for teaching the basics of percussion instruments and techniques.

MUS 2123 BRASS METHODS AND MATERIALS*Spring*

Methods and materials for teaching the basics of brass instruments and techniques.

MUS 2124 WOODWIND METHODS AND MATERIALS*Fall*

Methods and materials for the teaching of the basics of woodwind instruments and techniques.

MUS 2125 STRING METHODS AND MATERIALS*Spring*

Methodology for teaching beginning violin, viola, cello, and string bass.

MUS 2307 MUSIC APPRECIATION*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 General Topics option of the General Education Program requirements, 4.a.

MUS 2308 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 General Topics option of the General Education Program requirements, 4.a.

MUS 2401 SECOND YEAR MUSIC THEORY*Fall*

Continuation of Music 1401, 1402, harmonization of melodies, using diatonic and altered triads and seventh chords, nonharmonic tones and modulations. Continued music reading, aural and keyboard skills.

Prerequisite: Music 1402 with a grade of C or satisfactory achievement level on 1402 placement exam.

MUS 2402 SECOND YEAR MUSIC THEORY*Spring*

Continuation of Music 2401.

Prerequisite: Music 2401 with a grade of C or satisfactory achievement level on 2401 placement exam.

MUS 3307 CONDUCTING*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 3301 HISTORY OF MUSIC*Fall, alternate years*

Advanced study of the evolution of the musical art from its beginnings through the Baroque era.

Prerequisite: Mus 1301, 1302.

MUS 3302 HISTORY OF MUSIC*Spring, alternate years*

Continuation of Music 3301.

Prerequisite: Music 3301.

MUS 3305 COUNTERPOINT*Fall, alternate years*

Seventeenth and 18th Century counterpoint in all species and its application in writing for two, three and four voices.

Prerequisites: Music 2402.

MUS 3311 MUSIC METHODS FOR THE ELEMENTARY CLASSROOM TEACHER*Fall, Spring, Summer I*

Musical activities, methods and materials to aid in the social, emotional, physical, intellectual and musical growth of children in the elementary school. Special emphasis is given to making music an integral part of the daily curriculum. This course meets the General Topics option of the General Education Program requirements, 4.a.

Prerequisite: 60 hours.

MUS 3312 MUSIC EDUCATION IN THE ELEMENTARY GRADES K-6*Spring, alternate years*

A general methods course for music majors and minors or by permission of instructor; topics include objectives and instructional strategies for the development of basic musical concepts and skills in elementary classroom music.

Prerequisite: 60 hours

MUS 4301 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.

Prerequisites: MUS 2402.

MUS 4303 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 2402.

MUS 4210 MUSIC THEATRE ARTS K-6*Summer*

Instruction for teachers of children in grades K-6 to include dramatic singing games, creating folk song operettas, folk song rondos, dramatic and operatic reading of stories and poems, puppetry with music and movement, seasonal and patriotic operettas.

MUS 4211 MUSIC LEARNING K-6*Summer*

The study of the music learning process in children in the elementary grades with emphasis on stimuli, motivation and symbols. Practical application with children when available.

MUS 4212 SUMMER VOCAL INSTITUTE*Summer*

Academic and clinical diagnostic studies regarding the healthy development and use of the voice for singing and speaking. Integration of teaching techniques with the Essential Elements. Appropriate for teachers and prospective teachers.

MUS 4213 SUMMER CHORAL INSTITUTE*Summer*

Practical application of basic and advanced teaching and conducting techniques for use in choral rehearsal and performance. The transmission of knowledge, literature, and technique as structured through the Essential Elements. Appropriate for teachers and prospective teachers of vocal music.

MUS 4214 SHOW-CHOIR INSTITUTE*Summer*

Comprehensive approach to the training and development of the show-choir as a legitimate art form within the educational system, including methodology featuring the direct teaching of the Essential Elements. Instruction includes choreography, literature, development of healthy vocal techniques and use of sound equipment.

MUS 4311 SECONDARY SCHOOL MUSIC*Spring, alternate years*

Methods, materials, aims and procedures for teaching music in the junior and senior high school. Some advanced classes will be offered in alternate years.

*Prerequisite: 90 hours.***MUS 4312 WORKSHOP IN MUSIC FOR ELEMENTARY TEACHERS**

A workshop designed to assist teachers in utilization of music in the elementary classroom. Taught concurrently with Mus 5301, credit may not be received in both Mus 4312 and 5301.

MUS 5210 MUSICAL THEATRE ARTS FOR CHILDREN*Summer*

Instruction for teachers of children in grades K-6 to include dramatic singing games, creating folk song operettas, folk song rondos, dramatic and operatic reading of stories and poems, puppetry with music and movement, seasonal and patriotic operettas. Course may be repeated once for credit.

MUS 5211 MUSIC LEARNING K-6*Summer*

The study of the music learning process in children in the elementary grades with emphasis on stimuli, motivation and symbols. Practical application with children when available. Topic emphases will vary: May be repeated once for credit.

MUS 5212 SUMMER VOCAL INSTITUTE*Summer*

Academic and clinical diagnostic studies regarding the healthy development and use of the voice for singing and speaking. Integration of teaching techniques with the Essential Elements. Appropriate for teachers and prospective teachers. Topic emphases will vary: May be repeated once for credit.

MUS 5213 SUMMER CHORAL INSTITUTE*Summer*

Practical application of basic and advanced teaching and conducting techniques for use in choral rehearsal and performance. The transmission of knowledge, literature, and technique as structured through the Essential Elements. Appropriate for teachers and prospective teachers of vocal music. Topic emphases will vary: May be repeated once for credit.

MUS 5214 SHOW-CHOIR INSTITUTE*Summer*

Comprehensive approach to the training and development of the show-choir as a legitimate art form within the educational system, including methodology featuring the direct teaching of the Essential Elements. Instruction includes choreography, literature, development of healthy vocal techniques and use of sound equipment. Topic emphases will vary: May be repeated once for credit.

MUS 5301 WORKSHOP IN MUSIC FOR ELEMENTARY TEACHERS*Summer I*

A workshop designed to assist teachers in the utilization of music in the elementary classroom. Taught concurrently with Mus 4312, credit may not be received in both Mus 4312 and 5301.

Department of Nursing

Wayne D. Hooker, Chair

The Nursing Department offers two programs. The first is a two-year Associate Degree Nursing Program (ADN), which is fully accredited by the Board of Nurse Examiners for the State of Texas and the National League for Nursing.

Graduates of the Associate Degree Program will receive an Associate of Applied Science Degree. Graduates will be eligible to make application to the 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.

This 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 functioning level. The area of emphasis is to provide the technical and human relations preparation necessary for a student to enter the profession of nursing.

The second program is a non-traditional Baccalaureate Program offering registered nurses the opportunity to complete requirements for a Bachelor of Science Degree in Nursing (BSN). Completion of the two-year BSN program will enable registered nurses 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. The BSN program is fully accredited by the Board of Nurse Examiners for the State of Texas and the National League for Nursing.

Academic Instructional Staff

Adams, Rella (Ph.D., Northern Illinois University; adjunct professor)
 Briones, Tina (M.S.N., Corpus Christi State University; adjunct professor)
 Canon, Carol B. (M.S.N., Corpus Christi State University; asst. prof.)
 Carlson, Rita A. (M.S.N., U.T.M.B. at Galveston; asst. prof.)
 Crumpler, Lois (M.S.N., Corpus Christi State; instructor)
 Diaz, Maria I. (M.S.N., Texas Woman's University; asst. prof.)
 Dougherty, Katherine (M.S., University of Scranton; asst. prof.)
 Dunlap, Cathy Lee (M.S.N., Ohio State University; asst. prof.)
 Fossum, Patricia Ann (M.Ed., Pan American University; asst. prof.)
 Hooker, Wayne D. (Ph.D., St. Louis University; assoc. prof.)
 Huerta, Maria Carolina (M.S.N., University of Texas at Austin; asst. prof.)
 Maville, Janice A. (M.S.N., Ball State University; asst. prof.)
 McCormick, Emily (M.S.N., University of Texas at Galveston; asst. prof.)
 Ogilvie, Heather (Ph.D., UT Galveston; adjunct prof.)
 Sanchez, M. Sandra (M.S.N., University of Texas at Austin; C.N.M., State University of New York at Downstate; asst. prof.)
 Skinner, Gwendolynne (M.A., University of Northern Colorado; asst. prof.)
 Tucker, Barbara A., (Ph.D., Texas A&M University; assoc. prof.)
 Wilson, Bruce K. (Ph.D., North Texas State University; asst. prof.)

Requirements for Admission into ADN Program:

The ADN applicant must:

1. Meet admission requirements to Pan American University. An application for admission may be obtained from the Office of Admissions (381-2206) or the Department of Nursing (381-3491).
2. Submit an admission application for the ADN program, which can be obtained from the Department of Nursing.
3. Submit verification of completion of the following admission criteria:
 - a. ACT or SAT scores;
 - b. Nelson Denny Reading grade level (a minimum of 11th grade is required);
 - c. Satisfaction of PAU Math requirement;
 - d. College Grade Point Average (GPA — a minimum GPA of 2.0 on a 4.0 scale is required);
 - e. Completion of prerequisite courses with a minimum grade of "C"; and
 - f. Completion of each natural science course within five years of admission to the ADN program.
4. Submit application for Fall admission by the April 30th deadline. 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.

Admission Selection is Based Upon:

1. Space availability;
2. Completion of prerequisites; and
3. Total rank score of admission criteria.

LVN'S MAY CHALLENGE N ED 1701 (Fundamentals of Nursing) and, if successful, may challenge N ED 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 next course before admission is granted. Current information regarding LVN Challenge can be obtained from the Department of Nursing.

Readmission

Readmission is NOT automatic. Students desiring readmission must notify the Department of Nursing in writing at least ONE semester (or two summer sessions) in advance. Complete information regarding readmission can be obtained in the current *ADN Student Handbook* available in the Nursing Department.

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

			Semester Hours:
Prerequisite Courses			
HRP	1302	Introduction to Nursing	3
BIOL	1401	General Biology	4
BIOL	2403	Anatomy and Physiology	4
**MATH	1334		0 or 3
CPR Certification			
Freshman Year			
<i>Fall Semester</i>			
N Ed	1701	Fundamentals of Nursing	7
BIOL	2404	Anatomy & Physiology (Required before N Ed 1802)	4
PSY	1313	Introduction to Psychology	3
<i>Spring Semester</i>			
N Ed	1802	Medical-Surgical Nursing I	8
ENG	1301	Composition	3
PSY	2337	Psychology of Lifespan (Required before N ED 2805)	3
<i>Summer Session I</i>			
N Ed	2604	Medical-Surgical Nursing II	6
SOC	1313	Principles of Sociology	3
<i>Summer Session II</i>			
HRP	2351	Introduction to Clinical Nutrition	3
***NED	2505	Psychosocial Nursing	5
Sophomore Year			
<i>Fall Semester</i>			
N Ed	2805	Family Health Nursing	8
ENG	1302	Rhetoric	3
<i>Spring Semester</i>			
***N Ed	2505	Psychosocial Nursing	5
N Ed	2508	Medical-Surgical Nursing III	5
TOTAL HOURS			72 or 75

Requirements for Admission into the BSN Program:

The BSN applicant must:

1. Be a registered nurse in the state of Texas or have a temporary permit to practice professional nursing in Texas. (Students will not be permitted to continue in clinical

*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. All courses must be completed by N Ed 2508.

**Not required if student has a college level Math course or scores 16 or above on Math portion of the ACT.

***Taken during Summer or Spring.

- courses if a temporary permit expires without a license being issued or if a license to practice registered nursing has been suspended, cancelled, revoked, or expired.)
2. Provide **two** positive letters of recommendation from health care professionals, one of whom must be a registered nurse.
 3. Have a 2.0 grade point average on a 4.0 scale.
 4. Complete prerequisites. Prerequisites may be waived for graduate RN's in selected nursing courses.
 5. Provide evidence of no active infectious pulmonary disease.
 6. Pass entrance examination(s) consisting of two parts:
 - a. Written examination(s) covering the five major areas of nursing: maternal, pediatric, mental health, medical, and surgical.
 - b. Clinical practicum.
 7. Meet admission requirements set by the University.
 8. Be accepted by the BSN Student Development Committee.

Requirements for the Bachelor of Science Degree in Nursing

The BSN student must:

1. File a Degree Plan approved by the Chair of the Nursing Department.
2. Satisfactorily complete all required courses. Required non-nursing courses must be completed within five years after the last BSN nursing course has been taken.
3. Achieve a minimum grade of "C" in each required course.
4. File an acceptable Application for Degree with the Office of Admission and Records on or before the date specified in the University calendar.
5. Meet PAU General Requirements for a Bachelor's Degree.

*Suggested Degree Plan for the BSN Program

LOWER LEVEL PREREQUISITES		Semester Hours
Biology	Must include Human Anatomy and Physiology	12
Math		3
Chemistry		4
Freshman English		6
**Statistics		3
Biology 3411	Mammalian Physiology or equivalent	4
Introduction to Psychology		3
Growth and Development/Lifespan		3
Introduction to Sociology/Principles		3
Computer Literacy		3
Nursing Education	Credit after passing Entrance Examination	24
	PREREQUISITE SUBTOTAL	68
UPPER LEVEL REQUIREMENTS		Semester Hours
Junior Year: Spring Semester		
N Ed 3301	Health Care Delivery System	3
N Ed 3403	Client Assessment	4
American History		3
U.S. & Texas Government		3
***Physical Education		2
		15
Summer Session		
American History		3
U.S. and Texas Government		3
		6
Junior Year: Fall Semester		
N Ed 3402	Planning Nursing Care	4
N Ed 3404	Community Health	4
English	Sophomore Literature	3
****Foreign Language		3
		14

*Nursing courses must be taken in sequential order

**Statistics may be taken as Math 2330, Psy 2301, or Soc 2301.

***If exempt from Physical Education, 3 hours of Nutrition must be taken.

****6 hours of Foreign Language must be taken in the same language.

Senior Year: Spring Semester

Nursing Ed 3405	Rural Health Nursing	4
Nursing Ed 4606	Clinical Concentration	6
****Foreign Language		3
		<hr/> 13

Summer Session

Humanities		3
Humanities		3
		<hr/> 6

Senior Year: Fall Semester

N Ed 4607	Leadership in Nursing	6
N Ed 4308	Problems Seminar	3
English	Sophomore Literature	3
***Physical Education		2
		<hr/> 14

Upper Level Subtotal 67 or 68

GRAND TOTAL 135 or 136

Course Descriptions**Nursing Education****N ED 1701 FUNDAMENTALS OF NURSING***Fall*

This course enables the student to develop basic skills and knowledge which assist him to apply 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 a secondary health care setting. Five hours lecture and eight hours laboratory per week.

Prerequisites: HRP 1302, BIOL 1401, BIOL 2403, MATH 1334, if required; CPR Certification. Admission to ADN Program.

N ED 1802 MEDICAL-SURGICAL NURSING I*Spring*

This course provides continued utilization of the nursing process in the care of patients/clients experiencing alterations of selected body systems. Students will provide care in secondary health care settings. Five hours lecture and twelve hours laboratory per week.

Prerequisite: NED 1701, Biol 2403, 2404.

N ED 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. Three hours lecture and eight hours laboratory per week.

Prerequisites: N ED 1701, 1802, 2604, PSY 2337.

N ED 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. Three hours lecture and eight hours laboratory per week.

Prerequisites: N Ed 1701, 1802, 2604, 2805, and PSY 2337.

N ED 2604 MEDICAL-SURGICAL NURSING II*SS I*

This course provides continued utilization of the nursing process in the care of patients/clients experiencing more complex alterations in selected body systems. Three hours lecture and twelve hours laboratory per week.

Prerequisites: NED 1701, 1802; Biol 2403, 2404.

N ED 2805 FAMILY HEALTH NURSING*Fall*

This two-part course provides for continued utilization of the nursing process in the care of maternity patients/clients, newborns, and children. Five hours lecture and twelve hours laboratory per week.

Prerequisites: N ED 1701, 1802, 2604; Psy 2337; Biol 2403, 2404.

N ED 3301 HEALTH CARE DELIVERY SYSTEM*Spring*

A study of the health care delivery system with emphasis on influences upon the system. Students will use information from the physical sciences, social sciences, humanities, and health care disciplines to relate health care needs to the health care delivery system. Three hours lecture.

Prerequisite: Admission to the BSN Program or consent of the department.

N ED 3402 PLANNING NURSING CARE*Fall*

An in-depth study of the nursing process components including: assessment, analysis, planning, implementation, and evaluation. The student will utilize a practice setting to develop, utilize, and evaluate care plans. Two hours lecture. Six hours laboratory.

Prerequisite: N ED 3403 and/or consent of the department.

N ED 3403 CLIENT ASSESSMENT*Spring*

Applies psychological, social, and cultural concepts conjointly with normal physiology and with assessment skills used in evaluating the health status of clients. The student will use practice settings to develop cognitive, affective, and psychomotor skills in the assessment of clients. Two hours lecture. Six hours laboratory.

Prerequisites or corequisites: BIOL 3411, N ED 3301, and/or consent of the department.

N ED 3404 COMMUNITY HEALTH*Fall*

Focuses on the role of the nurse in planning and providing primary care to individuals and groups. The course will allow the student the opportunity to gain a broad overview of complex social, cultural, health, and economic problems within a community. The nurse will use the nursing process to recognize and meet nursing needs of individuals and groups. Two hours lecture. Six hours laboratory.

Prerequisite or corequisite: N ED 3402 and/or consent of the department.

N ED 3405 RURAL HEALTH NURSING*Spring*

Focuses on the health needs of rural areas. Students will have guided experiences in planning and implementing care to individuals and groups in isolated areas. Two hours lecture. Six hours laboratory.

Prerequisite: N ED 3404.

N ED 4606 CLINICAL CONCENTRATION*Spring*

Provides an indepth study of a major area of clinical nursing. Classroom activities will focus on the concepts and cognitive processes which form the basis for clinical decision making. In the clinical setting the student will apply general and specific knowledge and skills in a nursing specialty area. Three hours lecture. Nine hours laboratory.

Prerequisite or corequisite: N ED 3405.

N ED 4607 LEADERSHIP IN NURSING*Fall*

A study of nursing leadership as related to organizational structure and management systems in health care institutions. Class content will focus on nursing leadership, management principles and practices. Health care settings will be used to develop skills in leadership and management functions. Three hours lecture. Nine hours laboratory.

Prerequisite: N ED 4606.

N ED 4308 PROBLEMS SEMINAR*Fall*

Issues, trends, and problems in the delivery of nursing care will be discussed. Students will identify an issue, trend, or problem and evaluate its impact on the health care system. The use of research findings and theoretical constructs will be stressed. Three hours lecture.

Prerequisite or corequisite: N ED 4607 and/or consent of the department.

Physical Education

See Health and Kinesiology

Philosophy

See Department of History

Department of Physical Science

Dr. Frederic M. Glaser, Chair

Full-time Faculty

Burandt, Norman A. (MS, Texas A&I University, 1967; assistant professor) Electronics.
Ellis, Fred E. (Ph.D., Louisiana State University, 1965; associate professor) Computer Graphics.

Giuoco, Samuel E. (Ed.D, Oklahoma State University, 1971; assistant professor) Acoustics.

Glaser, Frederic M. (Ph.D., Ohio State University, 1963; associate professor) Spectroscopy.

LeMaster, Edwin W. (Ph.D., University of Texas, Austin, 1970; Professor) Remote Sensing.

Rodgers, Robert W. (MA, Baylor University, 1961; associate professor) Dimensional Geology.

Shockley, William C., Jr. (MA, University of Texas, Austin, 1966; assistant professor) Environmental Physics.

The Department of Physical Science offers a major in physics and minors in geology, physical science and physics.

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.

The department offers a combination degree in physics and engineering in cooperation with Columbia University in New York City, Texas A & M University, University of Texas, and University of Houston. This combination degree is called a 3-2 Program, because a student majors in physics for 3 years at Pan American University then transfers to one of the above universities and completes 2 years of study in an engineering curriculum. Upon successful completion, he receives a Bachelor's Degree in physics on completing any remaining work from Pan American University and a Bachelor's Degree in engineering from the second university. Further details are available from the Department Chairman.

Engineering

Pan American University does not offer a degree in engineering. The courses ENGR 1201 and 2303 are designed specifically for engineering students. Each student who plans to do his first two years of work at Pan American must obtain a catalog from the engineering school to which he plans to transfer and arrange his courses accordingly. Students electing the 3-2 plan are also eligible for participation in the co-op program at the engineering school they plan to attend.

Geology

The geology minor is compatible with major fields of study in physics, chemistry, education, biology, engineering, and business.

Degree Requirements

Minor in Geology

20 semester hours in geology, of which eight semester hours must be advanced; must include: Geology 1401, 1402, 2402, 3401, 3402.

Teacher Certification in Earth Science:

Secondary Option 1: 36 semester hours in geology, of which twenty semester hours must be advanced; must include Geology 1401, 1402, 2401, 2402, 3401, 3402, 3403, 3404 and 3405.

Secondary Option 2: 24 semester hours in geology, of which twelve semester hours must be advanced; must include Geology 1401, 1402, 2401 or 2402, 3401, 3403 and 3405.

Introductory courses in astronomy and physical geography are recommended.

Students are expected to furnish their own transportation and expenses on field trips.

Major in Physics:

The major in physics requires 60 semester hours taken in physics, mathematics, and computer science. This broad field major must include PHYS 1401, 2301, 2101, 2302, 2102, and 3402; MATH 1360, 1370, 2342, 3347, and 3349; and CS 2325, 2333 and 3350. Fourteen (14) semester hours of advanced physics courses and 6 semester hours of advanced mathematics and/or computer science are required to complete the 60 hours.

Minor in Physical Science:

18 semester hours in the physical sciences, of which 6 hours must be advanced; must include PHYS 1401, 1402; CHEM 1401, 1402; and any combination of advanced courses in Chemistry, Geology, Physical Science and Physics.

Minor in Physics:

18 semester hours in physics of which six semester hours must be advanced must include PHYS 1401, 2301, 2101, 2302, 2102 and 3402.

Teacher Certification in Physics:

Secondary Option 2: 24 semester hours in physics, of which 12 semester hours must be advanced; must include PHYS 1401, 2301, 2101, 2302 and 2102.

Teacher Certification in Physical Science:

Elementary Option 3: 24 semester hours in physical sciences, of which 8 must be advanced; must include PHYS 1401, 1402; CHEM 1401, 1402 and other courses from physics, physical science and chemistry.

Secondary Option 2: 24 semester hours in the physical sciences, of which 8 must be advanced; must include PHYS 1401, 1402; CHEM 1401, 1402 and other courses from physics or chemistry which satisfy these requirements.

Suggested Pre-engineering Program

Summer before Freshman year:

Math 1340, 1356

Freshman Year

MATH 1360, 1370, 2342

PHYS. 1401, 2301, 2101

CHEM. 1401

ENGR. 1201, 2303

Sophomore Year

MATH 3347, 3349

CS 2325

PHYS. 2302, 2102

CHEM. 1402

Advanced Phys. or Chem. course,
depending on engineering field

Suggested 3-2 Plan

The first two years are the same as pre-engineering.

Junior Year

PHYS. 3402 and 6 advanced hours

CS 2333, 3350

Eight (8) advanced hours in science elective courses are transferred back from engineering school to meet the advanced physics hours. An additional six (6) advanced hours in mathematics or computer science are transferred back to Pan American University. The student must also meet the 60 hours of University core curriculum courses with course work taken at Pan American University and the engineering school.

Course Descriptions

Astronomy

ASTR 1401 GENERAL ASTRONOMY

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. Three hours lecture and three hours laboratory. \$4.00 laboratory fee.

ASTR 1402 GENERAL ASTRONOMY

Spring

A study of the stellar universe. Telescopes and other instruments, including the planetarium, are used as an integral part of the course. Three hours lecture and three hours laboratory. \$4.00 laboratory fee.

Engineering

ENGR 1201 SCIENCE AND ENGINEERING ANALYSIS

Fall

Introduction to computational methods and solutions of problems in engineering and science using a computer programming model.

NOTE: Credit is given for either PHYS 1201 or ENGR 1201 but not both.

ENGR 2303 ENGINEERING MECHANICS: STATICS

Spring

The study of forces, moments, friction, centers of mass, gravity and pressure using the equations of equilibrium in vector algebraic and calculus forms.

Prerequisite: Physics 1401. Note: credit is given for either PHYS 2303 or ENGR 2303 but not both.

Geography

GEOG 2301 CONSERVATION OF NATURAL RESOURCES

Fall, Spring

A study of the conservation and use of our natural resources. Includes topics in soils, minerals, water and energy resources.

GEOG 2313 PRINCIPLES OF PHYSICAL GEOGRAPHY

Fall, Spring

An introduction to physical geography with emphasis on weather and climate. Soils and vegetation types and distributions are also studied.

Geology

GEOL 1401 PHYSICAL GEOLOGY

Fall

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. Three hours lecture and recitation, and three hours laboratory and field trips. \$4.00 laboratory fee.

GEOL 1402 HISTORICAL GEOLOGY

Spring

A course dealing with the geological history of the earth and its inhabitants as revealed by the fossil record with emphasis on North America. Three hours lecture and recitation, and three hours laboratory and field trips. \$4.00 laboratory fee.

GEOL 2401 GEOMORPHOLOGY

On demand

A course designed for sophomore Geology majors 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. Three hours lecture and three hours laboratory and field trips. \$4.00 laboratory fee.

Prerequisite: GEOL 1401.

GEOL 2402 STRUCTURAL GEOLOGY

On demand

A course designed for Geology majors, minors and teachers of Earth Science. A study of the architecture of the earth, including the causes of deformation, resulting structures and their interrelationships. Three hours lecture and three hours laboratory and field trips. \$4.00 laboratory fee.

Prerequisite: GEOL 1401, 1402.

GEOL 3401 MINERALOGY*On demand*

A course designed for Geology or Chemistry majors, minors, or teachers of Earth Science. A study of the major mineral groups, their atomic structure, chemical composition, external forms, properties and geologic interpretation. Three hours lecture and three hours laboratory and field trips. \$4.00 laboratory fee.

Prerequisite: GEOL 1401 or CHEM 1401, 1402.

GEOL 3402 INVERTEBRATE PALEONTOLOGY*On demand*

A course designed for Geology or Biology majors, minors, or teachers of Earth Science. An introduction to the study of fossils, including comparison of living and fossil forms, their morphology, classification, ecology and geologic history. Three hours lecture and three hours laboratory and field trips. \$4.00 laboratory fee.

Prerequisite: Geology 1402 or Biology 1401, 1402.

GEOL 3403 OCEANOGRAPHY*On demand*

An introduction to Physical Oceanography designed for Geology and Biology majors and Earth Science teachers. A study of the origin, motions, and the physical and chemical properties of marine waters. Three hours of lecture and three hours laboratory and field trips. \$4.00 laboratory fee.

Prerequisite: GEOL 1401 or advanced standing in any of the related sciences or consent of the instructor.

GEOL 3404 STRATIGRAPHY-SEDIMENTATION*On demand*

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. Three hours lecture and three hours laboratory and field trips. \$4.00 laboratory fee.

Prerequisites: GEOL 1401, 1402, 2402, 3401.

GEOL 3405 PETROLOGY*On demand*

A course designed for Geology majors or 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. Three hours lecture and three hours laboratory and field trips. \$4.00 laboratory fee.

Prerequisite: GEOL 3401.

Physical Science**PSCI 1421 PHYSICAL SCIENCE***Fall, 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.

NOTE: credit given only for one of the following: PSCI 1421, 1411, 1301, 1303. \$4.00 laboratory fee.

PSCI 1422 PHYSICAL SCIENCE*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. Three hours lecture and two hours laboratory. \$4.00 laboratory fee.

NOTE: Credit for only one course of the following: PSCI 1422, 1412, 1302, 1304.

PSCI 3301 INTERMEDIATE PHYSICAL SCIENCE*On demand*

Advanced treatment of topics covered in PSCI 1421 and PSCI 1422. Emphasis is on problems of our environment.

Prerequisite: MATH 1334 and 8 hours of a physical science, or consent of instructor.

PSCI 4311 TOPICS IN PHYSICAL SCIENCE*On demand*

A course which 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.

Prerequisite: MATH 1334 and 8 hours of a physical science, or consent of instructor.

Physics

PHYS 1401 GENERAL PHYSICS*Fall, Spring, Summer*

An algebra based introduction to the principles of mechanics, fluids, heat, waves and sound. Three hours lecture, three hours laboratory. \$4.00 laboratory fee.

Prerequisite: MATH 1340. Recommended credit for or concurrent enrollment in MATH 1356.

PHYS 1402 GENERAL PHYSICS*Fall, Spring, Summer*

A continuation of PHYS 1401 covering the principles of electricity, magnetism, light, and modern physics. Three hours lecture, three hours laboratory. Credit will not be given for this course and PHYS 2301 or PHYS 2302.

Prerequisite: Physics 1401.

PHYS 2101 INTERMEDIATE LABORATORY*Spring*

Laboratory exercises illustrating the principles of mechanics, heat and sound. Emphasis is placed on statistical data analysis and error treatment. \$4.00 laboratory fee.

Prerequisite: Concurrent with or credit in Physics 2301.

PHYS 2102 INTERMEDIATE LABORATORY*Fall*

Laboratory exercises illustrating the principles of electricity, magnetism, waves, and optics. \$4.00 laboratory fee.

Prerequisite: Concurrent with or credit in Physics 2302.

PHYS 2301 INTERMEDIATE PHYSICS*Spring*

A calculus based study of mechanics, heat, thermodynamics, wave motion and sound. Three hours lecture.

Prerequisite: PHYS 1401 and MATH 1370 with concurrent enrollment in MATH 2342. May not be counted for credit unless Physics 2101 is taken.

PHYS 2302 INTERMEDIATE PHYSICS*Fall*

Treatment of electricity, magnetism, wave phenomena and optics using calculus.

Prerequisite: PHYS 2301 and MATH 2342. May not be counted for credit unless Phys 2102 is taken.

PHYS 2307 INTRODUCTION TO COMPUTER GRAPHICS*On demand*

Use of computer-driven X-Y plotter and other graphic devices for the graphic presentation of scientific and technical data, and for the generation of maps, designs, and plans. This course is designed for pre-architecture, pre-engineering, chemistry, geography, geology, and physics students.

Prerequisite: MATH 1334 or equivalent and demonstrated knowledge of computer language (CIS 1301/CS 2325/ENGR 1201), or consent of instructor.

PHYS 3101 JUNIOR LABORATORY*Fall, Spring*

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. Three hours laboratory. Credit, one hour. \$4.00 laboratory fee.

Prerequisite: 12 semester hours of Physics.

PHYS 3102 JUNIOR LABORATORY*Fall, Spring*

A continuation of PHYS 3101. \$4.00 laboratory fee.

PHYS 3301 ELECTROMAGNETIC THEORY*On demand*

Theory of electrostatics, electromagnetics, magnetic properties of materials, units, and thermoelectricity, simple treatment of alternating current, oscillating circuits, electromagnetic radiation and Maxwell's Equation. Three hours lecture.

Prerequisites: 12 semester hours of Physics and MATH 2342 which may be taken concurrently.

PHYS 3303 HEAT AND THERMODYNAMICS*On demand*

Study of heat measuring devices, thermal expansion, behavior of gases, elementary thermodynamics, change of state, specific heats and transfer of heat. Three hours lecture.

Prerequisite: 12 semester hours of Physics and MATH 2342 which may be taken concurrently.

PHYS 3304 OPTICS*On demand*

A study of physical-optics, including diffraction, interference, polarization and the beginning of spectroscopy together with some geometrical optics. Three hours lecture.

Prerequisites: 12 semester hours of Physics and MATH 2342 which may be taken concurrently.

PHYS 3305 MECHANICS I*On demand*

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. Three hours lecture.

Prerequisites: 12 semester hours of Physics; MATH 3349, which may be taken concurrently.

PHYS 3401 ELECTRONICS*On demand*

Study of the phenomena of electronics including the application of electronic devices. Three hours lecture and three hours laboratory. \$4.00 laboratory fee.

Prerequisite: Physics 2302 and 2102.

PHYS 3402 MODERN PHYSICS*On demand*

Introduction to relativity, physics of atoms and solids and other topics in twentieth century physics. Three hours lecture and three hours laboratory. \$4.00 laboratory fee.

Prerequisites: Physics 2302 and 2102.

PHYS 3403 DIGITAL ELECTRONICS*On demand*

An introduction to electronic measurement, control and data manipulation using digital techniques. The course meets the needs of science majors in designing and using digital equipment and provides a background in the fundamentals of computer hardware. Microprocessors, their use, architecture, and methods of interfacing with measurement and control systems will be stressed. Primary emphasis will be placed on laboratory evaluation of circuits, devices, and techniques. Two hours lecture and four hours laboratory per week. \$4.00 laboratory fee.

Prerequisite: PHYS 3401 or consent of instructor.

PHYS 4101 SENIOR LABORATORY*Fall, Spring*

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 field of interest. Three hours laboratory. \$4.00 laboratory fee.

Prerequisites: Physics 3101, 3102.

PHYS 4102 SENIOR LABORATORY*Fall, Spring*

A continuation of PHYS 4101. \$4.00 laboratory fee.

PHYS 4103 SENIOR LABORATORY*Fall, Spring*

A continuation of PHYS 4102. \$4.00 laboratory fee.

PHYS 4301 TOPICS IN MODERN PHYSICS*On Demand*

A study of recent developments in physics including atomic energy, nuclear structure, X-rays, cosmic rays and radioactivity. Three hours lecture.

Prerequisite: Phys 3402.

PHYS 4308 SEMINAR IN PHYSICS*On demand*

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.

Prerequisite: 1 year of PHYSICS and consent of instructor.

Physics

See Department of Physical Science

Department of Political Science

Dr. Jose Hinojosa, Chair

Full-time Faculty

- Bokina, John (Ph.D., Illinois, 1979; assoc. prof.) Political Theory, Western & Eastern Europe.
- Freeman, Samuel (Ph.D., Kentucky, 1978; assoc. prof.) Political Parties, U.S. Presidency, Congress and Foreign Politics.
- Griffin, Richard (Ph.D., Florida State U., 1970, instructor) U.S. and Texas Politics, State and Local Government.
- Hinojosa, Jose (Ph.D., Notre Dame, 1980; assoc. prof.) Public Policy and Administration, Minority Politics.
- Lee, Kuo-Wei (Ph.D., Oregon, 1966; assoc. prof.) Far Eastern Politics, International Politics and Organization.
- Morgan, Glynn (M.A., Mississippi, 1961; assoc. prof.) U.S. & Texas Politics.
- Mounce, Gary (Ph.D., University of Texas at Austin, 1984; assoc. prof.) Mexico, Central and South American Politics, Mexican Politics.
- Polinard, J. L. (Ph.D., Arizona, 1970; prof.) Public Law.
- Wrinkle, Robert (Ph.D., Arizona, 1967; prof.) Public Policy, Urban Politics, Methodology

Government majors and minors take courses in five fields: (1) U.S. government, including local, state, and national. (2) Comparative government. (3) International politics and International Relations. (4) Political theory and methodology, including scope and methods of political science. (5) Public Administration. The Political Science faculty and students are actively involved in such campus activities as pre-law, student government and other student political activities.

Students majoring in Political Science may pursue active careers in Public Administration, Law, National and State government, Diplomatic Services, Journalism, and Teaching.

Pre-Law

Admission to law school is becoming increasingly selective. Applicants are selected primarily on these factors: the Law School Admissions Test (LSAT), which should be taken in the Junior or Senior year; a writing ability score, which is a separate part of the LSAT; the student's overall grade point average; co-curriculum activities and maturing experiences. Many law schools also request letters of recommendation.

The student should aim for a minimum GPA of 3.0 and a minimum LSAT score of 34. Virtually all law schools have admissions policies which allow exceptions to these figures, but the closer the student is to these scores, the better the chance of admission.

While any undergraduate major will prepare a student for law school, those majors which emphasize the fundamental skills necessary for effective oral and written communication are advisable. The student especially is encouraged to seek a course of study which requires a lot of reading and writing as these are the skills tested most fully by the LSAT. Any course that challenges one's ability to organize a body of data and reason from it will be beneficial.

Pre-Law students should consult the current *Pre-Law Handbook* prepared by the Law School Admission Test Council and the Association of American Law Schools. Students are encouraged also to join the Pre-Law Society at PAU, which arranges short courses on the LSAT and assists students in their preparation for law school.

For further information please contact the Department of Political Science, 381-3341.

Degree Requirements

Major in Political Science

33 semester hours in Pol Sci. Must include POLS 1333, 2313, 2314; 24 semester hours must be at the advanced level and must include six hours in American Government and Politics and three hours from each of the other four fields in Pol Sci: Comparative Government; International Relations; Political Theory and Methodology; and Public Administration. Also required are six hours of advanced political science electives. Also required: Introductory Statistics (MATH/STAT 2330 or PSY/SOC 2301 or MANA 3341) and 3 hours from ECO 1301, ECO 2353 or ECO 2354.

Minor in Political Science

18 semester hours in Political Science, of which 9 semester hours must be advanced, must include POLS 2313, 2314, 1333.

Teacher Certification in Political Science

Elementary Plan I: 18 semester hours in Political Science, of which nine must be advanced; must include POLS 2313, 2314, 2333; and three hours from three of the above five fields of political science.

Elementary Plan II: 24 semester hours in Political Science, of which 15 must be advanced; must include POLS 2313, 2314, 1333; and three hours from each of the above five fields of political science.

Secondary Plan I: 24 semester hours in Political Science of which 15 hours must be advanced, must include POLS 2313, 2314, 1333; and six advanced hours from American Government and Politics, three hours from each of the other four fields of political science.

Teacher Certification in Social Sciences:

Secondary Plan II: 48 semester hours in Social Sciences. Must include HIST 2313, 2314, 2333; POLS 2313, 2314; ECO 1301 or 2354; GEOG 2313 or 2301; and SOC 1313. 24 semester hours must be divided among advanced History and Political Science courses with not fewer than nine semester hours in each field.

Course Descriptions**Political Science****POLS 2313 UNITED STATES AND TEXAS GOVERNMENT AND POLITICS**

Fall, Spring, Summer

The origins and development of the American governmental system; U.S. and Texas constitutions; federal-state and interstate relations, state and local governments; the individual as a citizen, person and voter, political parties; plus civil rights and the Judiciary. Fulfills three hours of the legislative requirements of six hours of American and Texas government. *Open to freshmen.*

POLS 2314 UNITED STATES AND TEXAS GOVERNMENT AND POLITICS

Fall, Spring, Summer

A functional study of the American and Texas constitutions and governmental systems in relation to legislation, executive functions, administrative structures and functions; financing governmental activities; foreign relations; governmental services and functions in the fields of business, labor, agriculture, social welfare, public safety and conservation. Fulfills three hours of the legislative requirements of six hours of American and Texas government. *Open to freshmen.*

POLS 1333 INTRODUCTION TO POLITICAL SCIENCE

Fall, Spring

Emphasis on political fundamentals, public law, theory and organization of the modern state, political dynamics and institutions. Required of all government majors and minors. *Open to freshmen.*

POLS 2343 COOPERATIVE EDUCATION AND GOVERNMENT

On Demand

BH BC This course is designed for students seeking Political Science credit through the cooperative education program provided the following conditions are met: (A) the student's project must be directly related to his major; (B) the student must be under direct academic supervision; (C) the student must complete written assignments to be evaluated by the supervising teacher; and (D) the student must undergo an oral examination administered by the major department. Credit applies as an elective only.

POLS 2387 U.S. AND TEXAS GOVERNMENT AND POLITICS

Fall, Spring

Honor Plan

The origins and development of the American governmental system; U.S. and Texas constitutions; federal-state and interstate relations, state and local governments; the individual as a citizen, person, and voter, political parties; plus civil rights and the Judiciary. Fulfills three hours of the legislative requirements of six hours of American and Texas government.

Prerequisite: Admission to honors studies or by invitation.

POLS 2388 U.S. AND TEXAS GOVERNMENT AND POLITICS*Fall/Spring**Honor Plan*

A functional study of the American and Texas constitutions and governmental systems in relation to legislation, executive functions, administrative structures and functions; financing governmental activities; foreign relations; governmental services and functions in the fields of business, labor, agriculture, social welfare, public safety and conservation. Fulfills three hours of six hours of American and Texas government.

Prerequisite: Admission to honors studies or by invitation.

POLS 3185 INTERNSHIP*On Demand*

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 the student must complete written assignments to be evaluated by the supervising teacher. The course may be repeated for credit with a maximum of four hours counted toward fulfillment of the requirements for a major in Political Science.

Prerequisite: POLS 2313, 2314.

POLS 3314 AMERICAN STATE AND LOCAL GOVERNMENT*Fall, odd years*

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, 2314.

POLS 3316 AMERICAN PUBLIC POLICY*Spring, odd years*

An analysis of rationales underlying selected governmental policies and programs and assessments of the effectiveness of these policies and programs.

Prerequisites: POLS 2313, 2314.

POLS 3318 SPECIAL TOPICS*On demand*

Significant issues and problems in politics and political systems. Course may be repeated for credit provided different topics are the focus of each class.

Prerequisite: POLS 2313 and 2314.

POLS 3322 POLITICS OF DEVELOPING NATIONS*Fall, even years*

Analysis of political institutions and processes with focus on developing nations, such as those in Africa and the Middle East.

Prerequisites: POLS 2313, 2314.

POLS 3323 INTRODUCTION TO PUBLIC ADMINISTRATION*Fall, even years*

A survey of public administration in the United States, highlighting a wide variety of topics in the discipline, but with emphasis upon the general machinery of the national bureaucracy and on the powers, problems and control of its agencies.

Prerequisites: POLS 2313, 2314.

POLS 3324 GOVERNMENT ORGANIZATION AND ADMINISTRATIVE THEORY*Spring, odd years*

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 theory will be surveyed.

Prerequisites: POLS 2313, 2314.

POLS 3331 METHODS OF POLITICAL SCIENCE RESEARCH*Spring*

Analysis of the study of politics, models of inquiry, research methods, and introduction to the use of computers in political science research.

Prerequisite: POLS 2313, 2314 (was GOVT 4331; may not be repeated for credit)

POLS 3333 CLASSICAL POLITICAL THEORY*Fall even years*

A study of classical political philosophy from the Socrates to Machiavelli.

Prerequisite: POLS 2313, 2314.

POLS 3334 MODERN POLITICAL THEORY*Spring odd years*

A study of political philosophy from Machiavelli to the end of the 19th Century.

Prerequisite: POLS 2313, 2314.

POLS 3343 INTERNATIONAL POLITICS*Fall*

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, 2314.

POLS 3344 CONTEMPORARY POLITICAL THEORY*Spring even years*

A study of 20th Century Political Philosophy.

Prerequisite: POLS 2313, 2314.

POLS 3360 AMERICAN MINORITY POLITICS*Fall, Odd years*

An analysis of the political policies and techniques embraced by minorities in the American political system. Minorities studied include Mexican Americans, blacks and women.

Prerequisites: POLS 2313, 2314.

POLS 3363 AMERICAN HISPANIC POLITICS

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, 2314.

POLS 3364 U.S.-MEXICO BORDER RELATIONS

An analysis of the politics of the U.S.-Mexican border. Focus on the political economy and the administration of the borderlands.

Prerequisites: POLS 2313, 2314.

POLS 3365 POLITICS OF IMMIGRATION

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, 2314.

POLS 3371 SOVIET POLITICS*Spring, Odd years*

An examination of applied Marxism through the study of the ideology institutions and political processes of the Soviet Union.

Prerequisite: POLS 2313, 2314 (cannot be taken for degree credit if student has previously completed Political Science 3372).

POLS 4300 ACUI IS DIRECTED STUDY IN INTERNATIONAL ACTIVITIES*On demand*

A program of special study consisting of three phases: (1) directed, self-study preparation for one month on special and general aspects of the United Nations. (2) Two weeks of directed seminar study and practical experiences in the United Nations. (3) One month for writing a term paper on the project.

POLS 4310 COMPARATIVE PUBLIC ADMINISTRATION*On demand*

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, 2314.

POLS 4312 URBAN AND METROPOLITAN PLANNING*On demand*

An analysis of the various political factors shaping the direction and tasks of the planner. Attention is given to zoning, capital improvement budgeting, subdivision control and related aspects of the interrelationship of such planning with that done by other local units of government.

Prerequisites: POLS 2313, 2314.

POLS 4313 COMPARATIVE GOVERNMENTS: WESTERN EUROPE*Fall, even years*

A study of the major democracies of Europe: Great Britain, France, West Germany, Italy, low countries, Scandinavian countries, Switzerland and Austria. A comparative study of peoples and their institutions.

Prerequisites: POLS 2313, 2314.

POLS 4320 AMERICAN CONSTITUTIONAL LAW: FEDERALISM*Fall*

A study of the allocation of government powers by use of court cases, with special emphasis on the national government and an introduction to the judicial functions of the American legal system.

Prerequisites: POLS 2313, 2314.

POLS 4321 AMERICAN CONSTITUTIONAL LAW: CIVIL LIBERTIES*Spring*

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, 2314.

POLS 4332 AMERICAN POLITICAL THEORY*Spring, Odd years*

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, 2314.

POLS 4353 INTERNATIONAL ORGANIZATION*Spring*

An analysis of the judicial-political foundations. Actual machinery and activities of the principal international organizations, particularly the U.N. and related bodies. An appreciation of their achievements toward international peace.

Prerequisites: POLS 2313, 2314.

POLS 4360 AMERICAN EXECUTIVE PROCESS*Fall, Even year*

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, 2314.

POLS 4363 AMERICAN LEGISLATIVE PROCESS*Spring, Even years*

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, 2314.

POLS 4365 AMERICAN ADMINISTRATIVE PROCESS*Spring*

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, 2314.

POLS 4367 AMERICAN JUDICIAL PROCESS*Summer*

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.

Prerequisites: POLS 2313, 2314.

POLS 4373 AMERICAN POLITICAL PARTIES AND POLITICS*Fall, Odd years*

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, 2314.

POLS 4375 AMERICAN FOREIGN POLICY

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 will be examined.

Prerequisites: POLS 2313, 2314.

POLS 4382 GOVERNMENTS AND POLITICS OF CHINA, JAPAN AND INDIA*Spring*

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, 2314.

POLS 4383 POLITICS OF CENTRAL AMERICA AND THE CARIBBEAN*Fall*

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, 2314 (was POLS 3383, may not be repeated for credit).

POLS 4384 SEMINAR IN LOCAL GOVERNMENT PROBLEMS*Fall*

An examination and study of administrative problems in local government.

Prerequisites: POLS 2313, 2314.

POLS 4386 SOUTH AMERICAN POLITICS*Spring*

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.

Prerequisite: POLS 2313, 2314.

POLS 4387 POLITICS OF MEXICO

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, 2314.

POLS 5360 AMERICAN EXECUTIVE PROCESS AND POLICY OUTPUTS*Fall, Even years*

Advanced study of the development of the power and influence of the president and other American executives; procedures and policies of the executive process; executive policy outputs; the relation of the executive to the other elements of the political system.

POLS 5367 AMERICAN JUDICIAL PROCESS*Summer*

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.

POLS 5386 POLITICS OF SOUTH AMERICA*Spring*

A survey of governmental structures and politics in South America. Examines the political processes and their relationship to existing social and economic structures of South America.

Portuguese

See Department of Modern Languages and Literatures

Pre-Law

See Department of Political Science

Department of Psychology

Dr. Roy E. Cain, Chair

Psychology

Full-time Faculty

- Alamia, Alfonso J. (Ph.D., New Mexico, 1985; asst. prof.) developmental, adolescence, behavior modification, bilingual testing.
- Aldridge, James W., * Jr. (Ph.D. SUNY-Binghamton, 1976; assoc. prof.) perception, cognition, memory.
- Arnold, Bill R.* (Ph.D., North Texas State, 1976; assoc. prof.) counseling and rehabilitation and clinical neuropsychology.
- Cain, Roy E.* (Ph.D., Texas Tech, 1972; assoc. prof.) physiological psychology, biofeedback, psychophysiology, stress management.
- Gonzalez, Genaro (Ph.D., University of California, Santa Cruz, 1982; asst. prof.) social, cross-cultural.
- James-Aldridge, Valerie G.* (Ph.D., Oklahoma State, 1975; assoc. prof.) animal behavior, primate behavior, research in zoos.
- Kendrick, Sherrill* (Ph.D., Southern Mississippi, 1974; asst. prof.) clinical, behavior modification.
- Levine, Bert D.* (Ph.D., Texas, 1953; prof.) personality theories, abnormal behavior, adjustment.
- Montgomery, Gary T.* (Ph.D., Texas Tech, 1972; assoc. prof.) developmental, psychophysiology.
- Winkel, Mark H.* (Ph.D., Oklahoma State, 1982; assoc. prof.) cognitive social psychology, law and psychology.
- Wisener, Robert H. III,* (Ed. D., Northern Colorado, 1975; asst. prof.) school, clinical.

A major is offered in psychology with either a Bachelor of Arts or a Bachelor of Science degree. A demand exists for undergraduate psychology majors 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 B.S. program is designed to insure 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 B.S. degree also take further courses in the natural sciences and computer science. Whenever possible, students are involved in the many ongoing research programs of the department, giving them practical experience in the discipline.

In addition, the department offers a minor in psychology; and courses are also offered for students seeking a minor teaching field for teacher certification in secondary education.¹

Degree Requirements

Major in Psychology (B.A. Degree):

30 semester hours in Psychology of which 15 hours must be advanced; must include PSY 1313 or 1387, 1323 or 1388, 2301, 2325, 3343, 4313.

Major in Psychology (B.S. Degree):

30 semester hours in Psychology of which 15 hours must be advanced; must include:

PSY 1313 or 1387; 1323 or 1388; 2301; 2325

Select two from PSY 3353, 3373, 4318

Select one from PSY 4319, 4320, 4363

*On Graduate Faculty

¹PLEASE NOTE: Student seeking Texas certification in psychology must have a second teaching field, excluding sociology. Please see the department chair.

Select one from PSY 4313, 4333

Select one from PSY 3343, 4383

Select two sequences from: (total of 16 hours)

- a. Physics 1401, 1402 (Prerequisite: Math 1340)
- b. Biology 1401, 1402
- c. Chemistry 1401, 1402

Select one from:

- a. Biology 3303
- b. Physics 3401
- c. Computer Science 1380
- d. Chemistry 3401

Minor in Psychology:

18 semester hours in Psychology of which 6 must be advanced; must include PSY 1313 or 1387, and 1323 or 1388.

Teacher Certification in Psychology:

Secondary Option II: 24 semester hours in Psychology of which 12 hours must be advanced. PSY 1313 or 1387, and 1323 or 1388 are required.

Course Descriptions

Psychology

PSY 1313 INTRODUCTION TO PSYCHOLOGY

Fall, Spring, Summer

An introduction to the study of mental processes. Topics include: the scientific methods used in psychology; the scope and goals of psychology, the influences of heredity, physiology and environment; and the conditions governing learning, memory, sensation and perception. (Formerly PSY 2313, may not be repeated for credit.)

PSY 1323 GENERAL PSYCHOLOGY

Fall, Spring, Summer

Emphasis is on emotions and motives, the normal and abnormal personality, individual differences, the child, the adult and society. (Formerly PSY 2323, may not be repeated for credit.)

PSY 1387. INTRODUCTORY PSYCHOLOGY (HONORS PLAN)

Once each year

Emphasis is placed upon research methods, the brain and nervous system, perception, states of awareness, and learning.

Prerequisite: admission to Honors Studies or by invitation.

PSY 1388 GENERAL PSYCHOLOGY (HONORS PLAN)

Once each year

Emphasis is placed upon intelligence, personality, motivation, vocational choice and the application of psychological principles to behavioral problems.

Prerequisite: admission to Honors Studies or by invitation.

PSY 2301 STATISTICS FOR THE BEHAVIORAL SCIENCES

Fall, Spring

A practical study of the procedures used in handling psychological data including descriptive statistics, central tendency, variation, correlation and inference.

Prerequisite: MATH 1334 or higher (except MATH 2306) and PSY 1313 and 1323. (Formerly PSY 4301, may not be repeated for credit.)

PSY 2324 SOCIAL PSYCHOLOGY

Fall, Spring

A study of psychological and sociological principles as they relate to human social behavior. Relevant areas of theory and research in social psychology will be covered.

Prerequisite: 6 hours from the following: PSY 1313, 1323, SOC 1313, 1323.

PSY 2325 EXPERIMENTAL PSYCHOLOGY I

Fall, Spring

Lecture laboratory approach in illustrating the techniques of psychological research.

Prerequisite: PSY 1313, 1323, and 2301 or STAT 2330.

PSY 2331 PSYCHOLOGY OF DISABILITY

Once each year

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 abilities.

PSY 2335 DEVELOPMENTAL PSYCHOLOGY: INFANCY AND CHILDHOOD
Once each year
 A study of the physical, mental, emotional and social growth from conception through childhood.

Prerequisite: PSY 1313.

PSY 2336 DEVELOPMENTAL PSYCHOLOGY: ADOLESCENCE

Alternate years

A study of the physical, mental, emotional and social growth from childhood through adolescence.

Prerequisite: PSY 1313 or 1323.

PSY 2337 PSYCHOLOGY OF LIFESPAN DEVELOPMENT AND AGING

Fall, Spring

An overview of the cognitive, social-role and motivation changes that occur with age from a psychological/developmental viewpoint.

Prerequisite: PSY 1313 or PSY 1323. May not be counted if credit is received for either PSY 2335 or PSY 3333.

PSY 2340 PSYCHOLOGY OF SUBSTANCE ABUSE

Once each year

Provides an introduction to the field of substance abuse. A knowledge and understanding of psychological and physiological effects of substance abuse will be gained. The course provides an historical overview of the evolving attitudes, values, and treatment approaches to substance abuse. It will also review current state of the art research on the primary prevention of substance abuse and innovations in service delivery, such as employee assistance programs.

PSY 2345 PSYCHOLOGY OF LEARNING

Once each year

An introduction to the methods, result and interpretations of experimental studies of learning. Emphasis will be placed on classical and instrumental conditioning procedures.

Prerequisite: PSY 1313 (formerly 3323 and 4324, may not be repeated for credit.)

PSY 3305 BEHAVIOR MANAGEMENT AND MODIFICATION

Fall, Spring

An overview of existing behavioral control techniques for the remediation and prevention of problem behaviors and for the optimization of normal behaviors in real life settings. Contrasting therapeutic approaches will be examined as well as the ethics of behavior control and the impact of behaviorism on 20th Century man.

Prerequisite: PSY 1313 and 1323.

PSY 3325 PSYCHOLOGY OF ADJUSTMENT

Once each year

This course is devoted to a study of the normal personality and the influences which foster effective adjustment.

Prerequisites: PSY 1313, 1323.

PSY 3326 CONTEMPORARY ISSUES IN SOCIAL PSYCHOLOGY

Alternate years

A review and discussion of recent issues and advances in social psychology. Focuses on contemporary concerns with regard to both theory and research in the laboratory and the community. May be counted as PSY 3326 or SOC 3326.

Prerequisite: PSY 2324 or SOC 2324.

PSY 3333 PSYCHOLOGY OF ADULTHOOD: MATURITY AND OLD AGE

Once each year

A study of such aspects of adulthood as job selection, marriage, child rearing and old age.

Prerequisite: PSY 1313 and 1323.

PSY 3340 STRESS MANAGEMENT

Alternate years

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.

Prerequisites: Psy 1313 and 1323

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.

Prerequisite: PSY 1313, 1323, 2301.

PSY 3353 PHYSIOLOGICAL PSYCHOLOGY*Alternate years*

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 1313, 1323, (formerly 4343, may not be repeated for credit.)

PSY 3373 SENSATION AND PERCEPTION*Once each year*

A study of the basic mechanisms underlying sensation and perception. Experimental methods, research findings and theory are emphasized.

Prerequisite: PSY 1313 and 1323.

PSY 3383 INTRODUCTION TO ANIMAL BEHAVIOR*Once each year*

An introduction to the methods, results, and interpretation of studies of animal behavior from the perspectives of comparative psychology and ethology. An emphasis will be placed on social and communicative behavior.

Prerequisite: PSY 1313

PSY 3384 PRIMATE BEHAVIOR*Every year*

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. May be counted as ANTH 3384.

Prerequisites: PSY 1313 and 3383 or consent of instructor.

PSY 4312 FEMALE AND MALE*Alternate years*

An examination of the physiological, psychological influences of sex role development including such topics as human liberation, sexual behavior, child rearing practices and career opportunities. (Formerly PSY 4311 and SOC 4311, may not be repeated for credit.)

Prerequisite: 9 hours of psychology or consent of instructor.

PSY 4313 ABNORMAL PSYCHOLOGY*Fall, Spring, Summer*

A comprehensive analysis of various emotional disorders, neuroses and psychoses, their symptoms, etiologies and treatment and approaches.

Prerequisite: PSY 1313 and 1323.

PSY 4318 THEORIES OF LEARNING*Twice per year*

A historical review of major theoretical positions in the field of animal and human learning.

Prerequisite: PSY 1313, 1323, or consent of instructor.

PSY 4319 COGNITIVE PROCESSES*Alternate years*

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 1313, 1323.

PSY 4320 MEMORY*Alternate years*

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 1313, 1323.

PSY 4333 THEORIES OF PERSONALITY*Twice per year*

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 1313, 1323.

PSY 4353 INTRODUCTION TO CLINICAL PSYCHOLOGY*Once each year*

A comprehensive overview to clinical psychology today. This course provides a basic understanding of its history, diverse theoretical orientations, functions and problems. Both theory and research are emphasized.

Prerequisite: PSY 4313 or 4333.

PSY 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. May be counted as ANTH 5355.

Prerequisites: PSY 1323 or ANTH 1323 or ANTH 2353 or instructor's consent.

PSY 4363 SYSTEMS AND THEORIES IN PSYCHOLOGY*Once each year*

A history of the development of psychology and a study of theories in contemporary psychology.

Prerequisite: PSY 1313, 1323.

PSY 4383 SPECIAL PROBLEMS*On demand*

Selected topics assigned according to the interest of the class and/or student. Sequential registration for up to nine hours is permitted as topics vary.

Prerequisite: 9 hours of Psychology and consent of instructor.

PSY 5313 ABNORMAL PSYCHOLOGY*Fall, Spring, Summer*

A comprehensive analysis of various emotional disorders, neuroses and psychoses, their symptoms, etiologies and treatment and approaches.

Prerequisite: 6 semester hours of Psychology.

PSY 5318 LEARNING THEORIES*Twice per year*

A review of the major theories of learning based on animal and human research.

Prerequisites: PSY 1313, 1323 or consent of instructor.

PSY 5333 THEORIES OF PERSONALITY*Twice per year*

A study of the development, structure, and assessment of personality with a consideration of the major theoretical attempts to account for the psychological nature and the behavior of man. A research project and supporting specialized readings will be emphasized.

Prerequisite: 6 semester hours of Psychology.

PSY 5355 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. May be counted as ANTH 5355.

Prerequisites: PSY 1323 or ANTH 1323 or ANTH 2353 or instructor's consent.

PSY 6310 EXPERIENTIAL ASPECTS OF BEING BILINGUAL/BICULTURAL*Offered on Demand*

A study of the experience of being Bilingual/Bicultural focusing on cultural and socio-economic factors, learning and other factors which directly and/or indirectly affect the relationship between the speech pathologist and bilingual/bicultural client. Emphasis is on the juxtaposition of empirical data to expand consciousness about the experience of being bilingual/bicultural. May be counted as Psy 6310 or Soc 6310.

Prerequisite: 9 hours of Psychology or Sociology or consent of instructor.

Anthropology

Full-time Faculty

Glazer, Mark* (Ph.D. Northwestern, 1973; prof.) folklore, anthropological theory
 Pozorski, Thomas (Ph.D., University of Texas, 1976; asst. prof.) archaeology,
 development of civilization; archaeological method and theory

A minor is offered in Anthropology. The primary focus 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 and anthropological theory and methods. One graduate level course in Psychology and Mythology is offered.

Minor in Anthropology:

18 semester hours in Anthropology, of which 6 hours must be advanced; must include ANTH 1323, 1324, and 4345.

Course Description

Anthropology

ANTH 1323 INTRODUCTORY CULTURAL ANTHROPOLOGY

Fall

An introduction to cultural anthropology. Major aspects of culture (social organization, economics, religion, etc.), cultural patterns and socio-cultural change are emphasized. (Formerly SOC 2323, may not be repeated for credit.)

ANTH 1324 HUMAN EVOLUTION

Fall

An introduction to human evolution, hominid morphology, human variation, and prehistoric development, a survey to the biological and cultural evolution of human beings to the present. (Formerly ANTH 1313 and 1413; may not be repeated for credit.)

ANTH 2323 MEXICAN AMERICAN CULTURE

On demand

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 2342 INTRODUCTION TO ARCHAEOLOGY

Fall

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.

ANTH 2353 INTRODUCTION TO FOLKLORE

Fall, Spring

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. Credit may not be received for both ANTH 2353 and SOC 2353.

ANTH 3342 LATIN AMERICAN ARCHAEOLOGY

Spring

A review of major prehistoric cultures south of the United States. Emphasis on major civilizations in Mexico and Peru.

ANTH 3375 MEXICAN AMERICAN FOLKLORE

On demand

This course is designed to introduce Mexican American folklore. The course includes the study of Chicano legends, folktales, riddles, folk music, ballads, and festivals. Students will also be trained to collect and archive folklore materials. Credit may not be received for both ANTH 3375 and SOC 3375.

Prerequisite: ANTH 2353 or consent of instructor.

ANTH 3384 PRIMATE BEHAVIOR

Every year

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. May be counted as PSY 3384.

Prerequisites: PSY 1313 and 3383 or ANTH 1323 or ANTH 1324 or consent of instructor

ANTH 4345 ANTHROPOLOGICAL THEORY AND METHODOLOGY

On demand

Instruction in the methodology (interviewing, participant observation, network analysis, etc.) and theoretical perspectives of anthropology.

Prerequisite: Six hours of anthropology.

ANTH 4353 FOLKLORE OF THE LOWER RIO GRANDE VALLEY

On demand

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. Bilingual.

Prerequisite: ANTH 2353 or 3375.

ANTH 4355 PSYCHOLOGY AND MYTHOLOGY

Fall, odd years

This course will study the impact and interrelationships of psychology thought and mythological theory. The impact of the theories of Freud, Adler, Jung, Levi-Strauss and others on mythology will be studied. May be counted as PSY 4355.

Prerequisites: PSY 1323 or ANTH 1323 or ANTH 2353 or instructor's consent.

ANTH 5355 PSYCHOLOGY AND MYTHOLOGY*Fall, odd years*

This course will study the impact and interrelationships of psychology thought and mythological theory. The impact of the theories of Freud, Adler, Jung, Levi-Strauss and others on mythology will be studied. May be counted as PSY 5355.

Prerequisites: PSY 1323 or ANTH 1323 or ANTH 2353 or instructor's consent.

Recreation

See Health and Kinesiology

Department of School Administration and Supervision

Dr. J.C. Nichols, Acting Chair

Full-time Faculty

*Carlan, Carl (Ed. D. University of California at Berkeley 1972; assoc. prof.)
administration and supervision

*Nichols, John C. (Ph.D. Texas 1967; prof.) Educational Administration

*Pulley, Jerry (Ed. D. Univ. of Missouri-Columbia 1968; prof.) administration and
supervision

*Reeves, B.E. (Ed. D. Texas Tech 1965; prof.) administration and supervision

The Department of School Administration and Supervision offers the Master of Education Degree in supervision and in school administration.

In addition to the supervisor certification and degree, a 45 semester hour program leading to the Middle Management certificate and a 60 hour School Superintendent's certificate are also offered.

All students desiring to complete an M.Ed. program in the Department of School Administration and Supervision must meet minimum Graduate School and School of Education entrance requirements, complete an oral examination following the completion of twelve semester hours of graduate work, and pass a comprehensive written examination at the end of the program.

Degree/Certification Requirements: Supervision**M. Ed. Degree in Supervision**

The instructional supervisor is an integral part of the leadership team which manages the systems of public education in American society. The Masters degree program in supervision emphasizes the training of personnel for change-oriented supervision who are competent in such areas as curriculum improvement, leadership skills, instructional practices improvement, the selection and utilization of media and materials, and in planning and directing personnel development activities.

The thirty-nine hour program provides opportunities for several areas of specialization at both the elementary and secondary school levels.

It is recommended that the student complete the following courses prior to the oral examination: ED 6300, ED 6370, ED 6301, ED 6302 or PSY 5318. The Practicum, ED 6371 and ED 6379, should be the last six hours of the student's program.

**Major: Supervision
Certificate Supervisor
(39 hour Non-Thesis)**

**LEADERSHIP FOR INSTRUCTIONAL
IMPROVEMENT (18 hours)**

Curriculum and Staff Development

ED 6330* The Curriculum in the Elementary School

or

ED 6331* The Curriculum in the Secondary School

ED 6334 Curriculum Development - Problems and
Procedures

ED 6397 Analysis of Teaching Behavior

Theory and Practice of Instruction Leadership

ED 6370 Supervision of Instruction

ED 6371 Practicum in Supervision

ED 6379 Problems in Educational Supervision

**LEARNING THEORY AND INSTRUCTIONAL
TECHNOLOGY (6 hours)**

ED 6301 Instructional Media in Teaching

ED 6302 Advanced Educational Psychology

OR

PSY 5318 Learning Theories

RESEARCH TOOLS (6 hours)

ED 6300 Introduction to Research

ED 6367 Statistical Methods

RESOURCE AREA

With approval of the advisor, the student will select graduate courses from such areas as: Elementary Education, Secondary Education, Bilingual/Bicultural Education, Reading, Early Childhood Education, Special Education, disciplines outside of Education, or professional development courses.

**Major: Supervision
Certificate: Supervisor
(36 Hour Thesis Program)**

**LEADERSHIP FOR INSTRUCTIONAL
IMPROVEMENT (18 hours)**

Curriculum and Staff Development

ED 6330* The Curriculum in the Elementary School

or

ED 6331* The Curriculum in the Secondary School

ED 6334 Curriculum Development - Problems and Process

ED 6397 Analysis of Teaching Behavior

Theory and Practice of Instructional Leadership

ED 6370 Supervision of Instruction

ED 6371 Practicum in Supervision

ED 6379 Problems in Educational Supervision

**LEARNING THEORY AND INSTRUCTIONAL
TECHNOLOGY (3 hours)**

ED 6302 Advanced Educational Psychology

OR

PSY 5318 Learning Theories

RESEARCH TOOLS (12 hours)

ED 6300 Introduction to Research

ED 6367 Statistical Methods

ED 7300 Thesis (Problem Definition)

ED 7301 Thesis Completion

RESOURCE AREA

(3 hours)

With approval of advisor, the student will select coursework from such areas as: Elementary Education, Secondary Education, Bilingual/Bicultural Education, Reading, Early Childhood Education, Special Education, disciplines outside Education or professional development courses.

PLEASE NOTE: Candidates applying for the supervision certificate must pass an EXCET Exam.

Degree/Certification Requirements: Administration

The Educational Administrator's Program is designed to produce change-oriented administrators who are competent in such areas as administrative leadership, school organization and management, school law, finance, and contemporary personnel practices.

A thirty-six hour M. Ed. program is offered. Upon the successful completion of an additional fifteen hours minimum in administration, the student may earn the Middle Management Certificate.

The endorsement for the Superintendent requires an additional fifteen hours beyond the Middle Management Certificate.

Students desiring to enter either the degree or certificate programs in Educational Administration must meet admission and other requirements specified.

1. **Admission Requirements:**
 - a. Admission to the Graduate School.
 - b. A complete application for Admission to the Administrator's Program.
 - c. Approval by the Department of School Administration and Supervision Admissions Committee.
2. **Master of Education Degree Program:**

For the student who is interested in attaining a Master of Education Degree and at the same time have these courses count toward certification, the Department of School Administration and Supervision offers a 36 hour Master of Education Degree. After obtaining the Master of Education Degree in Educational Administration, the student wishing to obtain certification must complete the appropriate program discussed below.
3. **Certification Programs:**
 - a. **Middle Management Certification:** For the student who already possesses a Master of Education degree and who is interested in obtaining a Professional Administrator's Certificate with Middle Management (Principal) endorsement, the Department offers a 45 hour minimum Certification Program.
 - b. **School Superintendent:** For the student who already possesses a Master of Education Degree and who wishes to obtain a Professional Administrator's Certificate with a School Superintendent endorsement, the Department of School Administration and Supervision offers the 60 hour Certification Program.
4. **The Temporary Administrator's Certificate:**

Current certification regulations permit the issuance of a temporary certificate to persons being employed as administrators prior to their completing the requirements for full certification. This temporary certificate shall be valid for five years and cannot be renewed. Pan American University will recommend applicants for Temporary Administrator's Certificate if they meet the following criteria:

 - a. **Assistant Principal**
 1. Holds a Bachelor's degree
 2. Holds a Provisional Teacher's Certificate
 3. Has two years of creditable classroom teaching experience.
 4. Has a minimum of 12 graduate hours of Common Core required for the Professional Administrator's Certificate.
 5. Has been approved by the Department of School Administration and Supervision Admissions Committee for the Administrator's Program.
 6. Has been admitted to Graduate School.
 7. Has completed application for the Temporary Administrator's Certificate.
 8. Has obtained a Money Order or Cashier's Check for thirty (\$30.00) dollars.
 - b. **Principal**
 1. Holds a master's degree.
 2. Holds a Provisional Teacher's Certificate
 3. Has two years of creditable classroom teaching experience.

4. Has a minimum of 12 graduate hours of the Common Core required for the Professional Administrator's Certificate.
 5. Has been approved by the Department of School Administration and Supervision Admissions Committee for the Administrator's Program.
 6. Has been admitted to Graduate School.
 7. Has completed application for the Temporary Administrator's Certificate.
 8. Has obtained a Money Order or Cashier's Check for thirty (\$30.00) dollars.
- c. Superintendent
1. Holds a Middle Management Certificate.
 2. Has been approved by the Department of School Administration and Supervision Admissions Committee for the Superintendent's Program.
 3. Has been admitted to Graduate School.
 4. Has completed application for the Temporary Superintendent's Certificate.
 5. Has obtained a Money Order or Cashier's Check for thirty dollars (\$30.00.)

PLEASE NOTE: Candidates applying for professional certificates must pass an EXCET Exam.

**Master of Education
In
Educational Administration
(36 Hour Program)**

Major:		
Educational Administration		Non-Certification
EDUCATIONAL RESEARCH		(6 hours)
ED 6300*	Introduction to Research	
ED 6367	Statistics	
COMMON CORE		(12 hours)
ED 6330	Elementary Curriculum	
	or	
ED 6331	Secondary Curriculum	
ED 6384*	Introduction to Educational Administration	
ED 6370	Supervision of Instruction	
Three hours from:		
ED 6385	School Law	
ED 6389	Administration of School Business Services	
ED 6334	Curriculum Development	
RESOURCE AREA		(3-9 hours)
<i>Choice of 3 hours from: Human Relations and Communication Component</i>		
ED 6363	Personal Growth	
	or	
ED 6364	Consulting in Human Relations	
	or	
GenB 6317	Administrative Communications	
<i>Choice of 3 hrs. from Multi-Cultural Component:</i>		
ED 6388	Socio-Cultural Foundations of Education or	
SOC 5313	American Minorities or	
SOC 5323	The Mexican Americans	
<i>Choice of 3 hrs. from other academic areas approved by student's advisor</i>		
SPECIALIZED PREPARATION IN ADMINISTRATION		(9-15 hours)
<i>Required for M. Ed.</i>		
ED 6337	Administration of Special Instructional Programs	
ED 6338	The School Principalship	
<i>Select 3-9 hours from:</i>		
ED 6381	Problems in Organization and Administration of Public Schools	
ED 6386	Administration of Pupil Personnel Services	
ED 6393	The Administration of Staff Personnel	
ED 6394	Psychology of Decision-Making	
ED 6397	The Analysis of Teaching	
ED 6336	Problems in Education	

*These courses should be taken at the beginning of the student's program.

Select 0-3 hours from:

ED 6308 Foundations of Reading Instruction
 ED 5351 Teaching Reading to the Secondary Student
 ED 6369 Educational Data Processing

TOTAL 36 hours

**Educational Administration
 Certification Program
 Middle Management Certificate**

COMMON CORE

(18 hours)

ED 6330 Elementary Curriculum

or

ED 6331 Secondary Curriculum

ED 6384* Introduction to Educational Administration

ED 6370 Supervision of Instruction

ED 6385 School Law

ED 6389 Administration of School Business Services

ED 6334 Curriculum Development

RESOURCE AREA

(9 hours)

Choice of 3 hours from Human Relations and Communication Component

ED 6363 Personal Growth

or

ED 6364 Consulting in Human Relations

or

GENB 6317 Administrative Communications

Multi-Cultural Component - choice of 3 hours from:

ED 6388 Socio-Cultural Foundations of Education or

SOC 5313 American Minorities or

SOC 5323 The Mexican Americans

Choice of 3 hours from other academic areas approved by student's advisor.

SPECIALIZED PREPARATION FOR ADMINISTRATION

(18 hours)

Required:

ED 6337 Administration of Special Instructional Programs

ED 6338 The School Principalship

ED 6398 Internship in Middle Management

Select 6-9 hours from:

ED 6381 Problems in Organization and Administration of
 Public Schools

ED 6386 Administration of Pupil Personnel Services

ED 6393 The Administration of Staff Personnel

ED 6394 Psychology of Decision-Making

ED 6397 The Analysis of Teaching

ED 6336 Problems in Education

Select 0-3 hours from:

ED 6308 Foundations of Reading Instruction

ED 5351 Teaching Reading to the Secondary Student

ED 6369 Educational Data Processing

TOTAL 45 hours

**Educational Administration
 Certification Program
 (60 Hour Program)**

Major:
 Educational Administration

Professional Administrator
 Superintendency

COMMON CORE

(18 hours)

ED 6330 Elementary Curriculum

or

ED 6331 Secondary Curriculum

*These courses should be taken at the beginning of the student's program.

ED	6384	Introduction to Educational Administration	
ED	6370	Supervision of Instruction	
ED	6385	School Law	
ED	6389	Administration of School Business Services	
ED	6334	Curriculum Development	
RESOURCE AREA			(9 hours)
<i>Choice of 3 hours from Human Relations and Communication Component</i>			
ED	6363	Personal Growth	
or			
ED	6364	Consulting in Human Relations	
or			
GENB	6317	Administrative Communications	
<i>Multi-Cultural Component - choice of 3 hours from:</i>			
ED	6388	Socio-Cultural Foundations of Education or	
SOC	5313	American Minorities or	
SOC	5323	The Mexican Americans	
<i>Choice of 3 hours from other academic areas approved by student's advisor.</i>			
SPECIALIZED PREPARATION FOR ADMINISTRATION			(18 hours)
<i>Required:</i>			
ED	6337	Administration of Special Instructional Programs	
ED	6338	The School Principalship	
ED	6398	Internship in Middle Management	
<i>Select 6-9 hours from:</i>			
ED	6381	Problems in Organization and Administration of Public Schools	
ED	6386	Administration of Pupil Personnel Services	
ED	6393	The Administration of Staff Personnel	
ED	6394	Psychology of Decision-Making	
ED	6397	The Analysis of Teaching	
ED	6336	Problems in Education	
<i>Select 0-3 hours from:</i>			
ED	6308	Foundations of Reading Instruction	
ED	5351	Teaching Reading to the Secondary Student	
ED	6369	Educational Data Processing	
SUPERINTENDENT ENDORSEMENT			(15 hours)
ED	7310	Administration of School Facilities	
ED	7312	Social-political Problems and the Superintendency	
ED	7313	Internship for the Superintendent	
ED	7314	The Superintendency	
ED	7315	Texas School Finance	
TOTAL			60 hours

Course Descriptions

ED 6330 THE CURRICULUM IN THE ELEMENTARY SCHOOL

Spring, Summer

Development of the elementary school curriculum, significant factors which help to determine the curriculum and implications of research in curriculum construction are studied. Opportunity to select and organize appropriate learning experiences for the different levels is offered.

ED 6331 THE CURRICULUM IN THE SECONDARY SCHOOL

Fall, Summer

An overview of theories, principles and issues in curriculum planning for modern educational experience. In addition to an examination of current curricular practices, particular emphasis will be placed upon Chapter 75 and local efforts toward improvement in the secondary school.

ED 6334 CURRICULUM DEVELOPMENT — PROBLEMS AND PROCESSES

Fall, Spring, Summer

The examination of systematic approaches to developing and evaluating elementary and secondary school curriculums at the national, state, local school district and campus levels. Methods of developing and applying criteria for curriculum analysis of each of the major curriculum areas to be studied.

Prerequisite: ED 6330, ED 6331, or equivalent.

ED 6336 PROBLEMS IN EDUCATION*Fall, Spring, Summer*

This course's major emphasis is on current innovations in education. Students will conduct research related to selected problems. Experiences of the student may include conducting action research, working with educational determinants, new education programs, and/or working with classroom teachers and other persons in the community in order to improve the education program. Credit may be applied toward the graduate programs in education when the appropriate problem is chosen by the student. This course may be repeated once for credit.

ED 6337 ADMINISTRATION OF SPECIAL INSTRUCTIONAL PROGRAMS*Fall, Spring, Summer*

Emphasis is placed on the administration of special elementary and secondary school programs including: career, vocational, technical, special, compensatory, and reading education.

ED 6338 THE PRINCIPALSHIP*Fall, Spring, Summer*

A study of the unique functions of the principalship as they relate to the administration of elementary, middle, junior, and secondary schools. Special emphasis will be focused on the leadership role of the principal in the management and instructional aspects of the school programs.

ED 6369 EDUCATIONAL DATA PROCESSING*Fall, Spring*

Survey of data processing applications to student accounting, grade reporting and payroll; a study of model data processing programs available to streamline public school management problems.

ED 6370 SUPERVISION OF INSTRUCTION*Fall, Spring, Summer*

Fundamental problems of the supervision of instruction in the small and moderately-sized public schools; the nature and organization of supervision, supervisory plans and principles; teacher participation in forming education policies; effort of recent educational practices upon supervision; duties, relationships and training of supervisory officials; standards for judging teachers; methods of improving instruction; case studies in supervision; the use of conferences, teacher's meetings, demonstration teaching, visitation and research studies as supervisory agencies.

ED 6371 PRACTICUM IN SUPERVISION*Fall, Spring, Summer*

Actual experiences in supervisory methods and practices for the elementary school and secondary school supervisor. Teacher rating scales, in-service programs and staff development processes will be analyzed and implemented by each participant. A strong focus on clinical supervision.

*Prerequisite: ED 6370.***ED 6379 PROBLEMS IN EDUCATIONAL SUPERVISION***Fall, Spring, Summer*

Each participant will define and resolve a supervisory problem in his specific area of interest. Each participant will be directed in his study by a graduate faculty member and a formal research paper dealing with a specific supervisory problem will be required.

*Prerequisite: ED 6370.***ED 6381 PROBLEMS IN ORGANIZATION AND ADMINISTRATION OF PUBLIC SCHOOLS***Fall, Summer*

Research, readings and thorough study of the organization and administration of elementary and secondary schools; a careful analysis of the role of middle management personnel in the improvement of instruction; an analysis of administrative function and leadership style will be emphasized.

ED 6384 INTRODUCTION TO EDUCATIONAL ADMINISTRATION*Fall, Spring, Summer*

An overview of public school administration introducing such topics as: processes of organization and administration, instructional personnel and staff, finance, leadership roles, curriculum, physical plant operation, maintenance and legal aspects.

ED 6385 PUBLIC SCHOOL LAW*Fall, Spring, Summer*

Constitutional provisions, statutory laws, court decisions, torts and regulations governing public schools with special reference to their influence upon the administration and function of public schools.

ED 6386 ADMINISTRATION OF PUPIL PERSONNEL SERVICES*Spring, Summer*

A problem approach to the understanding, development and management of special pupil services of concern to the teacher, counselor, supervisor, and administrator.

ED 6388 SOCIO-CULTURAL FOUNDATIONS OF EDUCATION*Fall, Spring*

Identification and analysis of cultural forces which ultimately shape the direction of modern American education with emphasis upon the purposes of education in their social and cultural contexts. An emphasis on the multicultural factors in society which affect the public schools and their influence upon learning and the acquisition of skills important to survival and self-fulfillment will be made. Particular emphasis will be placed upon understanding the culture of the Mexican-American child.

ED 6389 ADMINISTRATION AND ORGANIZATION OF SCHOOL BUSINESS SERVICES*Fall, Spring, Summer*

Principles and procedures of developing and managing a sound financial plan for local school districts with emphasis upon Texas Education Agency financial and accounting procedures. Emphasis upon school law, taxation, property management, and maintenance, school transportation and management of business personnel.

ED 6393 ADMINISTRATION OF SCHOOL STAFF PERSONNEL*Fall, Spring*

Analysis of personnel organization, administration and function in school systems; relationships of various school positions; a study of ethics, welfare, security and professional improvement.

ED 6394 PSYCHOLOGY OF DECISION MAKING*Spring, Summer*

Analysis of skills and techniques needed by an effective administrator in the modern school; emphasis upon synergistic leadership, teacher-administrator relationships, group processes and group dynamics and the assessment of administrative performance.

ED 6397 ANALYSIS OF TEACHING BEHAVIOR*Fall, Spring, Summer*

Methods of gathering, analyzing and interpreting data in leadership conferences with student teachers, interns and professional teachers; the application of technology in the evaluation and supervision of classroom teaching; the development of skills to demonstrate effective behavior.

ED 6398 INTERNSHIP IN MIDDLE MANAGEMENT*Fall, Spring, Summer*

A field-based course in which students practice competencies and theories acquired as they assume responsibilities associated with the middle management positions in local school districts.

ED 7300 THESIS*Fall, Spring, Summer***ED 7301 THESIS***Fall, Spring, Summer***ED 7310 ADMINISTRATION OF SCHOOL FACILITIES***Fall, Summer*

A study of operation, utilization and maintenance of physical plant; determination of facilities needs; planning building programs and school plant development.

ED 7312 SOCIAL-POLITICAL PROBLEMS AND THE SUPERINTENDENCY*Fall, Summer*

An analysis of the interrelationships of the local districts with other local political subdivisions; a study of the impact of power structures upon local education; a review of the influence of professional and non-professional organizations upon educational decision making; and an analysis of the influence of the power structures upon educational decisions. School-community relations are emphasized.

ED 7313 INTERNSHIP FOR THE SUPERINTENDENT*Fall, Spring, Summer*

Designed to give prospective school superintendents on-the-job experiences under the guidance of an experienced, practicing public school administrator and under the supervision of a member of the University staff.

ED 7314 THE SUPERINTENDENCY*Spring, Summer*

A study of the unique role of the school superintendent. Attention will be given to policy development, staff/superintendent/board relations, school transportation, accreditation, human relations, and collective negotiations.

ED 7315 TEXAS SCHOOL FINANCE*Spring, Summer*

A study of Texas public school finance as mandated by the several sub-segments of the Texas Education Agency. Financial aspects of all segments of TEA will be reviewed; selected emphasis will be stressed on several major programs under the agency.

Department of School Services and Counseling

Dr. Ralph Carlson, Chair

Full-time Faculty

- *Alvarado, Victor (Ed.D., Western Michigan University, 1976; assoc. prof.) Educational Leadership; Guidance and Counseling
- *Burns, Jo Ann (Ph.D., University of Oklahoma, 1979; assoc. prof.) Special Education and Educational Psychology
- *Carlson, Ralph (Ph.D., University of Houston, 1974; assoc. prof.) Special Educational and Psychology (Quantitative Methods)
- *Kolesinski, Mary (Ed.D. University of Georgia, 1986; assoc. prof.) Gifted Education and Educational Psychology
- *Linskey, Arthur Owen (Ph.D., University of North Carolina, 1957; assoc. prof.) Guidance and Counseling and Educational Psychology
- *Rodriguez, Ana Maria (Ed.D., University of Houston, 1976; assoc. prof.) Guidance and Counseling
- *Smith, George W. (Ed.D., Texas Tech., 1969; prof.) Guidance and Counseling

The Department of School Services and Counseling offers an undergraduate area of specialization (minor) in elementary and secondary Generic Special Education. It also offers the Master of Education degree with specialization in elementary and secondary (all-level) Educational Diagnostician, and Guidance and Counseling. Endorsements in Mental Retardation, Learning Disabilities, Emotionally Disturbed, and Early Childhood for Exceptional Children are also offered by the Department.

A second very important focus for the Department is the coordination of all studies which are generic or core to all undergraduate and graduate degree programs. These includes studies in Measurement, Statistics, Research, Educational Psychology, History and Philosophy of Education, Multicultural Education, Child Growth and Development, Adolescent Educational Psychology, Human Growth and Development, and Educational Technology.

UC/GE Requirements for Teacher Education Majors

Students pursuing a Bachelor of Science degree in Elementary or Secondary Education and teacher certification are required to take the following courses in the UC/GE requirements as specified by the State Board of Education and the Texas Education Agency:

The requirements and applications for degree and/or certification programs under the current catalog must be completed prior to September 1, 1991. Students pursuing teacher certification after August 31, 1989, must enter under those programs prescribed by the new standards for teacher education. Prospective teacher education students should consult with their major advisors and the appropriate department in the School of Education.

- English 1301, 1302(or 1387, 1388)
- English — Sophomore Literature - 6 sem. hrs.
- Language other than English - 6 sem. hrs.
- Communication 1313
- Math 1340 or 2306 and 2307 or 1357
- Laboratory Science — 8 sem. hrs. (same science)
- Biol. 1405 and 1406 or PSCI. 1421 and 1422
- Computer Science 1300
- History 2313 or 2333, 2314(2387, 2388 Honors)
- Political Science 2313, 2314(2387, 2388 Honors)
- PE four semester hours activity courses

Fifteen hours from the following:

EDCI 3323

EDCI 3325

P E 4351

Psy 3305 (Prerequisite: PSY 1313 and 1323)

3 semester hours from:

Art 3381

Mus 3311

Comm 1303 or 2312

Electives-twelve hours

6 semester hours from 2 of the following areas:

Art 1301

Comm 1303 or 2312

Phil 1310, 1320, 2330, 2380

6 semester hours from 2 of the following areas:

Anth 1313, 1323, 2323, 2353

Eco 1301, 2353

Psy 1313, 1323

Soc 1313, 1323, 2333

Minor in Generic Special Education for Elementary Education Majors:

Professional Development and Methodology courses for Elementary Education Majors:

Professional Development

Prerequisite: EDCI 1301

EDCI 3301

EDCI 3302

EDCI 3303

EDCI 3305

EDCI 3311

EDCI 3312

EDCI 3328

EDCI 3331

EDCI 3332

Generic Special Education Minor:

ED	1305	Introduction to Special Education
ED	2304	Field Experiences in Special Education
ED	4301	Perception and Language Development
ED	4302	Perception and Cognitive Development
ED	4303	Individualized Instruction for Mildly and Moderately Disabled
ED	4309	Practicum in Generic Special Education (Prerequisite: ED 4303 and Psy 3305)
ED	4371	Testing and Assessment of Exceptional Individuals
ED	4372	Exceptional Individual
ED	4311	Directed Student Teaching (Elementary)
ED	4313	Directed Student Teaching (Generic Special Education)(Prerequisite: Ed 4309).

Directed Teaching Requirements for Generic Special Education

A student majoring in Elementary or Secondary Education and minoring in Generic Special Education must complete one-half of his/her student teaching semester in an elementary or secondary classroom and one-half in a special education classroom. The following requirements must be met by students entering student teaching:

1. English 1301 and 1302 completed with a minimum of "C" in each course.
2. Have completed at least $\frac{3}{4}$ semester hours in major with 2.25 grade point average.
3. Have completed at least $\frac{1}{2}$ semester hours required in the minor with a 2.25 grade point average. *If the student is to teach in his minor field, he must have completed $\frac{3}{4}$ of the semester hours in the minor.*
4. The General Education requirements must be completed. (If no more than 6 semester hours are incomplete a department head may choose to conditionally admit a prospect.)
5. At least 90 semester hours of college work completed.
6. Satisfactory completion of: Ed. 1305, 2304, 4301 or 4302, 4303, 4309, 4371 or 4372.

Endorsement in Special Education:*Teaching the Mentally Retarded:*

1. Texas Teaching Certificate
2. Twelve (12) semester hours: Ed. 4371, Ed. 4372, Ed. 4373, Ed. 4374
3. 2.25 GPA in the twelve (12) hours

Learning Disabilities:

1. Texas Teaching Certificate
2. Fifteen (15) semester hours:
 - a. Undergraduate
Ed. 4301 or Ed. 4302, Ed. 4303, Ed. 4372, Ed. 4378, Psy. 4318
 - b. Graduate
Psy. 5318, Ed. 5372, Ed. 6316, Ed. 6317, Ed. 6318
3. 2.25 GPA in the fifteen (15) hours

Teaching the Emotionally Disturbed and Autistic:

1. Texas Teaching Certificate
2. Fifteen (15) semester hours: Ed. 5372, Ed. 6376, Ed. 6374, and Ed. 6605
3. 2.25 GPA in the fifteen (15) hours

Early Childhood for Exceptional Children:

1. Texas Teaching Certificate
2. Twelve (12) semester hours: Ed. 4390, Ed. 4371, Ed. 4372, Ed. 4391
3. 2.25 GPA in the twelve (12) hours

Graduate Program**M.Ed Degree in Guidance and Counseling**

The counselor is an integral part of the supportive services in public school education who serves to facilitate the growth and learning of students. The counselor, upon completion of the thirty-nine hour M.Ed in Counseling and Guidance, should have competencies in (1) Planning, Organization, and Evaluation, (2) Individual and Group Counseling, (3) Consultation, and (4) Coordination.

Students need to take the following courses in sequence within the first twelve (12) to eighteen (18) semester hours of the program and prior to taking the oral examination: ED 6300, ED 6302, ED 6360, ED 6363, and ED 6362.

The following is the program for M.Ed Degree with specialization in elementary and secondary Guidance and Counseling:

**Master of Education Degree
39 Hour Thesis Program**

Major		Certificate
Elementary Education		Counselor
THE GUIDANCE PROGRAM		(3 hours)
ED 6360	Introduction to Guidance and Counseling	
THE PUPIL SERVED		(6 hours)
ED 6302	Advanced Educational Psychology	
ED 6322	The Bilingual Child	
RESOURCE AREA		(18 hours)
ED 6362	Theories and Techniques of Counseling	
ED 6363	Personal Growth	
ED 6365	Counseling Practicum	
ED 6345	Information Services: Occupational, Educational and Personal-Social	
ED 6368	Group Counseling	
ED 5372	Individual Differences	
ED 6306	Supervision of Student Teaching	
ED 6311	Advanced Child Psychology	
ED 6313	Individual Educational Testing	
ED 6314	Psychoeducational Assessment I	
ED 6323	Problems in the Teaching of Reading	
ED 6330	The Curriculum in the Elementary School	
ED 6342	Problems in Guidance and Counseling	

ED	6344	Psychoeducational Assessment II		
ED	6349	Counseling Procedures for Elementary Children		
ED	6361	Appraisal of Learning Abilities: The Multi-Disciplinary Approach		
ED	6364	Consulting in Human Relations		
ED	6366	Problems in Testing and Counseling		
ED	6367	Statistical Methods		
ED	6370	Supervision of Instruction		
ED	6386	Administration of Pupil Personnel Services		
ED	6393	Administration of School Staff Personnel		
ED	6394	Psychology of Decision Making		
ED	6397	Analysis of Teaching Behavior		
PSY	5313	Abnormal Psychology		
PSY	5318	Learning Theories		
PSY	5333	Theories of Personality		
SOC	5313	American Minorities		
			THESIS	(6 hours)
ED	7300, 7301	Thesis		
		DEGREE REQUIREMENTS		(6 hours)
ED	6312	Educational Measurement		
ED	6300	Introduction to Research		
			TOTAL	39 hours

**Master of Education Degree
39 Hours Non-Thesis Program**

Major				Certificate
Elementary Education				Counselor
THE GUIDANCE PROGRAM				(3 hours)
ED	6360	Introduction to Guidance and Counseling		
THE PUPIL SERVED				(6 hours)
ED	6302	Advanced Educational Psychology		
ED	6322	The Bilingual Child		
RESOURCE AREA				(24 hours)
ED	6313	Individual Educational Testing		
ED	6345	Information Services: Occupational, Educational and Personal-Social		
ED	6362	Theories and Techniques of Counseling		
ED	6363	Personal Growth		
ED	6365	Counseling Practicum		
ED	6368	Group Counseling		
3-6 hours from:				
ED	6314	Psychoeducational Assessment I		
ED	6344	Psychoeducational Assessment II		
ED	5372	Individual Differences		
ED	6306	Supervision of Student Teaching		
ED	6311	Advanced Child Psychology		
ED	6323	Problems in the Teaching of Reading		
ED	6330	The Curriculum in the Elementary School		
ED	6342	Problems in Guidance and Counseling		
ED	6364	Consulting in Human Relations		
ED	6366	Problems in Testing and Counseling		
ED	6367	Statistical Methods		
ED	6370	Supervision of Instruction		
ED	6386	Administration of Pupil Personnel Services		
ED	6393	Administration of School Staff Personnel		
ED	6394	Psychology of Decision Making		
ED	6397	Analysis of Teaching Behavior		
PSY	5313	Abnormal Psychology		
PSY	5318	Learning Theories		
PSY	5333	Theories of Personality		
SOC	5313	American Minorities		
DEGREE REQUIREMENTS				(6 hours)
ED	6312	Educational Measurement		
ED	6300	Introduction to Research		
			TOTAL	39 hours

**Master of Education Degree
39 Hour Thesis Program**

Major		Certificate
Secondary Education		Counselor
THE GUIDANCE PROGRAM		(3 hours)
ED 6360	Introduction to Guidance and Counseling	
THE PUPIL SERVED		(6 hours)
ED 6302	Advanced Educational Psychology	
ED 6353	Teaching the Disadvantaged Secondary Learner	
RESOURCE AREA		(18 hours)
ED 6362	Theories and Techniques of Counseling	
ED 6363	Personal Growth	
ED 6365	Counseling Practicum	
ED 6345	Information Services: Occupational, Educational and Personal-Social	
ED 6368	Group Counseling	
ED 5372	Individual Differences	
ED 6306	Supervision of Student Teaching	
ED 6313	Individual Educational Testing	
ED 6314	Psychoeducational Assessment I	
ED 6331	The Curriculum in the Secondary School	
ED 6341	Advanced Adolescent Psychology	
ED 6342	Problems in Guidance and Counseling	
ED 6344	Psychoeducational Assessment II	
ED 6361	Appraisal of Learning Abilities	
ED 6364	Consulting in Human Relations	
ED 6366	Problems in Testing and Counseling	
ED 6367	Statistical Methods	
ED 6370	Supervision of Instruction	
ED 6383	Seminar in School and Community Relations	
ED 6386	Administration of Pupil Personnel Services	
ED 6394	Psychology of Decision Making	
ED 6397	Analysis of Teaching Behavior	
PSY 5313	Abnormal Psychology	
PSY 5318	Learning Theories	
PSY 5333	Theories of Personality	
SOC 5313	American Minorities	
THESIS		(6 hours)
ED 7300, 7301	Thesis	
DEGREE REQUIREMENTS		(6 hours)
ED 5342	Tests and Measurements	
ED 6300	Introduction to Research	
	TOTAL	39 hours

**Master of Education Degree
39 Hour Non-Thesis Program**

Major		Certificate
Secondary Education		Counselor
THE GUIDANCE PROGRAM		(3 hours)
ED 6360	Introduction to Guidance and Counseling	
THE PUPIL SERVED		(6 hours)
ED 6302	Advanced Educational Psychology	
ED 6353	Teaching the Disadvantaged Secondary Learner	
RESOURCE AREA		(24 hours)
ED 6313	Individual Educational Testing	
ED 6345	Information Services: Occupational, Educational and Personal-Social	
ED 6362	Theories and Techniques of Counseling	
ED 6363	Personal Growth	
ED 6365	Counseling Practicum	
ED 6368	Group Counseling	

3-6 hours from:

ED	6314	Psychoeducational Assessment I
ED	6344	Psychoeducational Assessment II
ED	5372	Individual Differences
ED	6306	Supervision of Student Teaching
ED	6331	The Curriculum in the Secondary School
ED	6341	Advanced Adolescent Psychology
ED	6342	Problems in Guidance and Counseling
ED	6364	Consulting in Human Relations
ED	6366	Problems in Testing and Counseling
ED	6367	Statistical Methods
ED	6370	Supervision of Instruction
ED	6383	Seminar in School and Community Relations
ED	6386	Administration of Pupil Personnel Services
ED	6393	Administration of School Staff Personnel
ED	6394	Psychology of Decision Making
ED	6397	Analysis of Teaching Behavior
PSY	5313	Abnormal Psychology
PSY	5318	Learning Theories
PSY	5333	Theories of Personality
SOC	5313	American Minorities

DEGREE REQUIREMENTS

ED	6300	Introduction to Research	(6 hours)
ED	5342	Tests & Measurements	

TOTAL 39 hours

M.Ed Degree in Educational Diagnostician

The primary purpose of the Educational Diagnostician is to serve on the appraisal team with responsibility in the appraisal of educational functioning, the appraisal of intelligence factors, the collection and analysis of data pertaining to sociological variables, and may assist in compiling information from various appraisal sources.

The M.Ed Degree in Educational Diagnostician provides an opportunity for the student to develop skills in this area.

The following is the program for M.Ed Degree in elementary and secondary Educational Diagnostician:

Master of Education Degree

The student is responsible for checking with the Director of Special Education for specific departmental requirements.

Major

Elementary Education

Certificate
Educational Diagnostician

KNOWLEDGE OF THE EXCEPTIONAL CHILD

(6-9 hours)

ED	5372	Individual Differences
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Choice of 3-6 hours from:

ED	6361	The Learning Disabled Child
ED	6376	The Emotionally Disturbed Child
ED	5374	Psychology of Mental Retardation Seminar
PSY	5313	Abnormal Psychology
PSY	5333	Theories of Personality

KNOWLEDGE OF PSYCHOEDUCATIONAL AND OTHER DIAGNOSTIC PROCEDURES

(9-12 hours)

Required:

ED	6314	Psychoeducational Assessment I
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Choice of 6-9 hours from:

ED	6316	Development and Assessment of Psycholinguistic Processes
ED	6317	Perceptual Motor Development in Young Children
ED	6308	Foundations of Reading Instruction
ED	5313	Reading Tests
ED	6329	Diagnostic Teaching of Reading
ED	6344	Psychoeducational Assessment II

KNOWLEDGE OF HUMAN DEVELOPMENT	(3 hours)
<i>Choice of 3 hours from:</i>	
ED 6311 Advanced Child Psychology	
KNOWLEDGE OF LEARNING	(6 hours)
<i>Choice of 6 hours from:</i>	
ED 6374 Applied Behavioral Analysis	
ED 6302 Advanced Educational Psychology	
PSY 5318 Theories of Learning	
KNOWLEDGE OF INSTRUCTIONAL MODIFICATION, INCLUDING PRACTICAL APPLICATION (REMEDIATION TECHNIQUES AND MATERIALS)	(6-9 hours)
<i>Required:</i>	
ED 6604 Practicum in Psychoeducational Assessment	
<i>Choice of 3 hours from:</i>	
ED 6318 Diagnostic and Prescriptive Teaching	
ED 6308 Foundations of Reading Instruction	
DEGREE REQUIREMENTS	(6 hours)
ED 6300 Introduction to Research	
ED 6312 Educational Measurement	
TOTAL	39 hours

Master of Education Degree

The student is responsible for checking with the Director of Special Education for specific departmental requirements.

Major	Certificate
Secondary Education	Educational Diagnostician
ED 5372 Individual Differences	
<i>Choice of 3-6 hours from:</i>	
ED 6361 The Learning Disabled Child	
ED 6376 The Emotionally Disturbed Child	
ED 5374 Psychology of Mental Retardation Seminar	
PSY 5313 Abnormal Psychology	
PSY 5333 Theories of Personality	
KNOWLEDGE OF PSYCHOEDUCATIONAL AND OTHER DIAGNOSTIC PROCEDURES	(9-12 hours)
<i>Required:</i>	
ED 6314 Psychoeducational Assessment I	
<i>Choice of 6-9 hours from:</i>	
ED 6316 Development and Assessment of Psycholinguistic Processes	
ED 6317 Perceptual Motor Development in Young Children	
ED 6308 Foundations of Reading Instruction	
ED 5313 Reading Tests	
ED 6329 Diagnostic Teaching of Reading	
ED 6344 Psychoeducational Assessment II	
KNOWLEDGE OF HUMAN DEVELOPMENT	(3 hours)
ED 6341 Advanced Adolescent Psychology	
KNOWLEDGE OF LEARNING	(6 hours)
<i>Choice of 6 hours from:</i>	
ED 6374 Applied Behavioral Analysis	
ED 6302 Advanced Educational Psychology	
PSY 5318 Theories of Learning	
KNOWLEDGE OF INSTRUCTIONAL MODIFICATION, INCLUDING PRACTICAL APPLICATION (REMEDIATION TECHNIQUES AND MATERIALS)	(6-9 hours)
ED 6604 Practicum in Psychoeducation Assessment	
<i>Choice of 3 hours from:</i>	
ED 6318 Diagnostic and Precriptive Teaching	
ED 6308 Foundations of Reading Instruction	
DEGREE REQUIREMENTS	(6 hours)
ED 6300 Introduction to Research	
ED 6312 Educational Measurement	

Course Descriptions *Additional courses may be found in other Education Departments*

ED 1302 INTRODUCTION TO EDUCATIONAL PSYCHOLOGY

On Demand

Psychological principles basic to professional education will be stressed. The ability to understand children at all levels of the school along with the personal growth of the prospective teacher will be considered. Does not count toward certification.

ED 1305 INTRODUCTION TO SPECIAL EDUCATION

Fall, Spring

Introduction to special education course content will include exceptional children, youth and adults. This will include the different types of exceptional individuals and their educational and treatment program needs. Historical and current social, cultural, legal, educational, and professional topics related to the development of special education will be covered.

ED 2304 FIELD EXPERIENCES IN GENERIC SPECIAL EDUCATION

Fall, Spring

The content and activities of this course will require students to obtain field teaching experience with individuals' manifesting the conditions of mental retardation learning disabilities and emotional disturbance in public or private schools or agencies.

Prerequisite: ED 1305.

ED 4301 PERCEPTION AND LANGUAGE DEVELOPMENT

Fall, Summer I

The content of this course will include: perception and its relationship to language. There will be an emphasis on oral language development and psycholinguistic process as it relates to the cognitive disabled (mildly and moderately) Hispanic bilingual child.

ED 4302 PERCEPTUAL AND COGNITIVE DEVELOPMENT

Fall, Summer I

The content of the course will include the neurological bases for perception and cognition. Cognition, problem solving, and information processing will be emphasized. In addition, multi-sensory and perceptual-motor methodology used in teaching mildly and moderately disabled students will be presented.

ED 4303 INDIVIDUALIZED INSTRUCTION FOR MILDLY AND MODERATELY DISABLED

Spring, Summer II

The content of this course will include: specialized techniques and methodology for teaching the mildly and moderately disabled special education child in academic areas. The methods covered will include task analysis, behavior modification, successive and simultaneous processing of information, classroom management and classroom organization.

ED 4309 PRACTICUM IN GENERIC SPECIAL EDUCATION

Fall, Spring

The content and activities of this course are designed to provide students in the generic special education teacher training program with clinical experiences working with individuals manifesting the conditions of mental retardation, learning disabilities, and emotional disturbances. This course will require the practicum students to utilize cognitive and behavioral task analysis, classroom management principles and techniques, teaching handicapped students to learn how to learn through information processing, and multi-sensory-perceptual approaches.

Prerequisite: ED 4303 and Psy 3305

ED 4313 DIRECTED TEACHING — GENERIC SPECIAL EDUCATION

Fall, Spring

(Students must also be enrolled in ED 4311.) This language learning disabilities course must be taken by all undergraduate student teachers working toward a special education endorsement for teaching the language/learning disabled child. Course requires observation and experiences in a public school L/LD classroom for ½ day Monday through Friday, ½ 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 Teacher Education Committee.

ED 4319 EDUCATIONAL PSYCHOLOGY APPLIED TO THE BILINGUAL CLASSROOM*On Demand*

A course designed to develop the basic competencies needed to guide the learning experiences of children whose language, attitudes, and customs are significantly different from those of children in the dominant national culture. Such competencies include (1) understanding of growth and development of children, the teaching-learning process, concept development, first and second language acquisitions and development, and the child's world of feelings; (2) unconditional positive regard for all children; (3) effective skills in evaluating, guiding, and instructing culturally different children. May be taken for post-graduate credit only.

ED 4321 INTRODUCTION TO CAREER EDUCATION*On Demand*

The course includes the definition and rationale for career education as a comprehensive, sequential program beginning in early childhood and continuing through the adult years. Emphasis upon utilizing the content of basic subjects, K-12, to focus attention on career opportunities and requirements in the world of work.

ED 4322 DIRECTED TEACHING – EMOTIONALLY DISTURBED*On Demand*

(Students must also be enrolled in ED 4311.) This course must be taken by all undergraduate student teachers working toward a special education endorsement for teaching the emotionally disturbed child. Course requires observation and teaching experiences in a public school ED classroom for 1/2 day, Monday through Friday, 1/2 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 Teacher Education Committee.

ED 4323 DIRECTED TEACHING – MENTALLY RETARDED*On Demand*

(Students must also be enrolled in ED 4311.) This course must be taken by all undergraduate student teachers working toward a special education endorsement for teaching the mentally retarded child. Course requires observation and teaching experiences in a public school MR classroom for 1/2 day, Monday through Friday, 1/2 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 Teacher Education Committee.

ED 4371 TESTING AND ASSESSMENT OF EXCEPTIONAL INDIVIDUALS*Spring, Summer II*

The content of this course will include: norm and criterion reference measures, systematic observational procedures, and clinical observation techniques. There will be an emphasis on the assessment of handicapped individuals who are at variance linguistically, and socioculturally. This course will correlate assessment and appraisal of exceptional individuals with instruction and treatment of exceptional individuals.

ED 4372 EXCEPTIONAL INDIVIDUAL*Fall, Summer I*

The content of the course will include: the exceptional individual in the socio-cultural context (family, community, educational, and vocational). Training for parents of exceptional individuals will be included. Social, emotional, and cognitive development throughout infancy, early childhood, adolescence, and adulthood, as it relates to mildly and moderately handicapped individuals will be emphasized.

ED 4373 TEACHING MENTALLY RETARDED CHILDREN*Summer*

Problems and methods in teaching mentally retarded children. The course is designed for those interested in teaching mentally retarded children. Classroom experiences will be emphasized with some consideration of related problems.

ED 4374 PSYCHOLOGY OF MENTAL RETARDATION*Summer*

This course is designed for those who are especially interested in the problems of mental retardation. Emphasis will be placed on psychological problems including diagnostics of the social growth and development of the mentally retarded person.

ED 4378 TEACHING THE NEUROLOGICALLY HANDICAPPED AND LEARNING DISABLED*Summer*

This course provides the students with the opportunity to become competent in knowledge concerning the characteristics and needs of children with cerebral disfunction. Methods and techniques in psycholinguistics and perceptual motor activities will be studied. Actual observation and work with L/LD children will be required.

Prerequisite: ED 4301 or ED 4302, ED 4303, ED 4372 or permission of instructor.

ED 4390 GROWTH AND DEVELOPMENT OF YOUNG CHILDREN*Fall, Summer I*

Emphasis on developmental tasks and growth characteristics from birth through the eighth year with emphasis on the 3, 4, and 5 year old. Emphasis on physical, intellectual, social and emotional development, lectures, readings, class participation, observation.

ED 4393 TEACHING YOUNG CHILDREN OF DIVERSE CULTURES*Spring, On Demand*

A study and evaluation of methods and techniques used to further the cognitive and linguistic development of young children from diverse cultures. Lectures, readings, class participation and projects, observation.

ED 5321 CAREER EDUCATION*On Demand*

The course includes the definition and rationale for the concept of career education as a comprehensive program wherein the student's attention is focused on careers, beginning in early childhood and continuing throughout the adult years. Describes a sequentially developed education program offering career awareness, career exploration and job preparation for all students. For elementary and secondary, the program includes a structuring of basic subjects, grades K-12, around the theme of career opportunities and requirements in the world of work and emphasized the contribution that subject matter can make to a successful career.

ED 5342 TESTS AND MEASUREMENTS FOR THE SECONDARY CLASSROOM TEACHER*Fall, Spring*

This course emphasizes the role of the teacher in (1) the selection and administration of standardized achievement and diagnostic tests and (2) the interpretation and use of test results in the classroom as they apply to directing learning in the classroom. Credit will not be given if ED 5342 or ED S 3305 or EDCI 3312 has been taken.

ED 5372 INDIVIDUAL DIFFERENCES*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.

ED 5374 PSYCHOLOGY OF MENTAL RETARDATION SEMINAR*Spring, Summer*

This course is designed primarily for educational diagnosticians and other Plan A support personnel who are interested in an in-depth study of causes, symptoms and implications of mental retardation. A research paper is required regarding some aspect of the problem of mental retardation.

ED 5390 ADVANCED STUDIES IN THE DEVELOPMENT OF YOUNG CHILDREN*On Demand*

Review of development of the child from birth to age 8 with foci roots of individuality, origins of behavior and formation of cognitive structures. Survey of early acquisition of language and information skills. Principal course emphasis: physical characteristics, modes of learning, management of emotion, self-identification and responsiveness to the demands of social living by children ages 3, 4 and 5. Course activities include observation and interaction with young children, projects, readings and lectures. Credit not offered for both ED 4390 and ED 5390.

ED 5393 ADVANCED STUDIES OF CULTURAL DIVERSITY IN EARLY CHILDHOOD CENTERS*Spring, On Demand*

Designed to investigate facets of cultural diversity in young children and its relationship to child growth and development, instructional competencies of teachers and home-school relationships.

ED 6100 SEMINAR IN COUNSELING AND GUIDANCE*Fall, Spring, Summer*

The development of skills related to the helping profession represented through a series of six steps. Primarily for in-service with counselors and teachers. A student may receive from one (1) to six (6) semester hours credit.

Prerequisite: Permission of instructor.

ED 6101 SEMINAR IN COUNSELING AND GUIDANCE*Fall, Spring, Summer*

The development of skills related to the helping profession represented through a series of six steps. Primarily for in-service with counselors and teachers. A student may receive from one (1) to six (6) semester hours credit.

Prerequisite: Permission of instructor.

ED 6102 SEMINAR IN COUNSELING AND GUIDANCE*Fall, Spring, Summer*

The development of skills related to the helping profession represented through a series of six steps. Primarily for in-service with counselors and teachers. A student may receive from one (1) to six (6) semester hours credit.

Prerequisite: Permission of Instructor.

ED 6103 SEMINAR IN COUNSELING AND GUIDANCE*Fall, Spring, Summer*

The development of skills related to the helping profession represented through a series of six steps. Primarily for in-service with counselors and teachers. A student may receive from one (1) to six (6) semester hours credit.

Prerequisite: Permission of Instructor.

ED 6104 SEMINAR IN COUNSELING AND GUIDANCE*Fall, Spring, Summer*

The development of skills related to the helping profession represented through a series of six steps. Primarily for in-service with counselors and teachers. A student may receive from one (1) to six (6) semester hours credit.

Prerequisite: Permission of Instructor.

ED 6105 SEMINAR IN COUNSELING AND GUIDANCE*Fall, Spring, Summer*

The development of skills related to the helping profession represented through a series of six steps. Primarily for in-service with counselors and teachers. A student may receive from one (1) to six (6) semester hours credit.

Prerequisite: Permission of Instructor.

ED 6300 INTRODUCTION TO RESEARCH*Fall, Spring, Summer*

A study of research methods in Education including settings which culminate in the successful completion of a research project/paper. Students will also demonstrate skills in the utilization of research facilities and will be introduced to graduate programs in Education.

Must be taken or be in progress when applying for orals.

ED 6302 ADVANCED EDUCATIONAL PSYCHOLOGY*Fall, Spring, Summer I, II*

A research approach to the areas of teaching and learning. Human learning, conditions for effective learning, interference with learning and behavioral objectives will be emphasized.

Prerequisite: ED 3302 or equivalent.

ED 6311 ADVANCED CHILD PSYCHOLOGY*Spring*

This is an advanced study of children from conception to puberty, or from the pre-school through the elementary level, with emphasis on the role played by maturation and learning. The course will include a study of recent research dealing with theories of cognitive unfolding and personality integration.

Prerequisite: ED 3311 or equivalent.

ED 6312 EDUCATIONAL MEASUREMENT*Fall, Spring, Summer I*

The content of this course will include scaling; variance; scores derived through linear and nonlinear transformations; traditional item analysis and introduction to latent trait models; reliability and true score theories; partitioning total variance into true and measurement of error variance and measurement error variance into its different sources; validity; content, predictive, concurrent, and construct; models of unbiased assessment. These topics will be related to the construction and interpretation of norm and criterion reference measures, teacher made tests, and systematic observational scales.

ED 6313 INDIVIDUAL EDUCATIONAL TESTING*Fall, Spring, Summer I*

A practicum in the use of individual educational tests, such as the ITPA, Detroit Test of Learning Aptitude, The Durrell Sullivan Reading Test, Gates Reading Test, and Gray's Reading Test.

ED 6314 PSYCHOEDUCATIONAL ASSESSMENT I*Spring*

The content of this course will include the administration, scoring, and interpretation of Raven's Progressive Matrices (in pantomime), Wechsler scales (WAIS-R, WISC-R, WPPIS), socio-cultural, and adaptive behavior scales. Models of unbiased assessment for children whose socio-cultural and linguistic backgrounds are at variance from the American society core culture will be covered.

*Prerequisite: Ed 6312***ED 6316 DEVELOPMENT AND ASSESSMENT OF PSYCHOLINGUISTIC PROCESSES***Fall, Summer I*

The course is designed to acquaint the student with the physiologic mechanisms involved in the acquisition of speech and language and to define those social, psychological and perceptual aspects that contribute to the developmental language tasks appropriate for various chronological and mental age levels. The student will be guided toward an understanding of the relationship between aural and written language and social behavior. Observation of children will be included in the requirement.

ED 6317 PERCEPTUAL MOTOR DEVELOPMENT IN YOUNG CHILDREN*Fall, Summer I*

This course is intended to impart a knowledge of the perceptual processes and how they affect the motor development of the child. The tactual-kinesthetic (haptic), auditory and visual sense modalities will be defined and discussed separately and in relation to each other. Implications for classroom behavior and academic performance will be discussed. There will be opportunities for observation of children manifesting any one or combinations of perceptual deficits.

ED 6318 DIAGNOSTIC AND PRESCRIPTIVE TEACHING*Spring, Summer II*

This course is intended to enable the teacher to take all data -- psychological, social and educational -- and translate these into a course of action for herself and the child, including individualized selections of methods, materials and techniques. Criteria and procedures for ongoing evaluation will be an integral part of the course. Actual cases will be utilized and the student will have the opportunity to prepare diagnosis and develop educational prescriptions. Attention will be given to effective, meaningful reporting to other professionals as well as parents.

*Prerequisite: ED 6316, ED 6317.***ED 6336 PROBLEMS IN EDUCATION***Fall, Spring, Summer*

This course's major emphasis is on current innovations in education. Students will conduct research related to selected problems. Experiences of the student may include conducting action research, working with educational determinants, new education programs, and/or working with classroom teachers and other persons in the community in order to improve the education program. Credit may be applied toward the graduate programs in education when the appropriate problem is chosen by the student. This course may be repeated once for credit.

ED 6341 ADVANCED ADOLESCENT PSYCHOLOGY*Fall, Summer*

The history and systems of adolescent psychology applied to education. Modern theories and current research in learning and pupil motivation, especially in relation to new educational media and various aspects of the educative process.

*Prerequisite: ED 3341, ED.S. 3302, or equivalent.***ED 6342 PROBLEMS IN GUIDANCE***Fall, Spring, Summer*

A course involving an individual study in program planning in guidance. The student will present a paper which will be bound and placed in the library and in the office of counselor education.

ED 6344 PSYCHOEDUCATIONAL ASSESSMENT II*Fall*

The content of this course will include administering, scoring, and interpreting: Stanford-Binet Intelligence Scale; Bayley Scales of Infant Development and other age scales; human figure drawing; and Kaufman - ABC test. Opportunity for administering these measures in Spanish or English will be provided.

Prerequisite: Ed 6312 or satisfactory performance on equivalent competency examination.

ED 6345 EDUCATIONAL AND OCCUPATIONAL INFORMATION*Fall, Spring, Summer I*

A survey and analysis of the processes of assisting the individual to choose an occupation, prepare for it, enter it, and progress in it. The course seeks to train leaders who can help individuals make decisions and choices involved in planning a future and building a career.

ED 6346 HISTORY AND PRINCIPLES OF VOCATIONAL EDUCATION*On Demand*

History and principles of current vocational education programs stressing nature, scope, purpose, development and socio-economic values.

ED 6347 PLANNING AND ORGANIZING PROGRAMS OF VOCATIONAL GUIDANCE*On Demand*

Development of competencies related to planning and organizing appropriate vocational guidance programs. The study and implementation of methods and techniques of assessing vocational interests and aptitudes.

ED 6348 VOCATIONAL-STUDENT IDENTIFICATION, PLACEMENT AND FOLLOW-UP*On Demand*

Development of competencies in assessing students' vocational aptitudes and interests and in planning, organizing and coordinating placement and follow-up programs.

ED 6349 COUNSELING PROCEDURES FOR ELEMENTARY CHILDREN*Fall*

The study and implementation of basic techniques of counseling children with behavioral disorders. This course will emphasize the utilization of play media and systematic positive reinforcement to facilitate expression, self-understanding and personal growth. Observation and supervised experience in counseling sessions with children are an integral part of the course.

Prerequisites: ED 6360, ED 6362, ED 6363 or permission of instructor.

ED 6353 TEACHING THE DISADVANTAGED SECONDARY LEARNER*On Demand*

The course will emphasize the problems experienced in teaching secondary school students that are educationally and/or culturally disadvantaged. Applicable techniques and materials useful in classroom situations will be studied.

ED 6360 INTRODUCTION TO GUIDANCE AND COUNSELING*Fall, Spring, Summer I*

Philosophy, principles, and current practices of pupil guidance as a function of education. Social, emotional, intellectual and attitudinal dimensions are explored. Group guidance as well as individual counseling techniques, as they apply through public schools, are considered through lectures, discussion and class participation.

ED 6361 THE LEARNING DISABLED CHILD*Summer*

The student will acquire knowledge and theory regarding learning abilities and disabilities and acquire basic terminology in the field of psycho-educational evaluation. Experiences will include observation of children with various learning styles, participation on simulated ARD (Admission, Review and Dismissal) committees, and knowledge of procedures from referral techniques through dissemination of findings.

ED 6362 THEORIES AND TECHNIQUES IN COUNSELING*Fall, Spring, Summer*

A survey of the field of psycho-therapy, comparing the contributions of psychoanalysis, non-directive therapy and behavior therapy. Consideration will be given to such specialized approaches as group therapy, play therapy and family therapy. Arrangements will be made to visit local facilities utilizing a variety of these therapeutic techniques.

Prerequisite: ED 6360 and permission of the instructor.

ED 6363 PERSONAL GROWTH*Fall, Spring, Summer*

Discussions and practical application of group dynamics within a framework of group therapy. Limited to 20 graduate students accepted in the counseling and guidance program.

ED 6364 CONSULTING IN HUMAN RELATIONS*Spring*

Emphasis on the development of competencies in consulting with students, teachers, parents, and other personnel both individually and in small groups. Limit 20 students.

Prerequisites: ED 6360, ED 6362, ED 6363 or consent of instructor.

ED 6365 COUNSELING PRACTICUM*Fall, Spring, Summer*

A competency based practicum. Students will engage in counseling and in guidance planning through practical experiences in laboratory and in public schools. Seminars for discussion and critiquing by the student will be the theme of class sessions. Students will be required to recognize and identify counseling techniques and philosophies used in this practicum. Admission to course is dependent on admission to counselor education candidacy.

Prerequisites: ED 6360, ED 6362, ED 6363. Course must be taken within last nine (9) hours of program. Limit 12 students.

ED 6366 PROBLEMS IN TESTING AND COUNSELING*Fall, Spring, Summer*

Problems course involving a practicum in testing and counseling. Emphasis will be on diagnosis and therapy. The student will present a case study/studies which will be bound in two copies to be placed in the library and in the office of counselor education.

ED 6367 INTRODUCTION TO STATISTICAL METHODS*Fall, Spring, Summer I*

The content of this course will include central tendency; variance; normal, *t*, chi square, and *F* distributions; bivariate correlation and regression analysis, *t* test between means, goodness of fit and test of independence of chi square; one-way and factorial ANOVA. There will be an emphasis on hypothesis testing; Type I and II errors; an understanding of statistical significance and practical or functional significance.

ED 6368 GROUP COUNSELING*Fall, Spring, Summer*

The purpose of this course is to develop an understanding of group processes, theories and techniques. Demonstrated competency in this knowledge and application of group procedures will be required. Limit 20 students.

Prerequisites: ED 6360, ED 6362, ED 6363.

ED 6373 TECHNIQUES AND METHODS FOR THE SLOW LEARNER*Summer*

A course designed to present techniques which can be applied to the curriculum for retarded children. Perceptual as well as intellectual deficits will be considered. The students will be required to participate in some observations and in some work relationship with retarded and slow learning children.

ED 6374 APPLIED BEHAVIORAL ANALYSIS*Summer*

This course provides the opportunity to study behavioral characteristics of school children. Emphasis will be given to the prevention and remediation of behavioral problems. Special coverage will be given to a discussion of classroom problems.

ED 6376 THE EMOTIONALLY DISTURBED CHILD*Fall, Summer*

Characteristics of the emotionally disturbed. Basic concepts of personality development will serve as a framework for discussion of those behaviors that are regarded as self-enhancing and those considered debilitating within various social environments. Special emphasis will be focused on the interpretation and amelioration of behavior as it occurs in the classroom setting. Discussion of current research instructional arrangements and community resources will be included. Observation of the emotionally disturbed youth will be required.

ED 6377 INTERMEDIATE STATISTICS

The content of this course will include: partial, semi-partial, and multiple correlation and regression analysis; discriminant analysis; experimental designs Models I, II, III; ANOVA: repeated measures, higher-order factorial, nested, analysis of covariance; methods of multiple comparisons; introduction to linear models and MANOVA; Hotelling's T^2 , Wilk's lambda, Lawley-Hotelling trace, Roy's GCR, etc. There will be an emphasis on the blending of research design and statistical analysis.

Prerequisite: Ed 6367 or consent of instructor.

ED 6604 PRACTICUM IN PSYCHOEDUCATIONAL ASSESSMENT*Summer*

Supervised practical experience in psychoeducational assessment and therapy. This culminating activity will provide intensive training in the entire educational process for a child, whereby data is gathered, a diagnosis is developed and implemented, and an ongoing evaluation is designed and monitored to serve as a measure of the child's social and educational growth. Last 6 hours or last semester of work.

ED 6605 PRACTICUM FOR TEACHING THE EMOTIONALLY DISTURBED
Summer

The course emphasized, under the supervision of a fully endorsed teacher of the emotionally disturbed, the day to day techniques and instructional procedures for working with emotionally disturbed in a public school setting. Each student must spend a minimum of 120 clock hours in the classroom and maintain a log of all pertinent experiences.

Prerequisites: ED 5372, ED 6376, ED 6374, and 6 hours of Psychology or its equivalent.

ED 7300 THESIS
On Demand

ED 7301 THESIS
On Demand

Secondary Education

See Department of Curriculum and Instruction — Elementary and Secondary

Social Work

See Department of Sociology and Social Work

Department of Sociology and Social Work

Dr. Delores Reed-Sanders, Chair

Sociology

Full-time Faculty

Alvarez, David* (Ph.D. Texas, 1971; prof.) race and ethnicity, demography.

Juarez, Rinaldo Z.* (Ph.D., Pennsylvania State, 1976; assoc. prof.) health and aging, theory

Liebowitz, Stephen W. (Ph.D. Missouri at Columbia, 1979; asst. prof.) social psychology, statistics and methodology.

Lopez, Manuel Mariano* (Ph.D. Michigan State, 1977; assoc. prof.) stratification, demography, methods (on leave).

Nelson, Harold A.* (Ph.D. Southern California, 1960; prof.) social movements, community organization and change.

Reed-Sanders, Delores* (Ph.D. Oklahoma State; 1974, assoc. prof. and chair) family, deviance, gerontology.

Richardson, D. Chad* (Ph.D. Texas, 1975; assoc. prof.) race and ethnicity, sociology of education.

The Department of Sociology and Social Work offers both a major and a minor in Sociology. In addition, it offers sociology courses for students seeking a second teaching field for teacher certification in secondary education.¹

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:

30 semester hours of which 18 hours must be advanced; must include SOC 1313, 2301, 3301, 4333 and 4352.

Minor in Sociology:

18 semester hours in Sociology of which 9 hours must be advanced; must include SOC 1313 and 4333 or 4352.

Minor in Sociology

(With Teacher Certification)

Secondary Option II: 24 semester hours in Sociology. Must include: Soc 1313, 1323, 3301, 4323, 4360 and nine hours (3 upper division) from the following: 2301, 2324, 2332, 2333, 3313, 3324, 3326, 3333, 3343, 3353, 3393, 4313, 4314, 4325, 4333, 4352, 4373, 4380, 4383.

Course Descriptions

Sociology

SOC 1313 PRINCIPLES OF SOCIOLOGY

Fall, Spring, Summer

The social group, culture and personality; social institutions; social interaction; social change. (Formerly 2313, may not be repeated for credit.)

*On Graduate Faculty.

¹PLEASE NOTE: Students seeking teacher certification in sociology must have a second teaching field, excluding psychology. Please see the department chair for details.

SOC 1323 CURRENT SOCIAL ISSUES*Fall, Spring*

A sociological analysis of selected social issues present in current society. (Formerly SOC 2323, may not be repeated for credit.)

SOC 2301 STATISTICS FOR THE BEHAVIORAL SCIENCES*Fall, Spring*

An introduction to the procedures used in handling psychological and sociological data including frequency distributions, central tendency, variability, correlation, and elementary hypothesis testing.

Prerequisite: 3 hours of MATH (except MATH 2306) and SOC 1313, 1323, or consent of instructor (formerly SOC 4301, may not be repeated for credit.)

SOC 2324 SOCIAL PSYCHOLOGY*Fall, Spring*

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*On demand*

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*On demand*

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.

Prerequisite: Soc 1313 and 2301 or consent of instructor.

SOC 3313 CRIMINOLOGY*Fall, Spring*

A study of crime, its causes and its social treatment.

Prerequisite: SOC 1313 or consent of instructor.

SOC 3324 SOCIOLOGY OF HEALTH*On demand*

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 3333 URBAN SOCIOLOGY*On demand*

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 CHANGE*On demand*

A study of the processes and theories underlying social changes experienced in the Rio Grande Valley, the United States, and other Western societies. Emphasis will be placed on identifying and understanding the indicators of social change, perspectives of social change, patterns of change, and strategies for change.

Prerequisite: SOC 1313 or consent of instructor.

SOC 3353 JUVENILE DELINQUENCY*On demand*

Delinquency in modern society, basic factors and conditions of juvenile delinquency and the problems of delinquency control.

Prerequisite: SOC 1313 or consent of instructor.

SOC 3393 SOCIOLOGY OF AGING*On demand*

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 4313 AMERICAN MINORITIES*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 in-depth description of the problems and characteristics of major American minorities.

Prerequisite: 6 hours of Sociology or consent of instructor.

SOC 4314 SOCIOLOGY OF DEVIANCE*On demand*

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 socio-economic conditions and their historical antecedents.

Prerequisite: 6 hours of Sociology and/or Anthropology or consent of instructor.

SOC 4325 METHODS OF POPULATION ANALYSIS*On demand*

An overview of the techniques of population analysis and their applications in the planning, evaluation and problem-solving process. Special emphasis on the effects of population on community, regional and state socio-economic structures. Will explore the interaction of population and technology, resource-utilization, public policy, the planning process, and decision-making in business/government service.

Prerequisite: 6 hours of Sociology or instructor's consent.

SOC 4333 SOCIAL THEORY*On demand*

A survey of historical development and the theories of major sociologists.

Prerequisite: 9 hours of Sociology or consent of instructor.

SOC 4352 SOCIAL INEQUALITY*On demand*

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). Special attention will be given to an examination of poverty in the Lower Rio Grande Valley and among minority populations in the U.S.

Prerequisite: SOC 1313 or consent of instructor.

SOC 4360 SOCIOLOGY OF EDUCATION*On demand*

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 4373 LATIN AMERICAN SOCIETY*On demand*

The development, culture, structure and functioning of the societies of Latin America.

Prerequisite: 6 hours of Sociology or consent of instructor.

SOC 4380 SOCIAL PROTEST AND SOCIAL MOVEMENTS*On demand*

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*On demand*

Designed to give student experience in research or in-depth theoretical/empirical readings in a substantive area not normally covered within standard courses. Research projects or advanced readings will vary according to student interest and faculty availability. Sequential registration for up to nine hours is permitted as topics vary. Formerly SOC 4387. A maximum of 9 hours from SOC 4383, 4387, 4388, 4389 is permitted.

Prerequisite: 9 hours of Sociology and the consent of the instructor.

SOC 5313 AMERICAN MINORITIES*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 in-depth description of the problems and characteristics of major American minorities. A research project and supporting specialized readings will be emphasized.

Prerequisite: 9 semester hours of Sociology or consent of instructor

SOC 5323 THE MEXICAN AMERICANS*Fall, Spring*

Presents Mexican American and Anglo contacts and relations in the United States from Colonial times to the present, with special emphasis on the Southwestern United States. Social, economic and cultural differences are emphasized. Special attention is given to changes occurring among Mexican Americans in the last few years and how this is affecting Mexican American-Anglo relationships. Students will have to do a research project using primary resources as part of the course requirements.

Prerequisite: 6 hours of Sociology and/or Anthropology or consent of instructor.

SOC 5360 SOCIOLOGY OF EDUCATION*On demand*

An analysis of the relationship of the educational institution to society and the patterns of order, change and conflict that emerge. Current issues, such as bureaucratization of schools and problems of minorities in the schools are examined with regard to related sociological principles and theory. An applied project and report will be required.

Prerequisite: 9 hours of Sociology, Psychology, and/or Anthropology or consent of instructor.

Social Work

Librado R. De Hoyos Jr., Director

Full-time Faculty

Anzaldua, Hermila (M.S.W. Worden School of Social Work, Our Lady of the Lake University 1966, assoc. prof.) interpersonal, community social work.

De Hoyos, Librado R. Jr., (M.S.W. Boston University, 1964; assoc. prof. and director) Chicano-Latino Studies, community social psychology, social work.

Solis, Raul H. (M.S.W., Worden School of Social Work, Our Lady of the Lake University, 1974; asst. prof.) Mexican American experience, generalist social work, occupational social work.

The Bachelor of Social Work (BSW) degree program is a four-year broad field major with a liberal arts base, a required foundation content in behavioral sciences and the professional social work courses. It provides basic knowledge of the Social Welfare Systems, the Social Work profession, knowledge, values and skills necessary for social change in practice, and prepares students to pursue graduate study in Social Work and related professions. The Social Work Program is accredited by the Council on Social Work Education.

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 obtain the competencies of the entry-level generalist practitioner. These include such functional skills as the problem-solving approach to assess needs, intervene, evaluate responses and link individuals with resources and opportunities for change. The BSW candidate will master required standards for social work practice.

Any student who is admitted to Pan American University may declare a major in Social Work. A student who wishes to major in Social Work should register for SOCW 1313 - Introduction to Social Work. After successful completion of three sequential social work courses the student must apply for admission and be accepted 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 2.0 G.P.A. is required in the major as well as overall course work. Academic advisement is required for all social work majors. At least one course in psychology, sociology, philosophy, foreign language (Spanish) and biology must be complete prior to senior year work.

Full-time students in the Social Work Program are eligible for membership in the Student Association of Social Work (The Social Work Club), the National Association of Social Work, Texas Chapter and local NASW Unit. Upon graduation a (BSW) student may be certified as a social worker under the Texas Social Work Certification law.

Degree Requirement

Requires 32 hours in Social Work and must include SOCW 1313, 2314, 2324, 3314, 3323, 3324, 3353, 4314, 4416, 4417. Required 27 hours of foundation courses to be taken from the following groups:

Group A Statistics (3 hours required)

SOC 2301, PSY 2301, Math or Stat 2330

Group B Psychology (9 hours of which 6 must be advanced)

PSY 1313, 1323, 2336, 2337, 3305, 3325, 3333, 3343, 4313, 4333

Group C Sociology (6 hours of which 3 must be advanced)

SOC 1313, 1323, 2324, 3324, 3343, 3393, 4310, 4313, 4323, 4352

Group D General Topics (9 hours of which 6 must be advanced)

Anth 1323, Anth/Soc 2353, Anth/Soc 3345, 3375, Anth 4353

Cis 1301; Comm 1303, 1307, 2302, 3315, 3316

Crij 1301, 3303, 3341; Eco 1301

PolS 3323, 3344, 3360; Hist 2363, 4333, 4344, 4353, 4354

Phil 1301, 1320, 2330, 3320, 3340, 3380, 3390

SOCW electives recommended:

SOCW 2323, 2342, 2350, 3333, 3334, 3345, 3346, 4320, 4321, 4323, 4352, 4453

Course Descriptions

Social Work

SOCW 1313 INTRODUCTION TO SOCIAL WORK

Fall, Spring, Summer

Traces the philosophy and historical development of social welfare as an institutional arrangement, reflecting its European roots and its evolution in America. A general overview of social welfare institutions, structures and functions helps students understand social work concepts, ethics and practice. Descriptions of social work approaches help identify the facets of the profession. (Formerly SOCW 2313, may not be repeated for credit.)

Prerequisite: 3 hours PSY or SOC.

SOCW 2314 SOCIAL WELFARE LEGISLATION

Fall, Spring

Introduction to the legislative process in social welfare. Provides examination and analysis of the law, the population for which it is intended, and the relationship between the two. Specific legislation is studied to focus on provisions and exclusions of the law. In-depth understanding of social welfare institutions in the nation and state. (Formerly SOCW 3313, may not be repeated for credit.)

Prerequisite: SocW 1313

SOCW 2323 COOPERATIVE EDUCATION IN SOCIAL WORK

On demand

Designed for students seeking social work credit through the Cooperative Education Program provided the following conditions are met: (a) the student's project must be directly related to his major; (b) the student must be under direct academic supervision; (c) the student must complete written assignments to be evaluated by a supervisor.

SOCW 2324 HUMAN BEHAVIOR AND THE SOCIAL ENVIRONMENT

Fall and Spring

Designed to provide the social work major with an understanding of the physical, emotional, intellectual, spiritual, social, and cultural factors that affect an individual's social functioning. Particular emphasis will be placed on understanding the complex relationship between man and the environment that bear upon human growth, development and behavior, and implications of this for social work practice. (Formerly SOCW 4333, may not be repeated for credit.)

Prerequisite: SocW 1313 and 6 hours in SOC and PSY or consent of instructor.

SOCW 2342 SUBSTANCE ABUSE AND THE FAMILY*Fall, Spring, Summer*

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.

Prerequisites: 3 hours of Soc or Psy and 6 hours SocW and consent of instructor.

SOCW 2350 GROUPS IN SOCIAL WORK*Spring, odd years, Fall*

Provides a general orientation to small groups in Social Work practice. Students will examine the values, objectives and principles of social group work 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.

Prerequisites: 3 hours Soc or Psy and Soc 1313 and consent of instructor.

SOCW 3314 SOCIAL WELFARE POLICY AND PROGRAMS*Fall, Spring*

Examines economic, political, intellectual, sociocultural, leadership, values and ideologies and other such factors which 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. (Formerly SOCW 4313, may not be repeated for credit.)

Prerequisite: SocW 1313, SocW 2314, SocW 2324 and consent of instructor.

SOCW 3323 METHODS IN SOCIAL WORK PRACTICE I*Fall, Spring*

Gives the student beginning knowledge and experience in Social Work interventive modes. Through classroom and community work, the student examines some of the necessary knowledge, attitudes, values and skills upon which problem-solving is based, and understands this approach as basic to all intervention modes in social work.

Prerequisite: SocW 1313, 2314 and 2324.

SOCW 3324 METHODS IN SOCIAL WORK PRACTICE II*Fall, Spring*

Designed to provide social work students with an introductory knowledge of various theoretical perspectives used to understand and observe communities, and various models of community social work practice aimed at improving communities through community organization and planning.

Prerequisite: SOCW 3323 and 3314 and consent of instructor.

SOCW 3333 SPECIAL TOPICS IN SOCIAL WORK ISSUES*On demand*

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 him/her and other helping professionals for interdisciplinary collaboration in achieving effective social change objectives. Sequential registration for up to six hours is permitted as topics vary. Topics will vary according to timeliness of issues, student demand and availability of faculty.

Prerequisite: 9 hours SocW or consent of instructor.

SOCW 3334 SPECIAL TOPICS IN SOCIAL WORK ISSUES*On demand*

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 him/her and other helping professionals for interdisciplinary collaboration in achieving effective social change objectives. Sequential registration for up to six hours is permitted as topics vary. Topics will vary according to timeliness of issues, student demand and availability of faculty.

Prerequisite: 9 hours SocW or consent of instructor.

SOCW 3345 INDUSTRIAL SOCIAL WORK*Fall, even years*

This course design provides an overview of social work practice in labor and industry. It includes a basic orientation to industrial society, the meaning of work, the role of corporations and labor unions, and the emerging role of social work practice in industry. Emphasis will be given to social service delivery models and examination of critical social policy issues for social work intervention in the work place.

Prerequisite: 9 hours SocW or consent of instructor.

SOCW 3346 JUVENILE DELINQUENCY AND SOCIAL WORK PRACTICE*Spring, odd years*

Introduction to social work practice in the justice system, with emphasis on juvenile delinquency. Behavioral sciences theory and methodology will be utilized to examine criminal activities. The legal and economic bases of the current juvenile justice system will be examined along with Social Work practice approaches with juveniles.

Examinations of values, knowledge and skills, as these relate to practice with juvenile offenders will be focused.

Prerequisite: 9 hours SocW or consent of instructor.

SOCW 3353 RESEARCH FOR THE SOCIAL SERVICES*Fall, Spring*

Introduces students to simple but basic concepts necessary to understand the different phases and kinds 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. (Formerly SOCW 4323, may not be repeated for credit.)

Prerequisite: 9 hours of Social Work courses and statistics and consent of instructor.

SOCW 4314 METHODS IN SOCIAL WORK PRACTICE III*Fall, Spring*

Students learn how to give direct service to families, small groups using the problem solving method. Student will selectively utilize concepts and techniques from several interventive modes, e.g., ego psychology, family and small group theory, behavior modification, T.A., etc.

Prerequisites: SOCW 3323, 3324 and consent of instructor.

SOCW 4320 CHILD AND FAMILY PRACTICE*Fall, even years*

The design of this course includes an introduction to family diversity and addresses a wide range of implications for working with the family unit. Family theories, frameworks, the family as a social institution and implications for bilingual-bicultural approaches to work with families will be emphasized. A laboratory will be an integral part of the course.

Prerequisite: 9 hours SocW or consent of instructor.

SOCW 4321 DOMESTIC VIOLENCE IN SOCIETY*Spring, odd years*

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.

Prerequisite: 9 hours or consent of instructor.

SOCW 4323 COMMUNITY MENTAL HEALTH*Fall, even years*

Community Mental Health is presented in its historical, ideological and legislative contexts. It is defined in terms of preventive social work intervention; available social support systems; and the use of consultation. Students will study the achievements of the community mental health structure and proposals for reaching out to vulnerable populations beyond traditional mental health services and concerns.

Prerequisite: 9 hours SocW or consent of instructor.

SOCW 4352 SUBSTANCE ABUSE COUNSELING IN THE COMMUNITY*Spring, odd years*

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.

Prerequisite: SocW 2342 and consent of instructor.

SOCW 4416 FIELD INSTRUCTION IN SOCIAL WORK I*Fall, Spring*

A minimum of 240 hours in the field for one semester (2 days a week). Work will be completed in established social agencies or informal settings under joint supervision of agency and university. Students will receive educationally directed field instruction with engagement in direct service activities as well as gain knowledge of community resources and agency techniques for meeting today's social problems. Concurrent integrative seminar 3 hours weekly. (Formerly SOCW 4613, may not be repeated for credit.)

Prerequisite: SOCW 3314 and 3323 and approval by field coordinator.

SOCW 4417 FIELD INSTRUCTION IN SOCIAL WORK II*Fall, Spring*

Continuation of Field I.

*Prerequisite: SOCW 4416 and SOCW 3324 and approval by field coordinator.***SOCW 4453 COMMUNITY PRACTICUM IN SUBSTANCE ABUSE COUNSELING***Fall, even years*

This structured, supervised practicum provides concurrent application and integration of theory learned in SOCW 4352: Substance Abuse Counseling in the Community. The problem of substance abuse as it relates to social functioning will be the focus. Students will be placed in residential and non-residential programs in which both the individual and family will be treated and linkages established with community resources. The practicum requires 300 hours of supervised field instruction.

*Prerequisite: SocW 4352 and consent of instructor.***SOCW 4818 FIELD BLOCK PLACEMENT**

May be taken in lieu of SOCW 4416 and 4417. A minimum of 480 hours (4 days a week for one semester) of in-the-field experiences in established social agencies or informal settings under joint supervision of agency and university and as described in SOCW 4416 and 4417. Approval by Program Director.

Prerequisites: SOCW 3323, 3324 and 4314 and approval by field coordinator.

Spanish

See Department of Modern Languages and Literatures

Speech

See Department of Communications

Statistics

See Department of Mathematics and Computer Science

Theatre

See Department of Communications

The Honors Studies Program

Raymond Welch, Director

Purpose of Program

The purpose of Honors Studies is to provide the capable and interested students a means of enriching their college education.

This purpose is achieved in two basic ways: (1) by offering special honors classes at the freshman and sophomore level, and (2) by providing an independent study program in the student's major or related field of study at the junior and senior level.

A student may major in any academic discipline and still participate in the Honors Studies Program without having to take additional hours for graduation.

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. The small class makes rapport between professor and student and between student and student a much easier matter, and both the small class and the homogeneous grouping greatly facilitate the intellectual exchange among class members. Such an atmosphere furnishes the student greater opportunity to function as an individual and the professor greater opportunity to utilize creative and innovative teaching techniques. Enrichment rather than acceleration is the main objective of honors classes. For the good student, honors classes are not necessarily more difficult, simply better: more stimulating, more exciting, more challenging, more 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.

At the beginning of 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 a faculty member who possesses 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 21 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 semester 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 or the Financial Aid Office for scholarship applications.

Honors Studies Curriculum

In choosing honors classes at the freshman and sophomore level, the student should refer to the suggested curriculum under his 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 English 1301, 1302 and History 2313, 2314, the student may take the comparable honors English 1387, 1388 and honors History 2387, 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, the student 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.

Please note that there are five courses required for graduation in the Honors Studies framework: Honors 2387, 2388, 3187, 3387 and 4387. These five courses constitute the core of the Honors Studies Program. The purpose of requiring Honors 2387 and 2388 is to give students a broad overview of their intellectual heritage, thus better enabling them to assimilate and relate the knowledge gleaned from their other courses and studies.

Independent study, leading to the Senior Honors Thesis (Honors 3187, 3387, and 4387), required at the junior-senior level, allows students to delve into a highly specialized area of knowledge of their own, thus giving them valuable experience as independent scholars.

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 honors seminars, Honors 2387 and 2388.
2. Completion of the Senior Honors Thesis. Students receive credit in Honors 3187, 3387, and 4387 for completion of the thesis.
3. An over all grade point average of at least 3.00.

During the student's final semester a faculty committee questions the student on the Senior Honors Thesis. Using the findings of this committee, the rating of the thesis advisor, and the student's overall grade point average, the Honors Council determines whether the honors student graduates with Honors, High Honors, or Highest Honors. Besides having the total Honors Studies achievement recorded on their transcripts, honors students receive special recognition at the graduation ceremony.

Inquiries About Honors Studies

For applications or for further information about the Honors Studies Program, write the Director of Honors Studies Program, Pan American University, Edinburg, Texas, 78539.

Course Descriptions

Honors

HONR 2387 WESTERN CIVILIZATION

Taking a historical stance, this course examines the major political, social, religious and scientific events from the ancient Greeks through the reformation.

HONR 2388 WESTERN CIVILIZATION

This course is a continuation of Honors Seminar 2387, examining the major political, social, religious and scientific events from the reformation to the present.

HONR 3187 PROBLEMS IN INDEPENDENT STUDY

This course is an interdisciplinary approach to basic problems encountered in independent study. It further aids the student in choosing a topic for independent study and in setting up objectives for the study.

HONR 3387 INDEPENDENT STUDY

Supervised independent study at the junior level in the student's major or related fields, with periodic class meetings for coordination, instruction in methodology and discussion.

HONR 4387 INDEPENDENT STUDY

Supervised independent study at the senior level in the student's major or related field, with periodic class meetings for coordination, instruction in methodology and discussion.

Special Programs

Continuing Education

Pan American University offers non-credit continuing education courses in a variety of areas, including real estate, management, accounting, computer information systems, photography, and Spanish. These and other courses are generally arranged by and offered through the related schools and departments of the University. Fees are normally charged for these courses because such programs must be self-supporting. Many of the courses carry continuing education units. Some of the schools, particularly the School of Education, offer in-service training programs on a regular basis.

English Language Institute

The English Language Institute offers a variety of non-credit instructional English programs to non native speakers in the community and from abroad. Intensive English classes provide twenty-four hours of weekly instruction at various levels of proficiency. This program is designed to assist students preparing to enter an academic program, professionals desiring to improve their career-oriented English, and others wishing to increase their functional usage of the English language in a serious but friendly atmosphere. Conversational English classes are provided in the evening classes for members of the community and students wishing to diversify their abilities in spoken English. For additional information about the English Language Institute, write: The Director, English Language Institute, Edinburg, Texas 78539.

High School Equivalency Program

The High School Equivalency Program (H.E.P.) serves the migrant/seasonal farmworker who has not completed high school and is at least 17 years of age.

The primary goals of the program are successful achievement on the G.E.D. exam, sustained employment or enrollment in training programs (college, military, etc.). To accomplish H.E.P. goals, students are offered instruction in five subject areas (mathematics, science, social studies, grammar and literature). The academic program is individualized and helps each student progress at his own learning rate.

After the regular classes, students participate in a variety of after school activities such as intramural competition and other organized sports.

Supportive services provided by H.E.P. enabling students to achieve their potential are: placement services, dormitory counselors and a complete guidance and counseling program which includes individual and group counseling sessions. Other benefits of the program include room and board, medical care, University I.D. and a weekly stipend. For more information call 381-2521.

Upward Bound Program

Upward Bound is a federally-funded project for low-income high school students at the sophomore, junior and senior levels which provides a Saturday program during the academic year and a summer program during the first summer session. The purpose of this program is to acquaint these students with a university setting and to strengthen their academic preparation and motivation to pursue post-secondary education through a curriculum of reading, writing, math and science enrichment classes and through counseling designed to increase self-awareness, motivation and career exploration.

Pan American University at Brownsville

Dr. Homer J. Pena, President

Pan American University at Brownsville is an upper level institution offering junior, senior, and graduate level work leading to bachelor's and master's degrees. In Spring 1988, enrollment was approximately 1,340 students.

The establishment of the Brownsville campus in 1973 makes it possible for area residents to pursue undergraduate and graduate studies without traveling to a more distant University. Also, many teachers, business men and women, housewives, and others in the area have found it convenient to continue their education at the Brownsville campus. Many courses are offered during late afternoon, evening, and weekend in order to accommodate those who work during the day.

Location

Pan American University at Brownsville is on the campus of Texas Southmost College, a well-established two-year college. The two schools operate as separate institutions, but a cooperative spirit exists between them, assuring students of a smooth transition from lower to upper-level college work.

The campus is in Brownsville (Cameron County), Texas and adjacent to the U.S.-Mexico International Bridge over the Rio Grande. Cameron County is at the southernmost tip of Texas, bordering the state of Tamaulipas, Mexico. Brownsville, a city of more than 100,000 people, is across the Rio Grande from Matamoros, 25 miles from Padre Island, and 60 miles from Edinburg.

Programs

Undergraduate Programs

Bachelor of Arts (B.A.) Degree

- English
- Political Science
- History
- Sociology
- Spanish

Bachelor of Business Administration (B.B.A.) Degree

- Accounting
- Finance
- General Business
- Management
- Marketing

Bachelor of Criminal Justice (B.C.J.) Degree

- Police Administration

Bachelor of Applied Arts and Sciences

- Bachelor of Science (B.S.) Degree
- Elementary Education

Academic Teaching Fields and Delivery Systems

Elementary-Provisional

- *Art (I)
- Art (II)
- Bilingual Education (III)
- Biology (II)
- Early Childhood (IV)
- *English (I)
- English (II)
- Generic Special Education (III)
- *History (I)
- History (II)
- *Mathematics (I)
- Mathematics (II)
- Music (II)
- *Physical Education (I)
- Physical Education (II)
- Reading (II)
- Social Studies (III)
- *Spanish (I)
- Spanish (II)

Endorsements

- Kindergarten
- Bilingual Education
- English As A Second Language

All-Level-Provisional

- Physical Education (II)

Secondary-Provisional

- *Art (II)
- Biology (I)
- *Biology (II)
- Business Composite (III)
- Business Secretarial (I)
- *Computer Information Systems (II)
- English (I)
- *English (II)
- *Generic Special Education (II)
- Government (I)
- *Government (II)
- History (I)
- *History (II)
- Mathematics (I)
- *Mathematics (II)
- *Physical Education (II)
- *Psychology (II)
- *Reading (II)
- Science Composite (IV)
- Social Studies (IV)
- *Sociology (II)
- Spanish (I)
- *Spanish (II)

*Programs require a second specialization for Teacher Certification - Elementary; a second teaching field for Teacher Certification - Secondary.

Graduate Programs

- Master of Business Administration (M.B.A.)
- Master of Education (M.Ed.)
 - Bilingual
 - Counseling and Guidance
 - Educational Administration
 - Elementary
 - Reading
 - Supervision
- Interdisciplinary Studies
 - Master of Arts - English, History, Spanish
 - Master of Science - Biology

Financial Aid

The financial aid office on the Brownsville campus has a complete financial aid program for all eligible students. Types of financial assistance include grants, loans, scholarships, and student employment. Financial Aid and VA counseling services are also available to assist students.

For more information, contact the Office of Student Financial Aid located in the PAU-B Admissions Building.

Registration

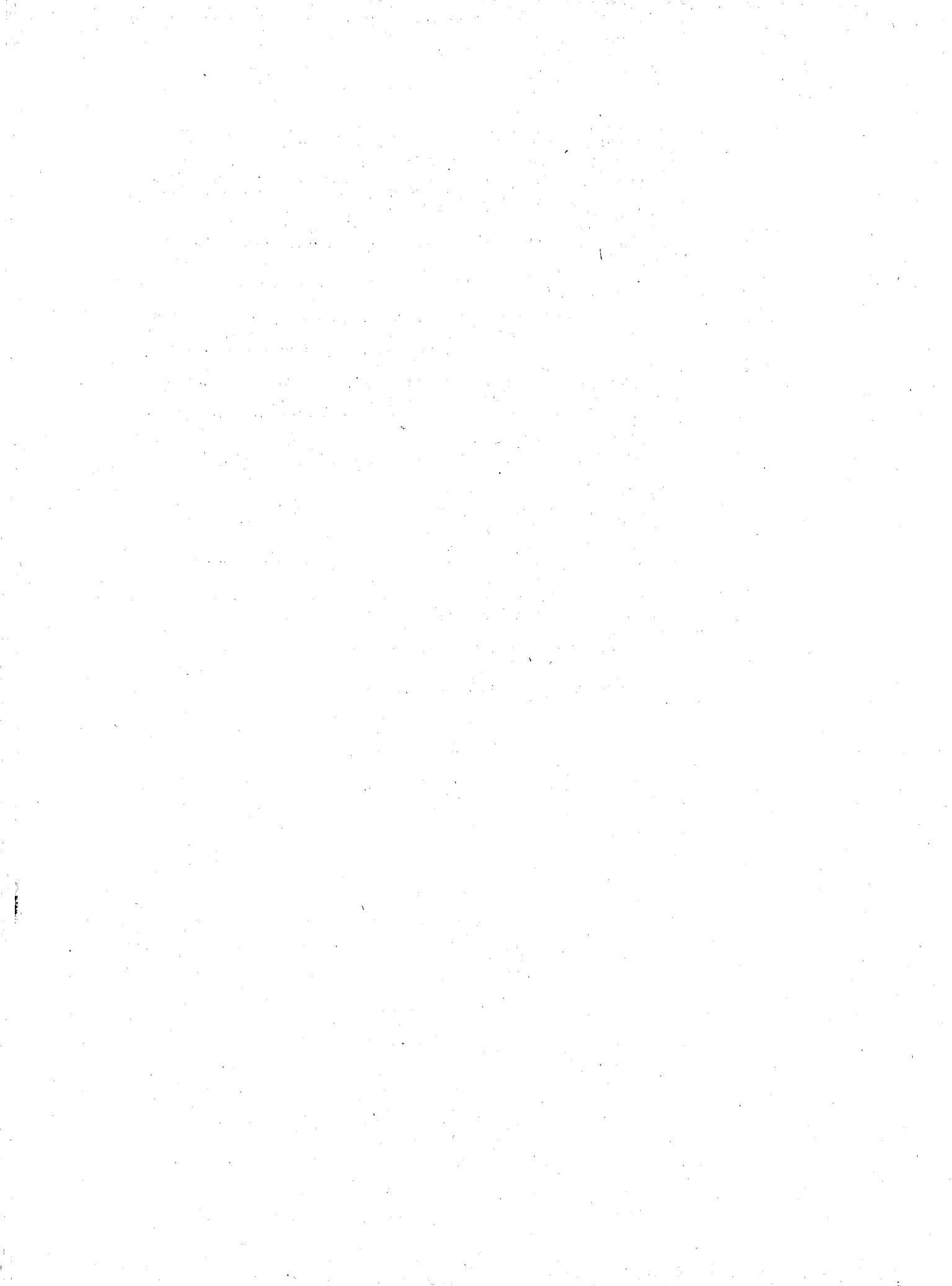
Students may enroll concurrently for classes at the Brownsville campus and on the Edinburg campus of Pan American University, and will be subject to only one set of tuition and fees for the combined hours taken. Also, students having certain lower-level course deficiencies in their degree programs may take those courses with Texas Southmost College and transfer the credit to Pan American University. Again, a student may enroll concurrently with both of these institutions, but in this case would be required to pay applicable tuition and fees to each institution.

Registration for both semesters and both summer terms takes place in Brownsville and Edinburg.

Admission

Generally, to be admitted for undergraduate study at the Brownsville campus, a student must have completed sixty (60) semester hours of college work and meet all other requirements for undergraduate admission to Pan American University set forth elsewhere in this publication. To be admitted for graduate study, a student must comply with all graduate admission requirements of Pan American University. Specific information concerning programs and requirements may be obtained by referring to the Pan American University at Brownsville catalog or by contacting:

Office of Admissions
Pan American University at Brownsville
1614 Ridgely Road
Brownsville, TX 78520





Bulletin of



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