

1982

PAU Catalog 1982-1983

Pan American University

Follow this and additional works at: <https://scholarworks.utrgv.edu/edinburglegacycatalogs>



Part of the [History Commons](#)

Recommended Citation

University Course Catalogs (Edinburg), UTRGV Digital Library, The University of Texas - Rio Grande Valley.
Accessed via <https://scholarworks.utrgv.edu/edinburglegacycatalogs/>

This Book is brought to you for free and open access by the University Course Catalogs at ScholarWorks @ UTRGV. It has been accepted for inclusion in University Course Catalogs (Edinburg) by an authorized administrator of ScholarWorks @ UTRGV. For more information, please contact justin.white@utrgv.edu, william.flores01@utrgv.edu.



1982-83 Catalog

Cover design by Gloria Herrera

Bulletin
of
Pan American University

An Unbroken Circle:

The Continuing Process of Learning Through
Knowledge Application Return

Pan American University is a Member of
Association of Texas Colleges and Universities
American Council on Education
Association of American Colleges
American Association of Colleges for Teacher Education
Southern Association of Colleges and Schools
Approved for Teacher Education by the
Texas Education Agency

Bulletin of Pan American University (USPS 336-050)

Vol. XXXI

May, 1982

Number 2

Published quarterly except second quarter, No. 2 and No. 3 bulletin
by Pan American University, Edinburg, Texas 78539
Second-class postage paid at Edinburg, Texas

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 conforming with the laws of the State of Texas.

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: Founded in 1927 as a two-year junior college, became a four-year institution in December of 1951, joined the state system in 1965.

Campus: An extremely beautiful campus, composed of some older buildings plus over 28 new and modern structures. The \$40 million plus campus is spread out over a 200-acre site.

Student Body: 9,100 students, 96% from the Valley area.

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

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

Graduate degrees available in:

- Business Administration
- Bilingual/Bicultural (Elementary)
- Reading (Elementary and Secondary)
- Education (Elementary and Secondary)
- Counseling and Guidance (Elementary and Secondary)
- Diagnostic Education (Elementary)
- Supervision (Elementary)
- Health and P.E.
- Educational Administration
- English
- 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

Statement of Institutional Purpose

Pan American University is a democratic institution which exists for the purpose of providing quality education through the discovery, organization, preservation and dissemination of knowledge. In carrying out this purpose, the University commits itself to:

reflecting and fostering the best features of the multi-cultural heritage of its location;

promoting the exchange of ideas and persons to facilitate an understanding of community — local, state, national, and international;

answering the needs of and encouraging service to the community;

aiding all University members to develop increased skills in communication;

encouraging freedom of thought and the assumption of responsibility for actions and for expression of ideas;

providing programs and options which recognize that each student, as an individual, has the right to pursue areas of learning for which he is capable and suited and in which he is interested;

providing curricular and extra-curricular experiences conducive to the intellectual, moral, and physical development of all students;

encouraging the humanistic development of every member of the University by providing strong curriculum offerings in the arts, humanities, and sciences;

recognizing the legitimate concerns of students with vocation and providing strong curricula leading to career opportunities;

providing personal and academic counseling and career planning for all students;

encouraging research leading to discovery, organization, refinement, and effective transmission of knowledge;

encouraging the growth of the professions by preparing students for successful graduate and professional study beyond the undergraduate level; and

providing a functional and aesthetic campus for the use and pleasure of the University and area communities.

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.



University Calendar 1982-1983

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

August 2, Monday

Application for admission and supporting documents (immunization certificate, 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 22, Sunday

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

August 24, Tuesday

Brownsville campus registration by appointment.

August 25, Wednesday

1. Registration by appointment for evening classes will begin at 5:30 p.m.
2. Dining Service opens for Breakfast.

August 26-27, Inclusive

Registration by appointment.

August 30, Monday

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

September 1, Wednesday

Last day for schedule changes and late registration.

September 14, Tuesday

Twelfth class day.

September 28, 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.

October 4, Monday

Deadline for filing Application for Degree form with the Office of Admissions and Records for baccalaureate students expecting to graduate in May, 1983, and for graduate students expecting to receive a master's degree in May, 1983.

October 18, Monday

Unsatisfactory reports will be filed with the Office of Admissions and Records by 9:00 a.m.

November 1, Monday

1. Deadline of submission of financial aid application for spring semester awards.
2. Deadline for filing completed signed thesis with Dean of major school for students expecting to receive a master's degree in December, 1982.

November 24, Wednesday

Dining Service closes at 6:30 p.m.

November 25-27, inclusive

Thanksgiving.

December 7, Tuesday

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

December 14-20, inclusive

First semester final examinations for night classes.

December 14-15, inclusive

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

December 16-21, inclusive

First semester final examinations for day classes begin with Saturday.

December 21, Tuesday

Dining Service closes at 6:30 p.m.

December 22, Wednesday

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

SECOND SEMESTER

December 1, Wednesday

Application for admission and supporting documents (immunization certificate, transcripts 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 11, Tuesday

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

January 12, Wednesday

Registration for Edinburg campus by appointment for evening classes will begin at 5:30 p.m.

January 13, Thursday

1. Registration by appointment.
2. Dining Service open for breakfast.

January 17, Monday

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

January 19, Wednesday

Last day for schedule changes and late registration.

February 1, Tuesday

Twelfth class day.

February 11, Friday

Deadline for filing an Application for Degree form with the Office of Admissions and Records for baccalaureate students expecting to graduate in August, 1983.

February 15, 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

Deadline for submission of financial aid applications for summer awards.

March 7, Monday

Unsatisfactory reports will be filed with the Office of Admissions and Records by 9:00 a.m.

March 11, Friday

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

March 14-19, inclusive

Spring recess.

March 20, Sunday

Dormitories reopen.

March 21, Monday

Dining Service opens at breakfast.

March 30, Wednesday

Dining Service closes at 6:30 p.m.

March 31-April 2, inclusive

Easter

April 4, Monday

Dining Service opens at breakfast.

April 6, Wednesday

Deadline for filing an Application for Degree form with the Office of Admissions and Records for graduate students expecting to receive a master's degree in August, 1983.

April 13, Wednesday

Deadline for filing completed signed thesis with the Dean of major school for students expecting to receive a master's degree in May, 1983.

April 27, Wednesday

Deadline for filing an Application for Degree form with the Office of Admissions and Records for baccalaureate students expecting to graduate in December, 1983.

April 28, Thursday

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

May 5-11, inclusive

Second semester final examinations for night classes.

May 5-8, inclusive

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

May 7-12, inclusive

1. Second semester final examinations for day classes.

May 12, Thursday

Dining Service closes at 6:30 p.m.

May 13, Friday

1. Dormitories close at noon.
2. Grade reports due in Office of Admissions and Records by 1:00 p.m.

May 15, Sunday

Commencement exercises.

SUMMER SESSION, 1983

April 29, Friday

Application for admission and supporting documents (immunization certificate, 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 summer session. Prospective students should file documents as early as possible before this deadline.

May 26, Thursday

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

May 27, Friday

1. Registration by appointment for first summer term.
2. Dining Service opens for breakfast.

May 30, Monday

Classes begin

May 31, Tuesday

Last day to register or make changes in class schedules.

June 1, Wednesday

Deadline for submission of financial aid application for fall semester awards.

June 2, Thursday

Fourth class day.

June 8, Wednesday

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

June 14, Tuesday

Deadline for filing an application for Degree form with the Office of Admissions and Records for graduate students expecting to graduate in December, 1983.

June 24, Friday

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

July 1, Friday

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 2, Saturday

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

July 5, Tuesday

Registration by appointment for second summer term.

July 6, Wednesday

Grade reports due in Office of Admissions and Records by 9:00 a.m.

July 7, Thursday

Classes begin.

July 8, Friday

Last day to register or make changes in class schedule.

July 12, Tuesday

Fourth class day.

July 13, Wednesday

Deadline for filing completed and signed thesis with the dean of major school for students expecting to graduate in August 1983.

July 18, Monday

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

August 3, Wednesday

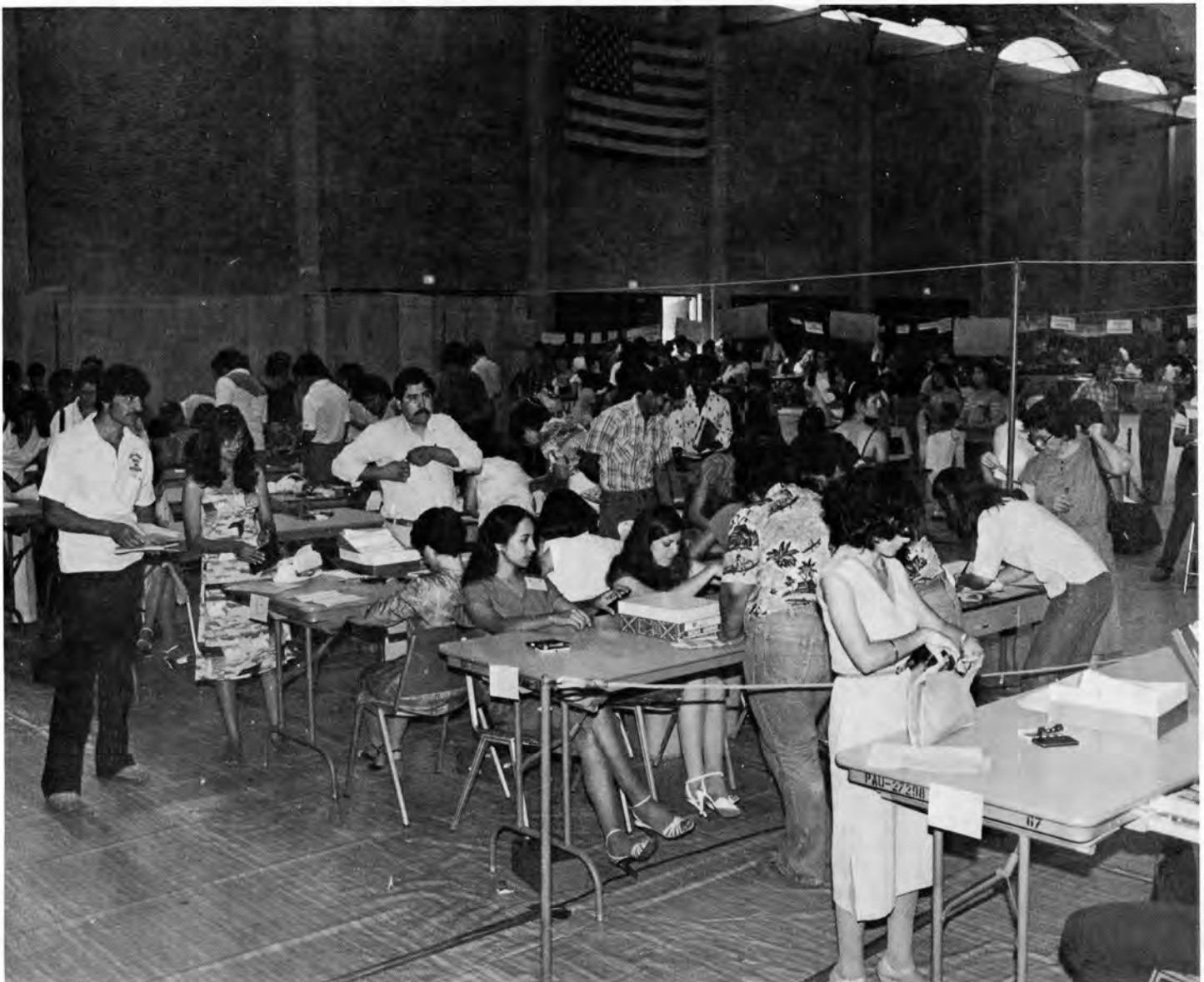
Last day to officially drop or withdraw through the Office of Admissions and Records.

August 10, Wednesday

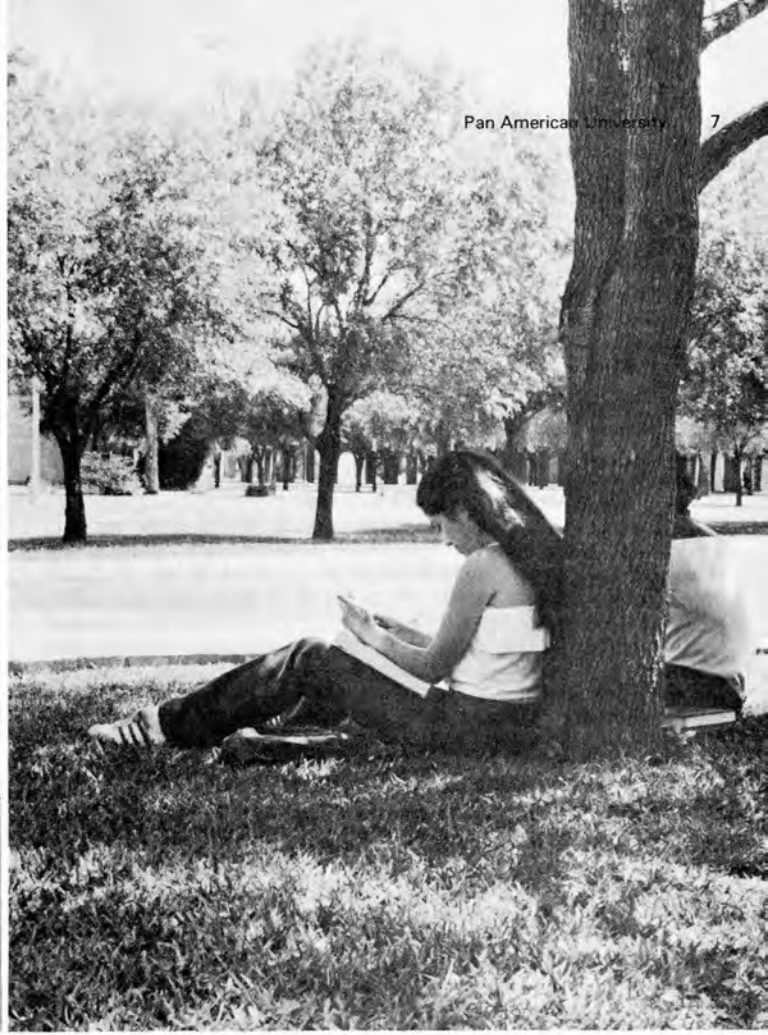
Second term final examinations.

August 11, Thursday

1. Grade reports due in Office of Admissions and Records by 4:00 p.m.
2. Dining Service closes at 6:30 p.m.
3. Dormitories close.







An Unbroken Circle

PAN AMERICAN UNIVERSITY AND THE CONTINUING PROCESS OF LEARNING

Knowledge

The purpose of higher education is to teach a person to *think*. Thinking leads to knowledge. With knowledge comes skill and an awareness of one's worth. These are the steps every person must take to realize his potential. In a community where the *opportunity to learn* is not readily available, the people of that community suffer.

For a region of Texas bordered by the Gulf of Mexico to the east and Mexico itself to the south, Pan American University today provides the wherewithal to allow the young people of the community to learn and apply their talents and knowledge to the problems of their community. This region is known as the Valley. Its people are proud, ambitious and aware of their long history. They live in an environment where distance is broken only by clusters of palm and a breathtaking desert plain. It is a beautiful place, and one that seems to thirst for knowledge. This Valley spirit is also the spirit of Pan American University. They are as one.

Application

Pan American serves the Valley community by providing a university level education where there was none a generation ago. With knowledge

gained from that education, graduates go out into the Valley community, the state of Texas, the Southwest, the nation, and the world to apply their skills. They add to the business and cultural life of the community where they work. Their talents enhance the nation and the world.

Their efforts and ambitions attract attention across boundary lines while strengthening the home community. They have earned a college degree and applied themselves to improving the life of their families and friends without ever leaving home.

Return

In each instance, a Pan American graduate is finally able to give back to the community much of what he has learned. As part of the business community — as accountants, managers or consultants — graduates are able to market skills to build up any region's economic base; as nurses or medical technologists they are able to treat the ills of the community. Still others choose education as a career — as elementary, secondary or college level teachers. A number of Pan American graduates take positions in local, state or federal government. The list is endless. The returns are incalculable.

In turning this full circle — from the attainment of knowledge to its application in a career position to the returns realized in the contributions received by the community — each Pan American University graduate preserves the continuity that only a good education can guarantee.



The History of Pan American

In September of 1927, to satisfy the needs of the growing Valley community, Edinburg Junior College began operation. First a two-year community college, the Junior College grew as the population of the surrounding area grew. And, as the Valley's population continued to increase, the need for a more complete, four-year institution became evident. In response, a bill was introduced into the Texas Legislature, passed and signed into law. On December 29, 1951, the school became known as Pan American College.

Between 1963 and 1980, the student enrollment of Pan American increased from 2300 students to 9200. A major factor causing this sharp increase was the acceptance of Pan American into the state higher education system in 1965.

On February 18, 1971, a bill was signed officially changing the name of Pan American College to Pan American University.

Today, Pan American ranks 14th in size out of 30 state-supported four-year colleges and universities in Texas, and has one of the most beautiful campuses anywhere.

In looking toward the years ahead, Pan American University foresees continued growth and increased effort toward building a university of excellence.

THE LEARNING RESOURCE CENTER

This magnificent new building, completed in 1977, is a major focal point on the Pan American campus. Its facilities are among the most comprehensive anywhere and it has been designed to create a total academic environment.

The University Library is housed in the Center and includes more than 178,000 volumes, microfilm units, phono-discs, and foreign and domestic newspapers and magazines.

Other major facilities housed in the Center include a modern recording studio, television studio, a beautiful auditorium with a seating capacity of 300, a graphic production laboratory, an instructional development area, and a large non-print media usage area.

THE STUDENT SERVICES BUILDING

This building was formally the University Library and is currently being used as classrooms, and houses the ROTC offices and the Office of Admissions and Records.

THE ADMINISTRATION BUILDING

As the latest addition to the university campus this building completed in 1982, houses the offices for the administrative offices of the president, vice president for academic affairs, vice president for business affairs, general counsel, Comptroller, Payroll, Personnel, purchasing, Internal Auditor, and the University Cashier.

THE OFFICE BUILDING COMPLEX

Located directly east of the residence halls, this complex consists of nine separate buildings. In building "A" is the Auxiliary Services Director and Financial Aid Records and Collections. Building "D" is occupied by the Veteran's Affairs Office and VA representatives; Learning Assistance Center in "E"; and the High School Equivalency program and the College Assistance Migrant Program in "F".

The Guidance and Counseling Office occupies building "G"; the Learning Assistance Center is in "H" and building "J" houses the Office of Information and university tour guide service.

THE CHAPEL OF THE LORD'S PRAYER

Erected in 1967, the Chapel was made possible through the generosity of Mrs. Joe Crump and her late husband of Mission. The structure, located directly north of the library, seats 48, is beautifully furnished and houses an organ.

THE UNIVERSITY CENTER

This is the focal point of student life on campus and serves a variety of student and faculty organizations which use it as a meeting place. The

center is comprised of a three-story activity building and an adjacent complex which houses the bookstore, snack bar, cafeteria, faculty lounge and a ballroom of which three entire walls are glass.

Located on the first floor of the center is the office of the vice president for student affairs, dean of students, housing office, director of career counseling, placement and testing; career library; and financial aid director.

Three large conference rooms, a student lounge, a music room, a TV room, offices for student organizations, the University Center Program Council and student government offices are located on the third floor.

Pan Am utilizes the university center as a laboratory for a continuous learning experience by encouraging self-directed activities which give students maximum opportunity for self-realization and for growth in individual social competency and group processes. Generally, the goal of the center is to contribute to the development of the whole individual to complement intellectual growth.

THE EDUCATION BUILDING

This was the last structure to be completed in Phase One of Pan Am's multi-million-dollar construction program. The \$1.25 million building contains the School of Education, the Inter-American Affairs and International Education division, classrooms and faculty offices.

THE PHYSICAL SCIENCE BUILDING

One of the original structures on the west campus, this building contains laboratories for physics, geology, engineering drawing and physical science. Classrooms, research areas, reading and conference rooms and faculty office space are also provided.

THE OLD FIELD HOUSE

Dressing rooms for both men and women, faculty office space and gymnastics and weight-lifting facilities are housed here.

THE FINE ARTS CENTER

Space for all the arts which include the music department, the art department and the communications department are provided in the fine arts center. In addition to the student learning and practice areas, there is an auditorium with a seating capacity of 1,000 which is used extensively for both university and public functions.

THE HEALTH AND PHYSICAL EDUCATION COMPLEX

This 5,000-seat facility is the home of the Pan Am Bronco basketball team. Other major sports include baseball, track and field, tennis, golf and soccer. An enclosed natatorium, also a part of the complex, meets the requirements for intercollegiate swimming competition. Classrooms, faculty offices and facilities for physical education courses also are provided.

THE MATH BUILDING

This building, constructed in 1963, is one of the three original buildings on the "new" West campus. After serving as the Liberal Arts office and classroom building for several years, it was assigned to Mathematics. In 1979, a major renovation was completed, providing a modern classroom-office building meeting the special needs of the Mathematics Department. Included in the building are teaching classrooms, a 72 seat lecture auditorium, a 3 room Math Lab complex, a computer science teaching classroom, a computer terminal room for use by all university students, a special mathematics education classroom, offices for about half of the math faculty, a faculty research and conference room and a student lounge containing additional computer terminals.

THE PLANETARIUM AND OBSERVATORY COMPLEX

This complex includes an observatory with a 17-inch telescope; a planetarium used for Pan Am's educational purposes, a solar telescope; a multi-telescope observing lab; a photographic darkroom and work areas.

THE ORVILLE I. COX TENNIS STADIUM

The stadium offers some of the finest playing surfaces to be found in the southwest. The stadium, built through contributions from a number of interested friends of the university, has acquired a reputation as the location of the Annual Pan American Invitational Tennis Tournament held each spring.

THE RESIDENCE HALLS

The Pan Am halls house 400 students, and are modern in every respect. The halls provide lounge space, laundry rooms, study areas, entertainment facilities and director's quarters as well as first-class living quarters for the students. Meals are served in the cafeteria at the university center which is conveniently located nearby. Information concerning reservations, cost and regulations may be obtained from the office for student affairs.

THE BASEBALL STADIUM

Situated on the northeast corner of the campus, the lighted Pan American stadium is home base for the Pan Am Broncs. The new 5,000-seat Jody Ramsey stadium conforms to the architectural scheme of the rest of the campus. Snack bar, restrooms and other related facilities are enclosed beneath the stands.

THE SCIENCE BUILDING

A two-level structure completed in 1969, the Science Building contains classrooms, faculty offices, laboratories for biology and chemistry and a wildlife museum. Also included are three auditoriums, one of which seats 233 persons and the other two, 150 each.

THE SOUTHWICK HALL AND EMILIA HALL

Both of these halls consist of classrooms and faculty offices. The Pan American newspaper and the El Bronco yearbook share the office space in Emilia Hall. Also in Emilia Hall, which is located next to the residence halls, is the university health coordinator.

THE NURSING EDUCATION BUILDING

This recently completed complex provides facilities for the nursing program and the division of health related professions. The structure contains a 250-seat auditorium, simulated patient hospital units, a large laboratory section, an audio-visual media room, classrooms, a student lounge, a conference room and faculty offices.

THE BUSINESS ADMINISTRATION BUILDING

Completed in early 1975, the facility houses the faculty and administration of the School of Business and the university's computer center. Special features include U-shaped seating arrangements in the classrooms for improved student-teacher interaction, a 150-seat auditorium and several special classrooms. An organizational behavior laboratory provides facilities for small group-behavior studies; a student reading-study area on the second floor contains current periodicals and frequently-used reference materials; and a student lounge area with facilities for student professional organizations are available. The Bureau of Business and Economic Research, also located in the building, will make extensive use of the computer center as will the students who will have access to several remote computer terminals.

THE ART ANNEX

Located north of the Fine Arts Auditorium, the Art Annex contains classrooms and laboratories. An area of the building is used for printmaking, pottery, etc. classes.

THE MARINE BIOLOGY LABORATORY

The Lab was first occupied in the summer of 1974. Located on the southern tip of scenic Padre Island, the 7,700 square foot structure consists of offices for a director and a secretary, research labs, a classroom and a large area for displaying local marine life for public viewing.

THE UNIVERSITY PRESIDENT'S HOME

This beautiful residence, a modified Spanish design two-story structure, has become a showplace in Edinburg. The home is designed with private living quarters upstairs and the downstairs area is used for parties and receptions given by the president and for other university functions. A walled-in patio with a fountain can be seen from the huge formal dining area and the kitchen and bar area. The residence is located on a five-acre tract one mile south of the campus on Sugar Road.

On the Social Side

There is a spirit that covers Pan American University. It's hard to put your finger right on it or define it in any tangible manner, but you can feel it the moment you step on campus. This spirit has a big effect on the social side of Pan American University.

Part of the spirit is the special friendliness found on campus. Whether the people at Pan American are students, faculty members, or administrators, they're all interested in you as an individual — an individual with different interests, strengths and opinions.

Whatever your interests are, there's something at Pan American you will enjoy participating in. Altogether there are more than 60 academic, social, and service organizations on campus.

Student input is very important at Pan American. The Student Association is a strong and active organization on campus made up of the Executive, Legislative, and Judicial branches. All members of the Student Association are elected officials with the Student Senate being composed of representatives from each of the academic schools.

The University Center Programs Council sponsors a wide variety of films, dances, concerts, guest speakers and many other exciting and informative activities. Live entertainment can be enjoyed in the Campus Coffee House; and pool, pinball, and bowling tournaments are held often.

For those with a journalistic bent, involvement with one of Pan American's publications is easy. There's "The Pan American," the university's weekly newspaper and "El Bronco," the student yearbook.

There's a traditional side to the social life at Pan American, as well.

The week before Thanksgiving, a number of competitive events take place on campus between clubs, sororities, fraternities, and other groups. Known as Bronco Days, the week of activity includes a dance and beauty competition.

Greek Week provides another week of competitive fun among fraternities and sororities on campus. Other traditional events include Pan American Week and the Carnival of the Great Pumpkin.

Public Information Services

Pan American University Public Information Services is the official university liaison with all news media. It conveys the purposes and activities of Pan American to a broad segment of the population through the use of mass media.

The office mails releases about students, faculty and campus events to all valley papers and occasionally to other daily newspapers throughout Texas. The office also keeps radio and television stations and wire services informed on campus occurrences.

In order to help facilitate the flow of information, the Public Information Service provides a photographer for special campus events and for honors received by university administrators, faculty, staff and students and forwards photographs and news items to home town newspapers.

The office is located in rooms 102, 103, and 104 of Emilia Hall.

Alumni Association

The purpose of the Pan American University Alumni Association is service to students, alumni and the University community.

The mission of the organization is to support education, to extend financial and other aids to students of PAU and to help provide an atmosphere for social and academic pursuits. The Association also strives to perpetuate and strengthen ties of affection and esteem formed in college days, and to promote the interest and welfare of Pan American University in the Valley, state and nation.

Organized in the year 1978, the Association is governed by an elected 25 member board of directors and two full-time staff persons. There are also several alumni chapters throughout the state.

Membership is extended to all students, former students, faculty and friends of the University. An annual tax deductible donation to the Alumni Fund is required to maintain active membership.

Athletic Action

A first-class program of intercollegiate athletics carries the name of Pan American University across the nation and around the world.

And the name Pan American has become a power that is respected throughout the National Collegiate Athletic Association during the past dozen years. The PAU Bronco teams compete at the NCAA Division I level against the nation's major universities in basketball, baseball, cross country, golf, and tennis.

The University also offers a strong program of inter-collegiate athletics for women. Pan American is currently a member of the Texas Association of Intercollegiate Athletics for Women, Division II. The Lady Broncs compete in basketball, gymnastics, softball and volleyball.

Since joining the NCAA, the Pan Am teams have traveled extensively, as far away as Hawaii, Las Vegas, Mexico City, the College World Series in Omaha, Nebraska, and, in fact, to most states in the Union.

Bronc teams have earned national "Top 20" ratings recently in basketball, baseball and tennis. These three teams have defeated many major

universities including *all* members of the Southwest Conference as well as Harvard, Michigan State, the Air Force Academy, Oklahoma, Oklahoma State, Tennessee, Kentucky, New Mexico, Indiana, Wichita State, Marquette and many others.

Bill White serves as Pan American's athletic director and head basketball coach. During his five seasons as coach the Broncs have won nearly two-thirds of their games against many top powers.

Several Pan Am athletes have gone on to success professional careers, and many more have gone into coaching. Lucious (Luke) Jackson sparked Pan Am to the NAIA national basketball title in 1963; was a member of the U.S.A. team that won the Tokyo Olympics in 1964; and helped the Philadelphia Warriors win the NBA title in 1967.

Marshall Rogers won the NCAA major-college basketball scoring championship in 1976 when he averaged 36.8 points per game.

Two Bronc coaches have earned national "Coach of the Year" honors — Sam Williams in basketball, 1964; and Al Ogletree in baseball, 1971. And the Broncs have athletic facilities to match their major-university status. Jody Ramsey Baseball Stadium, the PAU Field House and the Orville I. Cox Tennis Stadium all were built under the leadership of James A. (Jim) Brooks, who was athletic director for 18 years.





**Academic
Affairs**



Academic Affairs

UNDERGRADUATE ADMISSION

METHODS OF ADMISSION

A student is admitted to Pan American University through the Office of Admissions and Records. He may gain admission by:

1. Presentation of a transcript of his high school record showing that he is a graduate of an accredited high school, his rank in class, and that he has earned at least 16 accredited high school units. Included among the 16 units must be: three units in English; two units in mathematics, at least one of which must be in algebra; and a minimum of six units from the three fields of: a foreign language, social science, and natural science (with at least two units from each of two of these fields.)
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 he 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 Admissions Office from the awarding institution.

A student's previous college work will be evaluated in terms of Pan American University standards. Those students who are on academic suspension by these standards will not be granted admission for a regular semester during the period of suspension. 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 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 student with less than 30 semester credit hours of 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. Students who may not have filed test results with the University may take the test at Pan American University at the

time indicated on the official calendar as published in this catalog. A fee will be required.

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 English, remedial mathematics, remedial reading or developmental reading and remedial science 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, machinework, electricity, data processing welding. 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.

See core requirements for all new students.

GRADUATE ADMISSION

DEFINITIONS

Graduate Admission GPA—Section 61.074 of the Texas Education Code requires the Coordinating Board to establish a mandatory uniform

method of calculating official grade-point averages of students seeking admissions to a graduate or professional school. The following method to be used at Pan American University effective with students seeking admissions for 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 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 undergraduate work.
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 be then be totaled. The total of the products will be divided by the total semester or quarter hours. The result is to be calculated 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.

CLEAR ADMISSION

1. The applicant must have a 3.0 Graduate Admission GPA or more on a 4.0 scale in all undergraduate work 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.

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

TENTATIVE ADMISSION

The "Tentative" admissions 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 total G.R.E. (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.

DENIED ADMISSION

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

"Denied Admission" can be altered by meeting admission requirements such as, improving GRE scores and/or undergraduate overall 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.
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.

THE GRADUATE SCHOOL

Pan American University was authorized by its Board of Regents on March 12, 1970, to request approval of the Southern Association of Colleges and Schools for seven master's degree programs: Master of Education (elementary and secondary); Master of Education in Counseling and Guidance (elementary and secondary); Master of Education in Supervision (elementary and secondary); and Master of Education in Health and Physical Education. This approval was received on December 2, 1970. The Coordinating Board, Texas College and University System, added its approval on July 15, 1971.

Graduate courses were first offered by Pan American University in September, 1971. Since that time the Master of Arts (English, and Interdisciplinary Studies), the Master of Science (Biology and Interdisciplinary Studies), and Master of Business Administration have been added to the graduate program.

NATURE AND PURPOSE OF GRADUATE WORK

Graduate study is more than a continuation of undergraduate work. It calls for greater diligence and effort, and it should be pursued in the true spirit of inquiry, coupled with the desire to add something to human knowledge. Because initiative, ability and diligence are demanded to complete work of this type, a certain amount of selectivity must be exercised in the admission of students to graduate study. Pan American University has set as a standard the requirement that the student must have demonstrated by his scholastic achievements and his scores on aptitude tests the ability to do graduate level work.

The master's degree programs provide for the needs of the following type of students: (1) classroom teachers and administrators working toward professional and administrative certificates and degrees; (2) persons seeking through professional improvement to up-date their skills and/or to increase their knowledge of their fields of specialization; (3) persons seeking to prepare themselves to qualify for entrance into new professional fields; and (4) those who want to extend their horizons through personal enrichment.

ORGANIZATION OF THE GRADUATE SCHOOL

In addition to the President, the Vice President for Academic Affairs, and the School Deans, the faculty of the graduate school consists of all persons appointed by the President of the University to participate in the graduate instructional program. To qualify for membership on the graduate faculty, members must (1) meet the criteria outlined below; (2) be recommended by the heads of their departments; and (3) be approved by the deans of their respective schools who recommend them to the President.

A member of the graduate faculty must:

1. Be a member of a department offering an advanced degree or department offering graduate level (5000-7000) courses;
2. Hold the terminal degree or its clear equivalent in his field;
3. Have an avowed interest in graduate research;
4. Have experience and continuing interest in teaching upper level courses;
5. Be a productive scholar within the context of his special field;
6. Hold the rank of assistant professor or a higher rank.

THE GRADUATE COUNCIL

The Graduate Council is appointed by the President upon the recommendation of the Vice President for Academic affairs, with the advice of the Faculty Senate. It is composed of nine graduate faculty members, with at least one from each school, and two students, one graduate and one undergraduate.

All policies affecting graduate curricula leading to graduate degrees or professional certification are formulated for the Graduate Council. The council is primarily responsible for recommending new policies to the Council of Deans and through them to the Vice President for Academic Affairs, to the President, and to the Board of Regents.

The Graduate Council approves or disapproves requests by departments for new courses and new programs, reviews recommendations for membership on the graduate faculty and advises and lends assistance to the Vice President for Academic Affairs in the execution of policies and regulations.

GRADUATE PROGRAMS

Additional policies and standards for graduate work which do not conflict with the general policies of the Graduate School and the University and which are approved by the Graduate Council may be established by each department offering graduate work.

A department which wishes to establish a new graduate program or modify an existing one must submit its program to the Graduate Council, which will make recommendations concerning the proposal to the Council of Deans.

ADMISSION TO THE GRADUATE SCHOOL

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

one *official transcript* of all prior undergraduate and graduate work, a transcript of scores on 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 college 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, therefore, not acceptable.

Students working for the Master of Education degree and/ the professional certificate must *file in the Admissions Office a copy of the certificate(s) which they already possess*.

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 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 Graduate Council.

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, which must be cleared.

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.

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 the I-20 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.

TRANSFER OF CREDITS

A maximum of twelve (12) semester hours of appropriate graduate work earned at other institutions, subject to the approval of the head of the major's department, 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 head 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.)

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.

- 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).
- 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.

STUDENT RESPONSIBILITY

Graduate students are expected to inform themselves thoroughly concerning the regulations of the Graduate School and the course requirements for degrees and to make inquiries in case of doubt. It shall not be the Graduate School'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 graduate 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 graduate 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 on his request.

GRADUATE — SCHOLASTIC PROBATION AND SUSPENSION

Grade points are assigned for 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 grade-point 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 its approval and that of the Council of Deans.

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

MAXIMUM COURSE LOAD

The normal load for a full time graduate student is twelve (12) semester hours. A student may be permitted to enroll for fifteen semester hours with the approval of his graduate advisor and the Dean of the School.

REQUIREMENTS FOR ALL MASTER'S DEGREES

- 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.
- During or at the end of the student's final semester of work, he will be given a comprehensive written examination which may be waived at the discretion of the department for those students who choose to write thesis and take the an oral examination.

- 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.
- 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

- 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.
- At least 6 hours of coursework in the area of concentration must be upper level graduate work (6000 level).
- At least 3 hours of coursework must be taken in research methods or statistics in the area of concentration.
- At least 12 hours must be taken outside the field of concentration. These courses must be taken from two additional disciplines at least.
- 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.
- Advisement will be the responsibility of the department head in the area of concentration selected by students. Advisement for certification will be the responsibility of the School of Education.
- 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.
- 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 type and major.

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

A student, attempting to receive an additional master's degree, is classified as a special graduate and must:

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

PROCEDURES AND REGULATIONS FOR COMPLETION OF THE 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

The candidate for the master's degree writes his thesis (if he selects the thesis program) 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. The *original thesis and three copies* must be submitted to the Office of the Dean.

Once the student registers for 7300, he must continue to register for 7300 or 7301 each succeeding semester or summer session until the thesis is completed. Credit is counted only one time. Registration for 7300 or 7301 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 Office of the Dean 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 thesis to the student's supervisory committee will be established to complement the thesis time schedule for the Office of the Dean.

Before qualifying for graduation, the student must pay a fee for micro-filming 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 office 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 the material 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.

Substitutions for the Thesis

In certain instances a substitution for the formal thesis may be recommended to the Dean of the School by the appropriate department committee on graduate studies. Such substitutions may include internship reports (where the internship is approved as an essential part of the graduate program by the Dean) or reports prepared in certain graduate seminars or conferences. In each instance such a substitution for the thesis must have the prior approval of the Dean. Reports should be comparable to the thesis in every respect except for the evidence or original research. A report must be (1) from a *specifically authorized* seminar, conference, or research course which has the prior approval of the Dean and (2) reviewed and accepted by the student's supervisory committee. Upon acceptance of the report by the committee, the candidate must submit the *original and three copies*, entirely comparable to a thesis in terms of format, quality of paper, typing, binding, etc., to the Office of the Dean. The student may submit thirty-six (36) semester hours of approved graduate courses in lieu of either thesis or report plan.

Cooperative Ed.D. Program With the University of Houston

The Department of Education, in cooperation with the University of Houston, offers work which may be used in partial fulfillment of the requirements of the Ed.D. degree. The cooperative program will allow a student to complete his residence requirements in two summer sessions and one regular semester on the University of Houston campus and to do up to twenty-four (24) semester hours of his doctoral program on the Pan American University campus.

Specific information on the program may be obtained from the office of the Dean of the School of Education. An applicant must meet the requirements for admission to the Graduate School of each university, as well as those of the department in which he plans to specialize.

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 in Princeton, New Jersey, about a month before the scheduled test date. Check with the Testing office for application blanks and exact test dates.

FIELDS OF GRADUATE STUDY

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

- Master of Arts (Majors: English, Interdisciplinary Studies)
- Master of Business Administration
- Master of Education (Elementary)
- Master of Education in Counseling and Guidance (Elementary)
- Master of Education in Diagnostic Education (Elementary)
- Master of Education in Supervision (Elementary)
- Master of Education in Bilingual/Bicultural (Elementary)
- Master of Education in Reading (Elementary)
- Master of Education in Reading (Secondary)

Master of Education (Secondary)
Master of Education in Counseling and Guidance (Secondary)

Master of Education in Diagnostic Education (Secondary)

Master of Education in Supervision (Secondary)

Master of Education in Health and Physical Education

Master of Education in Educational Administration

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 Physical Education	Mathematics
English		Spanish

Support Areas

Art	Music	Sociology
Business	Physics	Speech and Drama
Chemistry	Psychology	
Mass Communications		

TEACHING CERTIFICATES

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 office of the Dean 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.

GENERAL ACADEMIC INFORMATION

DEFINITIONS

The rules and regulations of the University use terms that have specific meanings but which are not always clearly understood by the student. For his benefit, some of the more common terms are defined in this section. This listing is alphabetical.

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 Head 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 card from the office of the Registrar, 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.

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.

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 is 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 that it carries three hours of credit per semester. All courses ending in the numbers 87 and 88 are honors courses.

Degree Plan: A Degree Plan is an outline of the courses a student must complete or other conditions he must comply with in order to meet the requirements for graduation for a specific degree. This Degree Plan should be made out not later than the first semester of the junior year and it is often helpful to complete it earlier than this. While a student may make a Degree Plan without consulting any source except listed catalog requirements, he must have the Plan approved by the Department Head and the Dean of his school before he can submit an Application for Degree to the Office of Admissions and Records.

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.)

Full-time Graduate Student — A graduate student who is enrolled for at least 9 semester hours of credit during a regular semester or at least 4 semester hours of 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.)

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 Head and the Dean of his school.

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

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 3.0 to 3.49.

Magna Cum Laude — A grade point average of 3.5 to 3.74.

Summa Cum Laude — A grade point average of 3.75 or more.

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 one month 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.

Pay 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 reentry is imposed on a student who fails to pay a debt owed to the University, and a person who fails to pay registration fees during the assigned time for registration will have his or her classes cancelled.

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

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 scheduled schedule change period. In either case, the instructor receives the student's name by official notice from the Registrar and in no other way. A student may not receive credit for a course for which he or she is not officially registered.

Semester Hour: College credit is measured in terms of semester hours. Ordinarily, a class that meets one 50-minute period per week for a semester will carry a credit of one semester hours. 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.

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 that school or division. This involves jurisdiction over the student's program of study and degree requirements.

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 Offices of the Registrar, Business Affairs, Student and University Affairs, Admissions 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 8B 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, and financial files, and academic, 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 of 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 Vice President for Academic Affairs; who, within a reasonable period of time after receiving such requests, will inform students of the date, place, and the time of the hearing. Students may present evidence relevant to the issues raised and may be assisted or represented at the hearings by one or more persons of their choice, including attorneys, at the students' expense. The hearing panels which will adjudicate such challenges will be appointed by the Vice President. Decisions of the hearing panels will be final, will be based solely on the evidence presented at the hearing, and will consist of the written statements summarizing the evidence and stating the reasons for the decisions, and will be delivered to all parties concerned. The education records will be corrected or amended in accordance with the decisions of the hearing panels, if the decisions are in favor of the students. If the decisions are unsatisfactory to the students, the students may place with the education records statements commenting on the information in the records or statements setting forth any reasons for disagreeing with the decisions of the hearing panels. The statements will be placed in the

education records, maintained as part of the students' records, and released whenever the records in question are disclosed.

Students who believe that the adjudications of their challenges were unfair, or not in keeping with the provisions of the Act may request in writing, assistance from the President of the institution. 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 — Romulo Martinez
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 — John R. Morris
2. Financial Aid Office — Clementine Cantu

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 or any part 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 Minors(s)
- F. Current Class Schedule
- G. Number of Hours Enrolled Current Semester
- H. Classification
- I. Participation in Officially Recognized Activities and Sports
- J. Weight and Height 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 students who desires to review his record may do so upon request to the appropriate office immediately responsible for the record, and completion of the "Review Request" form.

IV. *Challenge to accuracy of record-keeping* — any student who desires to challenge the accuracy of his record should follow the procedure outlined below:

- A. *Informal Review* — Following the procedure as outlined for "Review of Record." Official will summarize action taken on "Review Request" form. This should be signed and dated by the review official and maintained with the student's record.
- B. *Formal Review* — If the informal review does not clarify the question of accuracy of record keeping, the student may request a formal review. The Vice President for Academic Affairs will chair and appoint a committee to hear challenges of records.

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.

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 consideration of the Chemistry Department Head 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 1370) 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 is given 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 1370.
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 is given 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.

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.

Math

A student scoring 28 or above on the mathematics section of the ACT may receive three semester hours credit in Mathematics 1340 (college algebra) provided he has completed three units of high school mathematics including one year or one unit of algebra and one year or one unit of geometry. A student scoring 28 or above on the mathematics section of the ACT may also receive three semester hours credit in Mathematics 1356 (trigonometry) provided that he has completed the following: three units of high school mathematics, including one year or one unit of algebra, one year or one-half unit of trigonometry. The mathematics credit will be given when the student earns at least 6 hours of academic credit at Pan American University.

A student receiving 21 or above on the mathematics section of the ACT may apply to the Office of Admissions and Records for credit in College Algebra upon completion of Analytic Geometry with a grade of "C" or better.

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 EXAMINATIONS 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 Head that he has the proper background to qualify for the test over which he desires 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.

NAME CHANGE

A student may change the full, legal name on his or her 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.

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.*

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 and 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 based upon his standing in each course, as of the official withdrawal date, in which he was enrolled.

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.

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 month of classes (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 based upon his standing (as of the official drop date) in the course he dropped.

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)

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.

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.

QUALITY OF WORK

While a grade of D is considered passing in a subject, an overall average of C which corresponds to a grade point average of 2.0 must be maintained by the student if he expects to graduate. Pan American University has certain specific grade requirements also. For example, the student must maintain a C average in his required freshman English; a D in English must be balanced by a B in English, not a B in another subject field. 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:

Method of Calculating

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			= 26 ÷ 15 =	1.73
		Total semester hrs.		15

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

Exclusion of "F" grades seven or more years old: All "F" grades 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.).

UNDERGRADUATE—SCHOLASTIC PROBATION AND SUSPENSION

- 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 60 or less and his grade point deficiency is 12 or more; or
 - b. His accumulated hours earned are 61 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 Admissions office 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 recur. 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 in the University. *An ineligible student who nevertheless registers in 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.*

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 stated above.

STANDARDS FOR SATISFACTORY PROGRESS FOR FINANCIAL AID RECIPIENTS

The maintenance of satisfactory progress is one of the criteria for student eligibility contained in Section 484 of the Higher Education Act of 1965, as amended. Therefore, if each participating Title IV institution or school does not have these standards, the institution cannot legally commit or disburse any Title IV assistance because it has no means of complying with the statute. These standards must be published and applied consistently to all regular students who receive Title IV assistance. A student must be certified by the institution as maintaining satisfactory progress in his course of study before receiving any financial aid. This certification must be completed before the beginning of each new payment period. The following is the policy designed for students at Pan American University.

- I. Definitions:
 - A. Financial aid includes grants, loans, work-study, and scholarships. Examples of the programs are, but not limited to, Pell (BEOG) Grants, Supplemental Educational Opportunity Grants, National Direct Student Loans, Hinson-Hazlewood Student Loans, College Work-Study, Guaranteed Student Loans, Texas Public Education Grants, Pan American University Scholarships and Tuition Scholarships.

- B. Enrollment status refers to the number of hours a student is enrolled as of the twelfth class day. (a) Twelve semester hours or more equals full-time, (b) Nine to eleven semester hours equals three-quarter time and (c) Six to eight semester hours equals one-half time. During the summer, enrollment status refers to the number of hours a student is enrolled as of the fourth class day with (a) six semester hours is full-time and (b) three semester hours is one-half time.
 - C. A regular semester refers to the fall or spring terms. Two consecutive summer sessions will be treated as one regular semester only if the student attempts to remove financial aid suspension or probationary status.
- II. Satisfactory Progress for Financial Aid: A student receiving financial aid is considered making satisfactory progress upon maintaining the enrollment status for which financial aid was received during any regular semester. For example, if a student received financial aid as a full-time student, he must complete a minimum of twelve semester hours.
 - III. The following procedures will be applied to the student who fails to meet satisfactory progress:
 - A. The student who drops or withdraws below the enrollment status for which he received financial aid during a regular semester will be placed on financial aid probation for three semesters. During the probationary semesters, the student is allowed to continue receiving financial aid, but the student is forewarned that one more semester of unsatisfactory progress will place the student on financial aid suspension. A student can get off financial aid probation by making satisfactory progress for three semesters after being placed on financial aid probation. The student will be notified at the end of each regular semester if he is not making satisfactory progress.
 - B. A student is placed on Financial Aid Suspension if while on financial aid probation, he drops or withdraws below the enrollment status for which he received financial aid for two semesters (not necessarily consecutively).
 1. If the student enrolls without financial assistance, the suspension status can be removed after one semester. The student must enroll at least half-time and maintain enrollment status in order to have the suspension removed. The two summer sessions can be counted as one regular semester.
 2. If the student elects to stay out of school instead of attending one semester without financial aid, the student may not receive financial aid for two regular semesters. Summer will not count as a regular semester (see I.C. above).
 - C. After removal from suspension the student will then return on probation status for three semesters, thus once again eligible to receive financial aid. Since the student is returning on probationary status, only one semester of unsatisfactory progress will result in financial assistance being suspended. Subsequent financial aid will be determined by the student's adherence to the standards of satisfactory progress policy.
 - IV. Appeal Process: As in all aspects of financial aid any exceptions to the rule will be reviewed on an individual basis. Appeals will be made through the Financial Aid Director and sent to the Financial Aid Committee. All appeals must be made in writing. Hearings will be held once a semester.
 - V. Cancellation of Aid: Pan American University reserves the right to review and cancel financial aid awards at any time for the following reasons:
 - A. Failure to maintain satisfactory progress.
 - B. Changes in the financial status of the recipient or his family.

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.

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.

CORE COURSE REQUIREMENTS

All students entering Pan American University beginning Fall 1981 *must pass all* the core courses and achieve at least a 2.00 GPA in those courses before enrolling in any upper division courses. Students must complete English 1301 and English 1302 or equivalent with at least a "C" in each course.

Students must complete the core courses within the first 60 hours *enrolled*. Students failing to meet this requirement may enroll in core courses only. Transfer students with 30 or more hours but without all core requirements may take upper level courses, if otherwise qualified, but must enroll in the core course(s) during the first semester and satisfactorily complete them within the year.

Core courses required of all students are:

English	1301, 1302 or equivalent
History	2313(2333), 2314
Government	2313, 2314
Mathematics ¹	1335 or equivalent ²

¹May not be used to meet the general education requirement of 12 hours from two of the following: mathematics, foreign language, or science.

²The following courses are equivalent to Math 1335: Math 1327 and 1328 or Math 2306 and 2307.

CURRICULA AND DEGREES

Pan American University offers five types of undergraduate curricula: (1) those leading to one of the six Bachelor Degrees (B.A., B.B.A., B.S.C.J., B.F.A., B.S., or B.S.W.) conferred by Pan American University; (2) those leading to the Associate of Applied Science (A.A.S.) in Nursing Education; (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. Computer Information Systems
3. Economics
4. Finance
5. General Business
6. Management
7. Marketing
8. Office Administration

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

1. Elementary Education
2. Health Education
3. Physical Education
4. Recreation Administration
5. Secondary Education
6. The School also offers curricula meeting the certification requirements for teaching in secondary schools.

The Division of Health Related Professions awards the Associate of Applied Science (A.A.S.) degree in Nursing Education and Bachelor of Science (B.S.) degree with majors in Human Services and Medical Technology.

The School of Humanities awards the Bachelor of Fine Arts (B.F.A.) with a major in Art Education and the Bachelor of Arts (B.A.) degree with majors in:

1. Art

2. Communications
3. English
4. Music
5. Spanish
6. Speech and Hearing

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

1. Biology
2. Chemistry
3. Mathematics
4. Physics

The School 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).

The School of Social Sciences awards the Bachelor of Science in Criminal Justice (B.S.C.J.) degree with majors in Corrections and Police Administration, The Bachelor of Social Work (B.S.W.) and Bachelor of Arts (B.A.) degree is awarded with majors in:

1. Government
2. History
3. Mexican American Heritage
4. Psychology
5. Sociology

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

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

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:

1. English, 12 semester hours. Must include English 1301 and 1302, or English 1387 and 1388 (Honors Plan), or English 1406 and 1302 (for foreign students) and 6 hours of sophomore English. (NOTE: Credit for English 1301 is a prerequisite for English 1302, and a 2.00 grade point average in the required 1000-level English courses must be achieved before a student may enroll for any English course numbered 2000 or higher.)
2. History 2313 (or 2333) and 2314 (open to freshmen who enter with credit in American History from high school), or History 2387 and 2388 (Honors Plan).
3. Government 2313 and 2314, or Government 2387 and 2388 (Honors Plan).
4. Twelve semester hours from two of the following: Mathematics, Foreign Language, Science (Astronomy, Biology, Chemistry, Geology, Physical Science or Physics). Departments may specify.
5. Physical Education, four semester hours of activity courses to be taken during the freshman and sophomore years. Only twelve semester hours of activity courses may be counted toward graduation. A waiver of this requirement may be made 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. R.O.T.C. courses, but only those taken at the freshman and sophomore level, may be substituted for required hours of physical education on the basis of one R.O.T.C. credit

for one credit of P.E. (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 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 P.E. 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 P.E. credit during each semester of his freshman and sophomore year completed prior to reaching age 25.

A waiver may be obtained by a transfer student on the same basis as though his work had been taken at this institution. Waivers must be requested by the student in each case; they are not automatic, and any student eligible for a waiver may instead enroll for physical education activity courses and receive credit toward graduation to the maximum extent provided. The waiver, when granted, simply absolves the requirement for the hours waived, but does not grant credit for them. Hours waived are thus converted to elective hours.

Requests for waivers should be made to the Office of Admissions and Records.

A minimum of 12 semester hours of free electives must be included in every bachelor's degree program.

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 six 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 point average of 2.00 must be achieved in 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.
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, Inter-American Studies, 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.
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.
10. For Medical Technology majors the last 30 semester hours of college work must be completed at Pan American University; 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 Head 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, but 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 a 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) 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, elective courses, and advanced courses, as set forth in this catalog.

REQUIREMENTS FOR THE ASSOCIATE OF APPLIED SCIENCE DEGREE IN NURSING EDUCATION

1. Satisfactory completion of the prescribed curriculum as specified in the bulletin.
2. A minimum of 67 semester hours of work is required with a minimum grade of "C" in each required course.
3. Only nursing courses completed in programs approved by the Coordinating Board, Texas College and University System, and/or Texas Education Agency and Board of Nurse Examiners for the State of Texas will be considered for transfer credit.
4. Transfer credit for first year nursing courses may be granted upon approval of the Head of the Nursing Department and the Director, Division of Health Related Professions.
5. A Degree Plan approved by the Head of the Nursing Department and the Director, Division of Health Related Professions must be on file in the Office of the Director. This requirement is normally to be accomplished as soon as possible after the close of the freshman year, but in any event the Degree Plan must be on file before the deadline for making application for a degree.
6. 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.

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 Head 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 Heads 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 teachers who have not completed their degrees to file an approved Degree Plan in the superintendent's office.

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, or at 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 head 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 heads 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 heads 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.

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.



Special Programs

THE HONORS STUDIES PROGRAM

Dr. Kenneth Ray Bain, *Director*

PURPOSE OF PROGRAM

The purpose of Honors Studies is to provide the capable and interested student a means of enriching his 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 Program without having to take additional hours for graduation.

HONORS CLASSES

Honors classes provide an ideal learning situation for the student. The classes are always small — 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 each honors student begins exploring a topic of his own choice in his major or related area. This work is done under the supervision of a faculty member who possesses special expertise in the student's chosen area.

ADMISSION REQUIREMENTS

Any beginning freshman with a high school grade average of A- or better, or above 21 ACT composite or 1000 SAT, is eligible to participate in the program, as is any college student with at least a 3.0 G.P.A. To qualify for an honors scholarship and to graduate within the Honors Studies framework, the student must take a specified amount of honors work. See the sections below for specifics. For additional information contact the Honors Studies Program Director.

SCHOLARSHIPS

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

HONORS STUDIES CURRICULUM

In choosing honors classes at the freshman and sophomore level, 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. Since all majors allow at least 12 hours of electives, the student may wish to take an honors class as an elective. Contact the Honors Studies Office for information offering in any given semester. The director can help interested students fit the honors program into any major on campus.

Please note that there are five courses required for graduation in the Honors Studies framework. These five courses constitute the core of the Honors Studies Program. The purpose of requiring Honors 2387 and 2388 is to give the student a broad overview of his intellectual heritage, thus better enabling him to assimilate and relate the knowledge gleaned from his other courses and studies.

Independent study required at the junior-senior level allows the student an opportunity to delve into a highly specialized area of knowledge of his own, thus giving him valuable experience as an independent scholar.

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 an honors project. Students receive credit in Honors 3187, 3387, and 4387 for completion of a project. Partial completion can earn credit for one or two of these courses, but will not qualify a student for graduation with honors.
3. An over all grade point average of at least 3.00.

During the student's final semester a faculty committee questions the student over his independent project. Upon the findings of this committee, the rating of the independent study 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 his transcript, the honors student receives special recognition at his graduation ceremony.

INQUIRIES ABOUT HONORS STUDIES

For applications or for further information about the Honors Studies Program, write the Director of Honors Studies, Pan American University, Edinburg, Texas, 78539.

MA/MS IN INTERDISCIPLINARY STUDIES

The MA/MS in Interdisciplinary Studies is a graduate degree designed to serve the unique needs of Pan American University and the community it serves. This single degree will allow PAU to continue to offer Master's level work to a growing clientele while eliminating presently existing degree programs in Spanish, History and Mathematics. The three disciplines, plus English, which will serve as the academic core of the new degree are English, History, Mathematics and Spanish. Students choosing to pursue the MA/MS will be required to select one of the four disciplines as an area of concentration and will have to complete at least 12 hours of study (with at least 6 at the 6000 level) in that discipline in order to qualify for a degree. For some students, 12 hours will constitute a sufficient concentration in a single discipline while others may wish to pursue added hours (up to 18) in the same field. The remaining hours of the degree program may be selected from among the three remaining disciplines or from a variety of supporting fields which already offer courses at the graduate level. A limited number of hours (12) may also be taken in PAU's two professional schools, Business Administration (A maximum of six semester hours may be taken in the School of Business Administration.) and Education.

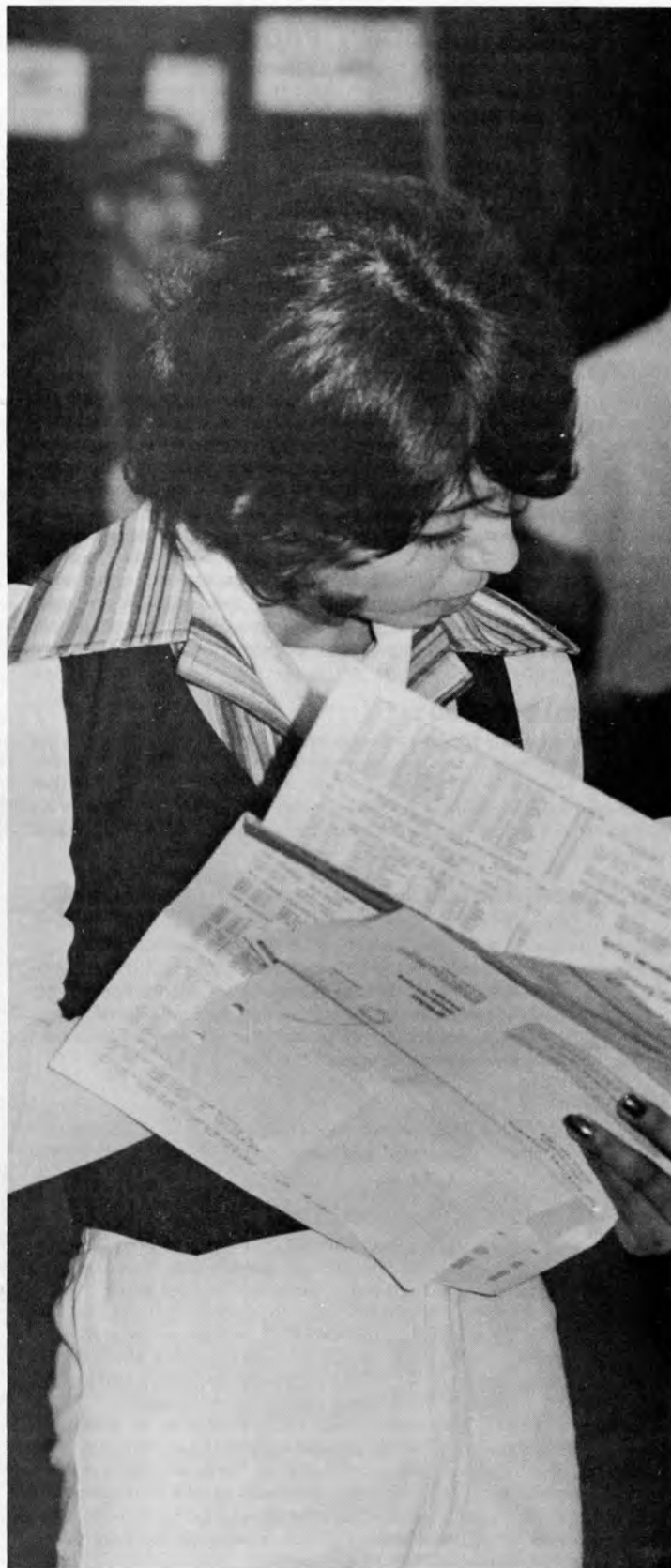
Due to the unique character of the MA/MS and the wide latitude given to students in making program and course decision, no "typical" semester-by-semester curriculum can be described. The exact sequence and scope of coursework for any given student will depend upon the area of concentration chosen, the depth to which the student elects to pursue that area, and the support work selected to fill out the program. See *area of concentration for program details.*

ROTC PROGRAM

The Department of Military Science offers a four-year General Military Science curriculum to prepare and qualify students for commissioning as Second Lieutenants in the United States Army Reserve. Outstanding cadets are offered Regular Army commissions. Graduates of this program are appointed in various branches of the Army, Army Reserve, or National

Guard. Appointments are based upon individual preference, academic major, and demonstrated leadership and technical qualifications.

For additional information refer to Military Science Department information elsewhere in the catalog or contact the Military Science Department directly.



**Business
Affairs**



Business Affairs

STUDENT EXPENSES

The cost of attending Pan American University is relatively low — approximately \$135.00 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. 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 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.

RESIDENCY CLASSIFICATIONS AND TUITION RATES‡

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

- tuition
- student service fees (computed at \$4.00 per semester credit hour up to a maximum of \$40.00 per regular semester or \$20.00 per summer semester)
- building use fees (computed at \$3.00 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 \$116.00 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.

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.

‡At the time of publication of this bulletin the tuition rates and fees were as follows, but a 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.

FEE TABLE‡

	Semester Credit Hours Enrolled for	Residents of Texas	Non- Resident Students (See Note 1)	Nursing Students (See Note 2)
Each	1	\$67.00	\$47.00	\$27.00
Fall	2	64.00	94.00	34.00
or	3	71.00	141.00	41.00
Spring	4	78.00	188.00	48.00
Semester	5	85.00	235.00	57.00
	6	92.00	282.00	68.00
	7	99.00	329.00	79.00
	8	106.00	376.00	90.00
	9	113.00	423.00	101.00
	10	120.00	470.00	112.00
	11	123.00	513.00	119.00
	12	126.00	556.00	126.00
	13	131.00	599.00	129.00
	14	138.00	642.00	132.00
	15	145.00	685.00	135.00
	16	152.00	728.00	138.00
	17	159.00	771.00	141.00
	18	166.00	814.00	144.00
	19	173.00	857.00	147.00
	20	180.00	900.00	150.00
Each additional hour add	7.00		43.00	3.00

Each	1	32.00	47.00	27.00
Six-	2	39.00	94.00	34.00
Weeks	3	46.00	141.00	41.00
Summer	4	53.00	188.00	48.00
Session	5	60.00	235.00	57.00
	6	63.00	278.00	63.00
	7	69.00	321.00	66.00
	8	76.00	364.00	69.00
	9	83.00	407.00	72.00
Each additional hour add	7.00		43.00	3.00

‡At the time of publication of this bulletin the tuition rates and fees were as follows, but a 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".

Note 2: Students enrolled in Nursing Education and who have been accepted by the Nursing Education Department and are enrolled in Nursing Education courses are in a special tuition classification shown in the above Fee Table.

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

To obtain any of the exemptions listed below the student must have an approved application for exemption on file with the Student Financial Aid Office.

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.

Connally-Carrillo Act: Citizens of Texas under 25 years of age residing in Texas for at least a year who graduated from an accredited high school in 1967 or later and were in the top 25% of their graduating class or who have scored in the top 20% on a nationally standardized university admission examination, whose annual family income is not more than \$4,800 and who have no other financial assistance will be exempt from payment of tuition fees, laboratory fees and individual instruction fees but will not be exempt from payment of student service fees, building use fees nor other fees and deposits.

OTHER FEES

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 \$4.00 if paid during the fall semester, \$2.50 if paid during the spring semester, and \$1.50 if paid during the summer session. Vehicle operation regulations are available at the Dean of Students' Office or the Campus Traffic and Security Office.

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 fee of \$20.00 will be charged.

Graduation Fee

A fee of \$20.00 for undergraduate degrees or \$25.00 for graduate degrees is charged. This fee is payable at the time the candidate presents his application for graduation to the Office of Admissions and Records.

Transcript Copy Charge

The first official copy of a transcript of a student's grades is provided free; subsequent official copies are charged for at the rate of \$1.00 per official 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 \$15.00 is charged for each Advanced Standing Examination.

ACT Residual Test Fee

A fee of \$12.00 is charged for ACT Tests administered at a time other than a regularly scheduled test dates. The regular fee for scheduled tests is \$8.50.

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 charge of five (\$5.00) to defray the costs of the extra services required to effect his or her late registration.

Returned Check Charge

A 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 fee of \$5.00 is charged for a replacement of this card.

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 during a fall or spring semester will receive a refund of his registration fees 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 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 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 30 days to the student's address on file at the Office of Admissions and Records.

RESIDENCE HALL FEES¹

¹Fees are subject to change. Fees shown are rates for 1981-82. Contact Collection's Office for current rates.

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

During fall and spring semesters there are two boarding plans available: a 20 meal per week plan from Monday breakfast through Sunday lunch and a 15 meal per week plan from Monday breakfast through Friday supper. During summer terms only the 20 meal per week plan is available. The dormitory fees are:

	15 Meal Plan	20 Meal Plan
Fall or Spring Semester	\$725.00	\$740.00
Summer Session	(not available)	\$275.00

Dormitory fees may be paid in monthly installments (Arrangements are made at the Collection's Office, Office Building A) at an additional charge of \$5.00 per month. Each semester the first installment payment is payable at the time the student registers. The remaining payments are scheduled as follows:

	15 Meal Plan	20 Meal Plan
Fall Semester		
First Payment	\$240.00	\$240.00
Second Payment, Oct. 1st	200.00	200.00
Third Payment, Nov. 1st	200.00	200.00
Fourth Payment, Dec. 1st	100.00	120.00
Spring Semester		
First Payment	\$240.00	\$240.00
Second Payment, Feb. 1st	200.00	200.00
Third Payment, March 1st	200.00	200.00
Fourth Payment, April 1st	100.00	120.00

First Summer Session

First Payment

Second Summer Session

First Payment

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 his dormitory 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 Assistant Dean for Student Life of the termination.

Telephone Payments

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

Dormitory Reservation and Room Deposits

Applications for dormitory room reservations are made in the Housing office. A check for \$20.00 must accompany the request. This will serve as a reservation fee and will be held as dormitory property and 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 dormitory. Should a student decide not to reside in the dormitory the deposit will be refunded if an application for refund is made by the following dates:

Semester	Refund Request not later than:
-----	-----
Fall Semester	August 8
Spring Semester	January 2
First Summer Session	May 15
Second Summer Session	July 3

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.

STUDENT INSURANCE

Each student is covered by a limited insurance policy for injuries sustained in attendance at the university or in going directly from home to the university, or from the university directly home. There is protection up

to \$1,500 for death, dismemberment or loss of sight. Medical expenses in excess of \$10.00 may be paid up to the amount of \$750.00.

Form to be completed in case of injury may be obtained from the Health Service Office at the University and this office has a detailed description of the coverage offered by the policy. These forms must be completed within twenty days of the date of the accident.

The cost of this coverage is included in the student service fee paid by each student.

An optional student health and accident insurance plan may be purchased by students. For further information contact the Student Health Center, Emilia Hall.

SUMMARY OF USUAL STUDENT EXPENSES PER SEMESTER

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

	<i>Each Fall or Spring Semester</i>	<i>Each Summer Session</i>
Required Fees for Resident		
of Texas enrolled in 15 hours.....	\$145.00	\$ 63.00
Estimated Laboratory Fees	4.00	2.00
Books and Supplies	80.00	30.00
Dormitory Room and Board.....	740.00	275.00
Total	\$969.00	\$370.00

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



**Student
Affairs**



Student Services

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.

CAREER PLANNING:

The Career Information Center in room 113J of the University Center, houses various sources of occupational information, registers and directories, and information on hundreds of different companies, school districts and government agencies. Fellowship/scholarship information and graduate and professional school catalogs are located in room 111 of the University Center.

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.

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 and 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 tests, and a number of others.

COOPERATIVE EDUCATION PROGRAM

The University Cooperative Education Program is a plan of education in which the student alternates periods of attendance at the University with periods of employment related to his or her college course of study and individual interest. The Co-Op student alternates school and work periods usually on a semester basis. Summer school is considered a semester. The Co-Op student has an alternate who works while he or she is in school in order to provide the employer with one full-time employee. The Co-Op student is eligible for academic credit.

In addition to the full-time program, Cooperative Education also has a parallel program where a student works at a similar type of job but on a part-time basis while attending school at Pan American University.

The Co-Op Program gives students an opportunity to:

- 1) gain valuable experience by working alongside professionals;
- 2) travel to different areas and work in a different environment;
- 3) see the relationship between his or her course of study in college and the practical application of that knowledge in actual working conditions; and
- 4) earn money in order to finance his or her further education.

Further information can be obtained from the Office of Placement, Testing and Cooperative Education or call 381-2246.

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.

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.

NATIONAL HONOR SOCIETIES

Alpha Chi
Alpha Psi Omega
Beta Gamma Sigma

NATIONAL PROFESSIONAL SOCIETIES

Alpha Kappa Psi
Kappa Delta Pi
Lambda Alpha Epsilon
Mu Phi Epsilon
National Association of Jazz Educators
Pi Omega Pi
Sigma Alpha Eta
Student National Education Association

DEPARTMENTAL CLUBS

Accounting Club
American Chemical Society
American Society for Personnel Administration
Bilingual Education Student Organization
Bronc Cadet Corps
Tri Beta (Bio League)
Health & Physical Education Club
Music Educators National Conference
National Honors Council
Pan American University Choir Club
Pan American University Communications Association
Pan American University Data Processing Management Association
Pan American University Geological Society
Pan American Honorary Pre-Medical & Bio-Medical Society
Pan American University Writing Club
Pan American Society of Medical Technology
Phi Alpha Theta
Psychology Club
Residence Hall Association
Texas Student Nurses Association

SERVICE ORGANIZATIONS

Alpha Phi Omega
Intercollegiate Knights
Inter-Service Council
Ladies of Camelot
Pan American University Student Association
University Center Program Council

RELIGIOUS ORGANIZATIONS

Baptist Student Union
Latter Day Saints Student Association
United Methodist Campus Ministry

MISCELLANEOUS ORGANIZATIONS

College Assistance Migrant Program
 CAMP Alumni Association
 El Sol
 HEP
 Interfraternity Council
 International Student Association
 Intersivity Christian Fellowship
 Los Arcos
 Panhellenic Council
 PAU Social Workers
 PAU Weight-Lifting Club
 PAU Young Democratic Club
 President's Leadership Scholarship Program
 Veteran's Club
 Visions

NATIONAL FRATERNITIES

Kappa Sigma
 Phi Kappa Tau
 Phi Kappa Theta
 Phi Sigma Kappa
 Tau Kappa Epsilon

NATIONAL SORORITIES

Delta Zeta
 Kappa Delta

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.

UNIVERSITY CENTER

The University Center is the nucleus of student activities and services, and houses the offices of the Dean of Students and Instructional Services, Assistant Dean of Students, University Center and Student Activities, Office of Student Development, career counseling, financial aid office, foreign student information, career information, testing, and job placement services.

The second and third floor provide a variety of recreational facilities. Offices for Pan American University Student Association, University Center Program Council (UCPC), student organizations, conference rooms, lounge areas, recreation area with billiards, table tennis, card tables, and a T.V. room are all found here.

Student Government, UCPC, sororities, fraternities, and students all plan and undertake a variety of activities throughout the year.

The Cafeteria, Snack Bar, Ballroom, and Faculty Lounge are all located within the University Center Complex.

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
Criminal Justice	Physics
English	Sociology
Government	Spanish

2. Mini-Courses

Short Courses lasting between 3 and 6 hours of contact are provided on the following topics:

Exam Review: help 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

Study Skills: assists students in identifying their own strengths and weaknesses in studying, and orients students to other LAC services that can improve study skills.

3. Individualized Learning Materials

Audio-cassette tapes are available for students who want basic instruction in Biology, Chemistry, English and math. In addition, several professors in other areas have provided taped lectures for students to use. Both cassettes and players can be checked out to students for use on campus.

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 ten students, and groups generally meet once per week for 10 weeks.

Assertion

Training: helps students develop confidence and to 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.

Human

Relationships: assists students to examine their own feelings, values, and morals when making decisions about dating.

Relaxation

Techniques: helps reduce anxiety, tenseness, and other feelings which interfere with academic performance.

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.

Leadership

Development: helps develop skills necessary for effective leadership.

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.

Reading Improvement and Study Skills

1. Reading Improvement Course

The Reading-Vocabulary Improvement Course is designed to prepare University students for their academic assignments. The course is an English Department offering and provides the student with 3 hours of credit. The course includes an initial diagnosis of the student's skills using standardized and informal tests. A typical class involves 15 minutes of pre-reading activities, 20 minutes of uninterrupted silent sustained reading, and 15 minutes of follow up exercises and individual skill application. Discussions and lectures cover topics such as the structure and functions of words and sentences, how to deal effectively with the reading in a specific type of course, and useful techniques in taking examinations.

2. Reading Lab Services

The Reading Laboratory services are also available to any university student who wishes to improve his reading skills. Underlying this aspect of the program is the belief that if the student is determined, he will improve his reading ability with guidance and practice. He may work selectively in improving vocabulary, reading comprehension, or any other area of needs. Each incoming student is given a standardized reading test and based on his score is guided into an individualized reading

program. The reading laboratory services are offered to the student at no cost.

Academic and Career 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 about three times a year to discuss the students' 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.

STUDENT HEALTH SERVICE

Student Health Service, located in Emilia Hall is open five days a week from 8:00 a.m. — 4:30 p.m. and offers the following services.

1. *Physician Service*—, the Pan American University doctor will be in the Health Service office Monday and Tuesday from 8:00-12:00 and Wednesday and Thursday from 1:00-4:00. Students must sign in and they must present their ID's. First come, first served basis.
2. *Registered Nurses*—Nurses will be in close contact with the doctors at all times. In emergencies, students will be referred to local hospital. Transportation will be made available if needed.
3. *Maintenance of Student Health Records*—Student's health and immunization records are kept on file at the Student Health Service office. This serves as a point of reference each time the student consults the Health Service for information or treatment. All records are confidential.
4. *Notification of Absences*—Call the Health Center when absent from class more than three days due to illness. A notice, not an excuse, will be sent to your instructors.
5. *Referral Service*—Dentist, and other specialists.
6. *Student Insurance*—Each student is covered by a limited insurance policy for injuries sustained while in attendance at the University. Forms to be completed in case of injury may be obtained from the Health Service office. (See "Student Insurance" in Business Affairs section for a complete description of benefits.) Optional Medical/Surgical/Hospital Insurance is available through Student Affairs.
7. *Immunizations*—Diphtheria-Tetanus and Polio (Polio for students under 18, only) immunizations are required every 10 years for students residing in the dormitories. An up-to-date immunization record should be sent to the Student Health Service at the

time of application for housing. Student's social security number should be included. These immunizations are available at the Student Health Service office through the courtesy of the Hidalgo County Health Department.

8. *Tuberculin Skin Test* — Tuberculin skin tests are available for any student wishing to obtain one. They are especially available to those students who wish to meet their student teaching requirements.
9. *Loan of medical equipment* such as crutches, canes, heating pads, etc.
10. *Health and Drug Information* — This office is a Health Information Center. Brochures and health films are available on many varied subjects. Students desiring any type of health and drug information should feel free to inquire at the Health Service office. All consultations and information are confidential.
11. *Family planning information*
12. *Approve handicap parking permit applications.*
13. *Provide tests for mono, diabetes, pregnancies, and V.D.*

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.

LINEN SERVICE

Arrangements have been made for linen service for those students who want it. The following items will be furnished upon request: To be delivered each week:

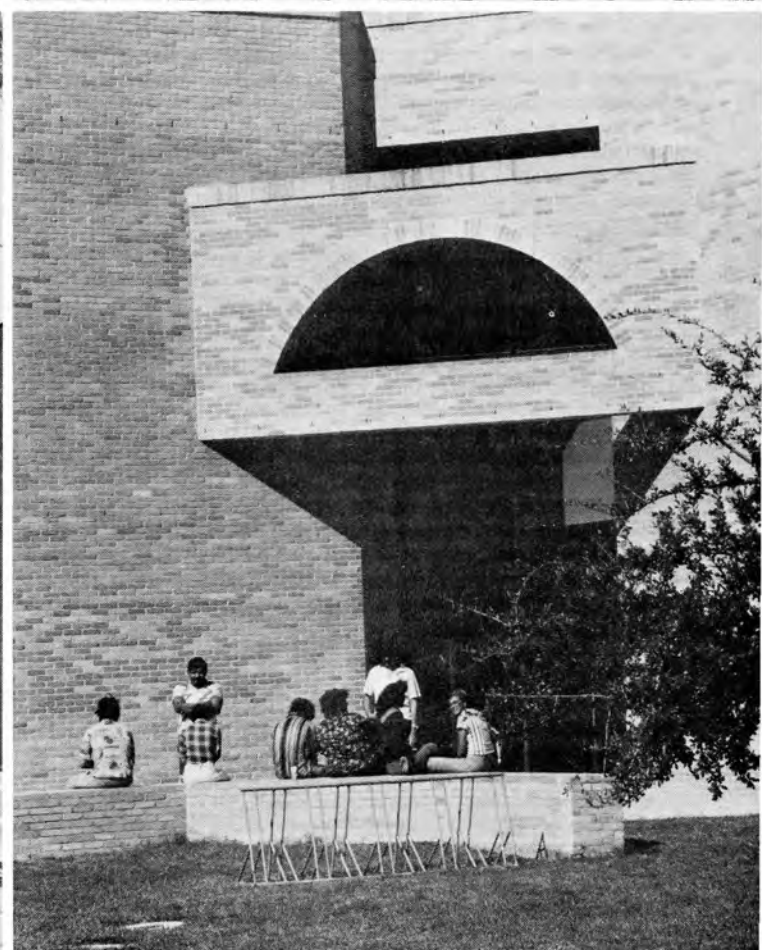
- 2 sheets 1 pillow case
- 4 bath towels 4 wash cloths

Cost:

1 long-term semester	\$18.00
2 long-term semesters	36.00
1 6-wk. summer semester	9.00
2 6-wk. summer semesters	18.00

Conditions: Students will be expected to pay for lost linens, burns and unnecessary damage while linens are in their possession. If a student leaves the university within the first six weeks of the semester, a refund of 50% of deposit will be made. After the first six weeks there will be no refund.





RULES AND REGULATIONS

Dormitory residents must comply with University regulations as stated above and, in addition, are subject to specific regulations governing each dormitory.

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

IDENTIFICATION CARDS

ID's are issued through the supervision of the Assistant Dean for Student Development. 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.
 - (e) Checking out equipment from the University Center recreation room checkout counter.
3. This card is Non-Transferable. Loss or mutilation must be reported to the Office for Business Affairs, A CHARGE OF \$5.00 WILL BE MADE FOR REPLACEMENT.

STUDENT PUBLICATIONS

"The Pan American"

Pan American University students write and edit the university's weekly newspaper.

Mass 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 junior and senior positions on the papers are compensated and volunteer workers are sought as reporters, copy-readers and headline writers. The office is at Emilia Hall 100.

"El Bronco"

El Bronco is the university's yearbook, a publication by and for the students. Writers, editors and photographers are students, many of them volunteers who supplement the paid staff, consisting principally of juniors and seniors. Work on the yearbook begins in the summer so publication can be accomplished prior to the end of the long term each May. Volunteers who wish to join the staff may apply at any time at Emilia Hall 100.

STUDENT FINANCIAL AID

Financial Aid has changed rapidly in the past couple of years. Despite all the changes, financial aid still plays a vital role at Pan American University. The Work-Study program, Educational Opportunity Grants and Loan programs are still very much alive. Programs such as the Nursing Scholarship and Law Enforcement Educational Program - no longer exist. Also, students are now required to show need in order to apply for a Guaranteed Student Loan, whereas before it was geared toward middle income students.

A large percentage of students are receiving some type of 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 12 hours as an undergraduate, or 9 hours as a graduate in each of the regular sessions; or for a minimum of 6 hours in each of the summer sessions. (EXCEPTIONS: Seniors and students enrolled for off-campus field work courses. Also, BEOG is awarded to students enrolled 3/4 time or 1/2 time.)
- d) is not delinquent 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.

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, the applicant with the greatest need will be given priority. Application should be submitted to the Financial Aid Office located in Room 108 of the University Center.

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. All applications should be submitted to the Financial Aid Office in the University Center building.

APPLICATION DEADLINES

Deadline for submission of applications for 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>
June 1st	November 1st	March 1st

All applications received after these dates are considered only if money is available to cover the request. With few exceptions, one application can and should be used for all assistance. Special application is forwarded upon examination of the general application, or upon request. 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 finances for a student's university expenses.

GRANTS

Pell Grants (formerly Basic Grants): This grant is available by completing an application for Federal Student Aid which is mailed directly to the processing center in Los Angeles. 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. 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.

Pan American University Scholarship: This program is designed to provide scholarships from institutional funds to students with exceptional financial need. Up to 10% of the funds may be allocated to out-of-state students.

LOANS

National Direct Student Loan (NDSL): Recognizing the fact that loans are an increasingly important aspect of financing an education, Pan American University by participating in the N.D.S.L. program, has some 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 in an accredited institution of higher learning. 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 and application forms 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 \$2,500 per academic year at a low interest rate. Repayment of funds borrowed does not start until the student is no longer attending an accredited institution of higher learning, provided that the total amount of the loan is repaid within fifteen years of the date of the first promissory note. 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 up to \$2,500 per year. 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 to \$148 per semester 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 \$2.00 charge is assessed against each loan.

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	Art or Music Dept
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
Cano Coors Scholarship	School of Business
Mr. & Mrs. Rodrigo Gonzalez, Jr. Scholarship	School of Business
Kraft Foods Co. Scholarship	School of Business
Communications	
Drama Scholarship	Communication Department
Criminal Justice	
Lambda Alpha Epsilon Scholarship	Criminal Justice Dept.
Officer Rosalin Suarez, Jr. Memorial Scholarship	Criminal Justice Dept.
Sheriff's Association of Texas Scholarship	Criminal Justice Dept.
Foreign Students	
Good Neighbor Scholarship	International Student Advisor

Geology

Magic Valley Gem & Mineral Society Scholarship Physical Science Dept.

Pre-Engineering & Related

TAME-Texas Alliance for Minorities in Engineering High School Counselors
Harry Wilcox Scholarship Math Dept

Veterans

Hazlewood Act Financial Aid Office

Unrestricted Majors

College Assistance Migrant Program PAU CAMP Office
Hagger Scholarship Financial Aid Office
Handicapped Scholarship Division of Vocational Rehabilitation
Honors Scholarship Honors Program Office
James Cullen Looney Scholarship Financial Aid Office
Joe & Jess Crump Scholarship Financial Aid Office
Legislative Academic Scholarship Financial Aid Office
President Leadership Scholarship High School Counselors or U.C. 105
Valedictorian Scholarship 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.

BIOMEDICAL SCIENCES PROGRAM*Program Appropriations*

The Biomedical Sciences Program is a federally funded project, made possible by Title III - Part L of the Elementary and Secondary Education Act. The program is a five year pilot project for the Rio Grande Valley.

Program Need

The Biomedical Sciences Program of Pan American University is a concerted effort, to assist in the alleviation of the shortage of Biomedical Professionals in the rurally isolated southern most part of the state of Texas.

Program Purpose

The program's purpose is to identify 100 low income academically talented ninth grade students from six participating independent school district; and introduce them to the challenges, opportunities and needs of serving their respective communities as a medical professional.

In order that this aim be accomplished, the program is designed to motivate the students in the development of academic, cognitive and communicative skills necessary to insure entry to professional schools in the Biomedical Sciences, thereby, instilling an awareness and concern for the provision of qualitative services in the biomedical health fields for the Rio Grande Valley.

Program Eligibility

Students must satisfy the following criteria in order to be considered for the program.

1. They must be academically talented and from an economically disadvantaged background.
2. They must be enrolled and in good standing in the ninth grade of a secondary school.
3. Their access to a higher educational opportunity in the Biomedical Sciences is significantly limited due to the income of the individual's family.

COLLEGE ASSISTANCE MIGRANT PROGRAM*Purpose*

The College Assistance Migrant Program is an effort to provide higher education opportunities for migrant young adults to attend college. Students selected for the program will receive assistance in the application process, supportive services and financial assistance.

Supportive services consist of tutorial and counseling assistance. The program will offer tutoring classes in History, Biology, Chemistry, English,

Spanish, Sociology, Psychology, and Mathematics. The counseling component provides learning skills in academic careers, and social awareness as well as self-awareness.

This program is designed to assist entering college freshmen who have worked as migrants or seasonal farm workers due to a lack of financial resources and other factors resulting from the migrant way of life.

Eligibility

To be eligible to participate in the CAMP project, a person must be a migrant or other seasonal farmworker, or a dependent of a migrant or other seasonal farmworker.

1. 'Migrant farmworker' means a seasonal farmworker whose employment required travel that precluded the farmworker from returning to his or her domicile (permanent place of residence) within the same day.
2. 'Seasonal farmworker' means a person who, within the past 24 months, was employed for at least 75 days in farmwork, and whose primary employment was in farmwork on a temporary or seasonal basis (that is, not a constant year-around activity).
3. Be enrolled or be admitted for enrollment as a full-time student at the participating IHE.
4. Not be beyond the first academic year of a program of study at the IHE, as determined under the standards of the IHE.
5. Be determined by the grantee to need the academic and supportive services and financial assistance provided by the project in order to complete an academic program of study at the IHE.
6. Students must be either high school graduates or have a G.E.D.
7. Students must be either citizens of the U.S. or have a permanent visa.

CAMP assists the student financially through a grant which is computed along with his financial aid package from the University. Additionally, CAMP provides indepth tutoring, individual and group counseling and many supportive services.

The CAMP student, as a freshman, gets a full package of financial aid, CAMP continues to follow-up and help in his other years in higher education.

The freshman CAMP student gets non-credit Study Skills courses and takes regular core subjects in the college curriculum. The student takes compulsory tutoring and counseling.

Prospective interested migrant students may apply to CAMP, office Bldg. "F", Pan American University, or call 512/381-2574.

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. They must meet income guidelines, as set by the Office of Management and Budget, and be legal residents of the United States.

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), plus reading and typing classes. 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. While in the program, students attend tutoring sessions for two hours every night, four days a week.

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 based on classroom attendance. 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.



VETERANS' PROGRAM

Veterans Cost of Instruction Program

The Veterans Cost of Instruction Program (VCIP) 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.

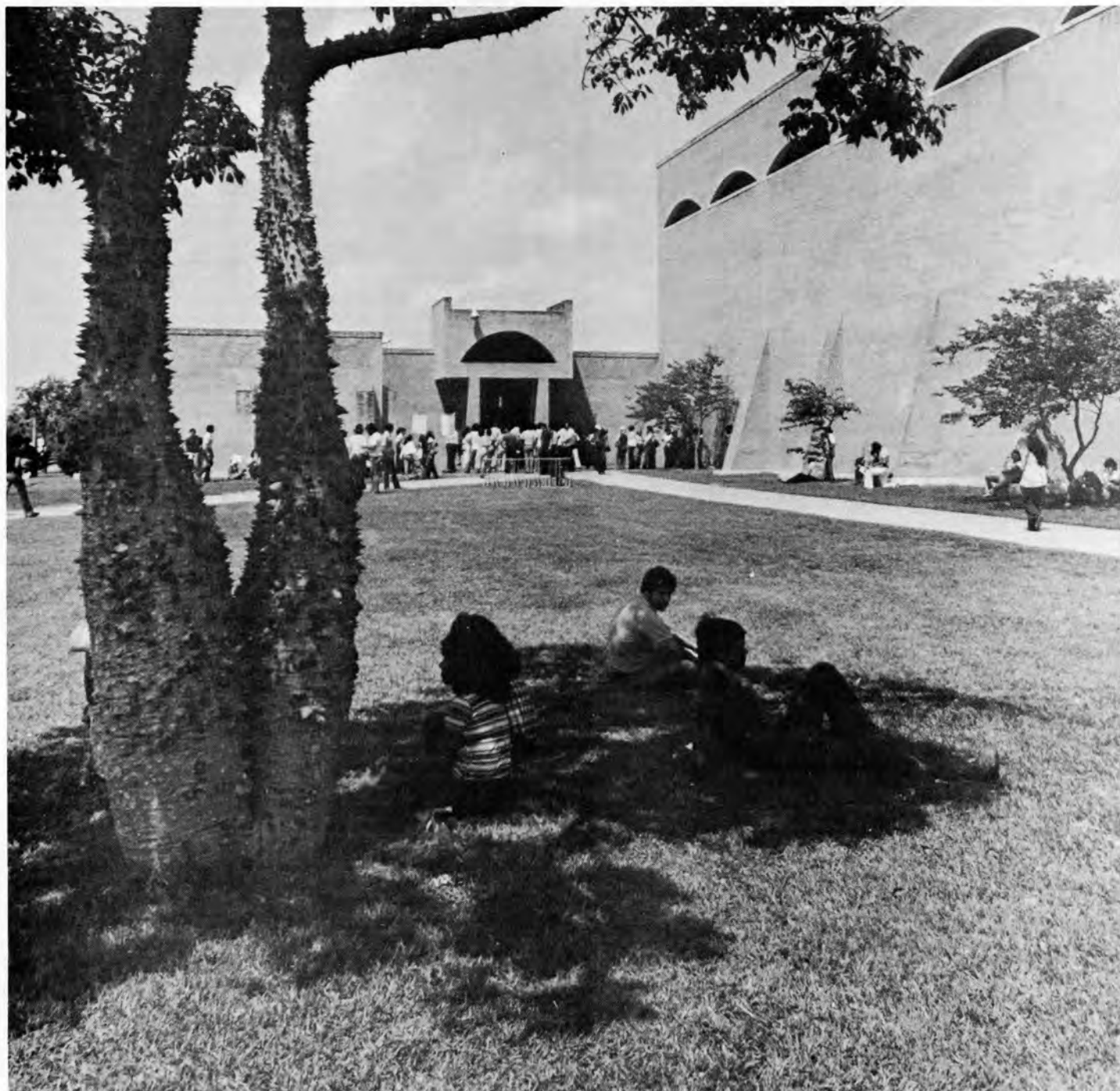
G.I. BILL EDUCATIONAL BENEFITS

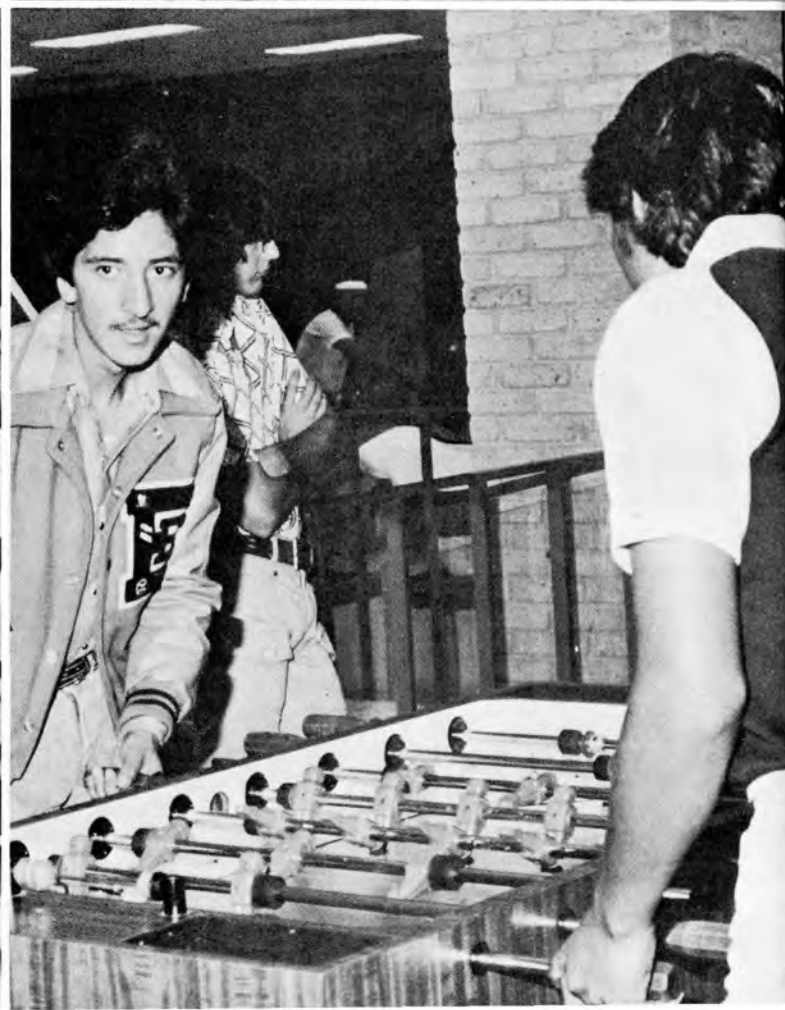
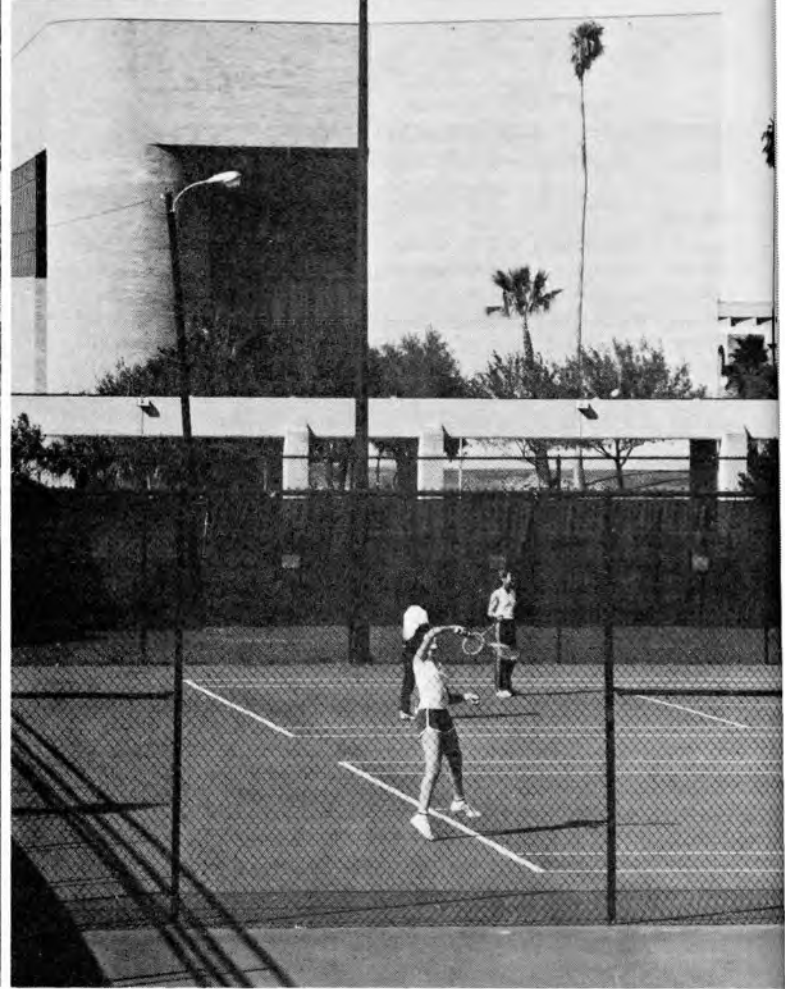
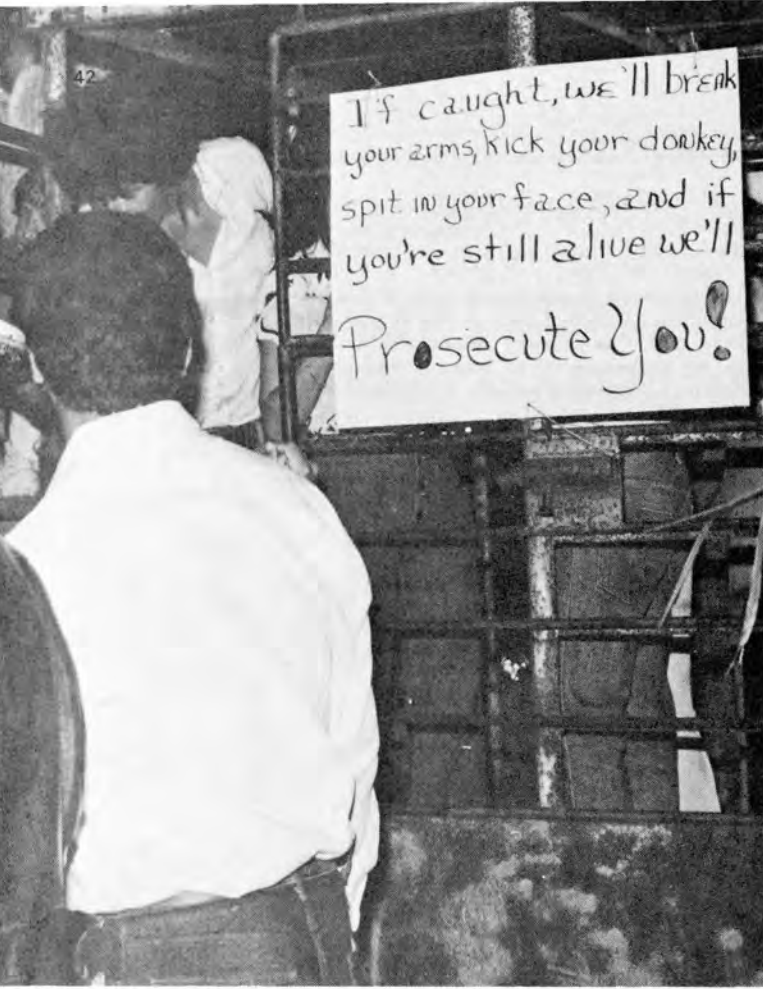
(G.I. bill rates are subject to change by Congressional Legislation)

	Credit Hours		No depen- dent	One Depen- dent	Two depen- dents	Each addit. Depen- dent
	Graduate Hour Equivalents in Paren- thesis					
Full Time	Reg. Sem. 12 Hours(9) or More	Sum. Sem. 4 Hours or More	\$342	\$407	\$464	\$29
¾ Time	9-11 Hours(6)	3 Hours	\$257	\$305	\$348	\$22
½ Time	6-8 Hours	2 Hours	\$171	\$204	\$232	\$15

Less than half time enrollment payment received for tuition and fees only.

For further information, contact the Veterans Office at Building "G" or call 381-2280. The Veterans Office at Pan American University is responsible for assistance to all veterans and their families with regard to Veteran's educational benefits. It provides information on benefits, assistance with applications, and assistance in resolving problems with receipt of benefits or eligibility for benefits.





**Programs
Of
Study**



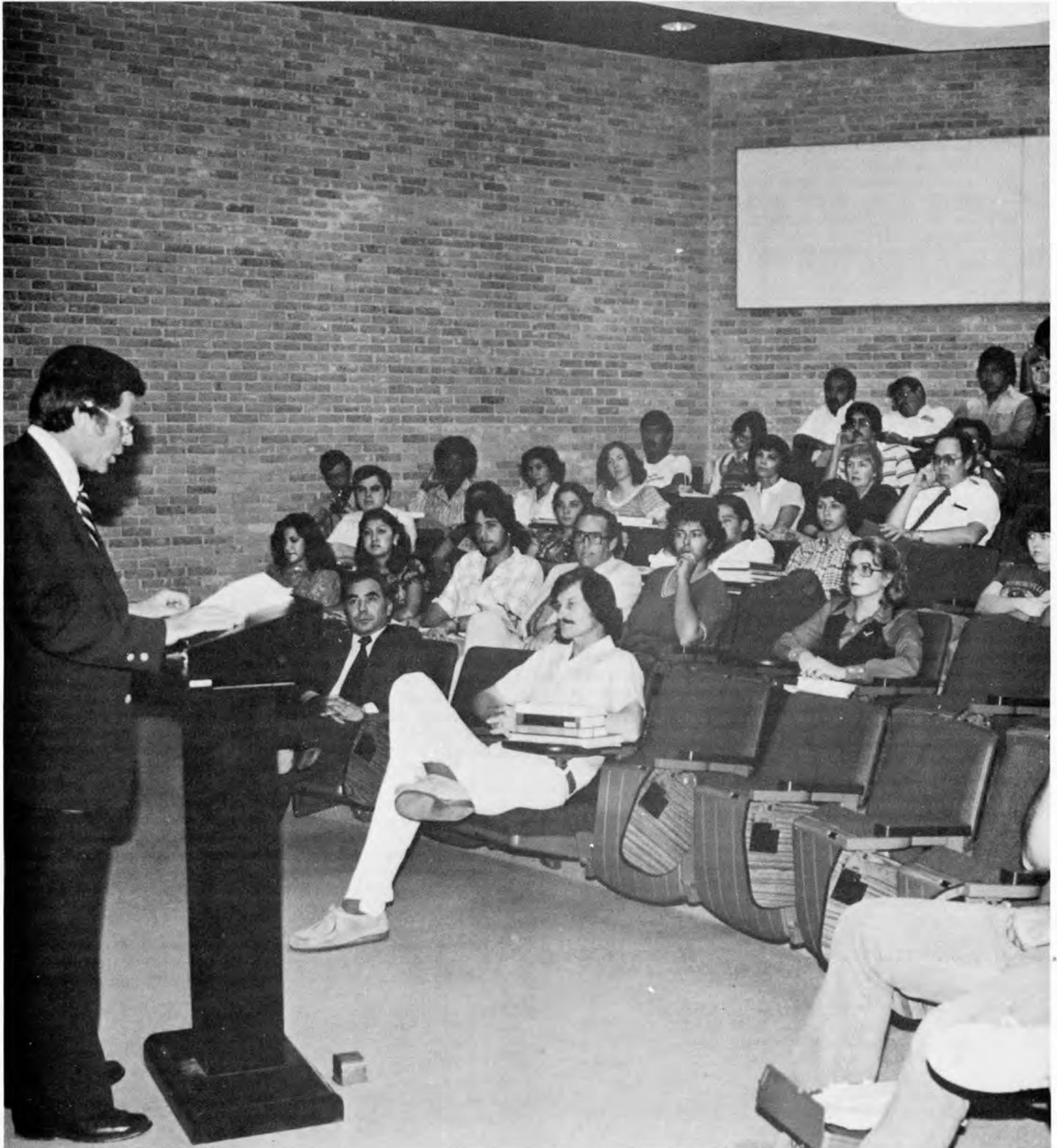
The School of Business Administration

Dr. F. J. Brewerton, *Dean*

The School of Business Administration at Pan American University was established in 1965 to offer professional training in the dynamic fields of

business. Since its creation, the number of students enrolled in the School has more than quadrupled — from 436 in the fall of 1965 to 2376 in the fall of 1981.

The undergraduate 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, which is characterized by low levels of income and educational achievement. This region, covering an area of more than 4,000 square miles, is populated by approximately 440,000 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 frequently operated by persons with limited levels of educational achievement and entrepreneurial skills. 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 our 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 is 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 projects for state, county and city agencies and private firms of a non-proprietary nature and short courses, seminars and workshops for individual business firms and governmental agencies. These non-credit programs have served thousands of persons in the Valley during the past few years and have provided opportunities for students to work for and with the business world.

Several other special programs and activities enrich and augment the regular curriculum of the School. Among such programs are a Small Business Institute and an Executive-in-Residence.

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 majors is also on campus. A chapter of Data Process Management Association (DPMA) is open to business and CIS majors.

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 — 1981

Mr. Thomas Backus, Manager of Plans & Controls
International Business Machines Corp. Corporation — Austin
Mr. Frank Birkhead, Executive Vice President
McAllen Industrial Board—McAllen

Mr. Eddie Cano, President
Cano Coors Distributing Co.—McAllen
Mr. Carl S. Chilton, Certified Public Accountant
Long, Chilton, Payte & Hardin—Brownsville
Mr. Dale E. Cunningham, Vice President
Texas Instruments, Inc. — Dallas
Mr. Pete Diaz, Jr., President
Valley Mart Food Stores—Rio Grande City
Mr. Mike Frost, President
McAllen Fruit & Vegetable Company — McAllen
Mr. Joe G. Garza, President
Valley Federal Savings & Loan — McAllen
Mr. Robert A. McAllen, President
First National Bank of Weslaco—Weslaco
Mr. Gasper Mir III, Certified Public Accountant
Peat, Marwick, Mitchell, & Co.—Houston
Mr. Porter P. Mitchell, General Manager—Residence
Southwestern Bell Telephone Company—San Antonio
Mr. Mark L. Rigg, Vice President of Human Resources
The Southland Corporation—Dallas
Mr. Glen Roney, President
McAllen State Bank—McAllen
Mr. L. L. Rudd, Employee Relations Advisor
Mobil Oil Corporation—Dallas

Academic Faculty¹

Allison, Margaret	Office Administration
<i>B.S., Texas A & I University; M.Ed., Sam Houston State University; M.Ed., University of Houston</i>	
Baldwin, Edward F.**	Accounting
<i>B.B.A., M.B.A., University of Texas (Austin); Ph.D., University of Houston</i>	
Bartley, Douglas*	Management
<i>B.S., University of Illinois; M.A., University of Pittsburgh</i>	
Brewerton, Francis J.*	Management
<i>B.S., M.B.A., D.B.A., Louisiana State University</i>	
Buitenpos, Clara	Office Administration
<i>B.S., Southern State College — Springfield, South Dakota; M.Ed., University of South Dakota</i>	
Cardenas, Gilbert*	Economics
<i>B.A., University of Texas (Austin); M.A., Michigan State University; Ph.D., University of Illinois</i>	
Cell, Robert F.	Management
<i>B.S., M.S., Kansas State University; M.B.A., University of Missouri; (Kansas City)</i>	
Crews, R. Michael	Economics
<i>B.B.A., M.A., University of Oklahoma; Ph.D., Utah State University</i>	
Ellard, Charles J.*	Economics
<i>B.S., University of Connecticut; M.S., University of Rhode Island; M.A., Ph.D., University of Houston</i>	
Gratz, Jerre E.*	Business Communications
<i>B.S., Shippensburg State College; M.Ed., Penn State University; Ed.D., University of Houston</i>	
Harrison, Jon P.	Computer Information Systems
<i>B.A., B.S., Rice University; C.P.A.</i>	
Kettering, Ronald C.*	Accounting
<i>B.B.A., M.B.A., University of Southern Mississippi; D.B.A., Louisiana Tech University</i>	
Lackey, Charles**	Economics
<i>B.A., University of Texas (Arlington); M.S., Baylor University</i>	
Munneke, Leslie E.*	Management
<i>B.A., Coe College — Cedar Rapids, Iowa; M.A., Ph.D., State University of Iowa</i>	
Palmer, Arthur	Marketing
<i>B.A., M.B.A., North Texas State University</i>	
Pardi, Patrick	Marketing
<i>B.S., Purdue University; M.B.A., Xavier University</i>	
Platzer, Bill*	Marketing
<i>B.B.A., Lamar University; M.B.A., Ph.D., University of Arkansas</i>	
Prock, Jerry D.*	Finance
<i>B.B.A., M.Ed., East Texas State University; D.B.A., Arizona State University</i>	
Rush, Carl H., Jr.*	Marketing
<i>B.S., M.A., Wayne University; Ph.D., Ohio State University</i>	

Rydl, Lester M.*	Computer Information Systems
B.A., Pan American University; M.S., Texas A&I University; Ph.D., Texas A&M University	
Slacum, Donald*	Finance
B.B.A., University of Oklahoma; M.B.A., D.B.A., Mississippi State University	
Smith, Ben W.	Business Law
B.S., Rice University; M.B.A., Central Michigan University; J.D., South Texas College of Law	
Strong, Charles R.*	Accounting
B.S., M.S., Oklahoma State University; Ph.D., University of Alabama; C.P.A.	
Vento, Edward	Economics
B.A., Ph.D., Texas A&M University	
Villar, Edna B.**	Finance
B.A., M.B.A., University of Texas (Austin)	
Vincent, Vern C.*	Statistics
B.A., West Texas State University; M.A., Washington State University; Ph.D., University of Northern Colorado	
Weber, Sylvia H.	Office Administration
B.B.A., Pan American University	
Williams, Ivan	Finance
B.S., Indian University; M.B.A., Eastern Illinois University	
Wilson, James M.*	Management
B.B.A., M.B.A., West Texas State University; Ph.D., University of Arkansas	
Yundt, Charles L.	Accounting
B.A., M.B.A., University of Chicago	

*On Graduate Faculty.

**On leave 1981-82.

†As of preparation date.

Bureau of Business and Economic Research

Dr. Carl H. Rush, Jr., *Director*

The Bureau of Business and Economic Research is the research arm of the School of Business Administration, and has the objective of providing an environment within which faculty, students, governmental agencies, and business firms can interact to solve problems of mutual interest. The bureau supplies specialized source materials, research-oriented personnel and physical facilities to encourage and support research activities. Research projects under contract with business firms and governmental agencies are undertaken by the bureau.

Division of Community Programs

Dr. James Wilson, *Director*

The School of Business Administration offers a variety of programs for the continuing education and special training of business persons, governmental agency employees and the general public. These programs are coordinated through the Division of Community Programs. The primary thrust of special programs offered by this division is to develop the professional, entrepreneurial and managerial capabilities of professional and business persons. The division will tailor design and administer special programs to meet special needs of enterprises and organizations.

Division of Graduate Studies

Dr. Vern Vincent, *Director*

The Division of Graduate Studies was established in 1975 when the Master of Business Administration (MBA) degree was instituted at the University. The MBA degree is a non-differentiated degree providing a broad-based professional core and allowing students a concentration in business with one-third of the 36-hour program. A longer program for students holding undergraduate degrees outside business administration is also available.

The graduate studies division is charged with reviewing and recommending revision of the graduate program, counseling graduate students, monitoring standards of graduate level performance and coordinating graduate studies in the School of Business Administration with the Council of Deans.

THE BACHELOR OF BUSINESS ADMINISTRATION DEGREE

The primary objective of the BBA degree programs is to prepare students for managerial level positions in business. Many students, however, will choose the business curriculum as a route to employment in administrative positions in public and non-profit agencies, in public accounting or in teaching, or as a preparation for more advanced study.

All BBA degree plans follow a common format of foundation courses, the business core courses, specialization courses, and free electives. The foundation courses provide, in the first two years, a base for the study of business, emphasizing general education. The business core courses, primarily at the junior level, provide broadly integrated work in the institutions, functions, processes and environment of business, along with further training in the use of analytical techniques. The specialization courses allow the student greater concentration in the area of his professional interest. The free electives may be chosen from any academic areas.

Requirements for the various degree programs differ from one another only in the area of specialization and professional electives. For this block of courses, about 25 percent of the total program, the student may choose from eight major options: Accounting, Computer Information Systems, Economics, Finance, General Business, Management, Marketing and Office Administration. The curricula for all BBA plans include 131-139 semester hours of credit. No minor is required, due to the broad field nature of the degree programs.

THE BBA DEGREE PLAN

Candidates for the BBA degree in all majors are required to complete the following program.

Foundation Courses

Eng 1301, 1302, 2309, plus 3 additional hours at the Sophomore level	12 hours
Govt 2313, 2314	6 hours
Hist 2313 or 2333, 2314	6 hours
Math 2316, 2317	6 hours
Science (lab) or Foreign Language	6-8 hours
Comm 1303	3 hours
Anth, Phil, Psy, or Soc elective	3 hours
P E Activities	4 hours
	46-48 hours

Business Core Courses

Acc 2421, 2322*, or 2329*	7 hours
CIS 1301	3 hours
Eco 2353, 2354	6 hours
Fina 3383	3 hours
GenB 1331, 3335, 3337, 3341, 3342, 4330, 4369	21 hours
Mana 3361, 3363	6 hours
Mark 3371	3 hours
	49 hours

*Acc 2322 required for Accounting and CIS majors;

Acc 2329 recommended for all other majors.

Specialization Courses

Courses in Major area	24-30 hours
Free Electives	12 hours
Total Requirements	131-139 hours

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, and 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. Individuals from non-business academic backgrounds are required to complete MBA prerequisite courses prior to enrolling in the graduate program, which may require one to two academic years of study depending upon deficiencies. 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 M.B.A. 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 is 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.
 - 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 meet the MBA Admission criteria can be granted Conditional Admission status in the MBA program based on the following priority list of indicators of success:

- A. "Admission Formula"
- B. GRE Score
- C. Relevant work and leadership experience
- D. Letters of recommendation
- E. An interview with the Director of Graduate Studies in the School of Business Administration is recommended

Conditional Admissions is limited to a maximum of 12 semester hours. Conditional Admission will be removed at the end of the semester in

which a student's total earned graduate hours toward the degree are 9 or more and the student's total grade point average is 3.0 or better. If the graduate grade point average drops below 3.0 pursuant to earning 9 semester hours, the student will be suspended from the School of Business graduate program.

DENIED ADMISSION

A student is denied admission to graduate study in the School of Business Administration for failure to meet the above 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 have a graduate degree in business and are interested in taking additional graduate business courses for professional improvement purposes.

ADMISSION OF FOREIGN STUDENTS

Foreign student 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, may be expected to take prescribed courses in English.

MBA DEGREE REQUIREMENTS

The MBA requires 36 hours, 30 of which must be in courses open only to graduate students (6000 or higher).

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 prerequisite courses plus 36 semester hours of graduate courses of which 27 semester hours are required core courses.

MBA PREREQUISITE COURSES

ACC 2421, 2329 or 2322 (Accounting)	7 semester hours
CIS 1301 (Computer Information Systems)	3 semester hours
ECO 2353, 2354 (Economics)	6 semester hours
FINA 3383 (Managerial Finance)	3 semester hours
GENB 3337 (Business Law)	3 semester hours
GENB 3341, 3342 (Business Statistics)	6 semester hours
MANA 3361 (Principles of Management)	3 semester hours
MARK 3371 (Principles of Marketing)	3 semester hours
MATH 2317 (Business Calculus)	3 semester hours

MBA prerequisites must be completed *prior* to admission as a graduate student in the MBA program unless granted written approval from the Director of Graduate Studies in the School of Business Administration.

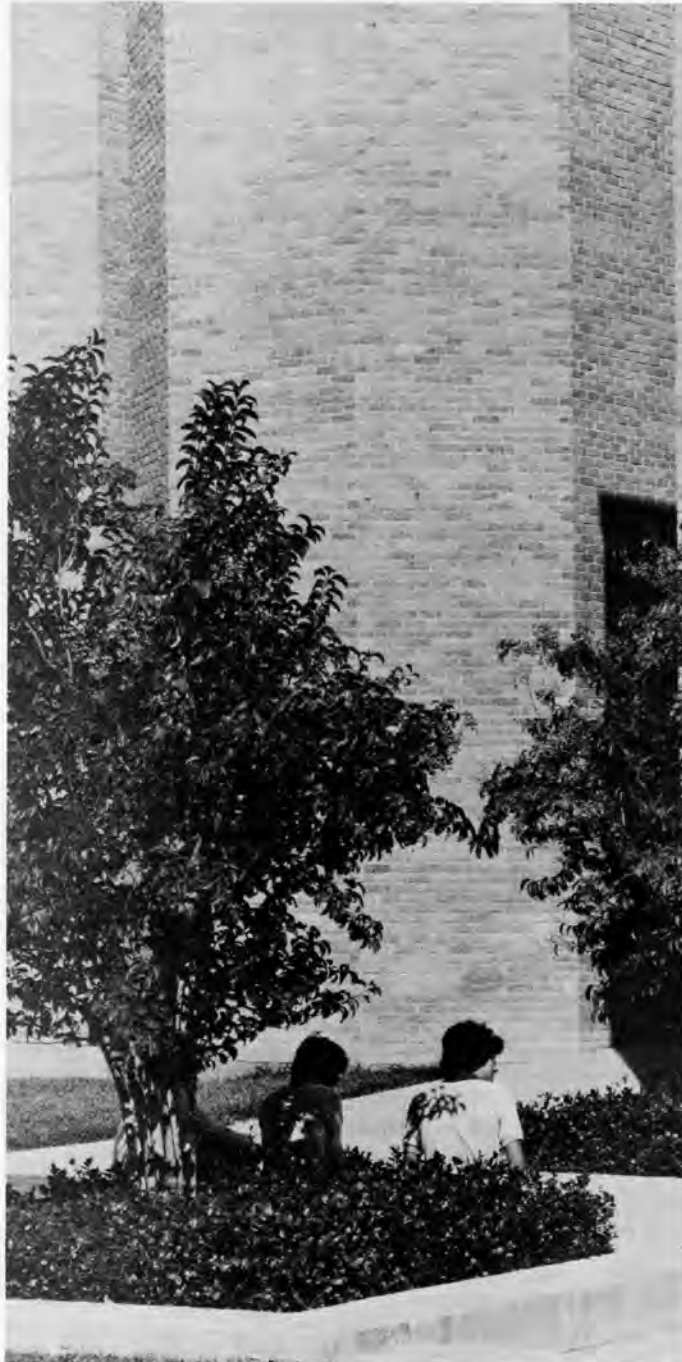
MBA CORE COURSES

GENB	6310	Business Research
ACC	6320	Financial and Managerial Accounting
MANA	6330	Management Theory and Organizational Behavior
FINA	6340	Financial Administration
ECO	6350	Managerial Economics
MANA	6360	Operations Management
MARK	6370	Marketing Policy and Management
GENB	6380	International Business
GENB	6390	Administrative Policy and Strategy

The student will select the remaining 9 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 nine hours must be in 6000 or 7000 level courses. A student may elect to write a thesis in lieu of six hours of graduate elective course work. Each MBA candidate, regardless of the option selected, must successfully pass a written comprehensive examination over the MBA core curriculum.

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	Operational Management
3rd Term—Fall		
Mark	6370	Marketing Policy and Management
GenB	6380	International Business
Graduate Business		Elective
4th Term—Spring		
Genp	6390	Administrative Policy and Strategy
Graduate Business		Elective
Graduate Business		Elective

**Department Of Accounting
And Economics**Dr. Ron Kettering, *Head***Accounting Specialization (Major) Option**

The admission and graduation requirement for the accounting major involves two steps: pre-accounting and accounting majors.

Pre-Accounting Major

All persons desiring an accounting degree will initially designate 'Pre-Accounting' as their major. This would be effective for all changes in major, transfer students, special students and entering freshmen.

Admission to Accounting Major Program

To move from pre-accounting to accounting major requires that the student apply to the Accounting Admission Committee for admission to the major and that the following guidelines be followed.

Guidelines for Admission to Accounting Major

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, 2322 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.

Graduation Requirement

In addition to the University and School of Business Administration graduation requirements, accounting majors must have an average grade point of at least 2.5 in all accounting courses taken in order to graduate with an 'accounting degree'.

Major in Accounting

Foundation and Business Core Courses	95-97 hours
Free Electives	12 hours
ACCOUNTING SPECIALIZATION COURSES	30 hours
Acc 3321 Intermediate Accounting I	
Acc 3322 Intermediate Accounting II	
Acc 3323 Income Tax Procedure	
Acc 3324 Cost Accounting	
Acc 4320 Advanced Accounting I -Topics	
Acc 4323 Contemporary Accounting Theory	
Acc 4324 Auditing I	
CIS 2310 Cobol Programming	24 hours
ACCOUNTING ELECTIVES* - Select 6 hours from:	
Acc 3325 Fund Accounting	
Acc 3328 Advanced Cost Accounting	
Acc 4321 Advanced Accounting II	
Acc 4327 Auditing II	
Acc 4329 Advanced Income Tax Procedure	
	6 hours
Total Requirements	137-139

*Selection of accounting elective courses should be made by the student in accordance with his interest in either public practice or industry/government practice. Those who wish to pursue the CPA certification are urged to select Acc 4321 and 4327. Moreover, GenB 3338, Business Law II, is strongly recommended as an elective. Those who wish to pursue industry/government practice are urged to select Acc 3328 and Acc 3325, Advanced Cost Accounting and Fund Accounting, respectively. In all cases of course selection, the student should seek the advice of his/her accounting faculty advisor.

A Note to Accounting Majors

The bachelor's degree in accounting is designed to prepare graduates for entry-level positions in both private and public accounting. The degree entitles the graduate to sit for the Certified Public Accountant Examination in Texas and most other states. The CPA Exam is structured to test the candidates over a broad range of accounting topics, some of which are not specified for the degree. All students seeking careers in public

accounting should seek advice of the faculty in selecting elective courses which will aid them in the extensive preparation required to satisfactorily complete the certification requirements.

Suggested (BBA) Accounting Curriculum

Freshman Year			
First Semester	Hrs	Second Semester	Hrs
Eng 1301	3	Eng 1302	3
Hist 2313 or 2333	3	Hist 2314	3
Comm 1303	3	Math 2316 (C or better)	3
GenB 1331	3	CIS 1301	3
*Sci(lab) or Fgn Lang	3-4	*Sci(lab) or Fgn Lang	3-4
P E	2	P E	2
	17-18		17-18

Sophomore Year			
First Semester	Hrs	Second Semester	Hrs
Eng 2309	3	Eng (Soph)	3
Govt 2313	3	Govt 2314	3
Acc 2421 (C or better)	4	Acc 2322 (C or better)	3
Eco 2353	3	Eco 2354	3
Math 2317	3	Psy, Soc, Anth, Phil	3
		CIS 2310	3
	16		18

Junior Year			
First Semester	Hrs	Second Semester	Hrs
Fina 3383	3	Mark 3371	3
Mana 3361	3	GenB 3337	3
GenB 3341	3	GenB 3342	3
Acc 3321 (C or better)	3	Acc 3322 (C or better)	3
Acc 3323/3324 (C or better)	3	Acc 3323/3324 (C or better)	3
		Mana 3363	3
GenB 3335	3		
	18		18

Senior Year			
First Semester	Hrs	Second Semester	Hrs
Acc Elective	3	GenB 4369	3
GenB 4330	3	Acc Elective	3
Acc 4320	3	Acc 4323	3
Acc 4324	3	Free Elective	3
Free Elective	3	Free Elective	3
Free Elective	3		
	18		15

*Select two courses from Foreign Language or Science(Lab).

Economics (Major) Options

Economics Major - BBA

Foundation and Business Core Courses	95-97 Hours
Free Electives	12 Hours
Economics Specialization Courses	24 Hours
Eco 3351 Macroeconomic Theory	
Eco 3352 Microeconomic Theory	
Eco 4359 History of Economic Thought	9 Hours
Economic Electives(Upper Division)	15 hours

Economics Major - Bachelor of Arts Degree

The BA Degree in Economics is the traditional Liberal Arts Degree broadly based in the arts and sciences. This degree plan provides students with an economics foundation for graduate studies or careers in government, teaching, or business. A minor is required with this program.

BA Degree Plan - Economics

Non-Economic Courses:	
Acc 2421 Principles of Accounting I	4 hours
CIS 1301 Computer Systems and Basic Programming	3 hours
Eng 1301, 1302, plus 6 hours (Soph Level)	12 hours
Fgn Lang or Lab Science	6-8 hours
GenB 3341 Elem Bus & Eco Statistics	3 hours
Govt 2313,2314	6 hours
Hist 2313 or 2333, 2314	6 hours
Math 6 hours from 1365, 1370, 1460, 2316, 2317, 2342	6 hours
Soc Sci Electives	6 hours
*Electives	39 hours
P E Activities	4 hours
	95-97 Hours

*Includes minor hours

Economics Specialization Courses	15 hours
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	
Economics Electives (Upper Division)	15 hours
Total Economics Hours Required	30 hours
Total Requirements	125-127 hours

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

Suggested (BBA) Economics Curriculum

Freshman Year			
First Semester	Hrs	Second Semester	Hrs
Eng 1301	3	Eng 1302	3
Hist 2313 or 2333	3	Hist 2314	3
Comm 1303	3	Math 2316 (C or better)	3
GenB 1331	3	CIS 1301	3
*Sci(lab) or Fgn Lang	3-4	*Sci(lab) or Fgn Lang	3-4
P E	2	P E	2
	17-18		17-18

Sophomore Year			
First Semester	Hrs	Second Semester	Hrs
Eng 2309	3	Eng (Soph)	3
Govt 2313	3	Govt 2314	3
Acc 2421	4	Acc 2322 or 2329	3
Eco 2353	3	Eco 2354	3
Math 2317	3	Psy, Soc, Anth, Phil	3
	16		15

Junior Year			
First Semester	Hrs	Second Semester	Hrs
Fina 3383	3	GenB 3342	3
Mark 3371	3	GenB 3337	3
Mana 3361	3	GenB 3335	3
GenB 3341	3	Eco 3352	3
Eco 3351	3	Mana 3363	3
Eco Elective - Adv	3	Eco Elective -Adv	3
	18		18

Senior Year			
First Semester	Hrs	Second Semester	Hrs
GenB 4330	3	GenB 4369	3
Eco Elective - Adv	3	Eco 4359	3
Eco Elective - Adv	3	Eco Elective -Adv	3
Free Elective	3	Free Elective	3
Free Elective	3	Free Elective	3
	15		15

*Select two courses from Foreign Language or Science(Lab).

Suggested (BA) Economics Curriculum

Freshman Year			
First Semester	Hrs	Second Semester	Hrs
Eng 1301	3	Eng 1302	3
Hist 2313 or 2333	3	Hist 2314	3
Math	3	Math (C or better)	3
Elective**	3	CIS	3
*Sci(lab) or Fgn Lang	3-4	*Sci(lab) or Fgn Lang	3-4
P E	2	P E	2
	17-18		17-18

Sophomore Year			
First Semester	Hrs	Second Semester	Hrs
Eng (Soph)	3	Eng (Soph)	3
Govt 2313	3	Govt 2314	3
Acc 2421	4	Elective	3
Eco 2353	3	Eco 2354	3
Soc Sci Elective	3	Soc Sci Elective	3
	16		15

Junior Year			
First Semester	Hrs	Second Semester	Hrs
Elective	3	Elective	3
Elective	3	Elective	3
GenB 3341	3	Eco 3352	3
Eco 3351	3	Elective	3
Eco Elective - Adv	3	Eco Elective - Adv	3
	15		15

Senior Year			
First Semester	Hrs	Second Semester	Hrs
Eco 4359	3	Eco Elective - Adv	3
Eco Elective - Adv	3	Elective	3
Eco Elective - Adv	3	Elective	3
Elective	3	Elective	3
Elective	3	Elective	3
	15		15

*Select two courses from Foreign Language or Science(Lab).

**Unspecified electives must include minor requirements.

Department of Management and Computer Information Systems

Dr. Les Rydl, *Head*

The Department of Management and Computer Information Systems offers a major in Management and a major and a minor in Computer Information Systems.

As may be implied from the department name, students majoring in this department may select between a management and computer information systems option. The curricula for the two options are shown below. In addition to completing the foundation and common body of knowledge courses as outlined in the Pan American University catalog, the student will be responsible for fulfilling the requirements of his selected option.

The minor in Computer Information Systems is available to students from all areas of the University and is designed to prepare the student for an entry-level position in computer data processing.

Major in Management

Foundation and Business Core Courses	95-97 hours
Free Electives	12 hours
Management Specialization Courses	24 hours
Mana 3332 Human Relations in Management(was Mana 4332)	
Mana 3362 Personnel Management	
Mana 4364 Societal Problems in Business	
CIS 2310 COBOL Programming	12 hours
Management Electives - Select 12 hours from:	
Mana 4300 Topics	
Mana 4361 Human Behavior in Organization	
Mana 3365 Wage and Salary Administration(was Mana 4365)	
Mana 4366 Small Business Management	
Mana 4368 Industrial Relations(new title)	
Eco 3351 Macroeconomic Theory	12 hours
Total Requirements	131-133 hours

Major in Computer Information Systems

Foundation and Business Core Courses	95-97 hours
Free Electives	12 hours
Computer Information Systems Specialization Courses	24 hours
CIS 2310 COBOL Programming	
CIS 2311 Advanced Programming Techniques	
CIS 2312 Microcomputer Concepts with Business Applications	
CIS 3330 File Structures for On-Line Systems	
CIS 3335 Data Base Management Systems	
CIS 3336 Systems Analysis	
CIS 4333 Information Systems	
CIS Electives (3 semester hours)	
Total Requirements	131-133 hours

Minor in Computer Information Systems

Acc 2421 Principles of Accounting I	
Mana 3361 Principles of Management	
CIS 2310 COBOL Programming	
CIS 3330 File Structures for On-Line Systems	
CIS Electives (6 semester hours)	
Total Minor Requirements	19 hours

Suggested (BBA) Management Curriculum

<i>Freshman Year</i>			
<i>First Semester</i>	<i>Hrs</i>	<i>Second Semester</i>	<i>Hrs</i>
Eng 1301(C or better)	3	Eng 1302(C or better)	3
Hist 2313 or 2333	3	Hist 2314	3
Comm 1303	3	Math 2316 (C or better)	3
GenB 1331	3	CIS 1301	3
*Sci(lab) or Fgn Lang	3-4	*Sci(lab) or Fgn Lang	3-4
P E	2	P E	2
	17-18		17-18

Sophomore Year

<i>First Semester</i>	<i>Hrs</i>	<i>Second Semester</i>	<i>Hrs</i>
Eng 2309	3	Eng (Soph)	3
Govt 2313	3	Govt 2314	3
Acc 2421	4	Acc 2322 or 2329	3
Eco 2353	3	Eco 2354	3
Math 2317	3	Psy, Soc, Anth, Phil	3
	16	Free Elective	3
			18

Junior Year

<i>First Semester</i>	<i>Hrs</i>	<i>Second Semester</i>	<i>Hrs</i>
Fina 3383	3	GenB 3337	3
Mark 3371	3	GenB 3335	3
Mana 3361	3	Mana 3363	3
GenB 3341	3	GenB 3342	3
Mana 3332	3	Mana 3362	3
CIS 2310	3		
	18		15

Senior Year

<i>First Semester</i>	<i>Hrs</i>	<i>Second Semester</i>	<i>Hrs</i>
GenB 4330	3	GenB 4369	3
Mana 4364	3	Mana Elective	3
Mana Elective	3	Mana Elective	3
Mana Elective	3	Free Elective	3
Free Elective	3	Free Elective	3
	15		15

*Select two courses from Foreign Language or Science(Lab).

Suggested (BBA) Computer Information Systems Curriculum

Freshman Year

<i>First Semester</i>	<i>Hrs</i>	<i>Second Semester</i>	<i>Hrs</i>
Eng 1301 (C or better)	3	Eng 1302 (C or better)	3
Hist 2313 or 2333	3	Hist 2314	3
Comm 1303	3	Math 2316 (C or better)	3
GenB 1331	3	CIS 1301	3
*Sci(lab) or Fgn Lang	3-4	*Sci(lab) or Fgn Lang	3-4
P E	2	P E	2
	17-18		17-18

Sophomore Year

<i>First Semester</i>	<i>Hrs</i>	<i>Second Semester</i>	<i>Hrs</i>
Eng 2309	3	Eng (Soph)	3
Govt 2313	3	Govt 2314	3
Acc 2421 (C or better)	4	Acc 2322	3
Eco 2353	3	Eco 2354	3
Math 2317	3	Psy, Soc, Anth, Phil	3
CIS 2310	3	CIS 2311	3
	19		18

Junior Year

<i>First Semester</i>	<i>Hrs</i>	<i>Second Semester</i>	<i>Hrs</i>
Fina 3383	3	Genp 3337	3
Mark 3371	3	GenB 3335	3
Mana 3361	3	GenB 3342	3
GenB 3341	3	CIS 3330	3
CIS 2312	3	Free Elective	3
	15		15

Senior Year

<i>First Semester</i>	<i>Hrs</i>	<i>Second Semester</i>	<i>Hrs</i>
GenB 4330	3	GenB 4369	3
CIS 3335	3	CIS 4333	3
CIS 3336	3	CIS Elective	3
Mana 3363	3	Free Elective	3
Free Elective	3	Free Elective	3
	15		15

*Select two courses from Foreign Language or Science(Lab).

Department of Marketing, Finance and General Business

Dr. Bill Platzer, Head

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. Major requirements in addition to the background and common body of knowledge courses for the BBA degree are shown below:

Major in Marketing

Foundation and Business Core Courses	95-97 hours
Free Electives	12 hours
Marketing Specialization Courses	24 hours
Eco 3362 Microeconomic Theory	
Mark 3372 Consumer Behavior	
Mark 3374 Intermediate Marketing Strategy	
Mark 4377 Marketing Management	
Mark 4378 Marketing Research	15 hours
Marketing Electives - Select 9 hours from:	
Mark 2373 Principles of Salesmanship	
Mark 3373 Wholesaling and Industrial Marketing	
Mark 3375 Retailing	
Mark 4372 Sales and Advertising Management	
Mark 4379 Special Problems in Marketing	9 hours
Total Requirements	131-133 hours

Major in Finance

Foundation and Business Core Courses	95-97 hours
Free Electives	12 hours
Finance Specialization Courses	24 hours
Fina 3381 Money and Banking	
Fina 3382 Investment Principles	
Fina 3386 Financial Institutions and Markets	
Fina 3389 Commercial Banking	
Advanced Finance Electives	9 hours
Professional elective to be selected from the following:	3 hours
Acc 3321, 3322, 3324; CIS 2309, 2310; GenB 4345, 4346; Mana 4366	
Total Requirements	131-133 hours

Major in General Business

Foundation and Business Core Courses	95-97 hours
Free Electives	12 hours
General Business Specialization Courses	24 hours
GenB 4345 Small Business Institute	
Mana 4366 Small Business Management	
Eighteen hours from the following with at least one course from each of the five groups:	
a. Acc 3323, 3324; CIS 2310	
b. Eco 3352, 3353, 4357	
c. Fina 3382, 3385; GenB 3356	
d. Mana 3362, 4332; GenB 3312	
e. Mark 2373, 3372, 3375	
Total Requirements	131-133 hours

Major in Office Administration

Foundation and Business Core Courses	95-97 hours
Free Electives	12 hours
Office Administration Specialization Courses	24 hours
GenB 1302 Production Typewriting	
GenB 1306 Intermediate Shorthand	
Genp 1307 Advanced Shorthand	
GenB 2308 Secretarial Training	
GenB 2335 Fundamentals of Business Communication	
GenB 3312 Administrative Office Procedures	
Mana 3362 Personnel Management	
Mana 4332 Human Relations in Management	
Total Requirements	131-133 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 Minor Requirements	19 hours

Second Teaching Field (Minor) in Business Administration

A secondary teaching field (minor) is offered in Business Administration. Students may choose a secretarial or non-secretarial option. The plan requires 28 hours in the Business Administration area (Acc, CIS, Eco, Fina, GenB, Mana, Mark) of which 12 hours must be advanced, as follows:

Acc 2421 Principles of Accounting I	
Acc 2329 Managerial Accounting	
GenB 1302 Production Typewriting	
GenB 1331 Introduction to Business	
GenB 3315 Seminar: Teaching Business Subjects	
Three hours from the following:	
GenB 1306 Intermediate Shorthand(Secretarial Option)or	
GenB 1307 Advanced Shorthand (Secretarial Option) or	
CIS 1301 Basic Typewriting Communication (Non-Secretarial Option)	19 hours
Upper Level Electives: Select 9 hours from the following areas:	
Acc, CIS, Eco, Fina, GenB, Mana, Mark	9 hours
Total Minor Requirements	28 hours

Suggested (BBA) Marketing Curriculum

Freshman Year

<i>First Semester</i>	<i>Hrs</i>	<i>Second Semester</i>	<i>Hrs</i>
Eng 1301	3	Eng 1302	3
Hist 2313 or 2333	3	Hist 2314	3
Comm 1303	3	Math 2316 (C or better)	3
GenB 1331	3	CIS 1301	3
*Sci(lab) or Fgn Lang	3-4	*Sci(lab) or Fgn Lang	3-4
P E	2	P E	2
	17-18		17-18

Sophomore Year

<i>First Semester</i>	<i>Hrs</i>	<i>Second Semester</i>	<i>Hrs</i>
Eng 2309	3	Eng (Soph)	3
Govt 2313	3	Govt 2314	3
Acc 2421	4	Acc 2322 or 2329	3
Eco 2353	3	Eco 2354	3
Math 2317	3	Psy, Soc, Anth, Phil	3
	16	Free Elective	3
			18

Junior Year

<i>First Semester</i>	<i>Hrs</i>	<i>Second Semester</i>	<i>Hrs</i>
Fina 3383	3	GenB 3337	3
Mark 3371	3	GenB 3342	3
Mana 3361	3	Mana 3363	3
GenB 3335	3	Mark 3374	3
GenB 3341	3	Mark (Elective)	3
Free Elective	3		
	18		15

Senior Year

<i>First Semester</i>	<i>Hrs</i>	<i>Second Semester</i>	<i>Hrs</i>
Mark 4378	3	Mark 4377	3
Mark 3372	3	GenB 4369	3
Eco 3352	3	Mark Elective	3
GenB 4330	3	Free Elective	3
Mark Elective	3	Free Elective	3
	15		15

*Select two courses from Foreign Language or Science(Lab).

Suggested (BBA) Finance Curriculum

Freshman Year

<i>First Semester</i>	<i>Hrs</i>	<i>Second Semester</i>	<i>Hrs</i>
Eng 1301	3	Eng 1302	3
Hist 2313 or 2333	3	Hist 2314	3
Comm 1303	3	Math 2316 (C or better)	3
GenB 1331	3	CIS 1301	3
*Sci(lab) or Fgn Lang	3-4	*Sci(lab) or Fgn Lang	3-4
P E	2	P E	2
	17-18		17-18

Sophomore Year

<i>First Semester</i>	<i>Hrs</i>	<i>Second Semester</i>	<i>Hrs</i>
Eng 2309	3	Eng (Soph)	3
Govt 2313	3	Govt 2314	3
Acc 2421	4	Acc 2322 or 2329)	3
Eco 2353	3	Eco 2354	3
Math 2317	3	Psy, Soc, Anth, Phil	3
	16	Free Elective	3
			18

Junior Year

<i>First Semester</i>	<i>Hrs</i>	<i>Second Semester</i>	<i>Hrs</i>
Fina 3383	3	GenB 3337	3
Mark 3371	3	GenB 3342	3
Mana 3361	3	Mana 3363	3

GenB 3341	3	Fina 3382	3
Fina 3381	3	Fina Elective - Adv	3
GenB 3335	3		
	18		15

Senior Year

First Semester	Hrs	Second Semester	Hrs
Fina 3386	3	GenB 4369	3
Fina Elective - Adv	3	Fina 3389	3
GenB 4330	3	Fina Elective - Adv	3
Prof Elective	3	Free Elective	3
Free Elective	3	Free Elective	3
	15		15

*Select two courses from Foreign Language or Science(Lab).

Suggested (BBA) General Business Curriculum

Freshman Year

First Semester	Hrs	Second Semester	Hrs
Eng 1301	3	Eng 1302	3
Hist 2313 or 2333	3	Hist 2314	3
Comm 1303	3	Math 2316 (C or better)	3
GenB 1331	3	CIS 1301	3
*Sci(lab) or Fgn Lang	3-4	*Sci(lab) or Fgn Lang	3-4
P E	2	P E	2
	17-18		17-18

Sophomore Year

First Semester	Hrs	Second Semester	Hrs
Eng 2309	3	Eng (Soph)	3
Govt 2313	3	Govt 2314	3
Acc 2421	4	Acc 2322 or 2329	3
Eco 2353	3	Eco 2354	3
Math 2317	3	Psy, Soc, Anth, Phil	3
		Free Elective	3
	16		18

Junior Year

First Semester	Hrs	Second Semester	Hrs
Fina 3383	3	GenB 3337	3
Mark 3371	3	GenB 3335	3
GenB 3341	3	GenB 3342	3
Mana 3361	3	Mana 3363	3
Group A	3	Group B	3
Free Elective	3		
	18		15

Senior Year

First Semester	Hrs	Second Semester	Hrs
GenB 4345	3	GenB 4369	3
Mana 4366	3	Group D	3
GenB 4330	3	Group E	3
Group C	3	Group A, B, C, D, E	3
Free Elective	3	Free Elective	3
	15		15

*Select two courses from Foreign Language or Science(Lab).

Suggested (BBA) Office Administration Curriculum

Freshman Year

First Semester	Hrs	Second Semester	Hrs
Eng 1301	3	Eng 1302	3
Hist 2313 or 2333	3	Hist 2314	3
GenB 1331	3	Math 2316 (C or better)	3
GenB 1306	3	GenB 1307	3
GenB 1302	3	CIS 1301	3
P E	2	P E	2
	17		17

Sophomore Year

First Semester	Hrs	Second Semester	Hrs
Eng 2309	3	Eng (Soph)	3
Govt 2313	3	Govt 2314	3
Acc 2421	4	Acc 2322 or 2329	3
Eco 2353	3	Eco 2354	3
Math 2317	3	Comm 1303	3
		GenB 2308	3
	16		18

Junior Year

First Semester	Hrs	Second Semester	Hrs
Fina 3383	3	GenB 3337	3
Mark 3371	3	GenB 3335	3
Mana 3361	3	Mana 3363	3
GenB 3341	3	*Sci(Lab) or Fgn Lang	3-4
*Sci(Lab) or Fgn Lang	3-4	GenB 3342	3
GenB 2335	3		
	18-19		15-16

Senior Year

First Semester	Hrs	Second Semester	Hrs
GenB 3312	3	GenB 4369	3
Psy, Soc, Anth, Phil	3	Mana 4332	3
Mana 3362	3	Free Elective	3
GenB 4330	3	Free Elective	3
Free Elective	3	Free Elective	3
	15		15

*Select two courses from Foreign Language or Science(Lab).



Division of Health Related Professions

Julian Castillo, *Director*

The Division, in cooperation with a number of health care facilities, offers educational programs for individuals wishing to pursue a health related profession. 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.

The Division of Health Related Professions offers an Associate of Applied Science degree in Nursing Education, a Bachelor of Science degree in Medical Technology or Nursing.

General Admission requirements conform with those of the University. Specific variations of requirements are stated with each program description.

Academic Instructional Staff^a

Abraham, John	Medical Technology
<i>B.S., Lubbock Christian College; M.Ed., Texas A&M University; M.T., Methodist Hospital, Lubbock; Board Certified Specialist in Hematology S.H.(ASCP).</i>	
Chandler, Karen S.	Medical Technology
<i>B.S., Purdue University; M.T., St. Elizabeth Hospital Medical Center.</i>	
Diaz, Maria I.	Nursing Education
<i>B.S.N., M.S.N., Texas Women's University.</i>	
Farshidfar, Drusila G.	Nursing Education
<i>B.S.N., M.S.N., Texas Woman's University</i>	
Fossum, Patricia Ann	Nursing Education
<i>B.S., N.Ed., South Dakota State College; M.Ed., Pan American University.</i>	
Garcia, Rebecca H.	Division of H.R.P.
<i>B.S., Pan American University.</i>	
Hayes, Elaine	Nursing Education
<i>B.S., Louisiana College; M.S.N., University of Texas, Austin.</i>	
Huerta, Maria Carolina	Nursing Education
<i>B.S., Incarnate Word College; M.S.N., University of Texas, Austin.</i>	
Lerma, Andrea	Nursing Education
<i>B.S.N., University of Texas(Galveston); M.S.N., Texas Woman's University.</i>	
Maville, Janice Ann	Nursing Education
<i>B.S.N., Ball State University, Indiana; M.S.N., Northern Illinois University.</i>	
McCormick, Emily	Nursing Education
<i>B.S., University of Texas Nursing School; M.S.N., University of Texas(Galveston).</i>	
Rodriguez, Wanzell Nix	Nursing Education
<i>B.S.N., Texas Christian University; M.S.N., Texas Woman's University.</i>	
Sanchez, M. Sandra	Nursing Education
<i>B.S.N., Incarnate Word College; M.S.N., University of Texas at Austin.</i>	
Skinner, Gwendolynne	Nursing Education
<i>B.S.N., Baylor University; M.A., University of Northern Colorado.</i>	
Stamper, Gerald C.	Nursing Education
<i>B.S.N., Texas Christian University; M.Ed., North Texas State University; M.S.N., University of Texas at San Antonio.</i>	
Strohmeier, Sister Marian	Division of H.R.P.
<i>B.S., N.E., St. Mary's College, Xavier, Kansas; M.P.H., University of California at Berkeley.</i>	
Tucker, Barbara A.M.	Nursing Education
<i>B.S.N., M.S.N., Texas Woman's University.</i>	
Wilson, Bruce Keith	Nursing Education
<i>B.S.N., University of Texas System School of Nursing at San Antonio; M.S.N., University of Texas Health Science Center at San Antonio.</i>	

^aAs of preparation date.

MEDICAL TECHNOLOGY ADVISORY COMMITTEE

Domingo Useda, M.D., Program Medical Director
McAllen Methodist Hospital
Neal Murray, M.T. (ASCP), Administrative Director of Pathology
McAllen Methodist Hospital
John Mims, Administrator
McAllen Methodist Hospital
Rodolfo Garza, M.D., Pathologist
Knapp Memorial Methodist Hospital
Robert Vanderveer, Administrator
Knapp Memorial Methodist Hospital
Ken Schill, M.T.(ASCP), Chief Technologist
Knapp Memorial Methodist Hospital
Ernest Baca, Ph.D., Dean, School of Science and Mathematics
Pan American University
David Flory, M.D., Program Medical Director
Valley Baptist Medical Center
Jim Parrot, M.T.(ASCP), Chief Technologist
Valley Baptist Medical Center
Bill R. Arnold, Ph.D., Psychologist
Private Practice, Edinburg
Willie Perkins, M.T.(ASCP), Chief Technologist
State Chest Hospital

MEDICAL TECHNOLOGY

Accredited by the Committee on Allied Health Education and Accreditation of the American Medical Association.

John P. Abraham, SH (ASCP), *Coordinator*

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. 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, the competition is keen. 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, and in the June meeting, they will consider all applications received until May 31st. 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.

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
Government	6 hours
History	6 hours
P.E. Activities	4 hours
Electives	12 hours
TOTAL	87 hours

Departmental Requirements:

HRP ¹ 1401	4 hours
CLSC 3401, 3402	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
 P.E. 2 hours
 HRP¹
 1201, 1301 or 1402
 Math 1340

Sophomore Year

Hist 2313, 2314
 CLSC² 3401, 3402
 Biol 2403, 3402
 Chem 2401

P E 2 hours
 Elective 6 hours

Junior Year

Govt 2313, 2314
 Eng (Soph Lit) 6 hours
 Biol³ 3401, 3403
 Chem 3401, 3403⁵ Electives 6 hours
 Apply to Medical Technology Program

Senior Year⁴

CLSC 4214, 4222, 4301, 4302,
 4303, 4304, 4313, 4332, 4410,
 4412, 4420, 4421, 4430, 4431

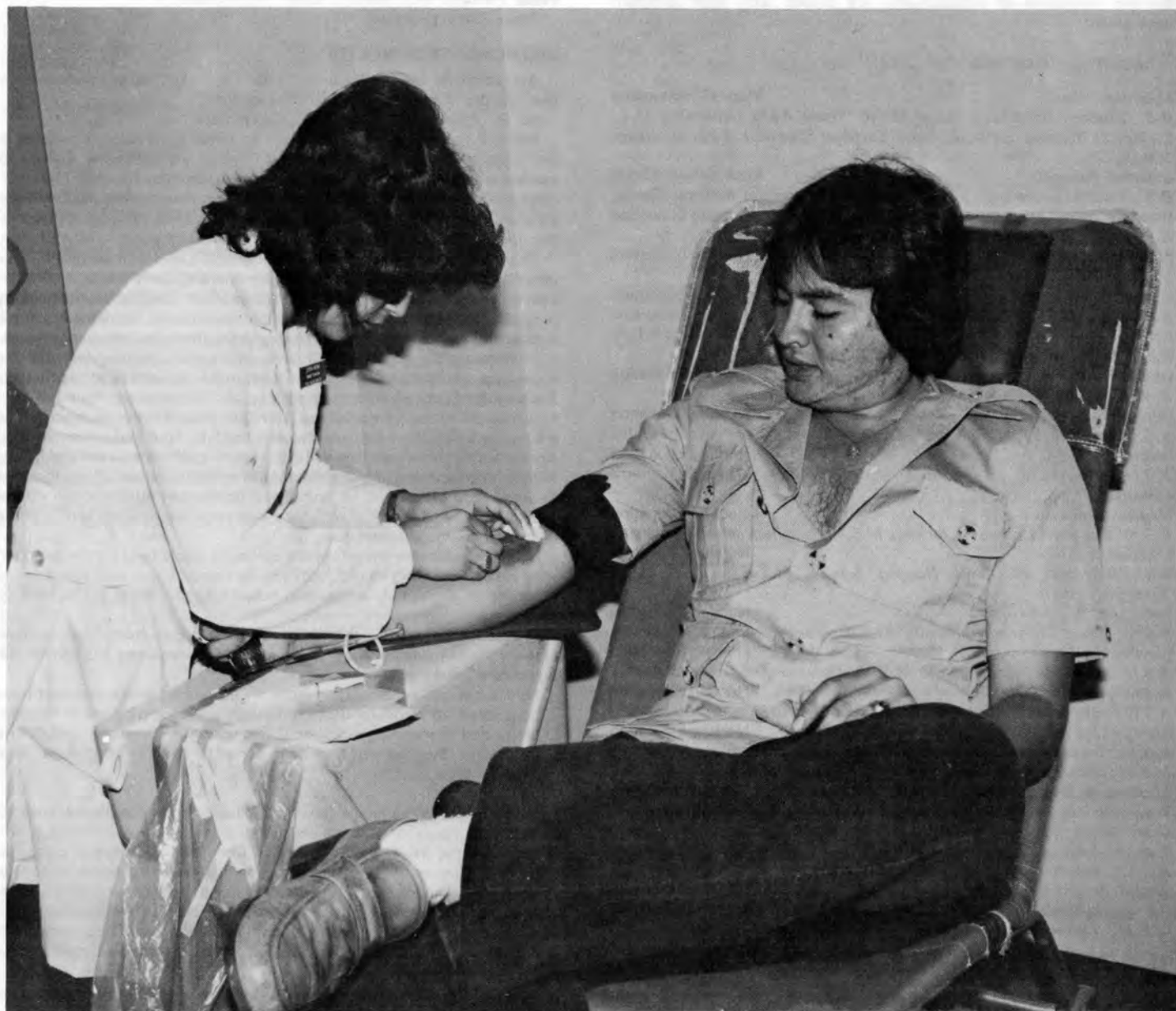
¹May be excepted for transfer students

²Physics 1401, 1402 may be substituted until 1985

³Upper level course in Immunology may be substituted for Biol 3403

⁴May attend an accredited Hospital-based MT program

⁵Second part of Organic (Chem 3402) may be substituted for Chem 3403



Department of Nursing Education

Jan Maville, Acting Head

The Nursing Department of Pan American University is a two-year Associate Degree Nursing Program. The Nursing Program is fully accredited by the State of Texas and the National League of Nursing.

Persons applying for admission to the program must meet Admission requirements set by the University as well as Admission requirements and criteria established by the Nursing Department.

The Department of Nursing Education offers an Associate of Applied Science Degree in Nursing. After successfully completing the two-year program, the graduate is eligible to make application to the State Board of Nurse Examiners to write the State Board Examination. After successfully completing the Board examinations the graduate is issued a license to practice as a registered nurse (RN) in the State of Texas.

Purpose:

The primary purpose of the Associate Degree Nursing Program is to prepare candidates to assume responsible roles as members of a health care team in the Rio Grande Valley of Texas. The basic belief on which the program is based is that adequate health care should be available to all who need it.

This ADN program is specifically designed to provide initial levels of skills, knowledges, 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 successfully embark on the lifelong process of becoming a nurse.

TERMINAL OBJECTIVES:

A graduate of the Pan American University ADN Program will:

1. Collaborate with a health care team in providing direct nursing care to the individual as a member of a family in a consistently safe, affective and effective manner.
2. Demonstrate the use of the nursing process in individualizing nursing care for patients with commonly recurring system alterations by:
 - a. Assessing the needs of the individual through use of a knowledge base, purposeful communications, observational skills, and documentation.
 - b. Planning a course of action derived from the nursing diagnosis to assist the individual to learn, to prevent illness, to maintain, and/or regain his optimum state of health or to cope with death and dying.
 - c. Implementing nursing care, to assist the individual to meet identified needs.
 - d. Evaluating the individual's response, modifying the plan if necessary and documenting changes.
3. Manage auxiliary nursing personnel to provide optimum individualized nursing care.
4. Demonstrate awareness of self limitations in knowledge and skills by functioning within the boundaries of professional ethics, patient rights, and legal statutes.
5. Advance nursing by expanding knowledge base, participating in professional and community affairs, and analyzing health trends through formal and informal education.

REQUIREMENTS FOR ADMISSION:

The Admission Committee for the Department of Nursing Education will evaluate each application. The following should be completed by March 30 in order for a student to be given priority consideration for Fall Admission.

1. Meet the requirements for admission to Pan American University.
2. Meet criteria for admission to the Nursing Department.
3. Be tested in Reading skills.

In order to enroll in N Ed 1701, Students need to:

1. Be accepted into the Nursing Program.
2. Pass HRP 1301, and Biology 1401 and Biology 1402 (with a grade of "C" or above).
3. Complete Math 1300 if required.

4. Make arrangements for uniforms and nursing student liability insurance through the Department of Nursing.

Readmission into the nursing program is not automatic. Each applicant is considered by the student development committee who may recommend additional studies. Complete information regarding readmission can be found in the current student handbook available in the Nursing Department.

REQUIREMENTS FOR THE ASSOCIATE OF APPLIED SCIENCE DEGREE IN NURSING EDUCATION:

1. Satisfactory completion of the required curriculum within a four (4) year period.
2. A minimum grade of "C" in each required course.
3. A Degree Plan approved by the Head of the Nursing Department must be on file.
4. An acceptable Application for Degree must be filed by the student with the Registrar on or before the date specified in the University calendar.
5. Satisfactory completion of comprehensive testing in the five major areas of nursing prior to graduation.

DEGREE PLAN FOR ASSOCIATE DEGREE NURSING PROGRAM

The minimum grade of "C" is required for each course.

<i>Curriculum</i>	<i>Semester Hours:</i>
Prerequisite courses: HRP 1302, Intro to Patient Care.....	3
Biol 1401, General Biol.....	4
Biol 1402, General Biol.....	4
Math 1300, General Math ⁷	0 or 3
<i>Freshman Year</i>	
<i>Fall Semester:</i>	
N Ed 1701, Fund of Nursing.....	7
Biol 2403, Anatomy & Physiology	4
Psy 1313, Intro to Psy	3
<i>Spring Semester:</i>	
N Ed 1802, Medical-Surgical Nursing I.....	8
Eng 1301, Composition	3
Psy 2337, Psychology of Life Span.....	3
<i>Summer Session I:</i>	
N Ed 2403, Medical-Surgical Nursing II.....	4
Soc 1313, Introduction to Sociology	3
<i>Summer Session II:</i>	
N Ed 2404, Medical-Surgical Nursing III.....	4
HRP 2351, Introduction to Nutrition.....	3
<i>Sophomore Year</i>	
<i>Fall Semester:</i>	
N Ed 2805, Family Health Nursing.....	8
Eng 1302, Rhetoric	3
<i>Spring Semester:</i>	
N Ed 2906, Psycho-Social Nursing	9
TOTAL HOURS.....	73 or 76

⁷Not required if student has a college level math course or scores 70% or above on the University Math Placement Test

Bachelor of Science in Nursing

The Department of Nursing Education will offer a Bachelor of Science in Nursing Education beginning Fall Semester 1982. This degree is one that is balanced between the sciences, liberal arts/humanities and the major Nursing. Students are referred to the University bulletin for general requirements for graduation. Criteria for admission to the BSN Program at Pan American University are as follows:

1. The applicant must be a Registered Nurse in the state of Texas.
2. The applicant must hold Junior level status.
3. The applicant must provide two positive letters of recommendations from health professionals, one of which must be a registered nurse.
4. A student must have and maintain a 2.00 grade point average each semester.
5. The applicant must have at least \$100,000 in Liability insurance prior to entering the first clinical nursing course.

6. The applicant must show evidence of no active pulmonary disease prior to entry into the first clinical nursing course.

Students should consult the Nursing Education Department for specific curricular, admissions and graduation requirements.



School of Education

Dr. Jerry L. Pulley, *Acting Dean*

The School of Education includes the Department of Curriculum Instruction — Elementary, Department of Curriculum Instruction — Secondary, Department of Health, Physical Education and Recreation. The Department of School Management and the Department of School Services.

The School offers a Bachelor of Science degree in Elementary Education, Secondary Education, Physical Education, and Health Education.

Students are encouraged to have degree plans made early in their program.

For specific degree requirements and suggested curricula see the departmental areas.

CERTIFICATE REQUIREMENTS FOR TEACHERS

Teachers in Texas elementary and secondary schools are required by law to hold a valid Texas teacher's certificate for the grade level, specialization area, or position to which they are assigned.

Prospective secondary school teachers are required to have 24 hours of credit in each of two teaching fields. Prospective elementary majors must have a second field with 18 to 24 hours credit. The Head of the Department of specialization or the Heads of the Departments of Curriculum and Instruction—Elementary or Curriculum and Instruction—Secondary Education should be consulted for specific course requirements. Please note that Ed 2100 is a prerequisite to all teacher education courses.

THE TEACHER EDUCATION COMMITTEE

The committee is made up of faculty members from the School of Education and from each department of the other Schools of the University.

To be recommended for certification to teach in the State of Texas, students completing their work at Pan American University will be evaluated and approved by the Teacher Education Committee. The Teacher Education Committee not only formulates policies for the admission of students to the teacher education program, but also approves course offerings in the various teaching fields and the professional preparation for certification.

Application for admission to the Teacher Education Program must be filed with the student's department head or the Teacher Education Committee, in accordance with the following provisions:

1. No student shall make application before having reached junior status. Students planning to complete their teacher certification requirements here should apply as soon as possible after they reach junior status.
2. Transfer students must delay application until successful completion of one regular semester at Pan American University.
3. Applications must be filed at the time of any regular registration period subject to provisions 1 and 2 above.
4. A student deciding late in his college career to pursue a program of teacher preparation should observe whichever of provisions 1, 2, and 3 above applies.
5. Effective the Summer 1984, students wishing to enter the teacher preparation program must successfully complete a general competency examination. (The first administration of the examination will be during the spring semester of 1984.)

The Teacher Education Committee will review the candidate's application, including his transcript of college work completed and the recommendations of the department head of his major and minor fields, and inform him to the effect that he (a) has *Clear Admission*, (b) has *conditional admittance* with, the conditions being set forth explicitly, or (c) has been *denied admission*. *Final approval will be given when the student has been accepted to do his directed 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 fields.

A student admitted on a conditional basis may proceed with a teacher preparation program but must meet the following requirements before he can receive final approval:

1. Must be approved for the directed teaching program.
2. Must have an overall 2.00 average in his college work.
3. Must have at least a 2.25 average in both major and minor fields.
4. Must have approval from the education division and from the department head of his major and/or minor fields and the appropriate Education Department. Check the university catalog for directed teaching requirements.

Denial of a request for admission does not necessarily constitute a final judgment. It merely means that the student does not appear to show sufficient promise of success as a teacher to justify his continued efforts in that direction. Should the applicant wish to pursue a course of teacher preparation in spite of such a repudiation, he may, after completion of an additional fifteen semester hours of study at Pan American University, file a second application, at which time he will be obliged to appear personally before the Teacher Education Committee.

Students graduating without following the approved program for their teaching fields must meet all these requirements, in addition to getting the required number of years of teaching experience, before being recommended by Pan American University to receive a Texas certificate.

Students working on a removal of deficiency program toward certification must also have a 2.00 average in all college work and a 2.25 average in the major and minor fields before being recommended by Pan American University for a Texas certificate.

THE PAN AMERICAN UNIVERSITY LOCAL COOPERATIVE TEACHER CENTER ADVISORY BOARD

This council is made up of college personnel and members of the faculties of the public schools in the area. The purpose of the council is to advise the School of Education and the Teacher Education Committee regarding admission requirements, course offerings, new programs, and student teaching.

Dr. Ana Rodriguez, Chairperson

Pan American University

Mr. Lauro Guerra, Director

Region I ESC

Mrs. Roger Larson, Teacher

McAllen ISD

Dr. Rodney Cathey, Superintendent

McAllen ISD

Mr. Esteban Garcia, Teacher

PSJA

Dr. Jerry L. Pulley, Acting Dean, School of Education

Pan American University

Dr. Nolan Wood, Director of Student Teaching

Pan American University

Mr. A. N. Rico, Superintendent

Weslaco ISD

Mr. Jerry Jacobs, Superintendent

Raymondville ISD

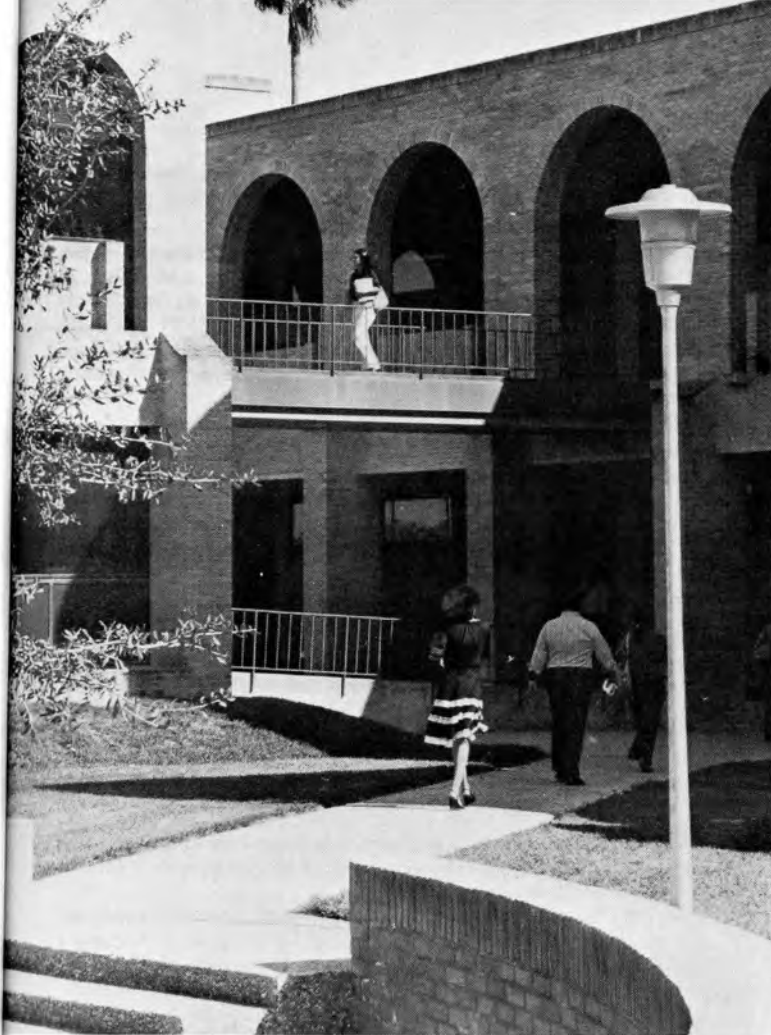
Academic Instructional Staff*

Alvarado, Victor*	School Services
M.S., Pontificia Universidad Catolicu de Chile; M.S., Ed.Sp., Ed.D., Western Michigan University	
Black, W. Darrel*	Physical Education
B.S., Iowa State Teachers College; M.S., Ph.D., Indiana University	
Brooks, James A.	Physical Education
B.S., Middle Tennessee State College; M.A., University of Kentucky.	
Burns, Jo Ann	School Services
B.S., Oklahoma State University; M.Ed., Ph.D., University of Oklahoma.	
Cannady, Alvin R.*	School Management
M.S., Oklahoma State University; and Ed.D., Texas Tech University.	
Carlan, Carl*	School Management
B.A., San Francisco State University; M.A., San Francisco State University; Ed.D., University of California at Berkeley.	
Carlson, Ralph*	School Services
B.A., Drake University; M.A., University of Houston; Ph.D., University of Houston.	
Corona, Eva	School Services
B.A., M.Ed., Pan American University	
Cunningham, Fred J.*	School Management
B.S., Oklahoma City University; M.Ed., Ed.D., Texas Tech University.	

Davis, Virginia L. B.S., <i>Drake University</i> ; M.A., <i>State University of Iowa</i> .	Elementary Education	Perez, Ricardo* B.S., <i>North Texas State University</i> ; M.Ed., <i>Southeast Oklahoma State</i> ; Ph.D., <i>University of Michigan</i> .	School Services
Dowell, Nancy B.S., M.Ed., <i>East Texas State University</i> .	Elementary Education	Phillips, Phyllis* B.A., <i>Southern State Teachers College</i> ; M.A., <i>George Peabody College</i> ; Ed.D., <i>Colorado State College of Education</i> .	Secondary Education
Esparaza, Esther B.A., M.S., <i>Texas Arts and Industries University</i> .	Elementary Education	Pulley, Jerry* B.S., <i>Central Missouri State</i> ; M.Ed., <i>Central Missouri State</i> ; Ed.D., <i>University of Missouri-Columbia</i> .	School Management
Esparaza, Thomas B.A., M.S., <i>Texas Arts and Industries University</i> .	Physical Education	Rabke, Mary Lee* B.S., <i>University of Texas</i> ; M.S., <i>University of Southern California</i> ; Ph.D., <i>Texas Woman's University</i> .	Physical Education
Frazier, Irene J.* B.B.A., <i>University of Michigan</i> ; M.A., <i>University of Denver</i> ; Ed.D., <i>University of Northern Colorado</i> .	Elementary Education	Reeve, Robert* B.S., <i>Maryville College</i> ; M.S., <i>Lehigh University</i> ; Ph.D., <i>Florida State University</i> .	Secondary Education
Garza, George* B.A., M.A., <i>Southwest Texas State University</i> ; Ph.D., <i>University of Texas</i> .	School Management	Reeves, B. E.* B.S., <i>Midwestern University</i> ; M.Ed., Ed.D., <i>Texas Tech</i> .	School Management
Gonzalez, George* B.A., <i>Pan American College</i> ; M.Ed., <i>University of Texas</i> ; Ph.D., <i>University of New Mexico</i> .	School Services	Rodriguez, Ana Maria* B.S., <i>Texas A&I</i> ; M.Ed., <i>Pan American University</i> ; Ed.D., <i>University of Houston</i> .	School Services
Gratz, Elizabeth* B.S., <i>Shippensburg State College, PA</i> ; M.Ed., <i>The University of Houston</i> ; Ph.D., <i>The University of Iowa</i> .	Secondary Education	Semper, Thomas* B.S.E., M.S.E., <i>Arkansas State University</i> ; Ph.D., <i>Texas Agricultural and Mechanical University</i> .	Physical Education
Guerrero, Oton, Jr. B.S., <i>Texas Agricultural and Mechanical University</i> ; M.S., <i>Texas Arts and Industries University</i> .	Physical Education	Simmons, Thomas* B.A., <i>Pan American College</i> ; M.S., <i>Texas Arts and Industries University</i> ; Ph.D., <i>Texas A&M University</i> .	Secondary Education
Guinn, Robert* B.S., <i>Angelo State University</i> ; M.Ed., <i>Pan American University</i> ; Ph.D., <i>Texas Agricultural & Mechanical University</i> .	Health & Physical Education	Smith, George W.* B.S., M.Ed.; Ed.D., <i>Texas Tech University</i> .	School Services
Harris, Jack* B.A., <i>Baylor University</i> ; M.Ed., <i>North Texas State University</i> ; Ed.D., <i>University of Houston</i> .	School Services	Smither, Nancy B.A., <i>University of Tulsa</i> ; M.A., <i>University of Tulsa</i> .	School Services
Hawkins, Jeanette B.S., M.Ed., <i>West Texas State University</i> .	Physical Education	Solis, Juan S. B.A., <i>University of Texas</i> ; M.A., <i>Texas Arts and Industries University</i> ; Ed.D., <i>University of Houston</i> .	Elementary Education
Infante, Irma B.A., M.Ed., <i>Pan American University</i> .	School Services	Sturdivant, Diane B.A., <i>University of Tulsa</i> ; M.S., <i>Kansas State Teacher's College</i> .	Physical Education
Jorgensen, Layne* B.S., M.A., <i>East Carolina University</i> ; Ph.D., <i>Louisiana State University</i> .	Physical Education	Taylor, Thomasine* B.A., <i>Pan American University</i> ; M.A., Ph.D., <i>University of Texas</i> .	Elementary Education
Linskey, Arthur Owen* B.A., <i>St. Mary's University</i> ; M.A., <i>University of Notre Dame</i> ; Ph.D., <i>University of North Carolina</i> .	School Services	Tevis, Martha M.* B.A., M.A., <i>Our Lady of the Lake</i> ; Ph.D., <i>University of Texas at Austin</i> .	Secondary Education
McBride, John* B.S., M.Ed., <i>Brigham Young University</i> ; Ed.D., <i>University of Houston</i> .	Elementary Education	Thomas, Amilda* B.S., M.A., <i>Texas State College for Woman</i> ; Ph.D., <i>Texas Woman's University</i> .	Physical Education
Moore, John L.* B.S., <i>University of Tennessee</i> ; M.Ed., <i>Utah State University</i> ; Ed.D., <i>George Peabody College</i> .	Elementary Education	Tolar, Roger* B.S., M.Ed., Ph.D., <i>University of Texas</i> .	Elementary Education
Morse, Kevin B.S., M.S., <i>Oregon College of Education</i> ; Ph.D., <i>University of Texas at Austin</i> .	Elementary Education	Walther, Kay P. B.J., M.Ed., Ph.D., <i>University of Texas at Austin</i> .	Elementary Education
Muniz, Amadita B.S., <i>Southwest Texas University</i> ; M.Ed., <i>Pan American University</i> ; Ed.D., <i>East Texas State University</i> .	Elementary Education	Willeford, Janice B.A., M.Ed., <i>Pan American University</i> .	Secondary Education
Nichols, J. C.* B.S., <i>Texas Wesleyan</i> ; M.Ed., <i>Texas A & I University</i> ; Ed.D., <i>University of Texas at Austin</i> .	Secondary Education	Williams, Sam B.S., <i>Texas Christian University</i> ; M.S., <i>North Texas State College</i> .	Physical Education
Ogletree, Alfred H. B.S., M.Ed., <i>Texas Agricultural and Mechanical University</i> .	Physical Education	Wood, Nolan E., Jr.* B.A., <i>Baylor University</i> ; M.Ed., <i>North Texas State University</i> ; Ed.D., <i>University of Houston</i> .	School Services
Parkinson, Charles* B.A., <i>Evansville College</i> ; M.S., P.E.D., <i>Indiana University</i> .	Physical Education		
Perez, Eustolia B.A., <i>Pan American University</i> ; M.S., <i>Texas College of Arts and Industries</i> .	School Services		

*As of preparation date.

*On Graduate Faculty.



Department of Curriculum and Instruction — Elementary

Dr. Elizabeth W. Gratz, *Acting Head*

The Department of Curriculum and Instruction — Elementary offers a major in Elementary Education, a minor in teaching reading, and a kindergarten specialty.

Satisfactory completion of a degree with a major in Elementary Education leads to a provisional elementary teaching certificate.

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.

Specialized endorsements to the provisional elementary certificate are offered for teaching kindergarten and for early childhood teachers of exceptional children. A specialization in the teaching of reading is also offered.

The elementary teacher education program includes opportunities for working with children in the public schools. Through the Department's Teacher Centers, relevant and practical field experiences are provided for learning.

Many career opportunities are open to students who major in Elementary Education and who attain any one of the specialized endorsements. Since many of the challenging opportunities in the education profession require advanced study and professional certification beyond the Bachelor's Degree, the department offers the Master of Education Degree in Elementary Education and in Reading.

General Education Requirements for a Bachelor of Science Degree in Elementary Education:

English 1301, 1302 or 1387, 1388 or 1406, 1302.....	6-7 hours
Sophomore Literature.....	6 hours
Foreign Language (Spanish recommended).....	6 hours
Government 2313, 2314 or 2387, 2388.....	6 hours
History 2313 or 2333, 2314 or 2387, 2388.....	6 hours
Mathematics 2306, 2307.....	6 hours
P.E. Activities.....	4 hours
Lab Science.....	6 hours
Electives.....	12 hours

TOTAL.....58-59 hours

DEGREE REQUIREMENTS

Major in Elementary Education and Elementary Certificate:

Ed 2100 is a prerequisite for all 3000 & 4000 level Education courses. (Professional Development and Elementary Content Courses to qualify for the provisional (life) certificate.)

36 hours, 27 advanced semester hours in Elementary Education; must include Ed 1201, 3302, 3311, 3323, 3325, 3328, 4611(or 4311 and 4312 for the Kindergarten endorsement); 6 semester hours from Ed 3301, 3303, 3305, 3312; 3-6 semester hours from Ed 3313, 3321, 3326, 3327, 4392; or a choice of 3 semester hours from Ed 3322, 3324, 3329.

Minor for Elementary Educational Majors:

Elementary Plan I and Plan II, Areas of Specialization: Art, Biology, Bilingual/Bicultural Studies, Chemistry, Drama, Earth Science, Elementary Mathematics Education, English, French, Generic Education, Government, Health and Physical Education, History, Mathematics, Physical Science, Physics, Psychology, Sociology, Spanish, Speech; in addition Music Education Elementary Plan II and Reading Plan I. (See minor field departmental Area Elementary Plan I or Plan II for certification requirements.)

Elementary Plan I: 18 semester hours in one subject, of which nine semester hours must be advanced. These may include courses in general education.

Related Area: 18 semester hours from Art 3381, 3382, Ed 4392; Geog 2301, 2313; Mus 3311, 3312; P E 3356, 3357; H E 2352; Comm 3317, 3308, 4305. (6 semester hours may be taken from Psy 1313; Eco 1301; Soc 2313, 4324; Anth 1323, 2344, 2353)

Elementary Plan II: 24 semester hours in one subject of which 12 semester hours must be advanced. These may include courses in general education.

Related Area: 12 semester hours from Art 3381, 3382, Ed 4392; Mus 3311, 3312; P E 3356, 3357, H E 2352, Comm 3317; Comm 3308,

4305, Geog 2301, 2313. (3 semester hours may be taken from Pay 1313; Eco. 1301; Soc. 1313, 4324; Anth. 1323, 2353 or 2344). **Minor in Reading, Reading Specialization:**

The teaching of reading minor (Plan I) for Elementary Education majors must include: ED 3314, 3316, 3329, 4367, 4368, and 4369. In addition, the following supporting courses are offered as part of the regular Elementary Education curriculum: Ed 3313 and 3321. For those students who minor in reading, the Texas Education Agency indicates reading as an area of specialization on the Elementary Teaching Certificate.

Early Childhood Education Program for Exceptional Children Endorsement

The endorsement of the Early Childhood Education Program for Exceptional Children shall require 12 semester hours of senior level courses. The program requires the following courses in recommended sequence: Ed 4390, Ed 4371, Ed 4372, Ed 4391. The program must be completed with a minimum 2.25 GPA.

Kindergarten Endorsement:

For individuals who are seeking a baccalaureate degree and an Elementary Certificate with Kindergarten endorsement.

To qualify for the Kindergarten Endorsement, a student shall be required to complete 15 advanced semester hours, three of which are to be student teaching at the kindergarten level(Ed 4312). The remaining 12 hours are: Ed 4390, Ed 4391, Ed 4392, and either Ed 4393 or 4314. Ed 4391 must be completed prior to enrolling in Ed 4312. The student must have a minimum GPA of 2.25 in the 15 hours required.

For individuals who possess a baccalaureate degree and an Elementary Certificate and desire a Kindergarten endorsement.

To qualify for a Kindergarten endorsement, a student will be required to complete 15 advanced hours in Kindergarten education with a GPA of 2.25. Two options are available:

Option I: The student may complete the following 15 graduate hours to apply as a part of the Professional Development component toward a Master's Degree in Elementary Education: Ed 5390 or 6390, 5391, 5392, 5393, 5314.

Option II: The student may complete the following 15 advanced undergraduate hours: Ed 4390, 4391, 4392, 4393 and 4314.

In addition, under either of the above options, in order for the individual to receive a Kindergarten endorsement, the Superintendent of Schools in the district where the teacher is employed must certify to the Texas Education Agency that the teacher has taught full time for one year in an accredited Kindergarten classroom.

Minor in Generic Special Education:

The student must meet the requirements for provisional elementary or secondary certificate. Twenty-four additional hours are required as follows: Ed 1305, 2304, 4301, 4302, 4303, 4304, 4371, 4372.

Directed Teaching (Elementary)

The Department of Curriculum and Instruction-Elementary has the following requirements for students entering Directed Teaching:

Clear Admission

1. English 1301 and 1302 completed with a minimum of "C" in each course.
2. Have completed at least 3/4 semester hours in major with a 2.25 grade point average.
3. Have completed at least 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 3/4 of the semester hours in the minor.
4. The General Education requirements must be completed. (If no more that 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 3302, 3311, 3323, 3325, and 3328.
7. Satisfactory completion of Ed 4391 for Kindergarten student teaching.

An applicant may be deficient in any one of the areas 2, 3, 4 or 5 above and still be allowed to student teach.

SUGGESTED CURRICULUM

Elementary Education Major

Freshman Year
Eng 1301, 1302
Math 6 hours

Sophomore Year
Eng (Soph Lit) 6 hours
Govt 2313, 2314

For Lang 6 hours
 Hist 2313, 2314
 P.E. Activities 2 hours
 E.D 1201

Lab Sci 6 hours
 P.E. Activities 2 hours
 Minor 6-9 hours¹
 Related areas 6-9 hours²
 Ed 2100

Junior Year
 Ed 3302, 3311
 Professional area 6 hours³
 Related areas 6-9 hours⁴
 Minor 6-9 hours¹
 Electives 6 hours

Senior Year
 Content area 9 hours
 Ed 4611
 Related areas 6-9 hours¹
 Minor 6-9 hours¹
 Electives 6 hours

¹Consult minor field for course requirements. Elementary Plan I or II. A minimum of 9 adv. hours must be included in Plan I and 12 adv. hours in Plan II.

²Required 9 hours — Ed 3323, 3325 and 3328. The remaining 6 hours must be from Ed 3313, 3321, 3326, 3327.

³The remaining 6 professional hours must be from Ed 3301, 3303, 3305 or 3312.

⁴EL Plan I calls for 18 hours in related courses. EL Plan II calls for 12 hours in related courses (Refer to minor for EL Ed Majors).



*See Core Course Requirements

Department of Curriculum and Instruction — Secondary

Dr. Thomas E. Simmons, *Head*

The Department of Curriculum and Instruction—Secondary offers professional education coursework leading to a Bachelor of Science degree with a major in Secondary Education and secondary school certification in two teaching fields. It also offers professional education coursework leading to secondary school certification for those students who choose to earn a Bachelors degree offered by other schools of the university and who plan to teach in secondary schools.

The Department of Curriculum and Instruction — Secondary requires a four-year clinical course of study for those students choosing to obtain teacher certification through completion of the Secondary Education Degree. Professional Centers located in local valley secondary schools (teacher-centers) presently provide laboratory facilities for student teachers and teacher trainees.

GENERAL EDUCATION REQUIREMENTS

General Education Requirements for the Bachelor of Science Degree (24 hours in Secondary Education, 30 hours in Major Teaching Field and 24 hours in Minor Teaching Field) in Secondary Education:

English 1301, 1302 or 1387, 1388 or 1406, 1302.....	6-7 hours
Sophomore Literature.....	6 hours
*Mathematics, 6 hrs. of one Foreign Language, or Lab Science.....	12-14 hours
History 2313 or 2333, 2314 or 2387, 2388.....	6 hours
Government 2313, 2314 or 2387, 2388.....	6 hours
P.E. Activities.....	4 hours
Electives.....	12 hours

TOTAL.....52-55 hours

DEGREE REQUIREMENTS

The prospective secondary teacher has two options available in preparing to teach in secondary schools: Option A offers a bachelor's degree (B.A., B.S., B.F.A., or B.B.A.) with appropriate secondary certification in two teaching fields, and Option B offers a Bachelor of Science in Secondary Education degree with a major in Secondary Education and appropriate secondary certification in two teaching fields. Broad field certification in Business Education, Music Education, Composite Science, and Social Studies is available in both options.

Option A requires Ed 2100 and the following advanced Secondary Education courses: Ed S 3301, 3302, 3307, 4641 or 4398 and Ed 4313, and 3 semester hours from Ed S 3303, 3305, 4318, 4351 and 4353.

Option B requires Ed 2100, Ed S 1301, 2301 and the following advanced Secondary Education courses: Ed S 3301, 3302, 3307, 4641 or 4398 and Ed 4313, and 3 semester hours from Ed S 3303, 3305, 4318, 4351 and 4353.

Note: Ed S 3301, 3302, and 3307 are required to be completed before Directed Teaching. Also, a student may not take more than 6 semester hours of additional course work during the semester in which Directed Teaching is taken.

Secondary Plan I(two teaching fields required)

First Teaching Field (minor): Art Education, Biology, Business Education, Chemistry, Drama, English, English-Language Arts, Government, Health Education, History, Mathematics, Music, Physical Education, Physics, Psychology, Sociology, Spanish and Speech.

Second Teaching Field(minor) (24 hours): Art Education, Biology, Business Education, Chemistry, Computer Science, Drama, English, English-Language Arts, French, Generic Special Education,¹Government, Health Education, History, Mathematics, Music, Physical Education, Physics, Psychology, Sociology, Spanish, and Speech.

¹Special Education: Generic The student must meet the requirements for provisional elementary or secondary certificate. Twenty-four additional hours are required as follows: ED 1305, 2304, 4301, 4302, 4303, 4309, 4371, 4372.

Secondary Plan II

*Broadfield Major:*Music Education, Social Studies, Second teaching field (minor) is not required. Consult the major field department for the major and certification requirements. For the B.S. in Secondary Education the Department of Curriculum and Instruction-Secondary is the major field

department. Note: A composite Science Certification program is available, also.

All-Level Certification

Art, Physical Education, and Music. Physical Education all-level requires a second teaching field of 24 hours; however, a second teaching field is not required for Art and Music all-level. Education courses for all-level: Ed 3302; Ed 3311 or Ed 3312; Ed S 3302 or Ed S 3305; Ed S 3307; Ed 4311, Ed S 4398.

Both fields (Secondary Plan I, Secondary Plan II, and All-level) may include courses in General Education, except for P.E. activity courses.

Teaching Endorsement for Teaching Mentally Retarded:

The student must meet the requirements for the provisional elementary or secondary certificate. Twelve additional hours are required: Ed 4371, Ed 4372, Ed 4373, and Ed 4374.

Teaching Endorsement for Language/Learning Disabilities:

The student must meet the requirements for the provisional elementary or secondary certificate. Fifteen additional hours are required: Psy 4318, Ed 4301 or Ed 4302, Ed 4303, Ed 4372, and Ed 4378 and a G.P.A. of 2.25 or better.

DIRECTED TEACHING (SECONDARY)

Directed teaching is a critically important component in the process of becoming a professional teacher. Directed teaching is required by the

Texas Education Agency. Directed teaching is provided as a service of the Department of Curriculum and Instruction — Secondary and is considered to be essential in the preparation of competent teachers.

The Department of Curriculum and Instruction — Secondary requires that students entering Directed Teaching:

1. Have senior standing.
2. Have completed all required courses in the General Education sequence.
3. Have at least a 2.00 Grade Point Average in all university courses.
4. Have completed at least 3/4 semester hours in major with a 2.25 grade point average.
5. Have completed at least 1/2 semester hours in minor with a 2.25 grade point average.
6. Have completed required freshman English courses with at least a C in each course.
7. Have completed at least 18 semester hours in the assigned teaching field(s) and 12 semester hours of professional secondary education, 3 hours of which must be Ed S 3307.
8. Have completed additional requirements as specified by the department of your major field.



**SUGGESTED SEQUENCE OF COURSES
FOR B.S. DEGREE IN SECONDARY EDUCATION**

Freshman Year

<i>1st Semester</i>		<i>2nd Semester</i>	
Eng. 1301	3	Eng. 1302	3
**Math.,		**Math.,	
Lab. Sc. or For. Lang.	3 or 4	Lab. Sc. or For. Lang.	3 or 4
Hist. 2313 or 2333	3	Hist. 2314	3
P.E. Activities	2	P.E. Activities	2
Ed S 1301	3	Electives (free)	6
Electives (free)	3		
	18 or 19		18 or 19

Sophomore Year

<i>1st Semester</i>		<i>2nd Semester</i>	
Soph. Eng. Lit.	3	Soph. Eng. Lit.	3
Govt. 2313	3	Govt. 2314	3
**Math., Lab. Sc. or		**Math., Lab. Sc. or	
For. Lang.	3 or 4	For. Lang.	3 or 4
Ed S 2301	3	Teaching Field-first ¹	3
Teaching Field-first ¹	3	Teaching Field-second ²	3
	15 or 16		15 or 16

Junior Year

<i>1st Semester</i>		<i>2nd Semester</i>	
Ed S 3301	3	Ed S 3303 or 3305 or 4318.	

Ed S 3302	3	or 4351 or 4353	3
Teaching Field-first ¹	6		
Teaching Field-second ²	6	Teaching Field-first ¹	6
		Teaching Field-second ²	3
	18		18

Senior Year

<i>1st Semester</i>		<i>2nd Semester</i>	
Ed S 3307	3	Ed S 4641	6
Teaching Field-first ¹	6	Teaching Field-first ¹	3
Teaching Field-second ²	6	Teaching Field-second ²	3
	15		12
		Total: ³ 129 or 133 Semester Hours	

**A total of 12 hours from two fields (Laboratory Science, Math, or Foreign Language) is required. See Core Course requirements.

¹If the first field is one of the general education areas, the general education hours will count toward the 30 hours required for the first.

²If the second field is one of the general areas, the general education hours will count toward the 24 hours required for the second.

³The total number of hours required for the degree will be determined by the choice of major and/or minor teaching fields



Required for Degree		Required for Degree and Certification		
Ed S 1301 — Clinical Introduction to Secondary Education (Field Experience)	Ed S 2301 — Introduction to the Teaching-Learning Process (Field Experience)	*Ed S 3301 — Instructional Technology (Prerequisite for Ed S 3307)	Ed S 3302 — Adolescent Behavior and the Learning Process (Prerequisite for Ed S 3302)	Ed S 3307 — A Clinical and a Systematic Approach to Teaching and Learning (Field Experience)

Required for Degree and Certification

Ed S 4641—Directed Teaching - Secondary
or
Ed S 4398—Directed Teaching - Secondary II and
Ed S 4313—Directed Teaching - Generic Special Education

Three Hours Will Count Toward Degree and Certification

*Ed S 3303 — Education: Past and Present
Ed S 3305—Evaluation for Secondary Teachers
*Ed S 4318—Problems Seminar for Secondary Teachers
Ed S 4351 — Developmental Reading in — Secondary Schools
Ed S 4353—Secondary School Methods - Teaching the Disadvantaged Learner

Total

24 sem. hrs. for B.S. Degree in Secondary Ed.
18 sem. hrs. for secondary certification only

*Ed S 3301, 3303, and 4318 will be dual listed with Ed. 3301, 3303, and 4318.

Note: a student may take no more than 6 semester hours of additional course work during the professional semester in which he takes Directed Teaching. The course work must be taken after 4.00 p.m.



Department of Health, Physical Education and Recreation

Dr. Amilda Thomas, *Acting Head*

The Department of Health, Physical Education and Recreation offers a Bachelor of Science degree with majors in Physical Education, Health Education and Recreation Administration. The Department offers minors in Physical Education and Health Education. The Recreation Administration major is a non-teaching degree.

The general education requirements for all University students is four semester hours of credit in physical education activity courses. This requirement is met during the freshman and sophomore years. Additional physical education activity courses may be used to satisfy the 12 semester hours of free electives.

Physical Education majors and minors are required to have credit in eight physical education activity courses. Physical education activity courses are not counted toward a major or minor in Physical Education.

A minimum of 12 semester hours of professional Physical Education or Health Education must be taken on the Pan American University campus.

The department offers a major in Physical Education at the Master's Degree level.

General Education Requirements for Bachelor of Science Degrees in Physical Education, Health Education, Recreation Administration

English 1301, 1302, or 1387, 1388 or 1406, 1302.....	6-7 hours
Sophomore Literature.....	6 hours
Government 2313, 2314 or 2387, 2388.....	6 hours
History 2313 or 2333, 2314 or 2387, 2388.....	6 hours
Math 1335 or 1327 and 1328.....	3-6 hours
Biology 1401, 2403.....	8 hours
Mathematics or Foreign Language.....	6 hours
P.E. Activities.....	4 hours
Electives.....	12 hours
TOTAL.....	57-61 hours

PHYSICAL EDUCATION DEGREE REQUIREMENTS

Physical Education Majors and Minors are required to take Biology 1401 and 2403. It is recommended that the student, by the end of the sophomore year, possess both knowledge and skills in individual and team sports, dance, gymnastics and aquatics. Majors and minors must have credit in PE 1200, 1201 or 2226 or 2230, 2203, 2204, 2207, 2208, 2225, 2257. Any required activity course may be waived through a proficiency examination and another activity course substituted.

Major in Physical Education

30 semester hours in professional Physical Education of which fifteen semester hours must be advanced; must include PE 1351, 2354, 3312, 3319, 3353, 4351, 4354, 3 semester hours from 3300, 3302, 3303, 3310, or 3320 and six additional semester hours. PE 1200, 1201 or 2226 or 2230, 2203, 2204, 2207, 2208, 2225, and 2257 are required. Biology 1401 and 2403 are required.

Minor in Physical Education:

Non-Certification

18 semester hours in Physical Education of which six semester hours must be advanced.

Teacher Certification in Physical Education

Elementary Plan I: 18 semester hours in Physical Education, of which 12 semester hours must be advanced; must include PE 1351, 3313, 3317, 3356, 3357, 4351.

Elementary Plan II: 24 semester hours in Physical Education, of which 12 semester hours must be advanced; must include PE 1351, 3310, 3313, 3317, 3356, 3357, 4351 and three semester hours elective.

Secondary Plan I: 24 semester hours of Physical Education of which 12 semester hours must be advanced; PE 1351, 2354, 3312, 3319, 3353, 4351, 4354 and three semester hours elective. Includes Ed 2100, Ed S 3301 or 3303, 3302, 3305, 3307, 4641. Biology 1401 and 2403 are required.

All-Level: 27 semester hours of Physical Education, of which fifteen semester hours must be advanced; must include PE 1351, 2354, 3312, 3319, 3353, 3356, 3357, 4351, and 4354. Includes Ed 2100, Ed S 3301 or 3303, 3302, 3305, 3307, 4398. Ed 3302 or 3305, 3311, 4311. Biology 1401 and 2403 are required.

HEALTH EDUCATION DEGREE REQUIREMENTS

Major in Health Education

30 semester hours in Health Education of which 15 semester hours must be advanced; must include HE 1354, HE 4350 and 4352. Biology 1401 and 2403 are required.

Minor in Health Education: Non-Certification

18 semester hours in Health Education, of which 6 semester hours must be advanced.

Teacher Certification in Health Education

Elementary Plan I: 18 semester hours in Health Education of which 12 semester hours must be advanced; must include HE 1354, HE 2352, and 12 hours electives. Biology 1401 and 2403 are required.

Elementary Plan II: 24 semester hours in Health Education, of which 12 semester hours must be advanced; must include HE 1354, HE 2352, and 18 hours electives. Biology 1401 and 2403 are required.

Secondary Plan I: 24 semester hours in Health Education of which 12 semester hours must be advanced; HE 1354, HE 4350, and 4352. Must include 19 semester hours in Education: Ed 2100; Ed S 3301 or 3303, 3302, 3305, 3307, 4641. Biology 1401 and 2403 are required.

RECREATION ADMINISTRATION DEGREE REQUIREMENTS

Recreation majors are required to take Bio. 1401 and 2403. Majors must have credit in PE 1200, 1201, 1255, 2201, 2202, 2203, 2204, 2221, 2225, 2257, 2258, 2259.

Major in Recreation Administration

45 semester hours in Recreation and related areas. Rec. 1351, 2351, 3360, 4353, 4354, 4356, 4656; 9 semester hours from Art 2303, 2304, 2371 and 3303; 9 semester hours from Comm 3308, 4305, Music 3311, 3312; HE 1354.

Minor Area

Psychology — 18 semester hours. Psy. 1313, 1323, 2324, 2336, 4333, and 3 semester hours advanced electives in Psychology.

Athletic Coaching Specialization

Athletic Coaching is not a Texas Education Agency certification area. Any person holding a provisional certificate may be assigned a coaching assignment in the public schools of Texas. However, there are several states that do not have an official certification area in coaching. Primarily from the impetus provided by Title IX, which has caused the tremendous increase in athletic participation by women, there has become a tremendous demand for teachers to assist with the coaching of athletics in the public schools.

The Department of Health, Physical Education and Recreation has the primary responsibility of preparing teachers in the areas of Physical Education and Health Education. In an effort to meet the demand for more 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 Kinesiology
- PE 3352 Care and Prevention of Athletic Injuries
- PE 3353 Physiology of Exercise
- HE 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

MASTER OF EDUCATION DEGREEMajor
Health and Physical EducationCertificate
Professional**SPECIALIZATION AREA****(24 Hours)**
(12 Hours)**Required:**

- PE 6301 History and Philosophy of Health and Physical Education
 PE 6302 Methods of Research in Health and Physical Education
 PE 6303 Applied Tests and Measurements in Health and Physical Education
 PE 6304 Scientific Foundations of Health and Physical Education

Electives in Major Area:

(12 hours)

- PE 5313 Workshop in Physical Education
 PE 5351 Physical Education and Health Curriculum for the Handicapped Student
 PE 5355 2Supervision and Administration of the Health and Physical Education Program
 PE 5356 Organization and Administration of the School Health Program
 PE 5357 Health Education Seminar
 PE 6305 Curriculum Construction in Health and Physical Education
 PE 6306 Planning and Use of Facilities for Health and Physical Education and Athletics
 PE 6307 Psychology of Motor Learning
 PE 6308 Current Readings in Health and 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 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)****Electives:**

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.

TOTAL 36 Hours**Department of School Management**Dr. Alvin R. Cannady, *Acting Head*

The Department of School Management offers the Master of Education Degree in elementary and secondary 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 Management 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.

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: ELEMENTARY 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*
 Ed. 6334 *Curriculum Development — Problems & Procedures*

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 *Research Methods*
 Ed. 6367 *Statistical Methods*

RESOURCE AREA**(9 Hours)***Option 1 — Concentration in Elementary Education*

- Ed. 6311 *Advanced Child Psychology*
 Ed. 6332 *Research in Elementary Education*
 Ed. 6326 *Science in Elem. School Curriculum*
 Ed. 6327 *Social Studies in the Elem. School Curriculum*
 Ed. 6328 *Mathematics in the Elem. School Curriculum*

Option 2 — Bilingual/Bicultural Education

- Ed. 6322 *The Bilingual Child*
 Ed. 6324 *Second Language Teaching: Theory and Methodology*
 Ed. 6335 *Teaching Elem. School Subjects in Bilingual School*

Option 3 — Reading

- Ed. 6308 *Foundations of Reading Instruction*
 (Plus 6 hours with consent of advisor)

Option 4 — Early Childhood: 9 hours selected from:

- Ed. 5390 *Advanced Studies in the Development of Young Children*
 Ed. 5391 *Constructing Curriculum for Early Childhood Center*



- Ed. 5392 *Research and Development of Creative Activities for Young Children*
 Ed. 5393 *Advanced Studies of Cultural Diversity in Early Childhood Centers*
 Ed. 5314 *Practicum in Kindergarten Education*

Option 5 — Special Education:

- Ed. 5372 *Individual Differences*
 (Plus 6 hours with the consent of Advisor)

Option 6 — Concentration in a field of study outside of Education**Option 7 — Professional Development courses selected from:**

Combination of courses in concentration areas (Options 1-6) and/or the following:

- Ed. 6303 *Advanced Philosophy of Education*
 Ed. 6307 *Comparative Education*
 Ed. 6306 *Supervision of Student Teaching*
 Ed. 6363 *Personal Growth*
 Ed. 6349 *Counseling Procedures for Elem. Children*
 Ed. 6373 *Techniques and Methods for the Slow Learner*
 Ed. 5321 *Career Education*
 Ed. 6388 *Socio-Cultural Foundations in Education*
 Ed. 6336 *Problems in Education*

or other Professional Educational courses appropriate to student goals and program purposes — must have consent of major advisor.

TOTAL 39 Hours

**MAJOR: ELEMENTARY 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*
 Ed. 6334 *Curriculum Development — Problems and Process*

Theory and Practice of Instructional Leadership

- Ed. 6397 *Analysis of Teaching Behavior*
 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 Learning Theories*
 Psy 5318

RESEARCH TOOLS

(12 Hours)

- Ed. 6300 *Research Methods*
 Ed. 6367 *Statistical Methods*
 Ed. 7300 *Thesis (Problem Definition)*
 Ed. 7301 *Thesis Completion*

ELECTIVE

(3 Hours)

To be selected from graduate level courses in English, History, Biology, Math, Psychology, Sociology, Health, P.E., Spanish, Speech, Drama, Art, Music or Education. Must have consent of advisor.

TOTAL 36 Hours

**MAJOR: SECONDARY SUPERVISION
 CERTIFICATE: SUPERVISOR
 (36 Hour Thesis Program)**

**LEADERSHIP FOR INSTRUCTIONAL
 IMPROVEMENT**

(18 Hours)

Curriculum and Staff Development

- 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 Leadership

- Ed. 6370 *Supervision of Instruction*
 Ed. 6371 *Practicum in Supervision*
 Ed. 6379 *Problems in Educational Supervision*

RESEARCH TOOLS

(12 Hours)

- Ed. 6300 *Research Methods*
 Ed. 6367 *Statistical Methods*
 Ed. 7300 *Thesis (Problem Definition)*
 Ed. 7301 *Thesis (Completion)*

LEARNING THEORY

(3 Hours)

- Ed. 6302 *Advanced Educational Psychology or Learning Theories*
 Psy. 5318

SUPPORT AREA

(3 Hours)

On the advice and with the approval of his advisor, the student must take 3 hours in one of the following specialization areas to increase his competency as a supervisor: Biology, Business Administration, English, Government, Health and Physical Education, History, Mathematics, Psychology, Spanish. He may also substitute any of the other graduate level courses that will improve his competency as a supervisor.

TOTAL: 36 Hours

**MAJOR: SECONDARY SUPERVISION
 CERTIFICATE: SUPERVISOR
 (39 Hour Non-Thesis)**

**LEADERSHIP FOR INSTRUCTIONAL
 IMPROVEMENT**

(18 Hours)

Curriculum and Staff Development

- Ed. 6331 *The Curriculum in the Secondary School*
 Ed. 6334 *Curriculum Development — Problems and Processes*

Theory and Practice of 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 Learning Theories*
 Psy. 5318

RESEARCH TOOLS

(6 Hours)

- Ed. 6300 *Research Methods*
 Ed. 6367 *Statistical Methods*

RESOURCE AREA

(9 Hours)

Option 1 — Secondary Education:

- Ed. 6333 *Research in Secondary Education*
 Ed. 6341 *Advanced Adolescent Psychology*
 Ed. 6353 *Teaching the Disadvantaged Secondary Learner*
 Ed. 6380 *Practicum for Secondary Teachers*

Option 2 — Bilingual Education

- Ed. 6322 *The Bilingual Child*
 Ed. 6324 *Second Language Teaching: Theory & Method*
 Ed. 6335 *Teaching Elem. School Subjects in the Bilingual School*

Option 3 — Reading:

- Ed. 6308 *Foundations of Reading Instruction plus 6 hours with consent of advisor.*

Option 5 — Special Education:

- Ed. 5372 *Individual Differences: Survey and Treatment plus 6 hours with consent of advisor.*

Option 6 — Concentration in a field of study outside of Education.**Option 7 — Professional development courses selected from combination of courses in concentration areas (Option 1, 2, 3, 5, 6) and/or the following:**

- Ed. 6303 *Advanced Philosophy of Education*
 Ed. 6307 *Comparative Education*
 Ed. 6306 *Supervision of Student Teaching*
 Ed. 6363 *Personal Growth*
 Ed. 6373 *Techniques and Methods for the Slow Learner*
 Ed. 5321 *Career Education*
 Ed. 6388 *Socio-Cultural Foundations in Education*
 Ed. 6336 *Problems in Education*

or other Professional Education courses appropriate to student goals and program purposes — must have consent of major advisor.

TOTAL 39 Hours

**THE EDUCATIONAL ADMINISTRATION
 PROGRAMS**

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, specified 15 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 completed application for Admission to the Administrators' Program.
- c. Approval by the Department of School Management 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 Management 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 of School Management 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 Management 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 Management 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 ten (\$10.00) 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 Management 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 ten (\$10.00) dollars.

c. Superintendent

1. Holds a Professional Administrator Certificate.
2. Has been approved by the Department of School Management Admissions Committee for the Superintendent's Program.
3. Has been admitted to Graduate School.
4. Has completed application for the Temporary Administrator's Certificate.
5. Has obtained a Money Order or Cashier's Check for ten (\$10.00) dollars.

EDUCATIONAL ADMINISTRATION
Master of Education
(36 Hour Program)

Major:

Educational Administration

Non-Certification

EDUCATIONAL RESEARCH

(6 hours)

- Ed. 6300* *Research Methods*
Ed. 6367 *Statistical Methods*

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)

- Required for M. Ed.: Human Relations and Communication*
Ed. 6364 *Consulting in Human Relations*
or,
GenB 6335 *Administrative Communications*
Choice of 3 hrs. from Multi-Cultural Component:
Ed. 6388 *Socio-Cultural Foundations of Education or*
Soc. 5313 *American Minorities*
Choice of 3 hrs. from:
Govt. 5367 *The American Judiciary Process or*
Mana. 6361 *Management Theory and Organization Behavior or*
Psy. 5318 *Learning Theory*

SPECIALIZED PREPARATION IN ADMINISTRATION (9-15 hours)

- Required for M. Ed.*
Ed. 6337 *Administration of Special Instructional Programs*
Ed. 6338 *The School Principalship*
Select 3-9 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. 6351 *Teaching Reading to the Secondary Student*
Ed. 6369 *Educational Data Processing*

TOTAL 36 Hours

*This course should be taken within the first 6 hours of the student's program

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*

*This course should be taken within the first six hours of the student's program

RESOURCE AREA**(9 hours)**

Ed. 7315 Texas School Finance

TOTAL 60 Hours**Human Relations and Communication Component**

Ed. 6364 Consulting in Human Relations

or,

Genp 6335 Administrative Communications

Multi-Cultural Component — choice of 3 hours from:

Ed. 6388 Socio-Cultural Foundations of Education or

Soc. 5313 American Minorities

Choice of 3 hours from:

Govt. 5367 The American Judiciary Process or

Mana. 6361 Management Theory and Organization Behavior or

Pay. 5318 Learning Theory

**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 Professional Administrator****Educational Administration Superintendency****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)**Human Relations and Communication Component**

Ed. 6364 Consulting in Human Relations

or,

GenB 6335 Administrative Communications

Multi-Cultural Component — choice of 3 hours from:

Ed. 6388 Socio-Cultural Foundations of Education or

Soc. 5313 American Minorities

Choice of 3 hours from:

Govt. 5367 The American Judiciary Process or

Mana. 6361 Management Theory and Organization Behavior or

Pay. 5318 Learning Theory

**SPECIALIZED PREPARATION FOR
ADMINISTRATION****(18 hours)***Required:*

Ed. 6337 Administration of Special Instructional Program

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

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 Field Problems for the Superintendent

School of Education Graduate Program

Majors: Elementary Education
Secondary Education
Health and Physical Education
Supervision (Elementary and Secondary)
Special Education (Elementary and Secondary)
Counseling and Guidance (Elementary and Secondary)
Educational Administration
Reading (Elementary and Secondary)
Bilingual/Bicultural Education (Elementary)

The School of Education offers courses leading to a Master of Education in Secondary Education, Elementary Education, Educational Administration, Supervision and Health and Physical Education and providing minor and support areas for degrees in other fields.

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

The programs in education are intended primarily for personnel in public schools, but the knowledge and skills are applicable to other agencies (social, community, city, state, federal, etc.). A student may complete some M.Ed. programs at PAU without meeting all the specific certification requirements. However, 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.

**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 section of this catalog.

For specific degree programs refer to specific departments.

**MASTER OF EDUCATION DEGREE
(36 Hour Non-Thesis Program)**

Major	Non-Certification
Elementary Education	

CONTENT COURSES (12 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 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

MASTER OF EDUCATION DEGREE 36 Hour Non-Thesis Program

Major
Elementary Education

Certificate
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 Physical Education, 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

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 6318*	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	Research Methods

TOTAL 36 Hours

*Requirements for L/D endorsements

MASTER OF EDUCATION DEGREE (30 Hour Thesis Program)

Major Elementary Education CONTENT COURSES	Non-Certification (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

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 Measurements
Ed 6300	Research Methods

TOTAL 30 Hours

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 Measurements
Ed 6300	Research Methods

Total: 36 hours

MASTER OF EDUCATION DEGREE 36 Hour Non-Thesis Program for students holding an Elementary Provisional Certificate.

Major
Reading - All-level

Certificate
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. 6351	Problems in Linguistics

PROFESSIONAL DEVELOPMENT (6 Hours)

Ed 5351*	Teaching Reading to the Secondary Student
Ed 6341	Advanced Adolescent Psychology

DEGREE REQUIREMENTS (6 Hours)

Ed 5313	Reading Tests
Ed 6300	Research Methods

TOTAL 36 Hours

*If the student had Ed 4351 at the undergraduate level, he will substitute an elective approved by advisor

MASTER OF EDUCATION DEGREE 36 Hour Non-Thesis Program for students holding a Secondary Provisional Certificate

Major
Reading - All-level

Certificate
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. 6351 Problems in Linguistics

PROFESSIONAL DEVELOPMENT (6 Hours)

Ed 5351* Teaching Reading to the Secondary Student
 Ed 6311 Advanced Child Psychology

DEGREE REQUIREMENTS (6 Hours)

Ed 5313 Reading Tests
 Ed 6300 Research Methods

TOTAL 36 Hours

*If the student had Ed 4351 at the undergraduate level, he will substitute an elective approved by advisor.

**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, Health and Physical Education, History, Mathematics, Spanish.

PROFESSIONAL DEVELOPMENT (6 Hours)

Ed 7300, 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
 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 Educational Measurement
 Ed 6300 Research Methods

TOTAL 30 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 Physical Education, 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 Research Methods

TOTAL 30 Hours

*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.

**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 Physical Education, 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:

Required:

Ed 6331 The Curriculum in the Secondary School
 Ed 6380 Practicum for Secondary Teachers

6 hours selected from:

Ed 5351 Teaching Reading to the Secondary Student
 Ed 5352 Secondary Classroom Methods and Materials
 Ed 6301 Instructional Media in Teaching
 Ed 6302 Advanced Educational Psychology
 Ed 6303 Advanced Philosophy of Education
 Ed 6306 Supervision of Student Teaching
 Ed 6307 Comparative Education
 Ed 6333 Research in Secondary Education
 Ed 6341 Advanced Adolescent Psychology
 Ed 6353 Teaching the Disadvantaged Secondary Learner
 Ed 6361 Appraisal of Learning Abilities — The Multi-Disciplinary Approach
 Ed 6397 Analysis of Teaching Behavior

DEGREE REQUIREMENTS (6 Hours)

*Ed 5342 Tests and Measurements for the Secondary Classroom Teacher
 ED 6300 Research Methods

TOTAL 36 Hours

*If the student had Ed 3342 or ED S. 3305 at the undergraduate level, he will substitute an elective from the courses listed under professional development with the approval of his advisor.

**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 Physical Education, 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)**Required:**

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

**PROFESSIONAL CERTIFICATE
with
MASTER OF ARTS DEGREE
or
MASTER OF SCIENCE DEGREE**

**PROFESSIONAL CERTIFICATE
with
MASTER OF ARTS DEGREE
or
MASTER OF SCIENCE DEGREE**

Major
Biology
English
History
Mathematics
Spanish

Certificate
Professional Elementary

Major
Biology
English
History
Mathematics
Spanish
Physics

Certificate
Professional Secondary

SPECIALIZATION AREA (12 Hours)
12 hours of graduate level courses in one of the following areas:
Biology, English, History, Mathematics, Spanish

SPECIALIZATION AREA (12 Hours)
12 hours of graduate level courses in one of the following fields:
Biology, English, History, Mathematics, Spanish, Physics.

PROFESSIONAL DEVELOPMENT (12 Hours)
Required:
Ed 6312 Educational Measurement
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

PROFESSIONAL DEVELOPMENT (12 Hours)
Required:
*Ed 5342 Tests and Measurements for the Secondary Classroom Teacher
Ed 6331 The Curriculum In the Secondary School
Ed 6380 Practicum for Secondary Teachers
3 hours selected from:
Ed 5351 Teaching Reading to Secondary Students
Ed 5352 Secondary Classroom Methods and Materials
Ed 6301 Instructional Media in Teaching
Ed 6306 Supervision of Student Teaching
Ed 6333 Research in Secondary Education
Ed 6341 Advanced Adolescent Psychology
Ed 6353 Teaching the Disadvantaged Secondary Learner
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

RESOURCE AREA (6 Hours)
6 hours which provide background for the specialization area, of courses chosen to extend the applicant's preparation in a subject matter field other than his specialization.

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.

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.

*If the student had Ed 3342 or Ed S. 3305 at the undergraduate level, Ed 6313 should be taken.

Department of School Services

Dr. Ana Maria Rodriguez, *Head*

The Department of School Services offers the Master of Education Degree in elementary Bilingual Education, elementary and secondary Guidance and Counseling, and elementary and secondary Educational Diagnostician.

In addition, the Department offers a major in Elementary Bilingual Education, a minor in Generic Special Education and Bilingual/Bicultural Studies. Students may also seek endorsements in Mental Retardation, Language Learning Disabilities, and Emotionally Disturbed.

All students desiring to complete an M.Ed program in the Department of School Services 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. The student must also meet any specific requirements set by the program he/she wishes to pursue.

Major in Elementary Education with Bilingual/Bicultural

Certification:

Ed 1201 and 2100 are prerequisites for all 3000 and 4000 level education courses

(Professional Development and Content Courses to qualify for the provisional (life) certificate.)

36 semester hours in Elementary Education; must include Education 3622, 3624, 3301, 3305, 3302, 3322, 3325, 4301, and 4611.

Minor for Elementary Education Majors in the Bilingual/Bicultural Program:

Must include Sociology 4323 or Sociology 4313, History 2363, English 3319, 3330, Spanish 3330, English/Spanish 4330, 4331; choice of 3 hours from Spanish 3310, 3311; choice of 3 hours from English 3312, 3313, 4316.

Endorsement for Bilingual Teachers:

For individuals who already hold an Elementary Certificate. The student must also satisfactorily complete an oral and written proficiency examination in Spanish.

A student wishing to have bilingual education endorsement may choose to take one of the following options:

Option 1 (Undergraduate) Ed 3315, 3624, and 4301.

Option 2 (Graduate) Ed 6309, 6316, 6324, and 6335.

Option 3 (Combination) Ed 3624 or 6324 and 6309 and Ed 3315 or 6335 and Ed 4301 or 6316.

Minor in Generic Special Education for Elementary Majors

Ed 2100 is a prerequisite for all 3000 and 4000 level Education courses. Elementary Major to include thirty-six hours, 27 advanced, from the following: ED 3302, 3311; six hours from ED 3301, 3303, 3305, 3312; ED 3323, 3325, 3328; six hours from ED 3313, 3321, 3326; or 3 hours from ED 3322, 3324, 3329; ED 4311 and 4313.

Generic Minor

24 hours in Special Education: Ed 1305, 2304, 4301, 4302, 4303, 4309, 4371, and 4372.

Endorsement for Teaching Mentally Retarded:

(Education courses required to qualify for the endorsement for teaching the mentally retarded.)

The student must have a Teaching Certificate. Twelve additional hours are required: Education 4371, 4372, 4373, 4374. The student must have a minimum 2.25 GPA in these twelve hours.

Endorsement for Language/Learning Disabilities:

To qualify for the endorsement for Language/Learning Disabilities, a student must first meet the requirements for an elementary or secondary provisional certificate. Fifteen additional hours are required: Psy 4318, Ed 4301 or 4302, Ed 4303, 4372, 4378. The student must have a minimum 2.25 GPA in these 15 hours.

Directed Teaching: Elementary Bilingual and Generic Special Education

The Department of School Services has the following requirements for students entering Directed Teaching:

1. English 1301 and 1302 completed with a minimum of "C" in each course.
2. Have completed at least 3/4 semester hours in major with a 2.25 grade point average.
3. Have completed at least 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 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.

For Bilingual Education Students:

1. Satisfactory completion of: Ed 3302, 3305, 3322, 3622, 3624, 4301.

For Generic Special Education Students:

1. Satisfactory completion of: Ed 1305, 2304, 4301 or 4302, 4303, 4309, 4371 or 4372.

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 Research Methods	
	Total 36 Hours

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	(18 Hours)
RESOURCE AREA		
Ed 6382	Theories and Techniques of Counseling	
Ed 6383	Personal Growth	
Ed 6385	Counseling Practicum	
Ed 6345	Information Services: Occupational, Educational and Personal-Social	
Ed 6368	Group Counseling	
Ed 6372	Individual Differences: Survey and Treatment	
Ed 6306	Supervision of Student Teaching	
Ed 6311	Advanced Child Psychology	
Ed 6313	Individual Educational Testing	
Ed 6314	Individual Mental Testing: Wechsler Scales	
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	Individual Mental Testing: Stanford-Binet	
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	
Soc. 5323	The Mexican Americans	

THESIS (6 Hours)
Ed 7300, 7301 Thesis

DEGREE REQUIREMENTS (6 Hours)
Ed 6312 Educational Measurement
Ed 6300 Research Methods
TOTAL 39 Hours

**MASTER OF EDUCATION DEGREE
39 Hour Non-Thesis Program**

—CL.7 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
and, if the student takes Ed 6313, he must also take	
Ed 6314	Individual Mental Testing: Wechsler Scales
Ed 6344	Individual Mental Testing: Stanford-Binet
<i>3-6 hours from</i>	
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
Soc. 5323 The Mexican Americans

DEGREE REQUIREMENTS (6 Hours)
Ed 6312 Educational Measurement
Ed 6300 Research Methods
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
<i>3 hours from</i>	
Ed 6345	Information Services: Occupational, Educational and Personal-Social
Ed 6368	Group Counseling
<i>6 hours from</i>	
Ed 5372	Individual Differences: Survey and Treatment
Ed 6306	Supervision of Student Teaching
Ed 6313	Individual Educational Testing
Ed 6314	Individual Mental Testing: Wechsler Scales
Ed 6331	The Curriculum in the Secondary School
Ed 6341	Advanced Adolescent Psychology
Ed 6342	Problems in Guidance and Counseling
Ed 6344	Individual Mental Testing: Stanford-Binet
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
Soc. 5323	The Mexican Americans

THESIS (6 Hours)
Ed 7300, 7301 Thesis

DEGREE REQUIREMENTS (6 Hours)
Ed 5342 Tests and Measurements
Ed 6300 Research Methods
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
Ed 6314	Individual Mental Testing: Wechsler Scales
Ed 6344	Individual Mental Testing: Stanford-Binet
<i>3-6 hours from</i>	
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
Soc. 5323	The Mexican Americans

DEGREE REQUIREMENTS		(6 Hours)
Ed 6300	Research Methods	
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	Certificate
Elementary Education	Educational Diagnostician

KNOWLEDGE OF THE EXCEPTIONAL CHILD		(6-9 Hours)
*Ed 5372	Individual Differences	
<i>Choice of 3-6 hours from:</i>		
Ed 6361	The Language/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	Individual Testing	
<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	

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 for the Educational Diagnostician
<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	Research Methods	
Ed 6312	Educational Measurement	
TOTAL		39 Hours

*If student took Ed 4372, he may substitute another course from this area.

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 Language/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	Individual Testing
<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

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 for the Educational Diagnostician
<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	Research Methods	
Ed 5342	Tests and Measurement	

*If a student took Ed 4372, he may substitute another course from this area.

School of Humanities

Dr. Bob Dowell, *Dean*

The Pan American University School of Humanities includes the Departments of Art, Communications, English, Foreign Language, and Music.

The Bachelor of Arts degree is offered with a major in Art, Communications with concentrations in Drama, Journalism, Speech and Speech and Hearing Therapy, English, Music and Spanish. Minors are available in the same fields. Supporting courses are offered in French and Portuguese.

The English and foreign language requirements are included within the framework of the General Education requirements, providing a vital service for students from a bilingual society. Fundamental English and speech courses are available for those who need them, as well as support courses in linguistics and Spanish for the Bilingual-Bicultural Program. Art and music courses fulfill requirements for those planning a career in teaching.

The Master of Arts degree is offered in English and in Inter-Disciplinary Studies with concentrations in English and Spanish.

Academic Instructional Staff¹

Anderson, John D.* Music
B.P.S.M., M.M., Southern Methodist University; Ph.D., George Peabody.

Anderson-Mejias, Pamela L. English
A.B., M.S., Ph.D., Indiana University.

Baltis, Margaret M. English
B.A. Pan American College; M.A. McNeese State College.

Barrera, Eduardo* Spanish
B.S., M.S., Texas Arts and Industries University; Ph.D., University of Texas.

Bazarsky, Judith R. Communications
B.A., University of Houston; M.A., North Texas State University

Beaudry, Charles E.* French, German, Spanish
Ph.B., M.A., Marquette University; Ph.D., Laval University.

Bloom, Leonard S. English
B.F.A., University of Texas; M.A., St. Mary's University.

Browne, Norman A.* Art
B.S., Washington State University; M.A., San Francisco State College; Ed.D., Indiana University.

Byrom, Edward Music
B.M.E., West Virginia Wesleyan; M.M., Southern Methodist University.

Calderon, Carlos I. Spanish
B.A., Sul Ross; M.A., University of Texas.

Canty, Dean R. Music
B.Mus., Texas Western College; M.M.E., North Texas State University; Ph. D., University of Texas.

Cararas, Sandra Ann English
B.S., M.A., Northeast Louisiana State University.

Contreras, Victoria Spanish
B.A., Pan American College; M.A., Pan American University.

Courtney, Janice Ray Speech
B.F.A., M.F.A., University of Texas.

Crews, Ruth English
B.M., M.M., University of Texas.

Cummins, Douglas* Drama
B.M.E., M.F.A., Ph.D., Texas Tech University.

Davidson, Judy English
B.A., University of Arkansas; M.A., Hardin-Simmons University

Davis, Vernon Communications
B.A., Baylor University; M.A., East Texas State University.

Davis, William* English
B.A., Texas Christian University; M.A., University of New Mexico; Ph.D., Rice University.

Dean, Paula Fix* English
B.A., M.A., Texas Tech University; Ph.D., Auburn University.

De la Fuente, Patricia* English
B.A., University of Oregon; M.A., Ph.D., University of Texas.

Dominguez, Sylvia M.* Spanish
B.A., M.Ed., Our Lady of the Lake, M.A., Ph.D., University of Arizona.

Dowell, Bob* English
B.A., Baylor University, M.A., East Texas State University, Ph.D., University of Denver.

Evans, James Leroy* English

B.A., B.S., Central Missouri State University, M.A., University of Colorado; M.A., Ph.D., University of Texas.

Field, Philip Art
B.F.A., Syracuse University; M.F.A., Rhode Island School of Design.

Fritz, Donald* English
B.S., B.A., M.A., Texas Tech University; Ph.D., University of Missouri.

Fulton, Richard English
B.A., M.A., University of Alabama.

Garcia, Lino Spanish
B.A., St. Mary's University, M.A., North Texas State University; Ph.D., Tulane University.

Garza-Swan, Gloria Spanish
B.A., M.A., Pan American University.

Gonzalez, Mauricio Spanish
M.A., Stephen F. Austin.

Grant, Patricia English
B.A., Wayne State University; M.A., Eastern Michigan University.

Grantz, Carl Leon* English
B.A., Centenary College; M.A., Teachers College, Columbia University; Ph.D., University of Texas.

Grossman, Morley K. Music
B.A., California State University; M.M., Cleveland Institute of Music; Ph.D., Indiana University.

Hamilton, Lee T. English
B.A., University of Texas at Austin; M.A., North Texas State University.

Haule, James M.* English
B.A., University of Michigan; M.A., Ph.D., Wayne State University.

Hawley, James A.* Drama
B.F.A. Drake University, M.S., Purdue University; Ph.D., Ohio State University.

Heckler, Edward E. English
B.A., Heidelberg College of Tiffin, Ohio; M.A., Ph.D., Michigan State University.

Heartfield, Gilbert B.* Spanish
B.A., Maryknoll; M.A., University of the Americas; Ph.D., University of New Mexico.

Holliday, Howard J.* English
B.A., M.A., University of Texas, Ph.D., Texas Christian University.

Hyslin, Richard P. Art
B.S., Oregon State College; M.A., University of New Mexico.

Iannarone, Ron English
B.A., W. Va Wesleyan College; M.A., University of Southern Florida.

Lyford, Roland Hazen* English
B.A., M.A., Middlebury College; Ph.D., University of California at Davis.

Maloney, James C.* Spanish
B.S., Mankato State College; Ph.D., University of Arizona.

McGovern, Carl* Communications
B.S., M.S., East Texas State University.

McLemore, George C. Speech
B.A., M.A., University of Houston.

McMullen, Eugenia Music
A.B., Marshall University; M.A., Columbia University Teachers College.

Mejias, Hugo* Spanish
M.A., Ph.D., State University of New York

Mendez-Egle, Beatrice English
B.A., Pan American University; M.A., Ph.D., Texas A & M University.

Miller, Clyde J.* English
A.B., Northwestern State College; B.S., University of North Carolina; M.A., University of Florida; Ph.D., University of Denver.

Mitchell, Paul* English
B.A., M.A., New Mexico Highlands University; Ph.D., University of Southern Mississippi.

Monta, Marian F.* Drama
B.S., M.S., Fordham University; Ph.D., Cornell University.

Moore, Alton O., Jr. French, Spanish
B.A., Pan American College; M.A., University of Texas.

Nichols, Edward D.* Art
B.F.A., M.F.A., University of Kansas.

Ply, Mary Sue English
B.A., Pan American University, M.A., Stephen F. Austin.

Prince, Nancy* Art
B.A., University of Southwestern Louisiana; M.A., Louisiana State University; Ph.D., Southern Illinois University.

Raimo, John* Music

B.M., M.M., The Conservatory of Music of Kansas City; M.A., Columbia University; D.M.A., Eastman School of Music.
 Rea, Ramiro R. Spanish
B.A., M.A., Sam Houston State University.
 Reed, Michael* English
B.A., University of Idaho; M.A., Ph.D., University of Oregon.
 Rieke, R. Neal Speech
B.A., Pan American University; M.S., M.P.A., North Texas State University.
 Sanchez, Encarnacion Spanish
B.A., Pan American College; M.A., Sam Houston State University.
 Schmidt, Dorothy S.* English
B.A., Pan American College; M.S., Texas Arts and Industries University; Ph. D., Bowling Green State University.
 Seale, Carl Music
B.M., Baylor University; M.Ed., University of Louisville; D.M.A., North Texas State University.
 Seale, Jan English
B.A., Baylor University; M.A., North Texas State University.
 Skinner, Izora English
B.A., Pan American University; M.A., Texas A&I University.
 Stanley, Jack R. Communications

B.F.A., Texas Christian University; M.A., Ph.D., University of Michigan.
 Stover, James A.* Music
B.S., M.A., Columbia University.
 Swenson, Sandra Art
B.A., University of Colorado; M.A., Colorado State College.
 Tollett, John Art
B.F.A., Louisiana College.
 Tucker, Wallace E. Music
B.M., M.M., North Texas State University.
 von Ende, Frederick* English
B.A., McMurry College; M.A., Ph.D., Texas Christian University.
 Wade, Seth English
A.B., University of Kentucky; M.A., Louisiana State University.
 Waldman, Lucila Montoya Music
A.B., Hunter College; M.M., Manhattan School of Music.
 Worman, Harold L.* Music
B.M.E., M.M.E., University of Wichita.

*On Graduate Faculty.

*As of preparation date.



Department of Art

Richard P. Hyslin, Acting Head

The Department of Art includes eight subjects: Advertising Art, Art Education, Art History, Ceramics, Jewelry, Painting, 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 is 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. Art courses are also offered for students seeking certification in a second teaching field at the elementary or secondary level.

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.

General Education Requirements for a Bachelor of Arts Degree and a Bachelor of Fine Arts Degree in Art:

124 total hours required for degree.

English 1301, 1302; or 1387, 1388; or 1406, 1302.....	6-7 hours
Sophomore Literature (2309).....	6 hours
Government 2313, 2314.....	6 hours
History 2313 or 2333, 2314.....	6 hours
P.E. Activities.....	4 hours
Music 2307.....	3 hours
Mathematics, Foreign Language or Lab Science.....	12-14 hours
Electives.....	12 hours
TOTAL.....	55-58 hours

DEGREE REQUIREMENTS

Major in Art Education

(B.A., all level certification)

48 semester hours in Art, of which 24 semester hours must be advanced; including Art 1301, 1311, 1331, 2303, 2312, 2321 or 2322, 2332, 3350, 3381, 3382, 3383, 4383, 3 additional hours in Art History, and 9 semester hours in Studio courses (at least 6 advanced hours).

19 hours in Education are required of which 18 must be advanced, including ED 2100, 3302, 3311 or 3312, ED S 3302 or 3305, ED S 3307, ED 4311 and ED S 4398.

Major in Art

(B.F.A., Studio)

60 semester hours in Art, of which 39 semester hours must be advanced; including Art 1301, 1311, 1312, 1331, 2312, 2332, 3 to 9 hours from 2321 or 2322, 2341, 2361; 3 to 6 hours from 2303, 2371; 12 semester hours advanced studio; Art 3350 and 9 semester hours of Art History; 12 semester hours of advanced Art electives.

(B.F.A., Studio - 18 hour Specialization in Advertising Design)
57 semester hours in Art, of which 33 semester hours must be advanced including Art 1311, 1331, 1332, 2312, 2321 or 2322, 2332, 2334, 3331, 3333, 3350, 4333, 4334, 4391 and 4392; 9 semester hours of Art History and 3 hours of advanced Art Electives.

12 hours in Communications are required of which 6 semester hours must be advanced; including Comm 1308, 2304, 4317 and 4321.

Major in Art Education

(B.F.A., Secondary Certification)

57 semester hours in Art, of which 30 semester hours must be advanced; including Art 1301, 1311, 1331, 2312, 2332; 12 semester hours from 2303, 2321 or 2322, 2341, 2361, 2371, 3383, 4383; 6 semester hours of advanced studio; Art 3350 and 9 semester hours of Art History; 6 semester hours of advanced Art electives.

19 semester hours in Education are required, of which 18 semester hours must be advanced; including Ed 2100, Ed S 3301, 3302, 3307 and 3 hours from Ed S 3303, 3305, 4318, 4351, 4353; and Ed S 4641.

Minor in Art

18 semester hours in Art, of which 9 semester hours must be advanced; including Art 1311, 1331, 2332, 3350, and 6 advanced semester hours of 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, 3350.

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, 3350 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, 3350, 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: B.F.A. Art majors are required to exhibit examples of their work during their senior year. B.F.A. studio majors will hold a 1- or 2-person show during their senior year. B.F.A. Studio majors with an 18 hour Specialization in Advertising Design may submit a portfolio and complete three employment interviews in lieu of an exhibit during their senior year.

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

SUGGESTED CURRICULA

Studio Art Major

(B.F.A.)

Freshman Year
Art 1301
Art 1311, 1312
Art 1331, 2332
Eng 1301, 1302
Twelve hours from two of the following fields:
Math, Lab Sci, or For Lang
P.E. 2 hours

Sophomore Year
Art 2312
Basic Art 6 hours
Eng (Soph Lit) 6 hours
Govt 2313, 2314
P.E. 2 hours
Elective 3 hours
Music 2307

Junior Year

Basic Art 6 hours
Art Studio 6 adv. hours
Art History 3 adv. hours
Hist 2313 or 2333, 2314
Art Elective 3 adv. hours
Art 3350
Electives 3 hours

Senior Year

Art Studio 6 adv. hours
Art History 9 adv. hours
Art Electives 9 adv. hours
Electives 6 hours

Art Education Major

(All-Level)

Freshman Year
Art 1301, 1311, 1331
Eng 1301, 1302
Music 2307
P.E. 2 hours
Twelve hours from two of the following fields:
Math, Lab Sci, For Lang

Sophomore Year

Art 2321 or 2322, 2332, 2312,
2303 or 2304
Eng (Soph Lit) 6 hours
Govt 2313, 2314
P.E. 2 hours

Junior Year

Art 3350, 3381, 3382
Art Elective 3 studio hours
Hist 2313 or 2333, 2314
Ed 3302, 3311 or 3312
Ed.S. 3302 or 3305
Elective 3 hours

Senior Year

Art 3383, 4383
Art Electives 6 adv. studio
hours
Art History 3 adv. hours
Ed.S. 3307, 4398
Ed 4311
Electives 9 hours

Art Education Major

(B.F.A., Secondary)

Freshman Year
Art 1301, 1311, 1331
Eng 1301, 1302
Twelve hours from two of the following fields:
Math, Lab Sci, For Lang
P.E. 2 hours
Music 2307

Sophomore Year

Art 2312, 2332
Basic Art studio 12 hours
Govt 2313, 2314
P.E. 2 hours

Junior Year

Art Studio 6 adv. hours
Art 3350, Art History 3 adv. hours
Hist 2313 or 2333, 2314
Ed.S. 9 hours
Electives 6 hours

Senior Year

Art 3383, 4383
Art History 6 adv. hours
Art Electives 6 adv. hours
Ed.S. 3307, 4398, 4399
Electives 6 hours

Art Major

(B.F.A., Specialization; Art Advertising)

Freshman Year
Art 1311, 1331, 1332
2312
Comm 1308

Sophomore Year
Art 2332, 2331, 2334
Comm 2304
Eng 2309, Soph Lit.

DEGREE REQUIREMENTS*Communications Major*

48 semester hours of which 24 must be advanced. Communications majors are not required to take minors. The following courses are required of all majors: COMM 1301, 1302, 1303, 1304, 1305.

Elementary Drama Certification

24 semester hours as follows: 3 hours Practicum; Plus COMM 1310, 1311 or 1312, 1305, 3308, 3309, 3317, 4305, (formerly: DRAM 1321 or 1322, 2323, 3306, 3321, 4320, SPEE 3303.)

Secondary Drama Certification

24 semester hours as follows: 3 hours Practicum; Plus COMM 1311, 1305, 3311, 3312, 4301, 4302, 4309, (formerly: DRAM 1103, 1321, 2323, 3311, 3326, 4301, 4302, 4309.)

Elementary Speech Certification

24 hours of speech as follows: 3 hours Practicum; plus COMM 1303, 1307, 2309, 3308, 3314, 3316, 3317.

Secondary Speech Certification

24 hours of speech as follows: 3 hours Practicum; Plus COMM 1303, 1307 or 1310, 2303, 3314, 3315 or 3316, 4308, 4307 or 4309.

Speech Therapy Certification

33 hours of speech therapy as follows: COMM 1309, 2309, 2310, 2311, 3319, 3320, 3321, 3322, 4310, 4311, 4312. (formerly: SPEE 1301, 2307, 2308, 2309, 2310, 3309, 3310, 3312, 4310, 4311, 4312.)

Secondary Journalism Certification

24 semester hours of which 12 must be advanced. The required courses are: 3 hours Practicum; plus COMM 1301, 1304, 1306, 1308, 4309. (formerly: M.C. 1301, 1302, 1303, 1305, 3306.)

Communications Minor

18 semester hours of which 6 must be advanced.

Department of English

Dr. Jack Holliday, *Head*

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 or M.A. in Interdisciplinary Studies with a concentration in English.

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.

General Education Requirements for the Bachelor of Arts Degree in English

English 1301 and 1302, or 1387 and 1388, or 1406 and 1302	6-7 hours
Sophomore English	6 hours
Foreign Language	6 hours
Government 2313 and 2314 or 2387 and 2388	6 hours
History 2313 or 2333, 2314, or 2387 and 2388	6 hours
Mathematics or Lab Science	6-8 hours
P.E. Activities	4 hours
Electives	12 hours
TOTAL	52-55 hours

DEGREE REQUIREMENTS*Major in English*

(Specialization in Literature)

36 semester hours of English of which 24 must be advanced; must include English 1301 and 1302 or approved substitutes; 2301 and 2302 or 2387 and 2388 or approved substitutes; 3312, 3313, 3319, and 4301; 12 hours of advanced English electives. In addition, 6 hours are required from the following: Art 1301, Music 2307, and Comm 1300 or 1303

Major in English

(Specialization in Language)

36 semester hours of English of which 24 must be advanced; must include English 1301 and 1302 or approved substitutes; 2301 and 2302 or 2387 and 2388 or approved substitutes; 3312, 3313, 3319, and 4313, 4314, and 4317; 6 hours of advanced English electives, of which 3 hours must be in literature. In addition, 6 hours are required from the following: Art 1301, Music 2307, and Comm 1300 or 1303.

Major in English

(Specialization in Literature with Elementary Certification, Plan I)

36 semester hours of English of which 24 must be advanced; must include English 1301 and 1302 or approved substitutes; 2301 and 2302 or 2387 and 2388 or approved substitutes; 3312, 3313, 3319, and 4301. 12 hours of advanced English electives from 3301, 3302, 3303, 3304, 3305, 3306, 3307, 3309, 3310, 3311, 3317, 3322, 3324, 4306, 4308, 4309, 4310, 4312, 4316, 4324. In addition, 6 hours are required from the following: Art 1301, Music 2307, and Comm 1300 or 1303.

Major in English

(Specialization in Literature with Elementary Certification, Plan II)

36 semester hours of English of which 24 must be advanced; must include English 1301 and 1302 or approved substitutes; 2301 and 2302 or 2387 and 2388 or approved substitutes; 3312, 3313, 3319, and 4301; 12 hours of advanced English electives from 3301, 3302, 3303, 3304, 3305, 3306, 3307, 3309, 3310, 3311, 3317, 3322, 3324, 4302, 4306, 4308, 4309, 4310, 4312, 4313, 4314, 4316, 4317, 4324, and 4325. In addition, 6 hours are required from the following: Art 1301, Music 2307, and Comm 1300 or 1303.

Major in English

(Specialization in Language with Elementary Certification, Plan II)

36 semester hours of English of which 24 must be advanced; must include English 1301 and 1302 or approved substitutes; 2301 and 2302 or 2387 and 2388 or approved substitutes; 3319, 4302, 4308, 4313, 4314, 4317; 6 hours of advanced literature electives. In addition, 6 hours are required from the following: Art 1301, Music 2307, and Comm 1300 or 1303.

Major in English

(Specialization in Literature with Secondary Certification)

36 semester hours of English of which 24 must be advanced; must include English 1301 and 1302 or approved substitutes; 2301 and 2302 or 2387 and 2388 or approved substitutes; 3319 and 4325; 18 hours of advanced English electives (except 4323), at least 9 of which must be in literature. In addition, 6 hours are required from the following: Art 1301, Music 2307, and Comm 1300 or 1303.

Major in English

(Specialization in Language with Secondary Certification)

36 semester hours of English of which 24 must be advanced; must include English 1301 and 1302 or approved substitutes; 2301 and 2302 or 2387 and 2388 or approved substitutes; 3319, 4302, 4308, 4313, 4314, 4317, and 4325; 3 hours of advanced literature electives. In addition, 6 hours are required from the following: Art 1301, Music 2307, and Comm 1300 or 1303.

Major in English

(Specialization in English as a Second Language with Secondary Certification)

36 semester hours of English of which 24 must be advanced; must include English 1301 and 1302 or approved substitutes; 2301 and 2302 or approved substitutes; 3319, 3330, 4318, 4325, 4326, 4328, 4329; 3 hours of advanced literature electives. In addition, 6 hours are required from the following: Art 1301, Music 2307 and Comm 1300 or 1303.

Minor in English

18 semester hours of English of which 6 semester hours must be advanced.

Minor in English

(with Teacher Certification)

Elementary Plan I: 21 semester hours of English of which 9 must be advanced; must include English 1301 and 1302 or approved substitutes; 6 semester hours from English 2301, 2302, 2303, 2305, 2307, 2308, 2313, 2387, 2388; English 3319; 6 hours of advanced English electives from 3301, 3302, 3303, 3304, 3305, 3306, 3307, 3309, 3310, 3311, 3312, 3313, 3317, 3322, 3324, 4301, 4306, 4308, 4309, 4310, 4312, 4316, and 4324.

Elementary Plan II: 24 semester hours of English of which 12 must be advanced; must include English 1301 and 1302 or approved substitutes; 6 semester hours from 2301, 2302, 2303, 2305, 2307, 2308, 2313, 2387, and 2388; English 3319; 9 hours of advanced English electives from 3301, 3302, 3303, 3304, 3305, 3306, 3307, 3309, 3310, 3311, 3312, 3313, 3317, 3322, 3324, 4301, 4302, 4306, 4308, 4309, 4310, 4312, 4313, 4314, 4316, 4317, 4324, and 4325.

Secondary Plan I: 24 semester hours of English of which 12 must be advanced; must include English 1301 and 1302 or approved substitutes; 6 semester hours from 2301, 2302, 2303, 2305, 2307, 2308, 2313, 2387, and 2388; English 3319 and 4325; 6 hours of any advanced English electives except 4323.

SUGGESTED CURRICULUM

English Major

Freshman Year

Eng 1301, 1302
Math or Lab Sci 6 hours
Art 1301, Mus 2307, Comm 1300
(or 1303) 6 hours
For Lang 6 hours
Elective 3 hours
P.E. 2 hours

Junior Year

Eng 3319
Adv Eng 9 hours¹
Minor 6 hours (at least 3 adv)
Electives 15 hours (3 should be adv)

Sophomore Year

Soph Eng 6 hours
Hist 2313, 2314
Govt 2313, 2314
Minor 6 hours
P.E. 2 hours
Elective 3 hours

Senior Year

Adv Eng 12 hours
Minor 6 hours (at least 3 adv)
Electives 15 hours (3 should be adv)

¹The advanced English hours suggested for both the junior and senior years will include some required courses; which courses are required will depend upon what plan and/or specialization area has been chosen. The student should refer to the descriptions of the various plans to determine which courses should be taken.

The Department of English Graduate Program

The Department of English offers courses leading to a Master of Arts in English 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 intending to use English as a support or specialization area must have six advanced undergraduate hours in the discipline.

REQUIREMENTS BY THE DEPARTMENT OF ENGLISH FOR A MASTER OF ARTS DEGREE WITH A MAJOR IN ENGLISH

In addition to the general requirements set out 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 the major and related fields will be determined through consultation between the student and the departmental Graduate Advisor.

MASTER OF ARTS DEGREE

Major English Thesis

Major

Thirty semester hours (of which at least 24 will be in English) including a thesis, with the option of taking 6 hours in one or more related fields.

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 (at least 27 of which will be in English) and no thesis, with the option of taking 9 hours in one or more related fields.

Requirements:

Eng 6300 Bibliography and Research Methods

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 set out 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.

MASTER OF ARTS DEGREE IN INTERDISCIPLINARY STUDIES

Concentration 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 STUDIES

Concentration
English

Non-Thesis

Eighteen semester hours in English without thesis and eighteen semester hours in other fields.

Requirements:

Eng 6300 Bibliography and Research Methods

TOTAL 36 Hours



Department of Foreign Languages

Dr. James Maloney, *Head*

The Department of Foreign Languages consists of the subject areas of French, German, Portuguese and Spanish.

A major and a minor are offered in Spanish. Beginning and intermediate courses in French and beginning courses in German and Portuguese are provided. Teacher certification plans in Spanish 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 Interdisciplinary Studies degree.

General Education Requirements for Bachelor of Arts Degree in Spanish

English 1301, 1302 or 1387, 1388, or 1406, 1302.....	6-7 hours
English, sophomore	6 hours
History 2313, 2314	6 hours
Government 2313, 2314	6 hours
Physical Education Activities	4 hours
Mathematics or Lab Science	6-8 hours
Free electives	12 hours

TOTAL 46-49 hours

DEPARTMENTAL REQUIREMENTS

Art Appreciation 1301 or Music Appreciation 2307 and Comm 1300 or 1303.

Major in Spanish (with certification)

36 semester hours of Spanish of which 24 semester hours must be advanced; must include 1301, 1302, or 1303, 1304; 2301, 2302 or 2307, 2308; 3303 or 3304, 3306, 3330, 4316; 6 hours from 3301, 3302, 3310, 3311; 6 hours from 3309, 3316, 3321, 4303, 4304, 4305, 4306, 4307, 4308, 4309, 4313, 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 or 3308, 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 or 3308; 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.

SUGGESTED CURRICULUM

Spanish Major

Freshman Year

English 1301, 1302
Spanish 1301, 1302; or 1303, 1304
History 2313, 2314
Math or Lab Science 6-8 hours
P.E. 2 hours
Art 1301 or Music 2307

Sophomore Year

English (Soph. Lit.) 6 hours
Spanish 2301, 2302; or 2307, 2308
Government 2313, 2314
P.E. 2 hours
Comm 1300 or 1303
Electives 9 hours

Junior Year

Spanish 3303 or 3304; 3330
Spanish electives 6 advanced hrs.
Minor 9 hours
Electives 9 hours

Senior Year

Spanish 3306
Spanish electives 9 advanced hrs.
Minor 9 hours
Electives 9 hours

Spanish Major (With Teacher Certification)

Freshman Year

English 1301, 1302
Spanish 1301, 1302; or 1303, 1304
History 2313, 2314
Math or Lab Science 6-8 hours
P.E. 2 hours

Sophomore Year

English (Soph. Lit.) 6 hours
Spanish 2301, 2302; or 2307, 2308
Government 2313, 2314
P.E. 2 hours
Comm 1300 or 1303
Minor 6 hours

Art 1301 or Music 2307
Electives 3 hours

Electives 3 hours

Junior Year
Spanish 3303 or 3304, 3330
Spanish electives 6
advanced hrs.
Minor 9 hours
Education 9 hours
Electives 3 hours

Senior Year
Spanish 3306, 4316
Spanish electives 6
advanced hrs.
Minor 9 hours
Education 9 hours
Electives 3 hours

The Department of Foreign Languages Graduate Program

The Department of Foreign 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.

Requirements:

Span Methods of Bibliography and Research
6300
Span Thesis
7300
Span Thesis
7301

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.

Requirements:

Span Methods of Bibliography and Research
6300

TOTAL 36 hours

Department of Music

Dr. Dean R. Canty, *Head*

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 Voice, Piano, and all of the instruments of the Band and Symphony Orchestra.

General Education Requirements for Bachelor of Arts Degree in Music or Music Education: total hour requirements vary with the program selected by the student.

English 1301, 1302 or 1387, 1388 or 1406, 1302.....	6-7 hours
Sophomore Literature.....	6 hours
Art 1301.....	3 hours
Government 2313, 2314 or 2387, 2388.....	6 hours
History 2313 or 2333, 2314 or 2387, 2388.....	6 hours
Foreign Language (French and/or German preferred).....	9 hours
Math or Science.....	3 hours
P.E. Activities.....	4 hours
Electives.....	12 hours

TOTAL55-56 hours

DEGREE REQUIREMENTS

Major in Music

(Applied Music):

77-93 semester hours in Music of which 35-43 semester hours must be advanced; including Music 1301, 1302, 1401, 1402, 2401, 2402, 3211, 3301, 3302, 3305, 4201, 4203; Applied Music: eight semesters, of which four semesters must be advanced; Music Ensemble: eight semesters, of which four semesters must be advanced; eight semesters 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, 3211, 3301, 3302, 3305, 3312, 4201, 4203; 4311; Applied Music: eight semesters, of which four semesters must be advanced; Music Ensemble; eight semesters, of which four semesters must be advanced; 2 semesters of Voice, proficiency in Piano, and eight semesters 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, 3211, 3301, 3302, 3305, 4201, 4203, 4311; Applied Music: Eight semesters, of which four semesters must be advanced; Music Ensemble: eight semesters, of which four semesters must be advanced; 2 semesters of Voice, proficiency in Piano, and eight semesters 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, 3311, 3312; Applied Music: four semesters; Music Ensemble: four semesters, and proficiency in Piano.

STANDARDS IN MUSIC

All students desiring to declare Music as a major must take the Music Department Theory Placement Exam prior to the semester in which they

intend to declare Music as their major. Based on the results of this exam, they are either admitted to Freshman Theory or Preparatory Theory. Upon successfully completing Preparatory Theory, they may be enrolled as a Music Major.

No grade below C in any of the required courses in Music will apply toward a degree with a major in Music or Music Education.

Transfer students will 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 is before a faculty jury.

Music majors and Music Education majors and minors must pass the piano proficiency examination by the end of their sophomore year.

Piano and other instrumental students in Music Education will study Applied Voice a minimum of two semesters.

Music majors will study privately in their areas of concentration during each semester of their enrollment. All students enrolled in Applied Music, will enroll in Applied Music Lab, and attend university concerts and recitals, as a part of their required work. 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 instructors.

Each full-time student must be a member of the large ensemble of his area of concentration, each semester during which he is enrolled. That is: Wind and Percussion — Band; Strings — Orchestra; Voice — Choir, Chorus; Piano and others — Choir, or Chorus. 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.

SUGGESTED CURRICULA

Applied Music Major

(Minor not required)

Freshman Year

English 1301, 1302
Art 1301
Math or Science
Music 1401, 1402, 1301, 1302:
Applied Music 8 hours:
Music Ensemble 2 hours
P.E. 2 hours
Applied Mus. Lab, 2 hrs.

Junior Year

Foreign Language 6 hours
Music 3305, 3211, 3301, 3302:
Applied Music 8 adv. hours:
Music Ensemble 2 adv. hours
Electives 3 hours
Applied Mus. Lab, 2 advanced hrs.

Music Education Major— All-Level

(Minor not required)

Freshman Year

English 1301, 1302
Art 1301
Math or Science
Music 1401, 1402, 1301, 1302,
2121, 2122: Applied Music
4 hours: Music Ensemble
2 hours
P.E. 2 hours
Applied Mus. Lab, 2 hrs.

Junior Year

Government 2313, 2314
Foreign Language 6 hours
Music 2125, 3305, 3301, 3302:
Applied Music 4 adv. hours:
Music Ensemble 2 adv. hours
ED 3302, 3311 or 3312
Electives 6 hours
Applied Voice 1 hour
Applied Mus. Lab, 2 adv.
hrs.

Sophomore Year

English (Sophomore
Literature) 6 hours
History 2313 or 2333, 2314
Music 2401, 2402: Applied
Music 8 hours:
Music Ensemble 2 hours
P.E. 2 hours
Electives, 3 hours
Applied Mus. Lab, 2 hrs.

Senior Year

Foreign Language 3 hours
Government 2313, 2314
Music 4201, 4203:
Applied Music 8 adv. hours:
Music Ensemble 2 adv. hours
Electives 6 hours
Applied Mus. Lab, 2 Advanced
hrs.

Sophomore Year

English (Sophomore
Literature) 6 hours
History 2313 or 2333, 2314
Music 2401, 2402, 2123, 2124:
Applied Music 4 hours:
Music Ensemble 2 hours
P.E. 2 hours
Electives 3 hours
Applied Voice 1 hour
Applied Mus. Lab, 2 hrs.
Ed 2100

Senior Year

Foreign Language 3 hours
Music 3211, 3312, 4311, 4201,
4203: Applied Music
4 adv. hours: Music
Ensemble 2 adv. hours
ED S. 3302 or 3305; 3307,
4399
ED 4311
Electives 3 hours
Applied Mus. Lab, 2 adv. hrs.



Inter-American Affairs and International Education Program

Pan American University is a unique American university in many aspects. It is the southernmost four year institution of higher learning in the Southwest United States, it is located just twenty miles from Mexico, and it has the largest enrollment of Mexican American students in the United States. There is definitely a Latin American atmosphere here, and even the architectural design of the university reflects this theme with its impressive arches and walkways.

Several interdisciplinary majors are offered to provide students with a diverse background in the history, geography, economics, language and literature of Hispanic America. Special emphasis is placed upon achievement of sufficient knowledge of the Spanish language to make it an effective means of communication. Students can obtain B.A. degrees in the following areas of specialization: Inter-American Studies (Spanish and History); Inter-American Studies (with certification-Spanish and History); Inter-American Studies (Latin American Business).

The growth in the volume of business and the number of firms operating in Latin America, together with the increased tensions of international relations, create a substantial demand for persons familiar with the Spanish language and Latin American customs and institutions. Local and national firms have repeatedly expressed this need. Government agencies — local, state, national and international — also require the services of employees with these qualifications. In the academic field the number and size of graduate programs offering advanced and specialized studies and research in this area are increasing yearly. These programs require qualified students as well as capable faculty.

Recognizing that communication and understanding are or major importance in promoting good relations between the countries of the Americas, the Program offers both English and Spanish Continuing Education courses. An intensive and semi-intensive English course is offered for foreign students who are preparing for studies in the United States, and for professionals and para-professionals who use the language on-the-job in Latin America. An intensive Spanish course is offered for interested businessmen, professionals and tourists who have a desire to use Spanish in their business and travels.

Latin America is geographically close to the United States to which it is tied by economic and military necessities. Yet the people of Latin America, their national characteristics, hopes, and aspirations, and the major components of their civilization are practically unknown to most North Americans. The need to continue and expand intellectual communication and mutual understanding with the Western Hemisphere, and with Mexico in particular, is of the utmost importance to the United States as well as to our neighbors to the South. Certainly the "need to know" about Latin America is apparent, and it is mainly in response to this need we offer these inter-disciplinary programs.

These inter-disciplinary programs involve the departments of Business Administration, Communications, Fine Arts, Foreign Languages, History, Government and Sociology and include the general education requirements applicable to all degree programs offered by Pan American University.

Opportunities for students completing this program are broad and varied. These degrees prepare the graduate for employment with a number of United States government agencies which operate both in the United States and Latin America; U.S. corporations with Latin American branches; and various international organizations such as the Organization of American States and the United Nations. As an extra bonus, secondary teaching certification in History and Spanish can be obtained.

Since Inter-American Studies is a broadly-integrated area of study, its degree programs require at least 48 semester hours of work associated with the Latin American field, of which 21 semester hours must be on the advanced level. Although this requirement precludes the necessity of a minor, most of the plans do incorporate courses that provide for one or more minors and/or teaching fields.

The Office of Special Programs in the Division of Academic Affairs and the Inter-American Affairs Program also sponsor and coordinate several related Inter-American activities. These include:

Annual Pan American Days Celebration

PAU-University of Arizona summer school in Guadalajara, Mexico
Border States University Consortium for Latin America Special Projects

Fulbright-Hays Program

Distinguished lecturers program

International Field Studies Program in Mexico and Central America

International scholarships

Inter-American Affairs Newsletter

For additional information concerning the activities offered by this unique program at Pan American University, contact or visit our offices in the Administration Building.

General Education Requirements for Bachelor Degree in Inter-American Studies:

124 total hours required for degree.

English 1301, 1302 or 1387, 1388 or 1406, 1302.....	6-7 hours
Sophomore Literature.....	6 hours
Government 2313, 2314 or 2387, 2388.....	6 hours
History 2313 or 2333, 2314 or 2387, 2388.....	6 hours
Mathematics or Lab Science.....	3-4 hours
P.E. Activities.....	4 hours
Electives.....	12 hours

TOTAL43-45 hours

DEGREE REQUIREMENTS

Major in Inter-American Studies (General Plan)

(without Teacher Certification):

This is an interdisciplinary area program requiring a 48-hour major with a minimum of 36 advanced hours out of the total 124 required for The broad field major requirements of Inter-American Studies provide the student a degree with minors in both Spanish and History. No minor required. The total program must include the following:

1. Twelve hours from History 2333, 3333, 4322, 4345, 4352, 4353, 4354, 4355, 4363, 4374;
2. Spanish 1301, 1302 or 1303, 1304; 2307, 2308;
3. Government 3343 or 4383;
4. Nine hours from Spanish 3303, 3304, 3306, 3330, 4303, 4307, 4309;
5. Nine hours from Art 4352, Eco 3336, 3353, Geog 3333, Phil 3380, Soc 4323, 4363, 4373.

Major in Inter-American Studies (General Plan)

(with Teacher Certification: teaching fields in History and Spanish): Students desiring to teach in the secondary school can be certified in the fields of History and Spanish. This is an interdisciplinary area program requiring a 48-hour major with a minimum of 54 advanced hours. The total program must include the following:

1. Fifteen hours from History 3333, 4322, 4345, 4352, 4353, 4354, 4355, 4363, 4374;
2. Spanish 1301, 1302 or 1303, 1304, 2307, 2308
3. Government 4383 or 4386;
4. Spanish 3303, 3304, 3306, 3330, 4303, 4307, 4309, 4316;
5. Nine hours from Art 4351, 4352, Genb 3336, Genb 3355, Eco 3353, Eng 3316, Geog 3333, Phil 3380, Soc 4343, Soc 4363, Soc 4373;
6. Three hours from History 3313, 3324, 4303, 4313, 4337, 4338, 4343;
7. Three hours from History 3341, 3342, 4371, 4376, 4383, 4393;
8. Three hours from Ed S 3303, 3305, 4351, 4353;
9. Ed S 3301, 3302, 3307, 4641;
10. History 1333 or 1334; and 2333
11. Grade point average of 2.25 in each teaching field is required for certification.

SUGGESTED CURRICULUM

Inter-American Studies Major (General Plan)

(Without Certification)

Freshman Year

Eng 1301, 1302 or 1387, 1388

or 1406, 1302

Hist 2313 or 2333, 2314

P E 2 hours

Span 1301, 1302 or 1303, 1304,

2307, 2308

Math or Lab Sci 3-4 hours

Suggested Electives (Soc 2313,

Sophomore Year

Eng (Soph Lit) 6 hours

Govt 2313, 2314

P E 2 hours

6 hours of

Inter-Am Studies Electives

Electives 9 hours

2323) 6 hours

Junior Year
 Hist 6 adv. hours¹
 Span 6 adv. hours²
 Inter-Am Studies elective
 3 hours³
 Inter-Am Studies elective
 3 adv. hours³
 Electives 6 adv. hours
 Electives 9 hours

Senior Year
 Hist 6 hours¹
 Span 6 adv. hours²
 Span 4311 or 4383²
 Inter-Am Studies elective
 3 adv. hours³
 Electives 15 hours

¹Advanced History must be chosen from Hist. 3333, 4322, 4345, 4352, 4353, 4354, 4355, 4363, 4374.
²Advanced Spanish must be chosen from Span. 3303, 3304, 3306, 3330, 4301, 4302, 4303, 4307.
³Inter-American Studies Electives are: Art 4352, Eco 3336, 3353, Geog 3333, Phil 3380, Soc 4323, 4343, Soc 4363, 4373.

Inter-American Studies Major (General Plan)

(With Certification: teaching fields in History and Spanish)

Freshman Year
 Eng. 1301, 1302 or 1387,
 1388 or 1406, 1302
 Hist 2313, 2314
 P E 2 hours
 Span 1301, 1302 or 1303, 1304
 2307, 2308
 Math or Lab Sci 3-4 hours
 Suggested Electives (Soc 2313,
 2323) 6 hours

Sophomore Year
 Eng (Soph Lit) 6 hours
 Govt 2313, 2314
 P E 2 hours
 6 hours of
 Inter-Am Studies Electives
 Electives 9 hours

Junior Year
 Hist 1333 or 1334; 2333
 Hist 3 adv hours¹
 Span 3330, 4316
 Inter-Am Studies elective
 3 hours²
 Inter-Am Studies elective
 3 adv. hours³
 Ed S 9 hours⁴
 Ed S 3301, 3302, 3307
 Elective 3 hours

Senior Year
 Hist 6 hours¹
 Span 3303
 Span 3306
 Govt 4383 or 4386
 Inter-Am Studies elective
 3 adv. hours²
 Hist 3 hours³
 Hist 3 hours³
 Ed S 4641
 Elective 3 hours

¹Advanced History must be chosen from Hist. 3333, 4322, 4345, 4352, 4353, 4354, 4355, 4363, 4374.
²Inter-American Studies Electives are: Art 4352, Eco. 3353, Geog 3333, Phil 3380, Soc 4323, Soc 4343, 4363, 4373.

³Advanced Education must be chosen from Ed S 3303, 3305, 4351, 4353.

⁴Advanced History must be chosen from Hist 3313, 3324, 4303, 4313, 4337, 4338, 4343.

⁵Advanced History must be chosen from Hist 3341, 3342, 4371, 4376, 4363, 4383.

Inter-American Studies (Specialized Plan)

This degree plan consists of 124 semester hours and is so constructed as to prepare the student for graduate work within various areas of the Inter-American Studies field as well as for job opportunities within the United States and/or Latin America. For example, with a few additional courses, the student should be well prepared for taking and passing the examination for employment with the State Department in its embassy and consular fields, or with related positions such as the Voice of America program. The broad field major courses required by Inter-American Studies provide the student with minors in Spanish and History.

Freshman Year
 Eng 1301, 1302 or 1387, 1388
 or 1406, 1302
 Hist 2313 or 2333, 2314, or
 2387, 2388
 Span 1301, 1302 or 1303, 1304
 Math or Lab Science 3-4 hours
 Eco 1301
 PE 2 hours
 Electives 6 hours

Sophomore Year
 Eng 2308 or (Soph Lit)
 Eng 2309 or (Soph Lit)
 Govt 2313, 2314 or 2387, 2388
 Span 2307, 2308
 Eco 2353
 PE 2 hours
 Electives 6 hours

Junior Year
 Span 3303, 3304, 4303 or 4309
 Geog 3333
 Hist 3333 or 4322, 4345, 4354
 Eco 3363 or 3355
 Soc 4363 or 4373
 Art 4352
 Govt 4383

Senior Year
 Govt 4386
 Span 3330, 4302, 4303, 4306,
 4307
 Hist 4352, 4355, 4374, 4353

Inter-American Studies Degree Plan with a Concentration in Latin American Business

The degree plan consists of 131 semester hours and is especially constructed to provide the student with a thorough preparation for entering the business aspect of Inter-American Affairs either with an organization in the United States or abroad in any Latin American country. The Business courses also prepare the student for entering the graduate program in Business at Pan American University or other institutions. It especially prepares the student for graduate work at one of the most prestigious and highly respected institutions in Inter-American Affairs, the American Graduate School of International Management in Phoenix, Arizona, by preparing the student in all three of its major topic areas: International Studies, Modern Languages, and World Business.

Freshman Year
 Genp 1331
 Eng 1301, 1302 or 1387, 1388
 or 1406, 1302
 Hist 2313 or 2333, 2314 or
 2387 or 2388
 Math 1340
 Span 1301, 1302 or 1303, 1304
 PE 2 hours
 Electives 6 hours

Sophomore Year
 Eco 2353, 2354
 Eng 2309
 Eng 2307 or (Soph Lit)
 Govt 2313, 2314 or 2387, 2388
 Acc 2421
 Acc 2329
 Span 2301, 2302, or 2307, 2308
 PE 2 hours

Junior Year
 Genp 3341, 3335
 Mana 3361, 3363
 Eco 3336, 3355
 Span 3303, 3304
 Geog 3333
 Electives 6 hours

Senior Year
 Fina 3383
 Genb 3337, 4369
 Mark 3371
 Hist 4363, 4355 or 4352
 4354, 4374
 Soc. 4363 or 4373
 Govt 4383
 Govt 4386

Scholarships, loans and grants are available for juniors and seniors enrolled in the Inter-American Studies programs through the following:

1. The Sylvia M. Dominguez Scholarship Fund.
2. The Inter-American Studies Scholarship Fund.

School of Sciences and Mathematics

Dr. Ernest J. Baca, Jr., *Dean*

The School of Sciences and Mathematics has five Departments: Biology, Chemistry, Mathematics, Physical Science, and Military Science. The Department of Physical Science includes five areas of concentration: astronomy, engineering, geology, physics, and physical science.

The Bachelor of Science degree is offered with a major in Biology, Chemistry, Mathematics, and Physics. Minors are offered in the same fields and in Military Science and Geology. The curricula meet the requirements for premedical, pre dental, and preprofessional work. Supporting courses are offered in the fields of Astronomy, Engineering, and Physical Science. The Master of Science degree is offered in the fields of Biology and Mathematics.

The Biology and Chemistry Departments are housed in the Science Building, a two-level structure that covers 80,000 square feet. This huge modern complex was just completed in 1969. The air-conditioned building contains classrooms, darkrooms, research space, faculty and graduate assistant offices, and laboratories. There is also a large auditorium with seating for 233 persons, two smaller auditoriums that each seat 150 persons, and an Audio-Tutorial Laboratory.

The Biology Department has a Marine Biology Laboratory on the Gulf Coast resort of Padre Island. The 7,700 square foot building has offices, laboratories, research facilities, a classroom, and a large area for displaying aquaria and instructional materials to the public. Laboratory sections for undergraduate and graduate marine biology courses make use of these facilities.

The Physical Science Department occupies the recently rebuilt Physical Science Building, a 25,000 square foot structure that was one of the original buildings on the west campus. The building is air conditioned and is fully equipped with new furniture, classrooms, reading and conference rooms. Laboratories for astronomy, physics, geology, and physical science are used for regular classwork and research. The astronomy area has a 22 foot Observatory Dome which houses a 17-inch telescope and a Planetarium which presents programs for astronomy and physical science students at Pan American. A solar telescope, a multi-telescope observing laboratory, astronomical cameras, and a darkroom are popular facilities with the students.

The Mathematics Department is located in a large 13,200 square foot building, complete with a modern mathematics laboratory, computer terminals, and an experimental laboratory. Additional office space is in Southwick Hall.

The Military Science Department occupies newly remodeled facilities in the west wing of the Old Library, complete with modern classrooms and instructional aids dealing with military subjects.

The faculty of the School of Sciences and Mathematics are well qualified: of the 47 members, two-thirds have earned a doctorate degree in their area of specialization, and one-third are engaged in sponsored research and curriculum development projects. The faculty are dedicated to providing quality education to their students at Pan American.

For specific degree requirements and suggested curricula, see the departmental sections.

Academic Instructional Staff:¹

School of Sciences and Mathematics

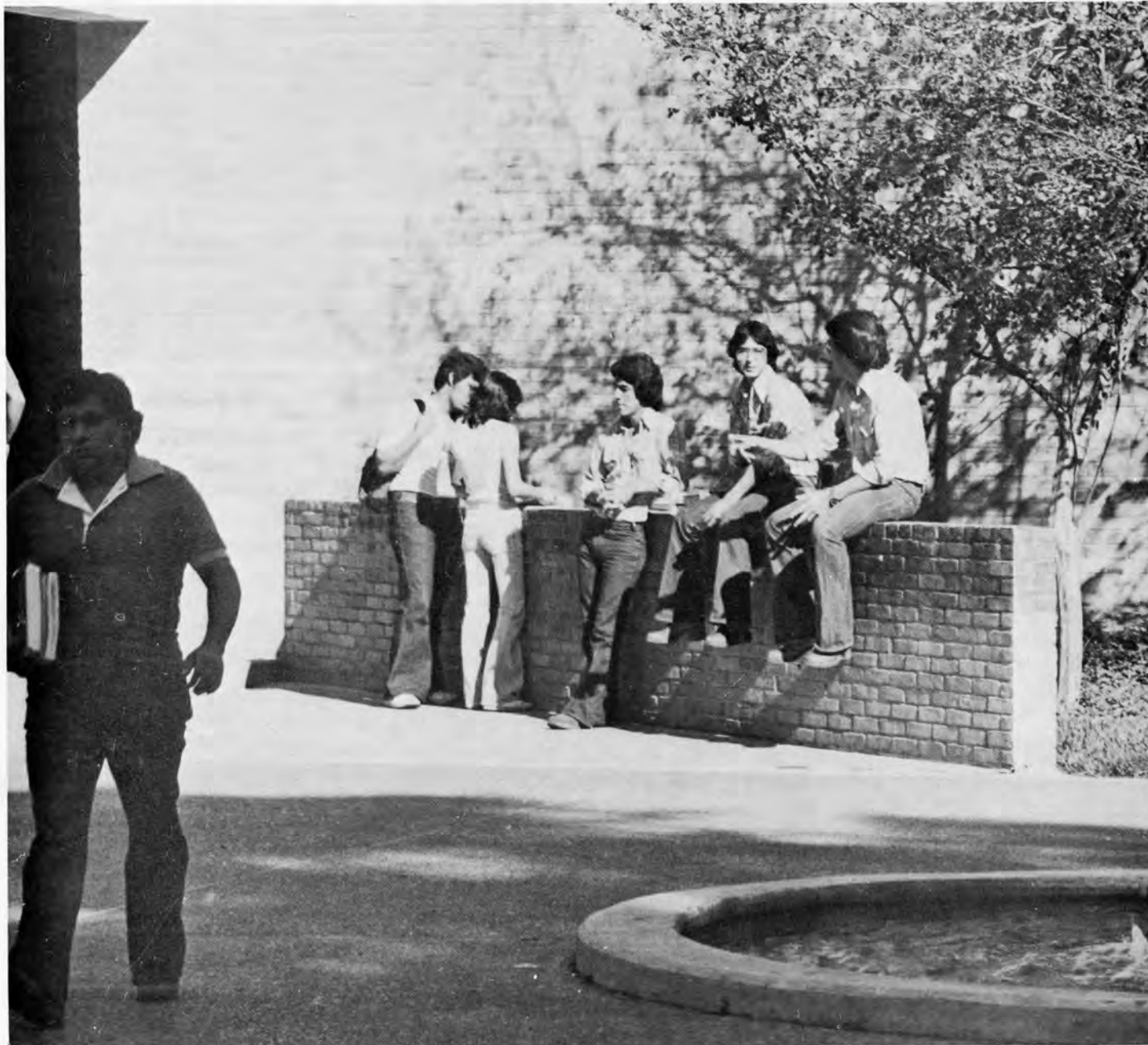
Allison, Terry C.*	Biology
<i>B.A., Texas Arts and Industries University; M.S., Ph.D., Texas A & M University</i>	
Arnold, Sharon T.	Mathematics
<i>B.S., University of Houston; M.A., North Texas State University</i>	
Atkinson, Richard J., Major	Military Science
<i>B.S., University of Albuquerque</i>	
Baca, Ernest J.	Chemistry
<i>B.S., College of Santa Fe; M.S., New Mexico Highlands; Ph.D., University of New Mexico</i>	
Brazier, Gerald*	Mathematics
<i>B.S., University of Dayton; M.S., Ph.D., Ohio State University</i>	
Brazier, Pearl	Mathematics
<i>B.S., Millersville State College; M.S., Ohio State University; M.S., Virginia Polytechnic Institute and State University</i>	
Burandt, Norman A.	Physics

<i>B.A., Southern Methodist University; M.S., Texas Arts and Industries University</i>	
Castrillón, José	Chemistry
<i>Ph.D., University of Buenos Aires</i>	
Chance, Joseph E.*	Mathematics
<i>B.A., University of Texas; M.S., Texas Tech University; Ph.D., University of Texas</i>	
Close, Robert A.	Mathematics
<i>B.S., U.S. Naval Academy; M.T.M., North Carolina State University</i>	
Crofts, Alfred E., Jr.*	Mathematics
<i>B.S., University of Texas; M.S., Ph.D., Southern Methodist University</i>	
De La Pena, Antonio M.	Biology
<i>B.S., Pan American College; M.S., Texas Arts and Industries University</i>	
Edwards, Robert J.*	Biology
<i>B.S., Oregon State University; M.A., Ph.D., University of Texas</i>	
Elliott, J. Lell**	Chemistry
<i>B.S., M.S., Ph.D., University of Colorado</i>	
Ellis, Fred E.	Astronomy
<i>B.S., M.S., East Texas State University; Ph.D., Louisiana State University</i>	
Estrada, Andres	Chemistry
<i>B.S., M.S., Texas Arts and Industries University</i>	
Giucoco, Sam E.**	Physical Science
<i>B.S., Pan American College; M.S., Ed.D., Oklahoma State University</i>	
Glaser, Frederic M.*	Physical Science
<i>B.S., Purdue University; Ph.D., Ohio State University</i>	
Goodier, Benjamin	Mathematics
<i>B.S., Massachusetts Institute of Technology; M.S., University of New Mexico</i>	
Harris, Laurence	Mathematics
<i>B.S., M.S., University of Missouri-Rolla</i>	
Hook, John W.	Mathematics
<i>B.S., Illinois Institute of Technology; M.A., Louisiana State University</i>	
Huber, John C.*	Mathematics
<i>B.S., M.A., Sam Houston State University; Ed.D., University of Houston</i>	
Hutchins, Diana	Mathematics
<i>B.S., Pan American College; M.S., Texas Arts and Industries University</i>	
James, Pauline*	Biology
<i>B.S., Memphis State; M.S., Ph.D., Cornell University</i>	
Judd, Frank W.*	Biology
<i>B.S., Midwestern; M.S., Ph.D., Texas Tech University</i>	
LeMaster, Edwin*	Physical Science
<i>B.S., West Texas State; M.S., Texas Tech University; Ph.D., University of Texas</i>	
Lonard, Robert I.*	Biology
<i>B.S.E., M.S., Kansas State Teachers College; Ph.D., Texas A & M University</i>	
Lyles, Donald J.	Biology
<i>B.S., Louisiana College; M.S., Louisiana Polytechnic Institute</i>	
Lyne, Steven L., Captain	Military Science
<i>B.S., SW Missouri State University</i>	
Marsh, David S.*	Biology
<i>B.S., Duke University; Ph.D., University of Texas at Austin.</i>	
Morales, Claudio	Mathematics
<i>B.A., Universidad de Chile; N.M., Universidad Tecnica del Estado; M.S., Ph.D., University of Iowa</i>	
Ortega, Jacobo*	Biology
<i>B.S., Escuela Superior de Agricultura, Saltillo, Mexico; M.S., Oklahoma State University; Ph.D., University of Minnesota</i>	
Otken, Charles C.*	Chemistry
<i>B.S., Texas Agricultural and Mechanical University; Ph.D., Cornell University</i>	
Parker, George E.*	Mathematics
<i>B.S., Guilford College; M.S., Ph.D., Emory University</i>	
Pontius, Paul E.	Mathematics
<i>B.B.A., University of Texas; M.A., University of Illinois</i>	
Ramirez, Olga	Mathematics
<i>B.S., Pan American University; M.A., Western Michigan University</i>	
Rhea, Don	Mathematics
<i>B.S., United States Military Academy; M.S., Tulane University</i>	
Rodgers, Robert W.	Geology
<i>B.A., M.A., Baylor University</i>	
Sager, Ray S.	Chemistry
<i>B.S., Texas Lutheran University; Ph.D., Texas Christian University</i>	
Savage, Norman L.*	Biology
<i>B.A., M.A., North Texas State University; Ph.D., University of Oklahoma</i>	

Schaefer, Mary Geralda* Mathematics
B.A., Incarnate Word College; M.A., Catholic University; Ph.D., University of Texas
 Shockley, William C. Physics
B.S., M.A., University of Texas
 Sides, Sammie L.* Biology
B.S., Tarleton State; M.S., Texas Tech University; Ph.D., North Carolina State University
 Skow, Don Mathematics
B.S., Pan American University; M.S., East Texas State University
 Torres, Jose Rene Mathematics
B.S., Pan American University; M.S., Texas A & I University.
 Villarreal, Heberto Mathematics
B.S., Pan American University; M.A., University of Houston.
 Villarreal, John R. Chemistry
B.S., M.A., Southwest Texas State University; Ph.D., Texas A&M University
 Wallace, Edward* Mathematics

B.S., Miami University; M.S., Rutgers; Ph.D., University of Texas at Austin
 Ware, William S.* Biology
B.S., Ph.D., University of California
 Watkins, William R.* Mathematics
B.S., M.M., Utah State University; Ph.D., University of Wyoming.
 Wiener, Bella Mathematics
B.S., Ryazan State University; M.A., Vitelsk Pedagogical University.
 Wiener, Joseph* Mathematics
B.A., University of Chernoutsy; M.A., Moscow University; Ph.D., University of Leningrad.

*On Graduate Faculty.
 **On leave.
 ***Professor Emeritus.
 †As of preparation date.



Department of Biology

Dr. S. L. Sides, *Head*

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 Head of the Biology Department.

General Education Requirements for Bachelor of Science Degree in Biology:

English 1301, 1302 or 1387, 1388 or 1406, 1302.....	6-7 hours
Sophomore Literature.....	6 hours
Government 2313, 2314 or 2387, 2388.....	6 hours
History 2313 or 2333, 2314 or 2387, 2388.....	6 hours
Mathematics or Foreign Language.....	3-6 hours
P.E. Activities.....	4 hours
Electives.....	12 hours
TOTAL	43-48 hours

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, 4403; Genetics or Evolutionary Biology — 2301, 3303; Developmental or Morphological Biology — 2401, 2402, 3405, 3407, 3408, 4306; Organismal or Environmental Biology — 2305, 2407, 3309, 3402, 3403, 3404, 4303, 4304, 4401, 4402, 4406, 4408, 4309, 4410; Physiology — 2403, 3411, 4305; 6 semester hours of Mathematics 1335 and 2330 or 6 semester hours from 1340, 1356, 1358, 1365, 1370, 2330. Chemistry 1401, 1402, and 3401, 8 semester hours of Physics or Geology 1401, 1402. Three semester hours of statistics or Computer Science are recommended.

Biology majors who are premedical 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 (Math 1370) 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, 4403; Genetics or Evolutionary Biology — 2306, 3303; Vertebrate Morphology or Physiology — 2401, 2402, 2403, 3411; Environmental Biology — 2305, 2407, 4401, 4402, 4410; Advanced Zoology — 3402, 3404, 3405, 3407, 4303, 4304; Advanced Botany — 3309, 3403, 3408, 4305, 4309, 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. Biology 1305, 1306, or 1401, 1402; 2401 or 2402, or 2403; 3309 or 3408 or 4410 plus additional advanced hours in biology to total 18.

Elementary Plan II: 24 semester hours, at least 12 of which are advanced. Biology 1305, 1306 or 1401, 1402; 2401 or 2402 or 2403; 3309 or 3408 or 4410 plus additional advanced hours to total 24.

Secondary Plan I: 24 semester hours, at least 12 of which are advanced. Biology 1401, 1402; 2401 or 2402 or 2403; 3309 or 3408 or 4410 plus additional advanced hours to total 24.

SUGGESTED CURRICULA

Biology Major:

Freshman Year
Eng. 1301, 1302
Biol. 1401, 1402
For. Lang. or Math 3 hours¹
Hist. 2313 or 2333, 2314
P.E. 2 hours
Electives 6 hours

Junior Year
Biol. 8 adv. hours
Electives 15-18 hours
Minor 6 hours

Sophomore Year
Biol. 7-9 hours
Govt. 2313, 2314
Eng. (Soph. Lit.) 6 hours
Minor 6 hours
Electives 6 hours
P.E. 2 hours

Senior Year
Biol. 4100 and 6-8 adv. hours
Minor 6 adv. hours
Electives — to make a total of 124 hours of which 36 must be advanced.

Biology Major:

(Premedical or Pre dental)
(Chemistry Minor)

Freshman Year
Eng. 1301, 1302
Biol. 1401, 1402
Chem. 1401, 1402
Math 1370²
Electives 3 hours
P.E. 2 hours

Junior Year
Biol. 12 hours
Chem. 3401, 3404
Govt. 2313, 2314
Electives 6 hours

Sophomore Year
Chem. 2401
Biol. 2402
Eng. (Soph. Lit.) 6 hours
Phys. 1401, 1402
Hist. 2313 or 2333, 2314
Electives 3 hours
P.E. 2 hours

Senior Year
Biol. 4100
Additional Biol. hours to make a total of 30 hours (with at least 15 adv.³)
Electives to make a total of 124 hours (with at least 36 adv.)

¹The 3 hours may be chosen from either field.

²Math 1370 required for the University of Texas Medical Schools; Math not required for admission to Baylor College of Medicine or to Dental Schools.

³Pre dental students not electing to take Math must complete general education requirements by selecting at least 3 hours from a foreign language.

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 8 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

- Acceptance by the Graduate School of Pan American University.
- Admission to the graduate program with a major in Biology requires a minimum of 24 hours (including 2 courses in Botany and 2 courses in Zoology) of undergraduate Biology with at least 12 hours at the Junior-Senior level. Chemistry will be at the discretion of the Head of the Department.
- Full-time graduate students, who must meet the above requirements, may take up to 9 semester hours of levelling work while taking a limited number of graduate hours. (Refer to Item 5.)
- A minimum grade point average of 2.75 in upper level undergraduate Biology courses (based upon a 4.0 system) is required.
- Special requirements:
 - 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.
 - 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.
 - Biol. 6101 will be required.

6. For those enrolled in the thesis program:
- 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 Head of the Department.
 - 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 Head 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 Head and the Dean of the Graduate School. The major professor and student should each retain a copy.
 - A thesis topic and plan for research will be chosen by the student and his major professor, subject to approval by the Committee.
 - The research will culminate in a thesis written in the style approved by the Graduate School and should be worthy, in whole or in part, of submission for publication in a reputable journal. Approval must be affirmed by the Head of the Department and the Dean of the Graduate 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 copies 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. 6365	Biological	
Biol. 7300		
7301	Thesis (6 Hours)	(9 Hours)

Electives in major area: (9-18 Hours)

Biol. 5309	Advanced Herpetology
Biol. 5344	Advanced Mammalogy
Biol. 5403	Advanced Cell Biology
Biol. 5408	Advanced Plant Pathology
Biol. 5410	Marine Plant Science
Biol. 5441	Ecological Concepts
Biol. 5445	Advanced Plant Physiology
Biol. 5446	Advanced Mycology
Biol. 5452	Advanced Marine Zoology
Biol. 6301	Cell Biology
Biol. 6302	Marine Ecology
Biol. 6303	Advanced Ecology
Biol. 6304	Host-Parasite Relationships
Biol. 6305	Biometry
Biol. 6308	Freshwater Phycology
Biol. 6309	Marine Phycology
Biol. 6310	Immunology
Biol. 6311	Ecological Physiology
Biol. 6312	Advanced Ornithology
Biol. 6314	Advanced Plant Systematics
Biol. 6315	Advanced Field Zoology
Biol. 6316	Advanced Genetics

Approved minor or support areas. (6-9 Hours)
TOTAL 30 Hours

MASTER OF SCIENCE DEGREE

Major Biology	Non-Thesis
MAJOR	(27-30 Hours)
<i>Required Courses:</i>	(3 Hours)
BIOLOGY GRADUATE SEMINAR	
Biol. 6100	

3 semester hours to be selected from (minimum)
BIOLOGICAL PROBLEMS FOR GRADUATE STUDENTS
Biol. 6365 Biological

Electives in major areas:

Biol. 5403	Advanced Cell Biology
Biol. 5344	Advanced Mammalogy
Biol. 5309	Advanced Herpetology
Biol. 5408	Advanced Plant Pathology
Biol. 5410	Marine Plant Science
Biol. 5441	Ecological Concepts
Biol. 5445	Advanced Plant Physiology
Biol. 5446	Advanced Mycology
Biol. 5452	Advanced Marine Zoology
Biol. 6301	Cell Biology
Biol. 6302	Marine Ecology
Biol. 6303	Advanced Ecology
Biol. 6304	Host-Parasite Relationships
Biol. 6305	Biometry
Biol. 6308	Freshwater Phycology
Biol. 6309	Marine Phycology
Biol. 6310	Immunology
Biol. 6311	Ecological Physiology
Biol. 6312	Advanced Ornithology
Biol. 6314	Advanced Plant Systematics
Biol. 6315	Advanced Field Zoology
Biol. 6316	Advanced Genetics

Approved minor or support area (6-9 Hours)
TOTAL 36 Hours

Department of Chemistry

Dr. José Castrillón, *Head*

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 pre dental and pre medical 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. A grant under the Minority Biomedical Support Program of the National Institutes of Health allows selected students to work at the interphase of Chemistry and Biology.

General Education Requirements for Bachelor of Science Degree in Chemistry:

English 1301, 1302 or 1387, 1388 or 1406, 1302.....	6-7 hours
Sophomore Literature.....	6 hours
Government 2313, 2314 or 2387, 2388.....	6 hours
History 2313 or 2333, 2314 or 2387, 2388.....	6 hours
Mathematics or Foreign Language.....	6 hours
P.E. Activities.....	4 hours
Electives.....	12 hours
TOTAL.....	46-48 hours

DEGREE REQUIREMENTS

Chemistry majors should include eight semester hours of Physics, eight semester hours of Biology and C.S. 2425 in their programs. Students who expect to do graduate work should take two years of French or German.

Major in Chemistry:

31 or 32 semester hours of chemistry; must include Chemistry 2401, 3301, 3401, 3402 or 4488, 3404, 4401, 4402 and one from 3403, 4301, 4302, 4488, 4403, and Mathematics 1370 and 2342 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:

Elementary Plan I: 18 semester hours in Chemistry of which 9 must be advanced.

Elementary Plan II: 24 semester hours in Chemistry of which 12 must be advanced.

Secondary Plan I: 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, 1358,
1370
Hist. 2313, 2314
P.E. 2 hours

A knowledge of typing is expected.

Sophomore Year

Eng. (Soph. Lit.) 6 hours
Chem. 3401, 3404
Phys. 1401, 1402
Eco. 1301
Govt. 2313, 2314
biol 3401¹, biol 2403²
P.E. 2 hours

¹University of Houston requires Biol 3401 and only 3 hours in freshman English.

²Students planning to transfer to the University of Texas should take Biol 2403 and may substitute Eng. 2309 or Comm 1303 for one semester of sophomore literature.

Chemistry Major

(Physics or Mathematics Minor)

Freshman Year

Eng. 1301, 1302 or 1387, 1388
or 1405, 1406
Chem. (2 semesters) 8 hours
(with 4 adv.)¹
Phys. 1402 (for minor in
Physics)
Math 1370 (for
minor in Mathematics)
P.E. 2 hours
Electives 3 hours²
Electives 4 hours

Sophomore Year

Eng. (Soph. Lit.) 6 hours
Chem. 8 hours (with 4 adv.)
Phys. 2401, 2402 (for minor
in Physics)
Math 2342 and C.S. 2425 (for
minor in Mathematics)
Hist. 2313 or 2333, 2314
P.E. 2 hours
Electives 3-8 hours (depending
on minor²)

Junior Year

Chem. (2 semesters)
8 adv. hours
Physics 3402 (for minor in
Physics)
Math 2345, 3347 (for
minor in Mathematics)
Govt. 2313, 2314
Electives 8 adv. hours²
Electives 6 hours

Senior Year

Chem. (2 semesters)
8 adv. hours
Physics 3 adv. hours for
minor in Physics)
Math 6 adv. hours³ (for
minor in Mathematics)
Electives 3 adv. hours²
Electives 11 hours
Electives 3 hours

¹Students without the Chem. 1402 prerequisite should take Chem 1401, 1402 the first year. Normal sequence in Chemistry for those students with the Chem. 1402 prerequisite is Chem. 2401, 3402 followed by any of the other required chemistry with Chem. 4401, 4402 given usually in alternate years.

²Of the 37-50 elective hours, 12 are free and may be taken in any subject field desired, subject only to prerequisites, the remainder may be from some or as many of the following suggestions as necessary to complete 124 hours for graduation: 8 hours of Biol., 6-12 hours of For. Lang., 8-12 hours of Phys. for Math minors, Eng. 2309, C.S. 2425, Art 1301, Mus 2307.

³It should be other than Math 3303, 3311, 3314 or 4318.

Department of Military Science

Major Richard J. Atkinson, *Acting Head*

Students need not seek a career in the U.S. Army to enroll in lower level courses such as Marksmanship, Rappelling and Survival which provide the opportunity to increase individual skills and knowledge in leadership and management techniques in and outside the classroom.

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. Commissions may be offered in the Active Army, U.S. Army Reserve or Army National Guard. Interested students should contact the Enrollment Officer in the Military Science Department.

Requirements for Advanced ROTC Standing and Commissioning

1. Complete four semester hours of lower level ROTC courses or have advanced credit as a Veteran, from USAR/ARNG Basic Training, ROTC Basic Camp, or JRTOC credit and approval.
2. Maintain full-time student status.
3. Pass a military physical examination.
4. Pass the ROTC Physical Aptitude Test.
5. Have an ACT score of 17 or SAT score of 850 or pass the Cadet Evaluation Battery.
6. Maintain an overall grade point average of 2.0.
7. Sign an Advanced ROTC and Commissioning Agreement for USAR/ARNG or Active Army duty.
8. Successfully complete 4 semesters of Advanced ROTC courses.
9. Successfully complete ROTC Advanced Camp.
10. Successfully complete an undergraduate degree program.

Minor Requirements

Eighteen semester hours in Military Science, of which twelve semester hours must be advanced; Hist 2335.

Department of Mathematics

Dr. John Huber, *Head*

The Department of Mathematics offers a major in mathematics and minors in mathematics, elementary mathematics education, 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 trigonometry and analytic geometry. Well prepared students are encouraged to establish credit in these pre-calculus courses by passing advanced standing examinations. 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 computer science is available for students from all areas of the University. The Computer Science minor is designed to provide the student with a marketable expertise in computer science.

The minor in elementary mathematics education is available for prospective elementary teachers seeking a specialization in mathematics. This minor is the only program of its kind in the State of Texas that focuses on the mathematical needs of the teacher in the elementary classroom.

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 concentrations in mathematics and mathematics education for qualified and interested students.

DEGREE REQUIREMENTS

A. Major in Mathematics:

Plan I: Major in Mathematics Without Teacher Certification

General Requirements

English	12-13 hours
English 1301 and 1302, or 1387 and 1388 (Honors Plan), or English 1406 and 1302 (for foreign students), English 2309 and 3 additional hours of sophomore English.	
Government	6 hours
Government 2313 and 2314, or Government 2387 and 2388 (Honors Plan)	
History	6 hours
History 2313 (or 2333) and 2314, or History 2387 and 2388 (Honors Plan).	
Lab Science.....	16 hours
Physics 1401 and 1402. Remaining hours to be chosen from Biology 1401, 1402; Chemistry 1401, 1402; Geology 1401, 1402; Physics 2101 and 2301.	
Computer Science.....	4 hours
C S 2425	
Humanities.....	6 hours
6 hours from Art, Drama, French, German, Music and Philosophy. (Phil 2343 recommended)	
Physical Education Activities	4 hours
Electives	12 hours

TOTAL66-68 hours

Mathematics Requirements

36 semester hours of mathematics of which 21 must be advanced; must include Math 1356, 1358, 1370, 2342, 2345*, 3347, 3337 (or 4339), 3349, 4345**, 4357** and six advanced hours in mathematics other than Math 3303, 3311, 3312, 3313, 3314, 3315, 3318, and 4316.

Students intending to work in applied mathematics should choose their advanced electives from Math 3337, 3338, 4339, 4340, 4348, 4468, 4371, 4373 and 4379.

Students intending to do graduate work in mathematics should include coursework in modern algebra in their degree program.

*C.S. 2425 prerequisite
 **For mathematics majors and minors, a grade of "C" or better in coursework taken from Math 4345, 4348, 4351, 4357, 4360 and 4364 is required for graduation.

Plan II: Major in Mathematics With A Minor In Statistic

General Requirements

The same as under Plan I.

Mathematics Requirements

50-52 hours of mathematics and statistics of which 34 must be advanced including:

- i) Math 1356, 1358, 1370, 2342, 2345*, 3347, 3349, 4345**, 4357** and 4468;
- ii) Stat 2330, 3337, 3338, 4336 and 4339;
- iii) 6 advanced hours in mathematics or statistics other than Math 3303, 3311, 3312, 3313, 3314, 3315, 3318, and 4316.

Plan III: Major In Mathematics With Teacher Certification

General Requirements

English	12-13 hours
English 1301 and 1302, or 1387 and 1388 (Honors Plan), or English 1406 and 1302 (for foreign students) and 6 hours of sophomore English.	
Government	6 hours
Government 2313 and 2314, or 2387 and 2388 (Honors Plan)	
History	6 hours
History 2313 (or 2333) and 2314, or 2387 and 2388 (Honors Plan)	
Lab Science.....	8 hours
Biology 1401 and 1402, or Chemistry 1401 and 1402, or Geology 1401 and 1402, or Physics 1401 and 1402.	
Computer Science.....	4 hours
C S 2425	
Humanities.....	3 hours
3 hours from Art, Drama, French, German, Music and Philosophy (Phil 2343 recommended)	
Physical Education Activities	4 hours
Electives	12 hours
TOTAL	
55-57 hours	

Education Course Requirements

18 hours of coursework including Secondary Education 3301, 3302, 3307, 4398, 4399 and 3 hours from Secondary Education 3303, 3305, 4351 and 4353. NOTE: Ed 2100 is a prerequisite for all upper level Education courses.

Second Teaching Field

A 24 hour approved second teaching field is required for secondary certification, of which 12 semester hours must be advanced.

Mathematics Requirements

36 hours of mathematics of which 18 must be advanced; must include 1356, 1358, 1370, 2342, 2345*, 3311, 3314, 4345**, and 4351**. The remaining hours must be selected from Math 2330, 3303, 3337, 3347 and 4316 or other approved Mathematics courses above Math 2330 and other than Math 3312, 3313, 3315, and 3318.

*C.S. 2425 prerequisite
 **For mathematics majors and minors, a grade of "C" or better in course work taken from Math 4345, 4348, 4351, 4360 and 4364 is required for graduation.

B. 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 1356, 1358, 1370, 2342, 2345*, 3347 and 6 advanced hours in mathematics other than Math 3303, 3311, 3312, 3313, 3314, 3315, 3318, and 4316.

Minors in Mathematics With Teacher Certification

Elementary Plan I:

18 semester hours in mathematics, of which 9 hours must be advanced; must include Math 2306, 2307 and 1365.

Elementary Plan II:

24 semester hours in mathematics of which 12 hours must be advanced; must include Math 1356, 1358, 1370 and 2342.

Secondary Plan I:

25 semester hours in mathematics of which 12 must be advanced including Math 1356, 1358, 1370, 2342, 2345*, 3311, 3314, 4345** and 3 additional advanced hours in mathematics other than Math 3312, 3313, 3315, and 3318.

Minor In Statistics Without A Mathematics Major

22 semester hours of which 9 must be advanced including:

- i) Math 1365 and 2345*;
- ii) Stat 2330, 3337, 3338 and 4336
- iii) C S 2425

*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.

Minor in Computer Science without Teacher Certification

19 semester hours of which 6 must be advanced:

- i) C S 2425, 2333, 3333, 3334;
- ii) CIS 2310.

Minor in Computer Science with Teacher Certification

25 semester hours of which 12 must be advanced including:

- i) C S 2425, 2333, 3333, 3334
- ii) CIS 2310
- iii) Math 4316
- iv) 6 additional semester hours of approved Computer Science, Computer Information Systems, or Mathematics.

Minor in Elementary Mathematics Education

18 semester hours of which nine must be advanced including:

- i) Math 2306, 2307, 1340
- ii) 9 hours from Math 3312, 3313, 3315 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.

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 4345 and 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, 6360 and 6390.

Resource Area (18 hours)

A minimum of 18 semester hours selected from two areas. At least half of the hours must be at the 6000 level. No more than 12 of these hours may be taken from Business Administration (Maximum of six hours in Business Administration.) and Education.

TOTAL 36 hours

Concentration
Mathematics Education

Non-Thesis

Concentration (18 hours)

A minimum of 18 semester hours of graduate course work in mathematics including Math 6308, 6312, 6314, 6320 and 6328.

Resource Area (18 hours)

A minimum of 18 semester hours selected from two areas. At least half of the hours must be at the 6000 level. No more than 12 hours may be taken from Business Administration (Maximum of six hours in Business Administration) and Education.

TOTAL 36 hours

Department of Physical Science

Dr. Edwin W. LeMaster, *Head*

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 and, tentatively, with 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 from Pan American University and a Bachelor's Degree in engineering from the second university. Further details are available from the department chairman.

All indications are that future needs for trained manpower in the physical sciences and engineering will be much greater than the expected production. This insures graduates of many choices of job opportunities, as well as attractive starting salaries.

Pre-Engineering

Pan American University does not offer a degree in engineering. The courses Physics 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.

General Education Requirements for Bachelor of Science Degree in Physics:

English 1301, 1302 or 1387, 1388 or 1406, 1302.....	6-7 hours
English 2309 and Sophomore English 3 hours.....	6 hours
Government 2313, 2314 or 2387, 2388.....	6 hours
History 2313 or 2333, 2314 or 2387, 2388.....	6 hours
Science.....	8 hours**
Mathematics.....	3 hours**
P.E. Activities.....	4 hours
Electives.....	12 hours

Total..... 51-52 hours

**These requirements are satisfied in the physics major and required supporting math courses.

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 Geology:

Elementary Plan II: 24 semester hours in geology, of which twelve semester hours must be advanced; must include Geology 1401, 1402, 2401, or 2402, 3401, 3402 and 3301.

Secondary Plan I: May be counted as second teaching field only. 24 semester hours in geology, of which twelve semester hours must be advanced; must include Geology 1401, 1402, 2401 or 2402, 3401, 3402 and 3301.

Students are expected to furnish their own transportation and expenses on field trips.

Major in Physics:

36 semester hours in physics, of which 24 semester hours must be advanced; must include Physics 1401, 1402, 2301, 2101, 3101, 3102, 3402, 4101, 4102, and 16 advanced hours. Mathematics 1356, 1358, 1370, 2342, 2345, 3347 and 3349 are required. The following mathematics courses are recommended: Math 4468, 4339, 4345 and 4379 (only one of these required to complete math minor).

Since 18 hours of math are required, most students will take a minor or second major in mathematics. Those electing a minor other than math must present 18 hours, including six advanced hours.

¹Computer Science 2425 is prerequisite for math 2345.

Minor in Physical Science:

18 semester hours in the physical sciences, of which 6 hours must be advanced; must include Phys 1401, 1402 or Phys 1405, 1406; 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, 1402, 2301, 2101, and 3402.

Teacher Certification in Physics:

Elementary Plan I: 21 semester hours in physics, of which 9 semester hours must be advanced; must include Phys 1401, 1402, 2301, 2101, and 3402.

Elementary Plan II: 24 semester hours in physics, of which 12 semester hours must be advanced; must include Phys 1401, 1402, 2301, 2101, and 3402.

Secondary Plan I: 24 semester hours in physics, of which 12 semester hours must be advanced; must include Phys 1401, 1402, 2301, 2101, and 3402.

Teacher Certification in Physical Science:

Elementary Plan II: 24 semester hours in physical sciences, of which 12 must be advanced; must include Phys 1401, 1402 or Phys 1405, 1406; Chem 1401, 1402 and other courses from physics, physical science and chemistry.

Secondary Plan I: 24 semester hours in the physical sciences, of which 12 must be advanced; must include Phys 1401, 1402 or Phys 1405, 1406; Chem 1401, 1402 and other courses from the physical sciences which satisfy these requirements.

Plan II — Composite Science Certification

50 semester hours in the sciences, including 18 advanced hours. These must include (with a grade of "C" or better); Biol 1401, 1402; Chem 1401, 1402; Geol 1401, 1402; Phys 1401, 1402. The remaining hours may be chosen from astronomy, biology, chemistry, geology, physical science, physics, and earth science.

Suggested Pre-Engineering Program

Freshman Year
Eng 1301, 1302
Phys 1401, 1402
Math 1356, 1358, 1370
Chem 1401, 1402
Phys 1201
C S 2425
P E 2 hours

Sophomore Year
Eng (Soph. Lit.) 3 hours, and
2309
Phys 2303
Hist 2313, 2314
Math 1370, 2342
Electives 3 or 4 hours
Phys 3402²
Chem 2401²
P E 2 hours

Summer

Govt 2313, 2314
Math 1370 (if not taken as Freshman).

¹Students not having a strong background in math should take Math 1356 and 1358 before Math 1370.
²Chemical and Petroleum Engineering students should take Chem 2401; others should take Phys 3402.

Suggested 3-2 Plan

Freshman Year
Eng 1301, 1302
Phys 1401, 1402
Math 1356, 1358, 1370
Chem 1401, 1402
Phys 1201
C S 2425
P E 2 hours

Sophomore Year
Eng (Soph. Lit.) 3 hours
and 2309
Engr 2303, 2304
Hist 2313, 2314
Math 1370, 2342
Phys 2301, 2101, 3402
P E 2 hours

Junior Year

Phys 8 adv. hours
Math 2345², 3347, 3349³
Govt 2313, 2314
Electives 12 hours

TRANSFER BACK FROM ENGINEERING SCHOOL: Advanced courses in engineering that will substitute for 12 advanced physics hours.

Suggested Curriculum Physics Major

Freshman Year
(with Math Minor)
Eng 1301, 1302
Phys 1401, 1402
Math 1356, 1358, 1370
Hist 2313 or 2314, 2314
Electives 3 hours
P E 2 hours
C S 2425

Sophomore Year
Eng 2309 and Soph. Eng.
3 hours
Math 2342, 2345², and 3347
Phys 2301, 2101, 3402
Govt 2313, 2314
Electives 3 hours
P E 2 hours

Junior Year

Phys 3101, 3102 and 8 adv.
hours
Math 3349 plus 3 adv. hours³
Electives 3 hours
Chem 8 hours

Senior Year

Phys 4101, 4102 and 8 adv.
hours
Electives 16 hours

NOTE: A second major in mathematics requires 34 hours with 18 being advanced hours. No minor is required for double majors.

A minor other than mathematics could be selected. This would require 18 hours (including six advanced hours) from the minor field.

²C S 2425 prerequisite.

³These 3 (three) additional advanced hours would complete a Math minor. (6 adv. hours from math or any other field must be completed to satisfy the 36 advanced hours requirements.)



School of Social Sciences

Dr. David Alvarez, *Dean*

The School of Social Sciences is composed of the Departments of Behavioral Sciences, Criminal Justice, History, and Political Science. The School has experienced tremendous growth in the last five years, both in terms of course offerings and in the number of majors and minors, resulting in a significant increase in the number of faculty.

The Department of Behavioral Sciences includes Psychology, Sociology, Social Work, Human Services, Philosophy, and Anthropology and has a heavy interdisciplinary focus in its course offerings.

The Department of Criminal Justice offers coursework in law enforcement and corrections under the generic major of Law Enforcement Science. Approved by the Coordinating Board, Texas College and University System on January 1982 there are two new majors in (1) **Police Administration** and (2) **Corrections** available Fall Semester, 1982. With approval of the new majors, the old Law Enforcement Science major will be deleted.

The Department of History offers a wide variety of courses, but with a heavy emphasis on Mexican and Latin American culture where the proximity of Mexico is used to the students' advantage. An interdisciplinary teaching major in Mexican American Heritage and an interdisciplinary minor in Mexican American Studies are also offered through this department.

The Department of Political Science includes Government and the University's Pre-Law program. A new degree in Public Administration is being considered.

Graduates from the varied programs in the School of Social Sciences are employed throughout the Valley, especially in different government and community agencies, and the focus of the programs tries to prepare them to better serve this area.

Academic Instructional Staff:¹

School of Social Sciences

Alamia, Alfonso J.	Psychology
B.A., University of Dallas; M.Ed., Pan American University	
Aldridge, James W., Jr.*	Psychology
B.A., Baylor University; M.A., Ph.D., State University of New York at Binghamton	
Alvarez, David*	Sociology
B.A., Southwestern University; M.Th., Southern Methodist University, M.A., Ph.D., University of Texas at Austin.	
Anzaldua, Hermila	Social Work
B.A., Pan American College, M.S.W., The Worden School of Social Services.	
Arnold, Bill R.	Human Services
B.A., University of Houston; M.A., Ph.D., North Texas State University.	
Bain, Kenneth R.*	History
B.A., Baylor University; M.A., North Texas State University; Ph.D., University of Texas at Austin.	
Cain, Roy*	Psychology
B.S., University of Houston; M.A., Ph.D., Texas Tech University.	
Carter, David Kent	Philosophy
B.A., Grinnell College; M.A., Yale University	
Carter, David L.	Criminal Justice
B.S., M.S., Central Missouri State University; Ph.D., Sam Houston State University.	
Chavez, Gene Joseph**	Social Work
B.A., College of Santa Fe; M.A., University of Chicago.	
Davidson, Rondel V.*	History
B.A., McMurry College; M.A., Ph.D., Texas Tech University.	
Dearth, Daniel K.	Criminal Justice
B.A., Golden Gate University; M.S., San Jose State University.	
DeHoyos, Librado	Social Work
B.A., St. Mary's University; M.S.W., Boston University	
Donnalley, Mary Jane	Human Services
B.A., Rollins College; M.Ed., Ed.D., University of Virginia.	
Fleming, William J.*	History
B.A., American International College; M.A., Ph.D., Indiana University	
Freeman, Samuel R.	Political Science
B.A., M.A., Georgia State University; Ph.D., University of Kentucky	
Glazer, Mark	Anthropology/Philosophy
B.A., Robert College; License M.A., Istanbul University; Ph.D., Northwestern University.	
Gonzalez, Genaro E.	Psychology
B.A., Pomona College; M.S., University of California at Santa Cruz.	
Gormly, James L.*	History
B.A., University of Arizona; M.A., Ph.D., University of Connecticut.	
Hall, Harry H.	Political Science
A.B., California State; M.A., American University of Beirut.	
Hinojosa, Jose R.	Political Science
B.A., M.A., Texas A&I University; Ph.D., University of Notre Dame.	
Irby, James A.*	History
B.A., Southern Methodist University; M.A., University of Texas; Ph.D., University of Georgia.	
James, Valerie Gail*	Psychology
B.S., Bethany Nazarene College; M.S., Ph.D., Oklahoma State University	
Johnson, Marson H.	Criminal Justice
B.S., M.S., M.A., Ph.D., Michigan State University	
Juarez, Rinaldo Z.	Sociology
B.A., M.S., Texas A & M University; Ph.D., Pennsylvania State University.	
Kendrick, Sherrill*	Psychology
B.A., M.A., North Texas State University; Ph.D., University of Mississippi.	
Lee, Kuo-Wei*	Political Science
B.Laws, National Chengehi University; M.A., Ph.D., University of Oregon.	
Liebowitz, Stephen W.	Sociology
B.A., University of Virginia; M.A., University of Bridgeport; Ph.D., University of Missouri at Columbia.	
Levine, Bert D.*	Psychology
B.S., Long Island University; M.A., Ph.D., University of Texas.	
Lopez, Manuel Mariano*	Sociology
B.A., City College of New York; M.A., University of Texas at Austin; Ph.D., Michigan State University.	
Lujan, Antonio	Social Work
B.A., New Mexico State; M.S.W., Tulane University.	
Maldonado, Alfredo C.	Sociology
B.A., M.A., Texas A&I University	
Miller, Hubert J.*	History
B.A., University of Dayton; M.A., St. Louis University; Ph.D., Loyola University of Chicago.	
Miller, Lawrence W.*	Political Science
B.S., M.A., Eastern New Mexico University; Ph.D., Texas Tech University.	
Montgomery, Gary*	Psychology
B.A., University of Texas at Austin; M.A., University of Iowa; Ph.D., Texas Tech University.	
Morgan, Glynn R.	Political Science
B.A., M.A., University of Mississippi.	
Mounce, Gary J.*	Political Science
B.A., Oklahoma State University; M.A., University of California, Berkeley; Ph.D., University of Texas at Austin.	
Neitzel, Sarah C.*	History
B.A., Millsaps College; M.A., University of Southwest Louisiana; Ph.D., Texas Tech University.	
Nelson, Harold A.*	Sociology
B.A., Ohio Wesleyan University; M.A., University of California; Ph.D., University of Southern California.	
Newsom, Rosemarie	Political Science
B.A., Pan American University; M.A., East Tennessee University.	
Noyes, Lillian Frances*	Political Science
B.A., Radcliffe College; M.A., Southern Methodist University; Ph.D., University of Texas.	
O'Daniel, Linda J.	Criminal Justice
B.S., M.A., Sam Houston State University.	
Polinard, Jerry*	Political Science.
B.A., M.A., Texas A&I University; Ph.D., University of Arizona.	
Prather, Charles T.	History
B.A., M.A., North Texas State University.	
Richardson, D. Chad*	Sociology
B.A., M.S., Brigham Young University; Ph.D., University of Texas at Austin.	
Rocha, Rodolfo	History
B.A., M.A., Pan American University; Ph.D., Texas Tech University.	
Sanders, Z. Delores Reed*	Sociology
B.A., M.S., Ph.D., Oklahoma State University	

Solis, Raul H.	Social Work
B.A., Trinity University; MSW, The Worden School of Social Services.	
Stolarek, John S.	Political Science
B.A., Duke University; M.A., University of Rochester	
Stratton, Porter A.*	History
B.A., University of New Mexico; M.A., Eastern New Mexico University;	
Ph.D., Texas Tech University.	
Stutsman, Donald E.**	Criminal Justice
B.S., M.A., Midwestern State University.	
Travis, Paul D.	History
B.A., M.A., Wichita State University; Ph.D., University of Oklahoma.	
Trotter, Robert T.*	Anthropology, Sociology
B.A., University of Nebraska; M.A., Ph.D., Southern Methodist	
University.	
Vassberg, David*	History
B.A., M.A., Ph.D., University of Texas at Austin.	
Welch, Raymond P.*	History
B.A., University of Buffalo; A.M., Ph.D., University of Pennsylvania.	
Wisener, Robert H., III*	Psychology
B.A., M.A., Texas Tech University; Ed.D., University of Northern	
Colorado.	
Wrinkle, Robert D.*	Political Science
B.A., Texas A&I University; M.A., Texas Tech University; Ph.D., University	
of Arizona.	

*On Graduate Faculty.

**On leave

*As of preparation date.

Department of Behavioral Sciences

Dr. Harold A. Nelson, *Head*

The Department of Behavioral Sciences offers programs of study which seek to understand the cultural, philosophical, psychological, and social dimensions of human existence. A major is offered in psychology, sociology, social work and human services. A minor is available in psychology, sociology, human services, anthropology and philosophy. In addition, psychology and sociology each offer courses for students seeking a second teaching field for teacher certification in both elementary and secondary education.

A demand exists for undergraduate sociology and psychology majors in public and private agencies dealing in human relations. However, the more challenging and specialized fields in psychology and sociology usually require further study beyond the Bachelor's degree. High academic standards are required of those students planning to do graduate work.

A student majoring in psychology or sociology should demonstrate competence in the scientific method, logical and systematic interpretation, and humanitarian concerns. Training in research methods, statistics, and theory are required of all majors. In addition, an action-oriented approach is used where possible, especially in sociology courses. Psychology majors, according to their own interests, take further courses in the areas of clinical, experimental, and social and developmental psychology. Sociology majors take courses in the areas of stratification and minorities, demography, anthropology, deviant behavior, family, and social psychology. The department is very heterogeneous and includes activities such as archeological digs, biofeedback research, survey research in such areas as immigration, criminal justice and deviance, and residential segregation, and film documentaries. Wherever possible, students are involved in these projects so as to give them practical experience within their particular discipline.

Social Work, a program accredited by the Council on Social Work Education, prepares the student for (1) immediate employment as a beginning professional social worker in social service positions; and (2) admissions to graduate programs for professional social work. The student is trained to use an orderly goal directed approach in dealing with problem situations. Students learn how to involve clients in studying, assessing and planning action aimed at problem resolution.

Problem-solving may consist of counseling services, material assistance, referral to another agency, or a combination of these. In some situations, the social worker may have to work toward the establishment of a new service or improvement of an existing service. Social workers may function autonomously or in conjunction with other professionals (physicians, teachers, criminologists, psychologists, city planners, health service personnel, lawyers, etc.).

Full time students in the Social Work Program are eligible for membership in the National Association of Social Workers. Graduates may become regular members of the Association. Students are invited to join the Student Social Work Association at the University.

Students will be conferred a Bachelor of Social Work degree upon completion of the program. Upon graduation, students will have learned practice theory and skills in the classroom and have had ample opportunity to apply these in actual helping situations (field placement).

A strong counseling program guides the Social Work student through specific background content areas that have been identified as necessary to give him a generic competence as a helping professional, and starts him in the direction of his vocational interest.

Bill R. Arnold, *Director, Human Services*

The Human Services Program is approved by the Council for Standards of Human Services Education, and as such, meets the national educational standards established for training mental health and human services workers. These training skills are common (1) to the provision of supervised direct treatment services to individuals, groups, and families; (2) to beginning levels of mental health program development, administration, and evaluation, and (3) to student self-growth, in both professional and personal-social areas.

The Human Services Program offers a Bachelor of Science degree with a broad field major in Human Services. The baccalaureate degree prepares the student to do supervised work as a member of an allied health care team. The primary goal of the Human Services Program is to provide students entering the profession an opportunity to develop a working knowledge of the mental health and rehabilitation areas in human services so that they may deliver quality services to people in need of assistance. With this aim concentrated study in the areas of community mental



health, mental retardation, child care and development, and mental health administration is provided.

The Human Services Program was developed to meet the need for human service manpower in mental health and rehabilitation on regional, state and national levels.

The curriculum of the Program is designed to give students a sound theoretical and technological foundation in the fields of mental health and rehabilitation, with particular emphasis on community approaches. These foundations are provided through course work in Human Service, as well as traditional behavioral science support areas, such as psychology and sociology. Theory is then supplemented with the opportunity to learn by practice via laboratory experience and institutional and community agency placements. Over twenty-five percent of the course credit awarded in the Human Services major is based on supervised laboratory and field experience. By the end of the senior year, the student will have completed more than 1000 hours of clinically relevant experience.

Additionally, the Program seeks to provide Human Services majors with an academic background which will facilitate their entry into graduate programs in rehabilitation, mental health counseling, occupational therapy, gerontology, child care, marriage and the family, psychology, social work and health care administration.

Admission Requirements:

The student does not have to be admitted to the Program to be enrolled in freshman Human Services courses, or to declare Human Services as a major field.

The student must be admitted to the Human Services Program prior to enrollment in sophomore practicum Human Services courses. The admissions procedure is as follows:

1. Successful completion of general admission requirements for Pan American University.
2. Successful completion of any remedial coursework required by the University.
3. Successful completion of freshman English requirements.
4. Successful completion of 3 credit hours of Human Services freshman course work.
5. Documentation of arrangements for student liability insurance coverage.
6. A Degree Plan on file with the Human Services Program, approved by the Program Director.

Students who have completed two years of study in Human Services and have received an Associate Degree in a Human Services field of study from an approved community college program are encouraged to transfer into the Pan American University Human Services Program. All course credits which meet University requirements and Program grade requirements will be accepted for transfer.

General Education Requirements for

Bachelor of Arts Degree in Psychology or Sociology:

Bachelor of Social Work Degree

Bachelor of Science Degree in Human Services

English 1301, 1302 or 1387, 1388 or 1406, 1302.....	6-7 hours
Sophomore English.....	6 hours ¹
Government 2313, 2314 or 2387, 2388.....	6 hours
History 2313 or 2333, 2314, or 2387, 2388.....	6 hours
Math 1335.....	3 hours
P.E. Activities.....	4 hours
Mathematics, Lab Science or Foreign Language.....	12 hours ²
Electives.....	12 hours

General Education Requirements for

Bachelor of Science Degree in Psychology:

English 1301, 1302 or 1387, 1388 or 1406, 1302.....	6-7 hours
Sophomore English.....	6 hours
Government 2313, 2314 or 2387, 2388.....	6 hours
History 2313 or 2333, 2314, or 2387, 2388.....	6 hours
Math 1340.....	3 hours
CIS 1301.....	3 hours
P.E. Activities.....	4 hours
Electives.....	12 hours

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

Select one from Psy 4313, 4333

Select one from Psy 3343, 4384

Select two sequences from: (total of 16 hours)

a. Physics 1401, 1402 (Prerequisite: Math 1340) or Physics 1405, 1406

b. Biology 1401, 1402

c. Chemistry 1401, 1402

Select one from:

a. Biology 3303

b. Physics 3401

c. CIS 2309 or C S 2425

d. Chemistry 3401

Math or Stat 2330 may be substituted for Psy. 2301, but student must still have 30 hours in Psychology.

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:

Elementary Plan I: 18 semester hours of Psychology of which 9 hours must be advanced. Psy. 1313 or 1387, and 1323 or 1388 are required.

Elementary Plan II: 24 semester hours in Psychology of which 12 hours must be advanced. Psy. 1313 or 1387, and 1323 or 1388 are required.

Secondary Plan I: 24 semester hours in Psychology of which 12 hours must be advanced. Psy. 1313 or 1387, and 1323 or 1388 are required.

Major in Sociology:

30 semester hours in Sociology of which 15 hours must be advanced; must include Soc. 1313, 1323, 2301, 3301 and 4333.

Math or Stat 2330 may be substituted for Soc. 2301, but student must have 30 hours in Sociology.

Minor in Sociology:

18 semester hours in Sociology of which 6 hours must be advanced; must include Soc. 1313, 1323, and either 3301 or 4333.

Teacher Certification in Sociology:

Elementary Plan I: 18 semester hours of Sociology of which 9 hours must be advanced. Soc 1313 and 1323 are required.

Elementary Plan II: 24 semester hours of Sociology of which 12 hours must be advanced. Soc. 1313, 1323, 2333, and 4313 are required.

Secondary Plan I: 24 semester hours in Sociology of which 12 hours must be advanced. Soc. 1313, 1323 and Soc. 3301 or 4333 are required.

Major in Social Work

The broad field major includes 32 hours in Social Work and must include SocW 1313, 2314, 2324, 3314, 3323, 3324, 3353, 4314, 4416, 4417 (4618 optional). Required support courses to be taken from the following groups: (27 hours)

Group A: (3 hours required)	Soc 2301; Psy 2301; Math 2330 or Stat 2330
Group B: (9 hours of which 6 must be advanced)	Psy 1313, 1323, 2335, 2336, 2337, 3305, 4313, 4333
Group C: (6 hours of which 3 must be advanced)	Soc 1313, 1323, 2324, 3324, 4311, 4323, 4352
Group D: (9 hours of which 6 must be advanced)	Hist 2363, 4344, 4353 Govt 3323, 3360 Anth 2353, 3345, 3375, 4353

¹English 2309 is recommended for three of the six hours of Sophomore English for Human Services majors.

²From two of the three fields. Social Work majors are required to take Biology 1401 and 1402, and 6 hours of Spanish. Human Services majors are required to select two from Biology 1401, 1402, 2305, 2403; and 6 hours of Spanish.

Comm 1303, 2302, 3315
 CIS 1301
 Eco 1301
 Phil 1320, 2330
 Crij 1301, 3341

Recommended Social Work electives: SocW 2323, 3333, 3334. Social Work is a broad field major and requires no minor.

Major in Human Services

The interdisciplinary broad field Human Services major requires a minimum of 56 major field course credits and support electives from each of 3 areas.

Major Field Courses: HS 1351, 1311, 1411, 2322, 3222, 3231, 3611 or 3791, 3612 and select one sequence: (1)HS 2571, 2572, Ed 2301, or (2)HS 2581, 2282, Psy 2324, 2335. Select one additional sequence: (1)HS 4711, 4712 (Mental Health/Mental Retardation); (2)HS 4721, 4722 (Mental Health Administration); or (3) HS 4731, 4732 (Child Care and Development).

A minimum grade of "C" is required in the major field courses.

Group I (select two): HRP 1201, 1301, 1402, 2301, 3301, 3302, Rec 1351, Comm 3316, Phil 1320.

Group II (Select two): Soc 1313, 1323, 2333, 3324, 3340, 3345, 3353, 3393, 4311, Socw 2324, Anth 2323, Crij 2303, 3341.

Group III (Select four, two must be advanced): Psy 1313, 1323, 2337, 3305, 3325, 3333, 4333, 4313.

Minor in Human Services:

HS 1351, 1311, 2322, 2571, and six advanced hours of Human Services coursework.

Minor in Anthropology:

18 semester hours in Anthropology, of which 6 hours must be advanced; must include Anth. 1413, 1323, and 4345.

Minor in Philosophy:

18 semester hours in Philosophy, of which 6 hours must be advanced; must include Phil. 1310 or 2330, and 1320.

Independent and Interdisciplinary Study in Philosophy:

Open to students who have completed at least two semesters of philosophy with a minimum grade point average of B and the consent of the instructor and the department head. Those enrolled in the course will

engage in serious directed research and participate in periodic colloquia arranged by the instructors in charge.

SUGGESTED CURRICULA

Psychology Major

Freshman Year

Eng 1301, 1302 or 1387, 1388
 or 1406, 1302

Hist 2313 or 2333, and 2314
 or 2387, 2388 or Govt 2313,
 2314 or 2387, 2388

Math 1335

For Lang, Math or Lab Sci¹

P.E. (if required)

Psy 1313 or 1387, 1323 or 1388

Junior Year

Psy 3 hours

Psy 3343

Psy 3 adv. hours

Minor 6 hours

Electives 9 hours (with 6 adv.)

Sociology Major

Freshman Year

Eng 1301, 1302 or 1387, 1388
 or 1406, 1302

Hist 2313 or 2333 and 2314
 or 2387, 2388 or Govt 2313,
 2314 or 2387, 2388

Math 1335

For Lang, Math or Lab Sci¹

P.E. (if required)

Soc 1313, 1323

Junior Year

Soc 3301

Soc 3 hours

Soc 3 adv. hours

Minor 6 hours

Electives 15 hours

(with 6 adv.)

Sophomore Year

Soph Eng 6 hours

Govt 2313, 2314 or 2387, 2388

or Hist 2313 or 2333, and 2314

or 2387, 2388

P.E. (if required)

Minor 3 hours

For Lang., Math or Lab Sci¹

Psy 2301 or Math 2330

Psy 2325

Elective 3 hours

Senior Year

Psy 4313

Psy 6 adv. hours

Minor 6 adv. hours

Electives 12-15 hours

(with 9 adv.)

Sophomore Year

Soph Eng 6 hours

Govt 2313, 2314 or 2387, 2388

Hist 2313 or 2333, and 2314

or 2387, 2388

P.E. (if required)

For Lang., Math or Lab Sci¹

Soc 2301 or Math 2330

Soc 3 hours

Minor 3 hours

Elective 3 hours

Senior Year

Soc 4333

Soc 6 adv. hours

Minor 6 adv. hours

Electives 15 hours

(with 9 adv.)

¹A total of 12 hours from 2 of the 3 fields is required

Department of Criminal Justice

Dr. David L. Carter, *Head*

The Department of Criminal Justice prepares the student to enter such careers as law enforcement, criminal justice planning and research, probation, parole, institutional corrections, youth services, and police management at all levels of government. The degree program also provides an excellent background for individuals interested in private and/or industrial security. The well-rounded academic experience provided by the Department of Criminal Justice additionally serves as a strong foundation for those students interested in graduate study in criminal justice. (Some credit is available by examination)

The Department of Criminal Justice is one of the largest in Texas and enjoys an excellent reputation both within the state and nationally. 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.

Criminal Justice has received approval for a significant change of available majors for Fall Semester 1982. Under the change a student may major in either (1) *Police Administration* or (2) *Corrections*. For further information on the status and requirements of these majors please contact the department, 381-3566.

DEGREE REQUIREMENTS

General Education Requirements for Bachelor of Science in Criminal Justice

English 1301, 1302 or 1387, 1388 or 1406, 1302...	6-7 hours
Sophomore English (2309 recommended).....	6 hours
Government 2313, 2314 or 2387, 2388.....	6 hours
History 2313 or 2333, 2314; or 2387, 2388.....	6 hours
Math 1335.....	3 hours
Mathematics, Lab Science or Foreign Language.....	12 hours ¹
PE Activities.....	4 hours
Electives.....	12 hours

Major in Police Administration

The *Police Administration* major is a broadfield major requiring 44 semester hours in criminal justice as follows: Crij 1301, 1312, 2331,

2332, 3303, 3402, 4311, 4312, 4401 and Soc 3313. Twelve hours of criminal justice electives from: Crij 2303, 2304, 2323, 3314, 3361, 4313, 4361, 4362, 4363. Additionally, required social science support courses (12 hours) are: Soc 1313 or 1323; Psy 1313 or 2324 or Soc 2324; Govt 4321 or 4367; and one course from Soc 3333, 3340, 4313, 4323, or 4343. Finally, *Police Administration* majors must choose three courses (9 hours) from **one** of the following interdisciplinary course groups:

Group A—General Management and Personnel Administration
CIS 1301; Eco 2301, 3358, 4303; Mana 3361, 3362, 4332, 4361

Group B—Accounting

Acc 2421, 2322, 2329; Eco 1301, 2353, 2354; Fina 3340; Mana 3361

Group C—Labor Management and Public Administration

Eco 2301, 3358, 4303; Fina 3390; Govt 3323, 3324, 4312, 4365, 4332, 4361; Mana 3365, 4368; Soc 3334

Group D—Community Services and Interaction

Psy 3325, 3373, 4313, 4333; Psy or Soc 2324, 3333, 4353; SocW 2324, 3314

Major in Corrections*

The Corrections major is a broadfield major requiring 44 semester hours in criminal justice as follows: Crij 1301, 2303, 2342, 2344, 3303, 3331, 3402, 4341, 4401, and Soc 3313. Twelve hours of criminal justice electives from: Crij 2331, 2332, 3341, 3343, 3361, 4343, 4361, 4362, 4363. Additionally, required social sciences support courses (12 hours) are: Soc 1313 or 1323; Psy 1323 or 2324 or Soc 2324; Govt 4321 or 4367; and one course from Soc 3353, 4 4323, or 4343. Finally, Corrections majors must choose three courses (9 hours) from **one** of the following interdisciplinary course groups:

Group A—Interpersonal Relations

Anth 1323, 3393; Comm 1307; Psy 2301, 2324, 3305, 3343, 4313; Soc 2323, 4352.

Group B—Health and Social Services

H E 2371; HRP 3301, 3302; Psy 2324; Soc 3324, 3326, 3393; SocW 1313, 2314, 2324, 3314

Minor in Criminal Justice

The Criminal Justice minor requires 19 semester hours of criminal justice course work, including Crij 1301 and 3402, of which 10 semester hours must be advanced.



*From two of the three fields.

Department of History

Dr. Rondel V. Davidson, *Head*

The Department of History offers both a major and a minor in history. In addition, it offers courses for students seeking a second teaching field for teacher certification. 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. The Department of History, in conjunction with the Department of Foreign Languages and Behavioral Sciences also offers a B.A. degree in Mexican American Heritage.

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.

General education Requirements for a Bachelor of Arts Degree in History:

English 1301, 1302 or 1387, 1388 or 1406, 1302.....	6-7 hours
Sophomore English.....	6 hours
Government 2313, 2314 or 2387, 2388.....	6 hours
Math 1335.....	3 hours
P.E. Activities.....	4 hours
Mathematics, Lab Science or Foreign Language.....	12 hours
(From two of the three fields)	
Electives.....	12 hours

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.

*Honors 2387, 2388 may be substituted for Hist. 1333, 1334.

**Honors Hist. 2387, 2388 may be substituted for Hist. 2313, 2314.

Minor in History

(without Teacher Certification):

18 semester hours of which 6 must be advanced. Must include 1333* or 1334*, 2313,** 2314,** and 2333.

Minor in History

(with Teacher Certification):

Elementary Plan I: 21 semester hours in history, must include Hist. 1333* or 1334,* 2313,** 2314,** 2333 and 9 advanced semester hours with 3 semester hours from each of the American, Latin American and European fields of history.

Elementary Plan II: 24 semester hours in history, of which 12 semester hours must be advanced; must include Hist. 1333* or 1334,* 2313,** 2314,** 2333 and 3 advanced semester hours from each of the three fields: American, Latin-American and European History.

Secondary Plan I: 24 semester hours of history, of which 12 semester hours must be advanced; must include Hist. 1333* or 1334,* 2313,** 2314,** 2333 and 3 advanced semester hours from each of the three fields: American, Latin-American and European history.

History Majors and Minors May Elect

Teacher Certification in Social Sciences:

Secondary Plan II: 48 semester hours in the social sciences. Must include Hist. 2313,** 2314,** 2333; Govt. 2313, 2314; Eco. 2354 or 1301; Geog. 2313 or 2301; and Soc. 1313. 24 semester hours must be divided among advanced History and Government courses with not fewer than nine semester hours in each field.

SUGGESTED CURRICULUM

History Major

Freshman Year

Hist 1333 and 1334
Hist 2313 and 2314 or 2387
and 2388

Sophomore Year

Hist 2333
Govt 2313 and 2314 or 2387
and 2388

Eng 1301 and 1302 or 1387
and 1388 or 1406 and 1302
Math 1335
P.E. (if required)
Minor field

Junior Year

Adv. Hist from Amer. Latin
Amer, European fields
Minor adv. hours
Electives 6 adv. hours

Soph Eng 6 hours
For Lang, Math or Lab Sci¹
P.E. (if required)
Minor
Electives

Senior Year

Minor
Electives
Recommended electives
9 adv. hours

¹A total of 12 hours from 2 of the 3 fields are required.

MAJOR IN MEXICAN AMERICAN HERITAGE

The B.A. degree in Mexican American Heritage is an interdisciplinary program taught by the faculty of the departments of History, Foreign Languages and Behavioral Sciences and administered by the Department of History. The program is designed as a broad field, secondary teaching degree which enables the student to concentrate in the field of Mexican American Heritage and to obtain teacher certification in three fields: History, Sociology and Spanish. The degree will provide the graduate many options in the teaching profession.

Major Requirements: History 2363 Mexican American Heritage

SPANISH Required courses: 18 semester hours	
2307, 2308	Intermediate Spanish (or equivalent courses)
3303	Spanish Composition
3330	Spanish Grammar
3306	Basic Concepts of Spanish Phonetics and Phonology
4316	Techniques of Teaching Spanish
HISTORY Required courses: 18 semester hours	
1333 or 1334	Civilization through the Centuries (or equivalent)
2333	A General Survey of the History of Texas
Choose 2 from these Latin American courses:	
3333	Colonial Latin America
4345	Mexico's First Century
4353	History of Mexican Culture
4354	Contemporary Mexico
Choose 1 from these American History courses:	
4322	The Spanish Southwest to 1821
4325	The American Southwest after 1821
Choose 1 from these European History courses	
3341	History of England I, to 1688
3342	History of England II, after 1688
4370	The Renaissance and the Reformation, 1300 to 1650
4375	Absolutism and Enlightenment in Europe, 1650-1789
4376	Revolutionary Europe, 1789-1850
SOCIOLOGY Required courses: 24 semester hours	
1313	Principles of Sociology
1323	A Study of Social Problems
3375	Mexican American Folklore
4323	The Mexican American People
Choose 1 from the following basic Sociology courses	
3301	Methods of Social Research
4333	Social Theory
Choose three from the following	
2353	Introduction to Folklore
3345	Ritual Belief and Healing
4313	American Minorities
4324	Demography of the Southwest
4363	Society of Modern Mexico
ADDITIONAL RECOMMENDED COURSES INCLUDE:	
Anth 1323	Introductory Cultural Anthropology
Eng 3321	Language and Culture
Eng 4316	Mexican American Literature
Span 3310	Masterpieces in Spanish-American Literature I
Span 3311	Masterpieces in Spanish-American Literature II
Span 3316	The Mexican Novel
Span 3321	Short Story in Spanish America
Govt 3360	American Minority Politics

MINOR IN MEXICAN AMERICAN STUDIES

This is an interdisciplinary program, taught by the faculty of the departments of History, Foreign Languages, Behavioral Sciences, and English which is aimed at giving the Mexican American student a more appreciable understanding of the heritage of his ancestry and its contributions to his present environment.

Mexican American studies offers a minor only, but it is a minor which offers excellent support for majors in Spanish or the Social Sciences as well as providing support for Secondary Education majors with teaching fields in the Social Sciences or Spanish and for Elementary Education majors specializing in Bilingual Education.

The curriculum for this program is divided into two classifications: impact courses, which deal specifically and directly with the Mexican American; and support courses, which, for the most part, are concerned with Mexico, aspects of its culture, and the Spanish language. Programs

of study will be influenced by the student's major. Any course may be taken as an elective.

Minor Requirements

18 semester hours, of which 9 must be from the impact courses.

Impact Courses:

- Eng 4316 Mexican American Literature.
- Hist 2363 Mexican American Heritage
- Hist 4322 The Spanish Southwest Through 1821.
- Soc 4323 The Mexican American People.

Support Courses in History:

- Hist 4325 The American Southwest After 1821.
- Hist 4345 Mexico's First Century as an Independent Republic.
- Hist 4353 History of Mexican Culture.
- Hist 4354 Contemporary Mexico

Support Courses in Spanish:

- Six hours of Freshman or Intermediate Spanish
- Span 3303 Advanced Spanish Composition.
- Span 3304 Advanced Spanish Composition.
- Span 3306 Fundamentals of Spanish Grammar.
- Span 3310 Masterpieces of Spanish-American Literature I.
- Span 3311 Masterpieces of Spanish-American Literature II.
- Span 3321 Short Story in Spanish-America.
- Span 4307 Spanish-American Novel.
- Span 4315 Contemporary Drama and Poetry of Spanish-America.
- Span 4326 Contemporary Spanish-American Literature: A New Era.

DEPARTMENT OF HISTORY GRADUATE PROGRAM

The department of history offers courses leading to a Master of Arts in Interdisciplinary Studies with a concentration in History and providing minor and support areas for degrees in other fields.

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

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 three 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 related fields such as government, sociology, English, economics, Spanish, or education.
2. Non-thesis program: 36 semester hours degree with 18 hours in history. Candidates must select the remaining 18 hours from 2 related fields.
3. Professional certification program: 36 semester hour, non-thesis degree with 18 hours of history. The program includes 12 hours of education with 6 additional hours in a resource area such as government, sociology, English, Spanish, or economics. In the 18 hours of history, one 6000 level history course is required in each of the specialization areas of American, European, and Latin American history.

MASTER OF ARTS DEGREE INTERDISCIPLINARY STUDIES

Concentration History	Thesis
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 related areas. At least half of the hours must be at the 6000 level.

TOTAL 30 Hours

MASTER OF ARTS DEGREE INTERDISCIPLINARY STUDIES

Concentration History	Non-Thesis
CONCENTRATION	(18 Hours)
A minimum of 18 semester hours of History with no more than half at the 5000 level. History 6300 required of all students.	
RESOURCE AREAS	(18 Hours)
A minimum of 18 hours selected from 2 related areas. At least half of the hours must be at the 6000 level.	
TOTAL	36 Hours

PROFESSIONAL CERTIFICATE with MASTER OF ARTS DEGREE

Major History	Certificate Professional Elementary
MAJOR	(18 Hours)
No more than 6 semester hours may be in courses at the 5000 level. History 6300 required of all students.	
3 semester hours required from each of the following areas:	
A.	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
B.	Hist. 6307 Seminar and Problems Studies in the History of South America
	Hist. 6309 Seminar and Problems Studies in the History of Middle America
C.	Hist. 6311 Seminar and Problems in Modern European History
	Hist. 6380 The Golden Age of Spain and Portugal
PROFESSIONAL DEVELOPMENT (EDUCATION)	(12 Hours)
<i>Required:</i>	
Ed. 6312	Educational Measurement
Ed. 6330	The Curriculum in the Elementary School
Ed. 6332	Research in Elementary Education
3 semester hours from:	
Ed. 6301	Instructional Media in Teaching
Ed. 6311	Advanced Child Psychology
Ed. 6322	The Bilingual Child
Ed. 6323	Problems in the Teaching of Reading
Ed. 6397	Analysis of Teacher Behavior

RESOURCE AREA	(6 Hours)
No more than 3 hours may be at the 5000 level. Choose from any of the related areas. Those seeking an elementary professional certificate may select these 6 hours in Education.	
TOTAL	36 Hours

PROFESSIONAL CERTIFICATE with MASTER OF ARTS DEGREE

Major History	Certificate Professional Secondary
MAJOR	(18 Hours)
No more than 6 semester hours may be in courses at the 5000 level. History 6300 required of all students.	
3 semester hours required from each of the following areas:	
A.	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
B.	Hist. 6307 Seminar and Problems Studies in the History of South America
	Hist. 6309 Seminar and Problems Studies in the History of Middle America
C.	Hist. 6311 Seminar and Problems in Modern European History
	Hist. 6380 The Golden Age of Spain and Portugal
PROFESSIONAL DEVELOPMENT (EDUCATION)	(12 Hours)
<i>Required:</i>	
*Ed. 5342	Tests and Measurements for the Secondary Classroom Teacher
Ed. 6331	The Curriculum in the Secondary School
Ed. 6380	Practicum for Secondary Teachers

*If the student had Ed. 3342 at the undergraduate level, he should take Ed. 6313.

- 3 semester hours selected from:
- Ed. 6351 Teaching Reading to Secondary Students
 - Ed. 6301 Instructional Media in Teaching
 - Ed. 6333 Research in Secondary Education
 - Ed. 6341 Advanced Adolescent Psychology
 - Ed. 6353 Teaching the Disadvantaged Secondary Learner
 - Ed. 6397 Analysis of Teacher Behavior

RESOURCE AREA (6 Hours)
 No more than 3 hours may be at the 5000 level.
 Choose courses from any of the related areas.

TOTAL 36 Hours

BIBLE CHAIRS

William Starbird, *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, his Department Head and the Vice-President for Academic Affairs may allow him to enroll for additional credit.

Department of Political Science

Dr. Jerry L. Polinard, *Head*

Government majors and minors take courses in four fields of Political Science: (1) American government, including local, state, and national. (2) Comparative government and international relations, including totalitarian government, and government and politics of Asia, comparative governments — Western Democracies politics of emerging nations, Africa and Middle East; international politics and international organization. (3) Political theory and methodology, including scope and methods of political science, and political theory. (4) 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. Government majors and minors also may become involved in the Department's Urban Intern program, whereby selected students receive college credit while working with local, municipal and county governments.

Students majoring in Government may pursue active careers in Law, National and State government, Diplomatic Services, Journalism and Teaching. Regardless of their chosen careers, Government majors all share an interest in the struggle to obtain and use political power; this interest is recognized in the nature of the courses offered by the Political Science faculty.

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 600. 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 to 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. Recommended courses for pre-law study are listed below. Students should take as many of these as their degree requirements allow.

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.

General Education Requirements for Bachelor of Arts Degree in Government and Pre-Law students:

English 1301, 1302 or 1387 ¹ , 1388 ¹ or 1406, 1302	6-7 hours
Sophomore English	6 hours
Government 2313, 2314 or 2387 ¹ , 2388 ¹	6 hours
History 2313 or 2333, 2314 or 2387 ¹ , 2388 ¹	6 hours
Math 1335	3 hours
Mathematics, Lab Science or Foreign Language	12 hours ²
P.E. Activities	4 hours
Electives	12 hours

TOTAL 52-53 hours

¹Honors Courses. Pre-Law students are encouraged to participate in the Honors Program.
²From two of the three fields.

DEGREE REQUIREMENTS

Major in Government:

30 semester hours in Government. Must include Govt. 2313, 2314, 2333; 21 semester hours must be at the advanced level and must include six hours in American government and politics and three hours from the other three above described fields. Eco 2353, 2354 (required).

Minor in Government:

18 semester hours in Government, of which 9 semester hours must be advanced, must include Govt. 2313, 2314, 2333.

Teacher Certification in Government:

Elementary Plan I: 18 semester hours in Government, of which nine must be advanced; must include Govt. 2313, 2314, 2333; and three hours from three of the above four fields of political science.

Elementary Plan II: 24 semester hours in Government, of which 15 must be advanced; must include Govt. 2313, 2314, 2333; and three hours from each of the above four fields of political science.

Secondary Plan I: 24 semester hours in Government of which 15 hours must be advanced, must include Govt. 2313, 2314, 2333; and six advanced hours from American Government and politics, three hours from each of the four fields of political science.

Teacher Certification in Social Sciences:

Secondary Plan II: 48 semester hours in Social Studies. Must include Hist. 2313, 2314, 2333; Govt. 2313, 2314; Eco. 1301 or 2354; Geog.

2313 or 2301; and Soc. 1313. 24 semester hours must be divided among advanced History and Government courses with not fewer than nine semester hours in each field.

Government Major

Freshman Year

Eng 1301, 1302
 Govt 2333
 Govt 2313, 2314 or
 Hist 2313 or 2333, 2314
 Math 1335
 For Lang, Math or Lab Sci
 3 hours
 P.E. 2 hours
 Minor 3 hours

Junior Year

Govt 12 adv. hours
 Minor 3 adv. hours
 Electives 6 hours
 Additional Electives 9 hours
 (with 6 adv.)

Sophomore Year

Soph Eng 6 hours
 Govt 2313, 2314
 or Hist 2313 or 2333, 2314.
 Eco 2353, 2354

For Lang, Math or Lab Sci
 9 hours

P.E. 2 hours
 Minor 3 hours

Senior Year

Govt 9 adv. hours
 Minor 6 hours (with 3 adv.)
 Electives 6 hours
 Additional Electives 12 hours
 (with 3 adv.)

**Pan
American
University
at
Brownsville**



Pan American University at Brownsville

Dr. Homer J. Peña, *President*

The Brownsville Campus of Pan American University is an upper level institution offering junior, senior, and graduate level work leading to bachelor's and master's degrees. Authorized as a center of Pan American University by the Coordinating Board in the Spring of 1973, the Brownsville campus was organized during the Summer and opened that Fall with an enrollment of 398 students. Legislative action in 1977 established Pan American University at Brownsville and the Board of Regents authorized a President and an organizational structure for the institution. In the Spring 1981, enrollment was approximately 1200 students and continued growth is expected.

The establishment of the Brownsville Campus has made it possible for those living in the area to pursue their undergraduate and graduate studies more conveniently without the necessity of traveling a considerable

distance to the Edinburg Campus of Pan American University or to some other more distant university. Students from Texas Southmost College may elect to continue their studies at Pan American University at Brownsville, which is conveniently located on the TSC campus. Also, many teachers, plant and business personnel, housewives, and others in the area have found it convenient to continue their education or take refresher courses at the Brownsville Campus. Many courses are offered during late afternoon and evening in order to accommodate those who work during the day.

LOCATION

Pan American University at Brownsville is located on the campus of Texas Southmost College, a well-established two-year junior college. The two institutions operate as separate institutions, but a cooperative spirit exists between them, assuring the student of a smooth transition from his lower- to his upper-level college work.

The campus is situated in Brownsville (Cameron County), Texas and adjacent to the U.S.-Mexico International Bridge over the Rio Grande. Cameron County is located at the southernmost tip of Texas, adjacent to the state of Tamaulipas, Mexico. Brownsville, a city of more than 80,000 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
 - Government
 - History
 - Sociology
 - Spanish
- Bachelor of Business Administration (B.B.A.) Degree
 - Accounting
 - General Business
 - Management
 - Marketing
- Bachelor of Criminal Justice (B.C.J.) Degree
 - Corrections
 - Police Administration
- Bachelor of Science (B.S.) Degree
 - Biology
 - Elementary Education
 - Physical Education
- Teaching Certification
 - Art
 - Biology
 - Business Education
 - Elementary Education
 - Government
 - History
 - Mathematics
 - Physical Education
 - Psychology
 - Sociology
 - Spanish
- Teaching Endorsements
 - Bilingual
 - Early Childhood Teachers of Exceptional Children
 - Kindergarten
 - Language Learning Disabilities
 - Mentally Retarded

Graduate Programs

- Master of Business Administration (M.B.A.)
- Master of Education (M.Ed.)
 - Bilingual/Bicultural

- Counseling and Guidance
- Educational Administration
- Elementary
- Reading
- Secondary
- Supervision
- Interdisciplinary Studies
- Master of Arts
- Master of Science

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





**Officers
and
Committees**



Officers and Committees 1982-83

PAN AMERICAN UNIVERSITY

THE BOARD OF REGENTS

Eddie Cano	McAllen
Melvin J. Hill	Houston
Ricardo H. Hinojosa	McAllen
Mrs. Ann LaMantia	McAllen
Dr. Rodolfo E. Margo, M.D.	Weslaco
William R. Parker, Jr.	Houston
Kenton E. Schaefer	Brownsville
Moises V. Vela	Harlingen

ADMINISTRATIVE OFFICERS AND STAFF

OFFICE OF THE PRESIDENT

Miguel A. Nevarez	President
Mary Cantu	Secretary to the President
Carol Rausch	Assistant to the President
Scott Chafin	General Counsel
Bahram Hatefi	Internal Auditor
Norma Hernandez	Secretary

OFFICE OF THE VICE PRESIDENT FOR INSTITUTIONAL ADVANCEMENT

T. Edward Mercer	Vice President
Doris Miller	Secretary

ATHLETICS

.....	Director
James McKone	Sports Information Director

OFFICE OF THE VICE PRESIDENT FOR ACADEMIC AFFAIRS

Carl L. Grantz	Acting Vice President
Santos Martinez	Secretary to the Vice President

BIBLE CHAIRS

William Starbird	Acting Director
------------------------	-----------------

COOPERATIVE EDUCATION

Romulo D. Martinez, Jr.	Director
------------------------------	----------

HONORS PROGRAM

Dr. Kenneth R. Bain	Director
---------------------------	----------

LEARNING RESOURCE CENTER

University Library	
Leslie M. Gower	Director of Library
Mary Jo Feldtman	Administrative Assistant
George Gause, Jr.	Special Collections Librarian
Susan Hancock	Head Public Affairs Librarian
Virginia Haynie	Head Catalog Librarian
Robert McDowell	Assistant Librarian for Readers Services
Martha Nichols	Reference Librarian
Katherine Rankin	Catalog Librarian
San Juanita Reyes	Head Reference Librarian
Stanley Shabowich	Acquisitions Librarian
Jean Shelander	Assistant Librarian for Technical Services
William Tinsman	Documents Librarian
Irene Vavrin	Catalog Librarian

University Media Services Center

Daniel Alvarez	Director of Media Services
Kenneth Brock	Assistant Director for Media Services

SCHOOL OF BUSINESS ADMINISTRATION

F. J. Brewerton	Dean of the School
Mary Lopez	Secretary to the Dean
Bureau of Business and Economic Research	
Carl H. Rush, Jr.	Director
Division of Graduate Studies	
Vern C. Vincent	Director
Division of Community Programs	
James Wilson	Acting Director

SCHOOL OF EDUCATION

Jerry L. Pulley	Acting Dean of the School
Ina Odstrcil	Secretary to the Dean

Department of Elementary—Curriculum and Instruction	
Elizabeth W. Gratz	Acting Department Head
Department of Secondary—Curriculum and Instruction	
Thomas E. Simmons	Department Head
Department of School Management	
Alvin R. Cannady	Acting Department Head
Department of School Services	
Ana Maria Rodriguez	Department Head
Department of Health, Physical Education and Recreation	
Amilda Thomas	Acting Department Head
DIVISION OF HEALTH RELATED PROFESSIONS	
Julian Castillo	Director
Marie Irma Salinas	Secretary to the Director
John P. Abraham	Coordinator, Medical Technology
Department of Nursing Education	
Jan Maville	Acting Department Head
SCHOOL OF HUMANITIES	
Bob Dowell	Dean of the School
Dora Cervantes	Secretary to the Dean
Department of Art	
Richard P. Hysiin	Acting Department Head
Department of English	
Jack Holliday	Department Head
Department of Foreign Language	
James Maloney	Department Head
Department of Music	
Dean R. Canty	Department Head
Department of Communications	
Marian F. Monta	Department Head
SCHOOL OF SCIENCES AND MATHEMATICS	
Ernest J. Baca	Dean of the School
Imelda Wade	Secretary to the Dean
Department of Biology	
Sammie L. Sides	Department Head
Department of Chemistry	
Jose Castrillon	Department Head
Department of Mathematics	
John Huber	Department Head
Department of Military Science	
Major Richard Atkinson	Department Head
Department of Physical Science	
Edwin LeMaster	Department Head
SCHOOL OF SOCIAL SCIENCES	
David Alvarez	Dean of School
Annette Clancey	Secretary to the Dean
Department of Behavioral Sciences	
Harold Nelson	Department Head
Department of History	
Rondel Davidson	Department Head
Department of Political Science	
Jerry Polinard	Department Head
OFFICE OF THE VICE PRESIDENT FOR BUSINESS AFFAIRS	
Roy Flores	Vice-President
Evelyn Tobin	Secretary to the Vice-President
PHYSICAL PLANT	
Louis deVries	Director
COMPUTER CENTER	
Leota Hull	Director
BOOKSTORE	
B. J. Pigg	Manager
COMPTROLLER	
.....	Comptroller
PERSONNEL OFFICE	
Tony Villalobos	Administrator
PURCHASING AND CENTRAL SERVICES	
Sam Odstrcil	Director
INTER-AMERICAN AFFAIRS AND INTERNATIONAL EDUCATION	

ALUMNI ASSOCIATIONGeraldine Baldwin..... *Executive Director***DEAN OF STUDENTS AND INSTRUCTIONAL SERVICES**Gilbert de los Santos..... *Dean*Judy Vinson..... *Assistant Dean for Student Life*Maria O. Leach..... *Secretary to the Dean***OFFICE OF ADMISSIONS AND RECORDS**David R. Zuniga..... *Director and Registrar*Linda Flores..... *Assistant Registrar*Linda J. Renner..... *Assistant Director of Admissions***PLACEMENT, TESTING AND COOPERATIVE EDUCATION**Romulo D. Martinez, Jr..... *Director***FINANCIAL AID**Clementine Cantu..... *Director*Jorge Guerra..... *Assistant Director*Cynthia Garrett..... *Assistant Director***STUDENT DEVELOPMENT AND UNIVERSITY CENTER**Antonio F. Vela, Jr..... *Assistant Dean***STUDENT PUBLICATIONS**Joyce A. Prock..... *Advisor***HEALTH SERVICE CENTER**Dora Castillo..... *Coordinator*..... *Physician***WOMEN'S RESIDENCE HALL**Mildred A. Fagg..... *Director***MEN'S RESIDENCE HALL**Darrell D. Troxel..... *Director***LEARNING ASSISTANCE CENTER**Sylvia Lujan..... *Director*Mario Leal..... *Veteran Affairs Advisor*Arturo Ramos..... *Assistant Director*Lupita Cantu..... *Coordinator, Counseling/Advisement*Richard Maville..... *Coordinator, Orientation/Recruitment***BIOMEDICAL SCIENCES PROGRAM**A. J. Alamia..... *Director***COLLEGE ASSISTANCE MIGRANT PROGRAM**Lucas Hinojosa..... *Director***HIGH SCHOOL EQUIVALENCY PROGRAM**Darly Guajardo..... *Director***UPWARD BOUND**Elvira Watson..... *Director***ACADEMIC COMMITTEES**

The Vice President for Academic Affairs and the Director of Admissions and Records are ex officio members of all academic committees. All schools are represented on each academic committee.

CURRICULUM COMMITTEE

8 Faculty Members

1 Graduate Student

1 Undergraduate Student

Director of Curriculum Development (ex officio)

Assistant to Vice President for Academic Affairs (ex officio)

GRADUATE COUNCIL

8 Graduate Faculty Members

1 Graduate Student

1 Undergraduate Student

Director of Curriculum Development (ex officio)

Assistant to Vice President for Academic Affairs (ex officio)

HONORS COUNCIL

8 Faculty Members

2 Undergraduate Students

Director of Honors Program (ex officio)

LIBRARY COMMITTEE

8 Faculty Members

1 Graduate Student

1 Undergraduate Student

Director of Library (ex officio)

RESEARCH COUNCIL

8 Faculty Members

1 Graduate Student

1 Undergraduate Student

OTHER COMMITTEES**ADMISSIONS COMMITTEE**

Director of Admissions and Records (ex officio)

6 Faculty Members

ATHLETIC COMMITTEE

7 Faculty and Administrative Members

Athletic Director (ex officio)

AWARDS AND RECOGNITIONS COMMITTEE

6 Faculty members

3 Students

Assistant Dean for Student Life(ex officio)

DISCIPLINARY COMMITTEE

4 Faculty Members

1 Administrator

3 Students

Dean of Students (ex officio)

Assistant Dean for Student Development(ex officio)

EQUAL EMPLOYMENT OPPORTUNITY COMMITTEE

Faculty and staff members of various ethnic backgrounds, university positions, assignments and sexes.

Compliance Officer

Vice President for Academic Affairs (ex officio)

Vice President for Business Affairs (ex officio)

Vice President for Student Affairs (ex officio)

FINANCIAL AID COMMITTEE

Registrar

Dean of Students

1 Administrator

3 Faculty Members

2 Students

Director of Financial Aid (ex officio)

INSURANCE COMMITTEE

1 Administrator

3 Faculty Members

1 Staff Member

Vice President for Business Affairs (ex officio)

Student Affairs Advisory Committee

3 Faculty Members

Dean of Students

PAUSA President

UCPC President

Editor, The Pan American

Vice President for Student Affairs (ex officio)

Food Committee

Comptroller

Director, Food Service

6 Students

Assistant Dean of Students (ex officio)

PAN AMERICAN UNIVERSITY**TEACHER EDUCATION ADVISORY BOARD**

3 Representatives from Pan American University

3 Representatives from public schools

2 Representatives from the teaching profession

1 Representative from the Education Service Center

PUBLICATION COMMITTEE

- 2 Administrators
- 3 Faculty Members
- 3 Students
- Dean of Students (ex officio)
- Advisor for Student Publications (ex officio)

STUDENT RIGHTS COMMITTEE

- 2 Administrators
- 3 Faculty Members
- 3 Students
- Dean of Students (ex officio)

STUDENT ORGANIZATIONS COMMITTEE

- 1 Administrator
- 3 Faculty Members

- 3 Students
- Assistant Dean for Student Development (ex officio)

TEACHER EDUCATION COMMITTEE

- Dean and Department Heads of School of Education
- Faculty Representatives from School of Education
- Faculty Representatives from each department having teacher education program
- President (ex officio)
- Vice President for Academic Affairs (ex officio)
- Assistant of Vice President for Academic Affairs (ex officio)

FACULTY SENATE

One member from each of the five schools, Health Related Professions and the Library for each 15 eligible members of their faculties.

COURSE DESCRIPTIONS



Course Descriptions

Accounting

ACC 2421 PRINCIPLES OF ACCOUNTING I

Fall, Spring, Summer

An introduction to basic accounting with a balance sheet approach. The accounting cycle is emphasized to promote an understanding of accrual accounting. The primary emphasis is on accounting for the sole proprietorship. Course content: Lecture, three hours per week; mandatory lab, two hours per week.

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

ACC 2322 PRINCIPLES OF ACCOUNTING II

Fall, Spring, Summer

Designed to introduce the student to professional accounting. Subsequent to an intensive review of the accounting cycle, emphasis will be placed on partnership, corporate, and debt equity. Additional areas include statements of changes in financial position, introduction to manufacturing components, analysis of financial statements, and other related topics.

Prerequisite: ACC 2421 with Grade "C" or better.

ACC 2329 MANAGERIAL ACCOUNTING

Fall, Spring, Summer

Emphasis upon implementation of accounting data, ratio analysis, fund statements, cost and budget projections, variance analysis, and relevant accounting tools for managerial decision making. Designed for non-accounting majors. (This course will not count toward accounting major requirements.)

Prerequisite: ACC 2421.

ACC 3321 INTERMEDIATE ACCOUNTING I

Fall, Spring, Summer

The accounting process and financial statements: Detailed study of current assets and current liabilities; revenue recognition; present value concepts; inventory valuation; and all financial statements in light of historical cost, current cost and inflation accounting.

Prerequisite: ACC 2322 and Math 2316; with a grade of "C" or better.

ACC 3322 INTERMEDIATE ACCOUNTING II

Fall, Spring, Summer

The continuing study of ACC 3321: property and plant— acquisition, depletion, disposition; long term liabilities; investments in securities and funds; capital structure and earnings per share; accounting for pension cost, leases and income taxes.

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 2322 or ACC 2329.

ACC 3324 COST ACCOUNTING

Fall, Spring, Summer

Basic concepts and procedures for job lot and continuous process cost accounting, including cost behavior and classification; overhead variance analysis and first level standard cost for material. Labor and overhead is included as well as other management decision considerations.

Prerequisite: ACC 2322 or ACC 2329 with a grade of "C" or better.

ACC 3325 FUND ACCOUNTING

Offered 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.

ACC 3328 ADVANCED COST ACCOUNTING

Offered on Demand

A continuation of ACC 3324 with emphasis on the managerial decision process. Topics will include direct costing; cost-volume-profit analysis; budgeting, responsibility accounting and control; advanced standard cost concepts; and distribution cost analysis.

Prerequisite: ACC 3324 with a grade of "C" or better.

ACC 4320 ADVANCED ACCOUNTING I

Fall

Selected topics such as bankruptcies, installment sales, liquidations and estates and trusts. (Formerly, ACC 4322, Accounting Topics. Credit cannot be obtained for both courses.)

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

ACC 4321 ADVANCED ACCOUNTING II

Spring

Detailed study emphasizing theory and technique of consolidated financial statements and partnership accounting. Prerequisite: ACC 3322 with a grade of "C" or better.

ACC 4323 CONTEMPORARY ACCOUNTING THEORY

Spring

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 or concurrent enrollment in ACC 4324.

ACC 4324 AUDITING I

Fall

A survey of auditing standards and procedures applied by public accountants and internal auditors in examining financial statements and verifying underlying data.

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

ACC 4327 AUDITING II

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 working paper techniques.

Prerequisite: ACC 4324 with a grade of "C" or better.

ACC 4329 ADVANCED INCOME TAX PROCEDURE

Offered 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.

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 organizations, and the application of these principles in evaluation, interpretation and utilization of accounting data for managerial decisions.

Prerequisite: ACC 2322 or 2339, FINA 3383. Since this course replaces ACC 6326, a student cannot receive credit for both courses.

ACC 6323 ACCOUNTING SEMINAR

Offered 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.

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 1413 PHYSICAL ANTHROPOLOGY AND HUMAN ORIGINS

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. Three hours of lecture and three hours of laboratory. Laboratory fee \$5.00 (Formerly ANTH 1313, may not be repeated for credit.)

ANTH 2323 MEXICAN AMERICAN CULTURE

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 2353 INTRODUCTION TO FOLKLORE

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. May be counted as Anth. 2353 or Soc. 2353.

ANTH 2371 AZTEC AND MAYA CIVILIZATION

A review of the development of Aztec and Maya Civilization. The social organization, religion, mythology, family, folk life and archaeology of the Aztec and the Maya is covered in this course.

Prerequisites: ANTH 1313 or 1323.

ANTH 3345 RITUAL, BELIEF AND HEALING

A socio-cultural analysis of existing medical systems. Both modern medical systems and folk medical systems will be discussed, with special emphasis on the current social science theories relating to health and human behavior. May be counted as Soc. or Anth. 3345.

Prerequisite: Three hours of anthropology or sociology, or consent of instructor.

ANTH 3375 MEXICAN AMERICAN FOLKLORE

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 achieve folklore materials. May be counted as Sociology 3375 or Anthropology 3375.

Prerequisite: Anth./Soc. 2353 or consent of instructor.

ANTH 4345 ANTHROPOLOGICAL THEORY AND METHODOLOGY

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

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.

Prerequisites: ANTH/SOC 2353 or 3375.

ANTH 4387 SPECIAL SOCIO-CULTURAL ISSUES

Designed to give students experience in significant socio-cultural issues. Projects and opportunities are varied according to student interest and availability of faculty. Sequential registration for up to nine hours is permitted as topics vary. May be counted as ANTH 4387, 4388, 4389 or SOC 4387, 4388, 4389.

Prerequisite: Nine hours of Sociology and/or Anthropology and consent of instructor.

ANTH 4388 SPECIAL SOCIO-CULTURAL ISSUES

Designed to give students experience in significant socio-cultural issues. Projects and opportunities are varied according to student interest and availability of faculty. Sequential registration for up to nine hours is permitted as topics vary. May be counted as ANTH. 4387, 4388, 4389 or SOC 4387, 4388, 4389.

Prerequisite: Nine hours of Sociology and/or Anthropology and consent of instructor.

ANTH 4389 SPECIAL SOCIO-CULTURAL ISSUES

Designed to give students experience in significant socio-cultural issues. Projects and opportunities are varied according to student interest and availability of faculty. Sequential registration for up to nine hours is permitted as topics vary. May be counted as ANTH. 4387, 4388, 4389 or SOC. 4387, 4388, 4389.

Prerequisite: Nine hours of Sociology and/or Anthropology and consent of instructor.

Art**ART 1301 ART APPRECIATION**

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

Introduction to drawing, including work in a variety of drawing media. Basic concepts are explored. \$4.00 laboratory fee.

ART 1312 DRAWING II

Continuation of Art 1311 with problems in illumination, foreshortening, perspective and chiaroscuro as expressive concepts.

Prerequisite: ART 1311. \$4.00 laboratory fee.

ART 1331 DESIGN I

Principles of design and development of design structures on two dimensional surfaces. \$4.00 laboratory fee.

ART 1332 LETTERING

Introduction to lettering styles. Basic serif and sans serif type faces are studied. Emphasis is placed upon spacing, rough lettering, and color usage.

Prerequisite: ART 1331. \$4.00 lab fee.

ART 2303 ART METALS I

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.

Prerequisite: ART 1331. \$4.00 lab fee.

ART 2304 ART METALS II

The continuance of portable art includes techniques such as stone setting, plastics, fabrication and casting. Students are advised in preparation of portfolio presentation.

Prerequisite: ART 2303. \$4.00 lab fee.

ART 2312 DRAWING III

The human figure as expressive subject matter in drawing.

Prerequisite: ART 1311. \$4.00 laboratory fee.

ART 2313 TECHNICAL DRAWING

Acquaints the student with tools and symbols used in professional drafting. Methods of drawing to scale are presented.

Prerequisite: 6 semester hours of drawing. \$4.00 lab fee.

ART 2321 PAINTING I

Introduction to painting, involving individual development and invention using watercolor and acrylic.

Prerequisites: ART 1311, 1331. \$4.00 lab fee.

ART 2322 PAINTING II

An introduction to oil painting techniques working from nature and the living model. Observation and interpretation are stressed.

Prerequisites: ART 1311, 1331. \$4.00 lab fee.

ART 2331 ILLUSTRATION

Learning to illustrate for mass duplication. This course covers the principles of illustration and the adaption of all art media to the needs of the illustrator.

Prerequisite: Art 1311, 1331, 2312. \$4.00 lab fee.

ART 2332 DESIGN II

Three dimensional design includes investigation into the phenomena existing in the three dimensional arts. A variety of materials handling and creative methods for the purposes of creating a three dimensional form are considered.

Prerequisite: ART 1331. \$4.00 lab fee.

ART 2334 PHOTOGRAPHY AS AN ART FORM

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.

Prerequisite: ART 1331. \$4.00 lab fee.

ART 2341 SCULPTURE I

Introductory course in sculptural concepts through basic sculptural media.

Prerequisite: ART 2332. \$4.00 lab fee.

ART 2342 SCULPTURE II

Continuation of ART 2341 with emphasis on individual development.

Prerequisite: ART 2341. \$4.00 lab fee.

ART 2361 PRINTMAKING I

Introduction to Printmaking with concentration of Intaglio processes.

Prerequisites: ART 1311, 1331. \$4.00 lab fee.

ART 2362 PRINTMAKING II

Introduction to color with continuation of Intaglio and relief printing systems.

Prerequisite: ART 2361. \$4.00 lab fee.

ART 2371 CERAMICS I

Introduction to ceramic design concentrating on handbuilding. Some work with potter's wheel, glazing and firing. \$4.00 lab fee.

ART 2373 CERAMICS II

Emphasis on basic wheel thrown shapes and introduction to glaze calculation.

Prerequisite: ART 2371. \$4.00 lab fee.

ART 3303 ART METALS III (METALSMITHING)

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.

Prerequisite: ART 2304. \$4.00 lab fee.

ART 3304 ART METALS IV (METALSMITHING)

Continued exploration of Metalsmithing techniques. Die forming, electroforming, and machining are included.

Prerequisite: ART 3303. \$4.00 lab fee.

ART 3321 PAINTING III

Problems in composition: figure, landscape, abstract using oil/acrylic.

Prerequisite: ART 1311 and 1331. \$4.00 lab fee.

ART 3322 PAINTING IV

Continuation of ART 3321 moving toward individual expression in oil/acrylic.

Prerequisite: ART 3321. \$4.00 lab fee.

ART 3331 VISUAL COMMUNICATIONS I

The translation of verbal language into visual language through a variety of media.

Prerequisite: Art 3333. \$4.00 lab fee.

ART 3333 ADVERTISING DESIGN

Introduction to advertising design. Developing graphic images from words and preparing them for mass duplication.

Prerequisite: ART 1331, 1332. \$4.00 lab fee.

ART 3341 SCULPTURE III

Intermediate course emphasizing increased personal development through the use of metal; welding and casting.

Prerequisite: ART 2342. \$4.00 lab fee.

ART 3342 SCULPTURE IV

Problems in sculpture. Variety in materials and techniques.

Prerequisite: ART 3341. \$4.00 lab fee.

ART 3350 ART SURVEY

Historical survey of the visual arts from Paleolithic to modern times.

ART 3351 MEDIEVAL AND RENAISSANCE ART

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

Prerequisite: ART 3350.

ART 3352 CONTEMPORARY ART

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

Prerequisite: Art 3350.

ART 3353 ART OF THE ANCIENT WORLD

An in-depth historical study of art styles from 5,000 B.C. to 325 A.D.

Prerequisite: ART 3350

ART 3361 PRINTMAKING III

Introduction to Serigraphy

Prerequisite: ART 2362. \$4.00 lab fee.

ART 3363 PRINTMAKING IV

Introduction to Lithography.

Prerequisite: ART 3361. \$4.00 lab fee.

ART 3371 CERAMICS III

Concentrated work on potter's wheel and advanced handbuilding techniques. Further instruction in glaze formulation.

Prerequisite: ART 2373. \$4.00 lab fee.

ART 3372 CERAMICS IV

Combined handbuilt and thrown forms, and encouragement of personal direction.

Prerequisite: ART 3371. \$4.00 lab fee.

ART 3381 PERCEPTION AND EXPRESSION IN ART I

A course designed to strengthen visual perception and divergent thinking through visual and conceptual stimuli with primary emphasis on studio activities for prospective teachers of elementary art.

Prerequisite: Junior standing.

ART 3382 PERCEPTION AND EXPRESSION IN ART II

Emphasis on further studies development in depth and on curriculum development for teachers of upper elementary and middle school art.

Prerequisite: ART 3381 or permission of instructor.

ART 3383 ART IN THE SECONDARY SCHOOL

Fall only

Survey of visual education at the secondary level. Required for teaching Art in the junior and senior high school.

Prerequisite: Junior standing. Prerequisite for student teaching.

ART 4301 PHILOSOPHIES OF ART

See Philosophy 4301 for course description. May be counted as Music or Art or Philosophy.

ART 4321 PAINTING V

Optional painting medium. Interpretation from nature, the living model, or studio concepts are developed.

Prerequisite: ART 3322. \$4.00 lab fee.

ART 4322 PAINTING VI

Optional painting medium. Advanced painting problems in observations from nature, the human figure, or advanced studio concepts.

Prerequisite: ART 4321. \$4.00 lab fee.

ART 4333 ADVERTISING ART II

Exploration of production in various advertising media, increased familiarity with type specification and applied design. May also include work in the field.

Prerequisite: Art 3333. \$4.00 lab fee.

ART 4334 ART DIRECTION I

Advanced problems in advertising communication for printed mass media. Course covers newspaper and magazine (editorial and advertising), billboard art production, brochures and corporate identity and photography application.

Prerequisite: Art 3333, 4333. \$4.00 lab fee.

ART 4341 SCULPTURE V

Exploration of experimental materials including electronics and kinetic art forms.

Prerequisite: ART 3342. \$4.00 lab fee.

ART 4351 LATIN AMERICAN ART: PRE-CONQUEST

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

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

ART 4353 AMERICAN ART

History of the visual arts in the United States: 17th century to the present, including the art of the American Indian.

Prerequisite: ART 3350.

ART 4361 PRINTMAKING V

Advanced printmaking emphasizing experimental techniques and individual direction.

Prerequisite: ART 3363. \$4.00 lab fee.

ART 4371 CERAMICS V

Individual direction and glaze experimentation.

Prerequisite: ART 3372. \$4.00 lab fee.

ART 4372 CERAMICS VI

Continuation of ART 4371.

Prerequisite: ART 4371. \$4.00 lab fee.

ART 4383 RESEARCH IN TEACHING SECONDARY ART

Methods for teaching Creative Art in the junior and senior high school. Spring only.

Prerequisite: ART 3383.

ART 4391 INDIVIDUAL PROBLEMS

Advanced problems in an area of the student's choice: Painting, Drawing, Sculpture, Crafts, Printmaking, Art Education, Art History.

Prerequisite: All courses in the area of choice.

ART 4392 INDIVIDUAL PROBLEMS

Advanced problems in an area of the student's choice.

Prerequisite: ART 4391.

ART 5383 SEMINAR IN ART EDUCATION

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

ASTR 1401 GENERAL ASTRONOMY

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

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.

Bible

BIBL 1310 OLD TESTAMENT SURVEY

A survey of the history and literature of the Old Testament. Particular emphasis is placed upon the teachings concerning God, man, salvation and social relations; especially those teachings which deal with the preparation for the coming of Christ.

BIBL 1311 NEW TESTAMENT SURVEY

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, Mohammedanism, Confucianism, Christianity and some less-known faiths or philosophies.

Biology

BIOL 1305 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 1305 and 1401. Three hours lecture and two hours laboratory. \$3.00 laboratory fee.

BIOL 1306 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 1306 and 1402. Three hours lecture and two hours laboratory. \$3.00 laboratory fee.

BIOL 1401 GENERAL BIOLOGY

Fall, Spring, Summer

A study of the basic principles of Biology. Topics covered include cellular biology and the anatomy and physiology of living organisms. Three hours lecture and three hours laboratory. \$3.00 laboratory fee.

BIOL 1402 GENERAL BIOLOGY

Fall, Spring, Summer

A continuation of Biology 1401 including cellular reproduction, genetics, development, evolution, ecology and a survey of the diversity of organisms. Prerequisite: Biology 1401. Three hours lecture and three 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: BIOLOGY 1401-1402 or permission of the instructor. Three hours lecture.

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 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: BIOLOGY 1401 or 1305. \$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: BIOLOGY 1401 or 1305. \$5.00 laboratory fee.

BIOL 2403 ANATOMY AND PHYSIOLOGY

Fall, Spring, Summer

Gross anatomy of the human body: The various physiological processes and fundamentals of heredity. Three hours lecture and three hours laboratory. Prerequisite: BIOLOGY 1401, 1305 or 1402. \$4.00 laboratory fee.

BIOL 2407 INVERTEBRATE ZOOLOGY

Spring

Study of the comparative morphology, evolution, systematics and natural history of the invertebrates. Recommended as a preparatory course for Biol. 3402 and 4402. Prerequisite: 6 to 8 hours of biology.

BIOL 3303 GENETICS

Spring

Introduction to Genetics with consideration of its application in Biology and human welfare. Three hours lecture.

Prerequisite: Nine semester hours of Biology.

BIOL 3309 PLANT TAXONOMY

Fall, Summer

Identification of vascular plants, with emphasis on native flowering plants. Two hours lecture and four hours laboratory.

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

BIOL 3401 BACTERIOLOGY

Fall, Spring, Summer

A general survey of the field of Bacteriology. The laboratory work includes culturing, staining and identifying of micro-organisms. Three hours lecture and three hours laboratory.

Prerequisite: BIOLOGY 1402 and six semester hours of Chemistry. \$4.00 laboratory fee.

BIOL 3402 ANIMAL PARASITOLOGY

Spring, Summer

Introduction to study of parasitic protozoa and worms (especially trematodes, cestodes, nematodes and acanthocephala). Three hours lecture and three hours laboratory.

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

BIOL 3403 MEDICAL MICROBIOLOGY AND IMMUNOLOGY

Spring

A study of micro organisms 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 micro organisms. Three hours lecture and three hours lab.

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

BIOL 3404 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.

Prerequisites: Nine semester hours BIOLOGY, including four hours from 2401, 2402, or 2403. \$4.00 laboratory 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

Fall, Summer(alternate years)

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 1420 or 1306. \$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 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: 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

Spring

Basic chemical and physical processes in plant growth and development. Three hours lecture and three hours laboratory.

Prerequisites: Nine semester hours of BIOLOGY and one semester of ORGANIC CHEMISTRY. \$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 and 2401 or 2402. \$4.00 laboratory fee.

BIOL 4401 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 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. \$4.00 laboratory fee.

BIOL 4403 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.

Prerequisite: Two semesters of general biology, one semester of organic chemistry. \$4.00 lab. 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 BIOLOGY 3401. \$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 that have economic importance. Three hours lecture and three hours laboratory or field work.

Recommended: BIOL. 3401 and 4406. \$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 BIOLOGY 1306 or 1402. Credit may not be earned under the new course number if previously earned under the old number. \$4.00 laboratory fee.

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 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 5403 ADVANCED CELL BIOLOGY

Fall(alternate years)

Detailed analysis, in lecture and in laboratory, of cell structure and of cell function; emphasis will be on respiration, photosynthesis, enzymes, proteins, nucleic acids and laboratory techniques. Three hours lecture and three hours laboratory. \$4.00 laboratory fee.

Prerequisite: 8 hrs. Biol, 1 sem. Organic Chem.

BIOL 5408 ADVANCED PLANT PATHOLOGY

Spring

The causes, nature, and control of plant diseases giving emphasis to economically important diseases. A research paper or research work will be assigned individually. Three hours lecture and three hours laboratory. \$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 5441 ECOLOGICAL CONCEPTS

Fall(alternate years)

Biotic and abiotic factors as they affect composition, structure and economic relationships of plant-animal populations. Three hours lecture and three hours laboratory. \$4.00 laboratory fee.

BIOL 5445 ADVANCED PLANT PHYSIOLOGY

Spring

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

Prerequisite: Graduate standing and one semester of ORGANIC CHEMISTRY.

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 BIOLOGY 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. \$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 MARINE ECOLOGY

Summer

Analysis of factors that influence plant and animal population in a marine habitat, effects of varied types of pollution will be considered. Three hours lecture and three hours laboratory. \$4.00 laboratory fee.

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 6304 HOST-PARASITE RELATIONSHIPS

Fall(alternate years)

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.

BIOL 6305 BIOMETRY

Fall

Statistical analysis and principles as applied to Biological problems. Three hours lecture and three hours laboratory. \$4.00 laboratory fee.

BIOL 6308 FRESHWATER PHYCOLOGY

Spring(alternate years)

An introduction to the structure, reproduction and identification of the freshwater algae with special emphasis on the ecology and identification of local forms. Three hours lecture and three hours laboratory. \$4.00 laboratory fee.
Prerequisite: BIOL 3408.

BIOL 6309 MARINE PHYCOLOGY

Offered on Demand

A detailed study of the common local marine flora with emphasis on the microscopic algal forms. Three hours lecture and three hours laboratory. \$4.00 laboratory fee.
Prerequisite: BIOLOGY 4410 or 5310.

BIOL 6310 IMMUNOLOGY

Spring(alternate years)

A study of the nature of antigens and antibodies and their interactions as they relate to allergy and infection. Three hours lecture and three hours laboratory. \$4.00 laboratory fee.
Prerequisites: BIOLOGY 3401 and ORGANIC CHEMISTRY.

BIOL 6311 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.

BIOL 6312 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 Biology 3404 recommended. \$4.00 laboratory fee.

BIOL 6314 ADVANCED PLANT SYSTEMATICS

Spring(alternate years)

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.

BIOL 6315 ADVANCED FIELD ZOOLOGY

Fall(alternate years)

A course designed to give the student experience in organizing field notes, collecting and preserving vertebrate animals, conducting habitat analysis and utilizing ecological research methods. Emphasis will be on populations and their relationships to local environments. \$4.00 laboratory fee.

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 and 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**

Computer Science

C S 2333 COMPUTER ORGANIZATION AND MACHINE LANGUAGE

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 2425.

C S 2425 SURVEY OF ELEMENTARY SCIENTIFIC PROGRAMMING

An introduction to computer languages with special emphasis on problems from the mathematical, physical and natural sciences. Three hours lecture and two hours laboratory. Credit may not be received for both C S 2425 and C S 2309.
Prerequisite: MATH 1340 or equivalent.

C S 3333 DATA STRUCTURES

Basic concepts of data and computer storage structures. The organization and maintenance of data files and sorting/searching techniques are studied. Linear lists, strings, arrays, orthogonal lists, trees and multilinked structures are developed.
Prerequisite: C S 2333 and advanced standing.

C S 3334 SYSTEMS PROGRAMMING

Review of batch process systems programs, their components, operating characteristics, user services and their limitations. Implementation techniques for parallel processing of input-output and interrupt handling. Overall structure of multiprogramming systems, details on addressing techniques, core management, file system design and management system accounting and other user-related services.
Prerequisite: CS 3333 and advanced standing.

C S 4341 TOPICS IN COMPUTER SCIENCE

Topics or problems in computer science, subject matter changes from semester to semester.
Prerequisite: Consent of instructor.

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 2307, 1335, 1340 or 2340 or concurrent enrollment in MATH 2307, 1340 or 2330. \$3.00 laboratory fee.

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 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 3201 CHEMISTRY AND ITS LITERATURE

Discussion and problems on using the chemical literature, and reports on specific literature topics. Each student will be expected to present a scholarly seminar on some particular topic of current interest in chemistry.
Prerequisite: 12 hours of chemistry.

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 method, 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 read out 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.

CIS 1301 COMPUTER SYSTEMS AND BASIC PROGRAMMING

Fall, Spring, Summer

A course with emphasis on computer appreciation and the BASIC programming language. Computer appreciation topics include: history, terminology, system components (hardware), internal data representation, language (software), applications and the cultural impact of computers. BASIC programming topics include: algorithms, flowcharting and coding concepts with reinforcement of these topics by laboratory experience. (Previously C S 1301, may not be repeated for credit.)
Prerequisite: Math 1335 with grade "C" or better, or the equivalent.

CIS 2309 FORTRAN PROGRAMMING

Fall, Spring

A programming course designed to familiarize the student with the FORTRAN language and some of its basic applications. (Previously C S 2309, may not be repeated for credit.)

Prerequisite: MATH 2316, CIS 1301 recommended. \$4.00 lab fee.

CIS 2310 COBOL PROGRAMMING

Fall, Spring

A programming course designed to familiarize the student with the COBOL language and some of its basic applications. (Previously C S 2310, may not be repeated for credit.)

Prerequisite: CIS 1301, GENB 1331 or consent of instructor. \$4.00 lab fee.

CIS 2311 ADVANCED PROGRAMMING TECHNIQUES

Offered by Demand

A programming course designed to thoroughly familiarize the student with advanced programming techniques such as modular programming, binary table searches, variable length record techniques, hashing and other techniques not normally covered in a basic programming course.

Prerequisite: CIS 2310.

CIS 2312 MICROCOMPUTER SOFTWARE AND HARDWARE CONCEPTS WITH BUSINESS APPLICATIONS

A survey of technical topics related to microcomputer systems with emphasis on the relationship between hardware architecture, systems software and application software.

Prerequisite: CIS 2310.

CIS 3330 FILE STRUCTURES FOR ON LINE SYSTEMS

Offered by Demand

An introduction to the organization of data for on line retrieval purposes. The course includes a study of tools for the on line analysis of data, ordered lists, file structures, pointers and linkages, directories, memory management, and data access methods.

Prerequisite: CIS 2310 with a grade of B or better.

CIS 3335 DATA BASE MANAGEMENT SYSTEMS

Offered by Demand

An introduction to the logical organization of data bases. The Hierarchical, network and relational approaches to data base design are developed and evaluated. Data independence, security, and integrity are discussed in detail as are commercially available data base management systems. (Previously C S 3335, may not be repeated for credit.)

Prerequisite: CIS 3330.

CIS 3336 SYSTEMS ANALYSIS

Offered on Demand

This course is concerned with the critical analysis of data processing operations in an organization and their redesign vis-a-vis computer applications.

Prerequisite: CIS 3330

CIS 4330 PROGRAMMING LANGUAGES

Offered on Demand

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 C S 4330, may not be repeated for credit.)

Prerequisite: CIS 3330 and senior standing.

CIS 4333 INFORMATION SYSTEMS

Offered by Demand

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.

Computer Information Systems

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 C S 4340, maximum of six hours credit allowed.)

Prerequisite: Consent of Instructor.

Clinical Laboratory Science**CLSC 3401 CLINICAL LABORATORY INSTRUMENTATION I**

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.

CLSC 3402 CLINICAL LABORATORY INSTRUMENTATION II

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

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

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

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

Serodiagnostic tests for syphilis and febrile diseases; identification of anti-treptococcal, antinuclear, and antihybrid 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

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

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

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

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

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

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

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

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

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

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.

Communications**COMM 1300 SPEECH IMPROVEMENT**

Analysis of student speech, concentrated drill on English speech sounds, bilingual language interference, language intonation patterns, and body movement. (Previous Number—SPEE 1300)

COMM 1301 INTRODUCTION TO COMMUNICATIONS I

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.

COMM 1302 INTRODUCTION TO COMMUNICATIONS II

A continuation of COMM 1301, with particular emphasis on improvement of those skills necessary for a career in communications. Writing and speaking exercises are used extensively to improve student skills and to demonstrate the various stylistic requirements of different forms of communication. Required of all communications majors. Two hours lecture and two hours lab.

COMM 1303 FUNDAMENTALS OF PRESENTATIONAL SPEAKING

Introduction to speech preparation and delivery. 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 communication message is stressed. Required of all communications majors. (Previous Number—SPEE 1302)

COMM 1304 REPORTING I

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 this course, with students submitting material to the newspaper. Required of all communications majors. (Previous Number—MC 1301)

COMM 1305 ACTING I

Improvisational acting techniques and the application of these principles to stage, TV, and film. Required of all communications majors. (Previous Number—DRAM 2323)

COMM 1306 REPORTING II

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. (Previous Number—M.C. 1302)

Prerequisite: COMM 1304 (C average)

COMM 1307 FUNDAMENTALS OF INTERPERSONAL COMMUNICATION

Introduction to the principles of intrapersonal and interpersonal communications. Self-concept and self-disclosure; creating meaning—perception; listening and feedback; verbal communication and language; nonverbal communication, attitudes, beliefs and values; assertiveness and communication relationships.

COMM 1308 PHOTOGRAPHY

An introduction to the techniques of taking photographs for a variety of purposes and processes of developing, printing, enlarging, cropping and dodging. (Previous Number—M.C. 1305)

COMM 1309 VOICE AND PHONETICS

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. (Previous Number—SPEE 1301)

COMM 1310 ORAL INTERPRETATION

Introduction and practice in the principles of speech as applied to the oral presentation of various literary forms. Includes prose and poetry, dramatic and duodramatic interpretation as well as storytelling. (Previous Number—DRAM 1303, SPEE 1303)

COMM 1311 TECHNICAL PRODUCTION I

Instruction and practice in the methods of construction, painting, rigging, shifting, stage scenery and properties, as well as application of these techniques to television production. (Three hours lecture and three hours arranged lab. Previous Number—DRAM 1321)

COMM 1312 TECHNICAL PRODUCTION II

A continuation of COMM 1311. Instruction and practical experience in production problems, including light and sound. (Three hours lecture and three hours lab. Previous Number—DRAM 1322)

COMM 1615 SUMMER THEATRE WORKSHOP

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. (Previous Number—DRAM 1610)

COMM 2101 PRACTICUM—THEATRE

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 up by the advisor of the particular program or programs. (Previous Number—SPEE 2101)

COMM 2102 STAGE MOVEMENT

Work on pantomime, special techniques, and exercises designed to improve motor activity performance for stage purposes. Students are expected to provide practice clothes for the course. The class will meet three hours per week. (Previous Number—DRAM 2104).

COMM 2103 PRACTICUM—FORENSICS

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 up by the advisor (Previous Number—SPEE 2102)

COMM 2104 PRACTICUM—PRINT MEDIA

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 up by the advisor.

COMM 2105 PRACTICUM—RADIO—TV—FILM

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 up by the advisor (Previous Number—SPEE 2101)

COMM 2106 PRACTICUM—SPEECH THERAPY

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 up by the advisor.

COMM 2301 BUSINESS AND PROFESSIONAL SPEECH

Experience in the practical matters of personal interviewing, group conference, oral reporting, informal sales presentations, briefing, good-will speaking and other aspects of oral communication. (Previous Number—SPEE 2306).

Prerequisite: ENG 1301 and 1302(C average in both).

COMM 2302 COMMUNICATION THROUGH GROUP PROCESS

A study of group theory and technique. Principles and methods of discussion, organization, preparation of agendas. Students observe and participate in small group discussions on contemporary issues. (Previous Number—SPEE 2303)

COMM 2303 ARGUMENTATION AND DEBATE

Principles of argumentation and educational debate. Includes decision-making, argument, analysis, briefing and reasoning, evidence and credibility, logic, strategic refutation and rebuttal, responsibilities of the advocate. Students debate contemporary questions. (Previous Number—SPEE 2305)

COMM 2304 TELEVISION PRODUCTION

Introduction to television studio operation with emphasis on television production. Covers cameras, microphones, lights, setting, and performers. Three hours lecture and three hours lab.

Prerequisite: COMM 1301 (C average)

COMM 2305 CINEMATOGRAPHY

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. (Previous Number—MC 2305)

COMM 2306 ACTING II

Intensive study of the techniques involved in building and developing a characterization. (Previous Number—DRAM 2324)

Prerequisite: COMM 1305

COMM 2307 MAKEUP AND COSTUMING

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. (Previous Number—DRAM 1323 and DRAM 2325)

COMM 2308 HISTORY AND SIGNIFICANCE OF MOTION PICTURE

A historical survey of movies and of picture techniques from 1890 to present. Focus on styles and techniques. Viewing of movies of various periods, styles, genres, including foreign films. (Previous Number—MC 2308)

COMM 2309 INTRODUCTION TO SPEECH CORRECTION

Designed to acquaint the student with the various types of communication disorders and their etiologies, identification, basic intervention and remediation procedures. Recommended for speech therapy majors, elementary and special education majors. (Previous Number—SPEE 2307)

COMM 2310 ANATOMY AND PHYSIOLOGY OF THE SPEECH AND HEARING MECHANISM

A detailed study of the anatomical and physiological structure and function of the speech and hearing mechanism, including neurological aspects. (Previous Number—SPEE 2308)

COMM 2311 SPEECH PATHOLOGY I

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. (Previous Number—SPEE 2309)

Prerequisite: COMM 1309, 2309, and 2310.

COMM 2313 READINGS IN DRAMATIC LITERATURE

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. (Previous Number—DRAM 2313)

COMM 3301 THE RHETORIC OF TELEVISION

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 those rhetorical structures affect human perceptual systems and resulting human behavior.

COMM 3303 RADIO AND TELEVISION NEWS PRODUCTION

Application of principles from basic news writing to production of various types of news for the electronic media. Three hours lecture and three hours lab. (Previous Number—MC 4307)

Prerequisite: COMM 1304

COMM 3304 ADVERTISING

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. (Previous Number—MC 3304)

COMM 3305 EDITING

Copyreading, headline writing, and planning newspaper makeup; processing articles for the University newspaper. (Previous Number—MC 3305)

Prerequisite: COMM 1304

COMM 3306 FEATURE WRITING

Interpreting trends in reader appeal; analyzing feature story structure; finding ideas for gathering materials; writing and selling feature articles. (Previous Number—MC 3310)

Prerequisite: COMM 1304

COMM 3307 EDITORIAL WRITING AND INVESTIGATIVE REPORTING

Determining editorial policies for print and broadcast media; studying the major types of editorials; writing editorials for particular purposes and different audiences; conducting investigations leading to significant news stories; analyzing and interpreting situations and timely events. (Previous Number—MC 3311)

Prerequisite: COMM 1304

COMM 3308 CREATIVE DRAMATICS

A study of informal drama in its application to the elementary classroom. Development of creativity through original dramatizations by children. Of special interest to the elementary teacher. (Previous Number—SPEE 3306, DRAMA 3306)

COMM 3309 ADVANCED TECHNICAL PRODUCTION AND DESIGN

Principles of design as applied to modern stage and television production.

COMM 3310 LIGHTING FOR THE STAGE, FILM, AND TELEVISION

Problems of lighting design and execution as applied to the various media—stage, screen and television.

COMM 3311 CONTEMPORARY DRAMA

A study of trends and movements in 20th century American, British, and European drama, with emphasis on works of major playwrights. (Previous Number—DRAMA 3311)

Prerequisite: twelve semester hours of English (may be counted as ENG 3311).

COMM 3312 ARTS MANAGEMENT AND PUBLICITY

Basic principles of managing arts events or arts centers. Practical experience will be gained in the areas of publicity, release writing, box office managements, program and poster production, and public relations. Three hours lecture, three hours lab. (Previous Number—DRAMA 3326)

COMM 3314 PERSUASIVE COMMUNICATION

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. Activities include 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. (Previous Number—SPEE 3313)

COMM 3315 COMMUNICATION IN HUMAN RELATIONS

Application of the speech communication perspective as a dynamic process of human interaction. Helps students understand their own communication problems, communication breakdowns, and become more effective communicators. Models and theories of communication; general semantics in communication; nonverbal communication; transactional analysis in interpersonal communication; influence of communication on attitude formation and change; relationship between communications systems and human value systems; and communication in conflict situations. (Previous Number—SPEE 3315)

COMM 3316 INTERCULTURAL COMMUNICATION

Study of the symbolic and relativistic nature of culture and the resultant problems in attempting to communicate meaning across cultural lines. (Previous number—SPEE 3316).

COMM 3317 SPEECH FOR THE ELEMENTARY TEACHER

A study of the teacher's speech personality, desirable classroom techniques and speech activities. Includes storytelling, poetry interpretation, discussion, speech choir, a comparison of English-Spanish phonology and problems of language interference. (Previous number—SPEE 3303).

COMM 3319 SPEECH PATHOLOGY II

Further investigation of communication disorders including aphasia, neurologically related disorders, and physical anomalies. Emphasis on the multiple handicapped child. (Previous number—SPEE 3309).

Prerequisite: COMM 2309 and 2310.

COMM 3320 AUDIOLOGY

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. (Previous number—SPEE 3310).

Prerequisite: COMM 2309 and 2310.

COMM 3321 LANGUAGE DEVELOPMENT

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. (Previous number—SPEE 2310).

COMM 3322 DIAGNOSTIC PROCEDURES

Study of diagnostic techniques and specific testing instruments utilized in the evaluation of disorders of communication with special emphasis on the evaluation of communication disorders in the bilingual child. (Previous number—SPEE 3312).

Prerequisite: COMM 2309, 2311, and 3321.

COMM 3623 PROFESSIONAL INTERNSHIP-COOPERATIVE EDUCATION—THEATRE

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 a satisfactory employer's evaluation and the student's written report.

COMM 3624 PROFESSIONAL INTERNSHIP-COOPERATIVE EDUCATION—FORENSICS

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 a satisfactory employer's evaluation and the student's written report.

COMM 3625 PROFESSIONAL INTERNSHIP-COOPERATIVE EDUCATION—PRINT MEDIA

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 a satisfactory employer's evaluation and the student's written report. Previous number—M C 4371.

COMM 3626 PROFESSIONAL INTERNSHIP-COOPERATIVE EDUCATION—RADIO—TV—FILM

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 a satisfactory employer's evaluation and the student's written report. (Previous number MC 3372, 3373, 4371)

COMM 3627 PROFESSIONAL INTERNSHIP-COOPERATIVE EDUCATION—SPEECH THERAPY

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 a satisfactory employer's evaluation and the student's written report.

COMM 4101 COMMUNICATIONS PRACTICUM—THEATRE

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 up by the instructor. (Previous number—DRAM 2101).

COMM 4102 STAGE MOVEMENT

Advanced study of movement on the stage for the actor. Students will be expected to provide practice clothes for the course. (Previous Number—DRAM 4104).

COMM 4103 COMMUNICATIONS PRACTICUM—FORENSICS

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 up by the instructor. (Previous number—SPEE 2102).

COMM 4104 COMMUNICATIONS PRACTICUM—PRINT MEDIA

Participation in the yearbook, student newspaper or another print program approved by the instructor. One hour of credit requires a minimum of 60 hours of satisfactory participation, plus any additional requirements set up by the instructor.

COMM 4105 COMMUNICATIONS PRACTICUM—RADIO—TV—FILM

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 up by the instructor.

COMM 4106 COMMUNICATIONS PRACTICUM—SPEECH THERAPY

Participation in the therapy clinic of the university or any other therapy program approved by the instructor. One hour of credit requires a minimum of 60 hours of satisfactory participation, plus any additional requirements set up by the instructor.

COMM 4301 DIRECTING I

Study, observation and practice in selecting scripts and working with problems, methods, and techniques of direction and production. Two hours lecture, two hours lab. (Previous Number—DRAM 4301)

COMM 4302 DIRECTING II

A continuation of Directing I with stress upon student direction and production of plays and television programs. One hour lecture, four hours lab. (Previous Number—DRAM 4302)

Prerequisite: COMM 4301

COMM 4303 COMMUNICATIONS RESEARCH

Major methods of research used in the various fields of communications. Each student is responsible for the successful completion of a research project. (Previous Number—DRAM 4308)

COMM 4305 CHILDREN'S THEATRE

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. (Previous Number—DRAM 4320)

COMM 4306 LEADERSHIP AND ORGANIZATIONAL COMMUNICATION

Communication as an aid in the development and maintenance of organizations. Interaction, motivation and leadership. Role of communication within organizations, and organizational barriers to communication. Study of the principles and practice of parliamentary procedure, duties of officers, committee procedures and regulations for drafting constitutions and by-laws.

COMM 4307 CONTEMPORARY RHETORIC OF SOCIAL AND POLITICAL MOVEMENTS

Rhetoric as an instrument of change within current political and social protest movements. Analysis of strategies and tactics of agitation and control. Study of pamphlets, speeches, underground publications, files, music, nonverbal symbols and body rhetoric. Includes such movements as the far right, new left, black power, Chicano movements and women's liberation. (Previous Number—SPEE 3308)

COMM 4308 RHETORICAL CRITICISM AND PUBLIC ADDRESS

Rhetorical criticism as applied to significant historical and contemporary speakers and speeches. Evolution of rhetorical theory from the early Greeks to the present. Principles of criticism applied to speaking as practiced legislative bodies, the pulpit, law courts, and popular assemblies. Speeches analyzed as dynamic events within their cultural and historical contexts. (Previous Number—SPEE 4308)

COMM 4309 COMMUNICATION FOR THE SECONDARY TEACHER

Methods for teaching communications in the public school. Materials for intramural and interschool communication activities in both junior and senior high schools. Methods of training participants in these activities. Course covers speech, drama, or journalism, depending on instructor. (Previous Number—DRAM 4309, SPEE 4309)

COMM 4310 AUDITORY AND VISUAL COMMUNICATION

Methods and techniques utilized in the aural rehabilitation or habilitation of the acoustically handicapped. (Previous Number—SPEE 4310)

COMM 4311 CLINICAL PRACTICUM I

A minimum of 60 clock hours of actual supervised clinical practice with communicatively handicapped individuals. Involves application of diagnostic, prescriptive and therapeutic techniques. (Previous Number—SPEE 4311)

COMM 4312 CLINICAL PRACTICUM II

A minimum of 60 clock hours of actual supervised clinical practice with communicatively handicapped individuals. Involves application of diagnostic, prescriptive and therapeutic techniques. (Previous Number—SPEE 4312)

COMM 4313 ETHICS AND LAW OF MASS COMMUNICATIONS

Rights, privileges, and responsibilities of news, editorial and advertising personnel; other legal implication planning guides of conduct for mass communications. (Previous Number—MC 4301)

COMM 4317 RADIO AND TELEVISION ADVERTISING PRODUCTION

Application of principles of advertising to production of radio and television commercials. Three hours lecture and three hours lab. (Previous Number—MC 4310)

Prerequisite: COMM 2304 and 3304

COMM 4318 THEORY AND STYLES OF ACTING

Techniques of period acting styles and explorations of major theories of acting techniques. Two hours lecture and four hours lab. (Previous Number—DRAM 3325)

COMM 4319 PROBLEMS IN ACTING

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. (Previous Number—DRAM 3324)

COMM 4321 PUBLIC RELATIONS

Planning and preparation of publicity material for various media application of public relations techniques, and clinical study of current public relations campaigns. Some laboratory work in the Communications Department. (Previous Number—MC 4302)

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 their workshop enrollment period without permission of the instructor. (Previous Number—DRAM 4610)

Criminal Justice

CRIJ 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 1312 POLICE ORGANIZATION AND ADMINISTRATION

Discussion of basic principles of administration, organization, and management; methods of applying administrative techniques to law enforcement agencies; interdisciplinary resources available to police administrators, functional responsibilities of the police administrator.

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.

Prerequisite: 12 semester hours of criminal justice, CRIJ 1301.

CRIJ 2331 LEGAL ASPECTS OF LAW ENFORCEMENT

A discussion of the constitutional aspects of criminal law; philosophy of criminal law making process; basic concepts of Texas criminal law, including general provisions of the penal code; the law of principles, accomplices and accessories; an overview of offenses against public peace, persons and property, stressing elements and proof; a study of offenses against morals and chastity; and a survey of case study and briefings.

CRIJ 2332 CRIMINAL PROCEDURE AND EVIDENCE

A survey of rules of evidence with particular import at the level of operation; the theory of signed statements; the philosophy of a hearing for the arrested person; the philosophy of the trial procedure and the law enforcement officer's place in the court; and the theory of probable cause. A review of the Texas code of criminal procedure.

Prerequisite: CRIJ 2331.

CRIJ 2342 OVERVIEW OF CORRECTIONAL PHILOSOPHIES

The study of prisoner custody and management; an overview of prisoner rights and institutional liability; comprehensive overview of modern correctional technology, in house rehabilitation programs, transitional problems of the incarcerated, and administrative problems of correctional management. (Formerly CRIJ 3342, credit cannot be received for both courses.)

CRIJ 2344 CORRECTIONAL ADMINISTRATION

Fundamental concepts of management, organization, and administration as specifically applicable to correctional institutions, field services, and community-based corrections.

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 the 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 3343 PENOLOGY

An overview of penal and reformatory institutions in their physical, educational, and social aspects; a survey of theories and practices of penology; discussions of differing philosophical approaches to penology.

Prerequisite: Six hours of criminal justice and junior standing or consent.

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.

Prerequisites: CRIJ 1301, 1312.

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 policing function.

CRIJ 4341 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.

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

Four hours duty per week with a law enforcement agency; three hours seminar of consultation per week; evaluation of student and agency critiques and reports; expansion of the law enforcement philosophy encountered in field work, problems and issues.

Prerequisites: 12 hours of CRIJ and senior standing.

Economics

ECO 2301 INTRODUCTION TO HUMAN RESOURCES

Offered on Demand

Survey course on human resource programs, structure, problems and policies, includes historical back-ground and philosophy of manpower programs, objectives and functions of manpower programs, job placement, job development, counseling and interviewing.

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 1335 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

Offered on Demand

Surveys the growth of the Mexican economy, its institutions and problem. 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

Offered on Demand

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

Offered 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

Offered 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

Offered 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

Offered 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

Offered 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

Offered 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

Offered 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

A special topic selected by the instructor will be assigned. Total course content will be established *a priori* by both instructor and student.
Prerequisite: ECO 3351 and 3352.

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 and 2354

ECO 6351 ECONOMICS SEMINAR

Offered on Demand

Readings and discussion of selected topics in economics.

Education

ED 1201 INTRODUCTION TO TEACHING

An orientation course in general education in a democratic society. It presents a survey of the school system in the United States, its growth, its structure, its problems and its trends as they affect and are affected by the schools. Includes field experience activities, may be taken as an elective. Does not count toward certification.

ED 1302 INTRODUCTION TO EDUCATIONAL PSYCHOLOGY

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 1303 EARLY CHILDHOOD EDUCATION, FIELD EXPERIENCE LEVEL I

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

Field experience in early childhood learning centers designed to develop, under supervision, competencies in advancing physical and intellectual development of children.

ED 1305 INTRODUCTION TO SPECIAL EDUCATION

Overview to special education. Field experience in special education programs required. Emphasis is given to visiting, observing, and recording components and features of public and private educational programs for handicapped people.

ED 1351 ART WORKSHOP FOR TEACHERS

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

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 1651 WORKSHOP FOR TEACHER-AIDES

A workshop course designed to assist in the development of concepts and skills considered desirable among teacher-aides in migrant and/or disadvantaged pupil programs. Extensive instruction and training will be given in the various roles of the teacher-aide. Instructional and training activities will include lectures, conferences, demonstrations and a wide variety of practical work in the preparation of audio-visual materials and in the use of audio-visual equipment.

Prerequisite: Appointment to the workshop under the guidelines set forth by Pan American University.

ED 2100 ADMISSION TO TEACHER EDUCATION

Orientation to teacher education programs and job requirements. Assessment program required for completion of orientation course. This course must be completed with minimum grade of "C" prior to enrolling in professional upper level (3000-4000) Education courses. Required of all students seeking a teaching certificate.

ED 2101 TEACHING HANDWRITING

A course designed for elementary school teachers who wish not only to develop a more acceptable standard of handwriting with a minimum expenditure of time, but wish to attain proficiency in the teaching of both manuscript and cursive penmanship. Legibility and logic of execution are stressed.

ED 2301 INTRODUCTION TO CHILD DEVELOPMENT

A study of the interrelationship of biological and environmental factors in the growth of the child from conception through pubertal cycle and the application of this knowledge in directing wholesome personality development. Students who have taken ED 1311, Child Growth and Development, may not take this course for credit. It is desirable, though not mandatory, that students shall already have taken PSY. 2313, Introduction to Psychology.

ED 2302 EARLY CHILDHOOD EDUCATION, FIELD EXPERIENCE. LEVEL III

Field experience in early childhood learning centers designed to develop, under supervision, competencies in coordinating home and center child-rearing practices and expectations.

ED 2303 EARLY CHILDHOOD EDUCATION, FIELD EXPERIENCE. LEVEL IV

Field experience in early childhood centers to develop competencies in methods and techniques for building self-concept children.

ED 2304 FIELD EXPERIENCES IN SPECIAL EDUCATION

This course is designed to enhance the teaching perspective of the prospective special education teacher. Each student is expected to serve a minimum of three (3) hours per week as an aide to a special education teacher in a private or public school setting.

Prerequisite: ED 1305.

ED 3301 INSTRUCTIONAL TECHNOLOGY

This course deals with modern instructional strategies and the proper use of instructional materials best suited for group or individualized instruction. Sources of and production of materials, methods of presentation, evaluation of results and proper use and care of various types of audio, visual and video equipment are stressed. Dual listed with ED S 3301 (Required for certification).

ED 3302 EDUCATIONAL PSYCHOLOGY

A detailed approach to the application of modern psychological principles to teaching-learning situations. Satisfies advanced professional requirements for Elementary school majors.

ED 3303 EDUCATION: PAST AND PRESENT

A chronological survey of the place of education in various civilizations; the historical development of educational objectives, methods, curricula, organizations and deliberations, presented with a view toward better understanding of modern educational problems and practices.

ED 3305 FOUNDATIONS OF CROSS-CULTURAL EDUCATION

An anthropological investigation of historical and philosophical factors in education which have applications across cultures and subcultures. Special consideration will be given to the Mexican-American cultural setting.

ED 3311 CHILD GROWTH AND DEVELOPMENT

This course presents a general view of the physical, emotional, social and mental development of children from prenatal life to the adolescent period. Special emphasis is given to the interrelatedness of these four aspects of development with a view toward helping parents and teachers to understand better and to guide the growth and development of the child through the pre-elementary school years.

ED 3312 TESTING, MEASUREMENT AND GUIDANCE — ELEMENTARY

This course emphasizes the role of the teacher in the evaluation and guidance of children in the modern elementary school. Construction, administration, interpretation and application of results of evaluation devices will be studied as they apply to directing learning and behavior in classroom situations.

ED 3313 CHILDREN'S LITERATURE

A course which deals with criteria of good literature for the elementary school with consideration of children's needs and reading interests. The student will read and evaluate children's books in categories such as picture-story books, folk tales, poetry and fiction.

ED 3314 INTRODUCTION TO THE READING PROCESS

This course provides the student with a knowledge and understanding of the following concepts as they relate specifically to the reading process: neurological, physiological, and psychological influences; motivation; interaction of sensory systems; and essential concepts of communication. This course includes a field experience designed to demonstrate the relationship of these concepts to observed behavior of children in a public school setting.

ED 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. Course is not designed for bilingual/bicultural program minors.

Prerequisites: Math 2306, 2307 and Education 3328. May be taken as a post-graduate course only.

ED 3316 READING SEMINAR

This field-based course is designed to help the student locate and observe the use of resources which deal with current literature and specialized vocabulary in the field of reading, as well as locate and be able to demonstrate the use of equipment and materials specifically designed for reading instruction in public school settings.

ED 3321 TEACHING LANGUAGE ARTS

Methods of teaching the language arts in the elementary school with special reference to the building of communication skills in the curriculum.

ED 3322 TEACHING THE BILINGUAL CHILD

Designed for teachers in primary and elementary grades. A study of the cultural, socio-economic and psychological factors which influence the bilingual child. Covers the rationale, state plan for bilingual education, the relationship between language familiarity and reading, diagnosing of language competence, and planning instruction to demonstrated needs. Development of techniques and materials for bringing pupil language competence to a point where growth in reading and written expression is facilitated.

ED 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.

Prerequisite: Ed. 3302, and Ed. 3311.

ED 3324 TEACHING ENGLISH AS A SECOND LANGUAGE

A study of the acquisition of languages by the young 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 young children. Recommended for teachers in early childhood.

ED 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.

Prerequisite: ED 3323

ED 3326 TEACHING ELEMENTARY SCIENCE

A study of those phases of science which are usually dealt with in teaching at the elementary level. Pertinent demonstrations and skills will be taught to help teachers become more proficient in helping children better understand and appreciate the natural forces which shape their physical environment.

Prerequisite: Must have completed a laboratory science.

ED 3327 TEACHING SOCIAL SCIENCE

Teaching social sciences in the elementary schools. The role of social sciences in the elementary schools with special reference to building units of work in the curriculum.

ED 3328 TEACHING ARITHMETIC

A treatment of the methods of teaching Arithmetic at the elementary school level. It includes basic number concepts, fractions, decimals, percentage, thought problems and such Arithmetical skills as are deemed necessary for the teaching of Arithmetic and the sciences.

Prerequisite: Must have completed MATH. 2306 and 2307.

ED 3329 CORRECTING READING PROBLEMS

Analysis of reading difficulties encountered during regular classroom instruction, with emphasis on prevention or early correction. Includes an appraisal of materials and techniques useful to classroom teachers at both elementary and secondary levels.

Prerequisite: ED. 3323 or ED. 4351.

ED 3330 SOCIAL STUDIES AND SCIENCE IN THE ELEMENTARY CURRICULUM

Methods of teaching the social studies and science in the elementary school. Emphasis will be placed on the discovery and multi-disciplinary approaches.

Prerequisite: Must have completed six hours of laboratory science.

ED 3331 LANGUAGE ARTS 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.

ED 3622 TEACHING CONTENT COURSES IN THE BILINGUAL SCHOOL

A course emphasizing a variety of learning and teaching methods and techniques promoting an active learning process in teaching modern elementary Mathematics, Science and Social Studies to the bilingual child. Competency will be established in understanding appropriate concepts and their relationships, conceptual schemes and processes and precise terminology in English and Spanish.

Prerequisite: Six semester hours of Mathematics, a completed laboratory science and 12 semester hours in the Social Sciences.

ED 3624 TEACHING READING AND THE OTHER COMMUNICATION SKILLS IN ENGLISH AND SPANISH

Consideration of different materials and methods for teaching children to understand, speak, read and write in both English and Spanish. Emphasis is placed on (1) the teaching of reading to second language learners and initial reading in Spanish; (2) the development of oral language skills in both first and second languages; (3) understanding how children acquire language. Approximately one-half of the course is devoted to the teaching of reading. Laboratory experience is required.

ED 4301 PERCEPTION AND LANGUAGE DEVELOPMENT

This course is designed to help the student develop competencies in the knowledge of both visual and auditory perception and how it relates to the development of language. Theories of linguists as well as those of psychologists are compared. The student will be introduced to the psycholinguistic processes which characterize communication in the classroom.

ED 4302 PERCEPTUAL MOTOR DEVELOPMENT

A course designed to provide the student opportunity to study the effects of perceptual-motor aspects of development. Comparative studies of sensori-motor theories will be emphasized and remediation using perceptual-motor activities will be covered. The student will have the opportunity to observe and work with children who have perceptual motor deficits.

ED 4303 INDIVIDUALIZED TEACHING FOR GENERIC SPECIAL EDUCATION

A course designed to enable a teacher to interpret all psychological and academic profiles of children and youth for the purpose of individualizing instruction. The course will provide profiles of actual cases for study. Demonstration of competency will be required.

ED 4309 PRACTICUM IN GENERIC SPECIAL EDUCATION TEACHING

This course is designed to give students minoring in generic special education an opportunity to demonstrate teaching competencies such as: (1) developing and writing behavioral objectives, (2) selecting appropriate multi-sensory teaching aids and procedures that support objectives, (3) using a teacher aide efficiently, (4) utilizing effective behavior management principles and techniques, and (5) evaluating the effectiveness of instruction in a classroom setting.

Prerequisite: ED 1305, ED 2304, and nine (9) hours advanced special education.

ED 4308 TEACHING THE ORTHOPEDICALLY HANDICAPPED

A course designed to familiarize the student with the specialized techniques and materials to be used with the orthopedically handicapped. Curriculum programming for young children through adolescence will be required along with field observation and field trips to facilities for the handicapped.

Prerequisite: ED 4372.

ED 4311 DIRECTED TEACHING — ELEMENTARY

Course consists of observation, limited participation in teaching, then full teaching responsibility in an elementary public school 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. Weekly seminars and individual conferences are a required part of the course. Students are in the public schools classroom one-half day, Monday through Friday, half a semester. A student registered for the course in the fall semester begins his work at the time his cooperating teacher reports for work in the fall. If registered for this course in the spring, the student completes his work when the public school term ends. Course is available only to students seeking an elementary certificate with kindergarten endorsement.

Prerequisite: Approved by the Teacher Education Committee.

ED 4312 DIRECTED TEACHING — KINDERGARTEN

Course consists of observation, limited participation in teaching, then full teaching responsibility in a kindergarten public school 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. Weekly seminars and individual conferences are a required part of the course. Students are in the public school classroom one-half day, Monday through Friday, half a semester. A student registered for the course in the fall semester begins his work at the time his cooperating teacher reports for work in the fall. If registered for this course in the spring, the student completes his work when the public school term ends. Course is available only to students seeking an elementary certificate with kindergarten endorsement.

Prerequisite: Approved by the Teacher Education Committee.

ED 4313 DIRECTED TEACHING — GENERIC SPECIAL EDUCATION

(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.

Prerequisites: Approval by the Teacher Education Committee.

ED 4314 SEMINAR & PRACTICUM IN KINDERGARTEN ED.

Student will develop and implement curriculum projects in a kindergarten center. Projects will include planning and managing learning situations for children. Field experience in a TEA accredited kindergarten 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 by undergraduates for ED. 4312, if they are working toward the kindergarten endorsement as a part of a B.S. degree in elementary education.

Prerequisites: ED 4390, ED 4391, ED 4392.

ED 4315 PRINCIPLES OF TEACHING WORKSHOP FOR ELEMENTARY/SECONDARY TEACHERS

A workshop course designed for the person entering the teaching profession to set a theoretical and practical base for inquiry into introduction to teaching and planning for guidance of learning activities. Special permission must be given to each participant before enrollment in the course.

ED 4316 PRINCIPLES OF TEACHING WORKSHOP FOR ELEMENTARY/SECONDARY TEACHERS, ADVANCED

A workshop course designed for the person entering the teaching profession to study classroom management and for development of instructional skills needed in the area of his instructional assignment. Special permission must be given to each participant before enrollment in the course.

ED 4317 SKILLS DEVELOPMENT SEMINAR FOR ELEMENTARY/SECONDARY TEACHERS

A practicum course which focuses attention on developing a variety of basic teaching skills needed in the classroom. Special permission must be given to each participant before enrollment in the course.

ED 4319 EDUCATIONAL PSYCHOLOGY APPLIED TO THE BILINGUAL CLASSROOM

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

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

(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 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 4323 DIRECTED TEACHING — MENTALLY RETARDED

(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 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 4367 READING FOR THE CULTURALLY DIVERSE STUDENT

This course provides the student with knowledge and instructional strategies for teaching reading to children of diverse cultural or language backgrounds. An emphasis will be placed on developing or selecting and appropriately using instructional materials designed specifically to meet the needs of such learners.

ED 4368 ORGANIZATION AND MANAGEMENT OF READING PROGRAMS

This course allows the student to study various management and organizational plans for efficient reading instruction and to develop techniques for use in working with parents and support personnel in related professional areas.

ED 4369 READING PRACTICUM

The student integrates and implements knowledge and skills gained from all previous courses within the reading specialization program as he (1) administers group diagnostic tools and uses results to organize the class for effective reading instruction, (2) uses individual diagnostic techniques appropriate for classroom instruction, (3) makes use of sound classroom management and organizational techniques to teach reading efficiently, and (4) uses appropriate reading instructional strategies (material and techniques) to teach individual learners effectively.

ED 4371 INFORMAL ASSESSMENT FOR SPECIAL EDUCATION TEACHERS

The goals of this course are: To assess with standardized and informal instruments the learning strengths and weaknesses of young children; to demonstrate proficiency in administration, scoring and interpretation of standardized and informal instruments; and to acquire knowledge of the appraisal procedures under Plan A.

ED 4372 EXCEPTIONAL CHILDREN

A survey course which includes discussion of the history and the philosophy of special education, diagnostic techniques, equipment and buildings, methods of teaching and therapy and administrative procedures will be discussed. Emphasis is given to the Texas plan of special education along with the study of further needs. Field trips may be required.

ED 4373 TEACHING MENTALLY RETARDED CHILDREN

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

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 and the social growth and development of the mentally retarded person.

ED 4378 TEACHING THE NEUROLOGICALLY HANDICAPPED AND LEARNING DISABLED

This course provides the students with the opportunity to become competent in knowledge concerning the characteristics and needs of children with cerebral dysfunction. 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

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 4391 EARLY CHILDHOOD CURRICULUM: ORGANIZATION, METHOD AND MATERIALS

Consideration of the philosophy, purposes and objectives of an early childhood program. 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 this 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.

ED 4392 CREATIVE ACTIVITIES IN THE KINDERGARTEN

Consideration of methods of teaching and materials — equipment and supplies — to be used with five-year-olds. Experiences emphasized will be literature — picture-story books, poetry, story-telling, dramatization, etc. Other activities considered will be music and art for the five-year-old. 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. Lectures, readings, class participation and projects, observation.

ED 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.

ED 4610 DIRECTED TEACHING —ELEMENTARY

This part of directed teaching requires the student teacher to assume complete responsibility for planning and implementation of instruction and for classroom discipline and management under the supervision of the public school teacher. The student will be assigned to a teacher in a public school for one-half of a semester, Monday through Friday. A weekly seminar and individual conferences are a required part of the course. Ed 4610 must be taken along with six other semester hours of directed teaching.

Prerequisite: Approval by the Teacher Education Committee.

ED 4611 DIRECTED TEACHING — ELEMENTARY

The first part of the course will consist of the preparation of teaching materials, lesson planning, keeping teacher records and making reports, study and observation of class and group work and limited participation in teaching at the elementary level. The remainder of the course will be devoted to observation and responsible teaching at this level under the guidance of a cooperating teacher. Periodic observations of the student teacher at work will be made by the university supervisor. The student teacher will be assigned to a teacher in a public school for one-half day for a semester, Monday through Friday. A weekly seminar and individual conferences are a required part of the course.

Prerequisite: Approval by the Teacher Education Committee Student Teaching Program at the beginning of the public school term for the fall semester. Those taking student teaching during the spring term will be required to remain until the end of the public school term. (See requirements for student teaching.)

ED 4612 DIRECTED TEACHING — KINDERGARTEN

This part of directed teaching consists of the preparation and implementation of learning experiences for young children under the direction of an assigned kindergarten teacher. The student teacher will be observed periodically by an assigned University supervisor. The student teacher is assigned to a public school kindergarten teacher for one-half of a semester, Monday through Friday. A weekly seminar and individual conferences are a required part of the course. ED 4610 must be taken with ED 4612.

Prerequisite: Approval by Teacher Education Committee.

ED 4613 DIRECTED TEACHING SPEECH AND HEARING

Course designed specifically for speech and hearing therapy 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 experiences in a school setting under the supervision of a certified speech therapist and a university supervisor.

ED 4651 WORKSHOP FOR ELEMENTARY TEACHERS

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 5308 PROBLEMS IN TEACHING THE ORTHOPEDICALLY HANDICAPPED

A study of the interrelationship of biological, social and environmental factors governing the growth and development of handicapped children. Emphasis will be upon learning strategies and materials to be used with children with the handicapping condition of an orthopedic defect(s). Development of curricula, implementation and ongoing evaluation of the handicapped student will be stressed. Services for the handicapped child outside of the local education agency will be considered. Demonstration of competencies and contact situations with handicapped children will be required.

Prerequisite: ED 4372 or ED 5372.

ED 5313 READING TESTS

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

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 ½ 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.

Prerequisites: ED 5390, ED 5391 and ED 5392.

ED 5321 CAREER EDUCATION

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

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 3342 or ED S 3305 has been taken.

ED 5351 TEACHING READING TO THE SECONDARY STUDENT

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

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 5372 INDIVIDUAL DIFFERENCES: SURVEY AND TREATMENT

A survey of all categories in exceptionality with special emphasis on school placement according to the Texas plan. Credit will not be granted for this course if ED 4372 has been taken.

ED 5374 PSYCHOLOGY OF MENTAL RETARDATION SEMINAR

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

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 5391 CONSTRUCTING CURRICULUM FOR EARLY CHILDHOOD CENTERS

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

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

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

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

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

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

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

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

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

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 6301 INSTRUCTIONAL MEDIA IN TEACHING

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: ED 3301, Ed.S. 3301, or equivalent.

ED 6302 ADVANCED EDUCATIONAL PSYCHOLOGY

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 6303 ADVANCED PHILOSOPHY OF EDUCATION

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

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 department of education. Does not count toward degree or certification.

ED 6306 SUPERVISION OF STUDENT TEACHING

Practical application of the supervisory role in the supervision of student teachers in a competency based teacher education program.

ED 6307 COMPARATIVE EDUCATION

A study of the educational philosophies of selected national systems of education. Particular attention is given to the role of normative, institutional and environmental patterns in shaping educational policies related to administration, curriculum development, diversification and expansion of educational opportunity. Prerequisite: ED 3303, Ed.S. 3303, or equivalent.

ED 6308 FOUNDATIONS OF READING INSTRUCTION

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

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

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 6311 ADVANCED CHILD PSYCHOLOGY

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

This course will cover three major types of measures: (1) norm reference measures; (2) criterion reference measures; and (3) observational procedures. Concepts to be emphasized are: scaling, sampling procedures, indexes of descriptive and inferential distributions, hypothesis testing, indexes of reliability and sources of error variance, indexes of validity, (content, predicative, construct, concurrent).
Prerequisite: ED 3312 or equivalent.

ED 6313 INDIVIDUAL EDUCATIONAL TESTING

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 INDIVIDUAL TESTING

Practices in administering and scoring the Wechsler Intelligence Scales for both elementary and secondary students. The WPPSI, WISC and the WAIS are included.
Prerequisite: ED 3312 or equivalent; also ED 5312 or ED 6367.

ED 6316 DEVELOPMENT AND ASSESSMENT OF PSYCHO-LINGUISTIC PROCESSES

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

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

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 6319 PRACTICUM IN BILINGUAL EDUCATION

Supervised practical experience in a bilingual/bicultural elementary classroom in which several of the essential components of a bilingual/bicultural education program will be analyzed and implemented by each participant with the cooperation of local school districts. Actual laboratory responsibility will be based on theoretical concerns, as field experiences will complement the principles governing community involvement, curriculum and instruction, instructional materials, staff development and assessment.

ED 6322 THE BILINGUAL CHILD

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

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

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

Supervised experience in working with individual children who have reading difficulties.
Prerequisite: ED 6329.

ED 6326 SCIENCE IN THE ELEMENTARY SCHOOL CURRICULUM

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

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

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

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 6333 RESEARCH IN SECONDARY EDUCATION

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 6334 CURRICULUM DEVELOPMENT — PROBLEMS AND PROCESSES

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 6335 TEACHING ELEMENTARY SCHOOL SUBJECTS IN THE BILINGUAL SCHOOL

A course emphasizing a variety of advanced instructional strategies appropriate to teaching modern elementary Mathematics, Science and Social Studies to the bilingual child through the Spanish and English languages. Competency will be determined in the areas of planning, assessment, teaching/learning, communication, management, concept development, the self-concept, materials, community and professional leadership. Precise terminology in English and Spanish and its application in the classroom will be stressed.

ED 6336 PROBLEMS IN EDUCATION

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

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

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 6341 ADVANCED ADOLESCENT PSYCHOLOGY

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

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 INDIVIDUAL MENTAL TESTING: STANFORD-BINET

Practice in administering and scoring the Stanford-Binet intelligence test for both elementary and secondary students. Prerequisite: ED 3313 or equivalent.

ED 6345 EDUCATIONAL AND OCCUPATIONAL INFORMATION

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

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

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

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

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

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

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 LANGUAGE/LEARNING DISABLED CHILD

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 (as mandated under Plan A in Texas), and knowledge of procedures from referral techniques through dissemination of findings.

ED 6362 THEORIES AND TECHNIQUES IN COUNSELING

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

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

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

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

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 STATISTICAL METHODS

This course is a study of statistics as applied to problems in education and psychology, to include frequency functions, correlation and regression, and statistical tests of significance.

ED 6368 GROUP COUNSELING

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 6369 EDUCATIONAL DATA PROCESSING

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

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; effect 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

Actual experience 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 upon clinical supervision.

Prerequisite: ED. 6370.

ED 6373 TECHNIQUES AND METHODS FOR THE SLOW LEARNER

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

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

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 6379 PROBLEMS IN EDUCATIONAL SUPERVISION

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 6380 PRACTICUM FOR SECONDARY TEACHERS
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 6381 PROBLEMS IN ORGANIZATION AND ADMINISTRATION OF PUBLIC SCHOOLS
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
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
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
A problems 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
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
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 6390 THE EDUCATION OF YOUNG CHILDREN
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.

ED 6393 ADMINISTRATION OF SCHOOL STAFF PERSONNEL
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
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
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
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 6604 PRACTICUM FOR THE EDUCATIONAL DIAGNOSTICIAN
Supervised practical experience in diagnosis 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
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 45 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

ED 7301 THESIS

ED 7310 ADMINISTRATION OF SCHOOL FACILITIES
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
An analysis of the interrelationships of the local school 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.

ED 7313 INTERNSHIP FOR THE SUPERINTENDENT
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
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
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.

Education—Secondary

ED S 1301 CLINICAL INTRODUCTION TO SECONDARY EDUCATION (FIELD EXPERIENCE)
This overview of secondary education emphasizes the role of the teacher as a person. This course includes a comparative study of personal value systems, ethical conduct and their relationship to teaching.

ED S 2301 INTRODUCTION TO THE TEACHING-LEARNING PROCESS (FIELD EXPERIENCE)
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 and performance of teaching activities within university and public school classrooms.

ED S 3301 INSTRUCTIONAL TECHNOLOGY
This course deals with modern instructional strategies and the proper use of instructional materials best suited for group or individualized instruction. Sources of and production of materials, methods of presentation, evaluation of results and proper use and care of various types of audio, visual and video equipment are stressed. Dual listed with ED 3301 (required for certification).

ED S 3302 ADOLESCENT BEHAVIOR AND THE LEARNING PROCESS
Comparisons and contrasts are made of theories that explain and predict behavior. Emphasis is given to motivation and re-enforcement of student behavior in the classroom. Additional emphasis is given to analyzing and understanding one's own behavior, especially as it relates to the teacher role. Classroom experiences are provided in diagnosing, classifying and changing adolescent behavior. (Required for certification.)

ED S 3303 EDUCATION: PAST AND PRESENT
A study of the history and philosophy of education includes the development of philosophical thought and practice in western education from a historical and current perspective. Additional emphasis is placed on helping students develop and clarify their professional philosophies. Dual listed with ED 3303.

ED S 3305 EVALUATION FOR SECONDARY TEACHERS
A study of statistics enables the students to analyze, interpret and utilize data to improve their teaching. Students construct, administer and interpret results of tests to quantitatively measure and evaluate student progress in secondary classrooms.

ED S 3307 A CLINICAL AND A SYSTEMATIC APPROACH TO TEACHING AND LEARNING (FIELD EXPERIENCE)

Emphasis on the person as a teacher is made in this field-based course. The systematic approach includes analyzing learners, analyzing learning, establishing learning environments, and evaluating outcomes, important teaching techniques and concepts are related to secondary classroom observations and incorporated into field experiences. These include classroom control, communication, cognitive and affective development, classroom planning, classroom organization and classroom evaluation.

Prerequisite: ED S 3301, ED S 3302 (required for certification).

ED S 4318 PROBLEMS SEMINAR FOR SECONDARY TEACHERS

This practicum course focuses attention on effective application of a variety of instructional techniques. Special permission must be given to each participant before enrollment in the course.

ED S 4351 DEVELOPMENTAL READING IN SECONDARY SCHOOLS

This course is designed to help students explore the developmental nature of reading at junior and senior high school levels, with particular emphasis on teaching content mastery through reading. (Material and techniques for teaching various content subjects will be developed by class members.) Credit may not be given for both ED 4351 or Ed.S. 4351 and ED 5351.

ED S 4353 SECONDARY SCHOOL METHODS: TEACHING THE DISADVANTAGED LEARNER

A study of the problems experienced in teaching secondary school students that are educationally and/or culturally disadvantaged. Emphasis will be on identification of the problems experienced by the classroom teacher, on study of the applicable techniques and materials useful in such classroom situations, and on development of concepts and skills involved in the use of various techniques and materials.

ED S 4398 DIRECTED TEACHING-SECONDARY II

This course gives secondary students experience in responsible teaching at the secondary level under the guidance of public school supervising teachers and university supervisors. The course is designed primarily for secondary students working on *P E all-level certification* with a *minor in generic special education*. To complete minimum certification requirements, these students must take ED S 4398 (secondary); ED 4311 (elementary); and ED 4313 (special education). Students are assigned to the public schools all day, Monday through Friday, for 16 weeks and are required, in addition, (1) to attend a 1-hour weekly seminar with the university supervisor and (2) to have at least one planning conference each week with the public school supervising teacher(s). With permission from the department head, the course may also be used by guest student teachers who need additional student teaching.

Prerequisite: 9 semester hours of upper level professional education courses, including ED S 3307.

A student may take no more than 3 sem hours of additional course work during the professional semester in which he takes Directed Teaching. The course work must be taken after 4:00 p.m.

ED S 4641 DIRECTED TEACHING-SECONDARY

This course is designed to give secondary students experience in responsible teaching at the secondary level under the guidance of public school supervising teachers and university supervisors. The course will be required (1) of students working on *P E all-level certification* in conjunction with ED 4311 and (2) of students working on *secondary certification only* with a *minor in Generic Special Education* in conjunction with ED 4313. Students are assigned to the public schools all day, Monday through Friday, for 16 weeks and are required, in addition, (1) to attend a 1 hour weekly seminar with the university supervisor and (2) to have at least one planning conference each week with the public school supervising teacher(s).

Prerequisite: 9 semester hours of upper level professional education courses, including ED S 3307.

A student may take no more than 3 sem hours of additional course work during the professional semester in which he takes Directed Teaching. The course work must be taken after 4:00 p.m.

ED S 4901 CLINICAL TEACHING IN THE JUNIOR OR SENIOR HIGH SCHOOL

This course is designed to give secondary education students teaching experience at the junior or senior high school level under the guidance of a public school supervising teacher and a university supervisor. Students are assigned to the public schools all day, Monday through Friday, for 16 weeks and are required, in addition, (1) to attend a 1 hour weekly seminar with the university supervisor and (2) to have at least one planning conference each week with the public school supervising teacher(s).

Prerequisite: 9 semester hours of upper level professional education courses, including ED S 3307.

A student may take no more than 3 sem hours of additional course work during the professional semester in which he takes Directed Teaching. The course work must be taken after 4:00 p.m.

English**ENG 1300 FUNDAMENTALS OF WRITTEN COMMUNICATION**

Intensive study and practice in forming the basic unit of written communication, the sentence. Emphasis upon syntax, diction, punctuation, spelling, types of sentence construction, and other basic writing skills. (Required of students scoring 10 or below on the English portion of the ACT test.) This course does not count toward the student's hours for graduation or in the determination of hours attempted or earned. Students will receive either a "P" - Pass or a "NP" - No Pass grade in this course.

ENG 1301 COMPOSITION

Development of the student's ability to communicate effectively and responsibly through written discourse. Emphasis upon mechanical proficiency and organizational 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 score of 11 or above on the English portion of the ACT test or a Pass in Eng 1300.

ENG 1302 RHETORIC

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.

Prerequisite: A grade of C or better in ENG 1301, 1387 or 1406. (Credit for this course may be obtained by qualified students through advanced placement or advanced standing examinations.)

ENG 1310 READING-VOCABULARY

Development of the student's ability to read college level materials. Emphasis on vocabulary and word recognition skills, comprehension skills, study skills, efficiency in content area reading. Course does not satisfy general education requirements, but carries elective credit.

ENG 1387 RHETORIC AND COMPOSITION (HONORS PLAN)

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)

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 1405 ENGLISH FOR FOREIGN STUDENTS

For foreign students or any student born outside the United States who lacks proficiency in English. Intensive practice and drill, both oral and written, in vocabulary and sentence patterns, with particular attention to the English idiom. Three hour lecture and assigned lab. Course does not satisfy general education requirements, but carries elective credit.

Prerequisite: Minimum score of 500 on TOEFL or minimum score of 60 on M.T.E.L.

ENG 1406 ENGLISH FOR FOREIGN STUDENTS

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 2301 SURVEY OF ENGLISH LITERATURE

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. A course designed specifically for English majors and minors.

Prerequisite: "C" average in six semester hours of required freshman English.

ENG 2302 SURVEY OF ENGLISH LITERATURE

A chronological study of the principal authors, their works, and the trends in English literature from pre-romantic poetry to the Twentieth Century. A course designed specifically for English majors and minors.

Prerequisite: "C" average in six semester hours of required freshman English.

ENG 2303 READINGS IN AMERICAN LITERATURE

A study of several masterpieces of American literature, with emphasis on careful reading and on writing critical essays about individual works.

Prerequisite: "C" average in six semester hours of required freshman English.

ENG 2305 READINGS IN ENGLISH LITERATURE

A study of several masterpieces of English literature, with emphasis on careful reading and on writing critical essays about individual works.

Prerequisite: "C" average in six semester hours of required freshman English.

ENG 2307 READINGS IN GENERAL LITERATURE

A study of several masterpieces of world literature in translation, with emphasis on careful reading and on writing critical essays about individual works.
Prerequisite: "C" average in six semester hours of required freshman English.

ENG 2308 READINGS IN SPECIAL TOPICS

A study of the literature associated with a special group, area, movement, or techniques. The topic to vary with each section. (Special topics to be announced in the schedule of classes. Student may receive credit in this course only once.)
Prerequisite: "C" average in six semester hours of required freshman English.

ENG 2309 TECHNICAL REPORT WRITING

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: "C" average in six semester hours of required freshman English.

ENG 2313 READINGS IN DRAMATIC LITERATURE

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 Drama.
Prerequisite (For English credit): "C" average in six semester hours of required freshman English.

ENG 2387 READINGS IN WORLD LITERATURE (HONORS PLAN)

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)

A study of selected works from western literature: Renaissance through modern.
Prerequisite: Admission to honors studies or by invitation.

ENG 3301 MEDIEVAL LITERATURE

A study of various types of medieval literature, including the epic, the romance and the allegory, with special attention to middle English writers.
Prerequisite: 12 semester hours of English. Not open to students with credit in ENG 4305.

ENG 3303 THE SEVENTEENTH CENTURY

A study of the literature of England from the beginning of the Jacobean period through the restoration.
Prerequisite: 12 semester hours of English.

ENG 3304 THE EIGHTEENTH CENTURY

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

A study of the development of romanticism in France, Germany and England, with the main emphasis on English writers. Not open to students with credit in Eng. 4303.
Prerequisite: 12 semester hours of English.

ENG 3306 THE ENGLISH NOVEL TO 1850

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

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

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

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 3311 CONTEMPORARY DRAMA

See Drama 3311 for course description, may be counted as English or Drama.
Prerequisite: 12 semester hours of English.

ENG 3312 SURVEY OF AMERICAN LITERATURE

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

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

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

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 LITERARY PROBLEMS

A course adapted to the study of special topics in English, American and world literature. 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 English and 12 semester hours of English.

ENG 3321 LANGUAGE AND CULTURE

Systematic exploration of social aspects of language and language use, including language attitudes, sociolinguistic dynamics of language contact situations, language learning, and the social and linguistic nature of dialects, language variation, and language change.
Prerequisite: 12 semester hours of English.

ENG 3322 POETRY

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

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. Not open to students with credit in ENG 4304.

ENG 3325 THE MEXICAN FILM

A critical examination of Mexican films, concentrating on approaches to aesthetic and technical criticism of the motion picture as an art form and as a communications medium. The course includes viewing and discussion of films as well as study of screenplays from which the films are derived.
Prerequisite: 12 semester hours of English. Not open to students with credit in M C 3325.

ENG 3326 THE NEW SPANISH CINEMA

Significant trends in Spanish cinema 1960-1975. Pioneering efforts of neo-realist directors like Luis Berlanga and Carlos Saura as well as formalistic experiments of Catalanian directors like Gonzalo Suarez and Antonio Ribas will also be emphasized in the course. Films will have English subtitles and will be shown at the Filmoteca Nacional in Madrid which will also provide classroom facilities for the course. (The course is sponsored by ACUIIS.)
Prerequisite: 12 semester hours of English. Not open to students with credit in M C 3326.

ENG 3327 PRACTICAL WRITING IMPROVEMENT FOR THE NON-ENGLISH MAJOR

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

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 for bilingual/bicultural students: ENG 3319.

ENG 3371 COOPERATIVE EDUCATION I

A planned program of full-time work (minimum of one semester or two continuous five-week summer sessions) related to the field of English. Enrollment should be determined on the basis of a satisfactory employer's evaluation and the student's written report. Carries elective credit only and cannot be applied toward fulfillment of major or minor requirements.
Prerequisite: Approval of the department.

ENG 4301 SHAKESPEARE

A study of representative plays in comedy, history and tragedy.
Prerequisite: 12 semester hours of English.

ENG 4302 MODERN ENGLISH SYNTAX

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

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

A history of the English language from the Anglo-Saxon period to the present.
Prerequisite: 12 semester hours of English.

ENG 4309 CHAUCER

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

A study of the works of representative writers of the south.
Prerequisite: 12 semester hours of English.

ENG 4312 MILTON

A study of the major poems and selected prose and minor poetry.
Prerequisite: 12 semester hours of English.

ENG 4313 CONTRASTIVE PHONOLOGY

A comparison of English and Spanish sound systems providing detailed study of the phonemic and phonotactic similarities and differences of the languages. Course open only to students with proficiency in both English and Spanish. May be counted as English or Spanish 4313.
Prerequisite: ENGLISH 3319 or SPANISH 3306.

ENG 4314 CONTRASTIVE GRAMMAR

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

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

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. Not open to students with prior credit in ENGLISH 3318.

ENG 4318 TEACHING SECONDARY SCHOOL LITERATURE

A study of methods and materials available to the teacher, with emphasis on procedures in analyzing specific works in various genres.
Prerequisite: 12 semester hours of English.

ENG 4322 CREATIVE WRITING I

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 4324 HISPANIC-AMERICAN LITERATURE IN ENGLISH TRANSLATION

A study of contemporary Hispanic-American literature, including essays by Octavio Paz, fiction by Azuela, Fuentes, Rulfo (Mexico), Garcia-Marques (Colombia), poetry by Neruda (Chile), and short fiction by Borges (Argentina).
Prerequisite: 12 semester hours of English.

ENG 4325 COMPOSITION TECHNIQUES

A study of advanced composition techniques, including theories and methods of teaching composition skills.
Prerequisite: 12 semester hours of English.

ENG 4326 LANGUAGE ACQUISITION

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

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

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

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.
Prerequisite for students in bilingual program: ENG 3319, 3330, SPAN 3330.

ENG 4331 PROBLEMS IN GRAMMAR, DIALECTS, AND LANGUAGE PERFORMANCE

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

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 6315 WORKSHOP IN CREATIVE WRITING

Work in all genres for advanced students with a serious interest in publishing.

ENG 6316 STUDIES IN MEXICAN-AMERICAN LITERATURE

Advanced study of the literature by and about Mexican Americans, with emphasis on the literary techniques and the cultural reflections in this literature.

ENG 6318 LITERATURE IN THE SECONDARY SCHOOL

Resources available for the teacher of English with consideration of analytical techniques.

ENG 6321 STUDIES IN LANGUAGE AND CULTURE

Advanced study of social aspects of language and language use, including language attitudes, sociolinguistic dynamics of language contact situations, language learning, and the social and linguistic nature of dialects, language variation, and language change. Requires a research project.

ENG 6325 STUDIES IN COMPOSITION TECHNIQUES

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

A study of ESL teaching methods and techniques and their application to specific language performance skills. Special emphasis on the linguistic, sociolinguistic, and psycholinguistic bases for selecting appropriate ESL methods and techniques.

ENG 6329 PROBLEMS IN ENGLISH AS A SECOND LANGUAGE

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

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

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

Major aesthetic theories related to exercises in practical criticism.

ENG 6350 INTRODUCTION TO DESCRIPTIVE LINGUISTICS FOR TEACHERS

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

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 or consent of the instructor.

ENG 6360 STUDIES IN ENGLISH LITERATURE

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

Extensive study in American literature. May be repeated for credit when the topic varies. (Special topics to be announced in schedule of classes.)

ENG 6380 STUDIES IN COMPARATIVE LITERATURE

The comparison of particular topics, motifs, or genres in the literature of two of more languages or cultures. May be repeated for credit when the topic varies. (Special topics to be announced in the tentative class schedule.)

ENG 6390 STUDIES IN SPECIAL TOPICS

Extensive study in topics not limited to American or English literature. May be repeated for credit when the topic varies.

ENG 7300 THESIS**ENG 7301 THESIS**

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: 6 hours ECO, 3 hours ACC.

FINA 3382 INVESTMENT PRINCIPLES

Offered 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, both those affecting the internal management of the firm and those concerned with the acquisition of new assets and funds. Prerequisite: ACC 2322 or ACC 2329.

FINA 3384 FUNDAMENTALS OF REAL ESTATE

Fall
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 AND MARKETS

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 3387 REAL ESTATE FINANCE

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 3389 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. Prerequisite: FINA 3381.

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. May be counted as finance or economics. Prerequisites: 6 semester hours each of accounting and economics.

FINA 4300 TOPICS IN FINANCE

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 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 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.

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, 3389.

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. Prerequisites: FINA 3383. Since this course replaces FINA 6381, a student cannot receive credit for both courses.

FINA 6341 FINANCE SEMINAR

Offered on Demand
Readings, reports and discussion of selected topics in finance. Prerequisite: 12 semester hours of graduate business courses.

French

FR 1321 BEGINNING FRENCH

A study of the essentials of French grammar, pronunciation, elementary conversation and prose reading.

FR 1322 BEGINNING FRENCH

A continuation of French 1321. Prerequisite: French 1321.

FR 1323 FRENCH CONVERSATION

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.

General Business

GENB 1301 BASIC TYPEWRITING COMMUNICATIONS

Fall, Spring, Summer

For those who have had little or no training in typewriting keyboard introduction, skill, improvement, personal and business letters, tabulation problems, reports, outline and keypunch simulation. May not be counted for major or minor credit in business administration. \$2.00 lab fee.

GENB 1302 PRODUCTION TYPEWRITING

Fall, Spring, Summer

For those who have had at least one semester of typewriting. Designed for students to become proficient in typewriting production improvement, manuscript writing, advanced report writing, and skills improvement.

Prerequisite: GENB 1301 or equivalent. \$2.00 lab fee.

GENB 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.

GENB 1306 INTERMEDIATE SHORTHAND

Fall, Spring

A continuation of GENB 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.

Prerequisites: GENB 1305 or equivalent and credit for or concurrent enrollment in GENB 1302.

GENB 1307 ADVANCED SHORTHAND

Offered on Demand

Enables the student to acquire speed in dictation and transcription and acquaints the student with acceptable forms of business letters. A student should be able to acquire a dictation speed of approximately 110 words per minute by the close of the semester.

Prerequisite: GENB 1306 or equivalent.

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.

GENB 2308 SECRETARIAL TRAINING

Spring

Secretarial procedures performed in business offices. Personal relations, business etiquette, handling of mail and telegrams, using the telephone, filing, banking procedures, using directories, interviewing callers, office equipment, keeping office records and minutes of meetings.

Prerequisites: GENB 1302 or equivalent.

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

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 3312 ADMINISTRATIVE OFFICE MANAGEMENT

Fall

The management functions of planning, organizing, actuating and controlling in a facilitating administrative system are applied to case problems in office administration. Principles of internal organization, motivational theories and informational technology are studied through the medium of the role playing, panels and critiques, as well as the discussion technique. Pertinent research applicable to the field of office management is also studied.

GENB 3315 SEMINAR: TEACHING BUSINESS SUBJECTS

Fall

Explores the methods and techniques of teaching all business subjects. In addition, the psychological aspects of learning are reviewed and applied to the teaching process. Designed for the business student who is preparing to teach at the secondary or post-secondary level.

GENB 3335 ORGANIZATIONAL COMMUNICATIONS

Fall, Spring, Summer

A systems approach to information processing which concerns itself with the psychological and practical aspects of communications applied to organizations networks. Research, both applied and experimental, in communications is a basic ingredient of this course. The areas of kinetic and mental communication are also explored on an intra-and inter- personal basis.

Prerequisite: Satisfaction of general requirements for freshmen English and ability to use the typewriter.

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 as well as the study and analysis of cases and rules of law; contracts, with reference to the Uniform Commercial Code; agency; property; and estates and trust.

GENB 3338 BUSINESS LAW II

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 3341 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 distributions, sampling distributions, estimation theory and hypothesis testing. Computer laboratory assignments covering the above topics will be assigned. May be credited as general business or economics.

Prerequisite: MATH 2316, CIS 1301

GENB 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. May be counted as Business Administration or economics.

Prerequisite: GENB 3341, MATH 2317.

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

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 4345 SMALL BUSINESS INSTITUTE

Fall, Spring

This course involves the on-premise evaluation of a small business. It focuses on the analysis of the accounting, finance, production, marketing and management functions as they pertain to the successful operation of the business. The student, acting as a counselor, diagnoses, analyzes and proposes possible solutions for problems currently affecting the business. This course may be repeated once for credit.

Prerequisites: Mana 3361, 3363, 3371; Fina 3383.

GENB 4346 TOPICS IN GENERAL BUSINESS

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.

GENB 4369 BUSINESS POLICY

Fall, Spring, Summer

A broad course in business management designed to integrate earlier studies in business. 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, GENB 3341, MANA 3361, MARK 3371, FINA 3383.

GENB 6310 BUSINESS RESEARCH

Fall

Business research techniques and methodologies. Topics include: identifying valid research activities, review of literature, data sources and collection, research design and methodology, computer statistical analysis, and written and oral communication of the research paper. (Since this course replaces GENB 6332, a student cannot receive credit for both courses.)

GENB 6311 PROJECT PLANNING AND PROPOSAL WRITING

Offered on Demand

The course develops skills in designing, evaluating and funding private and public projects. The project design and evaluation techniques integrate needs assessment, objectives, procedures, and program budgets. The funding process is investigated in detail. (Since this course replaces HR 6310, a student cannot receive credit for both courses.)

Prerequisite: A graduate level research course.

GENB 6316 BUSINESS RESPONSE TO GOVERNMENT REGULATIONS

Offered 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

Offered 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.)

GENB 6380 INTERNATIONAL BUSINESS

Fall

Readings and cases in international business. Emphasis is placed on the impact of comparative differences in the domestic and international business environments and operations, including the impact of historical, economic, cultural, and political foundations on business operations. Special international business topics of unique contemporary importance are also studied.

Prerequisite: 12 semester hours of graduate business courses.

GENB 6390 ADMINISTRATIVE POLICY AND STRATEGY

Spring

A study of management problems under dynamic conditions. Comprehensive, integrative cases will be studied and analyzed. Decision making and involvement in the management process is 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.

GENB 7300 THESIS

On demand

Research and writing of the thesis.

GENB 7301 THESIS

On demand

Research and writing of the thesis.

GEOG 2301 CONSERVATION OF NATURAL RESOURCES

A study of the use of conservation of our natural resources. Includes topics in soils, minerals, water and energy resources. Designed to meet the conservation requirements for elementary education. Can be counted in the supporting areas of elementary curriculum.

GEOG 2313 PRINCIPLES OF GEOGRAPHY: PHYSICAL ELEMENTS

An overview of the earth's natural features systematically described and interpreted through basic geography principles. Emphasis on earth-sun relations, the world pattern and distribution of water and climate; landscape development under the influence of vulcanism and mountain-building forces, rivers, underground water, glaciers, waves and currents, and the wind; the nature and classification of the principal soil groups of the world. Can be counted in the supporting areas of elementary education curriculum.

GEOG 3333 LATIN-AMERICAN GEOGRAPHY

A regional study of the geography of Mexico, the Caribbean, Central and South America. Includes an investigation of the physical, cultural and economic factors of various regions and how these affect present day conditions.

Geology

GEOLOGICAL 1401 PHYSICAL GEOLOGY

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.

GEOLOGICAL 1402 HISTORICAL GEOLOGY

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. Students are expected to furnish their own transportation on field trips. \$4.00 laboratory fee.

GEOLOGICAL 2401 GEOMORPHOLOGY

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: GEOLOGICAL 1401.

GEOLOGICAL 2402 STRUCTURAL GEOLOGY

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: GEOLOGICAL 1401, 1402.

GEOLOGICAL 3301 OCEANOGRAPHY

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 field problems.

Prerequisite: GEOLOGICAL 1401 or advanced standing in any of the related sciences or consent of the instructor.

GEOLOGICAL 3401 MINERALOGY

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: Geology 1401 or Chemistry 1401, 1402.

GEOLOGICAL 3402 INVERTEBRATE PALEONTOLOGY

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.

GEOLOGICAL 3404 STRATIGRAPHY-SEDIMENTATION

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/or field trips. \$4.00 laboratory fee.

Prerequisites: GEOLOGICAL 1401, 1402, 2402, 3401.

GEOLOGICAL 3405 PETROLOGY

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: GEOLOGICAL 3401.

Geography

German

GER 1331 BEGINNING GERMAN

A study of the essentials of German grammar, pronunciation, elementary conversation and prose reading.

GER 1332 BEGINNING GERMAN

A continuation of German 1331.

Prerequisite: German 1331.

Government

GOVT 2313 UNITED STATES AND TEXAS GOVERNMENT AND POLITICS

The origins and development of the American governmental system; U.S. and Texas constitutions; federal-state and interstate relations; the individual as a citizen, person and voter; political parties. Fulfills three hours of the legislative requirements of six hours of American and Texas government. *Open to freshmen.*

GOVT 2314 UNITED STATES AND TEXAS GOVERNMENT AND POLITICS

A functional study of the American and Texas constitutions and governmental systems in relation to legislation, executive functions, judicial functions, administrative structures and functions; structures and functions of lesser units of government; financing governmental activities; foreign relations; governmental services and functions in the field 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.*

GOVT 2333 INTRODUCTION TO POLITICAL SCIENCE

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.*

GOVT 2343 COOPERATIVE EDUCATION AND GOVERNMENT

This course is designed for students seeking government 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.

GOVT 2387 U.S. AND TEXAS GOVERNMENT AND POLITICS

Honor Plan

The origins and development of the American governmental system; U.S. and Texas constitutions; federal-state and interstate relations; the individual as a citizen, person, and voter; political parties. Fulfills three hours of the legislative requirements of six hours of American and Texas government.

Prerequisite: Admission to honors studies or by invitation.

GOVT 2388 U.S. AND TEXAS GOVERNMENT AND POLITICS

Honor Plan

A functional study of the American and Texas constitutions and governmental systems in relation to legislation, executive functions, judicial functions, administrative structures and functions; structures and functions of lesser units of government; financing governmental activities; foreign relations; governmental services and functions in the field 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.

GOVT 3185 INTERNSHIP

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 Government.

Prerequisite: GOVT 2313, 2314.

GOVT 3314 AMERICAN STATE AND LOCAL GOVERNMENT

A study of the basic functions, structure, procedures and problems of American state, and local government, with an emphasis upon intergovernmental relations.

Prerequisites: GOVT 2313, 2314.

GOVT 3316 AMERICAN PUBLIC POLICY

An analysis of rationales underlying selected governmental programs and assessments of the effectiveness of these programs.

Prerequisites: GOVT 2313, 2314.

GOVT 3318 SPECIAL PROBLEMS IN AMERICAN POLITICS

Significant developments and issues in American politics, including American political behavior and American political leadership.

Prerequisites: GOVT 2313, 2314.

GOVT 3322 POLITICS OF EMERGING NATIONS

Analysis of political institutions and processes with focus on "Third World" emerging nations.

Prerequisites: GOVT 2313, 2314.

GOVT 3323 INTRODUCTION TO PUBLIC ADMINISTRATION

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: GOVT 2313, 2314.

GOVT 3324 GOVERNMENT ORGANIZATION AND ADMINISTRATIVE THEORY

An analysis of the various theories of public administration and government organization. The contribution of such theorists as Weber, Taylor, Mayo, McGregor, Maslow, Simon, and others will be studied. The development of public administration will be surveyed.

GOVT 3331 METHODS OF POLITICAL SCIENCE RESEARCH

Analysis of the study of politics, models of inquiry, research methods, and introduction to the use of computers in political science research.

Prerequisite: GOVT 2313, 2314 (was GOVT 4331; may not be repeated for credit)

GOVT 3343 INTERNATIONAL POLITICS

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: GOVT 2313, 2314.

GOVT 3360 AMERICAN MINORITY POLITICS

An analysis of the political policies and techniques embraced by minorities in American political system. Minorities studies include Mexican-Americans, blacks and women.

Prerequisites: GOVT 2313, 2314.

GOVT 3371 GOVERNMENT AND POLITICS OF THE SOVIET UNION

A comparative study of ideology, institutions and political processes of totalitarian governments, with emphasis on the systems of contemporary Russia and communist China.

Prerequisites: GOVT 2313, 2314 (cannot be taken for degree credit if student has previously completed GOVT 3372).

GOVT 4300 ACUI IS DIRECTED STUDY IN INTERNATIONAL ACTIVITIES

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.

Prerequisite: Junior-senior standing and concurrence of Vice President for Inter-American Affairs and International Education.

GOVT 4310 COMPARATIVE PUBLIC ADMINISTRATION

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: GOVT 2313, 2314.

GOVT 4312 URBAN AND METROPOLITAN PLANNING

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: GOVT 2313, 2314.

GOVT 4313 COMPARATIVE GOVERNMENTS: WESTERN DEMOCRACIES

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: GOVT 2313, 2314.

GOVT 4320 AMERICAN CONSTITUTIONAL LAW: FEDERALISM

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: GOVT 2313, 2314.

GOVT 4321 AMERICAN CONSTITUTIONAL LAW: CIVIL LIBERTIES

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: GOVT 2313, 2314.

GOVT 4332 AMERICAN POLITICAL THEORY

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: GOVT 2313, 2314.

GOVT 4333 CLASSICAL POLITICAL THEORY (PRE-SOCRATIC TO MACHIAVELLI)

A study of political philosophy from the pre-Socratic era to Machiavelli.

Prerequisite: GOVT 2313, 2314.

GOVT 4343 MODERN POLITICAL THEORY (MACHIAVELLI TO THE 18th CENTURY)

A study of political philosophy from Machiavelli to the end of the 18th century.

Prerequisite: GOVT 2313, 2314.

GOVT 4344 CONTEMPORARY POLITICAL THEORY (THE RISE OF LIBERALISM TO THE PRESENT)

A study of political philosophy from the 19th century to the present. Prerequisite: GOVT 2313, 2314.

GOVT 4353 INTERNATIONAL ORGANIZATION

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: GOVT 2313, 2314.

GOVT 4360 AMERICAN EXECUTIVE PROCESS

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: GOVT 2313, 2314.

GOVT 4363 AMERICAN LEGISLATIVE PROCESS

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: GOVT 2313, 2314.

GOVT 4365 AMERICAN ADMINISTRATIVE PROCESS

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: GOVT 2313, 2314.

GOVT 4367 AMERICAN JUDICIAL PROCESS

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: GOVT 2313, 2314.

GOVT 4373 AMERICAN POLITICAL PARTIES AND POLITICS

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.

GOVT 4382 GOVERNMENTS AND POLITICS OF ASIA

The socio-economic setting, constitutional framework, political forces, authoritative decision-making agencies and certain major policy outputs of selected governments of Asian nations. Emphasis on Japan, India, Thailand, Indonesia and the Philippines.

Prerequisites: GOVT 2313, 2314.

GOVT 4383 POLITICS IN MEXICO, CENTRAL AMERICA AND THE CARRIBEAN

A survey of governmental structures and politics in Latin America, examines competing ideologies, group developments, party interests, influence of revolution, relationship between political, social and economic structures and Latin America's role in the world political arena.

Prerequisites: GOVT. 2313, 2314 (was GOVT 3383, may not be repeated for credit).

GOVT 4384 SEMINAR IN LOCAL GOVERNMENT PROBLEMS I

An examination and study of administrative problems in local government.

Prerequisites: GOVT 2313, 2314.

GOVT 4385 SEMINAR IN LOCAL GOVERNMENT PROBLEMS II

An examination of problems encountered by the interns in their work with various local governmental agencies and efforts to find solutions by applications of latest governmental administrative theories.

Prerequisites: GOVT 2313, 2314.

GOVT 4386 SOUTH AMERICAN POLITICS

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: GOVT 2313, 2314.

GOVT 5360 AMERICAN EXECUTIVE PROCESS AND POLICY OUTPUTS

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.

GOVT 5367 AMERICAN JUDICIAL PROCESS

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.

GOVT 5386 POLITICS OF SOUTH AMERICA

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.

Health Education

H E 1352 COMMUNITY AND ENVIRONMENTAL HEALTH

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 EDUCATION AND FIRST AID

Basic knowledges for safe and effective living. The essential aspects of home, school, community, work and traffic safety, theoretical and practical aspects of emergency care. Red Cross standard and advanced certificates available upon completion of specific requirements.

H E 2352 THE HEALTH EDUCATION PROGRAM IN THE ELEMENTARY SCHOOL

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

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

Human growth patterns and systemic development. Organismic nutritive needs and sources. Physical fitness defined and related to total fitness. The nature, source, control and treatment of non-communicable disease.

H E 2373 GROWTH, DEVELOPMENT, AND FITNESS

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

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

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

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

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 EDUCATION

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 EDUCATION WORKSHOP

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

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.

Human Services

H S 1301 DIRECTED STUDIES IN HUMAN SERVICES

An individual community-laboratory research course designed for students employed full-time as paid or volunteer workers in human services agencies. Students may not schedule other classes during the time period they are enrolled in this course, and will submit to the human services program coordinator a prospectus of their study outline. The project report will be evaluated by the coordinator one week prior to the beginning of the next year's work. There will be seminar group meetings connected with this course. Seminar hours to be arranged and thirty hours of laboratory each week.

Prerequisite: Approval by program coordinator and director, Division of Health Related Professions.

H S 1311 INTRODUCTION TO GROUP DYNAMICS

Introduction to theory and practice of group functioning and interaction among and between group members. Interpersonal relationships among group members as they develop through the processes of discussion and communication patterns, both verbal and non-verbal, will be reviewed and studied. The emergence of leadership and fellowship will be examined as they happen; the simulation of role playing, psychodrama and other learning techniques will be examined by the students. The class, as a group, will study itself in different group situations to begin the development of sensitivity skills and to understand the various ways through which people communicate their feelings and attitudes in different group settings. Two hours lecture and five hours laboratory each week: 3 credits.

H S 1351 INTRODUCTION TO THE HUMAN SERVICES AGENCIES AND PROGRAMS

Orientation to history, current concepts and trends in human services, which include mental health/mental retardation agencies and programs, definition and role of the human service associate and workers, studies of the human services practices from ancient to modern times. Emphasis is given to the current comprehensive community approach, to the broad aspects and the various disciplines in the human services, as applied to real life occupational situations with basic cultural and economic problems and differences related to dynamics of the community. Community laboratory participation in those activities by which the community-as-a whole, via its indigenous institutions, social groups, families and disparte members, can best be mobilized in service to their own personal goals and emotional needs. Attention is given to understanding the nature and development of community agencies and resources. Two hours of lecture and five hours of laboratory.

H S 1411 DEVELOPMENTAL AND LEARNING DISABILITIES

Introduction to the literature, historical development, contemporary theories, definitions, characteristics and problems of special learning disabilities. Consideration is given to special educational problems of developmental disabilities and principles of programs and methodology development. Three hours of lecture and eight hours of laboratory each week.

H S 2282 DIRECTED PRACTICUM: CHILDREN'S AGENCIES IN THE COMMUNITY

Continuing laboratory observation of children under care at various age levels. Six hours laboratory each week.

H S 2322 GROUP DYNAMICS-SMALL/LARGE GROUP PROCESS

A focus of the course will be on the individual as a small group member, i.e., family, T-groups, peer groups, etc. and on the reciprocal effect that small groups have on the individual and the individual on the group. Methods in small group counseling and individual and group interviewing will be examined. Tape recording of group sessions (in and out of class) will be reviewed and analyzed to identify the dynamics that transpire. Additionally, the interactions between members of different community groups as they meet to discuss common community interests will be studied. Special attention will be given to demonstrating the application of group dynamics to community problems and intra-group and interpersonal relations. Observation of the various group processes will be reviewed as they happen in the lab and in the community. Relevant research literature, theory and models will be surveyed. Two hours lecture and five hours laboratory per week; 3 credits.

H S 2571 HUMAN SERVICES (INSTITUTION)

A survey will be made of the institutions used by society in the treatment and rehabilitation of emotionally and behaviorally disturbed persons and the physically handicapped. Techniques used by these institutions will be explored and examined for their immediate effectiveness and their long range impact on the individual and his family. Roles and functions of the human service team in an institutional context are discussed and demonstrated in simulated situations. Efficacy of the clinical techniques common to each of the human services professions are examined as functions in the typical institutional milieu. The student will develop skills in the understanding the dynamic nature of mental illness and the process of therapeutic interactions and interventions. Three hours lecture and ten hours laboratory each week.

Prerequisite: H S 1351 — Introduction to the Human Services Agencies and Programs.

H S 2572 HUMAN SERVICES (COMMUNITY)

A survey will be made of community based health and mental health programs created to treat, rehabilitate and assist individuals with behavioral, personal, interpersonal or anti-social dysfunctions. Community based service modalities are contrasted with institutional programs. Students will study the emerging fields of community medicine and community mental health through personal observation of local programs. The course will include clinical laboratory participation in the care of individuals with behavioral disorders and methods of prevention through community resources. Three hours lecture and ten hours laboratory each week. Prerequisite: H S 2571 — Human Services (Institutional).

H S 2581 CHILDREN, FAMILY AND COMMUNITY

The psychosocial and psychobiological development of children through latency, and from latency to young adulthood. The effects of society on a child rearing practices and life styles of families. Continuing laboratory observation of children under care at various age levels. Three hours lecture and ten hours laboratory each week. 5 credits.

H S 3222 DIRECTED PRACTICUM IN BEHAVIORAL ACTIVITIES OF ADULTHOOD

The clinical emphasis is on the increasing problems of adult life in family organization, physical, cultural, occupational and social changes. These effects of aging and geriatric problems are included for the purpose of acquiring a useful theoretical practical frame of reference basic to working within the various human service programs. Six hours laboratory each week.

H S 3231 DIRECTED PRACTICUM IN BEHAVIORAL ACTIVITIES OF CHILDHOOD AND ADOLESCENCE

Clinical overview of contemporary theories and practices relating to the etiology of normal and abnormal behavior in children. Behavioral characteristics and needs of the child and the adolescent are explored with emphasis on physical, social and cultural aspects of growth, family dynamics and their influence upon the child as a basis for therapeutic relationships with children and families are included in this clinical application. Six hours laboratory each week.

H S 3611 COMMUNITY MENTAL HEALTH — PROGRAM DEVELOPMENT

The emerging concepts in community mental health, the development of community mental health center, programs and other resources and services available in the community will be studied. Existing mental health programs and service delivery models will be reviewed, examined and evaluated; local, state and federal mental health services and manpower utilization in human services will be investigated to determine how they attain their goals. Practicum placements will be in a community facility that will provide the student an experience in a self-contained operational program. Two hours seminar and twelve hours practicum placement each week. 6 credits.

H S 3612 COMMUNITY HEALTH — PROGRAM OPERATIONS

Various program approaches that have been developed to meet the social and mental health needs of the community, e.g., consultation processes, medical models, etc., will be studied. The development of the program's operation will be reviewed and the preventive or service delivery programming will be examined for its effectiveness in meeting the residents' needs. Two hours seminar and twelve hours practicum placement each week. 6 credits.

Prerequisite: H S 3611—Community Mental Health — Program Development.

H S 3791 DIRECTED PRACTICUM IN HUMAN SERVICES

Clinical/laboratory experience in the prevention, treatment and evaluation of behavioral disorders and developmental disabilities. Assignments will be made in hospitals, clinics, school programs and general community agencies. Included will be assignments in occupational and recreational therapy and speech and hearing units. The student will take an active role in providing patient/citizen care. Two hours seminar and fifteen hours laboratory each week.

Prerequisite: Approval by Program Coordinator and Director, Division of Health Related Professions.

H S 4711 COMMUNITY PROCESSES FOR MENTAL HEALTH I

This course will provide students with the forum within which they can begin to assimilate their three years of theory and experience into an operational frame of reference regarding the role that community processes have in the field of mental health. Existing social situations and institutions will be studied to determine the impact that specific problems and conditions have upon the mental health of those people who live in different adverse situations. Two hours seminar and fifteen hours practicum placement each week. 7 credits.

Prerequisite: H S 3611 — Community Mental Health — Program Operations.

H S 4712 COMMUNITY PROCESSES FOR MENTAL HEALTH II

This course is a continuation of HS 4711 with greater emphasis being given to demonstrating the application of those skills and techniques learned over the past three and one half years. Studies will be made of the impact of existing models of community mental health programs upon the emotional and behavioral patterns of a specific target population which is attempting to change identifiable social and economic conditions. Two hours seminar and fifteen hours practicum placement. 7 credits.

Prerequisite: H S 4711 — Community Processes for Mental Health I.

H S 4721 COMMUNITY MENTAL HEALTH ADMINISTRATION I

This course will explore the theoretical aspects of traditional mental health administration with an emphasis upon the relationships of management and labor, and how both play a role in instituting operational and programmatic changes. New concepts of community mental health and new administrative models will be reviewed and discussed in relation to their practical application in community settings. Two hours seminar and fifteen hours practicum placement. 7 credits.

H S 4722 COMMUNITY MENTAL HEALTH ADMINISTRATION II

Continuation of HS 4712 with an in-depth look at institution and community mental health administrative practices. The functional and programmatic effectiveness of the practices with regard to their level of operation and their service delivery program will be assessed. Two hours seminar and fifteen hours practicum placement. 7 credits.

Prerequisite: H S 4721 — Community Mental Health Administration I.

H S 4731 CHILD CARE SPECIALIST (INSTITUTION)

An in-depth analysis and evaluation of child care agencies and programs that are operating in schools, day care centers, early childhood development programs and adoption agencies will be made to ascertain the methodology used for working with children who have emotional, physical and behavioral problems. Students will acquire skills in the use of emerging testing and counseling techniques being applied to assist the problem child and his family in adjusting to stress situations. Two hours seminar and fifteen hours practicum placement each week. 7 credits.

Prerequisite: H S 2581 — Child, Family and Community.

H S 4732 CHILD CARE SPECIALIST (COMMUNITY)

This course will build upon the theoretical and practical program studies that were investigated in HS 4731. Students are to develop projects that reflect their understanding and knowledge of what is or should be entailed in working with children and their families who have problems with adjusting to different life situations. Techniques and skills acquired over the past three years by the students will be reinforced through their work with children, their families and others in the child's learning and living environment. Existing public policy effecting child care programming will be reviewed so that the students can obtain an operational grasp of what is involved in developing child care programs. Two hours seminar and fifteen hours practicum placement per week. 7 credits.

History**HIST 1333 CIVILIZATION THROUGH THE CENTURIES**

A thorough survey of the political, social and cultural history of Europe 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.

HIST 1334 CIVILIZATION THROUGH THE CENTURIES

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.

HIST 2313 AMERICAN HERITAGE I

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.

HIST 2314 AMERICAN HERITAGE II

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.

HIST 2333 A GENERAL SURVEY OF THE HISTORY OF TEXAS

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

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

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

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.

HIST 2388 AMERICAN HERITAGE II

Honors Plan

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.

HIST 3301 THE HISTORY OF IDEAS

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

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

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

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

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

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

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

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

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

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

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

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 4344 ORAL HISTORY RESEARCH AND METHODOLOGY

The course will focus on the theoretical and experiential aspects of oral history research and methodology. Students will be exposed to both field and archival techniques in the collection, preservation, and analysis of oral history data and its utilization in anthropology, government, history, social work, sociology, linguistics, language research, education and other areas. May also be counted as SOC 4344 Prerequisites: HIST 2313, 2314 and SOC 1313.

HIST 4345 MEXICO'S FIRST CENTURY AS AN INDEPENDENT REPUBLIC

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 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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

A study of European history through the period of growing nationalism and imperialism leading to World War I.

HIST 6300 HISTORIOGRAPHY AND HISTORICAL METHOD

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

A survey and critique of the bibliography and problems of various eras in American history before the Civil War.

HIST 6303 SEMINAR AND PROBLEMS STUDY IN ERAS IN AMERICAN HISTORY SINCE 1860

A survey and critique of the bibliography and problems of various eras in American history since 1860.

HIST 6306 STUDIES IN TEXAS AND SOUTHWESTERN HISTORY

An intensive investigation of selected problems in southwestern history with emphasis on Texas.

HIST 6307 SEMINAR AND PROBLEMS STUDY IN THE HISTORY OF SOUTH AMERICA

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.

HIST 6309 SEMINAR AND PROBLEMS STUDY IN THE HISTORY OF MIDDLE AMERICA

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.

HIST 6311 SEMINAR AND PROBLEMS IN MODERN EUROPEAN HISTORY

A survey and critique of the bibliography associated with investigations of selected era studies and problems experienced by modern Europe.

HIST 6316 STUDIES IN MEXICAN AND AMERICAN HERITAGES

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 6380 THE GOLDEN AGE OF SPAIN AND PORTUGAL, 1300 to 1700

A study of the political, social, and cultural developments of Spain and Portugal from the era of the Moors to the end of the Hapsburg Dynasty, including colonial expansion into North Africa.

HIST 7300 THESIS

Research and writing of the thesis.

HIST 7301 THESIS

Research and writing of the thesis.

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.

Health Related Professions

HRP 1302 INTRODUCTION TO PATIENT CARE

This course is designed to introduce the pre-professional student to unique theories, concepts and practices related to patient care. The student will be introduced to the social, legal, and ethical components of patient care. Prerequisite: Approval of department.

HRP 1401 INTRODUCTION TO HEALTH RELATED PROFESSIONS

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 HEALTH AND MEDICAL CARE SYSTEM

This course provides an overview of the health care system of the United States and acquaints the student with the following: personal health services, the hospital system, the public health system, voluntary health associations, supportive health services (i.e., drugs, physical therapy, etc.). A descriptive analysis of various levels of health care delivery, financing health care and governmental involvement in the health and medical care delivery system will be given. Three lecture hours. Prerequisite: Sophomore or Advanced Standing.

HRP 2351 INTRODUCTION TO CLINICAL NUTRITION

A survey of nutrition of people in the life cycle infancy (effects of early malnutrition), old age, pregnancy, lactation. Principles of diet in the treatment of disease. Diseases or conditions treated by diet. Modification of the normal diet in the various nutrient consistency and selection.

HRP 2402 MEDICAL TERMINOLOGY

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 3301 INTRODUCTION TO SOCIAL AND LEGAL ASPECTS OF ALCOHOLISM

Introduction to traditional and contemporary bicultural 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 3302 INTRODUCTION TO TREATMENT AND CONTROL OF ALCOHOLISM

A survey of medical and psychological treatment modalities used with alcoholic individuals. Procedures for identification, referrals and follow-up are incorporated in context of total alcoholism treatment process. 3 hours lecture.

HRP 3303 CURRENT HEALTH LEGISLATION OF NATIONAL HEALTH POLICY SEMINAR

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 3304 HEALTH PLANNING AND DEVELOPMENT OF COMMUNITY HEALTH CARE

Theories, methods and approaches to health planning will be studied by means of lecture, readings, case studies, and visiting health planners' lectures. The philosophical basis for various planning methodologies will be examined. Study of the National Health Planning and Resource Development Act (P.L. 93-641) will be done. Concepts of regionalization and its impact on health care delivery will be explored. Planning for specific services and community health care will be emphasized. Three lecture hours.

Prerequisite: HRP 2301 or department approval.

HRP 3310 SPECIAL TOPICS IN PATIENT CARE ISSUES

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 3351 CLINICAL NUTRITION IN HUMAN SERVICES AGENCIES

Effect of culture on food choices and acceptance. Psychological aspects of food and eating. Effects of emotional stress on dietary habits. Dietary interviewing and counseling.

Management

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, student may not receive credit for both courses.)

Prerequisite: MANA 3361.

MANA 3361 PRINCIPLES OF MANAGEMENT

Fall, Spring, Summer

Management functions and processes which have general applicability to all types of enterprises. Emphasis is placed on applicability to the major functional business areas of production, marketing and finance, introduction to basic management philosophy and decision-making processes, study of the principles involved in carrying out managerial functions.

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 3363 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.

Prerequisite: Genb 3341.

MANA 3365 WAGE AND SALARY ADMINISTRATION

On demand

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. (Previously Mana 4365, student may not receive credit for both courses.)

MANA 4300 TOPICS IN MANAGEMENT

A course of supervised independent study and research into management theory and practice.

Prerequisite: 12 hours of Management courses with at least a 3.0 GPA in these courses.

MANA 4361 HUMAN BEHAVIOR IN ORGANIZATION

Offered on Demand

Development of management theory with emphasis on the investigation of individual and group behavior in organizations.

Prerequisite: MANA 3361.

MANA 4364 SOCIETAL PROBLEMS IN BUSINESS

On Demand

The behavior and social responsibilities of business firms and other business institutions in modern society.

MANA 4366 SMALL BUSINESS MANAGEMENT

On demand

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: MANA 3361, MARK 3371 and FINA 3383.

MANA 4368 INDUSTRIAL RELATIONS

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.

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, 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.

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.

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 decision processes utilized in managing operations and achieving optimal production. (Since this course replaces MANA 5363, a student cannot receive credit for both courses.)

Prerequisite: MATH 2317 or the equivalent.

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.

Prerequisite: Eco 2353.

MARK 3372 CONSUMER BEHAVIOR

Fall

An overall view of the basic perspectives of consumer behavior. An interdisciplinary approach is utilized by studying the fields of economics, psychology, sociology and anthropology as they relate to marketing. Emphasis is placed on the fundamental process of motivation, perception and learning, as well as analysis of individual predispositions and group influences in marketing.

Prerequisite: MARK 3371 or consent of instructor.

MARK 3373 WHOLESALING AND 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 and 3374 or consent of the instructor.

MARK 3374 INTERMEDIATE MARKETING STRATEGY

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.

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.

MARK 4372 SALES AND ADVERTISING 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, 3374.

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: ECO 2352, GENB 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.

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.

MARK 6371 MARKETING SEMINAR

Offered 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.)

Math**MATH 1300 BASIC MATHEMATICS**

A course designed for the student with a minimal background in mathematics. This course should prepare one for 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 arithmetic, percentages, elementary geometry, measurements, consumer mathematics, and an introduction to algebra. This course may not be used to satisfy any general university graduation requirements but may be counted only as a general elective.

MATH 1327 MATHEMATICS APPRECIATION I

This course is the first semester of a two semester sequence designed to acquaint non-science majors with both the historical and contemporary uses of mathematics. Developing mathematical skills for problem solving is emphasized. Topics are chosen from algebra, consumer and investment problems, probability, modeling and computers.

Prerequisite: MATH 1300 with a grade of C or better or satisfactory grade on ACT or placement exam. This course replaces MATH 1316. A student may use MATH 1327 to replace a grade received in MATH 1316; however, one may not receive credit for both MATH 1316 and MATH 1327.

MATH 1328 MATHEMATICS APPRECIATION II

This course is a continuation of Math 1327. Emphasis is placed on mathematical structures. Topics are chosen from logic, analytic geometry, probability, and statistics.

Prerequisite: MATH 1327. This course replaced MATH 1317. A student may use MATH 1328 to replace a grade received in MATH 1317; however, one may not receive credit for both MATH 1317 and MATH 1328.

MATH 1335 BASIC ALGEBRA

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: MATH 1300 with a grade of C or better or satisfactory grade on ACT or placement exam. This course replaces MATH 1303. A student may use MATH 1335 to replace a grade in MATH 1303; however, one may not receive credit for both MATH 1303 and MATH 1335.

MATH 1340 COLLEGE ALGEBRA

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 1335 with a grade of C or better or satisfactory grade on ACT or placement exam. This course replaces a grade received in MATH 1304; however one may not receive credit for both MATH 1304 and MATH 1340.

MATH 1356 TRIGONOMETRY

Topics include circular functions, identities, special angles, rectangular and polar coordinates, and graphs.

Prerequisite: MATH 1340 or its equivalent with a grade of C or better or satisfactory grade on ACT or placement exam. The course replaces MATH 1305; however, one may not receive credit for both MATH 1305 and MATH 1356.

MATH 1358 ANALYTIC GEOMETRY

Topics include lines, conic sections, polar coordinates, vectors, and three dimensional geometry.

Prerequisite: MATH 1340 (or its equivalent) and MATH 1356 (or its equivalent) with a grade of at least a C in each. MATH 1356 may be taken concurrently with MATH 1358.

MATH 1365 SURVEY OF ELEMENTARY CALCULUS

This course is an overview of the nature and uses of Calculus, but it is *not* intended for those majors or minors in disciplines requiring more than three semester hours of Calculus. Topics include Differentiation and Integration, as applied to the physical sciences, the social sciences, and the life sciences.

Prerequisite: MATH 1340 with grade of C or better.

MATH 1370 CALCULUS I

This course covers the differentiation and integration of algebraic, trigonometric, and inverse trigonometric functions; and includes limits, summations, and applications of the derivative and integral.

Prerequisite: MATH 1356 and MATH 1358 with a grade of C or better in each; or MATH 1460 with a grade of C or better. This course replaces MATH 1318; however, one may not receive credit for both MATH 1318 and Math 1370.

MATH 2306 MATHEMATICS FOR ELEMENTARY TEACHERS I

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 1300 with grade of C or better or satisfactory grade on ACT or placement exam. 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

This course is a continuation of MATH 2306. Topics include measurements, 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 2316 BUSINESS ALGEBRA

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.

Prerequisite: Math 1335 with a grade of "C" or better or satisfactory grade on ACT or placement exam.

MATH 2317 BUSINESS CALCULUS

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 2316 with a grade of "C" or better.

MATH 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 1335 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 CALCULUS II

This course is a continuation of Calculus I covering further topics of differential and integral calculus including derivatives and integrals of exponential, logarithmic and hyperbolic functions, parametric equations, methods of integration, indeterminate forms, limits by, improper integrals, volumes, surface area and other applications, polar coordinate calculus.

Prerequisite: MATH 1370 with a grade of C or better. This course replaces MATH 1319. Students may use MATH 2342 to replace a grade received in MATH 1319; however, one may not receive credit for both MATH 1319 and MATH 2342.

MATH 2345 COMPUTATIONAL LINEAR ALGEBRA

Topics include systems of linear equations, matrices and their algebraic properties, determinants, vectors, Euclidean N-space, and 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 2425 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 3302 VECTOR ANALYSIS

A study of the applications of vector methods to the problems of mathematics and physics. Topics discussed include vector and scalar products, differentiation of vector valued functions, the divergence theorem, and Stokes theorem.

Prerequisite: Math 2342 with a grade of "C" or better.

MATH 3303 HISTORY OF MATHEMATICS

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 3311 MATHEMATICS FOR SECONDARY TEACHERS I

This course includes a study of Mathematics education in the United States, an examination of curricular recommendations, experimental programs, teaching strategies. Throughout the course an integration of content and pedagogy is maintained.

Prerequisite: 12 semester hours of Mathematics. 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

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 count only toward elementary math certification.

Prerequisite: Grade of "C" or better in MATH 2307 or equivalent.

MATH 3313 ALGEBRAIC STRUCTURES FOR ELEMENTARY TEACHERS

Algebraic concepts and structures relevant to elementary school mathematics will be examined along with applications of these concepts to consumer problems. This course can count only toward elementary math certification.

Prerequisite: Grade of "C" or better in MATH 1340.

MATH 3314 GEOMETRY FOR SECONDARY TEACHERS

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. 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, STATISTICS, AND NUMBER THEORY FOR ELEMENTARY TEACHERS

An in depth study of probability, statistics, and number theory relevant for grades K-8. Topics include ratios, proportions, probability, odds, interpreting and constructing tables, graphs, and charts, primes, composites, divisibility, prime factorization, and casting out nines. This course can only be used for elementary math certification.

Prerequisite: Grade of "C" or better in MATH 1340 or equivalent.

MATH 3318 DIAGNOSIS AND REMEDIATION IN ELEMENTARY SCHOOL MATHEMATICS

An in depth analysis of diagnostic and remediation procedure for children experiencing difficulty in elementary school mathematics.

Prerequisite: Grade of "C" or better in each of MATH 2306, 2307, and ED 3328 or equivalent.

MATH 3337 APPLIED STATISTICS I

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, C S 2425 and either MATH 1365, 1370, or 2317. 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

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

This course is a continuation of MATH 2342 and MATH 2345. Topics include Infinite Series, 3-dimensional Analytic Geometry, Partial Derivatives and Multiple Integrals.

Prerequisite: MATH 2342 with a grade of "C" or better. This course replaces MATH 2305 and 2347. A student may use MATH 3347 to replace a grade received in MATH 2305 and 2347; however, one may receive credit for only one of MATH 2305, 2347 and MATH 3347.

MATH 3349 DIFFERENTIAL EQUATIONS

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 4302 THEORY OF NUMBERS

This course includes a study of Peano's postulates, prime and composite integers, divisibility properties of the integers, congruence, and diophantine equations.

Prerequisite: 12 semester hours of mathematics.

MATH 4316 MATHEMATICS FOR SECONDARY TEACHERS II

This course covers the content and methodology of topics taught in junior and senior level school mathematics. The course may be repeated for credit when topic changes.

Prerequisite: MATH 3311 or consent of instructor. This course replaces MATH 4313. A student may use MATH 4316 to replace a grade received in MATH 4313; however, one may not receive credit for both MATH 4313 and MATH 4316.

MATH 4339 MATHEMATICAL STATISTICS I

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 4340 MATHEMATICAL STATISTICS II

This course is a continuation of MATH 4339. Topics include a study of sampling distributions estimation, tests of hypotheses, correlation and regression, and the analysis of Variance.

Prerequisite: MATH or STAT 4339. This course replaces MATH 4309 and is the same as STAT 4340. A student may use MATH 4340 to replace a grade in MATH 4309; however, one may receive credit for at most one of MATH 4309 or STAT 4340.

MATH 4345 INTRODUCTION TO PURE MATHEMATICS

This course introduces the student to a rigorous study of Mathematics. Emphasis is placed on the creation and presentation of Mathematical Proofs.

Prerequisite: Math 2342 or consent of instructor. This course replaces MATH 4310. A student may use MATH 4345 to replace a grade received in MATH 4310; however, one may not receive credit for both MATH 4310 and MATH 4345.

MATH 4348 LINEAR ALGEBRA

Topics include an Introduction to Vector Spaces, Linear Transformations and Associated Matrices, Bilinear and Quadratic Forms, Eigenvalues and Eigenvectors, and Similarity of Matrices.

Prerequisite: MATH 2345 with a grade of "C" or better. This course replaces MATH 4303. A student may use MATH 4348 to replace a grade received in MATH 4303; however, one may not receive credit for both MATH 4303 and MATH 4348.

MATH 4351 MODERN ALGEBRA

This course provides an introduction to Algebraic structures. Topics to be taken from Groups, Rings and Fields.

Prerequisite: MATH 4345. 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

This course presents a rigorous introduction to the elements of real analysis. Topics include Sequences, Series, Functions, Limits, Continuity, and Derivatives.

Prerequisite: MATH 4345. 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 4360 TOPOLOGY

This course presents a rigorous introduction to the elements of topology. Topics include a study of metric spaces, separation axioms, topological spaces, and topological properties of point sets and mappings.

Prerequisite: MATH 4345. This course replaces MATH 4312. A student may use MATH 4360 to replace a grade received in MATH 4312; however, one may not receive credit for both MATH 4312 and MATH 4360.

MATH 4364 SPECIAL PROBLEMS IN MATHEMATICS

This course covers special undergraduate topics in Mathematics which are not taught elsewhere in the department. May be repeated for credit. Prerequisite: MATH 4345 and consent of instructor.

MATH 4371 MULTIVARIABLE ANALYSIS

This course covers various topics selected from the theory and application of the Calculus of Functions of Several Variables.

Prerequisite: MATH 3347. This course replaces MATH 4314. A student may use MATH 4371 to replace a grade received in MATH 4314; however, one may not receive credit for both MATH 4314 and MATH 4371.

MATH 4373 COMBINATORIAL ANALYSIS

This course presents an introduction to the theory of enumeration.

Prerequisite: MATH 3347; or consent of instructor.

MATH 4379 SPECIAL PROBLEMS IN APPLIED MATHEMATICS

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 4468 NUMERICAL ANALYSIS

This course includes interpolation, numerical integration, numerical solutions to differential equations, and a study of numerical solutions to systems of equations.

Prerequisite: MATH 3349 or consent of instructor. This course replaces MATH 4307. A student may use MATH 4468 to replace a grade received in MATH 4307; however, one may not receive credit for both MATH 4307 and MATH 4468.

MATH 6301 STRUCTURE OF MATHEMATICAL SYSTEMS FOR ELEMENTARY TEACHERS

This course will consider the comparative structures of mathematical systems. Emphasis will be on the system of real numbers and the algebraic operations involved in the arithmetic of real numbers. Geometric concepts will be studied and related to algebra. 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 and 2307 or equivalent.

MATH 6306 DIAGNOSTIC AND CORRECTIVE PROCEDURES IN ELEMENTARY SCHOOL MATHEMATICS

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

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

This course examines geometric structures and investigates research and recent trends in the teaching of geometry.

Prerequisite: MATH 3314 or consent of instructor.

MATH 6314 RESEARCH METHODS IN MATHEMATICS EDUCATION

The student will present an exposition of supervised independent research in a particular area of mathematics. This course is required for all graduate mathematics majors.

Prerequisite: Consent of instructor.

MATH 6320 COMPUTER APPLICATIONS IN SECONDARY MATHEMATICS

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

A critical analysis of issues, trends, and historical developments in secondary Mathematics teaching with emphasis on the areas of curriculum and methodology. This course may be repeated for credit when topic changes.

MATH 6339 ADVANCED PROBLEMS IN PROBABILITY AND STATISTICS

Design of experiments, multivariate analysis, analysis of variance and multiple regression.

Prerequisite: Consent of instructor.

MATH 6351 TOPICS IN ALGEBRA

Topics selected from abstract and linear algebra.

Prerequisite: Math 4351 and consent of instructor.

MATH 6357 TOPICS IN ANALYSIS

Topics selected from real, complex, and abstract analysis.

Prerequisite: Math 4357 and consent of instructor.

MATH 6360 TOPOLOGY

This course is an introduction to the techniques and applications of point-set topology through the study of continuity, separation axioms, separability, basis for topologies, topological properties, and metric spaces.

Prerequisite: MATH 4360.

MATH 6364 ADVANCED PROBLEMS IN MATHEMATICS

This course covers advanced topics in Algebra, Analysis, and Topology not taught elsewhere in the department. May be repeated once for credit when topic is different.

Prerequisite: MATH 6351, 6357 or 6360 and consent of the instructor.

MATH 6390 MATHEMATICS SEMINAR

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.

MATH 7300 THESIS**MATH 7301 THESIS**

Music

MUS 1105/4106 SYMPHONY ORCHESTRA

Instrumental music organization open to all university students who play appropriate instruments. Concerts on and off the campus.

MUS 1204/3205 UNIVERSITY BAND

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. Only eight hours of each number may be counted toward a music degree.

MUS 1203/3204 UNIVERSITY CHOIR

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. Only eight hours of each number may be counted toward a music degree.

MUS 1207/3208 STAGE BAND

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. Only eight hours of each number may be counted toward a music degree.

MUS 1109/3110 UNIVERSITY CHORUS

Vocal music organization open to all university students who desire to participate in such an ensemble. No audition required.

MUS 1111/4112 CHAMBER MUSIC

Small performing ensembles of voices and/or instruments. Performance literature selected from repertoire appropriate to each ensemble.

MUS 1185/3186 APPLIED MUSIC LAB

As a part of applied music, each semester, all students 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

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

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

Vocal instruction for students who have no previous training in voice. May be used to satisfy the voice requirements for non-vocal majors. Three class hours a week with outside preparation of materials for examination. Instructional fee of \$10.00.

MUS 1224 CLASS VOICE

Vocal instruction for students who have no previous training in voice. May be used to satisfy the voice requirements for non-vocal majors. Three class hours a week with outside preparation of materials for examination. Instructional fee of \$10.00.

MUS 1129/4130 OPERA WORKSHOP

Preparation and production of musical stage works including opera, oratorio, cantata, operetta and musical comedy. Open to all students wishing to participate in either on-stage or off-stage musical theatre activities.

APPLIED MUSIC

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 one or 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: one or two semester hour course, \$20.00; four semester hour course, \$35.00. Student 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 1300 PREPARATORY THEORY

A course designed for those students who desire to major in music but do not have the skills to enter freshman theory. This course may be used as elective credit. It does not fulfill any university or departmental requirements.

MUS 1301 MUSIC LITERATURE

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.

MUS 1302 MUSIC LITERATURE

Continuation of Music 1301.

MUS 1401 FIRST YEAR MUSIC THEORY

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. Prerequisite: Satisfactory achievement level on theory placement exam.

MUS 1402 FIRST YEAR MUSIC THEORY

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

Methods and materials for teaching vocal soloists and vocal groups.

MUS 2122 PERCUSSION METHODS AND MATERIALS

Methods and materials for teaching players of percussion instruments.

MUS 2123 BRASS METHODS AND MATERIALS

Methods and materials for teaching players of brass instruments.

MUS 2124 WOODWIND METHODS AND MATERIALS

Methods and materials for the teaching of players of woodwind instruments.

MUS 2125 STRING METHODS AND MATERIALS

Methodology for teaching beginning violin, viola, cello, and string bass.

MUS 2307 MUSIC APPRECIATION

An introductory course in the elements, forms and stylistic eras in music. Designed for non-music majors and minors.

MUS 2401 SECOND YEAR MUSIC THEORY

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

Continuation of Music 2401.

Prerequisite: Music 2401 with a grade of C or satisfactory achievement level on 2401 placement exam.

MUS 3211 CONDUCTING

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

Advanced study of the evolution of the musical art from its beginnings through the Baroque era.

Prerequisite: Junior standing.

MUS 3302 HISTORY OF MUSIC

Continuation of Music 3301.
Prerequisite: Music 3301.

MUS 3305 COUNTERPOINT

Seventeenth and 18th Century counterpoint in all species and its application in arranging for two, three and four voices.
Prerequisites: Music 2401, 2402.

MUS 3311 ELEMENTARY SCHOOL MUSIC

The basic skills of music will be presented in the same sequence in which they can be taught in the elementary classroom. Music will be shown to be a vital part of the elementary curriculum. Music reading skills will be developed through the use of the soprano recorder and sol-fa singing. The course will also include methods of teaching movement, speech and rhythmic activities, and use of simple song accompanies.
Prerequisite: 60 Hours.

MUS 3312 CONTEMPORARY MUSIC METHODS

An understanding of Kodaly principles and the Orff process will be gained by teaching experiences in class. The sequence of materials and procedures of teaching music in the elementary school will be emphasized. Required for music education majors.
Prerequisite: 60 hours; Mus 3311 and/or a knowledge of treble staff notation and soprano recorder is required for non-majors.

MUS 4201 FORM AND ANALYSIS

Historical development of form and consideration of balance. Symmetry and the principles of musical structure, analysis of phrase structure, simple part forms, variation forms, contrapuntal forms. Special consideration of the sonata-allegro form as found in the symphony, concerto and sonata. Two hours per week.
Prerequisites: MUS 2401, 2402.

MUS 4203 ORCHESTRATION AND ARRANGING

Techniques of scoring and editing music for band, orchestra and instrumental ensembles, ranges, timbres, voicings and limitations of the instruments.
Prerequisite: MUS 2402.

MUS 4207 ADVANCED BAND TECHNIQUES

Band organization and recruiting, rehearsal procedures, instrumentation, library, uniforms, discipline, marching, program planning and general instrumental administration.

MUS 4311 SECONDARY SCHOOL MUSIC

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 5301 WORKSHOP IN MUSIC FOR ELEMENTARY TEACHERS

A workshop designed to assist teachers in the utilization of music in the elementary classroom. Includes a study of Orff and Kodaly methods; their similarities and differences and how they can be applied to the classroom.

Nursing Education

N ED 1701 FUNDAMENTALS OF NURSING

This course enables the student to develop basic skills and knowledge which assist him to apply the Nursing Process in patient care. Students practice and demonstrate competency in performing skills in a simulated situation before providing nursing care to adults in the secondary health care setting. Five hours lecture and ten hours laboratory per week.
Prerequisites: HRP 1302, BIOL 1401, BIOL 1402, MATH 1300 if required.

N ED 1802 MEDICAL-SURGICAL NURSING I

This course provides continued utilization of the Nursing Process in the care of the patients experiencing alterations of selected body systems. Students will provide care in secondary health care settings. Five hours lecture and twelve hours laboratory per week. Prerequisites: N ED 1701.

N ED 2403 MEDICAL-SURGICAL NURSING II

This course provides continued utilization of the Nursing Process in the care of patients experiencing more complex alterations in selected body systems. Emphasis will be given to the needs of the geriatric patients. Four hours lecture and sixteen hours laboratory per week.
Prerequisites: N Ed 1802.

N ED 2404 MEDICAL-SURGICAL NURSING III

A continuation of medical-surgical nursing II. Continued use of the Nursing Process with patients whose nursing needs are more complex. Four hours lecture and sixteen hours laboratory per week.
Prerequisites: N Ed 2403.

N ED 2805 FAMILY HEALTH NURSING

This two part course provides for continued utilization of the Nursing Process in the care of maternity patients, newborns and children. Four hours lecture and twelve hours laboratory per week.
Prerequisites: N Ed 2404.

N ED 2906 PSYCHO-SOCIAL NURSING

This course is designed to assist in the transition from role of student to graduate. Major emphasis is placed on conditions affecting the psychological, emotional and physical integrity of individuals and/or groups. The leadership role of the nurse is heavily emphasized. Five hours lecture and sixteen hours laboratory per week.
Prerequisites: N Ed 2805.

N ED 3301 HEALTH CARE DELIVERY SYSTEMS

A study of the scientific and social factors which brought about the evolution of the present Health Care Delivery System. A study of current issues and future trends. Students will utilize biostatistics, population studies and other methods of determining community needs essential in Health Planning. Elements of nursing research are introduced. Three hours lecture.
Prerequisite: Junior standing.

N ED 3402 NURSING I: PLANNING PATIENT CARE

Incorporates the components of the Nursing Process in Planning nursing care. Essential content will include nursing histories, behavioral objectives, and evaluation techniques. The student will utilize the practice setting to develop and evaluate nursing care plans. Three hours lecture, six hours laboratory.
Prerequisite: N ED 3301.

N ED 3403 NURSING II: PHYSICAL ASSESSMENT

Applies social and behavioral concepts conjointly with normal physiology in assessing the health status of clients. The student will utilize health care practice settings to develop skills in recognition of health problems of clients. Three hours lecture, six hours laboratory.
Prerequisite: N ED 3402, BIOL 3411.

N ED 3404 NURSING III: COMMUNITY HEALTH PRACTICE

Focuses on the role of nurse in planning and providing primary care to individuals within a community. 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 skills of assessment, intervention, and problem-solving to recognize and meet nursing needs of small and large groups. Three hours lecture, six hours laboratory.
Prerequisite: N ED 3403.

N ED 3405 NURSING IV: RURAL HEALTH NURSING

The focus is on the health needs of rural areas. Students will have guided experiences in planning and implementing care to individuals in medically underserved areas. Four hours lecture, twelve hours laboratory.
Prerequisite: N ED 3404.

N ED 4308 NURSING VII: PROBLEMS SEMINAR

Student will complete and present the results of the nursing study begun in N ED 4806. Professional paper or project in relation to the collected data will be the basis for evaluation.
Prerequisite: N ED 4806.

N ED 4607 NURSING VI: LEADERSHIP IN NURSING

Will utilize elements of the nursing process to develop a system of managing by objectives within a clinical specialty. Areas of content will include the Problem Oriented Medical Record, Nursing Audit, peer review, Quality Assurance Program, and current issues in nursing. The student will participate in staff development and personnel management programs. Three hours lecture, eight hours laboratory.
Prerequisites: N ED 4806 and MANA 3361.

N ED 4806 NURSING V: CLINICAL CONCENTRATION

Provides in-depth study of the major areas of clinical nursing. The student will be an active participant in the continuum of care from first contact with the health care system through separation from the system. The student will begin collection of data relating to a nursing problem to be completed in N ED 4308. Three hours lecture, twelve hours laboratory.
Prerequisite: N ED 3301, 3402, 3403, 3404, 3405.

Physical Education

P E 1200 SWIMMING I**P E 1201 FITNESS AND MOTOR DEVELOPMENT****P E 1203 ADAPTIVE PHYSICAL EDUCATION**

Required of all students who do not qualify medically for regular activity courses. Courses may be taken independently.

P E 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.

P E 1161 DANCE PERFORMANCE-JAZZ

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.

P E 1204 ADAPTIVE PHYSICAL EDUCATION

Required of all students who do not qualify medically for regular activity courses. Courses may be taken independently.

P E 1250 SPEEDBALL-SOCCER**P E 1255 SOFTBALL****P E 1351 INTRODUCTION TO HEALTH, PHYSICAL EDUCATION AND RECREATION**

Orientation to the field of health, physical education and recreation, its scope, organization of professional activities, vocational opportunities and professional qualifications.

P E 1354 SAFETY EDUCATION AND FIRST AID

Basic knowledge for safe and effective living, the essential aspects of home, school, community, work and traffic safety. Theoretical and practical aspects of emergency care, Red Cross standard and advanced certificates available upon completion of specific requirements.

P E 2201 FLAG FOOTBALL

\$3.00 fee.

P E 2202 VOLLEYBALL

\$3.00 fee.

P E 2203 BADMINTON

\$6.00 fee.

P E 2204 TENNIS I

\$6.00 fee.

P E 2205 WRESTLING

\$3.00 fee.

P E 2206 WEIGHT TRAINING

\$6.00 fee.

P E 2207 TRACK AND FIELD**P E 2208 GYMNASTICS I**

\$3.00 fee.

P E 2209 ADAPTIVE PHYSICAL EDUCATION

Required of all students who do not qualify medically for regular activity courses. Courses may be taken independently.

P E 2210 ADAPTIVE PHYSICAL EDUCATION

Required of all students who do not qualify medically for regular activity courses. Courses may be taken independently.

P E 2117 RULES AND OFFICIATING OF INDIVIDUAL SPORTS

The teaching of officiating, study of DGWS rules. Laboratory experience required.

P E 2221 BASKETBALL

\$3.00 fee.

P E 2225 FOLK AND SQUARE DANCE

\$3.00 fee.

P E 2226 MODERN DANCE I

\$3.00 fee.

P E 2227 TAP DANCE I

\$3.00 fee.

P E 2228 MODERN DANCE II

\$3.00 fee.

P E 2229 TAP DANCE II

\$3.00 Fee.

P E 2230 MODERN JAZZ I

This course includes a brief history of jazz dance, terminology, jazz movements, and recreational jazz dance.

P E 2231 MODERN JAZZ II

\$3.00 Fee.

P E 2252 SWIMMING II**P E 2253 SOCIAL DANCE****P E 2256 TENNIS II**

\$6.00 fee.

P E 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 \$6.00.

P E 2258 ARCHERY

\$8.00 fee.

P E 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 \$25.00.

P E 2264 FENCING

\$5.00 fee.

P E 2273 GYMNASTICS II

\$3.00 fee.

P E 2280 SENIOR LIFE SAVING

\$5.00 fee.

P E 2281 WATER SAFETY INSTRUCTION

Prerequisite: P E 2180 or current senior life saving certificate.

\$5.00 fee.

P E 2282 SKIN AND SCUBA DIVING

To acquaint the student with the basic scientific principles related to skin and scuba diving; to insure that the student has the basic qualifications to operate near, in or under water. Certification as a scuba diver by the National Association of Underwater instructor will be available.

Prerequisites: P E 2152 or 2180 or equivalent training. \$10.00 fee.

P E 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 \$99.00.

P E 2354 BIOMECHANICS

A study of the structural and mechanical factors which interact with human movement.

Prerequisite: BIOL 1401, 2403.

P E 3300 THEORY OF COACHING FOOTBALL

A study and participation in the fundamentals and techniques, rules and strategies of football.

P E 3302 TEACHING INDIVIDUAL SPORTS

The current theories and practices in teaching tennis, badminton and golf.

Prerequisites: P E 2204, 2203, 2257 or demonstrated proficiency.

P E 3303 THEORY OF COACHING BASKETBALL

A study and participation in the fundamentals, techniques, rules and strategies of basketball.

P E 3304 THEORY OF COACHING BASEBALL

A study involving the use of theory in the analysis and interpretation of coaching techniques and fundamentals in baseball.

P E 3305 THEORY OF COACHING TRACK AND FIELD

A study involving the use of theory in the analysis and interpretation of coaching techniques and fundamentals in track and field.

P E 3310 TEACHING TEAM SPORTS

Analysis of skills and techniques in teaching volleyball, basketball, soccer/speedball.

P E 3312 TEACHING DANCE ACTIVITIES

Analysis of skill and techniques in teaching social, folk, square and modern dance.

Prerequisites: P E 2225, 2226 and 2253 or demonstrated proficiency.

P E 3313 DANCE FOR CHILDREN

This course is intended to provide both theory and practice in planning, organizing and presenting dance activities appropriate for grades K-6. Special emphasis are placed upon the techniques of teaching rhythm skills, creative rhythms, singing games, and folk dances appropriate for children enrolled in the elementary school.

Prerequisites: P E 2225 or P E 2226. Required of elementary education majors for certification in physical education.

PE 3317 METHODS OF TEACHING GYMNASTICS IN THE ELEMENTARY SCHOOL

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.

P E 3319 TEACHING TUMBLING AND GYMNASTICS

Analysis of skills and techniques in teaching basic tumbling and gymnastics. Laboratory experience to be arranged.

Prerequisites: P E 2208 or demonstrated proficiency.

P E 3320 THEORY OF COACHING VOLLEYBALL

A study involving the use of theory in the analysis and interpretation of coaching techniques and fundamentals of volleyball.

P E 3352 CARE, TREATMENT AND PREVENTION OF ATHLETIC INJURIES

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.

Prerequisite: Six semester hours of biology.

P E 3353 PHYSIOLOGY OF EXERCISE

A study of the adaptation of the body to activity with special emphasis on the gross movements of physical education. This course will include an experimental laboratory experience.

Prerequisite: P E 2354.

P E 3356 MOVEMENT EDUCATION

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.

P E 3357 PHYSICAL EDUCATION IN THE ELEMENTARY SCHOOL

Curriculum construction, material selections and methods of presenting physical education activities in the elementary school.

P E 4313 WORKSHOP IN PHYSICAL EDUCATION

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.

Prerequisite: 12 semester hours of physical education or approval of instructor.

P E 4351 THE ADAPTED PHYSICAL EDUCATION PROGRAM

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.

P E 4352 THE INTRAMURAL PROGRAM

The organization and administration of intramural programs for both boys and girls.

P E 4353 RECREATION LEADERSHIP

The organization and administration of recreation leadership in public and private agencies. Offered alternate years.

P E 4354 PHYSICAL EDUCATION FOR THE SECONDARY SCHOOLS

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.

P E 4355 ORGANIZATION AND SUPERVISION OF THE PHYSICAL EDUCATION PROGRAM

History and philosophy, principles, policies of supervision, planning and administering the school physical education and interscholastic programs and a brief introduction to test and measurements as each relates to physical education.

P E 5313 WORKSHOP IN PHYSICAL EDUCATION

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.

P E 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.

P E 5355 SUPERVISION AND ADMINISTRATION OF THE PHYSICAL EDUCATION PROGRAM

A study of the principles and policies of supervising and administering the physical education program in the public schools.

P E 5356 ORGANIZATION AND ADMINISTRATION OF THE SCHOOL HEALTH PROGRAM

The organization and administration of the school health education program with special emphasis on curriculum problems in health education, community and school health council, the health service program. A study of local, state, and national health agencies and their use and intergration with the school health program.

P E 5357 HEALTH EDUCATION SEMINAR

For administrators, teachers, nurses, and community leaders. Topical discussion areas will center around the interests and needs of the participants and the communities.

P E 6301 HISTORY AND PHILOSOPHY OF HEALTH AND PHYSICAL EDUCATION

Historical development of Physical Education from primitive to modern times. Philosophy of modern Physical Education with application to present day educational programs.

P E 6302 METHODS OF RESEARCH IN HEALTH AND PHYSICAL EDUCATION

Introduction to methods and materials of research in the field. Approved methods of writing term papers and research papers.

P E 6303 APPLIED TESTS AND MEASUREMENTS IN HEALTH AND PHYSICAL EDUCATION

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.

P E 6304 SCIENTIFIC FOUNDATIONS OF HEALTH AND PHYSICAL EDUCATION

Background of physical education from biological, anatomical, and physiological aspects.

P E 6305 CURRICULUM CONSTRUCTION IN HEALTH AND PHYSICAL EDUCATION

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.

P E 6306 PLANNING AND USE OF FACILITIES FOR HEALTH AND PHYSICAL EDUCATION

Principles, terminology and standards for planning construction, use and maintenance of facilities.

P E 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.

P E 6308 CURRENT READING IN HEALTH AND PHYSICAL EDUCATION

Extensive readings and discussion of selected topics in the field.

P E 6309 ADVANCED TECHNIQUES FOR TEACHING MOTOR SKILLS, ELEMENTARY LEVEL

Practical and theoretical study of technique in presenting motor activity.

P E 6310 ADVANCED TECHNIQUES OF TEACHING MOTOR SKILLS, SECONDARY LEVEL

Practical and theoretical study of technique in presenting motor activity.

P E 6311 THE TEACHING OF PHYSICAL EDUCATION ACTIVITY CLASSES

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.

P E 6312 ORGANIZATION AND CONDUCT OF DANCE IN EDUCATION

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.

P E 6320 INDEPENDENT RESEARCH

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.

P E 7300 THESIS**P E 7301 THESIS**

Philosophy

PHIL 1310 INTRODUCTION TO PHILOSOPHY

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

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

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 2330 ETHICS

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 2380 PHILOSOPHY IN WESTERN CIVILIZATION

An examination of the major issues and trends in Western Philosophy viewed in the context of the nature and development of Western Civilization.

PHIL 3340 PHILOSOPHY OF THE PERSON

A philosophical examination of what it is to be human. This course will deal with such issues as the problem of personal identity, the nature and structure of the self, the nature of mind and its place in the world, and the question of "human nature".

PHIL 3370 PHILOSOPHY OF RELIGION

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.

PHIL 3380 LATIN AMERICAN THOUGHT

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. (Formerly PHIL 2353 may not be repeated for credit.)

PHIL 3390 AMERICAN PHILOSOPHY

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.

Physics

PHYS 1201 SCIENCE AND ENGINEERING ANALYSIS

Introduction to computational methods and solutions of problems in engineering and science using a computer programming model.

PHYS 1401 GENERAL PHYSICS

A non-calculus presentation of fundamental principles of mechanics, heat and sound. Three hours lecture, three hours laboratory. \$4.00 laboratory fee.
Prerequisite: MATH 1340. Credit for or concurrent enrollment in MATH 1356.

PHYS 1402 GENERAL PHYSICS

A presentation of the fundamental principles of light, electricity and modern physics. Three hours lecture, two hours laboratory and one quiz section. \$4.00 Laboratory fee.
Prerequisite: Physics 1401.

PHYS 1405 PHYSICS IN THE MODERN WORLD

This course is designed to meet the needs of those in the life sciences and related fields. Fundamental concepts of physics are presented with special emphasis on the principles of mechanics, heat, and sound which lend themselves to life science applications. Three hours lecture and three hours laboratory. \$4.00 laboratory fee.

PHYS 1406 PHYSICS IN THE MODERN WORLD

This course is designed to meet the needs of those in the life sciences and related fields. Fundamental concepts of physics are presented with special emphasis on the principles of light, electricity, and modern physics which lend themselves to life science applications. Three hours lecture and three hours laboratory. \$4.00 Laboratory fee.

PHYS 2101 INTERMEDIATE LABORATORY

Emphasis is placed on statistical analysis and the use of computational equipment in the laboratory. Three hours laboratory. \$4.00 Laboratory fee.
Prerequisite: Concurrent with or credit in Physics 2301.

PHYS 2301 INTERMEDIATE PHYSICS

Advanced treatment of topics covered in Physics 1401 and 1402 using the calculus. Three hours lecture.

Prerequisite: PHYS 1402. Students should enroll in Physics 2101.

PHYS 2303 STATICS AND ELEMENTARY KINEMATICS

Elementary vector algebra, center of mass, equations of equilibrium, friction, kinematics of particles and rigid bodies.

Prerequisite: Physics 1401.

PHYS 3101 JUNIOR LABORATORY

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

A continuation of PHYS 3101. \$4.00 laboratory fee.

PHYS 3301 ELECTROMAGNETIC THEORY

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

Study of heat measuring devices, thermal expansion, behavior of gases, elementary thermodynamics, change of state, specific heats and transfer of heat. Three hours lecture.

Prerequisites: 12 semester hours of Physics and Math 2342 which may be taken concurrently.

PHYS 3304 OPTICS

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

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

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 1402.

PHYS 3402 MODERN PHYSICS

A continuation of the introductory program for engineers, chemistry, mathematics and physics majors. Three hours lecture, two hours laboratory and one hour quiz section. \$4.00 Laboratory fee.

Prerequisite: Physics 1402.

PHYS 3403 DIGITAL ELECTRONICS

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

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.

Prerequisite: Physics 3101, 3102.

PHYS 4102 SENIOR LABORATORY

A continuation of PHYS 4101. \$4.00 laboratory fee.

PHYS 4103 SENIOR LABORATORY

A continuation of PHYS 4102. \$4.00 laboratory fee.

PHYS 4308 SEMINAR IN PHYSICS

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.

PHYS 5306 ADVANCED MECHANICS

The Lagrangian formulation of mechanics is treated extensively with an introduction to the Hamiltonian formulation. Selected topics including variational principles, tensor algebra as applied to rigid body motion and the theory of small amplitude vibrations.

Prerequisite: Graduate standing and Physics 3305.

PHYS 5307 SOLID STATE PHYSICS

Crystal structure studies, classical and quantum theories of specific heat and band theory of metals and semi-conductors.

Prerequisite: Graduate standing and Physics 3402.

PHYS 5308 SEMINAR IN PHYSICS

Investigations of problems and progress in contemporary physics will be undertaken. Individual research and reporting will be emphasized.

Prerequisite: Graduate standing and 1 year of Physics.

Portuguese

PORT 1361 BEGINNING PORTUGUESE

A practical course in listening, speaking, reading and writing modern Portuguese.

PORT 1362 BEGINNING PORTUGUESE

A continuation of Portuguese 1361.

Prerequisite: Port 1361.

Physical Science

PSCI 1301 PHYSICAL SCIENCE FOR ELEMENTARY TEACHERS

A laboratory course in physical science designed for elementary education majors. Emphasis is placed on making this a most practical course for the elementary teacher. Two hours lecture and two hours laboratory. \$4.00 laboratory fee.

PSCI 1302 PHYSICAL SCIENCE FOR ELEMENTARY TEACHERS

A continuation of PSCI 1301. Two hours lecture and two hours laboratory. \$4.00 laboratory fee.

PSCI 1303 PHYSICAL SCIENCE

A laboratory course in science designed for the general education or non-science majors. Two hours lecture and two hours laboratory. \$4.00 laboratory fee.

PSCI 1304 PHYSICAL SCIENCE

A continuation of PSCI 1303. Two hours lecture and two hours laboratory. \$4.00 laboratory fee.

PSCI 3301 INTERMEDIATE PHYSICAL SCIENCE

Advanced treatment of topics covered in PSCI 1301 and or PSCI 1303 and 1304. Emphasis is on problems of our environment.

Prerequisite: MATH 1335 and 6 hours of a physical science, or consent of instructor.

PSCI 3307 COOPERATIVE EDUCATION I

A planned program of full-time work experience of minimum duration — one semester or a complete summer session of 10 weeks. The work experience must be related to physical science. Enrollment should be completed prior to the beginning of the work period; credit will be determined on the basis of the employer's evaluation and the student's written report. This course will count only as elective credit.

Prerequisite: Departmental advisor's approval.

PSCI 3308 COOPERATIVE EDUCATION II

A planned program of full-time work experience of minimum duration — one semester or a complete summer session of 10 weeks. The work experience must be related to physical science. Enrollment should be completed prior to the beginning of the work period; credit will be determined on the basis of the employer's evaluation and the student's written report. This course will count only as elective credit.

Prerequisite: PSCI 3307.

PSCI 3309 COOPERATIVE EDUCATION III

A planned program of full-time work experience of minimum duration — one semester or a complete summer session of 10 weeks. The work experience must be related to physical science. Enrollment should be completed prior to the beginning of the work period; credit will be determined on the basis of the employer's evaluation and the student's written report. This course will count only as elective credit.

Prerequisite: PSCI 3307 and PSCI 3308.

PSCI 4311 TOPICS IN PHYSICAL SCIENCE

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 1335 and 6 hours of a physical science, or consent of instructor.

PSCI 5321 GRADUATE TOPICS IN PHYSICAL SCIENCE

A course designed for physical science teachers to study current and classical topics in the physical sciences. The announced topics covered in the course will change. A search of current literature including a written and oral report will be required of each student.

Prerequisite: PSCI 3301, or 1 year of classroom teaching experience in physical science.

Psychology

PSY 1201 ACADEMIC AND CAREER AWARENESS

Designed to assist the freshman and sophomore level student with career and academic plans through aptitude, interest and personality testing, career research, determining personal values, and through the use of a decision-making process. Especially relevant for students who are unsure of educational and future career plans. May not be counted toward a major or minor in 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 feelings 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)

Emphasis is placed upon evolution and heredity, the brain and behavior, perception, states of awareness, and learning. The course is discussion-centered with emphasis on independent study.

Prerequisite: admission to Honors Studies or by invitation.

PSY 1388 GENERAL PSYCHOLOGY (HONORS PLAN)

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 and sociological data including descriptive statistics, central tendency, variation, correlation and inference. May be counted as Psychology 2301 or Sociology 2301.

Prerequisite: 3 hours of MATH (except MATH 2306) and 6 hours from the following: PSY. 1313, SOC. 1313, 1323. (formerly PSY. 4301, may not be repeated for credit.)

PSY 2324 SOCIAL PSYCHOLOGY

Fall, Spring

A study of psychological principles as they are applied in social controls, mob actions, leadership and group actions. Social status, attitudes and public opinion will be discussed. May be counted as Psy 2324 or Soc 2324.

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 2330 COOPERATIVE EDUCATION I

A planned program of full-time work (minimum of one semester or two continuous five-week summer sessions) related to the major or minor field. Credit will be determined by a satisfactory employer's evaluation, interviews between the student and a supervisory professor; and a supervised written report by the student. The course counts only as elective hours outside of the specified major or minor field. Students enroll on a credit/no credit basis.

PSY 2335 DEVELOPMENTAL PSYCHOLOGY: INFANCY AND CHILDHOOD

Spring

A study of the physical, mental, emotional and social growth from conception through childhood.

Prerequisite: PSY. 1313.

PSY 2336 DEVELOPMENTAL PSYCHOLOGY: ADOLESCENCE

Fall

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

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 2345 PSYCHOLOGY OF LEARNING

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

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

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

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

Fall, odd years

A study of such aspects of adulthood as job selection, marriage, child rearing and old age.

Prerequisite: PSY. 1313 and 1323.

PSY 3343 TESTS AND MEASUREMENTS IN PSYCHOLOGY

Fall

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

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 3363 EMOTION AND MOTIVATION

Spring, odd years

A selected review of experimental and theoretical literature of emotion and motivation in man and animals.

Prerequisite: PSY. 1313 and 1323.

PSY 3373 SENSATION AND PERCEPTION

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

Spring, even years

A comparative study of behavior characteristics of selected samples of the animal kingdom from protozoan to man.

Prerequisite: PSY. 1313 and 1323.

PSY 4311 FEMALE AND MALE

Fall, Spring

An examination of the physiological, psychological and sociological influences of sex role development including such topics as human liberation, sexual behavior, child rearing practices and career opportunities. May be counted as Psy 4311 or Soc 4311.

Prerequisite: 9 hours of psychology and/or sociology.

PSY 4313 ABNORMAL PSYCHOLOGY

Fall, Spring

Analysis, etiology and incidence of neurosis and psychosis, mental hygiene problems and adjustive behavior.

Prerequisite: PSY. 1313 and 1323.

PSY 4318 THEORIES OF LEARNING

A historical review of major theoretical positions in the field of animal and human learning.

Prerequisite: 1313, 1323, or consent of instructor.

PSY 4319 COGNITIVE PROCESSES

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 VERBAL LEARNING AND MEMORY

The experimental study of the acquisition, storage, retrieval, and forgetting of verbal information. Emphasis is on basis 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

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

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 4363 SYSTEMS AND THEORIES IN PSYCHOLOGY

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 4384 SPECIAL PROBLEMS

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 4385 SPECIAL PROBLEMS

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

Analysis, etiology, and incidence of neurosis and psychosis; mental hygiene problems; and adjustive behavior. A research project and supporting specialized readings will be emphasized.

Prerequisite: 6 semester hours of Psychology.

PSY 5318 LEARNING THEORIES

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

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.

Recreation

REC 1351 MAN, HIS LEISURE AND RECREATION

Study of historic development of leisure, attitudes taken toward it, and theories as to its cause. An opportunity to develop a personal philosophy of leisure and recreation and an understanding of professional preparation.

REC 2351 INTRODUCTION TO COMMUNITY RECREATION

Scope of community recreation; its organization, and relation to other social institutions; program content and leadership.

REC 3360 OUTDOOR SPORTS ACTIVITY

Methods and procedures for conducting activity in swimming, boating, fishing, hunting, hiking, and camping.

REC 4353 RECREATION LEADERSHIP

Development of face to face leadership, enthusiasm and creative leadership methods and techniques that can be applied to all recreational settings through the use of creative recreational activities.

REC 4354 COMMUNITY RECREATION PROGRAM PLANNING

Varied aspects of playground and community center operations; development of programs and identifying problems relating to planning and operation of these programs.

REC 4356 ADMINISTRATION OF RECREATIONAL PROGRAMS

Introduction to the basic principles of administration covering such aspects as goals and objectives, policies, departmental organization, budgets, personnel, office management, and evaluation, especially as related to sub-administrative and supervisory positions.

REC 4655 PROFESSIONAL FIELD WORK

Practical field experience working in a community recreation department under recreation director and faculty supervision.

ROTC

ROTC 1203 MARKSMANSHIP AND FIRST AID

Meets two hours per week, plus required special activities. Rifle firing on indoor range; Texas hunter safety; basic first aid as prescribed by US Army texts, supplemented by first aid approved training in coronary-pulmonary resuscitation; Army ROTC orientation. May involve week-end use of range facilities.

ROTC 1204 SURVIVAL TRAINING

This course studies methods and techniques of survival in various and unusual situations. It emphasizes active student participation in rappelling and adventure training designed as an individual confidence builder and stresses physical conditioning. Optional weekend survival trip and participation in Advanced ROTC Leadership Laboratory 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. Optional weekend survival trip and participation in Advanced ROTC Leadership Laboratory is offered.

ROTC 1207 LAND NAVIGATION

Course of instruction provides the student with practical experience in use of the map and compass skills required to effectively negotiate terrain. It emphasizes active student participation in rappelling and adventure training designed as an individual confidence builder and stresses physical conditioning. Optional weekend outing and participation in Advanced ROTC Leadership Laboratory is offered.

ROTC 2101 SEMINAR IN NATIONAL DEFENSE

A six week course of instruction in special or current problems involving national defense matters.

Prerequisite: Permission of Instructor

ROTC 2102 SEMINAR IN NATIONAL DEFENSE

A six week course of instruction in special or current problems involving national defense matters.

Prerequisite: Permission of Instructor

ROTC 2103 SEMINAR IN NATIONAL DEFENSE

A six week course of instruction in special or current problems involving national defense matters.

Prerequisite: Permission of Instructor

ROTC 2203 BASIC MILITARY LEADERSHIP

Course examines leadership traits and involved practical application in the techniques of decision-making, problem solving and group interaction. It includes management simulation programs and instruction in effective management techniques. Optional weekend outing and participation in Advanced ROTC Leadership Laboratory is offered.

ROTC 2204 ARMY ORGANIZATION AND CUSTOMS

Course of instruction includes military customs and courtesies, U.S. Army organization, an overview of specialty branches of the Army and a study of Army equipment and their uses in unit missions. Optional weekend outing and participation in Advanced ROTC Leadership Laboratory is offered.

ROTC 3301 ADVANCED MILITARY LEADERSHIP

Course provides the student with an understanding of the responsibilities, character and uniqueness of the profession of arms, and studies the philosophy and application of leadership techniques in today's Army. Course meets three hours per week in classroom and includes leadership laboratory. A weekend outing away from campus is mandatory.

Prerequisite: Advanced ROTC Standing.

ROTC 3303 SMALL UNIT TACTICS

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, map reading and terrain association. Course meets three hours per week in classroom and includes leadership laboratory. A weekend outing away from campus is mandatory.

Prerequisite: Advanced ROTC Standing.

ROTC 4302 TRAINING AND STAFF MANAGEMENT

An examination of methods and techniques of planning, preparing and conducting individual and collective military training; and an overview of the organization and responsibilities of the small unit staff. Course meets three hours per week in classroom and includes leadership laboratory. A weekend outing away from campus is mandatory.

Prerequisite: Advanced ROTC Standing.

ROTC 4304 ADVANCED MILITARY SCIENCE

Course of instruction includes preparation for commissioning and delves into unit administration, logistics, military justice and examines the social aspects and customs of the Army officer. Course meets three hours per week in classroom and includes leadership laboratory. A weekend outing away from campus is mandatory.

Prerequisite: Advanced ROTC Standing.

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.)

SOC 1323 A STUDY OF SOCIAL PROBLEMS

Fall, Spring, Summer

A sociological analysis of selected social problems present in current society. (Formerly Soc 2323, may not be repeated for credit.)

SOC 2301 STATISTICS FOR THE BEHAVIORAL SCIENCES

Fall, Spring

A practical study of the procedures used in handling psychological and sociological data including descriptive statistics, central tendency, variation, correlation and inference. May be counted as Soc 2301 or Psy 2301.

Prerequisite: 3 hours of MATH (except MATH 2306) and 6 hours from the following: PSY 1313, 1323, SOC. 1313, 1323, (formerly SOC. 4301, may not be repeated for credit.)

SOC 2324 SOCIAL PSYCHOLOGY

Fall, Spring

A study of psychological principles as they are applied in social controls, mob actions, leadership and group actions. Social status, attitudes and public opinion will be discussed. May be counted as Soc 2324 or Psy 2324.

Prerequisite: 6 hours from the following: SOC 1313, 1323, PSY 1313, 1323.

SOC 2330 COOPERATIVE EDUCATION I

A planned program of full-time work (minimum of one semester or two continuous five-week summer sessions) related to the major or minor field. Credit will be determined by a satisfactory employer's evaluation, interviews between the student and a supervisory professor; and a supervised written report by the student. The course counts only as elective hours outside of the specified major or minor field. Students enroll on a credit/no credit basis.

SOC 2333 MARRIAGE AND THE FAMILY

Fall

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 2353 INTRODUCTION TO FOLKLORE

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, medicine, art and material culture. May be counted as Soc 2353 or Anth 2353.

SOC 3301 METHODS OF SOCIAL RESEARCH

Fall
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: 6 semester hours of Sociology 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

Analysis of basic problems in the maintenance and preservation of health and delivery of health care services by social class. Focus is on environmental causes of disease, social-psychological response to illness; and family cohesion, strain and resources as affected by illness.
Prerequisite: 3 hours of Sociology or consent of instructor.

SOC 3326 CONTEMPORARY ISSUES IN SOCIAL PSYCHOLOGY

Spring
A review and discussion of recent issues and advances in social psychology. This course will focus on contemporary concerns with regard to both theory and research in the laboratory and the community. May be counted as Soc 3326 or Psy 3326.
Prerequisite: 2324 or SOC 2324.

SOC 3333 URBAN SOCIOLOGY

The culture, history and growth patterns of cities; demographic, ecological patterns and trends. Problems of housing and community organization.
Prerequisite: SOC 2301 or 3301 or consent of instructor.

SOC 3334 SOCIOLOGY OF WORK

Analysis of selected labor force characteristics including education, occupation, family, housing; and ethnic participation in major industries by job classification; readings on work norms including group participation, alienation and job satisfaction. Emphasis on the southwest region.
Prerequisite: 3 hours of Sociology or consent of instructor.

SOC 3340 COMPLEX ORGANIZATIONS

An analysis of the process of bureaucratization of society and its effect upon functionaries and clients of large and complex organizations. A discussion of the emergence of philosophies of management in this context and the dilemmas and problems of attempts to merge bureaucratic and professional principles in modern organizations. An applied project will be required.
Prerequisite: SOC. 1313

SOC 3345 RITUAL, BELIEF AND HEALING

A socio-cultural analysis of existing medical systems. Both modern systems and folk medical systems will be discussed with special emphasis on the current social science theories relating to health and human behavior. May be counted as Soc 3345 or Anth 3345.
Prerequisite: 3 hours of Sociology or Anthropology or consent of instructor.

SOC 3353 JUVENILE DELINQUENCY

Spring
Delinquency in modern society, basic factors and conditions of juvenile delinquency and the problems of delinquency control.
Prerequisite: SOC 3313 or 1313 or consent of instructor.

SOC 3375 MEXICAN AMERICAN FOLKLORE

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. May be counted as Anthropology 3375 or Sociology 3375.
Prerequisite: ANTH./SOC. 2353 or consent of instructor.

SOC 3393 SOCIAL GERONTOLOGY

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 4311 FEMALE AND MALE

Fall, Spring
An examination of the physiological, psychological and sociological influences of sex role development including such topics as human liberation, sexual behavior, child rearing practices; and career opportunities. May be counted as Soc 4311 or Psy 4311.
Prerequisite: 9 hours of Psychology and/or Sociology.

SOC 4313 AMERICAN MINORITIES

A study of the principal minority groups in American society and their sociological significance; problems of intergroup relations, social movements and related social changes occurring on the contemporary American scene.
Prerequisite: 6 hours of Sociology or consent of instructor.

SOC 4314 SOCIOLOGY OF DEVIANCE

Fall
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

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 4324 DEMOGRAPHY OF THE SOUTHWEST

Fall
An analysis of the impact of demographic factors (distribution, composition, migration, growth and vital rates) on the evolution of the economic, political and social problems of today's Southwest. Following an introductory survey of the demo-historical background of the area, attention will be focused on the significance of post 1910 developments in changing ethnic composition and roles.

SOC 4333 SOCIAL THEORY

Spring
A survey of historical development and the theories of major sociologists.
Prerequisite: 9 hours of Sociology or consent of instructor.

SOC 4343 SOCIAL DEMOGRAPHY

Fall, Even Years
A study of population distribution, composition, growth, migration and vital processes.
Prerequisite: 6 hours of Sociology or consent of instructor. (formerly SOC 3343. May not be repeated for credit.)

SOC 4344 ORAL HISTORY RESEARCH AND METHODOLOGY

The course will focus on the theoretical and experiential aspects of oral history research and methodology. Students will be exposed to both field and archival techniques in the collection, preservation, and analysis of oral history data and its utilization in anthropology, government, history, social work, sociology, linguistics, language research, education, and other areas. May also be counted as HIST 4344.
Prerequisites: HIST 2313 and 2314 and SOC 1313.

SOC 4352 SOCIAL INEQUALITY

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

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

SOC 4363 SOCIETY OF MODERN MEXICO

Family, community, industrialization and urbanization in modern Mexico.
Prerequisite: 3 hours of Sociology or consent of instructor.

SOC 4373 LATIN AMERICAN INSTITUTIONS

Spring, Odd Years
The development, structure and functioning of the major social institutions in Latin American countries.
Prerequisite: 6 hours of Sociology or consent of instructor.

SOC 4380 SOCIAL PROTEST AND SOCIAL MOVEMENTS

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 4387 SPECIAL SOCIO-CULTURAL ISSUES

Designed to give students experience in significant socio-cultural issues. Projects and opportunities are varied according to student interest and availability of faculty. Sequential registration for up to nine hours is permitted as topics vary. May be counted as Soc 4387, 4388, 4389 or Anth 4387, 4388, 4389.
Prerequisite: 9 semester hours of Sociology and/or Anthropology and consent of instructor.

SOC 4388 SPECIAL SOCIO-CULTURAL ISSUES

Designed to give students experience in significant socio-cultural issues. Projects and opportunities are varied according to student interest and availability of faculty. Sequential registration for up to nine hours is permitted as topics vary. May be counted as Soc 4387, 4388, 4389, or Anth 4387, 4388, 4389. Prerequisite: 9 semester hours of Sociology and/or Anthropology and consent of instructor.

SOC 4389 SPECIAL SOCIO-CULTURAL ISSUES

Designed to give students experience in significant socio-cultural issues. Projects and opportunities are varied according to student interest and availability of faculty. Sequential registration for up to nine hours is permitted as topics vary. May be counted as Soc 4387, 4388, 4389, or Anth 4387, 4388, 4389. Prerequisite: 9 semester hours of Sociology and/or Anthropology and consent of instructor.

SOC 5313 AMERICAN MINORITIES

A study of the principal minority groups in American society and their sociological significance; problems of intergroup relations, social movements, and related social changes occurring on the contemporary American scene. A research project and supporting specialized readings will be emphasized. Prerequisite: 9 semester hours of Sociology.

SOC 5323 THE MEXICAN AMERICANS

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 5343 POPULATION PROBLEMS

A study of population distribution, composition, growth, migration and vital processes. A research project and supporting specialized readings will be emphasized. Prerequisite: 9 hours of Psychology and/or Sociology.

SOC 5360 SOCIOLOGY OF EDUCATION

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

SOCW 1313 INTRODUCTION TO SOCIAL WORK

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

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.)

SOCW 2323 COOPERATIVE EDUCATION IN SOCIAL WORK

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 supervising teacher.

SOCW 2324 HUMAN BEHAVIOR AND THE SOCIAL ENVIRONMENT

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.)

SOCW 3314 SOCIAL WELFARE POLICY AND PROGRAMS

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.) Prerequisites: 6 hours of Social Work courses; SOCW 2324 recommended.

SOCW 3323 METHODS IN SOCIAL WORK PRACTICE I

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: 6 hours of Social Work courses

SOCW 3324 METHODS IN SOCIAL WORK PRACTICE II

Designed to provide social work students with a 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. Prerequisites: SOCW 3313. Recommended SOCW 3323.

SOCW 3333 SPECIAL TOPICS IN SOCIAL WORK ISSUES

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.

SOCW 3334 SPECIAL TOPICS IN SOCIAL WORK ISSUES

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 objective. Sequential registration for up to six hours is permitted as topics vary. Topics will vary according to timeliness of issues, student demand and availability of faculty.

SOCW 3353 RESEARCH FOR THE SOCIAL SERVICES

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.) Prerequisites: 9 hours of social work courses.

SOCW 4314 METHODS IN SOCIAL WORK PRACTICE III

Students learn how to give direct service to families, individual 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. Recommended prior to SOCW 4417.

SOCW 4416 FIELD INSTRUCTION IN SOCIAL WORK I

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 Seminar 2 hours weekly. (Formerly SOCW 4613, may not be repeated for credit.) Prerequisite: SOCW 3323. Recommended: SOCW 3324.

SOCW 4417 FIELD INSTRUCTION IN SOCIAL WORK II

Continuation of SOCW 4416.

SOCW 4618 FIELD BLOCK PLACEMENT (OPTIONAL)

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. Prerequisites: SOCW 3323, 3324 and 4314.

Spanish

SPAN 1301 BEGINNING SPANISH

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

A continuation of Spanish 1301.
Prerequisite: Spanish 1301.

SPAN 1303 BEGINNING SPANISH

A course designed to develop the ability to read and write the Spanish language. For students whose native language is Spanish but who have not studied it.

SPAN 1304 BEGINNING SPANISH

A continuation of Spanish 1303.
Prerequisite: Spanish 1303.

SPAN 2301 INTERMEDIATE SPANISH FOR NON-NATIVE SPEAKERS

Continuation of oral practice with special emphasis on reading and writing skills.
Prerequisite: Spanish 1302.

SPAN 2302 INTERMEDIATE SPANISH FOR NON-NATIVE SPEAKERS

A continuation of Spanish 2301.
Prerequisite: 2301.

SPAN 2307 INTERMEDIATE SPANISH FOR NATIVE SPEAKERS

A comprehensive review of Spanish grammar and special emphasis on writing.
Prerequisite: Spanish 1304.

SPAN 2308 INTERMEDIATE SPANISH FOR NATIVE SPEAKERS

A continuation of Spanish 2307.
Prerequisite: Span. 2307.

SPAN 3301 SPANISH LITERATURE (1100-1750)

A survey of the literature of Spain to the beginning of Romanticism. Given in Spanish.
Prerequisite: Spanish 2302 or 2308.

SPAN 3302 SPANISH LITERATURE (1750 TO OUR TIMES)

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

Intensive training in Spanish composition. Given in Spanish.
Prerequisite: Spanish 2302 or 2308.

SPAN 3304 ADVANCED SPANISH COMPOSITION

Additional work in composition. Given in Spanish.
Prerequisite: Spanish 2302 or 2308.

SPAN 3306 BASIC CONCEPTS OF SPANISH PHONETICS AND PHONOLOGY

An analysis of the phonetic and phonological system of Spanish with special emphasis on the relationship between the phonetic system and writing.
Prerequisite: 2302 or 2308.

SPAN 3308 SPANISH GRAMMAR AND COMPOSITION FOR THE CLASSROOM TEACHER

The study of the Spanish language applicable to the concerns of the elementary classroom. Skills and knowledge in basic instructional Spanish language varieties in the school and the community are elements of this course. A strong application to the Spanish of the bilingual classroom is stressed. Given in Spanish.
Prerequisite 2302 or 2308.

SPAN 3309 TECHNIQUES OF LITERARY ANALYSIS

A study and practical application of the fundamentals of literary criticism. Several different approaches to literary analysis will be presented in order to construct a solid basis for the interpretation of literature.
Prerequisites: Span. 2302 or 2308.

SPAN 3310 MASTERPIECES OF SPANISH-AMERICAN LITERATURE, 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: Span. 2302 or 2308.

SPAN 3311 MASTERPIECES OF SPANISH-AMERICAN LITERATURE, II

An investigation of the literary works of the principal narrators, poets and dramatists of Spanish America from Modernism to the present. Analysis of the form and content and study of the historical background and literary currents in each work. Given in Spanish.
Prerequisite: Span. 2302 or 2308.

SPAN 3316 THE MEXICAN NOVEL

The study of the major novels of Mexico. Given in Spanish.
Prerequisite: SPANISH 2302 or 2308.

SPAN 3321 SHORT STORY IN SPANISH AMERICA

A study of the evolution of this very important genre in Spanish American literature. Themes, techniques and literary movements will be investigated. The writers studied in this course will include: Echeverria, Palma, Gutierrez Najera, Quiroga, Borges, Garcia Marquez, and others.
Prerequisite: Span. 2302 or 2308.

SPAN 3330 SPANISH GRAMMAR

A study of grammatical concepts with concentration on basic sentence structure, the paragraph, principles of punctuation, and functional grammar. Course designed for Spanish majors and minors as well as those interested in bilingual endorsement.
Prerequisite: SPAN 2302 or 2308.
Prerequisite for aspirants to bilingual/bicultural endorsement: SPAN 2302 or 2308 and ENG 3319.

SPAN 4303 SPANISH CIVILIZATION

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

A survey of lyric poetry from its beginning to the present. Given in Spanish.
Prerequisite: Spanish 2302 or 2308.

SPAN 4305 CERVANTES

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 4306 HISTORY OF THE SPANISH LANGUAGE

A study of the development of Spanish as a language.
Prerequisite: Spanish 2302 or 2308.

SPAN 4307 SPANISH-AMERICAN NOVEL

Begins with a study of literary and historical influence in 19th century Spanish American Gaucho and Costumbrista novels and those showing European influence: Guiraldes, Blest Gana, Gamboa. Examination of recent literary trends: Mallea, Sabato, Roa Bastos, Vargas Llosa.
Prerequisite: Span. 2302 or 2304.

SPAN 4308 MEDIEVAL SPANISH LITERATURE

A study of the principal literary works of Spain from El Cid to the Romancero. Given in Spanish.
Prerequisite: Spanish 2302 or 2308.

SPAN 4309 CONTEMPORARY SPANISH LITERATURE

A study of the principal literary works of Spain from the generation of 1898 to the present. Given in Spanish.
Prerequisite: Spanish 2302 or 2308.

SPAN 4316 TECHNIQUES AND METHODS OF TEACHING SPANISH

A study of methods and techniques utilized in teaching Spanish at the secondary level.
Prerequisite: Spanish 2302 or 2308.

SPAN 4317 GOLDEN AGE PROSE

A critical study of the most representative prose works of Golden Age Spain. Given in Spanish.
Prerequisite: Span. 2302, or 2304.

SPAN 4318 THEATER AND POETRY OF THE GOLDEN AGE

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 Peon, Gongora and others.
Prerequisite: Span. 2302 or 2308.

SPAN 4325 CARIBBEAN LITERATURE

This course will investigate the contemporary literature of Puerto Rico, the Dominican Republic and Cuba with special study of the following literary figures: Rene Marquez, Luis Pales Matos, Juan Bosch, Nicolas Guillen and Alejo Carpentier. Emphasis on Afro-Antillean influence with special attention to the relevance of these works in today's social and political atmosphere.
Prerequisite: Span. 2302 or 2308.

SPAN 4326 CONTEMPORARY SPANISH AMERICAN LITERATURE: A NEW ERA

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: Span. 2302 or 2308.

SPAN 4327 SPANISH AMERICAN LITERATURE OF CONFLICT

Since literature and political philosophies have always been closely allied in Spanish America, this course will begin with a brief study of the revolutionary aspects of the Enlightenment in Spanish America and will proceed with investigations concerning 19th century political romanticism, the Peruvian "indianista" novel, the Mexican revolutionary novel and the political thoughts of Neruda, Vallejo, Asturias and Cardenal.

SPAN 4329 MEXICO'S CONTEMPORARY LITERATURE

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.

SPAN 4330 THEORIES OF GRAMMAR, DIALECTS, AND LANGUAGE PERFORMANCE

A survey of contrastive analyses of grammar, dialects, and language performance 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.

Prerequisite for students in the bilingual program: ENG 3319, 3330, SPAN 3330.

SPAN 4331 PROBLEMS IN GRAMMAR, DIALECTS, AND LANGUAGE PERFORMANCE

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 or 2308.

Prerequisites for bilingual certification students: ENG 3330, SPAN 3330, ENG/SPAN 4330.

SPAN 6300 METHODS OF BIBLIOGRAPHY AND RESEARCH

A systematic study of bibliographic and reference information. Emphasis will be placed upon the study of indexes, national bibliographies, and bibliographical control. Also includes practice and guidance in the writing of graduate level papers. Required of those with concentrations in Spanish.

Prerequisite: Graduate standing and 12 hours of advanced Spanish.

SPAN 6303 STUDIES IN HISPANIC CIVILIZATION

A critical study of the physical, ethnic, racial, and historical aspects of Hispanic civilization from its advent to the present. Iberian as well as American Hispanic cultures will be studied and compared.

SPAN 6307 ADVANCED SPANISH GRAMMAR AND COMPOSITION FOR THE CLASSROOM TEACHER

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

A detailed study of the growth of the Spanish language from the beginning to the present. Given in Spanish.

SPAN 6339 SPECIAL STUDIES IN SPANISH-AMERICAN LITERATURE

Special topics from the field of Spanish-American literature. This course may be taken three times as the topic varies.

Prerequisite: Graduate standing and twelve hours of advanced Spanish.

SPAN 6341 SPECIAL STUDIES IN SPANISH LITERATURE

Special topics from the field of Spanish literature. This course may be taken three times as the topic varies.

Prerequisites: Graduate standing and twelve hours of advanced Spanish.

SPAN 7300 THESIS**SPAN 7301 THESIS**

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 1335 with a grade of C or better. This course replaced STAT 1313 and is the same as MATH 2330. A student may use STAT 2330 to replace a grade received in STAT 1313, however, one may receive credit for no more than one of STAT 1313, STAT 2330 or 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, CS 2425 and either MATH 1365, 1370 or 2317. It is highly recommended that the student have some knowledge of statistics such as offered in Stat 2330. This course replaces STAT 3308 (MATH 3308) and is the same as MATH 3337. A student may use STAT 3337 to replace a grade received in STAT 3308; however, one may receive credit for at most one of STAT 3308, STAT 3337, MATH 3308 or MATH 3337.

STAT 3338 APPLIED STATISTICS II

This course is a continuation of STAT 3337 and includes special designs, analysis of variance and covariance, multiple comparisons, and coding.

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.

STAT 4339 MATHEMATICAL STATISTICS I

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 STAT 4308 and is the same as MATH 4339. A student may use STAT 4339 to replace a grade received in STAT 4308; however, one may receive credit for at most one of STAT 4308, STAT 4339 or MATH 4339.

STAT 4340 MATHEMATICAL STATISTICS II

This course is a continuation of STAT 4339. Topics include a study of sampling distributions estimation, tests of hypotheses, correlation and regression, and the analysis of variance.

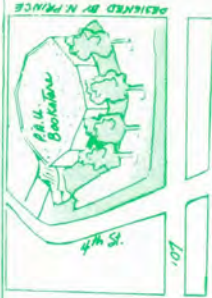
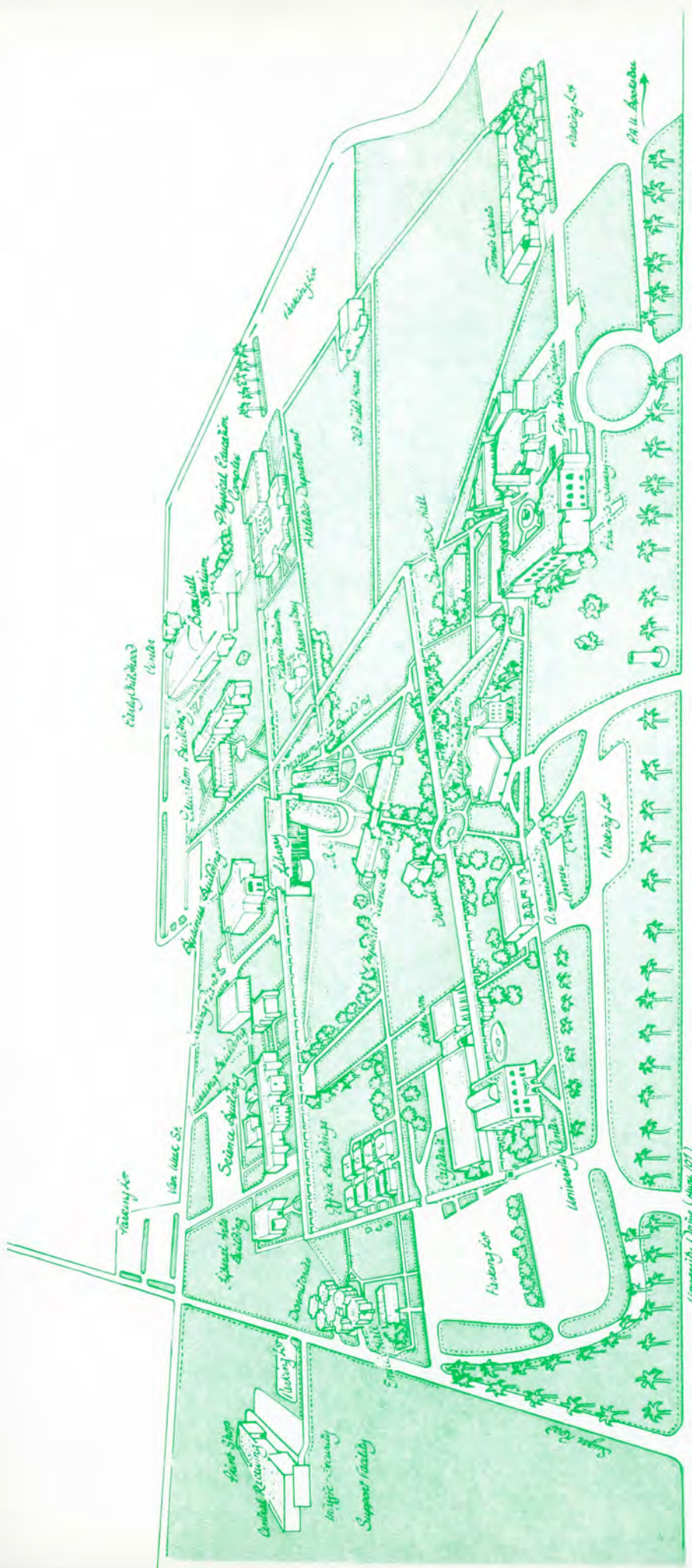
Prerequisite: STAT or MATH 4339. This course replaces STAT 4309 and is the same as MATH 4340. A student may use STAT 4340 to replace a grade received in STAT 4309; however one may receive credit for at most one of STAT 4309, STAT 4340, or MATH 4340.

Index

Academic Affairs	14	Dormitory	
Academic Committees	111	Fees and Payments	31
Academic Instructional Staff (see individual departments)		Reservation and Room Deposit	31
Accreditation	1	Rules and Regulations	38
Additional Degree(s)		Estimated Cost per Semester	32
Baccalaureate	25	Examinations	
Masters	17	Advanced Placement	21
Administrative Officers and Committees	110	College Entrance Examination (CEEB)	21
Admissions		College Level Examination Program (CLEP)	21
Undergraduate	14	GRE and GMAT Tests (Graduate)	18, 34
Graduate	14	Exemptions from Tuition	30
Advanced Standing Examination	21	Family Education Rights and Privacy Act of 1974	19
Army ROTC	27, 92	Fees	30
Alumni Association	10	Fields of Graduate Study	18
Athletics	11	Financial Aid	38
Attendance	22	Financial Responsibility	30
Auditing a Course	18	Foreign Students	16
Board of Regents	110	General Requirements	
Brownsville Campus	106	For Associate Degree	25
Buildings	9	For a Bachelors Degree	24
Business Affairs	30	For a Masters Degree	17
Calendar	4	Grade Change Policy	22
Career Planning	34	Grading System and Grade Points	22
Certification (see individual departments)		Graduate School	15
Check, returned	31	Admissions	15
Change of Address	22	Council	16
Course Load, Graduate	17	Degree Requirements	(see individual departments)
Classification	19	Programs	18
Clubs and Organizations	34	Regulations	17
College Assistance Migrant Program	39	Reservation of undergraduate work for graduate credit	16
College transfers from other colleges	14	Health Education	61
Core Course Requirements	24	Health Related Professions	83
Counseling Service	35	Health Service	36
Courses		High School Equivalency Program	40
Description	114	History of the University	9
Dropping of	22	Honor Roll	19
Numbering of	19	Honors Studies Programs	27
Selection of	26	Housing, Student	36
Credit by Examination	21	Insurance, Student	31, 36
Curricula and Degrees	24	Independent Study	27
Definitions	18	Intercollegiate Athletics	11
Degree Plan	25	International Students	16
Degree Requirements (see individual departments)		Nontraditional Education Credit	20
Departments		Organization of the University	110
Accounting and Economics	48	Philosophy of the University	3
Art	74	Placement	34
Behavioral Sciences	97	Prelaw	103
Biology	89	Prerequisites	19
Business Administration—Graduate	46	Probation	17, 19, 22
Chemistry	91	Publications, Student	38
Communications	75	Quality of Work	22
Criminal Justice	100	Refunds	31
Elementary Education	56	Residency Classifications and Tuition Fees	30
English	76	Scholastic Probation	17, 22
Foreign Language	78	Scholastic Suspension	22
Health Education, Physical Education, and Recreational Administration	61	School of	
History	101	Business Administration	44
Human Services	97	Education	53
Management and Computer Information Systems	50	Humanities	72
Marketing, Finance and General Business	51	Science and Mathematics	87
Mathematics	92	Social Sciences	96
Medical Technology	83	Selection of Courses	26
Music	79	Social Life	10
Nursing Education	85	Special Programs	27
Physical Science	94	Students	
Political Science	103	Employment by the University	34
ROTC	27, 92	Financial Aid	38
School Management	62	Financial Responsibility	30
School Services	69	Grants	38
Secondary Education	57	Health Service	38
Division of Health Related Professions	83	Housing	36
Division of Inter-American Affairs and International Education	81	Identification Cards	38

Insurance.....	31, 36
Loans.....	39
Reservation of Undergraduate Work for Graduate Credit.....	16
Responsibility.....	17
Scholarships.....	39
Services.....	34
Transfer.....	14, 16
Satisfactory Progress.....	23
Summer Session.....	26
Suspension.....	17, 22
Teacher Education Committee.....	53
Teacher Certificate.....	18, 53
Thesis.....	17, 31
Substitution.....	18

Work.....	18
Transfer of Credits.....	14, 16
Tuition.....	30
Tuition Exemptions.....	30
Undergraduate Admissions.....	14
University	
Center.....	35
History.....	9
Organization.....	110
Upward Bound.....	40
Varsity Athletes.....	23
Veterans' Program.....	41
Withdrawal from the University.....	22
Work-Study Program.....	38



PAN AMERICAN UNIVERSITY edinburg, texas 78539

Bulletin of
PAN AMERICAN UNIVERSITY
Edinburg, Texas 78539

Second Class Postage
Paid at
Edinburg, Texas

ALTIE VIRGINIA HAYNIE

LRC214

"A University for All the Americas"