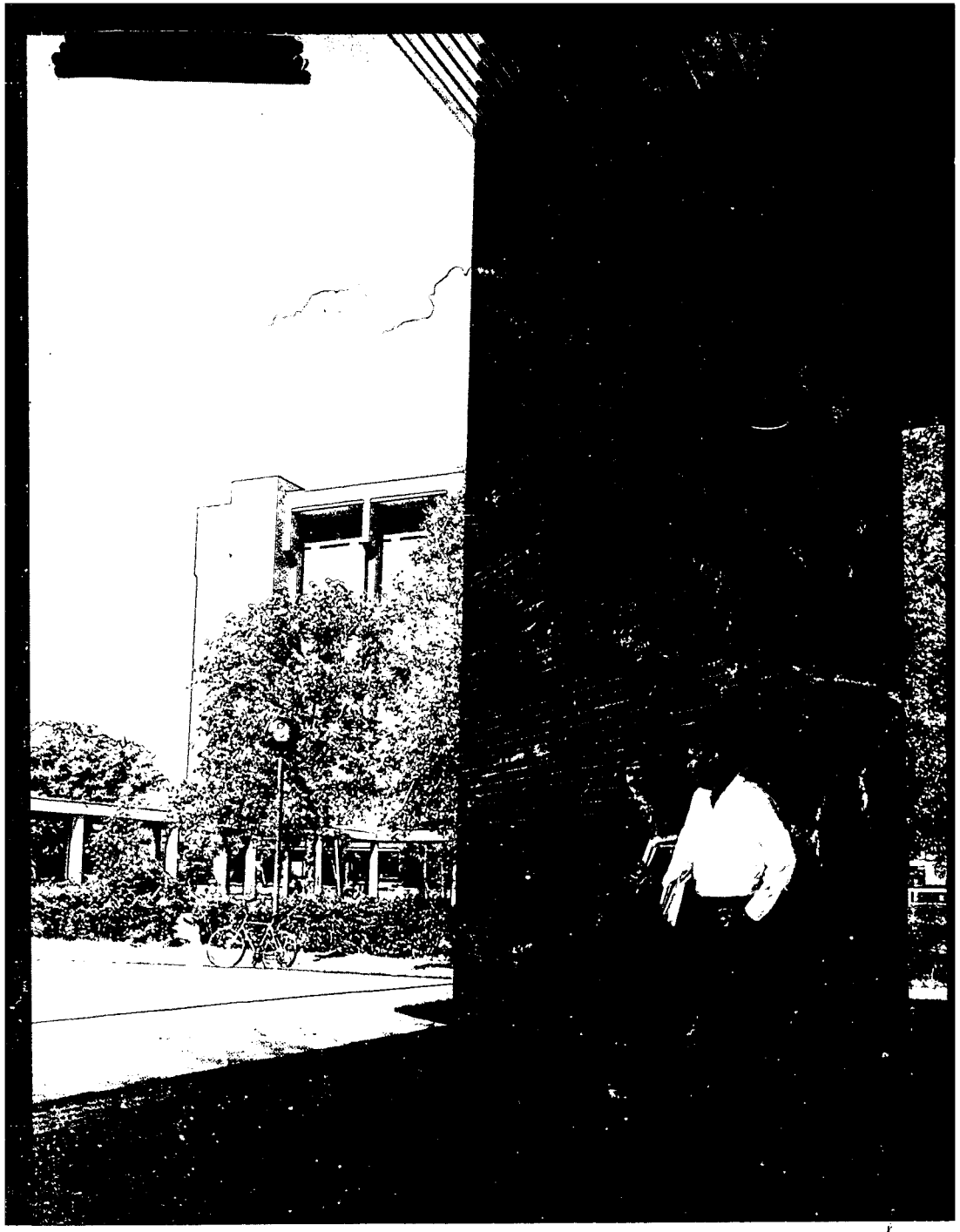

LAMAR UNIVERSITY • 85-86
GENERAL CATALOG

Debra Klock's Desk Copy

Lamar University

1985-86 Bulletin

Vol.34 No. 1

Thirty-fourth annual catalog issue with announcements for 1985-86.
Founded in 1923, and established as a four-year coeducational state-supported college on September 1, 1951.

The provisions of this bulletin do not constitute a contract, expressed or implied, between any applicant, student, and faculty member in Lamar University. Lamar University reserves the right to withdraw courses at any time, change fees, calendars, curricula, graduation procedures, and any other requirement affecting students. Changes become effective when the proper authorities so determine the application to both prospective students and to the students already enrolled.

Lamar University is an equal opportunity/affirmative action educational institution and employer. Students, faculty and staff members are selected without regard to their race, color, creed, sex, or national origin, consistent with the Assurance of Compliance with Title VI of the Civil Rights Act of 1964; Executive Order 11246 as issued and amended; Title IX of the Education Amendments of 1972, as amended; Section 504 of the Rehabilitation Act of 1973. Inquiries concerning application of these regulations may be referred to the vice president for administration, personnel and student services.

Bulletin of Lamar University (USPS 074-420).
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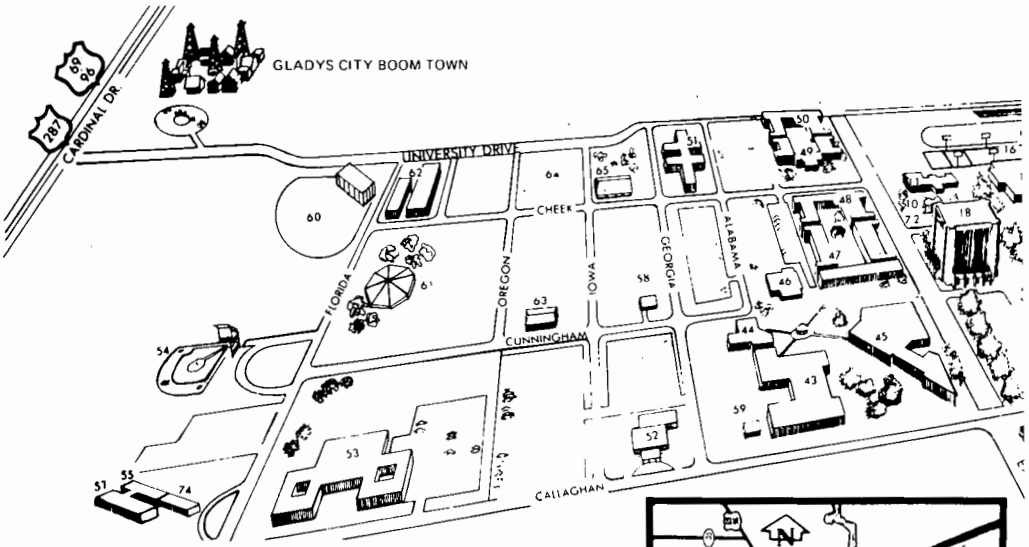

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Business	9	Parking and Traffic	70
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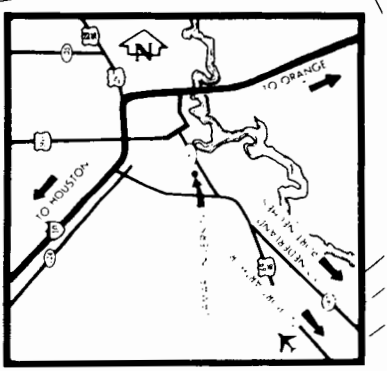
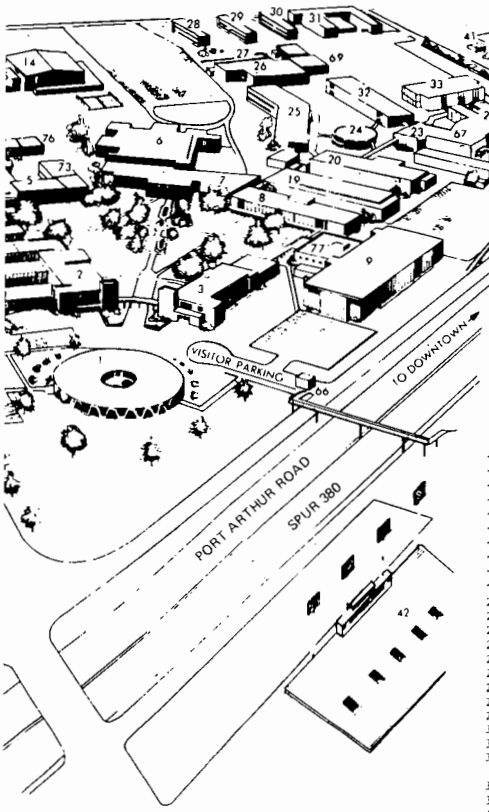


The Campus

Lamar University's campus has expanded rapidly during the past decade and now encompasses more than 200 acres. The University system also has campuses in Orange and Port Arthur.

Guidelines for future expansion of the Beaumont campus are included in a conceptual master plan which will guide development into the year 2000. A large portion of the master plan already has been approved by the University's Board of Regents.

Architects have placed a strong emphasis upon developing a feeling of "monumentality and dignity," with the library as the dominant focus of the campus. The 20-year plan shows the addition of multi-storied buildings.



Campus Legend

1. Plummer Administration
2. Lucas Engineering
3. Wimberly Student Services
4. Home Economics
5. Engineering II
6. Setzer Student Center
7. Bookstore
8. Archer Physics
9. Galloway Business
10. President's Home
11. Health Center
12. Custodial Services
13. Dining Hall
14. McDonald Gymnasium
15. Handball Courts
16. Tennis Courts
17. Ty Terrell Track
18. Gray Library
19. Geology
20. Psychology
21. Music
22. Art
23. Communication
24. Science Auditorium
25. Chemistry
26. Women's Gym & Pool
27. Outdoor Pool
28. 29. 30. Lamar Apartments
31. Gentry Hall
32. Hayes Biology
33. Mamie McFaddin Ward Health & Behav. Sciences
34-38. Technical Arts
39. Beeson Technical Arts
40. Employment Office
41. Campus Planning
42. Cardinal Stadium
43. Liberal Arts
44. Education
45. Cherry Engineering
46. Army ROTC
47. Morris Hall
48. Combs Hall
49. Campbell Hall
50. Gray Hall
51. Plummer Hall
52. Speech & Hearing Center
53. Brooks-Shivers Hall
54. Vincent-Beck Field
55. Police Academy
56. Physical Plant
57. Spindletop Museum
58. Alumni Association
59. Energy Management Ctr.
60. Golf Driving Range
61. John E. Gray Institute
62. University Apartments
63. Fraternity Lodge
64. Cardinal Park
65. YMBL Pavillion
66. Visitor Information
67. University Theatre
68. Dishman Art Gallery
69. Women's Auxiliary
70. Parking & Traffic
71. Doornbos Park
72. Housing
73. Print Shop/Quick Copy/ Supply Center/WPC
74. Baby Red Bird Day Care
75. University Police
76. Post Office
77. Placement Center

1985-86 Calendar

Published dates of this calendar are subject to revision by published notice from the Vice President for Academic Affairs.

Fall Semester—1985

AUGUST

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

SEPTEMBER

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29	30					

OCTOBER

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NOVEMBER

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DECEMBER

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22	23	24	25	26	27	28
29	30	31				

August 1985

22 International Student Orientation
23 New Student Orientation (for fall entrants and transfer students)
25 Dormitories open at 1 p.m.
Dining halls open at 4:30 p.m.
26 Registration begins
27 Registration
29 Classes begin—late registration— schedule revisions
30 Last day for schedule revisions and/or late registration

September 1985

2 Labor Day—no classes
16 Twelfth Class Day

October 1985

10 Last day to drop or withdraw without penalty
17 Last day to apply for December graduation
Last day to pay for diploma; cap and gown

November 1985

15 Last day to drop or withdraw
27 Thanksgiving recess begins at 10 p.m.
Dining halls close at 6 p.m.
Dormitories close at 10 p.m.

December 1985

1 Dormitories open at 1 p.m.
Dining halls open at 4:30 p.m.
2 Classes resume at 8 a.m.
11-17 Final examinations
18 Dining halls close at 10 a.m.
Dormitories close at 12 noon
19 Grades for Graduating seniors due by 8:30 a.m.
All grades due by 4 p.m.
21 Commencement (Beaumont)

Spring Semester—1986

JANUARY

S	M	T	W	T	F	S
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MARCH

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30	31					

APRIL

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20	21	22	23	24	25	26
27	28	29	30			

MAY

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11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

January 1986

9 International Student Orientation

10 New Student Orientation (for spring entrants)

12 Dormitories open at 1 p.m.
Dining halls open at 4:30 p.m.

13 Registration begins

14 Registration

16 Classes begin—late registration— schedule revisions

17 Last day for schedule revisions and/or late registration

31 Twelfth Class Day

February 1986

27 Last day to drop or withdraw without penalty

March 1986

6 Last day to apply for May graduation
Last day to pay for diploma; cap and gown

21 Spring recess begins at 5 p.m.
Dining halls and dormitories close at 6 p.m.

30 Dormitories open at 1 p.m.
Dining halls open at 4:30 p.m.

31 Classes resume at 8 a.m.

April 1986

15 Last day to drop or withdraw

May 1986

7-13 Final examinations

14 Dining halls close at 10 a.m.
Dormitories close at 12 noon

15 Grades for graduating students due by 8:30 a.m.
All grades due by 4 p.m.

17 Commencement (Beaumont)

Summer Session 1986—First Term

May 1986

30 International Student Orientation

June 1986

1 Dormitories open at 1 p.m.
Dining halls open at 4:30 p.m.

2 Registration
Deadline to apply for Orientation Session I

3 Classes begin—Schedule revisions and/or late registration

4 Last day for schedule revisions and/or late registration

6 Fourth Class Day

10-12 Freshman Orientation—Session I

16 Last day to drop or withdraw without penalty
Deadline to apply for Orientation Session II

24-26 Freshman Orientation—Session II

27 Last day to apply for August graduation
Last day to pay for diploma; cap and gown

July 1986

1 Last day to drop or withdraw

4 Independence Day—no classes

9 Last class day

11 All grades due by noon

Summer Session 1986—Second Term

July 1986

10 Registration

11 Classes begin—Schedule revisions and/or late registration
Deadline to apply for Orientation Session III

14 Last day for schedule revisions and/or late registration

16 Fourth Class Day

19-21 Freshman Orientation—Session III

24 Last day to drop or withdraw without penalty

28 Deadline to apply for Orientation Session IV

August 1986

5-7 Freshman Orientation—Session IV

8 Last day to drop or withdraw

15 Last class day
Grades for graduating students due by 8:30 a.m.
Dining halls and dormitories close at 6 p.m.

16 Commencement (Beaumont)
All grades due by 8:30 a.m.

Table of Contents

General Information (Lamar University)

Location

The central campus of Lamar University, a state-supported institution, is located in Beaumont, Texas, one of the world's largest petrochemical centers. Beaumont is one of the fastest growing and most progressive cities in the Sunbelt. The city offers private and public schools, churches, museums, shopping districts and a wide range of leisure-time activities to serve the metropolis of 130,000. A civic center, convention center and coliseum draw professional entertainers and a wide variety of business, social and professional groups to the city. Beaumont is convenient to major recreational facilities of Southeast Texas, including the Gulf of Mexico, large lakes and the Big Thicket National Preserve.

Other campuses are located in Port Arthur and Orange.

History

South Park Junior College was established in 1923 and was controlled by the South Park Independent School District. Classes were conducted in the South Park High School Building. An initial enrollment of about 125 students in 1923 had increased to 300 by 1931.

In 1932, the name of the institution was changed to Lamar College. At this time, separate facilities were provided, additional equipment was purchased and new policies instituted. By 1939, enrollment was approximately 640.

Lamar Union Junior College District was created in 1940, and Lamar College was separated from the South Park Independent School District. Bonds were approved and new facilities were constructed on the site of the present main campus.

A movement to expand Lamar College into a four-year state-supported school culminated in the creation of Lamar State College of Technology on September 1, 1951. Since then, enrollment has increased to more than 14,600 students, and the curriculum has been expanded to include 140 areas of study. Graduate work in specified fields began in the academic year of 1960-61, and extension work became an integral part of the educational program in 1964. A doctoral program in engineering was added in 1971. Lamar University at Orange, offering first and second year courses, opened in 1969. Lamar University at Port Arthur, also offering first and second year courses, began operation in the fall of 1975.

The institution's status as a university became official on August 23, 1971, when the name was changed to Lamar University.

The University's status was again changed when the Texas Legislature passed a bill creating the Lamar University System. The bill was signed into law on June 19, 1983.

Government

A board of nine regents, appointed by the Governor and approved by the State Senate for terms of six years, governs the University. The Board of Regents delegates the direction of university affairs to the chancellor, presidents, campus administrative officers and faculty.

Statement of Purpose and Mission

Lamar University is a multi-purpose, state-supported university serving as an educational resource center. The university reaffirms its traditional teaching emphasis to prepare students for careers, for advanced studies, for personal development, and for public service. Further, Lamar University recognizes the importance of scholarly research and public service to its mission of educational leadership.

In keeping with its general purpose, scope, and mission, Lamar University is committed to the following goals:

1. Attract and retain qualified and motivated students including greater representation of those who are especially talented and gifted.
2. Develop broad basic knowledge, values, and skills; modes of critical thinking; and rational attitudes required for problem solving and decision making needed for personal development and effective citizenship.
3. Provide access to appropriate levels of instruction to assist students in meeting career objectives.
4. Offer graduate studies in those fields where need exists and where realistic competence can be achieved.
5. Provide public services, including continuing education programs, where need exists, support is available, and activities are appropriate to the university's mission.
6. Contribute to the broader educational experience of students by participation in effective international and intercultural programs.
7. Enhance the total development of students by providing a wide range of appropriate student activities and services.
8. Contribute to the artistic, cultural, scientific, professional, business and civic life of the region.
9. Contribute to the body of knowledge through research, creativity, and scholarly activity of its faculty.
10. Provide leadership promoting and supporting education, economic growth, cultural and social achievement in Southeast Texas.

Accreditation

Lamar is accredited by the Association of Texas Colleges and Universities, (or a candidate for accreditation) by the Commission on Colleges of the Southern Association of Colleges and Schools and is approved by the Texas Education Agency.

Several departments and programs have been accredited by professional agencies. In the College of Engineering, the departments of Chemical, Civil, Electrical, Industrial and Mechanical Engineering are accredited by the Accreditation Board for Engineering and Technology. The undergraduate programs of the College of Business are accredited by the American Assembly for Collegiate Schools of Business. Other accreditations include the Department of Chemistry by the American Chemical Society; Department of Music by the National Association of Schools of Music; and the Departments of Elementary and Secondary Education by the National Council for the Accreditation of Teacher Education; and Council on Social Work Education; and programs in Speech Pathology by the American Speech-Language-Hearing Association and in Deaf Education by the Council for Education of the Deaf.

The University also is a member of a number of academic councils, societies, associations and other such organizations.

Degree Offerings

Associate of Arts

Associate of Science

Associate of Applied Science

Bachelor of Arts in Chemistry, Dance, Deaf Education/Habilitation, Economics, English, French, Geology, History, Mathematics, Political Science, Psychology, Sociology, Spanish, Speech, Speech Pathology/Audiology, and Theatre

Bachelor of Business Administration in Accounting, Economics, Finance, General Business, Management, Marketing, Office Administration, and Personnel Administration.

Bachelor of General Studies in Liberal Arts and in Fine Arts

Bachelor of Fine Arts in Graphic Design, Studio Art.

Bachelor of Music

Bachelor of Music in Music Education

Bachelor of Science in Art Education, Biology, Chemistry, Communication, Criminal Justice, Dance, Deaf Education/Habilitation, Education (Elementary, Secondary, and Special), En-

ergy Resources Management, Environmental Science, Geology, Graphic Design, Health Education, Home Economics, Mass Communication, Mathematics, Mathematical Sciences, Medical Technology, Nursing, Oceanographic Technology, Physical Education, Physics, Political Science, Psychology, Sociology, Speech, Speech Pathology/Audiology, Studio Art, and Theatre and the following **Engineering Fields:** Chemical, Civil, Computer Science, Electrical, Industrial, Mechanical, and Industrial Technology.

Bachelor of Social Work

Master of Arts in English, History and Political Science.

Master of Business Administration (undifferentiated).

Master of Education in Elementary Education, Guidance and Counseling, School Administration, Secondary Education, Special Education and Supervision.

Master of Engineering

Master of Engineering Management

Master of Engineering Science

Master of Music

Master of Music Education

Master of Science in Audiology, Biology, Chemistry, Computer Science, Deaf Education/Habilitation, Health and Physical Education, Home Economics, Mathematics, Psychology, Public Address, Speech, Speech Pathology/Audiology, and Theatre.

Master of Public Administration

Doctor of Engineering

Organization

Lamar University at Beaumont is organized into eight colleges. These Colleges are Arts and Sciences, Business, Education, Engineering, Fine Arts and Communication, Health and Behavioral Sciences, Technical Arts and Graduate Studies. Other campuses are located at Orange and Port Arthur, Texas.

ROTC

The Army Reserve Officers Training Corps (ROTC) conducts a permanent program of instruction on campus to provide eligible male and female students an opportunity to qualify for a commission in the United States Army. Students who successfully complete the program will be commissioned as second lieutenants upon graduation.

A complete listing of course descriptions and requirements can be found in the College of Arts and Sciences under the Department of Military Science.

Teacher Certification

All teacher education programs of the University are approved by the Texas Education Agency. Students seeking teacher certification should consult the Dean of the College of Education regarding requirements.

Entering Dates

Courses and schedules have been arranged so students may enter Lamar four times each year. The current University Calendar contains information regarding registration periods and exact entering dates.

Evening Classes

Classes offered after 4:45 p.m. are considered Evening Classes. Both day and evening classes, with few exceptions, are taught by the regular faculty, and educational facilities are the same. Persons employed during the day may attend classes in the evening and study to

obtain a degree or to expand their knowledge in a special field of interest as an adult non-degree student. Enrollment forms are available through the department of Extramural Education, Room 101 Wimberly Student Services Building.

Bookstore

The University provides a bookstore, for the convenience of faculty and students, where supplies and books, new and used, may be purchased.

Used books, which are currently approved, may be sold to the bookstore. Books which must be discontinued are not purchased by the Bookstore except at a wholesale price. The Bookstore reserves the right to require the seller to prove ownership of books.

Brown Center

The Brown Center, located off Highway 90 near Orange, became a Lamar University facility in 1976. It is used as a center of cultural and educational activities for the benefit of the people of Orange County and Southeast Texas. The 87 acres of grounds comprising the Brown Center include a graceful mansion built in the Southern antebellum tradition, greenhouses, lakes and landscaped grounds.

The estate was a gift to the University from the four sons of the late Edgar W. Brown Jr., Orange industrialist and philanthropist, who served as a charter director of the Lamar University Foundation, Inc.

Campus Post Office

The campus Post Office, a contract facility operated by the University, is officially designated as Lamar University Station 77710. Full postal services are offered.

Each student may make application for a box at the Post Office by completing necessary forms. There is a charge for each box. Three students are allowed to share the same box.

Mail may be picked up at the general delivery window by those students who do not choose to reserve boxes at the Post Office.

Computer Center

The University Computer Center is responsible for providing the computing services required by the academic, administrative and research communities of Lamar University.

The Computer Center has a Dual Honeywell DPS8/49 computer with 1536K words of 36 bit MOS memory and approximately 1.1 billion characters of on-line disk storage. The system supports one card reader, one card punch, two line printers and three tape drives at the main site. Over ninety terminals are available for interactive computer use. Extensive communication equipment can connect up to 53 synchronous and 134 asynchronous terminals to the computer concurrently. A remote job entry station with one card reader and one printer is located in the Beeson Technical Arts Building. This station also has a Honeywell Level 6 computer tied in with the main frame computer.

Academic computing work, particularly students in Computer Science courses, accounts for a large portion of the Computer Center's computer usage. Each student is responsible for preparing his or her own program. Most student programs are usually processed within thirty minutes. Keypunches are available for punching cards. All jobs are automatically scheduled by the computer which considers computing time and storage requirements as well as other factors. The programming languages supported by the Honeywell computer include: BASIC, FORTRAN, COBOL, PASCAL, ALGOL, LISP, SNOBOL, and APL.

The Computer Science Department has a Digital Equipment Corporation VAX-11/750 computer. There are 1.5 megabytes of main memory, one tape drive, one disk drive and one printer attached to the VAX-11/750. At present, this system can support sixteen asynchronous terminals.

The Institute

The **John Gray Institute**, a privately funded, state operated, non-profit center, is dedicated to the mutual advancement of business, labor, industry, and education and, thereby to the general well-being of the economy of the Gulf Coast Crescent. The staff continuously addresses the region's challenges and opportunities while designing new programs, studies and reports focused on labor-management relations, training and productivity, and the potential for a more diverse economy in the area.

In its new facilities on the south side of the Lamar University campus in Beaumont, the Institute will continue to expand its activities toward improving labor-management relations and enhancing economic development.

Institute publications profile, analyze and evaluate challenges facing the area. Obtaining this information and turning it into opportunities for action will continue to be a major focus of the Institute.

In order to provide impartial information and assist positive changes, the **Institute** uses the following approaches.

- ***Assessment**
- ***Awareness**
- ***Forward Planning**
- ***Implementation and Training**
- ***Evaluation**

Services for Handicapped Students

Services for handicapped students are designed to help the student be as successful as possible on the Lamar campus. Students who have certain disabilities qualify for registration assistance, tutoring, adaptive equipment and other personalized services. For additional information contact the Coordinator of Services for Handicapped Students, 106B Wimberly Student Services Building, P.O. Box 10043, Lamar University Station, Beaumont, Texas 77710. (409) 880-8026.

Students applying for admission and/or re-admission are informed that a special assistance program is provided to physically handicapped students by the Registrar's staff during periods of pre-registration and registration.

Prior to registration in any university program, physically handicapped students are requested to notify the Coordinator for Handicapped Services regarding assistance and/or accommodation they anticipate will be needed during the course of instruction for which they plan to register. This notification, and preferably a conference appointment, should be completed from one to two months before the actual date of registration.

Department Heads and Academic Deans are authorized to notify faculty members to assist physically handicapped students with information regarding the university policy for assistance and to urge handicapped students and applicants to take advantage of the earliest possible appointment and conference regarding assistance and/or accommodations anticipated for their course of instruction.

When students require third-party assistance or mechanical assistance in the course of instruction, instructors will be notified by their department head that the particular assistance has been approved. Such assistance will be available to the student during all instructional sessions including examinations and scheduled laboratory sessions. Third-party assistance may also be required on appointment when students request a conference and/or advisement from instructional faculty.

In certain instances the university assumes the obligation to provide signers as third-party assistance to students with impaired hearing. When authorized signers are hired by the instructional department as student assistant the rate is $5.00 per class hour. Signers as student assistants are authorized when the handicapped student is not otherwise provided with third-party assistance by the Texas Rehabilitation Agency and when the signer has been certified as qualified by the University Speech and Hearing Clinic.

Instructional departments are reimbursed for signers as student assistant expenditures by the Vice President for Finance in response to procedures detailed in "Registration Assistance Program" dated 10-18-83.

Lamar University at Orange

Beginning in 1969, the university offered courses in Orange, Texas. With the provision of facilities by the Lamar University—Orange Capital Foundation, this program expanded to offer first and second year courses in principal fields of the University in addition to expanded vocational courses. Career-oriented courses are offered during the extended day hours. For additional information, see the Bulletin of Lamar University at Orange.

Lamar University at Port Arthur

Port Arthur College merged with Lamar University in August 1975, with legislative funding of instructional programs at the first and second year level. Lamar University at Port Arthur courses are offered on the same basis as courses authorized for the university in principal areas of business, liberal arts, as well as in vocational and technical arts programs.

For additional information, see the Bulletin of Lamar University at Port Arthur.

Library

The eight-story Mary and John Gray Library building dominates the campus from its central location. Built to house a million volumes, the Library now occupies six floors with open access to 750,000 volumes. Seating accommodates 1200 students and faculty.

The first floor service areas include circulation, reference, media, and interlibrary loans. The second floor houses reserve reading, current periodicals and government documents. Four floors provide stacks for books and periodicals shelved in Library of Congress classification sequence from class A on the third floor through class Z on the sixth floor.

The seventh and eighth floors offer expansion space for the future, but are presently shared with other University services. Library special collections and a lecture room share the seventh floor with the Public Services Division, Continuing Education programs. The spacious and elegant eighth floor, furnished by community donors, serves as a University Reception Center for meetings and conferences.

Expanding library collections support continuously evolving academic programs. In addition to a strong collection of books and periodicals, the Library provides access to state and federal government documents and participates in the library networks which extend access to information resources. The Library coordinates multi-media programs on campus and is developing basic collections of equipment and materials for central distribution.

Division of Public Service

In addition to providing studies and other services for area business and community organizations, the Office of Public Service conducts on-campus and off-campus instructional programs for credit and non-credit, with emphasis on adult education. A broad spectrum of vocational and academic courses are offered. Public Service is composed of the departments of Continuing Education and Extramural Education.

Office of Research and Programs

The Office of Research and Programs is administered by a director who serves as the chairman of the Faculty Research Council which awards all state financed research projects. Many services for research and program acquisition are offered by this office. Among these are administration of state research funds to encourage "seed" grants which stimulate the development of hypotheses or generate proposals requiring extramural support; a program of public relations with outside agencies, establishing personal contacts with members of units in government, industry, business and private foundations to enhance funding of re-

search grants and programs; providing information about the availability of external support for research and programs; assisting faculty to make application for funds, by providing assistance in developing proposals, by making contact with the appropriate funding agency, and by identifying the best possible sources for support. The Office provides editorial help in the preparation of the application and budget and the arrangement and support of travel for meetings with donors or funding agencies.

Spindletop Museum and Gladys City

The Spindletop Museum, operated by Lamar University, is located in the Educational Services Center, 950 Florida Street. It has artifacts and exhibits on the early days of the oil industry in Texas which began on January 10, 1901, when the Lucas Gusher blew in on a field not far from the present Beaumont campus. An outdoor museum, Gladys City, re-creates the boom town which sprang up at Spindletop following the Lucas discovery. It is located at University and Cardinal Drives. Gladys City may be visited from 1-5 p.m. Sunday through Friday, and from 9 a.m. to 5 p.m. on Saturday. The Spindletop Museum is open from 9 a.m. to 5 p.m. Monday through Saturday and from 1 to 5 p.m. Sunday. Admission to Gladys City is 50 cents for adults, 25 cents for those under 18 years of age and free to Lamar students with their student activity cards. There is no admission charge to the Spindletop Museum.

University Relations and Development Offices

The University Relations Office was established in 1975, and includes the areas of development, public information and publications and printing.

The Development Office was reorganized in 1975 under the Office of University Relations. It is administered by a Director of Development, and the office works closely with the President and Board of Regents in raising funds for many worthwhile programs for which appropriations are not received from the Legislature.

Alumni Association

The Lamar University Alumni Association, including graduates and ex-students, is active on a year-around basis. The executive director of the association maintains an office in the Alumni House, located on Redbird Lane.

Veterans' Affairs Office

A Veterans' Affairs Office is maintained in the Wimberly Student Services Building and aids veterans in obtaining their educational benefits. It also provides academic assistance and counseling. Additional information about veterans' programs may be found in the Fees and Expenses section of this bulletin.

Admissions

Applicants for admission to the University are required to meet the academic requirements outlined in this bulletin or other applicable publications of the University.

Both the College of Graduate Studies and the College of Technical Arts publish separate bulletins. Graduate Study requires a special application form.

Information on admission to the undergraduate program at Lamar is covered in this section and applies to Lamar University at Beaumont.

The Office of School Relations, located in the Wimberly Student Services Building, provides complete admissions counseling for entering students. Professionally trained personnel assist prospective students in assembling all admission credentials so transition into a college environment can be made as smooth and problem-free as possible. All initial inquiries to the University should be made to this office by writing P.O. Box 10007, Lamar University Station, Beaumont, Texas 77710 (409/880-8888).

Requirements for Students Entering From High Schools

An applicant is required to have graduated from an accredited high school and to have submitted entrance examination scores as specified below. Applicants who have attended another college or university cannot disregard that enrollment and seek admission only on the basis of their high school record. Equivalency diplomas granted on the basis of GED scores will not fulfill entrance requirements. (Non-high school graduates should see the section on Individual Approval.)

NOTICE

Effective June 1, 1986 Lamar University admissions requirements will be as follows:

1. **Students admitted on a regular admissions basis must meet the following prerequisites:**
   a. **attainment of a high school diploma from an accredited high school and successful completion of 14 college preparatory courses in high school with a minimum of 2.3 grade-point average including:**
      (1) **4 college preparatory English Courses.**
      (2) **3 college preparatory mathematics courses.**
      (3) **2 laboratory science courses.**
      (4) **2½ social studies courses.**

      OR
   b. **attainment of a high school diploma from an accredited high school and achievement of a score of at least 700 on the SAT (Scholastic Aptitude Test) or 15 on the ACT (American College Test).**
2. **Students failing to meet the above prerequisites may be permitted to attend Lamar University for one probationary semester but must pass with a satisfactory grade any standard English and standard mathematics courses during that probationary semester in order to continue as a regular student.**
3. **These general admissions standards do not apply to students entering vocational-technical programs.**
4. **In addition to these general admissions standards, Lamar's pre-professional and professional programs will continue to require separate, more rigorous, standards commensurate with the fields for students beginning their sophomore year.**

Entrance Examination Requirement

Applicants may submit either SAT or ACT scores in fullfillment of the entrance examination requirement. These examinations are required for entrance purposes. Both tests are given several times each year at test centers throughout the United States and in many foreign countries. It is recommended that summer and fall applicants take one of the tests early in the senior year and if possible, no later than February. Location of test centers, test

dates, fees, test application forms, sample question booklets and similar information may be obtained without charge from high school counselors or by writing to the testing agency. SAT inquiries should be directed to the College Entrance Examination Board, Box 1025, Berkeley, California 94702. ACT inquiries should be directed to the American College Testing Program, Box 168, Iowa City, 0828 Iowa 52240.

The Level I Mathematics Test of the College Entrance Examination Board must be taken by all students entering the College of Engineering. It is strongly recommended for students planning to major in any of the physical sciences. Students planning to continue a language started in high school must take the CEEB reading test in the language for placement purposes. Otherwise, achievement tests are not required, but in many cases are recommended. Students whose high school records are outstanding should consider taking achievement tests for advanced placement.

Recommended High School Preparation

Although specific high school credits are not required for admission at this time, the University expects each applicant to be adequately prepared to do academic work above the high school level. It is strongly recommended the following credits be included in the high school program:

English	4
Laboratory Sciences	2
Algebra	2
Geometry	1
Social Sciences	2

In some fields, foreign language is desirable. Applicants to the College of Engineering are required to have completed a minimum of two credits in algebra and one credit in geometry. In addition, engineers should have one-half credit in trigonometry, one credit in chemistry and one credit in physics. Any deficiencies must be made up after enrollment at the University.

How To Apply

1. Submit application for admission on the official form. Inclusion of a social security number is required on this form.
2. Take the Scholastic Aptitude Test (October, November or December dates preferred) or the American College Test (October or December dates preferred) and designate this University to receive score reports.
3. Have your complete high school transcript sent to the University Admissions and Records Office immediately following graduation. Seven semester transcripts may be submitted for temporary acceptance, but final certification of graduation is required.

When To Apply

Application should be made well in advance of the proposed enrollment date two or three months in advance, if possible. Students planning to enter either a Summer Session or the Fall Semester, should apply by February 1. Applications for the Spring Semester should be on file by October 1.

Acceptance Notices

Certificates of acceptance normally are issued shortly after the required admission credentials are received. Registration information and general instructions are included. Lamar University has no student quota. All applicants who meet entrance requirements are generally accepted.

Change of Address or Name

Students are responsible for all communications addressed to them at the address on file in the Student Affairs Office and in the Office of Admissions and Records. Any student who moves during a semester must immediately register his change of address in the office

of the dean of student development and in the office of Admissions and Records. Change of address forms are available in the Office of Admissions and Records.

Change of name due to marriage, or correction of name because of spelling errors, may be made by completing a name change card at the Admissions and Records Office. All name changes must be accompanied by a copy of the legal document making the name change official. This document will be kept on file in the student's confidential folder.

Graduates of Non-Accredited High Schools

Applicants who have not graduated from an accredited high school may be admitted if they (1) have graduated in the upper 2/3 of their class, (2) score 700 or above on the Scholastic Aptitude Test, and (3) have the recommended high school preparation credits.

Freshman Orientation and Registration

A series of freshman orientation and registration programs is held during the summer months. These small group sessions are designed to acquaint the new student with campus facilities and services, and to give the individual student an opportunity to confer with university departmental advisors about an academic program. **Registration for the Fall Semester is completed at this time and tuition and fees are paid. Books may be purchased or reserved. Attendance at each session is limited and advance reservations are necessary. Details of the program including available dates, costs and reservation forms, are sent out following issuance of acceptance notices. Reservations should be requested early so a convenient date may be selected. Parents are invited to attend and to particiate in programs designed especially for them. Similar programs are available to new students entering the Spring Semester.**

Academic Advising

College advising centers have been established in each college and branch campus to assist students in designing a program of study meeting the degree plan requirements of the department and guides the student in the proper sequence of courses. Faculty advisors also are assigned. It is the responsibility of the student to schedule regular appointments with the advisor. Appointments and other advising/counseling services may be facilitated through the college advising centers.

Advising sessions assure that a program of study is pursued in proper sequence and proper academic progress is maintained by the student. College advising centers maintain degree plans for each academic major.

Undeclared majors are advised in the College of Arts and Sciences advising center. Students experiencing difficulties in deciding upon a major field of study or who are uncertain about career fields should make an appointment with the staff in the Counseling and Testing Center in the Wimberly Student Services Building.

Advanced Placement

The two optional testing programs listed below are offered to enable first time university students to qualify for advanced standing and/or college credit. These tests must be taken before enrollment. Applicants also may qualify for credit through CLEP (College Level Examination Program).

1. **Advanced Placement Examinations** (Optional)
   Applicants who wish to receive credit for college-level work completed in high school may do so by submitted scores on the College Entrance Examination Board's Advanced Placement Examinations. Examinations are given each May by high schools. Arrangements are made through high school counselors. Subject matter areas and the basis for granting credits are listed as follows:

Subject Area	Required Score	Credit Granted
Chemistry	Score of 3 or above	Chemistry 141
Computer Science	Score of 3	Variable Exemption
	Score of 4	CS 131
	Score of 5	CS 131 & 2 Sem. Hrs. Special Topics
English	Score of 4 or 5	Eng 131-132
	Score of 3	Eng 131 (Student receiving such credit must complete in Eng 136
Foreign Language	Score of 4 or 5	12 semester hours of foreign language
	Score of 3	Three semester hours of foreign language
American History	Score of 3 or above	History 231-232*
European History	Score of 3 or above	History 131-132
Biology	Score of 3 or above	Biology 141-142
Calculus	Score of 3 or above	Mth 1335, 148 or
AB Test		Mth 134, 1341 or Mth 1335, 236
BC Test	Score of 3 or above	Mth 1335, 148, 149
Physics B	Score of 3 or above	Physics 141-142
Physics C (Mechanics)	Score of 3 or above	Physics 247
Physics C (E & M)	Score of 3 or above	Physics 248
Art	Score of 3 or above	Art 131, 133
Music	Score of 3 or above	MLt 121,122

*State law requires three semester hours of classroom instruction in some phase of American History in addition to credit by examination.

2. **Achievement Tests** (Optional)

Students who have outstanding high school records or who have participated in accelerated programs are encouraged to take the College Entrance Examination Board's Achievement Tests in the corresponding subject matter areas. Students may enter advanced courses provided test results indicate they are qualified. Minimum scores are set by the University and students who qualify are notified. Upon the completion of the advanced course with a grade of "C" or better, college credit is granted as indicated in the following table.

Achievement Tests are given on all regularly scheduled test dates other than October. Application is made directly to CEEB.

Subject Matter Area	CEEB Test Required	Credit Granted
English Composition	English by completion of Eng 136 with a grade of "C" or better.	Eng 131 if validated
Foreign Lang	Spanish French	0 to 12 semester hours depending on placement and validation.
Chemistry	Chemistry	Chem 141 if validated by completion of Chem 142 with a grade of "C" or better.
Mathematics	Level I	Up to 12 semester hours depending on placement and validation.
Physics	Physics	Physics 141 if validated by completion of Physics 142 or 248 with a grade of "C" or better.

3. **College Level Examination Program** (Optional)

Credit by examination also is available through CLEP (College Level Examination Program). Details in Academic Regulations section.

Admission Requirements

Students who have attended another college or university will be considered for admission to Lamar University under the requirements listed below. Former students of Lamar who attend another university other than during a summer term will also have to meet the following transfer admission requirements:

1. Submit application for admission.
2. Have an official copy of all college and/or university transcripts on file by application deadline.
3. Must be eligible to re-enter all colleges and/or universities previously attended.
4. Must have a cumulative grade point average of at least 2.0 on a 4.0 scale for all work attempted.
5. Students who transfer less than 30 hours must also submit and meet the entrance credentials and requirements of a first-time-in-college student.

Transfer Credit Evaluation

Credit earned at other accredited institutions will be considered for credit at Lamar University by the following policies:

1. All courses, whether passed, failed or repeated are used in calculating the cumulative grade point average.
2. "D" grades are transferred but departments may refuse to count toward degree.
3. Transfers from a junior college are limited to 66 semester hours or the number of hours required by the university during the freshman and sophmore years in the chronological order in which the student plans to enroll. No junior college credits will be considered for transfer as upper level (Junior-Senior) credits.
4. Acceptance to the University does not constitute acceptance to a particular degree program.

How To Apply for Admission

The following procedure should be followed in making application for admission. All credentials should be sent to the Office of Admissions and Records, Lamar University, Box 10010, Beaumont, TX 77710.

1. Submit application for admission on the official form. Inclusion of a social security number is required on this form.
2. Submit official transcripts from each college previously attended. This requirement applies regardless of the length of time in attendance and regardless of whether credit was earned or is desired.
3. If entrance examination scores are required, take the prescribed entrance tests and/or have a record of test scores sent to the Office of Admissions and Records.

When To Apply

Application should be made well in advance two or three months of the proposed enrollment date, if possible.

The application form should be submitted before transcripts are sent. Transcripts normally should be sent after all work to be transferred is completed. A temporary admission may be granted if the time interval between the end of a semester elsewhere and the beginning of a subsequent semester at this University is too short for the transcript to be submitted before registration. However, all credentials must be on file within one week of the first day of class or the student will be withdrawn. Students on temporary admission, who are subsequently found to be ineligible for admission, will be withdrawn.

In some cases, questions regarding transfer need to be clarified while work is still in progress at another institution. Under these circumstances, the partial transcript should be submitted and a supplementary transcript furnished at the end of the semester. The student must have complete credentials within one week or be withdrawn.

Former Students Returning From Another Institution

Former Lamar students who have not been in attendance for one or more regular semesters must file for readmission by submitting the standard application for admission form.

Students who left on suspension and had accumulated twenty-five (25) or more grade point deficiencies must receive written clearance from the Dean of that college to be eligible for re-admission.

A former student who has attended another college is required to submit a complete record of all work done subsequent to the last date of attendance at Lamar University, and to meet the academic requirements for other transfer students outlined in this bulletin. The regular application for admission must be submitted.

Summer Transients

Students in attendance at another college during the Spring Semester who wish to do summer work only at Lamar University may be admitted as transient students. A student applying for admission under this classification is required to submit only the regular application for admission. No credentials are required unless specifically requested in individual cases. Transient students who later apply for regular long term admission must meet all entrance requirements and supply all necessary admission credentials. International students may not be admitted as transients.

Adult Nondegree Students

A high school graduate who has not attended high school during the past three years and who is at least 21 years of age may enter Lamar University as an adult nondegree student by submitting his/her high school transcript and application for admission. However, if the student desires to take an English or Math course the SAT examination is required.

Admission by Individual Approval

A non-high school graduate who is 19 years of age or older, and whose high school class has been graduated for at least one year, may apply for admission as an individual approval student: Applicants must furnish evidence of preparation substantially equivalent to that required of other applicants. They must possess the aptitude and the seriousness of purpose to pursue a college course of study successfully.

Applicants are required (1) to take the entrance examination, (2) to submit a record of the school work which was completed, and (3) to appear for a personal interview. Educational records and test scores must be on file 30 days in advance of proposed registration date to be considered. Arrangements for the interview should be made after records and scores are received by the University but 30 days in advance of registration.

Educational Records and Student Rights

The following information concerning student records maintained by Lamar University is published in compliance with the Family Education Rights and Privacy Act of 1974 (PL 93-380).

Access to educational records directly related to a student will be granted to him or her unless the type of record is exempt from the provision of the law.

The types, locations and names of custodians of educational records maintained by the University are available from the Dean of Admissions and Registrar.

Access to records by persons other than the student will be limited to those persons and agencies specified in the statute. Records will be maintained of persons granted such access and the legitimate interest in each case.

The release of information to the public without the consent of the student will be limited to the categories of information which have been designated by the University as directory information and which will be routinely released. The student may request any or

all of this information be withheld from the public by making written request to the Admissions and Records Office. The request must be made by the last official day to register for a given session and applies to that session only. Directory information includes name; current and permanent address; telephone listing; date and place of birth; major and minor; semester hour load; classification; particiation in officially recognized activities and sports; weight and height of members of athletic teams; dates of attendance; degrees and awards received, with dates; and last educational agency or institution attended.

A student has the right to challenge records and information directly related to him or her if it is considered to be inaccurate, misleading or otherwise inappropriate. Issues may be resolved either through an informal hearing with the official immediately responsible or by requesting a formal hearing. The procedure to be followed in a formal hearing is available in the Office of Admissions and Records.

The right of parental access to student records may be established by either of two methods: first, by the student filing a written consent statement and second, by the parent validating the student's dependency as defined by IRS.

International Students

International students are entitled to all student services and programs for which they are eligible according to law and University definition. The University reserves the right to establish policies for selected groups of students if the policies are in the student's and the institution's best interest. Applicants will be carefully screened for academic excellence, English proficiency, adequate health, and financial self-sufficiency.

Internationals are encouraged and expected to participate in student activity and organizational programs — so as to experience more fully the culture and lifestyles of southeast Texas. It is the student's responsibility to integrate himself into the campus environment; however, the University provides an atmosphere conducive to acceptance of internationals and affords them every opportunity to succeed.

Since the presence of international students also entails responsibility for the university in meeting certain distinctive needs, it is imperative that adequate provision be made for doing so. The University recognizes this responsibility by setting entrance and exit standards for its non-native English speakers that take into account the minimum language skills necessary for success in academic work as well as the minimum standards that a diploma from the University represents.

In order for the international students to achieve their educational objectives, certain academic services are essential; the University provides facilities and staff commensurate with those needs.

Moreover, the University recognizes that English language proficiency, and not citizenship or immigration status alone, is a key criterion in determining, and meeting, the needs of students for whom English is a second language.

International Student Admission

Applicants who attended foreign secondary schools, colleges or universities must furnish certified translations of their academic records. These records must show the ability to do above average work in an academic program. Freshman admission will be based on the completion of 12 years of schooling, be 18 years of age, and eligibile for admission to a recognized university in the student's own country. Marks or grades must be well above average. Advanced standing credit will be granted for college level work completed at a recognized college or university if marks are above average. A complete record of secondary school training and university training must be submitted. Complete and official translations must be furnished along with certified true copies of the original records. Records must show all subjects taken and grades or marks earned in each, both from the school and tests given by the Ministry of Education. The grading system should be clearly shown on each record. UNCERTIFIED PHOTOGRAPHIC COPIES OR OTHER DUPLICATIONS ARE NOT ACCEPTABLE. Translations must be certified true and correct. Applicants applying as freshmen

(first year students) should submit acceptable scores on the Scholastic Aptitude Test (SAT). For information about this test, write to College Entrance Examination Board, Box 592, Princeton, New Jersey 08540. Scores of 500 or above on the Test of English as a Foreign Language (TOEFL) are required along with scores on the Scholastic Aptitude Test (SAT). SAT scores may be waived for students who have completed a post-secondary academic degree with above average grades.

International students who plan to transfer to Lamar University from another college or university in the United States must have completed at least two regular semesters with at least 30 semester hours of transferable work. An average of C (2.0) on all work attempted is required. English proficiency must be demonstrated by submitting scores of 500 or better on the TOEFL. Applicants may be required to submit recommendations from teachers or foreign student advisors. The usual transfer standards apply except that tests may be required if unconditional eligibility is not established.

International students must present proof of sufficient financial resources to meet the cost of attending Lamar University. Internationals also must present proof of adequate health insurance. Internationals who plan to drive an automobile in the State of Texas must have liability insurance.

Information on the SAT and TOEFL may be obtained by writing to the College Entrance Examination Board, Box 595, Princeton, New Jersey 08540, U.S.A. Scores must be received directly from the testing service. Photocopies or student copies of test scores will not be accepted.

Application forms, test scores, financial statement and complete educational records must be on file by the dates indicated: June 15 for Fall Semester; November 1 for Spring Semester; and March 15 for Summer Sessions.

Special application forms and details on the procedure to follow in making application for admission to Lamar University may be secured by writing to the Office of Admissions and Records.

Applicants accepted by Lamar University are required to attend a special orientation program for internationals new to the Lamar campus. Dates for the program will be indicated upon acceptance and noted on form I-20, "date of arrival." **Failure to attend the program will delay registration for one semester.** An orientation fee of $20 is charged and is payable to Lamar University, c/o Director of International Orientation, P.O. Box 10006, Lamar U. Station, Beaumont, Texas 77710, U.S.A. The program is designed to facilitate a smoother, less problematic adjustment to the Lamar campus. Students whose native language is not English will be tested for English language proficiency. On the basis of these test scores, appropriate courses in English will be required.

Pre-College Honors Program

The Pre-College Honors Program enables seniors-to-be to take university courses during the summer between the junior and senior year in high school. Provision also is made for a high school senior to take a university course during the regular school year. Credit earned is held in escrow until after graduation, but then may be applied to university degree programs. Only students of academic ability are selected for the program. Special counseling is provided by the University. Enrollment may be for one or both Summer Sessions.

To be considered for selection for the Beaumont Campus Program, an applicant must (1) have completed the junior year in an accredited high school; (2) have at least a B+ average through the second quarter of the junior year of high school; (3) submit scores of 1000 or equivalent on the PSAT, SAT or ACT; a score of 500 or equivalent on the verbal section of the PSAT, SAT, or ACT is necessary for acceptance to the program; and (4) be recommended by the high school counselor or principal. Only a limited number of applicants are taken into the program each year. Selection is made on an individual basis by the University. An eligible senior who lacks no more than three required academic credits for graduation may enroll during the regular school year with joint approval of high school official and the Lamar Director of Admissions.

Detailed information and special application and recommendation forms are available in the Admissions Office.

Student Financial Aid and Awards

Financial assistance in the form of scholarships, grants, loans and employment is available to a number of qualified students. Information regarding programs and eligibility criteria can be obtained from the Office of Student Aid, P.O. Box 10042, Lamar Station, Beaumont, Texas 77710.

When To Apply

Applications should be completed by March 1 for the following academic year. Notification of awards will be mailed in late spring and early summer. The university will continue to award student aid as long as funds are available. The most desirable types of aid, however, are normally expended early. Therefore, students should make every effort to meet the March 1 deadline.

How To Apply

Lamar University requires all students applying for aid to file the General Application for Student Aid. Students wishing to be considered for scholarships only should request the Scholarship Application. Students should be aware that scholarship funds are limited and recipients normally must have a grade point average in excess of 3.50 to be considered.

Students wishing to apply for grants, loans and/or work-study employment must also file the Financial Aid Form with the College Scholarship Service to determine the degree of need. Since the processing of this form requires between three and four weeks those students planning to meet the March 1 deadline should file about February 1.

After the application is complete the Student Aid Office will consider the student's academic record and potential as well as substantiated degree of need. The amount and type of assistance will be determined by the staff of the Student Aid Office.

Minimum Qualifications

Scholarship awards to entering freshmen are determined by the applicant's scores on the Scholastic Aptitude Test (SAT) or American College Testing Program (ACT), leadership and high school class rank. Scholarship awards for upperclassmen are determined by their cumulative grade point average at the college level. Scholarship applicants must have a combined score of 900 on the SAT or composite score of 20 on the ACT plus a grade point average in excess of 2.5 to be eligible for a university administered scholarship.

Those applying for need-based grants, loans or work-study employment have their eligibility established by the Financial Aid Form.

Applicants should arrange to have SAT or ACT test scores on file with Lamar University Admissions Office and have the General Application and Financial Aid Form calculation on file in the Student Aid Office. Freshmen may be able to obtain required forms from their high school counselors or directly from the Student Aid Office, P.O. Box 10042, Beaumont, Texas 77710. Students currently enrolled at Lamar may obtain the forms from the Student Aid Office, Wimberly Student Services, Room 216. Students must re-apply each year for consideration for continued assistance.

Grants

The Pell Grant (BEOG) is the foundation source for all other aid programs. All applicants are required to submit the Student Eligibility Report for the Pell Grant except those applying for scholarships only. No other need based assistance (grants, loans, work-study) can be awarded until the student's eligibility for the Pell Grant is determined. The filing of the Financial Aid Form should cause the Pell Student Eligibility Report to be sent to the student's address. The student should then send the Student Eligibility Report to the Student Aid Office for an estimated grant amount to be determined. The final Pell Grant will be determined at the time of enrollment.

Other available grants are the Supplemental Educational Opportunity Grant, the Texas Public Education Grant (TPEG) and the State Student Incentive Grant (SSIG). Students with exceptional need as determined by the Financial Aid Form may be awarded one of these grants.

Scholarships

Scholarships are funds which cover a portion of the student's expenses. Scholarships at Lamar University are of two types: those administered solely by the university, including the selection of recipients, and those administered by the university at the request of donors who select the recipients themselves. The scholarship program at Lamar University is financed solely by public donation. Half of the scholarship is disbursed for the fall term and the remaining half for the spring semester.

Loans

Lamar University provides both short-term and long-term loans. Short-term loans for 30 days are designed to cover emergency situations and must be repaid within the semester in which the loan is made. Long-term loans with repayment after graduation may be obtained under such programs as the National Direct Student Loan Program, the Federally Insured Student Loan Program, and the Hinson-Hazelwood College Student Loan Act. Those interested in one of these loan programs should contact the Student Aid Office for information and application forms.

Employment

Employment opportunities under the College Work Study Program and other employment programs of the University are available to Lamar students as part of the financial assistance program. The University, local businesses and industries provide a number of part-time jobs which enable students to earn part or all of their expenses while attending the University.

Valedictorians

Valedictorians from accredited high schools of Texas are entitled to an exemption from payment of tuition and laboratory fees for two regular semesters following graduation. Fees are not exempt. During registration, valedictorians should report to the scholarship station for fee adjustments. The names of valedictorians of all Texas high schools are certified by principals to the Texas Education Agency and the list is supplied to the University for reference.

Students with Physical Handicaps (Vocational Rehabilitation)

The Texas Rehabilitation Commission offers assistance for tuition and nonrefundable fees to students who have certain disabling conditions, provided their vocational objectives have been approved by a TRC counselor. Examples of such conditions are orthopedic deformities, emotional disorders, diabetes, epilepsy, heart conditions, etc. Other services also are available to assist the handicapped student to become employable. Application for such service should be made at the Texas Rehabilitation Commission, Beaumont District Office, 2209 Calder, Beaumont, Texas 77701.

Fees and Expenses

Lamar University reserves the right to change fees in keeping with acts of the Texas Legislature and the University's Board of Regents.

Payment of Fees

A student is not registered until all fees are paid in full. Payment may be made by check, money order or currency. Checks and money orders, not in excess of total fees, should be made payable to Lamar University and will be accepted subject to final payment. Checks and drafts deposited with Federal Reserve banks cannot be handled through regular bank collection channels if received without the magnetic ink (MICR transit number).

Summary of Registration Expenses

Each student must plan a budget carefully. It is possible to attend Lamar on a modest sum and yet participate in most phases of the university program. To assist in planning registration expenses, the following estimate is furnished as a guide.

Texas residents taking a 15 hour academic work load*:

Tuition	$60
Student Services Fee	60
General Use Fee	90
Setzer Student Center Fee	20
Student Health Fee	15
Parking Fee (if desired)	15
Health Insurance (if desired)	48
Books (estimated)	160
	$468
	+ lab fees

Part-time Student (Six semester hours):

Tuition	$50
Student Services Fee	45
General Use Fee	36
Setzer Student Center Fee	20
Student Health Fee	48
Parking Fee (if desired)	15
Books and Incidentals (estimated)	80
	$300
	+ lab fees

Tuition and general use fees vary with the semester hours carried so the total may differ from this estimate.

*Tuition for Texas residents taking 12 hours or less is $50 per semester. Each additional semester hour is $4 per hour. A full-time student is one who takes 12 or more semester hours of course work. Non Texas/US Rate for tuition $46 per hour, with no minimum. Foreign rate is $69 per hour with no minimum.

Summary of Fees

Additional fees and charges which are applied on a selective basis are listed following the Summary of Fees. (Subject to change by Legislative action)

Term	No. of Semester Hours	Tuition			Student Service Fee	General Use Fee	Setzer Center Fee	Health Center Fee	Total Change		
		Texas*	USA/NON-TEX*	Foreign*					Texas*	USA/NON-TEX*	Foreign*
		A	B	C					A	B	C
Each	1	$50	$ 46	$ 69	$20	$20	$20	$ 5	$115	$ 111	$ 134
Fall	2	50	92	138	25	20	20	5	120	162	208
or	3	50	138	207	30	20	20	5	125	213	282
Spring	4	50	184	276	35	24	20	5	134	268	360
Semester	5	50	230	345	40	30	20	5	145	325	440
	6	50	276	414	45	36	20	6	157	383	521
	7	50	322	483	50	42	20	7	169	441	602
	8	50	368	552	55	48	20	8	181	449	683
	9	50	414	621	60	54	20	9	193	557	764
	10	50	460	690	60	60	20	10	200	610	840
	11	50	506	759	60	66	20	11	207	663	916
	12	50	552	827	60	72	20	12	214	716	992
	13	52	598	897	60	78	20	13	223	769	1,068
	14	56	664	966	60	84	20	14	234	822	1,144
	15	60	690	1,035	60	90	20	15	245	875	1,220
	16	64	736	1,104	60	90	20	15	249	921	1,289
	17	68	782	1,173	60	90	20	15	253	967	1,358
	18	72	828	1,242	60	90	20	15	257	1,013	1,427
	19	76	874	1,311	60	90	20	15	261	1,059	1,496
	20	80	920	1,380	60	90	20	15	265	1,105	1,565
Each	1	$25	$ 46	$ 69	$20	$20	$10	$ 1	$ 76	$ 97	$120
Six	2	25	92	130	25	20	10	2	82	149	195
Week	3	25	138	207	30	20	10	3	88	201	270
Summer	4	25	184	276	30	24	10	4	93	252	344
Session	5	25	230	345	30	30	10	5	100	305	420
	6	25	276	414	30	36	10	6	107	358	496
	7	28	322	438	30	42	10	7	117	411	572
	8	32	368	552	30	48	10	8	128	464	648
	9	36	414	621	30	54	10	9	139	517	764
	10	40	460	690	30	60	10	10	150	570	800

Code: A. U.S. citizens who are legal residents of Texas under tuition law; B. U.S. citizens who are not legal residents of Texas under tuition law, and C. Foreign from non-exempt countries.

Tuition and Fees

Tuition is based upon the number of hours for which the student registers, and is determined by the student's classification as a Texas resident; a nonresident U.S. citizen; or a citizen of another country. Determination of legal residence for tuition purposes is made on the basis of statutes of the State of Texas.

Laboratory Fees

A laboratory fee of $2 is charged each semester for courses with a combined lecture and laboratory credit of from one to three semester hours. The laboratory fee is $4 per semester for courses of four or more semester hours credit.

Private Lessons in Voice and Instrumental Music

One half-hour lesson per week $18
Two half-hour lessons per week 36

Late Registration Fee

A charge of $5 is made during the first day of late registration, $10 for the second day and $15 for the third and following days.

Parking Fee

Charges for parking on campus are made at registration. Automobile registration fees are as follows: Fall Semester, $15; Spring Semester, $10; Summer Session I, $6; Summer Session II, $4. Only one registration is required during an academic year, and a student's parking fee is honored until the end of Summer Session II.

Health and Accident Insurance

Health and accident insurance coverage is available at registration for regularly enrolled students. The fee is estimated at $45 per long semester. This or similar insurance is required of all international students. Additional information may be obtained from the Dean of Students' office, Room 109, Wimberly Student Services Building.

Special Fees

Fees will be set by the University for courses in which special plans and/or field trips must be prepared and specialists secured as instructors.

Exemption 1: Scholarships to High School Honor Graduates

The highest ranking student in the graduating class of a fully accredited Texas high school will be entitled to a tuition and laboratory fee waiver valued at approximately $100. Details may be obtained from the Student Aid Office.

Exemption 2: Veterans (Hazelwood)

Persons who were citizens of Texas at the time of entry into the Armed Forces, and who are no longer eligible for federal educational benefits, are exempt from tuition, laboratory fees, Setzer Student Center fees, and general use fee. This applies to those who served in World War I, World War II, the Korean Conflict or the Vietnam War and were honorable discharged. This exemption also applies to those veterans who entered service after Jan. 1, 1977, and did not contribute under the VEAP program. To obtain this exemption, necessary papers must be presented prior to registration and approval obtained from the Office of Veterans' Affairs. The above exemption also extends to wives, children and dependents of members of the Armed Forces who were killed in action or died while in the service in World War II, the Korean Conflict or Vietnam War.

Students who have been out of the service more than ten years need to provide a copy of their separation papers (DD214). Students separated for a period of less than ten years must also provide a letter from the Veterans Administration stating that the student has no remaining eligibility.

Students who expect to attend under some veterans' benefit plan should contact the Office of Veterans' Affairs 60 to 90 days prior to registration. The Office of Veterans' Affairs advises veterans on program and training opportunities, academic assistance and counseling. Veterans interested in information in these areas should visit this office in the Wimberly Student Services Building.

Policy on Waiving Fees

Off Campus Classes

Students taking classes which are held off campus will not be required to pay Setzer Center or Health fees. The tuition, student service fee, and general use (building) fee are required by either Board of Regents or State statute and cannot be waived.

Students who may have classes both on campus and off campus will have health fees based on the number of hours on main campus.

Example of the above where fees are waived are:

(a) Field Center Courses
(b) Summer trips for credit
(c) Vocational Nursing courses which conduct all their classes at the hospital.
(d) COOP students, for semester when they are not taking classes on campus. (Only pay tuition because Board of Regents have waived student service and general use fee.)

Example where fees are not waived:

(a) Student enrolled only for thesis course (Pays only $25 for tuition.) plus all other normal fees.
(b) Student enrolled only for a special project course.

Faculty and Staff with Activity Cards

Faculty and staff with Activity Cards will have the student service fee waived to avoid paying twice for same service.

Refund of Fees-Withdraw Refunds

Any student officially withdrawing during the first part of the semester will receive a refund on tuition, Setzer Center, student service, laboratory, building and general use and private lesson fees according to the following schedule:

Fall or Spring Semester

1. Prior to the first class day, 100 per cent.
2. During the first five class days, 80 per cent.
3. During the second week of the semester, 70 per cent.
4. During the third week of the semester, 50 per cent.
5. During the fourth week of the semester, 25 per cent.
6. After the fourth week of the semester, none.

Summer Session

1. Prior to the first class day, 100 per cent.
2. During the first, second or third class day, 80 per cent.
3. During the fourth, fifth or sixth class day, 50 per cent.
4. Seventh class day and after, none.

Drop Course Refunds

All students who drop courses during the first 12 class days of the Fall or Spring Semester, or within the first four days of a Summer Session, and remain enrolled at Lamar University, will receive a refund on tuition and fees for that particular course or courses.

All questions regarding refunds should be directed to the Finance Office.

Returned Check Fees

A student is automatically suspended from the University if a check is returned unpaid. The student may re-enter upon redemption of the check plus payment of the returned check fee of $10.

Miscellaneous Fees

Associate Diploma	$12.00*
Certificate of Completion	12.00*
Bachelor's Diploma	12.00*
Master's Diploma	12.00*
Doctor's Diploma	12.00*
Bachelor's Cap and Gown (disposable)	15.50*
Master's Cap, Gown and Hood Rental	25.50*
Doctor's Cap, Gown and Hood Rental	27.50*
Returned Checks (Bookstore)	10.00
Re-entry fee	5.00
Transcript Fee	2.00
Advanced Standing Examination (per course)	5.00
Photo Identification	2.00
Lost Photo I.D.	5.00
Swimming Pools (suits and towels)Per Semester	15.00
Copy of Fee Receipt	.50
Driver Education Certification Fee	50.00

*Subject to State Sales Tax

Fine and Breakage Loss

Library fines, charges for breakage or loss of equipment or other charges must be paid before a transcript of credit or a permit to re-enter the University will be issued.

The University reserves the right to make a special assessment against any student guilty of inexcusable breakage, loss of instructional equipment or other university property.

Rules and Regulations for Determining Residence Status

Texas law specifies that if there is any question as to the student's right to classification as a resident of Texas, it is the student's responsibility to (1) have his classification officially determined and (2) to register under the proper classification.

Pertinent sections of the Texas statuates governing residence for tuition purposes follow. More detailed information on both the law and its interpretations may be obtained from the Office of Admissions and Records.

Pursuant to Title 3, Texas Education Code.

Effective July 20, 1979

Minors

Statute: Section 54.052(a)(3) Dependent means an individual who is claimed as a dependent for federal income tax purposes by the individual's parent or guardian at the time of registration and for the tax year preceding the year in which the individual registers.

Section 54.052 (c) An individual, who is eighteen (18) years of age, or is a dependent and who is living away from his family, and whose family resides in another state or has not resided in Texas for the 12-month period immediately preceding the date of registration shall be classified as a nonresident student:

Section 54.052 (d) An individual who is eighteen (18) years of age or under, or is a dependent and whose family has not resided in Texas for the 12-month period immediately preceding the date of registration, shall be classified as a nonresident student, regardless of whether he has become the legal ward of residents of Texas or has been adopted by residents of Texas while he is attending an educational institution in Texas, or within a 12-month period before his attendance, or under circumstances indicating that the guardianship or adoption was for the purpose of obtaining status as a resident student.

Section 54.055 An individual who is eighteen years of age or under or is a dependent and whose parents were formerly residents of Texas is entitled to pay the resident tuition fee following the parents' change of legal residence to another state, as long as the individual remains continuously enrolled in a regular session in a state-supported institution of higher education.

2 Residence of individuals Over Eighteen

Statute: Section 54.052 (e) An individual who is eighteen (18) years of age or over who has come from outside Texas and who is gainfully employed in Texas for a 12-month period immediately preceding registration in an educational institution shall be classified as a resident student as long as he continues to maintain a legal residence in Texas.

Section 54.052 (f) An individual who is eighteen years of age or over who resides out of the state or who has come from outside Texas and who registers in an educational institution before having resided in Texas for a 12-month period shall be classified as a nonresident student

Section 54.054 A nonresident student classification is presumed to be correct as long as the residence of the individual in the state is primarily for the purpose of attending an educational institution. After residing in Texas for at least twelve (12) months, a nonresident student may be reclassified as a resident student as provided in the rules and regulations adopted by the Coordinating Board, Texas College and University System. Any individual reclassified as a resident student is entitled to pay the tuition fee for a resident of Texas at any subsequent registration as long as he continues to maintain his legal residence in Texas.

3 Married Students

Statute: Section 54.056 A nonresident who marries and remains married to a resident of Texas, classified as such under this Act at the time of the marriage and at the time the nonresident registers, is entitled to pay the resident tuition fee regardless of the length of time he has lived in Texas, and any student who is a resident of Texas who marries a nonresident is entitled to pay the resident tuition fee as long as he does not adopt the legal residence of the spouse in another state.

4 Military Personnel and Veterans

Statute: 54.058 (a) Military personnel are classified as provided by this section in the following manner:

(b) An officer, enlisted man or woman, selectee or draftee of the Army, Army Reserve, Army National Guard, Air National Guard, Texas State Guard, Air Force, Air Force Reserve, Navy, Navy Reserve, Marine Corps, Marine Corps Reserve, Coast Guard, or Coast Guard Reserve of the United States, who is assigned to duty in Texas is entitled to register himself, his spouse, and their children in a state institution of higher education by paying the tuition fee and other fees or charges required of Texas residents without regard to the length of time he has been assigned to duty or resided within the state. However, out-of-state Army National Guard or Air National Guard members attending training with Texas Army or Air National Guard members under National Guard Bureau regulations may not be exempted from nonresident tuition by virtue of that training status nor may out-of-state Army, Air Force, Navy, Marine Corps, or Coast Guard Reserves training with units in Texas under similar regulations be exempted from nonresident tuition by virtue of such training status. It is the intent of the legislature that only those members of the Army or Air National Guard, Texas State Guard, or other reserve forces mentioned above be exempted from the nonresident tuition fee and other fees and charges only when they become members of Texas units of the military organizations mentioned above.

(c) As long as they reside continuously in Texas, the spouse and children of a member of the Armed Forces of the United States who has been assigned to duty elsewhere immediately following assignment to duty in Texas are entitled to pay the tuition fees and other fees or charges provided for Texas residents.

(d) A Texas institution of higher education may charge to the United States Government the nonresident tuition fee for a veteran enrolled under the provisions of a Federal law or regulation authorizing educational or training benefits for veterans:

(e) The spouse and children of a member of the Armed Forces of the United States who dies or is killed are entitled to pay the resident tuition fee, if the wife and children become residents of Texas within 60 days of the date of death: and

(f) If a member of the Armed Forces of the United States is stationed outside Texas and his spouse and children establish residence in Texas by residing in Texas and by filing with the Texas institution of higher education at which they plan to register a letter of intent to establish residence in Texas, the institution of higher education shall permit the spouse and children to pay the tuition, fees, and other charges provided for, Texas residents without regard to length of time that they have resided within the State.

5 Employees of Institutions of Higher Education Other Than Students

Statute: Section 54.059. A teacher, professor, or other employee of a Texas institution of higher education in entitled to register himself, his spouse, and their children in a state institution of higher education by paying the tuition fee and other fees or charges required for Texas residents without regard to the length of time he has resided in Texas. A teacher, professor, or other employee of a Texas institution of higher education is any person employed at least one-half time on a regular monthly salary basis by a state institution of higher education.

6 Student Employees

Statute: Section 54.051 (o). A teaching assistant, research assistant, or other student employee of any institution covered by this section is entitled to register himself, his spouse, and their children, in a state institution of higher education by paying the tuition fees and other fees or charges required for Texas residents, without regard to the length of time he had resided in Texas; provided that said student employee is employed at least one-half time in a position which relates to his degree program under rules and regulations established by the employer institution. This exemption shall continue for students employed two consecutive semesters through the summer session following such employment if the institution is unable to provide employment and, as determined under standards established by the institution, if the employee has satisfactorily completed his employment.

7 Competivite Scholarships

Statute: Section 54.051 (p) A student who holds a competitive scholarship of at least $200 for the academic year or summer for which he is enrolled and who is either a nonresident or a citizen of a country other than the United States of America is entitled to pay the fees and charges required of Texas residents without regard to the length of time he had resided in Texas, provided that he must compete with other students, including Texas residents for the scholarship and that the scholarship must be awarded by a scholarship committee officially recognized by the administration of the institution of higher education.

8 Reciprocity Clause Applicable to Junior Colleges, Upper Level Institutions.

Statute: Section 54.060. Resident of Bordering State: Tuition. The non-resident tuition fee prescribed in this chapter does not apply to a nonresident student who is a resident of a state situated adjacent to Texas and who registers in any Texas public junior-college situated in a county immediately adjacent to the state in which the nonresident student resides. The nonresident junior college student described in this section shall pay an amount equivalent to the amount charged a Texas student registered at a similar school in the state in which the nonresident student resides. The nonresident student described in this section shall pay equivalent fees and charges to those charged Texas students registered at a similar institution in the state in which the nonresident student resides, when such student registers at a Texas public senior upper level (those institutions offering only junior,senior, and graduate level programs) institution of higher education located within Texas public junior college district from which the nonresident student has graduated or completed 45 semester credit hours.

9 Waiver of Nonresident Tuition by Junior Colleges

Statute: Section 130.003(b) (4) ...the governing board of a public junior college district may waive the difference in the rate of tuition for nonresident and resident students for a person, and his dependents, who owns property which is subject to ad valorem taxation by the junior college district...

10 Citizens of Any Country Other Than the United States of America

Statute: Section 54.057 An alien who is living in this country under a visa permitting permanent residence or who has filed with the proper Federal immigration authories a declaration of intention to become a citizen has the same privilege of qualifying for resident status for fee purposes under this Act as has a citizen of the United States. A resident alien residing in a junior college district located immediately adjacent to Texas boundary lines shall be charged the resident tuition by that junior college.

13 Penalities

Statute: Section 54.053 The governing board of each institution required by this Act to charge a nonresident tuition or registration fee is subject to the rules, regulations, and interpretations issued by the Coordinating Board, Texas College and University System, for the administration of the nonresident tuition provisions of this Act. The rules, regulations, and interpretations promulgated by the Coordinating Board shall be furnished to the presidents or admininistrative heads of all Texas public senior and junior colleges and universities.

Section 54.061 The governing board of an institution of higher education may assess and collect from each nonresident student who fails to comply with the rules and regulations of the boards concerning nonresident fees a penalty not to exceed $10 a semester.

Academic Policies and Procedures

Course Numbering

The unit of instruction for credit purposes is the course. Most courses meet three hours each week and have a credit value of three semester hours for one semester, or six hours for two semesters.

Each course has an individual alpha-numeric code (such as Eng 333). The alpha part indicates the subject area. Each number contains three or more figures. The first digit indicates the rank of the course: 1, means it is freshman level; 2, sophomore level; 3, junior level; and 4, senior level. The second figure indicates the number of semester hours credit. The third figure (or figures) indicates the order in which the course normally is taken. The letter a or b following course numbers indicates partial credit in each case; full credit for such numbered courses will be granted only when the series is complete.

Applied music courses are numbered so that the second number indicates both semester hour credit and number of private lessons each week.

In this bulletin, each course title will be followed by three digits separated by colons such as (3:3:1). This code provides the following information. The first number is the semester hours of credit for the course. The second number is the class hours of lecture, recitation or seminar meetings per week. The third number is the required laboratory hours per week. The letter A indicates that the hours are Arranged, usually with the instructor of the course.

New Courses

In order to meet changing educational requirements, the University reserves the right to add any needed courses at any time without regard to the listing of such courses in the Bulletin. It is expected that a listing of these courses will appear in the next Bulletin issued.

The right to change numbers in order to indicate changes in semester hours also is reserved for the reasons above.

Semester Hour

The unit of measure for credit purposes is the semester hour. One hour of recitation (or equivalent in laboratory work) each week usually is equal to one semester hour. For each classroom hour, two hours of study are expected. Two or more hours of laboratory work are counted equivalent to one classroom hour. For laboratory work which requires reports to be written outside of class, two clock hours are usually counted as one semester hour.

Maximum Course Loads

The normal course load in a regular semester is 15-18 semester hours; for a six week summer term 6-8 semester hours. Overloads must be approved by the student's academic dean. No student will be allowed to enroll for more than 21 semester hours regardless of the number of grade points earned the preceding semester.

Twelve semester hours is the minimum full time load (9 for graduate students) in fall and spring, 4 semester hours in Summer (3 for graduate students).

Registration for Classes

Students will be permitted to attend class only when the instructor has received evidence of proper registration. Registration dates and deadlines are listed in the official University calendar. Students may add courses, make section changes, or drop courses only within the period specified in the calendar. A schedule of classes is prepared by the Office of Admissions and Records well in advance of a given semester.

Minimum Class Enrollment

The University reserves the right not to offer any course listed in this bulletin if fewer than 10 students register for the course.

Course Auditing by Senior Citizens

Senior citizens, 65 years of age or older, may audit courses without the payment of fees on a space-available basis.

Class Attendance

Regular class attendance is important to the attainment of the educational objectives of the University. Especially in lower division courses and in large classes at any level, the instructor should keep attendance records and should formulate an attendance policy consistent with departmental policies but suited to the needs of the particular course. The instructor's policy is to be explained in detail to the class at the beginning of the semester.

Postponed Examinations

Arrangements for taking postponed examinations are made with the instructor concerned, but must be approved by the instructor's department head. Such arrangements should be made at least 48 hours before the examinations.

Course Repetition

A course may be repeated for additional credit only as specified by the official course description in the University Bulletin.

With approval of the student's major department head, students may repeat courses which are not ordinarily repeatable for additional credit only when a grade of C or below has been earned. When these conditions are met the official grade is the last one made but the original grade remains on the student's record as a course taken and is included in the grade point average calculation.

English Requirement

A full-time student (one taking 12 or more semester hours) must register for freshman English until credit for six semester hours has been earned. This policy does not apply during summer terms.

A student's use of English is subject to review before graduation. If found unsatisfactory, additional course work may be prescribed.

Remedial English Course

All new freshmen who score 35 or less on the Test for Standard Written English (TSWE) are required to complete satisfactorily English 137 - Developmental Reading and Writing before being permitted to enroll in English 131 - Composition.

A new freshman student who scores 35 or below on the TSWE and wishes to appeal the score may request a written examination administered on the Main Campus by the Director of Freshman English and on the branch campuses by English teachers designated by the chief academic officers of the branch campuses. If the written examination is judged satisfactory, the student will be permitted to enroll in English 131. If the written examination is judged unsatisfactory the student shall enroll in English 137 or may appeal the decision through normal academic administrative channels.

University policy requiring that all full-time students register for freshman English until credit for six semester hours has been earned also applies to students who are not eligible to enroll in English 131 because of their TSWE scores; therefore, such full-time students must enroll in English 137. The student who does not successfully complete English 137 must repeat the course until a satisfactory grade (S) is received.

Students enrolled in English 137 shall receive grades as follows.

a. S if they score 36 or more on a post-test using the TSWE and write a satisfactory paragraph.
b. F if they score 35 or less on a post-test using the TSWE and/or do not write a satisfactory paragraph.

c. I if they obtain approval of the instructor when the course requirements will not be completed.
d. Q if they drop the course prior to the penalty date or if they are passing at the time of the drop.
e. W if they withdraw prior to the penalty date or if they are passing at the time of the withdrawal.

Physical Activity Course Registration Requirement

All full-time students (those taking 12 or more semester hours) must register for physical activity until they complete four semesters except as follows:

1. Those who are unable to participate in a regular or modified activity course because of physical handicaps (must have written exemption from the University physician).
2. Those who choose active participation in the marching band or ROTC for four semesters.
3. Students who are 25 or more years of age may be exempted from this requirement at their option.
4. Veterans who have completed basic training as a part of their military service are exempt from the required freshman year courses in physical education, but must take two semesters of physical education at the sophomore level to complete the requirements for graduation.

Students exempted from the physical education requirement must submit elective hours approved by their major department in lieu of the requirement.

Bible Courses

A student may register for as many as three semester hours of Bible study each semester for a total of two semesters. This total may be raised to four semesters with the approval of the student's counselor if the field of study warrants such elective choice.

Engineering Cooperative Programs

A cooperative program is offered, to a limited number of qualified students, whereby the student spends alternate terms at work or study.

To remain in the program, students must maintain their grade point averages and perform in a manner satisfactory to both their employer and Lamar. Further information may be obtained from the Director of Engineering Cooperative Education, Box 10057, LU Station.

Changing Schedules

All section changes, adds and drops must be approved by the department head of the student's major field. All such changes are initiated by the completion of the proper form available in the department head's office. Usually, a course may not be added after the first two days of the Fall-Spring semester or first two days of a Summer Session.

Dropping Courses

After consultation with their advisor and/or department head, students may drop a course and receive a grade of "Q" during the first six weeks, (two weeks in the summer session) of the semester. For drops after this penalty-free period, grades are recorded as "Q" or "F" indicating the student was passing or failing at the time of the drop. A grade of "Q" may not be assigned unless an official drop has been processed through the Office of Admissions and Records. A student may not drop a course within 15 class days of the beginning of final examinations or five class days before the end of the summer term. Students should check the published schedule for specific dates.

Instructor Initiated Drop

When absences, other than approved absences, interfere seriously with the student's performance, the instructor may recommend to the department head that the student be

dropped from the course. If this action is taken after the first six weeks of the semester, a grade of "F" may be recorded for the course. The student's major department will be notified that the student was dropped for excessive unexcused absences. The student remains responsible for initiating drop procedures if he finds that he cannot attend class.

Reinstatement to Class

A student may be reinstated to class upon written approval on the official form by his major Department Head, Instructor of course and the Instructor's Department Head.

Withdrawals

Students wishing to withdraw during a semester or summer term should fill out a Withdrawal Petition in triplicate in the office of their department head. Students must clear all financial obligations, and return all uniforms, books, laboratory equipment and other materials to the point of original issue. Copies of the withdrawal form signed by the department head and the director of library services are presented to the Office of Admissions and Records by the student.

The Finance Office, on application before the end of the semester or Summer Session, will return such fees as are returnable according to the schedule shown under the "Fees" section of the bulletin. If a withdrawal is made before the end of the sixth week (second week of a summer term) or if the student is passing at the time of withdrawal after the sixth week, a grade of "W" is issued for each course affected. A grade of "F" is issued for all courses not being passed at the time of withdrawal after the pentaly-free period.

A student may not withdraw within 15 class days of the beginning of final examinations or five class days before the end of a summer term. A student who leaves without withdrawing officially will receive a grade of "F" in all courses and forfeit all returnable fees. Students should check the published schedule for specific dates.

Enforced Withdrawal Due to Illness

The director of the health center and the vice-president for student affairs, on the advice of competent medical personnel, may require withdrawal or deny admission of a student for health reasons (mental or physical).

Transfer from One Department to Another

Students wishing to change their majors must have the approval of the head of the department of their former major area and approval of the head of the new department. These approvals must be in writing on the form entitled "Change of Major."

Interchange and Recognition of Credits

Credit earned in the respective colleges of the University, including the College of Technical Arts, may be applied to degree programs of the University when such credit is appropriate to established programs.

Simultaneous Enrollment

Students who desire to enroll simultaneously on more than one campus or more than one institution must have written approval of their Lamar University academic advisor for all classes to be taken. Such approval can be granted only if all Lamar University academic policies are adhered to by the coursework taken as a whole. For example, academic load restrictions due to probation would apply to the total course hours taken at all institutions or campuses. The written approval is to be retained in the student's permanent file.

Transfer Credit for Correspondence Courses

Lamar does not offer courses by corresponsence. However, a maximum of 18 semester hours of correspondence work from an accredited institution may be applied toward a bachelor's degree.

No correspondence course may be carried while a student is in residence without the permission of the student's department head. A permit signed by the department head must be filed in the Office of Admissions and Records before registration for the course.

A student may not: (1) register for, carry or complete a correspondence course during the last semester of Summer Session before graduation, nor (2) receive credit for any junior or senior course taken by correspondence, except in the following circumstances: (a) a course required for graduation is not offered by Lamar; (b) the student has a schedule conflict between required courses; (c) a nonresident senior who is six semester hours or less short of graduation and who has filed a statement of intent to complete work by correspondence.

This statement of intent must be approved by the department head and filed in the Office of Admissions and Records no later than the last date to apply for graduation.

Seniors must file correspondence transcripts 14 days before graduation.

Credit by correspondence for a course failed in residence will not be accepted toward graduation.

Credit by Examination

Lamar awards undergraduate credit on the basis of several nationally recognized examinations and on the basis of local advanced standing examinations administered by academic departments. These programs are described below. Advanced Placement testing programs are discussed in another section of this Catalog.

Except for satisfying the coursework-in-residence and the state-mandated American History and American Government requirements, credit earned by examination is equivalent to credit earned by taking the course and may be used to satisfy bachelor's and associate's degree requirements as defined in this Catalog under "Degree Requirements."

Advanced Standing Examinations

Advanced standing examinations are intended only for those students who have had the equivalent, in formal or informal training, of the work being presented in the course in question. Credit may be granted to those who pass departmental advanced standing examinations with a grade of B or better. Normally, departmental examinations will be given only if CLEP subject examinations are not available.

To secure permission for such examinations, a student must obtain the written permission of the Dean of the College and the department head responsible for the course. A fee of $25 must be paid to the Finance Office. Forms are available in the office of the department head. Advanced standing examinations will not be approved for skill courses.

A student having received a grade (passing or failing) in a course may not take an advanced standing examination in that course.

College Level Examination Program (CLEP)

Lamar University awards credit on the basis of most of the Subject Examinations of the College Level Examination Program (CLEP). A complete list is available from the Admissions and Records Office. No credit will be awarded for the General Examinations. The essay section of the College Composition Examination is required, but need not be taken in order to qualify for credit on most of the other subject examinations.

The amount of credit awarded to a student who attended college before taking the examination will depend upon which college courses the student had completed before taking

the examination. Credit will not be awarded if the student had received prior credit for the same course or its equivalent. Grades will not be assigned and hours will not be used in the computation of grade point averages.

A copy of "Policies Concerning Academic Credit and Placement on the Basis of the CLEP Subject Examinations" may be obtained from the Office of the Dean of Admissions and Registrar or from the Counseling and Testing Center.

Academic Progress

Classification of Students

Students are classified as freshmen, sophomores, juniors, seniors, post baccalaureate and graduate students. For the purpose of determining eligibility to hold certain offices and for other reasons, officially enrolled students are classified as follows:

Freshman: has met all entrance requirements but has completed fewer than 30 semester hours.

Sophomore: has completed a minimum of 30 semester hours with 60 grade points.

Junior: has completed a minimum of 60 semester hours with 120 grade points.

Senior: has completed a minimum of 90 semester hours with 180 grade points.

Post baccalaureate: holds a bachelor's degree, but is not pursuing a degree program.

Graduate: has been accepted and is pursuing a graduate degree (see Graduate Catalog).

Full-Time Student: an undergraduate student taking 12 or more semester hours in Fall/Spring (four or more in a summer term) is classified as a full-time student. A full-time graduate student is one who takes 9 or more semester hours in Fall/Spring (3 or more in a summer term). Some sources of student financing reduce payments to students dropping below full-time status.

Grading System

A — Excellent
B — Good
C — Satisfactory
D — Passing
F — Failure
I — Incomplete
W — Withdrawn
Q — Course was dropped
S — Credit
U — Unsatisfactory, no credit
NG — No grade

The grade of W or Q is given if the withdrawal or drop is made before the penalty date (see Dropping Course) or if the student is passing at the time of withdrawal or drop.

The grade of I may be given when any requirement of the course, including the final examination, is not completed. Arrangements to complete deficiencies in a course should be made with the instructor.

Incomplete work must be finished during the next long semester, or the Office of Admissions and Records must change the I grade to the grade of F. The course must then be repeated if credit is desired.

An I grade also automatically becomes an F if the student reregisters for the course before removing the deficiencies and receiving a grade change.

The instructor may record the grade of F for a student who is absent from the final examinations and is not passing the course.

Semester grades are filed with the Office of Admissions and Records. A grade may not be recorded for a student not officially enrolled in a course during the semester covered. A grade may not be corrected or changed without the written authorization of the instructor giving the grade. The written instruction for a grade change should be accompanied by a statement explaining the reason for the change.

A student desiring to register for a course to receive a grade of NG must have the written approval on official form of major Department Head, Instructor and Instructor's Department Head and Admission and Records Verification. Student semester hours attempted will be reduced by appropriate number of hours.

Grade Point Average Computation

The grade point average is a measure of the student's overall academic performance and is used in the determination of academic standing, rank in class, eligibility for graduation, etc. Grade point averages are computed separately for technical arts and academic records, except for honors and certain special degree requirements.

In order to compute grade averages, grade points are assigned to letter grades as follows: to the grade A, 4 points; to B, 3 points; to C, 2 points; to D, 1 point, and to F, I, S, U, NG, W, 0 points. The number of grade points earned in a course is obtained by multiplying the number of semester hours credit by the number of points assigned to the grade made in the course.

The grade point average is calculated by dividing the total number of grade points earned by the total number of semester hours attempted in courses for which the grades A, B, C, D, F and I are assigned. Thus, for grades, S. U. NG, W and Q, neither semester hours nor grade points are used in the computation of the grade point average. Hours attempted include all work taken whether passed, failed or repeated. Courses in which a grade of S or U is assigned are used in calculating a student's semester hour load.

This method of calculating grade point averages will apply to all students in baccalaureate programs of study effective July 5, 1978. The University's former repeat policy will not apply to students in four year programs after this date; thus, the grade of a course repeated after July 5, 1978, may not be substituted for a prior grade.

Grade point averages for students in certificate, diploma and associate degree programs are calculated in the manner prescribed for baccalaureate programs, with one exception. A student in one of these programs who passes a course at the same institution where the student previously received a failing grade (F or U), will have only the passing grade and its associated grade points applied toward any certificate, diploma or associate degree. After the course is repeated, the student must file a request for a grade point adjustment with the Records Office. Any adjustment to a grade point average made during the time a student enrolled in an applicable course of study is disregarded once the student enters a four-year program.

Academic Records and Transcripts

Academic records are in the permanent custody of the Admissions and Records Office. Transcripts of academic records may be secured by an individual personally, or will be released on the student's written authorization. College transcripts on file from other colleges will not be duplicated by Lamar's Records Office.

Students who owe debts to the University or who have not met entrance requirements may have their official transcripts withheld until the debt is paid or creditenials are furnished.

Chapter 675, Acts of the 61st Legislature, 1969 Regular Session, provides that "no person may buy, sell, create, duplicate, alter, give, or obtain a diploma, certificate, academic record, certificate of enrollment or other instrument which purports to signify merit, or achievement conferred by an institution of education in this state with the intent to use fraudulently such document or to allow the fraudulent use of such document.

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

Final Grade Report

Reports on grades are mailed at the end of each semester or summer term. These reports include the semester grades and the grade point average for the semester, and for all work attempted at the University.

Deans' List

At the end of each semester the Office of Admissions and Records prepares a list of all full-time (those who complete 12 or more semester hours) freshman and sophomore

students who have earned for that semester a grade point average of 3.40 or above and junior and senior students who have earned for that semester a grade point average of 3.60 or above. This list is the Dean's List and is announced by the academic dean of each college.

Scholastic Probation and Suspension

Students are expected to make acceptable scholastic progress toward their degree objectives. A "C" is the minimum satisfactory grade, and a "C" average or 2.0 grade point average (G.P.A.) constitutes satisfactory performance. Since two grade points are awarded for each semester hour of "C", students are in good standing if they have earned at least twice as many grade points as semester hours attempted. Students with a grade point deficiency shall be placed on scholastic probation and continued on probation as long as a deficiency exists.

All students with a grade point deficiency of 25 or more grade points at the end of Fall, Spring or Summer shall be suspended.

Students suspended from Fall, Spring or Summer by this action may attend the Summer Session on probation. Students with a grade point deficiency less than 25 at the close of the Summer Session will automatically be reinstated and may register for the following Fall Semester. Students with a grade point deficiency of 25 or more at the end of the Fall, Spring, or Summer Session must obtain approval for probationary re-enrollment from the dean of their respective college.

Students wishing to return to Lamar University after an absence who are 25 or more grade points deficient must obtain written permission from the dean of their respective college prior to being accepted for re-admission for either a Fall or Spring Semester.

A college, with the approval of the vice president for academic affairs, may prescribe academic requirements for its majors in addition to the basic university grade point standard. Students suspended under this provision may register in another college at Lamar, provided they meet the prescribed standards and are accepted through the normal change-of-major procedure. Students may not register for a 300 or 400 level course offered by the suspending college unless the course is required by their new curriculum.

Academic Appeals Procedures

After an enrollment lapse of seven or more years from Lamar University and after completing successfully (2.2 average) thirty semester hours of work at Lamar, a student may petition to disregard a maximum of two entire successive semesters of work taken previously at Lamar University. The petition shall be filed with the department head and shall follow regular channels to the vice president for academic affairs for a final decision. Endorsements and/or recommendations shall be required at each academic level. When approved by the vice president for academic affairs, disregarded work shall not count in determining the student's grade point average for academic progress or for graduation; however, it shall remain on the transcript with an appropriate notation, and it shall be used in determining honors.

Degree Requirements

General Education Requirements—Bachelor Degrees

1. Satisfy all admission conditions.
2. Meet the following minimum requirements:
   a. A grade point average of at least 2.0 both on all courses in the major field and on all courses attempted.
   b. 120 semester hours not including required activity courses in physical education, marching band, and/or ROTC.
      (1) 30 semester hours in residence at Lamar University with at least 24 semester hours earned after attaining senior classification, except for special degree programs in biology and medical technology.

(2) 30 semester hours on the junior and senior levels. 18 hours must be completed at Lamar University.
(3) 24 semester hours in a major field with at least 12 in upper division courses.
(4) 6 semester hours in political science. (see note 1)
(5) 6 semester hours in American history. (see note 2)
(6) 12 semester hours in English (not to include English 137) including 6 semester hours in freshman composition and 6 semester hours in literature. Three semester hours of technical report writing or 3 semester hours of speech communication or 3 semester hours of foreign language may be substituted for 3 hours of literature. (see note 3)
(7) Four courses in laboratory science or mathematics, to include at least one course in laboratory science and at least one course in mathematics which may be satisfied by satisfactorily completing one of the following courses:
(a) Mth 1334, College Algebra
Mth 1335, Precalculus Mathematics
Mth 1336, Survey of Mathematics
Mth 134, Mathematics for Business Applications
Mth 1341, Elements of Analysis for Business Applications
Mth 148, Calculus and Analytic Geometry I
Mth 149, Calculus and Analytic Geometry II
(b) Any course at the sophomore level or higher; namely, any course beginning with a digit of 2 or greater.
(8) 4 semesters of physical activity and/or marching band and/or ROTC. (see note 4)
(9) 6 semester hours of electives from disciplines outside the major field.
(10) No more than 18 semester hours of correspondence work and no more than 30 semester hours of correspondence and extension work and/or credit by examination combined may be applied to the bachelor's degree.

3. Complete the program of study as listed in the bulletin.
4. Make application for the Bachelor Degree and pay all designated fees.
5. Attend the official graduation exercises or receive prior approval from the Dean of Admissions and Registrar to be absent.

Second Bachelor Degree

When another bachelor's degree is taken simultaneously, or has been taken previously at Lamar, the second bachelor's degree may be granted upon the completion of all required work for the second degree. A total of 30 semester hours above the number required for the degree having the greater semester hour requirement must be completed at Lamar University.

Bachelor of Arts Degree

1. Meet the University's general education requirements for a bachelor's degree.
2. Complete the course numbered 232 in a foreign language.
3. Complete six semester hours of literature.
4. Complete the minor of 18 semester hours, six of which must be in advanced courses.
5. Meet the specific requirements of the selected program of study as listed in the department concerned.

Bachelor of Science Degree

1. Meet the University's general education requirements for a bachelor degree.
2. Meet the specific requirements of the selected program of study as listed in the department concerned.

Bachelor of Business Administration Degree

1. Meet the University's general education requirements for a bachelor degree.
2. Meet the specific requirements of the selected program of study as listed in the department concerned.

Bachelor of General Studies Degree

1. Meet the University's general education requirements for a bachelor degree.

2. Meet the specific requirements of the selected program of study as listed in the department concerned.

Special Degree Programs

Biology: A student may receive the degree of Bachelor of Science, biology major, after completion of one year in an approved college of dentistry or medicine.

The following minimums are required:

1. Complete 106 semester hours of the basic requirements for the Bachelor of Science degree. This includes all the required minimums except the total of 140 semester hours.
2. Complete the biology core.
3. Furnish proof of at least 30 semester hours in an approved domestic college of dentistry or medicine.
4. Formally apply for the degree before August graduation deadline.

Associate of Arts Degree (A.A.)

1. Satisfy all admission conditions.
2. Meet the following minimum requirements:
   a. 30 semester hours in residence at Lamar University. Twelve semester hours of this minimum must be earned after May 1972, and after reaching sophomore classification.
   b. A grade point average of at least 2.0 on all work attempted.
   c. 60 semester hours not including required activity courses in health and physical education, marching band and/or ROTC.
   d. Six semester hours in political science.(see note 1)
   e. Six semester hours in American history.(see note 2)
   f. Nine semester hours in English (not to include English 137), including six semester hours of freshman composition and three semester hours of literature.(see note 3)
   g. Two courses in laboratory science or mathematics.
   h. Two semesters of physical education activity and/or marching band and/or ROTC.(see note 4)
3. Complete the course numbered 232 in a foreign language.
4. Complete an Associate of Arts program of study as outlined in the bulletin.
5. No more than a total of 15 semester hours of correspondence and extension credit and/or credit by examination combined may be applied toward the degree.
6. Make application for the Associate of Arts degree and pay all designated fees.

Associate of Science Degree (A.S.)

1. Satisfy all admission conditions.
2. Meet the following minimum requirements:
   a. 30 semester hours in residence at Lamar University. Twelve semester hours of this minimum must be earned after May 1972, and after reaching sophomore classification.
   b. A grade point average of at least 2.0 on all work attempted.
   c. 60 semester hours not including required activity courses in health and physical education, marching band and/or ROTC.
   d. Six semester hours in political science.(see note 1)
   e. Six semester hours in American history.(see note 2)
   f. Nine semester hours in English (not to include English 137), including six semester hours of freshman composition and three semester hours of literature.(see note 3)
   g. Two courses in laboratory science or mathematics.
   h. Two semesters of physical education activity and/or marching band and/or ROTC.(see note 4)
3. Complete an Associate of Science program of study as outlined in the bulletin.

4. No more than a total of 15 semester hours of correspondence and extension credit and/or credit by examination combined may be applied toward the degree.
5. Make application for the Associate of Science degree and pay all designated fees.

Associate of Applied Science Degree (A.A.S.)

1. Satisfy all admission requirements.
2. Complete an approved degree plan.
3. Have at least a 2.0 grade point average on all work submitted on the degree plan and a 2.0 on all courses in the major field submitted on the degree plan.
4. Complete 24 semester hours of major work at Lamar with 12 hours in 200 level courses.
5. No more than a 15 semester hours of correspondence and/or extension credit may be applied toward the degree.
6. Make final application for graduation and pay all fees by the deadline date as stated in the current bulletin.

Second Associate Degree

When another associate degree is taken simultaneously, or has been taken previously, the second associate degree may be granted upon the completion of all required work for the second degree. A total of 15 semester hours above the number required for the degree having the greater semester hours requirements must be completed.

Degree Requirement Notes:

1. Texas law requires six hours in political science, which includes consideration of the U.S. Constitution and that of Texas. This shall normally be satisfied by completing Political Science 231 and 232 or other appropriate political science courses approved by the head of the Political Science Department. Three semester hours may be satisfied by an advanced standing examination.
2. Texas law requires six hours in American History. This normally shall be satisfied by completing two courses in the History 231-236 sequence or other appropriate history courses approved by the head of the History Department. Three semester hours may be satisfied by a course in Texas History or by an advanced standing examination.
3. A score of 36 on the Test for Standard Written English or satisfactory completion of the developmental English course (English 137) is a prerequisite to admission to English 131. Students who do not qualify for enrollment to English 131 classes through the application of these standards may petition the Board of Regents through the Office of the President for exemption from enrollment qualifications.
4. All full-time students must register for physical activity courses until they have met the requirement except as follows:
   a. Those with physical handicaps who have written exemptions from the University physician.
   b. Those who enroll in marching band and/or ROTC for four semesters.
   c. Those who are 25 or more years of age, at their option.
   d. Those veterans who have completed basic training in military service may be exempted from the freshman courses in physical education. Two semester courses at the sophomore level must be completed to meet graduation requirements.

Students exempt from the physical education requirements must submit elective hours approved by their major department in lieu of the requirement.

Graduation

Application for Graduation

Applications for graduation must be filed with the Office of Admissions and Records. The current University Calendar contains exact dates.

Before final approval of these applications, the following supplementary materials must be submitted:

1. Statements showing reasonable expectation of completion of degree requirements by graduation time.
2. Transcript showing grade point average of at least 2.0 on all courses taken and applied to meet degree requirements. A course is counted each time taken whether failed or passed.
3. Receipt showing payment of cap and gown and diploma fees.
4. Clearance of all financial and property matters to date.
5. Approval of the department sponsoring the student.

The application of a student lacking a grade point average of 2.0 on either overall or in the student's major field will be removed from the graduation list at the beginning of the semester.

If a student under such condition does complete all degree requirements, the student may apply for a statement of such completion and appear for the next graduation date.

The student is responsible for making the application, for securing official advisement about study plans for the last two semesters, and for checking compliance with all degree requirements with the Office of Admissions and Records.

Graduation Under a Particular Bulletin

A student normally is entitled to graduate under the degree provisions of the bulletin in effect at the time of the student's first completed semester of enrollment with these exceptions:

A bulletin more than seven years old shall not be used.

The program of the student who interrupts enrollment (for reasons other than involuntary military service) for more than one calendar year shall be governed by the bulletin in effect at the time of the student's re-entrance to the University. The student who interrupts enrollment for involuntary military service must re-enroll within one year from the date of separation from military service in order for this provision to apply. For these purposes, enrollment shall be defined as registration for and successful completion of at least one course during an academic term. A student forced to withdraw for adequate cause before completion of a course may petition for a waiver of this provision at the time of withdrawal.

The program of the student who changes major from one department to another within the University shall be governed by the degree requirements in effect at the time the change of major becomes effective.

At the discretion of the dean, the student will be required to comply with all changes in the curriculum made subsequent to the year in which the student is enrolled. Deletions and additions of courses will be of approximately equal credit so no student will have an overall appreciable increase of total credits required for graduation.

Any first-time college student who entered a junior college on or after September 1, 1968, can qualify, upon transfer to Lamar University, to graduate under the Lamar University bulletin in effect when the student entered the junior college if the core curriculum provisions of the Coordinating Board are followed. Students are subject to the requirement if they interrupt their studies for more than one calendar year at the junior college or before transfer to Lamar University, they must qualify for graduation under the bulletin in effect when they return to the junior college or enroll at Lamar University. This policy became effective for the year 1974-75.

Graduation Honors

To be designated as honor graduates, members of the graduating class must (1) have completed at least 60 semester hours at Lamar University for a four-year degree and 30 semester hours for a two-year degree, (2) have a grade point average of at least 3.5 for all course work attempted at Lamar as well as a 3.5 on the combination of work at Lamar and all attempted work at other institutions attended. A grade point average of 3.5 to 3.64 qualifies for "honors," 3.65 to 3.79 for "high honors" and 3.80 to 4.00 for "highest honors."

Grades made the semester of graduation are included in the calculation of grade point averages for honors. Recognition of honor graduates at the commencement exercises, however, will of necessity be limited to those who have the qualifying grade point average at the end of the semester or term preceding graduation. Both diplomas and permanent records indicate graduation honors.

Student Affairs

Counseling Center

Lamar University maintains a Counseling Center located in 116 Wimberly Student Services Building that offers a full range of services to students. In this central resource location, professional staff are available to provide educational, diagnostic and career testing; instruction for and access to individual computer-assisted career exploration; educational, personal, social, career, and vocational counseling; and assessment and referral to student development programs including those of Special Services and Learning Skills.
The center is staffed with a fully-licensed and qualified psychologist and licensed and certified counselors to assist in the resolution of student problems and questions.

While the Counseling Center does not address problems of a long-term therapeutic nature, students encountering difficulties are encouraged to consult the office on a no-charge basis. All contacts are maintained as confidential and there are no entries made in the student's records. In order to assist students in making decisions concerning choices of majors and careers, the Counseling Center maintains a computerized career information system SIGI, a computerized guidance system, and a career library.

The Center coordinates testing required by Lamar University and provides individual testing services for students. These services include the administration and interpretation of vocational interest and personality tests. The office also acts as a National Test Center for administration of the Graduate Record Examination, Law School Admission Test, Graduate Management Admission Test, Scholastic Aptitude Test (SAT), American College Testing Program (ACT), College Level Examination Program (CLEP), General Educational Development Test (High School Equivalency Test), the Miller's Analogies Test, and the Pre-Professional Skills Test. Information and application forms concerning these tests may be obtained from the Counseling Center.

Health Center

The University maintains a Health Center for use by Lamar students. Two types of service are available: (1) outpatient service care of illness or injury that do not require constant supervision, and (2) infirmary service for those in need of continued medical attention.

It is not possible for the University to provide unlimited medical service. Some routine laboratory test are available at the clinic at a reasonable cost. More extensive laboratory test and x-rays are available from private physicians if requested by Health Center Staff.

All drugs, splints, special bandages, as well as serums, vaccines, and gamma globulin, which may be prescribed in the Health Center are dispensed at prices equal to the cost assessed the University. Pre-admission vaccinations are not given. Emergency Room or other outside medical care is not the responsibility of of the University and is not offered by the Health Center. Any student who has a chronic illness or disability requiring continuing medical attention should make arrangements with a local private physician.

All students pay a Health Center fee of $5.00 up to five semester hours and then $1.00 for each additional hour up to a maximum of $15.00 for each Fall and Spring semester. During the Summer Sessions, $1.00 per semester hour is charged with a maximum of $10.00 required for each session.

When the University is not in session, the Student Health Center is not responsible for a student's health care.

Learning Skills Programs

The Office of Learning Skills Program is continually seeking to develop new programs and approaches to aid students in making the most of their college experience, and thus increase student retention.

Carefully selected and trained student counselors under the direct supervision of the Director of Learning Skills conduct a systematic instructional program and course designed to provide students with the opportunity to develop the kinds of skills necessary for satisfactory performance in college courses. This program is designed to serve all students—both the very able learners and students with potential academic problems. Any student, regardless of SAT or ACT score, high school rank, grade point average, or classification is eligible to take the course.

The Office of Learning Skills Programs also assists with new student orientation and with obtaining and evaluating assessment data for appropriate programs.

Students who desire more information should contact the Director of Learning Skills, Galloway Business Building, Room 102.

Placement Center

The Placement Center is a centralized operation responsible for placement activities for all colleges of the University. The Placement Center's services are available at no charge to students, faculty, staff and all former students. The Center keeps updated information on career fields and job areas, employers and the kind of employees being sought.

Interviews are scheduled regularly with companies, governmental agencies, schools and other employers.

The Center also offers student seminars pertaining to job search techniques, interviews, resume writing and job availability. The Placement Center is located in Room 102 of the Galloway Business Building.

Special Services Program

The Special Services Program, under the auspices of the Vice President for Administration, Personnel, and Student Affairs, is designed to provide support services for students who need academic counseling or other assistance to successfully complete their college education. The goal of the Program is to increase the retention and graduation rate of students who, by traditional academic measures, would have difficulty succeeding in college. There are also cultural and social activities and seminars included in the program to motivate and help students to learn to think more clearly and effectively in problem-solving situations.

The Special Services Program staff includes a career counselor to help with educational and vocational planning; a writing specialist to instruct and assist students who require supplementary help in that area; and a reading specialist to assist students who need help in reading and/or English. In addition, a Tutorial Coordinator supervises a student tutoring staff that is available to provide individualized assistance to program participants. Any student enrolled at Lamar University who is recognized as economically disadvantaged, a veteran or physically handicapped is eligible to receive tutoring and participate in the activities of the program.

The program operates in close cooperation with the Counseling Center, the Office of Student Development, and the Director of Learning Skills in order to deliver its services in the most efficient, effective, and pervasive manner.

The overall thrust of the program is to: (1) identify those students experiencing academic difficulty; (2) diagnose the difficulty; and, (3) and bring the total resources of the Special Services Program and the university to bear on a given student's problem.

The Special Services Program office is located on the second floor of the Education Building in Room 244, P.O. Box 10049, Lamar University, Beaumont, Texas 77710.

Religious Centers

Several denominations provide a full-time ministry to the campus and have established student centers adjacent to the campus.

In addition to credit Bible courses, the centers offer opportunities for worship, noncredit study and counseling to aid the student in developing a meaningful context for his university years.

Student Development Office

In the event of an emergency between the hours of 8:00 a.m. and 4:30 p.m., the Office of Student Development will attempt to locate a student on campus and/or to relay an emergency message to him or her.

Students may also request this office to notify faculty member(s) prior to or during an extended absence due to personal or family illness, accident, hospitalization, etc. This notification does not constitute an excused absence from class; however, it does advise the faculty member(s) as to the reason a student is absent and the expected date of his or her return.

Certain directory information on currently enrolled students is available in this office. Also students interested in leadership development programming should contact the Office of Student Development in 107 Wimberly Student Services Building.

Student Government Association

The Student Government Association serves as the representative voice of students; as a major facilitator of new and improved student services and programs; and in an important role relative to student judicial proceedings. All regularly enrolled Lamar University students are members of the Student Government Association which affords each student an opportunity to promote, support and participate in a well-rounded student life program.

The President and members of the Student Senate are named each spring in a general student election. The Vice President and Secretary-Treasurer are elected annually by the Student Senate which meets weekly. Student opinions may be expressed at the open meetings of the Senate, or ideas, suggestions, and/or concerns may be submitted through SGA suggestion boxes at various campus locations.

The Student Government Association offices are located in Room 211 of the Setzer Student Center and are staffed by three student officers and a full-time secretary.

Setzer Student Center

The Richard W. Setzer Student Center provides facilities for leisure-time recreation and is the campus center for many extracurricular activities. The Center includes an information center, two games areas, TV Rooms, check cashing/ticket sales, locker rental, music listening room, snack bar, graphics operations,reservations office, video lounge, a ballroom, a reading room, various meeting rooms and lounges, and The Redbird Perch, a pizza parlor and delicatessen operation. The Center houses the offices of the Setzer Student Center Council, Student Government Association, Recreational Sports, Student Organizations, Alpha Phi Omega, Student Publications and various staff members who work with these organizations and many others. Commercial businesses housed in the Center include the Lamar University Bookstore, the Roost Ice Cream Shop and a campus hair styling shop.

Setzer Student Center Council

The Setzer Student Center Council (SSCC) is the student organization responsible for providing the campus with a variety of programs and extracurricular activities, using the Center for the majority of its functions.

The SSCC is comprised of 12 committees: concert, performing arts, forum, contemporary film, classic film, coffeehouse, recreation, social, video tape, video tape productions, travel and homecoming. Students and members of the faculty and staff are urged to seek membership on these committees.

Student Organizations

More than 175 student organizations are currently active at Lamar and offer student membership opportunities in one or more of the service, professional, religious, mutual interest, honor, sorority, fraternity, spirit, sports or activity groups. Participation in student organization activity enhances the education of students, who are strongly encouraged to affiliate with the organization(s) of their choice and participate in the programs.

Recreational Sports

All faculty, staff and currently enrolled students with a valid Lamar ID card have access to the recreational facilities and may participate in the wide variety of activities that are offered. The Recreational Sports Office is responsible for organizing the activities which are arranged into three different levels of involvement and competition.

The Recreation Program offers the use of the University's facilities for free time recreation. Published schedules and reservations allow the student, faculty or staff member to exercise and enjoy competition with friends at a leisurely pace. Sports equipment is available to be checked out for overnight and weekend excursions or club activities.

The Intramural Program provides an opportunity to participate in supervised, competitive sports between groups within the University community. Persons not involved in varsity athletics are given further opportunity to develop skills learned at the high school level. Organizations may place teams in the All-Sports Division, which consists of competition in 22 different sports, or choose the Independent Division in which specialization in one or more sports may be chosen. The stated purpose of the Intramural Program is to promote human understanding, fair play and behavioral control through the inter-relationships occuring in athletic competition.

Sports Club are made up of individuals interested in a specific sport and seek competition beyond the boundaries of the University. Further information on any facet of the Recreational Sports Program may be obtained from the Recreational Sports Office, room 212 of the Setzer Student Center.

Publications

University student publications include the *University Press*, a student newspaper published twice a week during the long terms and the *Cardinal*, a full-feature magazine published once a semester.

Offices for the *University Press* and the *Cardinal*, both of which serve as training opportunities for students interested in journalism, are at 200 Setzer Student Center.

The *Student Handbook* sets forth University policies and procedures relative to student conduct, rights and responsibilities. It is available at registration and at other times in 107 Wimberly Student Services Building or 212 Setzer Student Center. It is the responsibility of each student to obtain and read this publication. The *Student Directory* — containing a listing of the names, addresses and telephone numbers of students, faculty and administrators—is also available in the Setzer Student Center. Students should contact the Office of Admissions and Records to complete a form if they wish not to be listed in the *Student Directory*.

Eligibility for Extracurricular Activities

An extracurricular activity is understood to be any activity representing the student body, any student organization, any department or division organization or any general activity representing the University.

Any full-time student not on disciplinary or scholastic probation, who is regularly registered, is eligible to become a candidate and/or to hold student office or to represent the University in any extracurricular activity provided such student has a grade point average of at least 2.0 for both the total of college work completed at Lamar and that of the preceding semester.

For the purpose of establishing eligibility, two six-week summer terms may count as one semester.

Transfer students have the same eligibility as freshman students until completion of one semester.

Eligibility for Intercollegiate Athletics for Men and Women

A high school graduate with a minimum 2.00 G.P.A. from high school, who is registered for a minimum 12 semester hours is immediately eligible for intercollegiate athletics at Lamar.

Regulations for the Southland Conference, the Southland Women's Conference, and the National Collegiate Athletic Association, each of which Lamar University is a member, require the following for eligibility in years subsequent to the first academic year in residence: (1) satisfactory completion of a minimum 24 semester hours of the academic credit required for a baccalaurate degree in a designated program of studies since the beginning of the student athlete's last season of completion; or (2) satisfactory completion of degree credit which averages at least 12 semester hours during each of the previous semesters enrolled; (3) a minimum 1.6 G.P.A. must be maintained; hours earned in summer school may be utilized to satisfy requirements in sub-paragraph (1).

For additional details on eligibility for intercollegiate athletics for men and women the student should contact the Director of Athletics.

Student Conduct

In order to meet its educational objectives, an institution of higher learning must expect rational, mature behavior from its constituency. To accept anything less is to invite the destruction of not only academic freedom, but the system of higher education itself.

Student discipline at Lamar is based on an educational philosophy of helping students grow and mature into responsible citizens. When a student behaves in a manner which might require disciplinary action, a careful investigation of all facts is made and the student afforded every opportunity to assist in arriving at just and equitable decisions. Counseling, conferences with parents and/or instructors, conferences with peer groups and other techniques as may seem appropriate, may be employed in making discipline an educational experience.

Hazing

Hazing is prohibited in state educational institutions by the Texas Education Code, Section 4.19. Students of Lamar University are forbidden to engage in, encourage, aid, or assist any person(s) participating in what is commonly known and recognized as hazing. Any student who does so will be subject to university disciplinary action and might also expect to be dealt with by civil authority. Refer to the **Student Handbook** for more specific definitions and information relative to the legal implications of hazing.

Penalty for False Statements

A student who provides false information or makes false statements to any university official or office or on an official form submitted to the university is subject to immediate dismissal.

Official Summons

An official summons takes precedence over other university activities of the student and should be answered promptly on the day and hour designated. Failure to heed an official summons may subject the student to serious disciplinary action.

Student Debts

The University is not responsible for debts contracted by individual students or student organizations and will not act as a collection agency for organizations, firms or individuals to whom students may owe bills.

Students and student organizations are expected to honor contractual obligations promptly, but in case of flagrant disregard of such obligations the Vice President for Student Affairs or his designated representative will take appropriate action.

Failure to pay all University fees by the specified date will result in suspension through the 12th week in the long semester and the 4th week in the summer term. After the 12th week in the long semester and the 4th week in the summer term failure to pay all fees by the specified date will result in suspension at the end of the current semester and may include: a) denial of readmission; b) withholding of grades and transcripts; c) withholding of degree.

Disciplinary Action

A student is subject to disciplinary action for unacceptable behavior, as outlined in the *Student Handbook* under "Student Conduct and University Discipline." The Dean of Students may classify behavior as unacceptable and may refer the case to the proper judicial body for investigation and decision. The student has the privilege of appealing the decision to the University Discipline Committee. This appeal is made through the Office of the Dean of Students and the action of the University Discipline Committee is subject to review by the Vice-President for Student Affairs.

Parking Regulations

Each student who pays the necessary fee is issued a car decal which permits parking on the campus. This decal is numbered and is to be displayed as instructed in official parking and traffic regulations, which are issued when automobiles are registered. Strict observance of traffic and parking regulations is necessary for the safe, orderly flow of vehicles in the campus area.

Student Housing

The student housing program is designed to supplement the academic program by providing opportunities for social and intellectual development and recreation in a pleasant living environment. A variety of living styles, designed with most of the conveniences of an apartment and all the advantages of campus living, include semi-private rooms, modern furniture, carpet, central heating and air conditioning. Residence hall staff assist with programs and serve as advisors and counselors to the residents.

It is recommended that freshmen who do not live with parents or other relatives reside on the campus since the adjustment from high school to college frequently is difficult for the first-year student. In a residence hall, students have easy access to the library, to contacts with upperclassmen in their major fields and to professional counseling.

Students who do not feel the residence hall program meets their personal needs may elect to find living accommodations off-campus.

Applications

To apply for a room in a University residence hall, contact the Housing Office. A check or money order for $50 must accompany the application. Contracts will be sent to applicants as rooms become available. The contract must be signed and returned with a $150 payment to be applied to the Fall semester room rent. Failure to do so by July 15 will result in a cancellation of the room reservation by the university housing office. If the student cancels the reservation on or before July 15, the $150 pre-payment will be refunded. No refunds will be issued on cancellations received after this date.

All unclaimed rooms will be declared vacant and the deposit forfeited at 6 p.m. on the first day of regular registration unless the student gives the Housing Office sufficient notice to hold the room for a longer period. Residents will receive deposit refunds, less any breakage or cleaning charges, at the end of a semester on proper withdrawal from the housing unit. The deposit will not be refunded if the student moves from the housing system before the end of a semester, and a penalty will be charged as stated in the housing contract.

Assignments

Permanent assignments cannot be made until the student reports for check-in. The University reserves the right to assign students to specific residence halls and rooms. The University also reserves the right to consolidate residents in order to achieve maximum utilization of facilities. Students may request certain residence halls and rooms, and consideration will be given each request. However, all assignments are made based on the date of deposit.

Dining Halls

Dining halls are located on Redbird Lane, in Brooks-Shivers Hall, and adjacent to Stadium Hall. Snack bars, located in the Setzer Student Center and Beeson Technical Arts

Building, provide sandwiches, soft drinks and light lunches. Commuter students may also use the dining halls. A schedule of serving hours may be obtained from the Housing Office.

All resident students are required to be on a University Board Plan.

Fees

Room and Board fees may be paid in one, two or three installments as outlined on the schedule furnished by the Housing Office. Statements will not be mailed to students or parents and a $10 late fine plus $1.00 per day will be charged for failure to comply with the established schedule. Failure to pay all University fees by the specified date will result in suspension through the 12th week in the long semester and the 4th week in the summer term. After the 12th week in the long semester and the 4th week in the summer term failure to pay all fees by the specified date will result in suspension at the end of the current semester and may include; a) denial of readmission; b) withholding of grades and transcripts; c) withholding of degree.

For additional information and application forms, write: University Housing Office, Lamar University Station, Box 10041, Beaumont, Texas 77710.

Residence Hall Association

The Lamar Residence Hall Association is the umbrella organization for individual residence hall councils and provides a voice for campus residents. The RHA is also the activity programming body for the residence halls. Social, educational and service programs are designed to enhance the quality of life in the residence halls. Every resident student is an automatic member of the RHA and is encouraged to participate in its programs and activities.

College of Arts and Sciences

Departments: Biology; Chemistry; English and Foreign Languages; Geology; History; Military Science; Physics; Political Science; Sociology, Social Work and Criminal Justice

John P. Idoux, Ph.D. Dean

Joseph C. Lambert, Director of Honors Program

Christopher P. Baker, Director of Advising Center

Jeanne Beard, Adjunct Advisor, Advising Center

Dana Grayson, Adjunct Advisor, Advising Center

Organization and Function

The College of Arts and Sciences, the largest academic unit in the University, was formed in 1982 by merger of the College of Liberal Arts and the College of Sciences. The College enrolls approximately twenty-five percent of the University's undergraduate students, provides most of the general education foundation courses for all of the University's majors and, in the finest tradition of the liberal arts and sciences, serves a vital academic leadership role within the University.

In keeping with the aims and goals of Lamar University, the College of Arts and Sciences is responsible for programs in the Humanities (English, history, modern languages, philosophy), the Natural Sciences (biology, chemistry, geology, physics) and the Social Sciences (anthropology, political science, sociology and allied areas). Through its Departments of Biology, Chemistry, English and Foreign Languages, Geology, History, Military Science, Physics, Political Science, and Sociology, Social Work and Criminal Justice, the College offers more than forty baccalaureate and graduate programs in these areas. In addition, through an approved program of study, a provisional secondary teaching certificate may be obtained in a particular Arts and Sciences discipline. The College also offers a Bachelor of General Studies—Liberal Arts degree, provides pre-professional programs in pre-law and in those primary health care delivery areas which lead to further study in schools of dentistry, medicine, optometry, pharmacy, physical or occupational therapy, podiatry and veterinary medicine, and is responsible for the organization and supervision of the University's Honors Program.

In addition to providing strong academic degree programs in the areas described above, the College of Arts and Sciences offers a wide selection of courses designed to complement the programs of the other colleges of the University. Those offerings include most of the courses necessary to satisfy the University's general education requirements for all undergraduate students, the Honors courses and a variety of religious education courses.

The Liberal Arts and Sciences

Like other areas of study, the disciplines represented by the Arts and Sciences prepare a student for advanced study and research, for a career in business, industry, government service or teaching or for study in a professional field. In addition, however, the very nature of the Arts and Sciences disciplines not only trains the mind and sharpens the intellect but also provides an experience designed to encourage life-long learning. It is a *liberating* experience which enables one to acquire the skills and knowledge to think critically, examine values and principles, broaden perspectives and to understand the individual and the relationship among the individual, our natural environment and our society. Thus, specialization in one or more of the Arts and Sciences disciplines provides the opportunity for this experience and the prelude to a career.

Degree Offerings

Bachelor of Arts with majors in the following fields:

- Chemistry
- English
- French
- History
- Political Science
- Sociology
- Spanish

Bachelor of General Studies—Liberal Arts

Bachelor of Science with majors in the following fields:

- Biology
- Chemistry
- Criminal Justice
- Energy Resources Management
- Environmental Science
- Geology
- Medical Technology
- Oceanographic Technology
- Physics
- Political Science
- Sociology

Bachelor of Social Work

Associate of Science in Law Enforcement

Graduate programs are offered in biology, chemistry, English, history, political science and public administration. The Department of Geology, the Department of Physics and the Sociology Program offer graduate courses in support of other advanced degree programs. Further information may be obtained from the Graduate Catalog or by contacting the appropriate academic department.

Minimum Standards for Undergraduate Majors in the College of Arts and Sciences

A student enrolled as a major in the College of Arts and Sciences (including undecided majors) must fulfill all University degree requirements, including those for general education, as well as the particular requirements set forth by the department for an area of specialization. Students are expected to make acceptable progress toward their degree objectives and are expected to work closely and carefully with their academic advisor. Students who initially enter the College as an undecided major will generally be required to select a major before the beginning of their third semester in the College.

Students majoring in one of the programs in the College of Arts and Sciences (including undecided majors) who accumulate a grade point deficiency of 25 or more grade points by the beginning of a fall or spring semester will be suspended for that semester. Students returning from an academic suspension must reduce their grade point deficiency every semester of enrollment until the deficiency is eliminated. Failure to reduce the deficiency in any one semester will result in a second suspension of two long semesters. A third suspension will result in exclusion as a major in the College of Arts and Sciences.

Students suspended from fall and/or spring semesters may attend a summer session. If the grade point deficiency is less than 25 at the close of the summer session, the student may enroll for the following fall semester but will be charged with a suspension.

Upon recommendation of the Department Head and approval of the Dean of the College, exceptions to the above policy will be considered for:

1. A student whose unsatisfactory work includes an I grade and whose grade point deficiency is less than 25 grade points if calculated without the I.
2. A student who compiles exactly a 2.0 GPA after returning from a suspension.
3. A student in good standing (2.0 or greater GPA) who accumulates a grade point deficiency of 25 or more grade points in one semester.
4. A first time in college student at the end of his/her first semester of attendance.

Honors Program

Director: Joseph C. Lambert

The Lamar University Honors Program is an enriched program offering a variety of courses designed specifically for qualified and highly motivated students. Honors courses are not necessarily more difficult than regular courses, but they are more challenging and more creative. The classes are always small, and the instructor has ample opportunity to present course material to a select group of good students in a very interpretive and analytical fashion. Honors courses make learning a genuine pleasure. Although the program is admin-

istered through the Dean's office of the College of Arts and Sciences, qualified students working toward an approved baccalaureate degree in any of the colleges may participate. Normally, some scholarships are available to qualified students who enroll in the program. In order to be admitted to the Honors Program, entering freshmen must have a score of at least 1000 on the SAT. College students participating in the program must maintain a 3.1 overall grade point average. The benefits of participating in the Honors Program are several: there is the prestige of having been selected for an accelerated academic program; there is the possibility of winning a commencement award given to the graduating senior with the highest grade point average who participated in the Honors Program; and, most importantly, there are the additional learning opportunities afforded those enrolled in Honors courses.

Within the College of Arts and Sciences, the Honors Program currently includes special courses in sophomore literature (Eng 2318 and Eng 2319) special honors sections in sophomore government (Pols 231H and Pols 232H), special honors sections of American history (His 231H and His 232H), special honors sections of general Biology (Bio 141H and Bio 142H), a special honors section of general chemistry (Chm 142H) and two advanced, interdisciplinary courses especially designed for the program (Hon 331 and Hon 431). Plans are to expand the program to include 100 and 200 level Honors course offerings in psychology, sociology, economics and computer science.

Honors Courses (Hon)

331 Honors Seminar I 3:3:0

An interdisciplinary course designed for the Honors Program. The content depends upon the combination of disciplines involved.

May be repeated for credit when topic varies.

431 Honors Seminar 3:3:0

An interdisciplinary course designed for the Honors Program. The content depends upon the combination of disciplines involved.

May be repeated for credit when topic varies.

Bachelor of General Studies—Liberal Arts

Advisor: Christopher P. Baker

The Bachelor of General Studies-Liberal Arts degree is designed for those students who have already established careers and who wish to earn credit toward a degree while learning for the pleasure of learning.

The Bachelor of General Studies—Liberal Arts will be granted upon the completion of the General Degree Requirements of the University plus a major in liberal arts of 36 semester hours, including 18 advanced, over and above the liberal arts courses specified in the General Degree Requirements. For purposes of establishing what courses may be applied toward the liberal arts major, liberal arts courses shall be defined as those offered by the programs in anthropology, economics, English, history, modern languages, philosophy, political science, psychology and sociology. Course selection is subject to the approval of the program advisor.

At least 30 semester hours of the work applied toward this degree must be completed after June 1, 1976.

Pre—Professional Programs

The College of Arts and Sciences offers pre-professional programs for students planning careers in law or in one of the primary health care delivery areas — dentistry, medicine, optometry, pharmacy, physical or occupational therapy, physician's assistant, podiatry and veterinary medicine. Other programs associated with the health-related professions (i.e., the allied health sciences) are administered through the College of Health and Behavioral Sciences.

Pre—Law

For admission to law school a student needs a baccalaureate degree, a high grade point average, and a good score on the Law School Aptitude Test (LSAT). According to the Association of American Law Schools, skills appropriate to the legal profession which can be acquired in undergraduate education are these: comprehension and expression in words, critical understanding of human institutions and values with which the law deals, and creative power of thinking. Therefore, a broad education obtainable in a liberal arts program is excellent preparation for admission to law schools.

The pre-law programs are administered by pre-law advisors within the student's major department. Pre-law students should work closely with the appropriate advisor in planning an undergraduate curriculum and in eventually making application to law schools. One aspect of the application process is the Law School Aptitude Test (LSAT) which law schools require to be taken prior to consideration for admission.

Pre—Clinical Programs in Physical Therapy, Occupational Therapy and Physican's Assistant

Advisor: Michael E. Warren

The pre-clinical programs in physical therapy, occupational therapy and physician's assistant are administered by the Department of Biology. The specific programs of study are listed in that department. Further information may be obtained by contacting the advisor.

Pre—Dental and Pre—Medical Programs

Advisor: Keith C. Hansen

The Pre-Professional Advisory Committee for the Health Professions, chaired by the Head of the Chemistry Department, was created as a service to all students preparing for and seeking admission to professional schools of dentistry, medicine, optometry, podiatry and veterinary medicine. The services provided include basic advising and counseling in preprofessional matters, academic advising, information on professional school application procedures and providing composite evaluative information on the student to professional schools. It is extremely important that preprofessional students work closely with the program advisor from the time they initiate their studies at the University.

Admission to health professional schools is highly competitive and, in general, the most competitive applicants will have credentials which significantly exceed the stated admissions requirements. For example, while many dental and medical schools may have stated requirements of only two to three years of college preparation, greater than 90 percent of the students actually accepted will have had four years of college. Thus, since "pre-dent" or "pre-med" studies do not lead to a degree, such students should pursue a degree granting program. The student is then not only a more competitive professional school applicant but has also prepared for an alternate career should admission to a professional school not be possible. Any degree granting program at the University may be chosen as a major; however, programs within the sciences are generally the most appropriate as their required curriculum contain many of the courses also required for professional school admission. In addition, careful use of elective hours in the curricula will allow for the selection of other appropriate preprofessional courses.

Various standardized examinations are required as a part of the admissions process to professional schools (dentistry—DAT; medicine and podiatry—MCAT; optometry—OCAT; veterinary medicine—MCAT). Students should consult with the program advisor concerning preparation for a particular examination and the appropriate time at which the examination should be taken.

Pre—Pharmacy

Advisor: Anne Harmon

Professional training in pharmacy is offered at three institutions in Texas — the University of Houston, the University of Texas and Texas Southern University. All require a

minimum of two years of pre-pharmacy training; however, the minimum entrance requirements differ among the institutions and exceptions are seldom granted. Thus, students should work closely and carefully with the pre-pharmacy advisor in planning their curricula.

All Colleges of Pharmacy in Texas require submission of test scores on the Pharmacy College Admissions Test (PCAT).

Professional Programs

The Arts and Sciences departments offer approved programs which enable students to secure the bachelors degree in one of the Arts and Sciences and at the same time certify for a provisional certificate secondary with teaching field in that Arts and Sciences discipline.

An Army officer commission is available through the Reserve Officer Training Corps (ROTC) program. A complete description of the program may be found under the Department of Military Science.

The Department of Sociology, Social Work, and Criminal Justice offers approved programs to prepare the student for public service in the areas of criminal justice and social work. The student may earn a Bachelor of Science in Criminal Justice, a Bachelor of Social Work, or an Associate of Science in Law Enforcement.

Career Counseling—Liberal Arts

The Departments of English and Foreign Languages, History, Political Science, and Sociology, Social Work and Criminal Justice each have two or more faculty members who specialize in career counseling. One counselor specializes in counseling students who will attend professional graduate schools. Other counselors specialize in counseling for careers in business, industry and social services.

The Career Counselors have developed lists of career support courses, based on current information about the job market. They can suggest patterns of courses, both electives and minors, that are likely to provide advantages for the Liberal Arts graduate in various types of career pursuits. Numerous materials are available to help students prepare themselves for choosing possible career goals and for entering the job market.

Cooperative Education Program

A cooperative (COOP) Education Program in which the student spends alternate terms at work and at study is offered to qualified students in the Departments of Chemistry and Physics. This program is coordinated by the Director of Cooperative Education, and students may contact that office or the individual departments for further information.

Courses in Bible and Religious Education

Instructors: Chatham, Eckstein, Maness

These courses are provided by church related sources. If credit is desired, the fees are payable to the University. A maximum of 12 semester hours is allowed with the approval of the student's academic dean.

Bible Courses (Bib)

131 Survey of the Old Testament 3:3:0
A critical study of the Old Testament and its relevance to Western culture.

132 Survey of the New Testament 3:3:0
A critical study of the New Testament, its historical context and the beginnings of the Christian Church.

133 New Testament: Gospels 3:3:0
A critical study of the Gospels, the person and work of Jesus of Nazareth.

134 New Testament: Paul 3:3:0
A study of the life and ministry of St. Paul and the major portion of the Pauline letters.

135 Introduction to Christian Thought 3:3:0
A course designed to acquaint the student with the major concepts of the Christian faith: to explore their Biblical basis and their relevance for the present day.

212 Current Issues in Religion 1:1:0
An interpretation of religious events through the reading of current religious and secular periodicals.

231 Church History 3:3:0
The history of the Christian Church, including the General Councils, the missionary movements, the Reformation and the transition to the modern scene.

232 Christian Ethics 3:3:0
The relation of the Christian Faith to daily living, with particular emphasis on vocation, courtship and marriage, the person and society.

233 Old Testament: Prophets 3:3:0
A study of the major and minor prophets and the role they played in the development of the religion of Israel.

314 Thematic Approach to Religion 1:1:0
A critical study of significant ideas or writings in religion.

324 Thematic Approach to Religion 2:2:0
A critical study of significant ideas or writings in religion.

331 Philosophy of Religion 3:3:0
Planned to describe the points of view in religious philosophy which are of vigorous contemporary influence and to analyze the basic issues between them, including a study of religion as such, its historical development and some emphasis on major contemporary religions.

232 Major Themes of the Bible 3:3:0
Planned to present Biblical concepts of God, man, history, covenant, prophecy, vocation and related ideas.

333 Comparative Religion 3:3:0
A comparative study of the world's major religions, e.g. Judaism, Christianity, Islam, Hinduism, Buddaism.

334 Thematic Approach to Religion 3:3:0
A critical study of significant ideas or writings in religion.

Department of Biology

Department Head: Michael E. Warren **101 Hayes Building**

Professors: Harrel, McGraw, Ramsey, Turco, Warren

Associate Professors: Malnassy, Runnels

Assistant Professors: Bechler, Bryan, Carley, Haiduk, Hunt, Sullivan

Adjunct Professor: Johnson

A student majoring in one of the three Baccalaureate degrees offered by the department of Biology (Biology, Medical Technology, Oceanographic Technology) quickly understands that the biological sciences have foundations in the supporting sciences of chemistry, physics and mathematics.

The Biology program is committed to the laboratory approach to science. Students completing the Biology core will have been exposed to all major areas of Biology and still be allowed the freedom to concentrate on an area of special interest within the major. There are also sufficient hours of free electives so that a Biology major could obtain secondary teaching certification simultaneously. The faculty is housed in the Hayes Biology building and in the Science Auditorium. Field based study is also available at the Dujay Sanctuary in the Big Thicket and at the Marine Station at Pleasure Island, near Port Arthur.

The areas of expertise and research interests of the faculty include Behavior, Plant and General Physiology, Cell Biology, Ecology, Limnology, Cytogenetics, Microbiology, Epidemiology, Ornithology, Oceanography, Parasitology, Entomology, Epidemiology, Invertebrate Biology as well as Biology of Fish, Reptiles, and Mammals.

Bachelor of Science—Biology Major

As the study of life, Biology requires a thorough understanding of the underlying chemical and physical principles governing all life processes. Lamar students attracted to this field are well equipped to enter the professions of medicine, dentistry, etc., or one of the other areas listed below in this section. Students are equally prepared for environmentally related careers in various governmental agencies or private companies. A career file is maintained in 101 Hayes Biology building to acquaint students with the far ranging career possibilities. Students interested in further education leading to an advanced degree in biology are also well prepared. Those interested in teaching should consult that section below.

The degree of Bachelor of Science in Biology will be awarded upon the completion of the following requirements:

A. General Requirements:
English Composition—six semester hours
Sophomore English Literature—six semester hours
Mathematics—two courses to include calculus
Sophomore American History—six semester hours
Political Science-American Government—six semester hours
Physical Activity, Marching Band, or ROTC—four semesters
Laboratory Science-Biology 141-142—eight semester hours

B. Major:
Core courses, see list below—twenty semester hours
Biology electives—twelve semester hours
Biology 416, 417 Literature—two semester hours

C. Supporting Sciences:
General Chemistry—eight semester hours
Organic Chemistry—eight semester hours
General Physics—eight semester hours
Biochemistry or Cell Physiology—three or four semester hours
Statistics—four semester hours

D. Electives:
Sufficient electives to complete a total of 140 semester hours. (134 academic hours plus 6 hours in PE, ROTC, or MLB)

Recommended Program of Study

First Year

Eng 131	3
Eng Composition	3
Bio 141, 142 General	8
Chm 141, 142 General	8
Mth 1335 Precalculus or 236	3
Mth 236 Calculus or 237	3
Electives	4
PE/MLb 124***/ROTC 2 sem	2 or 4
	34-36

Second Year

Soph Eng Literature	6
Chm 341, 342 Organic	8
Phy 141, 142 General	8
**Bio selected from core	12
PE/MLb 124***/ROTC 2 sem	2 or 4
	34-36

Third Year

POLS 231-232	6
Electives	7
Psy 241 Statistics	4
**Bio selected from core	8
Bio Elective	8
Chem 441 or Bio 4302	3 or 4
	36-37

Fourth Year

Bio 416, 417 Bio Lit	2
Bio Electives	4
Electives	18
Soph Am His.	6
	30

Teacher Certification—Biology

Students wishing to obtain the Bachelor of Science degree in Biology and simultaneously certify in Biology for a provisional certificate-Secondary, must include the following in their degree plan:

1. C&I 331, 332, 338, 438, and 462.
2. Obtain 24 semester hours in additional teaching field (see College of Education section in this Bulletin).

***The following courses must be included in the Biology Core: Bio 243 or 245, Microbiology; Bio 346, Invertbrate Zoology; Bio 345, Botany; Bio 240 or 444, Comparative Anatomy or Vertbrate Natural History; Bio 347, Genetics.*
****Offered Fall Semester only. If MLb 124 option is desired it should be added to third and fourth year, as four semesters are required.*

*Bachelor of Science in Psychology

*Bachelor of Science in Biology

First Year

Bio 141, 142 General	8
Chm 141, 142 General	8
Eng Composition	6
Mth 1335 Precalculus	3
Psy 131 Intro to Psy	3
Psy 241 Intro to Stat Meth	4
PE Activity	2-4
	34-36

Second Year

Chm 341, 342 Organic	8
Bio 240 Comparative Anatomy or 444 Vert Nat Hist	4
Bio 245 or 243 Microbiology	4
Psy 342 Methods	4
Eng Soph Literature	6
Mth 236 Calculus I	3
Mth 237 Calculus II or CS 131	3
***Psy Advanced	3
	35

Summer

Pols	6
PE Activity	2-4
Electives	6
	14-16

Third Year

Soph Am His	6
Phy 141, 142 General	8
Bio 347 Genetics	4
Bio 345 Botany	4
Psy 443 Experimental Psy	4
***Psy Advanced	9
	35

Fourth Year

Bio 346 Invert Zool	4
Bio 416-417 Bio Literature	2
**Bio Electives	12
***Psy Advanced	6
Electives	13
	37

*Both degrees must be awarded simultaneously.
Biology Electives chosen from Bio 342, 344, 446, 447.
***Advanced Psychology Electives: Group I (choose any three): Psy 331, 332, 333, 432; Group II (choose any three): Psy 336, 431, 436, 438.

†Bachelor of Science in Biology

†Bachelor of Science in Chemistry

First Year

Bio 141-142 General	8
Chm 141-142 General	8
Eng Composition	6
Mth 1335 Precalculus	3
Mth 236 Calculus	3
PE/MLb 124**/ROTC	2-4
Electives	6
	36-38

Second Year

Chm 341-342 Organic	8
Mth 237 Calculus	3
Eng Literature	6
Phy 141-142 General	8
Bio Elective	4
POLS 231-232	6
PE/MLb 124**/ROTC	2-4
	37-39

Summer

Phy 335 Modern	3
***Bio Elective from Core	4
Chm 241 Quantitative	4
Electives	3
	14

Third Year

Bio selected from core***	16
Soph Am His	4
Chem 413,414 Physical Lab	2
Chm 333 Inorganic	3
Chm 431,432 Physical	6
Electives	3
	36

Fourth Year

Bio 416 and 417 Bio Lit	2
Bio Electives	8
Chm 441 Biochem	4
Chm Electives* min	8
Electives	10
	32

Both degrees must be awarded simultaneously.
Biology electives to be chosen from Bio 244, 341, 342, 344, 447.
**Chemistry electives to be selected from Chm 430, 436, 442, 444, 446.*
***Offered Fall Semester only. If MLb 124 option is desired it should be added to third and fourth year as four semesters are required.*
****The following courses must be included in the Biology Core: Bio 245 or 243, Microbiology; Bio 346, Invertebrate Zoology; Bio 345; Botany; Bio 240 or 444, Comparative Anatomy or Vertebrate Natural History; Bio 347, Genetics.*

Bachelor of Science—Medical Technology

Major Advisor: M.D. Hunt 205-12 Hayes

The medical technologist performs the laboratory tests required by physicians in order to properly diagnose and treat patients; most technologists find employment in hospitals, clinics, or blood banks. Medical product manufacturers and medical technical sales account for an increasing percent of career opportunities for Medical Technologists.

A. General Requirements:
English Composition—six semester hours
English Literature—six semester hours
Mathematics—six semester hours to include Mth 1334 & 1335
Sophomore American History—six semester hours
Sophomore Political Science-American Government—six semester hours
Physical Activity, Marching Band, or ROTC—four semesters
Laboratory Science-Biology 141-142—eight semester hours

B. Multidisciplinary Major:
Biology: 141-142 General, 243 Microbiology, 224 Disease & Immunity; 344 Advanced Physiology, 441 Parasitology, 340 Diagnostic Microbiology
Chemistry: 141-142 General, 341-342 Organic, 241 Quantitative
Physics: 141-142 General

C. Electives:
14 semester hours to total 104-106 semester hours, plus one year internship. See below:

Recommended Program of Study

First Year

Eng 13	3
Eng Composition	3
Bio 141, 142 General	8
Chm 141, 142 General	8
Mth 1334 Algebra	3
Mth 1335 Precalculus	3
Electives	4
PE/MLb 124***/ROTC 2 sem	2 or 4
	34-36

Second Year

Eng Literature	6
Bio 243-244 Microbiology	8
Chm 341-342 Organic	8
Phy 141-142 General	8
PE/MLb 124*/ROTC	2 or 4
	32-34

Third Year

Bio 344 Adv Physiology	4
Bio 340 Diagnostic Microbiology	4
Chm 241 Quantitative	4
Soph Am His	6
Bio 441 Parasitology	4
**Electives	8
POLS 231-232	6
	36

**Offered Fall Semester only. If MLb 124 option is desired it should be added to third and fourth year, as four semesters are required.*
***Suggested Electives: Statistics, Genetics, Psychology, Epidemiology, Computer Science, in order of preference.*

Fourth Year Clinical Training

All the above requirements for the degree must be met before a student may be admitted to clinical training, 12 consecutive months at a hospital laboratory approved for teaching by the Council on Medical Education and Hospitals of the AMA. After satisfactorily completing this training, the student is awarded the degree of Bachelor of Science Medical Technology.

The Program shown will fulfill Registry requirements.

Physical Therapy

Major Advisor: M.E. Warren 101 Hayes

Physical therapists aid in testing and evaluation of patients, then lead the patient through activities to restore health to various impaired bodily functions of the nervous, muscular, bone and joint systems, restore the range of muscle strength, endurance and improve joint motion. Physical therapists are employed by hospitals, physicians and clinics, or may be self-employed.

First Year

Eng 131	3
Eng Composition	3
Bio 141-142 General	8
Chm 141-142 General	8
Mth 1335 Precalc(or Mth 1312-Trig)	3
Psy 131 Introduction	3
Electives*	6
	34

Second Year

Physics 141-142	8
Sociology 131	3
Speech	3
Bio 344 Adv Physiology	4
Psy 241 Statistics	4
His 231-232	6
POLS 231-232	6
	34

Third Year

Bio 240 Comparative	4
Eng Literature	3
Psy 234 Child	3
Psy 337 Adjustment	3
Psy 432 Abnormal	3
Electives minimum*	10
	26

**Electives should be chosen from Sociology, Psychology, Economics, etc.*

The first two years of the program above will satisfy the minimum requirements for the University of Texas Medical Branch at Galveston. Their program calls for an additional two years of clinical work for the BS degree. The three years of preparatory work will meet the requirement of the University of Texas Health Science Center at Dallas. Their program requires one year of clinical work for the BS degree. PE, etc., does not count toward the semester hour requirement. Acceptance to the clinical program is on a competitive basis. Clinical experience is required for the Galveston program.

Occupational Therapy

Major Advisor: M.E. Warren 101 Hayes

Occupational therapists aid their patients who are physically injured through accident, illness, or through psychological disability. The aim of the therapy is to rehabilitate the patient through application of splints, prostheses, or directed occupational pursuits to maximize and extend the patient's fine motor abilities. Occupational therapists are employed by hospitals, schools, and retirement homes.

First Year		Second Year	
Eng 131	3	Eng Lit	3
Eng Composition	3	Speech	3
Bio 141-142 General	8	His 231-232 United States	6
Chm 141 General	4	POLS 231-232	6
Psy 131	3	Soc	3
Mth or psychology statistics	3	Electives	6
Psychology	3	Bio 143 Anatomy & Physiology	4
Electives	4		
	31		31

Plus two years clinical affiliation

*Social Psychology recommended.

Physician's Assistant

Major Advisor: M.E. Warren 101 Hayes

The physician's assistant is under the supervision and responsibility of a physician, performing duties which extend the ability of the physician to provide adequate health care. Such duties include taking a medical history, routine physical exams, and other such duties which the physician may assign.

First year same as first year Physical Therapy.

Second year same as second year Occupational Therapy.
Plus two years clinical affiliation

Note: Lamar University provides only the pre-clinical years for the above three programs, changes in program requirements are under the control of the schools offering the clinical programs. For detailed course requirements contact the faculty advisor in Hayes 101.

Bachelor of Science—Oceanographic Technology

Major Advisor: W.C. Runnels 205-8 Hayes

The Ocean Sciences hold great promise for the future. The oceans are highly complex systems; their study requires a multidisciplinary approach to fully explore and utilize the ocean's untapped potential. This will be necessary in the decades ahead; to fail in this area will affect out security, economy, and limit our ever increasing demand for food and raw materials. Students interested in this field may declare an area of special interest by choosing one of the options listed below.

A. General Requirements:
English Composition—six semester hours
Sophomore English Literature—six semester hours
Mathematics: see particular emphasis below
Sophomore American History—six semester hours
Political Science-American Government—six semester hours
Physical Activity—two semesters swimming and life saving; two semesters physical activity, marching band, ROTC

B. Multidisciplinary Sciences:
General Chemistry—eight semester hours
Geology—Meterology three semester hours
Biology-General Oceanography—four semester hours
Bio-Field Oceanography—six semester hours
Bio-Ocean Seminar—one semester hour

C. Electives:
Sufficient to total 132 semester hours

D. Options:
Biology Emphasis:
Biology 141-142, 243, 346, 443, 444, 445, 446, 417
Geology 141-142
Chemistry 341-342

Mathematics 1335, 234, 236, 237
Physics 141-142
Geology Emphasis:
Geology 141-142, 241, 243, 341, 342, 345, 346 (or CE 339),433, 419
Engineering 114, 1121, 1221
Biology 141-142, 443, 445
Mathematics 1335, 236, 237
Physics 141-142, 430
Engineering Emphasis:
Engineering 114, 1121, 1221, 230, 231, 233, 234
Chemical Engineering 3311
Civil Engineering 211, 212, 213, 232, 331, 339, 413
Industrial Engineering 333
Electrical Engineering 3305, 333, 438
Mathematics 148, 149, 241
Geology 220, 342, 433
Physics 140, 222, 241

Marine Biology Option

First Year

Bio 141-142 General	8
Chm 141-142 General	8
Mth 1335 Pre-Calculus	3
Mth 236 Calculus I	3
Eng Composition	6
PE Activity	2-4
	30-32

Second Year

Geo 141-142 Phys, His	8
Phy 141-142 General	8
Mth 237 Calc II	3
Bio 243 Microbiology	4
Statistics	3
Soph Eng Literature	6
PE 227-228 Swim, Life	4
	35

Third Year

Bio 349 General Ocean	4
Bio 346 Invert Zool	4
Bio 444 Vert Nat His	4
Bio 445 Marine Bio	4
Chm 341-342 Organic	8
His Soph Am His	6
Elective	3
	34

Fourth Year

Geo 4370 Meteorology	3
Bio 418 Ocean Seminar	1
Bio 417 Bio Lit	1
Bio 446 Ecology	4
Bio 443 Limnology	4
POLS 231-232	6
Approved Electives	3-4
Free Electives	9
	32

Third or Fourth Summer

Bio 361 Field Course	6

Minimum Total 137

Bachelor of Science—Oceanographic Technology

Marine Geology Option

First Year

Geo 141-142 Phys, Hist	8
Chm 141-142 General	8
Mth 1335 Pre-Calculus	3
Mth 236 Calculus I	3
Eng Composition	6
PE Activity	2-4
	30-32

Second Year

Geo 241-242 Min, Opt Min	8
Bio 141-142 General	8
Mth 237 Calculus II	3
Egr 1121 Intro Computer I	1
Egr 1221 Intro Computer II	2
Egr 114 Graphics	1
Eng Literature	6
PE 227-228 Swim, Life	4
	33

Third Year

Geo 345 Petrology	4
Geo 4370 Meteorology	3
Geo 341 Stat, Data Proc	4
Geo 342 Structural Geo	4
Bio 349 General Ocean	4
Geo 419 Seminar	1
Phy 141-142 General	8
CE 339 Soils Sci	3
or	
Geo 346 Sed Stat	4
Bio 443 Limnology	4
	35-36

Third or Fourth Summer

Bio 361 Field Course	6

Fourth Year

Geo 433 Geophysics	3
Geo elective-Senior level	3
Bio 418 Ocean Seminar	1
Bio 445 Marine Bio	4
POLS 231-232	6
His Soph Am His	6
Approved elective	3-4
Free Electives	9
	32

Mininimum Total 139

**Selected from the sequence Geo 431 thru Geo 438.*

Bachelor of Science—Oceanographic Technology

Ocean Engineering Option

First Year

Geo 220 Geo for Eng	2
Chm 141-142 General	8
Mth 148-149 Anal I & II	8
CE 211 Measurement	2
Eng Composition	6
Egr 114 Graphics I	2
PE Activity	2-4
Elective	3
	31-33

Second Year

Phy 140,222,241	10
Mth 241 Analysis III	4
Egr 1121 Intro Computers I	1
Egr 1221 Intro Computer II	2
Egr 230 Statics	3
CE 212 Rt Surveying	1
Egr 231 Dynamics	3
Eng Literature	6
PE 227-228 Swim, Life	4
	34

Third Year

CE 331 Environ Sci	3
CE 339 Soils Sci	3
IE 333 Egr Economy	3
Bio 349 General Ocean	4
CE 232 Mech of Solids	3
Egr 233 Circuits	3
Egr 234 Thermodynamics	3
EE 333 Electronics I	3
EE 3305 Switch System	3
His Soph Am His	6
	34

Third or Fourth Summer

Bio 361 Field Course	6

Fourth Year

Geo 4370 Meterology	3
Bio 418 Ocean Seminar	1
Phy 430 Physical Ocean	3
Geo 433 Geophysics	3
EE 438 Instrumentation	3
CE 413 Photogrammetry	1
CE 213 Exp Stress Anal	1
ChE 3311 Momentum Trans	3
CS 439 Comp Appl	3
POLS 231-232	6
Elective	9
	33

Minimum Total 138

Biology Courses (Bio)

1400 Introductory Biology **4:3:2**

A human centered non-chemically based course for non-science majors, includes function and problems of the human circulation, respiration, digestion, reproductive, and sensory systems.

1401 Introductory Biology **4:3:2**

A companion course to Biology 1400, which is not prerequisite. Includes human heredity and a consideration of the diversity and impact of the plant kingdom on human life and history as food and medicine as well as their aesthetic value.

141 General Biology **4:3:2**

A survey of organisms, molecules, cells, tissues, photosynthesis and genetics.

142 General Biology 4:3:2
Structure and function, development, reproduction ecology and evolution.

143 Human Anatomy and Physiology 4:3:2
Structure and function of cells, tissues, muscle, skeletal and nervous system.

144 Human Anatomy and Physiology 4:3:2
Structure and function of the circulatory, digestive, excretory and reproductive systems.
Prerequisite: Bio 143.

240 Comparative Anatomy of the Vertebrates 4:3:4
Comparative anatomy presented from systemic viewpoint. Two 2-hour labs per week.
Prerequisite: Bio 141-142.

243 Microbiology 4:3:3
Classification, morphology, reproduction and physiology of microorganisms.
Prerequisite: Bio 141-142.

244 Disease and Immunity 4:3:3
Antigen-antibody responses and life cycles of disease-causing microorganisms.
Prerequisite: Bio 243.

245 Introductory Microbiology 4:3:2
Micro-organisms with emphasis on those of medical significance and problems of personal and community health.

330 Applied Anatomy and Kinesiology 3:3:0
Organization and mechanics of the human body and analysis of human motion, skeletal system, attachments and actions of muscles. Does not count toward biology major.
Prerequisite: Bio 141-142.

339 Biology and Psychology of Sexuality 3:3:0
Understanding of human sexuality through the progressive study of conception and birth, through the development of sex roles, to the acquisition of sexual maturity and functioning in society. Credit may not be received for both Bio 339 and Psy 339.

340 Diagnostic Microbiology 4:2:6
Public health diagnostic procedures, epidemiology, control and treatment of human bacterial diseases.
Prerequisite: Bio 243-244; Chm 342 or concurrent enrollment.

341 Histology 4:3:3
Study of normal tissues of vertebrates including human tissue.
Prerequisite: Bio 141-142 and 240 or 243-244.

342 Embryology 4:3:3
Comparative study of meiosis, fertilization, cleavage and early embryology as it relates to human development of vertebrates.
Prerequisite: Bio 141-142, 240.

344 Advanced Physiology 4:3:3
General physiology, muscle-nerve relations, digestive, circulatory, respiratory, excretory, nervous and endocrine systems.
Prerequisite: Bio 141-142; Chm 141-142. Recommended: Chm 341-342.

345 General Botany 4:3:3
Introduction to plant structure and function with emphasis on the seed plants.
Prerequisite: Bio 141-142.

346 Invertebrate Zoology 4:3:3
Classification, natural history, phylogenetic relationships and economic importance of the invertebrate phyla.
Prerequisite: Bio 141-142.

347 Genetics 4:3:3
General principles of heredity, including human inheritance.
Prerequisite: Bio 141-142.

348 Epidemiology 4:3:3
A study of the distribution and determinants of diseases and injuries in human populations. Laboratory utilizes a case history approach.
Prerequisite: Microbiology, statistics recommended.

349 General Oceanography 3:3:3
Principles of oceanography. Geological, chemical, physical and biological environments of the ocean.
Prerequisite: Geo 141, Chm 141.

361 Field Course in Estuarine and Coastal Oceanography 6:5:40
Near shore processes. The application of sampling devices. Laboratory analysis of samples. Small boat handling. Duration: six weeks. Field trip required and special fee assessed.
Prerequisite: Bio 349, PE 228.

4101,4201,4301,4401 Special Topics in Biology 1-4:A:0
Physiological, anatomical, taxonomic and ecological biology. Laboratory and/or library work and conferences with a faculty member. May be repeated for credit when the area of study differs.

416 Classical Biological Literature 1:1:0
A survey of major written works in biology.
Prerequisite: Senior standing in biology.

417 Current Biological Literature 1:1:0
A survey of modern biological works published in recent journals.
Prerequisite: Senior standing in biology.

418 Oceanographic Technology Seminar 1:1:0
Reports on current literature in oceanography for Oceanographic Technology majors.
Prerequisite: Bio 349.

430 Undergraduate Problems 3:0:6
Individual investigation of a problem in biology. Formal report of research to be approved by two faculty members.
Prerequisite: Written permission of instructor.

4302 Cellular Physiology 3:3:0
Basic processes in physiology, metabolism, transport, energetics, molecular and cellular mechanisms.
Prerequisite: Junior standing, credit for organic chemistry.

4303 Principles of Electron Microscopy 3:3:0
Principles of operation, adjustment and elementary maintenance of the electron microscope. Preparation of specimens, sectioning and grids

4304 Electron Microscope Techniques 3:1:6
Practical experience in application of electron microscopy procedures from living tissue to finished photographic plate.
Prerequisite: Bio 4303 and consent of instructor.
Supplementary lab fee.

440 Ornithology 4:3:3
Natural history, taxonomy and ecology of birds.

4402 Taxonomy of Vascular Plants 4:3:3
The classification of vascular plants; family characteristics, specific identification of the local flora and dominant plants of floristically different areas of Texas.

441 Parasitology 4:3:3
A study of the morphology, life history and host-parasite relationships of parasites of man and other vertebrates.
Prerequisite: Bio 141-142.

442 Entomology 4:3:3
Physiology, morphology, life history, collection, classification and control of insects.
Prerequisite: Bio 141-142.

443 Limnology 4:3:3
Fauna, flora, ecology and productivity of fresh water.
Prerequisite: Bio 141-142.

444 Vertebrate Natural History 4:3:3
Collection, identification and natural history of area fish, amphibians, reptiles, birds and mammals.
Prerequisite: Bio 141-142.

445 Marine Biology 4:3:3
Habitats and community relationships of marine plants and animals.
Prerequisite: Bio 141-142.

446 Ecology 4:3:3
Quantitative approach to both field and experimental studies. Interrelationships of organisms and their environment.
Prerequisite: Bio 141-142.

447 Cellular Biology 4:3:3
Structure and function of the cell and its organelles.
Prerequisite:Bio 141-142 .

448 Cytological-Histological Technique 4:1:6.
Principles and techniques of fixation, dehydration, embedment, sectioning and the use of selective stains on various plant and animal tissues for observation and study with the light microscope.

449 Protistology 4:3:3
Morphology, taxonomy and ecology of protozoa, algae and fungi.
Prerequisite: Bio 141-142.

460 **Field Biology** 6:A:0
Environmental relationships and natural history of plants, invertebrates and vertebrates. Extensive field trips for study and collection of organisms in their natural habitat.
Prerequisite: Bio 345, 20 hours credit in biology and consent of instructor. Field trip required and special fee assessed.
Summers only.

Department of Chemistry

Department Head: Keith C. Hansen **217 Chemistry Building**

Professors: Cameron, Hansen, Idoux, Ortego, Yerick, Whittle

Associate Professors: Akers, Dorris, Harmon, Mejia

Laboratory Manager: Grayson

Chemistry is a fundamental science and is required in all science and engineering degree programs. The Chemistry department offers programs leading to B.S. and B.A. degrees in Chemistry and to a B.S. degree in Environmental Science. In addition the department offers preprofessional programs to prepare students for entrance into various professional programs such as medicine, denistry, veterinary medicine, and pharmacy. The Chemistry department has active research programs in several areas including organic synthesis, organic reaction mechanisms, transition metal coordination chemistry, iron metabolism, and molecular spectroscopy. Undergraduates students are strongly encouraged to take advantage of the opportunity to participate in one or more of these programs. The Department has been approved by the Committee on Professional Training of the American Chemical Society to award ACS approved degrees.

Bachelor of Science—Chemistry Major*

The degree of Bachelor of Science in Chemistry will be awarded upon completion of the following requirements.

A. General Requirements:
Meet the University's requirements for a B.S. degree which are described earlier in this bulletin under degree requirements.

B. Science and Mathematics:
Bio 141, 142 or Geo 141, 142
Phy 247, 248, 335
Mth 148, 149, 241
CS 131, 132

C. Chemistry Core:
Chm 141, 142 General
Chm 333, 436 Inorganic
Chm 341, 342, 444 Organic
Chm 241, 446 Analytical
Chm 431, 432, 413, 414 Physical
Chm 411 Chemical Literature
Chm 412 Senior Seminar

D. Electives:
6—8 semester hours Advanced Chemistry electives
15 semester hours general electives

Recommended Programs of Study

First Year	
Chm 141, 142 General	8
Bio/Geo 141, 142 General	8
Mth 148, 149 Calc An Geo I, II	8
Eng Composition	6
HPE/MLb**/ROTC	2-4
	32-34

Second Year	
Chm 241 Quantitative	4
Chm 333 Inorganic	3
Phy 247, 248 General	8
Eng Literature****	6
Electives	6
Mth 241 Calc An Geo III	4
HPE/MLb**/ROTC	2-4
	33-35

Third Year	
Chm 341, 342 Organic	8
Chm 431, 432 Physical	6
Chm 413, 414 Physical Lab	2
Phy 335 Modern	3
CS 131, 132 Intro	6
His 231, 232 Amer. His	6
	31

Fourth Year	
Chm 444 Organic Qual	4
Chm 446 Instrumental	4
Chm 411 Chemical Lit	1
Chm 412 Senior Seminar	1
Chm 436 Inorganic	3
Chm Electives***	6-8
POLS 231, 232 Amer Gov	6
Electives (outside of major)	9
	34-36

Minimum 126 semester hours + HPE/MLb/ROTC

American Chemical Society approved degree plan. A grade of C or better is required in core chemistry courses (Chm 141, 142, 241, 333, 341, 342, 431, 432)

**Offered Fall Semester only. If MLb 124 option is desired it should be added to third and fourth years, as four semesters are required.*

***To be selected from Chm 430, 433, 437, 438, 441, 442.*

****Eng 4335, Report Writing may be substituted for 3 hours literature.*

Bachelor of Science—Chemistry (Biochemistry Option)*

The degree of Bachelor of Science in Chemistry will be awarded after the completion of the following requirements:

A. General Requirements:

Meet the University's requirements for a B.S. degree which are described earlier in this Bulletin under-degree requirements.

B. Science and Mathematics:

Bio 141, 142, 243, 244, 341 or 347
Phy 141, 142, 335
Mth 236, 237

C. Chemistry Core:

Chm 141, 142 General
Chm 241, 446 Analytical
Chm 333, 436 Inorganic
Chm 341, 342 Organic
Chm 441, 442 Biochemistry
Chm 431, 432, 413, 414 Physical
Chm 411 Chemistry Literature
Chm 412 Seminar

D. Electives:

10-12 semester hours advanced chemistry or biology electives
6 semester hours general electives

Recommended Program of Study

First Year	
Chm 141, 142 General	8
Bio 141, 142 General	8
Mth 236, 237 Calculus I, II	6
Eng Composition	6
HPE/MLb**/ROTC	2-4
	30-32

Second Year	
Chm 241 Quantitative	4
Chm 333 Inorganic	3
Bio 243, 244 Microbio	8
POLS 231, 232 Amer Gov	6
Phy 141, 142 or Phy 247, 248	8
Eng Literature	3
HPE/MLb**/ROTC	2-4
	34-36

Third Year

Chm 341, 342 Organic	8
Chm 431, 432 Physical	6
Chm 413, 414 Physical Lab	2
Bio 341 Histology	
or	
Bio 347 Genetics	4
Phy 335	3
His 231, 232 Amer. His	6
Chm/Bio Electives***	3-4
	32-33

Fourth Year

Chm 441, 442 Biochem	8
Chm 446 Instrumental	4
Chm 436 Inorganic	3
Chm 411 Chm Literature	1
Chm 412 Sr. Seminar	1
Eng Literature	
or	
Eng 4335 Report Writing	3
Bio/Chm Electives***	7-8
Electives	6
	33-34

Minimum 125 hours + HPE/MLb ROTC

American Chemical Society approved degree plan. A grade of C or better is required in core chemistry courses (Chm 141, 142, 241, 333, 342, 431, 432)

**Offered Fall Semester only. If MLb option is desired it should be added to third and fourth years, as four semesters are required.*

***To be selected from Chm 430, Chm 433, Chm 437, Chm 438, Chm 444, Bio 341, Bio 342, Bio 344, Bio 347, Bio 441 and Bio 447.*

Bachelor of Arts—Chemistry Major

The degree of Bachelor of Arts in Chemistry will be awarded after the completion of the following requirements.

A. General Requirements:

Meet the University's requirements for a B.A. degree which are described earlier in this bulletin under degree requirements.

B. Science and Mathematics:

Bio 141, 142 or Geo 141, 142
Phy 141, 142, 335
Mth 236, 237
CS 131, 132

C. Chemistry

Chm 141-142 General
Chm 241 Analytical
Chm 333 Inorganic
Chm 341, 342 Organic
Chm 431, 432, 413, 414 Physical
Chm 411 Chemical Literature
Chm 412 Seminar

D. Electives and Minor

23 semester hours of electives. Complete degree must include a minor of at least 18 semester hours of which 6 semester hours must be in advanced courses.

Recommended Program of Study

First Year

Chm 141, 142 General	8
Bio/Geo 141, 142 General	8
Mth 236, 237 Calculus I, II	6
Eng Composition	6
HPE/MLb*/ROTC	2-4
	30-32

Second Year

Chm 241 Quantitative	4
Chm 333 Inorganic	3
Phy 141, 142 General	8
Fre 131, 132 Elementary	6
His 231 Am Hist	6
Eng Literature	6
HPE/MLb*/ROTC	2-4
	35-37

Third Year

Chm 341, 342 Organic	8
Phy 335	3
Fre 231, 232 Reading	6
POLS 231, 232 Amer Gov	6
CS 131, 132	6
Minor/Electives	3
	32

Fourth Year

Chm 431, 432 Physical	6
Chm 413, 414 Physical Lab	2
Chm 411 Literature	1
Chm 412 Seminar	1
Minor/Electives	20
	30

Minimum 123 + PE/MLb/ROTC

**Offered Fall Semester only. If MLb option is desired, it should be added to third and fourth year, as four semesters are required.*

Bachelor of Science in Biology

†Bachelor of Science in Chemistry

The degrees of Bachelor of Science in Biology and Bachelor of Science in Chemistry will be awarded upon completion of the following requirements. Both degrees must be awarded simultaneously.

A. General Requirements:
Meet the University's requirements for two (2) B.S. degrees which are described earlier in this bulletin under degree requirements.

B. Science and Mathematics
Mth 1335, 236, 237
Phy 141, 142, 335

C. Biology:
Bio 141, 142, 240, 243, 244, 341, 342, 344, 416, 347, 447

D. Chemistry:
Chm 141, 142, 241, 333, 431, 432, 413, 414, 441
additional semester hours of advanced chemistry

E. Electives
23 semester hours general electives

Recommended Program of Study

First Year

Bio 141-142 General	8
Chm 141-142 General	8
Eng Composition	6
Mth 1335 Precalculus	3
Mth 236 Calculus	3
PE/MLb 124**/ROTC	2-4
Electives	6
	36-38

Second Year

Chm 341-342 Organic	8
Mth 237 Calculus	3
Eng Literature	6
Phy 141-142 General	8
Bio Elective	4
POLS 231-232	6
PE/MLb 124**/ROTC	2-4
	37-39

Summer

Phy 335 Modern	3
Bio 243	4
Chm 241	4
Electives	3
	14

Third Year

Bio 240 Comparative	4
Bio 344 Adv Physiology	4
Bio 341 Histology	4
Bio 342 Embryology	4
His 231, 232 Am His	6
Chm 413,414 Physical Lab	2
Chm 333 Inorganic	3
Chm 431, 432 Physical	6
Electives	3
	36

Fourth Year

Bio 416 or 417 Bio Lit	1
Bio 447 Cellular	4
Bio 347 Genetics	4
Chm 441 Biochem	4
Chm Electives* min	8
Electives	11
	32

**Chm electives to be selected from Chm 430, 438, 442, 444, 446.*
***Offered Fall Semester only. If MLb 124 option is desired it should be added to third and fourth year as four semesters are required.*

Bachelor of Science—Environmental Science

Environmental Science is an interdisciplinary program concerned with protecting, monitoring, and improving the environment. The degree program combines study in Biology, Chemistry, and Engineering in preparing the student for a career in either industry or government. This degree program combines funcamental training in the basic sciences as well as a broad training across several of the traditional disciplines to prepare a student to be able to both monitor and protect water and air quality, as well as other aspects of the environment.

Program Director: Ewin A. Eads

The degree of Bachelor of Science in Environmental Science will be awarded upon completion of the following requirements.

A. General Requirements:
Meet the University's requirement for a B.S. degree which are described earlier in this bulletin under degree requirements.

B. Science and Mathematics:
Mth 1335, 236, 237
Phy 141, 142
CE 331

C. Biology:
Bio 141, 142, 243, 244, 446, 443
8 semester hours of biology electives

D. Chemistry:
Chm 141, 142, 241, 334, 341, 342, 434, 333, 410, 438
6-8 semester hours of chemistry electives

E. Health Education
HED 434, 437

First Year

Bio 141, 142 General	8
Chm 141, 142 General	8
Eng Composition	6
Mth 1335 Precalculus	3
Mth 236 Calculus I	3
Elective	3
HPE/MLb*/ROTC	2-4
	33-35

Second Year

Bio 243, 244 Microbio	8
Chm 241 Quantitative	4
Chm 334 Air Anal	3
Eng Literature	6
Mth 237 Calculus II	3
Phy 141, 142 General	8
HPE/MLb*/ROTC	2-4
	34-36

Third Year

Bio 446 Ecology	4
Chm 341, 342 Organic	8
Chm 434 Air Pollu Surv	3
CE 331 Envir Sci	3
Eng 4335 Report Writing	3
HED 434 Hlth/Human Eco	3
HED 437 Hlth/Epid	3
Chm 333 Inorganic	3
POLS 231 Amer Gov I	3
	33

Fourth Year

Bio 443 Limnology	4
Chm 410 Sem Envi Sci	1
Chm 438 Radiochem	3
Chm Electives**	6-8
His 231, 232 Amer His	6
POLS 232 Amer Gov II	3
Bio Electives	8
	31-33

Minimum 127 semester hours + HPE/MLb/ROTC

*Offered Fall Semester only. If MLb option is desired it should be added to third and fourth year as four semesters are required.
**Selected with approval of department.

Cooperative Education Program

A Cooperative Education Program, in which the student spends alternate terms at study and at work, is available to qualified studies in the Department of Chemistry. Details may be obtained from the department head.

Chemistry Courses (Chm)

130 Introductory Environmental Science 3:3:0
Fundamental concepts of environmental systems as related to urban affairs and man's environment. Air, water and soil pollution with control methods related to the modern technological society.

135 Chemical Principles 3:3:0
An introduction to the fundamentals of chemical structure, reactions, periodicity and the mathematical manipulations used in chemistry. May not be substituted for required chemistry courses in any degree program.
NOTE: It is strongly recommended that students enrolling have mathematics competency at or above the level of Mth 1334

141 General 4:3:3
General practices, problems, fundamental laws and theories.
Prerequisite: Chm 135 with a grade of C or better or satisfactory performance on diagnostic test.

142 General 4:3:3
A continuation of Chm 141. Properties of the elements. Elementary qualitative analysis and theories of solutions and equilibrium.
Prerequisite: Chm 141.

143 Introductory 4:3:2
For nonscience majors. A survey course in elementary inorganic chemistry.

144 Introductory 4:3:2
For nonscience majors. Continuation of Chm 143. Nuclear science, elementary organic and physiological chemistry.
Prerequisite: Chm 143 or 141.

241 Quantitative Analysis 4:3:5
Theory and practice of analytical chemistry utilizing gravimetric and titrimetric techniques.
Prerequisite: Chm 142 with a grade of C or better.

333 Inorganic 3:3:0
Generalization involving atomic and nuclear theory; properties of the elements with emphasis on periodicity; non-aqueous solvents, acids, bases, oxidation-reduction, etc.
Prerequisite: Chm 142 with grade of C or better.

334 Air Analysis 3:3:3
Theory and practice of chemistry as required in determination of ambient air quality.
Prerequisite: Chm 241, Mth 236 or parallel.

341 Organic 4:3:4
Current theories and chemical principles as they relate to the field of structure and reaction of the various types of organic compounds.
Prerequisite: Chm 142

342 Organic 4:3:4
A continuation of Chm 341.
Prerequisite: Chm 341.

410 Seminar in Environmental Science 1:1:0
Reports and assigned reading.
Prerequisite: senior standing in Environmental Science.

411 Chemical Literature 1:1:0
Lecture and assigned reading in the chemical literature. Chemical literature search on an advanced level.
Prerequisite: 20 semester hours of chemistry.

412 Senior Seminar 1:1:0
Reports and assigned reading.
Prerequisite: senior standing in chemistry.

413 Physical Laboratory 1:0:4
Laboratory applications of modern theory in physical chemistry.
Prerequisite: Chm 241, 431 or parallel.

414 Physical Laboratory 1:0:4
Continuation of Chm 413.
Prerequisite: Chm 413, Chm 432 or parallel.

430 Organic Polymers 3:3:0
Chemistry of industrial polymerization of organic compounds, petro-chemistry of organic monomer preparation and chemical characteristics of organic polymers. Industrial field trip(s).
Prerequisite: Chm 342, Chm 431 or CHE 441 or parallel.

431 Physical 3:3:0
Modern chemical theory as applied to gases, liquids, solids and solutions.
Prerequisite: Chm 142, Phy 142 or 248, Mth 241 or 237 or parallel.

432 Physical 3:3:0
A continuation of Chm 431.
Prerequisite: Chm 431 or equivalent.

433 Modern Physical 3:3:0
Selected topics in modern physical chemistry.
Prerequisite: Chm 432

434 Air Pollution Surveys 3:3:3
Chemical, physical, meterological, biological, bacteriological and epidemiological factors as applied to determine the extent of environmental damage from air pollution.
Prerequisite: Chm 334 and senior standing.

436 Inorganic 3:3:0
Study of the quantized atom, valency and the chemical bond, and coordination chemistry with applications to biological systems.
Prerequisite: Chm 431.

438 Radiochemistry 3:2:3
Basic concepts of nuclear science. Principles and use of radiation measuring devices.
Prerequisite: Chm 241, Chm 333, Chm 431.

441 Biochemistry I 4:3:4
Structures chemistry and functions of biological compounds. A survey of the detailed structures, chemistry and functions of the various classes of biologically important compounds.
Prerequisite: Chm 342.

442 Biochemistry II 4:3:4
A detailed survey of metabolic pathways and processes.
Prerequisite: Chm 441.

444 Qualitative Organic Analysis 4:2:8
A study of systematic methods for the identification of organic compounds and mixtures of organic compounds.
Prerequisite: Chm 241 and 342.

446 Instrumental Chemical Analysis 4:3:4
Instrumental techniques of chemistry. Theory and practice in optical, electrometric and chomatographic methods.
Prerequisite: Chm 241, 342, 431

427,437,447 Introduction to Research 2-4:A:0
Problems are on the undergraduate level and emphasize research techniques. With approval of the department head, these courses may be repeated for credit.
Prerequisite: Minimum of 8 semester hours of chemistry above the freshman level and permission of instructor. semester hours of previous chemistry courses.

4101,4201,4301,4401 Special Topics in Chemistry 1-4:A:0
Topics in under-graduate analytical, inorganic, organic and physical chemistry or biochemistry. Library and/or laboratory work and conferences with a staff member. With permission of the department head, student may repeat the course for credit when the area of study is different.
Prerequisite: Approval of instructor and department head.

Department of English and Foreign Languages

Department Head: Charles Timothy Summerlin **4 Liberal Arts Building**

Director of Freshman English: Christopher P. Baker

Director of English as a Second Language: R. Victoria Price

Professors: Barnes, Ellis, Georgas, Olson, Rule, Strickland, Thomas, Wall

Associate Professors: Baker, Francis, K. Jones, Platt, Price, Renfrow, Summerlin

Assistant Professors: Daigrepont, De Rose*, Gwynn, Hutchings, Pineda, Reynolds, Sheppeard, Smith.

Adjunct Instructors: Amberg, Atteberry, Ellery, Ingham, R. Jones, Kuhne, Loyd, Northcutt, Risser, Stelly, Yattaw

Laboratory Supervisor: Pardo

* On leave

The Department of English and Foreign Languages offers opportunities to study a variety of languages and literatures. The Bachelor's and Master's degrees are available in English. Scholarly interests of members of the department include old and middle English, the Renaissance, Shakespeare, eighteenth century studies, English and American romanticism, the Victorian age, and contemporary English and American literature. In addition to the study of English and American literature through courses organized by genre, period, and individual author, the student may explore the history and structure of language and the crafts of both creative and technical writing. The Bachelor's degree is available in both French and Spanish, enabling the student to acquire competence in conversation and composition in these languages as well as familiarity with their literature and culture.

Bachelor of Arts—English

The degree of Bachelor of Arts in English will be awarded upon the completion of the following requirements:

A. General Requirements:
Foreign Language through the course numbered 232.
Freshman composition six semester hours.
Mathematics and laboratory science four courses, at least one in mathematics and one in a laboratory science. No courses less advanced than college algebra will fulfill the mathematics requirement except as indicated under Teacher Certification below.
History 131 and 132 (not required for persons who earn a teacher's certificate).
Sophomore American history six semester hours.
Sophomore American political science 231 and 232.
Physical activity courses, marching band or ROTC four courses.

B. Major: Two options are available, one emphasizing literature, the other emphasizing writing
Sophomore literature six semester hours
Advanced American literature six semester hours
Advanced British literature nine semester hours
English 430 (except as indicated under Teacher Certification below).
One may substitute nine hours of advanced writing courses (drawn from English 335, 4326, 4335, 4345, and 4355) for nine of the fifteen required advanced literature hours. Students choosing this option may substitute English 4312 for 430.

C. Minor:
An approved minor of 18 semester hours, including at least six semester hours in advanced courses. A student electing the literature option for the English major may also select a writing minor and vice-versa.
D. Sufficient approved electives to complete a total of 126 semester hours (except as indicated under Teacher Certification below).

Teacher Certification—English

Students wishing to secure the Bachelor of Arts degree in English and at the same time to certify for a provisional certificate-secondary with a teaching field in English will be required to meet a revised set of teacher education standards. All teacher education programs are subject to comply beginning in the fall of 1985. It will be necessary to consult with your department head or the College of Education Advising Center concerning the specifics of these requirements.

Recommended Program of Study—English

First Year		Second Year	
Eng Composition	6	Eng Sophomore Lit	6
His 131-132 World Civilization	6	Sophomore Am. History	6
Foreign Language 131-132	6	POLS 231 and 232	6
Mth	6	Foreign Languages 231-232	6
Electives	6	Electives	6
PE Activity	2	PE Activity	2
	32		32

Third Year	
Eng	9
Laboratory Science	8
Minor	9
Electives	6
	32

Fourth Year	
Eng 430 History of the English Language	3
Eng	6
Minor	9
Electives	12
	30

Bachelor of Arts—French or Spanish

The degree of Bachelor of Arts in French and Bachelor of Arts in Spanish will be awarded upon the completion of the following requirements:

A. General Requirements:
Freshman English six semester hours
Literature six semester hours
*Mathematics six semester hours
*Laboratory Science eight semester hours
Sophomore American History six semester hours
Sophomore American Government six semester hours
Physical Education ,Marching band or ROTC four semesters

B. Major:
French
French 131-132 Elementary French
French 231-232 Reading, Composition, Conversation
French 330 French Conversation
French 337 Advanced Grammar and Composition
French 338 French Phonetics
Advanced French three semester hours
Spanish
Spanish 131-132 Elementary Spanish
Spanish 231-232 Reading, Composition, Conversation
Spanish 330 Spanish Conversation
Spanish 335 Advanced Composition
Advanced Spanish six semester hours

C. Minor in French or Spanish:
An approved minor of 18 semester hours, including at least six advanced semester hours

D. Electives:
Sufficient approved electives to complete a total of 126 semester hours.

Students may follow general degree requirements in regard to science and mathematics.

Teacher Certification—French, Spanish

Students wishing to secure the Bachelor of Arts degree in French or Spanish and at the same time to certify for a provisional certificate-secondary with a teaching field in French or Spanish will be required to meet a revised set of teacher education standards. All teacher education programs are subject to comply beginning in the fall of 1985. It will be necessary to consult with your department head or the College of Education Advising Center concerning the specifics of these requirements.

Recommended Program of Study—French or Spanish

First Year	
*Maj Lang 131-132 Elementary	6
Eng Composition	6
**Mth	6
HPE Activity	2
Elec	12
	32

Second Year	
Maj Lang 231, 232 Intermediate	6
Eng Literature	6
Sophomore American His	6
**Sci	8
HPE	4
Elec	2
	32

Third Year		Fourth Year	
Maj. Lang: Fre 330, 337, 338	9	Maj Lang Adv.	3
or		Elec incl minor	30
Maj Lang: Spa 330, 335	6		
Spa Adv.	3		
Elec incl minor	15		
	30		33

*Must be included if student has not already had the equivalent.
**Students may follow general degree requirement in regard to Science and Mathematics

English Courses (Eng)

131 Composition 3:3:0
Intensive study and practice in basic forms of expository writing. Frequent themes. Collateral reading in articles and essays of a factual and informative type. This course is prerequisite to English 132, 134 and 135.

132 Composition 3:3:0
Further study and practice in the forms of expository and analytical writing. Topics for composition suggested from wide reading in at least two of the three genres: prose fiction, poetry, and drama. Research paper required.
Prerequisite: Eng 131.

134 Composition 3:3:0
Further study and practice in the forms of expository and analytical writing. Topics for composition suggested from a wide survey of various communications media: films, tapes, radio, television, periodicals, books, etc. Requires attendance at specific instructor-specified events in addition to class attendance. Research paper required.
Prerequisite: English 131.

135 Composition 3:3:0
Intensive study and practice in the forms of persuasive writing. Topics for composition suggested by the study of rhetoric and collateral readings. Research paper required.
Prerequisite: English 131.

136 Composition and Rhetoric 3:3:0
An accelerated program for those exceptionally well prepared at time of enrollment. Extensive writing; introduction to literary genres. Research paper required.
Prerequisite: Approval of head of the English and Foreign Languages Department.
Offered Fall semesters and on main campus only. Must be taken the first long semester the student is enrolled. Upon completion of this course with the grade of C or better, the student receives credit for both English 131 and 136. This course meets the general degree requirement for freshman English.
(Note: The student can satisfy the general degree requirements for freshman English by completing successfully English 131 and any other course from English 132, 134 and 135. However, a student is not permitted to receive credit for more than one freshman English course a semester.)

137 Developmental Reading and Writing 3:3:0
Development of writing skills, broadening reading background and improvement of reading comprehension. Emphasis on individualized instruction in composition. This course does not satisfy general degree requirements for Freshman English.
(Note: Satisfactory completion of this course for those who score 35 or below on the SAT Test of Standard Written English is prerequisite to Eng 131.
(NOTE: Satisfactory completion of six hours of freshman composition is prerequisite to sophomore literature courses. Unless specified by a particular department, any combination of the six sophomore courses below will satisfy a sophomore literature requirement.)

2311 Masterworks of World Literature 3:3:0
Critical study of six to ten major monuments of world literature, from classical antiquity to the present century.

2312 Masterworks of American Literature 3:3:0
Critical study of six to ten major works of American literature, including both the nineteenth and twentieth centuries.

2313 Masterworks of British Literature 3:3:0
Critical study of six to ten major works of British literature, including writers from most of the important periods.

2315 The Literature of Africa 3:3:0
Major writers of Africa, including various genres and works translated from languages other than English.

2316 Afro-American Literature 3:3:0
Significant contributions to American literature from Colonial times to the present.

2318 Sophomore Literature Honors Course 3:3:0
Critical studies of several major works of British and World Literature from classical antiquity to the present century, designed especially for honors students.

2319 Sophomore Literature Honors Course 3:3:0
Critical studies of several major works of British, American and World Literature from classical antiquity to the present century, designed especially for honors students.

333 Shakespeare 3:3:0
Rapid reading of the histories, comedies and tragedies. The development of Shakespeare as a dramatist; his relationship to the Elizabethan theater; his social, political and literary background in the Tudor-Stuart era.

335 Creative Writing 3:3:0
A workshop approach to the writing of poetry, fiction and drama.

336 The Short Story 3:3:0
The technique of the short story; its historical development; study and analysis of great short stories.

337 The Drama 3:3:0
The historical development of the drama from Aeschylus to the present. Intensive study of selected plays.

338 Studies in the British Novel 3:3:0
Wide reading and critical study in some particular aspect or period of the British novel. May be taken for credit more than once if the topic varies.

339 American Novel 3:3:0
A study of the history, growth and technique of the American novel, with emphasis on the novels of the twentieth century.

3316 Poetic Analysis 3:3:0
A study of the forms and techniques and the critical evaluation of poetry.

3321 Methods of Teaching English 3:3:0
Methods of teaching reading and composition at the secondary level, with special attention to the assigning and evaluating of written work.

3322 The American Literary Renaissance: 1820-1860 3:3:0
An intensive study of the major authors of the period from Poe to Melville.

3324 The Development of American Realism: 1860 to 1900 3:3:0
An intensive study of the major authors of the period from Whitman to Norris.

430 History of the English Language 3:3:0
Theory and nature of language. Studies in the growth of English and American forms.

432 Studies in Sixteenth Century Literature 3:3:0
Critical studies in the poetry, prose and drama of the age. May be taken for credit more than once if the topic varies.

434 Shakespeare 3:3:0
Intensive study of selected major plays.

435 Studies in Seventeenth Century Literature 3:3:0
Critical studies in the poetry, prose and drama of the period 1600-1660. May be taken for credit more than once if the topic varies.

438 Studies in Eighteenth Century Literature 3:3:0
Critical studies in the poetry, prose and drama of the period 1660-1800. May be taken for credit more than once if the topic varies.

439 Studies in Romantic Literature 3:3:0
Critical studies in the poetry, prose and drama of the Romantic period. May be taken for credit more than once if the topic varies.

4311 Studies in Victorian Literature 3:3:0
Critical studies in the poetry and prose of the Victorian period. May be taken for credit more than once if the topic varies.

4312 Studies in Language and Linguistics 3:3:0
Special problems in linguistics, such as the history of American English, regional dialects, new grammars. May be taken for credit more than once if the topic varies.

4317 Contemporary Drama 3:3:0
A study of dramatic trends and representative plays from Ibsen to the present.

4318 Contemporary Poetry 3:3:0
A study of poetry developments in England and America with emphasis on representative poets from Hardy to the present.

4319 Contemporary Fiction 3:3:0
A study of prose fiction representative of modern ideas and trends, with emphasis on English and Continental authors.

4322 Russian Literature 3:3:0
Selected works from nineteenth and twentieth century Russian literature in translation. Pushkin to Sholokov.

4326 Expository Writing 3:3:0
The practical application of the techniques of mature exposition; classification, explanation, evaluation. With permission of the instructor, this course may be repeated one time for credit.

4327 Bibliography and Methods of Research 3:3:0
An introduction to research methods and sources. Recommended for those planning or beginning graduate study.

4328 Early American Literature 3:3:0
A survey of all significant writers from the beginning of Colonial America to 1828.

4329 Modern American Literature 3:3:0
A critical survey of major American writers of the twentieth century.

4333 Studies in a Particular Author 3:3:0
Intensive critical study of a major writer such as Chaucer, Milton, Hawthorne, Faulkner. May be taken for credit more than once when the topic varies.

4334 Critical Studies in Literature 3:3:0
Intensive critical study of a particular genre or theme in comparative literature or criticism. May be taken more than once for credit when the topic varies.

4335 Technical Report Writing 3:3:0
Supervised preparation of technical and scientific reports according to standard usage recommended by scientific and engineering societies.
Prerequisite: Completion of six hours of freshman English or permission of the instructor.

4336 Directed Studies in American Literature 3:3:0
Study in American literature in an area of mutual interest. May be taken for credit more than once if topic varies.
Prerequisite: Junior standing.

4337 Directed Studies in British Literature 3:3:0
Study in British literature in an area of mutual interest. May be taken for credit more than once if the topic varies.
Prerequisite: Junior standing.

4345 Writing Seminar
Intensive study in writing, focusing on specific topics, with either a technical or creative emphasis. May be taken more than once for credit if the topic varies.
Prerequisite: English 335 or permission of the instructor (for any creative writing seminar).

4355 Editing Technical Communications
Editing technical communications for clarity, conciseness, and form. Emphasis on affective communications within and between organizations and organizational levels including reports, proposals, manuals, memoranda, and news releases.
Prerequisite: Either English 4326, 4335, or 4345 (when technically oriented).

Philosophy Courses (Phl)

Advisor: George D. Wall

The overall aim of philosophy is the pursuit of truth. The methods of philosophy are conceptual analysis and sound reasoning. The objective of philosophy courses is to stimulate and train students to think critically, so that they will enthusiastically engage in the pursuit of truth.

131 Introduction to Philosophy 3:3:0
General characteristics of philosophy as a field of knowledge and as a method of inquiry.

232 Logic 3:3:0
Nature and methods of correct reasoning; deductive and inductive proof; logical fallacies.

332 Ethics 3:3:0
A critical analysis of the concepts, methodology and theories of ethics.

333 History of Philosophy I, Ancient and Medieval Philosophy 3:3:0
The development of Western philosophic thought from the inception in Greece to the end of the Medieval period.

334 History of Philosophy II, Modern Philosophy 3:3:0
The development of philosophic thought from the Renaissance through the nineteenth century; emphasis upon philosophers of the seventeenth and eighteenth centuries.

430 Topics in Philosophy 3:3:0
Selected topics in philosophy. Course may be repeated for credit when topic changes.

English as a Second Language (ESL)

Advisor: Victoria Price

Students for whom English is a second language are required to demonstrate English proficiency by scoring a minimum of 80 on a proficiency/placement test. Those students whose scores fall below the miminimum required are placed in a support course until satisfactory proficiency scores are obtained. A student placed in ESL 134 must enroll for the course in the semester in which he is placed in it, and the course cannot be dropped.

After a satisfactory level of proficiency is achieved, the ESL student may satisfy degree requirements in English by completing the following courses:

Freshman Composition:

ESL 135 and ESL 136 (may not be taken concurrently)

Literature:

ESL 231 or ESL 232 (freshman composition is prerequisite; may not be taken concurrently with other ESL courses.)

Prospective ESL teachers may satisfy the course work requirement for ESL endorsement in the state of Texas by completing twelve hours of prescribed courses: ESL 431, 432, 433, 434

132 Listening Comprehension 3:3:0
The course aims toward achieving the goal of understanding native speech at normal speed in unstructured situations.

133 Reading and Vocabulary Development 3:3:0
The course emphasizes vocabulary building and increasing reading comprehension skills. Use of magazines, newspapers and other types of reading material.

134 Grammar and Writing Skills 3:3:0
Progressive work in mastering English grammar for purposes of writing. Frequent guided and free writing exercises.
*NOTE: The student for whom English is a second language can satisfy the general degree requirements for freshman English by completing successfully ESL 135 and ESL 136. The courses, however, may not be taken simultaneously.

135 Composition: English as a Second Language 3:3:0
Intensive grammar review followed by study and practice in basic forms of expository writing needed for writing essay examinations, themes and term papers.

136 Composition: English as a Second Language 3:3:0
Further study in basic forms of expository writing. The primary aim of the course is to assist the student to prepare for writing required research papers. Practice in library research.
Prerequisite: ESL 135.

137 Developmental Skills in ESL 3:3:0
Students for whom English is a second language are placed in this course when English proficiency scores fall below the prescribed level for exemption. This course does not satisfy general degree requirements for Freshman English. Grading on a Satisfactory-Unsatisfactory basis.

231 Masterpieces in British and American Literature 3:3:0
Critical study of six to ten major works in British and American literature, including representative works from most of the major periods. Applies toward the sophomore literature requirement for students for whom English is a second language.

232 World Masterpieces in English Translation 3:3:0
Critical study of six to ten major works of world literature in various genres, from classical antiquity to the present century. Applies toward the sophomore literature requirement for students for whom English is a second language.

431 The Teaching of English as a Second Language 3:3:0
The course deals with techniques for teaching basic English skills and literature to non-native speakers. Socio-cultural aspects of second language learning.

432 Foundations in Teaching ESL 3:3:0
A general methodology course that focuses on both linguistic and cultural foundations of ESL and examines trends in ESL and strategies for teaching ESL.

433 Psycholinguistics 3:3:0
Examines the current research and theory of first and second language acquisition and development as a base for teaching English to non-native speakers.

434 Introduction to Linguistics 3:3:0
Provides background in the nature of language and linguistic changes as a basis for describing and comparing language systems; focuses on a description of the phonological, morphological, and syntactic features of English in contrast to features of other languages.

French Courses (Fre)

131 Elementary French 3:3:0
Pronunciation, conversation, reading, dictation, grammar. Use of tapes.

132 Elementary French 3:3:0
Pronunciation, conversation, reading, dictation, grammar. Use of tapes.
Prerequisite: Fre 131 or equivalent determined by examination.

231 Reading, Composition, Conversation 3:3:0
Prerequisite: Fre 132 or equivalent.

232 Reading, Composition, Conversation 3:3:0
Prerequisite: Fre 231 or equivalent.

330 French Conversation 3:3:0
Required of majors and of students desiring teacher certification in French. (This course may not be substituted for Fre 232 to meet the language requirement for the Bachelor of Arts degree.)
Prerequisite: Fre 231 or equivalent.

331 Contemporary French Drama 3:3:0
A study of representative plays of the twentieth century with emphasis on the theater of post World War II. Dramatists studied include Giraudoux, Sartre, Camus, Ionesco, Beckett, Arrabal.
Prerequisite: Fre 232.

332 Contemporary French Novel 3:3:0
A study of representative novels of the twentieth century, including such writers as Gide, Mauriac, Sartre, Camus and the masters of the New Novel.
Prerequisite: Fre 232.

337 Advanced Grammar and Composition 3:3:A
A thorough study of French grammar with extensive written composition. Secondary stress on pronunciation.
Prerequisite: Fre 232.

338 French Phonetics 3:3:A
A study of the French sound system. Laboratory exercises to improve pronunciation.
Prerequisite: Fre 232.

339 French Culture and Civilization 3:3:0
A survey of the intellectual, philosophic, political and social development of France. Readings of significant works in these areas. Lectures, readings, oral and written reports.
Prerequisite: French 232 or equivalent.

435 Survey of French Literature through the 18th Century 3:3:0
Readings from significant works. Lectures, readings, oral and written reports.
Prerequisite: Six hours advanced courses in French.

436 Survey of French Literature Since the 18th Century 3:3:0
Readings from significant works. Lectures, readings, oral and written reports.
Prerequisite: Six hours advanced courses in French.

German Courses (Ger)

131 Elementary German 3:3:0
Pronunciation, conversation, reading, dictation, grammar. Use of tapes.

132 Elementary German 3:3:0
Pronunciation, conversation, reading, dictation, grammar. Use of tapes.
Prerequisite: Ger 131 or equivalent determined by examination.

Italian Courses (Ita)

131 Elementary Italian 3:3:0
Conversation, reading, dictation, grammar. Use of tapes. Emphasis will be placed on vocabulary and pronunciation.

132 Elementary Italian 3:3:0
Conversation, reading, dictation, grammar. Use of tapes. Emphasis will be placed on vocabulary and pronunciation.
Prerequisite: Italian 131.

Spanish Courses (Spa)

131 Elementary Spanish 3:3:0
Pronunciation, conversation, reading, dictation, grammar. Use of tapes.

132 Elementary Spanish 3:3:0
Pronunciation, conversation, reading, dictation, grammar. Use of tapes.
Prerequisite: Spa 131 or equivalent determined by examination.

231 Reading, Composition, Conversation 3:3:0
Prerequisite: Spa 132 or equivalent.

232 Reading, Composition, Conversation 3:3:0
Prerequisite: Spa 231 or equivalent.

330 Spanish Conversation 3:3:0
Required of majors and of students desiring teacher certification in Spanish.
Prerequisite: Spa 231 or equivalent.
(Note: This course may not be substituted for Spa 232 to meet the language requirement for the Bachelor of Arts degree.)

331 Culture and Civilization of Spain and Spanish America 3:3:0
A study of the geography, history, government, art, economic resources and psychology of Spain, Cuba, Santo Domingo, Mexico and Central America. Lectures, readings, oral and written reports.
Prerequisite: Spa 232.

333 Survey of Spanish-American Literature 3:3:0
A study of outstanding writers and their works up to the nineteenth century [modernista] movement. Lectures, readings, oral and written reports.
Prerequisite: Spa 232.

335 Advanced Composition 3:3:0
Vocabulary building, intensive review of grammar as needed for sentence structure. The development of the paragraph in written composition: Frequent written reports.
Prerequisite: Spa 232.

337 Contemporary Spanish-American Short Story 3:3:0
The authors chosen are among the best interpreters of the spiritual and intellectual climate of Spanish America. Lectures, readings, oral and written reports.
Prerequisite: Spa 232.

338 Contemporary Theater of Spain 3:3:0
Emphasis will be given to the theater of Lorca, Casona, Buero Vallejo, Calvo Sotelo, Alfonso Sastre and other major authors of today.
Prerequisite: Spa 232.

431 Contemporary Spanish Literature 3:3:0
Prerequisite: 6 hours of advanced Spanish.

432 Development of Spanish Novel 3:3:0
Prerequisite: 6 hours of advanced Spanish.

433 Survey of Spanish Literature Through the 17th Century 3:3:0
A study of the most significant works of Spanish literature through the seventeenth century. Readings from [El Cid, El Conde Lucanor, La Celestina,] poetry of the Renaissance, Cervantes' prose and the Golden Age drama. Lectures, readings, oral and written reports.
Prerequisite: 6 hours of advanced Spanish.

434 Survey of Spanish Literature Since the 17th Century 3:3:0
A study of the most significant works of Spanish literature from the eighteenth century through the twentieth century. Readings with emphasis on the drama and the novel. Lectures, readings, oral and written reports.
Prerequisite: 6 hours of advanced Spanish.

436 Spanish American Novel 3:3:0
Prerequisite: 6 hours of advanced Spanish.

Lamar Overseas Study Program

Each summer the English and Foreign Languages Department participates in the summer overseas program offered by the University. English courses are offered in London and in Rome and a senior member of the English faculty participates in each program. The undergraduate and graduate student may receive course credit while experiencing the cultural and historical environment of the region under the guidance of experienced faculty.

A six weeks program at the University of Strasbourg, France, under the direction of experienced senior foreign language faculty is offered by the department every other year, that is, 1983, 1985, etc., for as long as there is interest in it. Participants study French language and literature on all levels. College students as well as high school students who receive their high school diplomas before the beginning of the program may obtain details from the office of the Department of English and Foreign Languages. The group is limited to 15 students.

Courses listed below may be taken by students who have finished elementary and intermediate language courses through language 232. The French courses listed are accepted toward a major or teaching field in French but may not be substituted for a required advanced course.

4371 French Studies Abroad 3:3:A
A study of the French language, literature and culture on a campus abroad. Students will be placed in language groups according to their proficiency in the language. Cultural activities will include visits to famous museums, historic sites and churches and cathedrals. Credit for this course may be applied toward a major in French.

4372 French Studies Abroad 3:3:A
Students may register for this course concurrently with French 4371. A study of the French language, literature and culture on a campus abroad. Students will be placed in language groups according to their proficiency in the language. Cultural activities will include visits to famous museums, historic sites and churches and cathedrals. Credit for this course may be applied toward a major in French.

4373 French Studies Abroad 3:3:A
This course is designed for students who have completed French 4371 or 4372. It consists of a more advanced study of French language, literature and culture on a campus abroad. Students will be placed in language groups according to their proficiency in the language. An in-depth study will be made by the student of one facet of the foreign culture. Credit for this course may be applied toward a major in French.
Prerequisite: French 4371 or 4372.

4374 French Studies Abroad 3:3:A
Students may register for this course concurrently with French 4373. The course is designed for students who have completed French 4371 or 4372. It consists of a more advanced study of French language, literature and culture on a campus abroad. Students will be placed in language groups according to their proficiency in the language. An in-depth study will be made by the student of one facet of the foreign culture. Credit for this course may be applied toward a major in French.
Prerequisite: French 4371 or 4372.

Department of Geology

Department Head: William H. Matthews III **214 Geology Building**

Professors: Aronow, Matthews, Pampe

Associate Professor: Stevens

Assistant Professor: Coskren, Jordan

Adjunct Instructor: Howes

Energy Resources Management Coordinator: William R. Pampe

The Geology Department specializes in undergraduate instruction and offers bachelor's degrees in Geology and Energy Resources Management. Graduates may be employed in industry (petroleum, mining, engineering, and environmental geology), by government agencies, or elect to take graduate training at another institution. A specilization area in Earth Science teaching is also offered in conjunction with the College of Education.

Geology faculty have a broad range of research and scholarly interests. These include sedimentation, petroleum geology, soils and Pleistocene geology of the Gulf Coast, computer applications to geologic problems, geochemistry, mineralogy, and secondary school Earth Science education.

A background in high school chemistry and physics, and two units of algebra and a unit of trigonometry are recommended for prospective majors. Students with inadequate chemistry background must take Chemistry 135 to make up the deficiency. Math 1334 may also be required of students with inadequate high school mathematics.

Bachelor of Science—Geology Major

The Bachelor of Science in Geology will be awarded upon completion of the following requirements:

A. Required Courses—58 semester hours:
   Freshman English—six semester hours
   English Literature—three semester hours
   Speech or technical report writing—three semester hours
   Political Science (state and national government)—six semester hours
   History—six semester hours
   Physical Education or Band—four semesters
   Mathematics—eleven semester hours

Chemistry—eight semester hours
Physics—eight semester hours
Introduction to computers—three semester hours

B. Geology Requirements—56 semester hours. NOTE: A grade of "C" or better is necessary in a required geology course.
Physical and Historical Geology—eight semester hours
Mineralogy—four semester hours
Optical Mineralogy—four semester hours
Statistics and Data Processing—four semester hours
Structural Geology—four semester hours
Petrology—four semester hours
Sedimentation-Stratigraphy—four semester hours
Summer Field Course—six semester hours
Seminar—one semester hour
Geophysics—three semester hours
Geomorphology—four semester hours
Economic Mineral Deposits—three semester hours
Stratigraphic Paleontology—four semester hours
Elective senior-level geology course—three semester hours

C. Electives—15 semester hours
Minimum Total: 131 semester hours

First Year

Geo 141-142 Phys, Hist	8
Chm 141-142 General	8
Mth 1335 Pre-Calculus	3
Mth 148 Analyt Calculus I	4
Eng Composition	6
PE Activity	2
	31

Second Year

Geo 241 Mineralogy	4
Geo 243 Optical Min	4
Mth 149 Analyt Calculus II	4
Egr 1121, 1221 BASIC, FORTRAN	3
Eng Literature	3
Spc 331 or OAS 335 or Eng 4326	3
POLS 231, 232	6
PE Activity	4
	31

Third Year

Geo 341 Stat-Data Proc	4
Geo 342 Structural Geo	4
Geo 345 Petrology	4
Geo 346 Sed Strat	4
Phy 141-142 General	8
**Elective	6
	30

Fourth Year

Geo 419 Seminar	1
Geo 433 Geophysics	3
Geo 434 or Geo 439	3
Geo 445 Geomorphology	4
Geo 437 or Geo 438	3
Geo 442 Strat Paleo	4
His Soph Am His	6
**Electives	9
	33

Third or Fourth Summer

Geo 360 Field Camp	6

Minimum Total 131

*Those planning to specialize in Geophysics should substitute the sequence Phy 247, 248.
**At least 6 semester hours of electives must be other than Geology courses.

Bachelor of Science—Energy Resources Management

The Bachelor of Science in Energy Resources Management (ERMA) will be awarded upon completion of the following requirements:

A. Required Courses—53 semester hours:
Freshman English—six semester hours
English Literature—three semester hours
Speech—three semester hours
Political Science (state and national government)—six semester hours
History—six semester hours
Physical Education or Band—four semesters
Mathematics—seven semester hours

Chemistry—eight semester hours
Introduction to computers—three semester hours
Physics—four semester hours
Chemical Engineering—three semester hours

B. Geology Requirements—34 semester hours:
Physical and Historical Geology—eight semester hours
Mineralogy—four semester hours
Optical Mineralogy—four semester hours
Structural Geology—four semester hours
Petrology—four semester hours
Sedimentation-Stratigraphy—four semester hours
Economic Mineral Deposits—three semester hours
Fossil Fuels—three semester hours

C. Business Requirements—33 semester hours:
Principles of Accounting—six semester hours
Business Analysis and Computers—three semester hours
Business Law and Legal Principles—six semester hours
Petroleum Law—three semester hours
Principles of Economics—six semester hours
Economics of International Trade—three semester hours
Principles of Management—three semester hours

D. Electives—nine semester hours
Minimum Total: 134 hours

Recommended Program of Study

First Year

Geo 141-142 Phys, Hist	8
Chm 141-142 General	8
Mth 1335 Pre-Calculus	3
Mth 148 Analyt Calculus I	4
Eng Composition	6
PE Activity	2
	31

Second Year

Geo 241-243 Mineralogy, Optical	8
Phy 141 General	4
Acc 231-232 Principles	6
Eco 131-132 Principles	6
Eng Literature	3
Egr 1121-1221, Basic, Fortran	3
POLS 231	3
PE Activity	2-4
	35

Third Year

Geo 345 Petrology	4
Geo 342 Structural Geo	4
Geo 437 Econ Min. Deposits	3
BAC 331	3
HIS 231 American His.	3
BLW 331 Bus. Law	3
Eco 335 Intern'l Trade	3
Spc 331	3
****Elective	6
	32

Fourth Year

Geo 438 Fossil Fuels	3
Geo 346 Sed-Strat	4
Che 438 Petroleum Egr	3
Mgt 331 Management	3
BLW 434 Adv. Legal Princ	3
BLW 438 Petroleum Law	3
POLS 232 Intro Am Govt II	3
His 232 Am Hist	3
Eco 4315 Govt & Bus	3
****Electives	6
	34

Minimum Total 134

*****At least 6 semester hours of electives must be other than Geology courses, and no electives can be taken in business courses.*

Teacher Education in Earth Science

Students wishing to secure the Bachelor of Arts or Bachelor of Science degree and at the same time to certify for a provisional certificate with a secondary teaching field will be required to meet a revised set of teacher education standards. All teacher education programs are subject to comply beginning in the fall of 1985. It will be necessary to consult with your department head or the College of Education Advising Center concerning the specifics of these requirements.

Geology Courses (Geo)

141 Physical Geology 4:3:2
Earth materials, structures, land forms, mineral resources and the processes which formed them.

142 Historical Geology 4:3:2
History of the earth and its inhabitants through geologic time.
Prerequisite: Geo 141

220 Geology for Engineers 2:2:2
A survey of physical geology for engineering students. A student may not receive credit for both Geo 220 and Geo 141. Students must enroll in a Geo 141 (Physical Geology) laboratory section.

237 Physical Geography 3:3:0
The fundamental concepts of local, regional and global geography.
Prerequisite: Sophomore standing.

238 Cultural Geography 3:3:0
History and distribution of cultural groups with emphasis upon the interaction between geographic environment and human cultures.

239 History of Life 3:3:0
History of the earth and its life forms. Includes the study of geologic time, fossils and prehistoric people. A student may not receive credit for both Geo 239 and Geo 142.

241 Mineralogy 4:3:3
The classification, properties, occurrence and identification of minerals. Field trip and special fee required.
Prerequisite: Geo 141 and Chm 141 or 143.

243 Optical Mineralogy 4:3:3
Optical properties of minerals. Use of the polarizing microscope in the identification of minerals.
Prerequisite: Geo 241.

336 Geology of Texas 3:3:0
The topography, physiography, structure, geologic history and mineral deposits of Texas. Field trip and special fee required.
Prerequisite: Geo 141 or Geo 239.

339 Environmental Geography 3:3:0
The environmental significance of human development as related to atmospheric, aquatic and mineral resources. Field trips and special fee required.
Prerequisite: Geo 141 or 237.

341 Statistics and Data Processing 4:3:3
The application of digital computer and statistical techniques to the analysis of earth science data.
Prerequisite: Egr 1221, CS 235, Geo 345.

342 Structural Geology 4:3:3
Rock deformation and geologic structures. Field trip and special fee required.
Prerequisite: Geo 241, Mth 148.

345 Petrology 4:3:3
The classification, properties, and occurrence of rocks. Macro and micro techniques for the identification of rocks. Field trip and special fee required.
Prerequisite: Geo 243.

346 Sedimentation-Stratigraphy 4:3:3
The derivation and deposition of sediments. The environmental interpretation and physical correlation of sedimentary strata. Field trip and special fee required.
Prerequisite: Geo 345.

360 Summer Field Course 6:5:40
Description of stratigraphic sections, preparation of geologic maps and field reports. Conducted off campus at various field locations. Special field trip fees required.
Prerequisite: Geo 342, 345.

418 Earth Science Literature 1:1:0
Reports on current source materials for earth science education majors. Not open to geology majors.
Prerequisite: 8 hours of Geology and consent of instructor.

419 Seminar 1:1:0
Written and oral reports on current geological literature. May be repeated for credit.
Prerequisite: 20 semester hours of Geology.

422 X-ray Crystallography 2:0:6
X-ray techniques to identify crystalline substances. For advanced science and engineering students.
Prerequisite: one year of Chemistry or Physics and consent of instructor.

427,428 Special Project 4:A:0
An individual library, laboratory or field project. To receive credit, an acceptable typewritten report is required.
Prerequisite: Consent of instructor

433 Geophysics 3:3:0
Application of the principles of physics to geologic problems. Use of geophysical techniques in petroleum exploration.
Prerequisite: Geo 342, Phy 142, Mth 149.

436 Geochemistry 3:3:0
The application of the science of chemistry to the solution of geological problems.
Prerequisite: Chem 142, Geo 243

437 Economic Mineral Deposits 3:3:0
Origin and of occurrence of commercially valuable minerals and rocks. Field trip and special fee required.
Prerequisite: Geo 345 and 4350

438 Fossil Fuels 3:3:0
Origin and occurrence of coal, oil and gas deposits. Field trip and special fee required.
Prerequisite: Geo 345 or 4350.

439 Tectonics of North America 3:3:0
The development of tectonic theory as evidenced by and applied to the North American continent.
Prerequisite: Geo 342, 345.

442 Stratigraphic Paleontology 4:3:3
The classification, morphology, and identification of invertebrate fossils. The application of paleontology to stratigraphic correlation. Field trip and special fee required.
Prerequisite: Geo 346.

445 Geomorphology 4:3:3
The development and classification of land forms. Field trip and special fee required.
Prerequisite: Geo 342.

4101,4201,4301,4401 Special Topics in Earth Science 4:A:0
Topics in the earth sciences. May be repeated for credit when the area of study is different.
Prerequisite: Consent of instructor.

4350 Earth Materials 3:3:0
The study of minerals and rocks. Field trip and special fee required. A student may not receive credit for both Geo 4350 and Geo 241-243, 345.
Prerequisite: Geo 141, 237 or 239.

4370 Meteorology 3:3:0
The composition and processes of the atmosphere. Weather and climate and their effect on human activities.
Prerequisite: 8 hours of science.

4380 Oceanography 3:3:0
The structure, properties and processes of the hydrosphere. The role of the seas and oceans in the total environment.
Prerequisite: 8 hours of science.

Department of History

Department Head: Adrian N. Anderson **57 Liberal Arts Building**

Professors: Anderson, Gwin, Isaac, Mackey, Norton, Satterfield, Storey, Sutton, Wooster

Associate Professors: Carroll, Holt, Lambert, Woodland

Assistant Professor: Fritze, Stiles

It is the purpose of the Department of History to impart a knowledge and understanding of the past to the students enrolled in the University. This objective is based upon the belief that such knowledge and understanding improves the quality of life of individuals and contributes to the welfare of our society. The Department seeks to accomplish this objective through a program of continued study and research by its members and its students. Research interests of the Department focus on both American and European history.

Bachelor of Arts—History Major

The degree of Bachelor of Arts in History will be awarded upon the completion of the following requirements:

A. General Requirements:
Freshman English—six semester hours
Literature—six semester hours including English 2311
Mathematics and laboratory science—four semester courses, at least one in mathematics and one in laboratory science. Mathematics and science courses must be

selected from a list of approved courses, and must include at least one course in mathematics at or above the level of Math 1334.
Completion of the 232 course in a foreign language
Sophomore political science—six semester hours
Physical Education or Band—four semesters

B. Major:
History 131-132—World History
Sophomore American History—six semester hours
History 339—Historical Research
Advanced United States History—six semester hours
Advanced World (Non-United States) History—six semester hours

C. Minor:
An approved minor of 18 semester hours, including at least six advanced semester hours.

D. Electives:
Sufficient approved electives to complete a total of 126 semester hours.

Teacher Certification—History

Students wishing to secure the Bachelor of Arts degree in history and at the same time certify for a provisional certificate—secondary with a teaching field in history will be required to meet a revised set of teacher education standards. All teacher education programs are subject to comply beginning in the fall of 1985. It will be necessary to consult with the Department Head of History or the College of Education Advising Center concerning the specifics of these requirements.

Recommended Program of Study

First Year

His 131-132—World History	6
Freshman English	6
Foreign Language	6
Mth	6
Electives	6
PE—Activity	2
	32

Second Year

Sophomore American History	6
Literature (including Eng 2311)	6
Foreign Language	6
Science	8
Sophomore POLS	6
PE—Activity	4
	36

Third Year

His 339	3
His (Adv)	6
Electives	9
Minor (or other Teaching Field) and Electives	12-14
	30-32

Fourth Year

	30-32
His (Adv)	6
Edu 438 and 462 or Minor (or other Teaching Field) and Electives	15-17
	30-32

History Courses (His)

131 History of World Civilization **3:3:0**
Survey of world history to 1660.

132 History of World Civilization **3:3:0**
Survey of world history from 1660 to 1965.

134 History of Texas **3:3:0**
Survey of Texas history from the beginning to the present time.

231 American History: History of the United States, 1763 to 1877 **3:3:0**
Survey of United States history from the revolutionary period through reconstruction.

231H American History: History of the United States, 1763 to 1877 **3:3:0**
Survey of United States from the revolutionary period through reconstruction, designed especially for honors students.
Prerequisite: departmental approval.

232 American History: History of the United States, 1877 to the Present **3:3:0**
Survey of United States history from the post-reconstruction period to the present.

232H American History: History of the United States, 1877 to the Present 3:3:0
Survey of United States history from the post-reconstruction period to the present, designed especially for honors students.
Prerequisite: departmental approval.

233 American History: The Development of Society in America 3:3:0
A historical survey of social change in the United States.

234 American History: The Arts in America 3:3:0
A historical survey of cultural life in the United States.

235 American History: The Americas to 1810 3:3:0
The United States and the Western Hemisphere from the beginning to 1810.

236 American History: The Americas since 1810 3:3:0
The United States and the Western Hemisphere since 1810.

237 Military History of the United Staters 3:3:0
History of American warfare and the development of American military institutions and practices.

NOTE: Various colleges and departments may counsel their majors into certain of the American history courses listed above; otherwise the student may satisfy his/her American history requirement by taking any two courses selected from History 231, 232, 233, 234, 235, 236, or 237.

330 History of Ideas 3:3:0
The Judeo-Christian and Greco-Roman elements in the Western intellectual tradition.

331 Social and Intellectual History of the United States to 1865 3:3:0
Life and thought in the United States prior to 1865.

332 American Thought Since Darwin 3:3:0
Life and thought in the United States since 1865.

333 History of American Economic Life 3:3:0
A study of economic change in the context of institutional development in the United States.

337 Diplomatic History of the United States 3:3:0
Historical development of American diplomacy.

338 Urban History of the United States 3:3:0
The origin and development of cities in the United States.

339 Historical Research* 3:3:0
Principles and methods of historical research.

430 Era of the Renaissance and Reformation 3:3:0
Western Europe from 1453 to 1610.

431 The Old Regime 3:3:0
Western Europe from 1610 to 1783.

432 The French Revolution and Napoleon 3:3:0
Western Europe from 1783 to 1815.

433 Russia and Eastern Europe to 1860 3:3:0
Russia, Poland, and the Balkans from the period of the Byzantine Empire to 1860.

434 Nineteenth Century Europe 3:3:0
Europe from 1815 to 1914.

435 Twentieth Century Europe 3:3:0
Europe since 1914.

436 The American West 3:3:0
The American West from colonial times to the present.

437 The Old South 3:3:0
The American South from colonial times to the Civil War.

438 The New South 3:3:0
The American South from the Civil War to the present.

439 Honors Program 3:A:0
A tutorial program for honors seniors. Admission by invitation only.

4311 Colonial America 3:3:0

4312 The American Revolution 3:3:0

4313 The Age of Jackson 3:3:0

4314 The American Civil War 3:3:0

4315 Reconstruction and Industrialization: The United States from 1865 to 1898 3:3:0

4316 World Power and Reform: The United States from 1898 to 1920 3:3:0

4317 New Deal and World Leadership: The United States from 1920 to 1940 3:3:0

4318 Classical Civilization 3:3:0
Greece and Rome from earliest times to the fall of the Roman Empire in the West.

4319 Medieval Civilization 3:3:0
Western Europe and the Mediterranean area from the late Roman period to 1453.

4321 The Far East to 1800 3:3:0
Japan, China, Indo-China and India to 1800.

4322 The Far East since 1800 3:3:0
Japan, China, Indo-China and India since 1800.

4323 Latin America to 1810 3:3:0

4324 Latin America Since 1810 3:3:0

4325 Tudor and Stuart England 3:3:0
England from 1485 to 1688.

4326 Eighteenth Century England 3:3:0
England Great Britain from 1688 to 1815.

4327 Victorian England 3:3:0
Great Britain from 1815 to 1914.

4328 Contemporary America: The United States Since 1940 3:3:0

4329 Modern European Intellectual History 3:3:0
An examination of the major European intellectual movements and thinkers from the Renaissance to the present.

4331 Russia Since 1860 3:3:0
The development of modern Russia, from 1860 to the present.

4332 Afro-American History to 1865 3:3:0
The black experience in Africa and in the Western Hemisphere prior to emancipation.

4333 Afro-American History since 1865 3:3:0
The black experience toward achieving freedom in the United States.

4334 Early National Period 3:3:0
The United States from 1789 to 1820.

4335 Topics in History 3:3:0
Selected special topics in major areas of history. Course may be repeated for a maximum of six semester hours credit when the topic varies.

4336 Ancient Near East 3:3:0
The civilizations of the Near East from the earliest times to the pre-classical period.

4337 Directed Studies in European History 3:A:0
Individual study with an instructor in an area of mutual interest. May be repeated for a maximum of six semester hours credit when topic varies.
Prerequisite: Departmental permission.

4338 Directed Studies in American History 3:A:0
Individual study with an instructor in an area of mutual interest. May be repeated for a maximum of six semester hours credit when topic varies.
Prerequisite: Departmental permission.

4339 Directed Studies in Historical Research 3:A:0
Individual study with an instructor on historiography and historical research methods.
Prerequisite: Departmental permission.

4341 World War II 3:3:0
A military, political and social history of World War II.

4342 Nazi Germany 3:3:0
A military, political, and social history of Nazi Germany.

Department of Military Science

Department Head: Major Michael W. Simpson ROTC Building

Assistant Professor: Captain Peterson

Instructor: Sergeant Major Smith

ROTC Program

The Department of the Army has established a four-year Reserve Officers' Training Corps program at Lamar University. The ROTC program has as its primary objective the production of junior officers who by their education, training, and inherent qualities are capable of filling positions of leadership in the active or reserve components of the United States Army. The program is open to both male and female students.

The Department of Military Science course offerings consist of the basic course (100-200 level) and the advanced course (300-400 level). No military service obligation is incurred for students enrolled in the basic course. Students in all courses are furnished textbooks and instructional material at no cost.

Requirements for Admission

Basic Course: All courses offered as part of the basic course are treated the same as other electives in the curricula. All physically fit, male and female, freshman and sophomore may qualify to enroll. Students desiring to participate need only to register for basic military science courses. These courses may be taken in lieu of required Health and Physical Education courses.

Advanced Course: The two year advanced course is elective in that any qualified students may apply for admission, and selective in that the application requires the approval of the Professor of Military Science. Students who have at least two years of college remaining, maintain a 2.5 or better quality point average, complete the basic course or who qualify for prior military training, and are physically qualified are eligible for enrollment in the advanced course. The advanced course leads to an officer's commission in the United States Army Reserve or regular Army and is pursued under a written agreement with the Department of the Army. Advanced course contract students are paid approximately $2,500.00 for the two-year course which includes attendance at the ROTC summer camp.

Two-Year Program: Students transferring or currently enrolled at Lamar who can not complete the basic course prior to becoming academic juniors, or graduate students with at least two years remaining may qualify to enter the advanced course by successfully completing a five and one-half week Leadership Seminar course, conducted each summer at Fort Knox, Kentucky. Academic credit and pay are granted to students attending the course. Applications should be submitted to the Department of Military Science by May 1.

Credit for Previous Military Training: Students with previous military training may qualify for placement directly into the advanced course. The Professor of Military Science determines the placement, which is acceptable to the Army, for each student requesting this classification.

Veterans: Students who have prior military service are eligible for advanced placement provided their active duty was completed within the last five years.

National Guard/Reserves: Students who are currently members of the United States Army Reserves or the National Guard are eligible for advanced placement under the Simultaneous Membership Program.

Junior ROTC: Students who have had at least three years of junior ROTC may qualify for advanced placement. An interview with the Professor of Military Science is required.

ROTC Scholarships: Competitive 3 and 2-year scholarships which pay for all tuition fees, laboratory fees, textbooks, and other required academic expenses, except room and board, are available. In addition, the scholarship holder receives $100.00 per month for the duration of the scholarship, except for the six-week advanced summer camp, during which the student is paid one-half the basic monthly pay of a second lieutenant plus travel expenses to and from camp.

Students desiring additional information concerning the Army ROTC program should write to: Professor of Military Science, Lamar University Station, Box 10060, Beaumont, TX, 77710. Phone calls may be made collect to: (409) 880-8560, 8569.

Military Science Courses (MS)

121 Learn What It Takes to Lead
An introduction course designed to emphasize confidence building activities such as mountaineering, rifle marksmanship, and orienteering- all of which are inherent in learning what it takes to lead.

122 Woodland Skills/Survival
Instruction includes basic survival skills required to survive in the wilderness. Survival techniques will include shelter construction, food preparation, first aid, water procurement, and directional finding techniques.

221 Small Unit Operations
Course consists of basic skills necessary for a small unit to perform in a military environment. Skills covered in the course include: Weapons, tactics, map reading and the enemy threat. Students plan and participate in a small unit operation in a field training exercise during the semester.
Prerequisite: MS 121, 122 or permission of the PMS.

222 Military Management
The functions of management, planning, organizing, directing, staffing, and controlling are introduced. Human behavior is examined and leadership is studied as it relates to accomplishment of objectives. Practical exercises, classroom discussions, and films are used to illustrate current management philosophies and techniques.
Prerequisite: MS 121, 122 or permission of the PMS.

223 Advanced Leadership
In depth instruction on a wide range of leadership skills to include advanced mountaineering techniques, physical fitness, leadership, orienteering skills and first aid (CPR). Students will participate in at least one orienteering meet and one overnight field training exercise.
Prerequisite: MS 121, 221, and permission of PMS.

Advanced Course

Note: Prerequisites for enrollment in the advanced courses are as determined by the Professor of Military Science.

331 Military Roles 3:3:1
Development of the student's ability to express himself clearly and accurately in the process of analysis and evaluation of military problems and the projection of solutions. Discussion of the military environment in the field and in garrison. Introduction to the employment of the infantry platoon through map and practical exercises.

332 Tactical Concepts 3:3:1
Analysis of the platoon leader's role in directing and coordinating the efforts of individuals, small units, and the combined arms team in the execution of military operations. Related aspects include communications, tactics, weaponry, patrolling and map exercises designed for advance camp preparation.

333 ROTC Advanced Camp
Practical application of tactics; leadership training and practice; and arms qualification. Six weeks during the summer at a military reservation designated by the Department of the Army (no fee).
Prerequisite: Military Science III courses and/or permission of PMS.

431 Staff Organization and Management 3:3:1
Methods of organization, administrative management, and personnel management are examined through conferences and practical exercises. A block of instruction emphasizes the military law system. Staff operation of the cadet corps and practical exercises in leadership are conducted during a leadership laboratory.

432 Military Ethics 3:3:1
The organization, capabilities, and mission of military units are examined through lectures and conferences, World changes and military implications related to the role of the Army are considered. Active duty career planning is studied. Staff operation of the cadet corps and practical exercises are conducted during a leadership laboratory.

MS—Leadership Laboratory
Practical application of classroom instruction emphasizing Physical fitness, drill and ceremonies, and basic military skills. Participating students are provided all uniforms and equipment. Participation is required of all MS II, III, and IV students. Participation by MS I students is at their option.

Special Courses

U.S. Army ROTC Basic Camp
(Maximum of 8 credit hours) The ROTC Basic Camp is a six-week summer course conducted at Fort Knox, Kentucky for students who cannot complete the Basic Course (4 electives) prior to becoming academic juniors. In addition to free room, board, and transportation, students are paid approximately $600.00. Training includes practical exercises to enhance confidence, physical fitness and leadership qualities.
Prerequisite: Approval of the PMS.

Rangers
An adventure oriented organization designed to develop leadership qualities through small unit tactics, self-discipline, self-confidence, and resourcesfulness. Members participate in several field training exercises during the semester. Open to all interested and qualified students.

Competition Rifle Team
In depth analysis of all facets of competitive firing with small bore rifle to include safety, equipment care, aiming, breath and trigger control, positions, and participation in ten competitive matches a year.

Orienteering Team
In depth analysis of the sport of orienteering. Involvement in environmental awareness, physical fitness, map reading skills, compass proficiency, mental acuity, and competition with others will be emphasized. Students participate in several orienteering meets during the semester.
Open to all interested students.

Rifle Drill Team
A precision drill team designed primarily to promote the military image thru innovative and imaginative routines involving close order drill with weapons. Team performances include, but not limited to, university and local civic events. All uniforms and equipment are provided and participation is open to all interested students.

Department of Political Science

Department Head: William M. Pearson **56 Liberal Arts Building**

Professors: Drury, Pearson, Stevens

Associate Professors: Lanier, Sanders, Stidham, Utter

Assistant Professors: Dubose, Loewenstein

Adjunct Instructor: Sitton

Political Science is the study of political power, who has it, and how those who have it behave. The Political Science curriculum encourages students to acquire a broad understanding of the political system and the policymaking process in order to become effective participants in it and prepare for careers in law, government service, teaching, journalism, and business.

To accomplish these objectives, the Department offers courses of study which introduce students to the discipline and methods of Political Science and its subfields: American government and politics, political philosophy, international relations, comparative politics, and public administration and policy.

The Political Science faculty members have earned doctorates and a wide range of specialization within the broad areas specified above. The faculty's expertise is complemented by active involvement in scholarly research on the following topics: administrative accountability in state government; empirical-normative limits between voting and political obligation; the trial courts' responses to Supreme Court policy changes; Marxist political theory and its relation to traditional democratic theory; Brazilian public policy; minority politics and social policy analysis; public policy impact of comparable worth; the effect of quality circles on public employee productivity; Polish-German relations; voting behavior in state and local politics; and a comparison of caucus and primary methods for selection of presidential nominees.

The Department of Political Science offers the following undergraduate degrees: Bachelor of Arts in Political Science, Bachelor of Arts in Political Science with Teacher Certification, and Bachelor of Science in Political Science. Additionally, the Department offers a Pre-Law Program leading to Bachelor of Arts or Bachelor of Science degrees with intern credit for working in law firms.

Political Science—Pre-Law

One of the traditional routes to law school is a four-year undergraduate degree in Political Science. Students may pursue either the Bachelor of Arts degree in Political Science or Bachelor of Science degree in Political Science as candidates for admission to a school of law. Both degrees retain the values of a liberal education (such as history, English, and foreign language) and the enhancement of technical skills (including computer science, accounting and mathematics). With a large number of free electives and 18 hour minors, the Bachelor of Arts or Bachelor of Science in Political Science afford considerable flexibility in meeting each students' unique educational and career needs.

A Pre-Law Counselor in the Political Science Department specializes in advice to Pre-Law students, maximizing their chances for success on the Law School Admission Test and assisting them in the process of application to law school.

Legal Internships—Pre-Law

Exceptional students may qualify for a cooperative education program available in the legal profession. They earn up to 12 semester hours of elective internship credit in their junior and senior years while working half-days in local law firms. Law office experience is combined with academic assignments to develop skills useful to the potential lawyer. Admission to the program is by permission of the head of the Department of Political Science.

Bachelor of Arts—Political Science Major

The Bachelor of Arts degree in Political Science emphasizes a traditional liberal arts or humanities curriculum and includes the following requirements:

A. General Requirements:
Freshman English—six semester hours
Literature—six semester hours
*Mathematics 1334 and three additional hours
*Science—laboratory—eight semester hours
Completion of the 232 course in a foreign language
Sophomore American History—six semester hours
Physical activity courses, Band or ROTC—four semesters

B. Major:
Political Science 231-232—Introduction to American Government I and II
Political Science 131—Introduction to Political Science
Political Science 3319—Statistics for Social Scientists
Advanced Political Science (at least one course from each of five fields)—15 semester hours. The fields are American politics (POLS 334, 335, 339, 437, 3301, 4312, 3313, 3315); political philosophy (POLS 432, 433); international relations (POLS 332, 337, 435); comparative politics (POLS 331, 3317, 4381, 4383); public administration (POLS 3316, 430, 434, 439).

C. Minor:
An approved minor of 18 semester hours, including at least six advanced hours. (Freshman English composition courses may not be counted toward a minor in English.)

D. Electives:
Sufficient approved electives to complete a total of 126 semester hours.

*For science and mathematics the general degree requirements may be followed.

Bachelor of Arts—Teacher Certification—Political Science

Students wishing to secure the Bachelor of Arts in Political Science degree and at the same time to certify for a provisional certificate with a secondary teaching field in Political Science, will be required to meet a revised set of teacher education standards. All teacher education programs are subject to comply beginning in the fall of 1985. It will be necessary to consult with your department head or the College of Education Advising Center concerning the specifics of these requirements.

Recommended Program of Study—Bachelor of Arts

First Year

POLS 131	3
Eng—Composition	6
Foreign Language	6
Mth (incl 1334)	6
PE Activity	2
Electives (His 131-132 recommended)	6
	29
	29

Second Year

Eng—Literature	6
Foreign Language	6
PE Activity	4
AM His	6
POLS 231-232	6
POLS 3319	3
	31

Third Year

POLS (Adv)	9
Electives	9
Laboratory Science	8
Minor and Electives	5-8
	31-34

Fourth Year

POLS (Adv)	6
Electives	9
Minor and Electives	15-18
	30-33

Bachelor of Science—Political Science Major

The Bachelor of Science degree in Political Science emphasizes career education. It will be awarded upon completion of the requirements for the Bachelor of Arts degree in Political Science with the following substitutions for foreign language: Computer Science 131 or 133;

POLS 4319 and nine additional hours to be selected from two of the following areas: Accounting 231-232; Computer Science—Adv; Economics 131-132, 233 or Adv; Mathematics—Adv; Psychology—Adv.

Recommended Program of Study—Bachelor of Science

First Year		Second Year	
POLS 131	3	Eng—Literature	6
Eng—Composition	6	Am History	6
Math (incl 1334)	6	POLS 231-232	6
PE Activity	2	POLS 3319	3
Computer Science 131 or 133	3	PE Activity	4
Electives (His 131-132 recommended)	12	Approved Electives	6
	31		31

Third Year		Fourth Year	
POLS (Adv)	9	POLS (Adv)	6
Laboratory Science	8	Minor and Electives	21-24
POLS 4319	3		
Minor and Electives	12-14		
	30-40		27-30

Political Science Courses (POLS)

231 Introduction to American Government I 3:3:0
A study of the national and Texas constitutions; federalism; political socialization and participation; public opinion and interest groups; parties, voting and elections.
Prerequisite: Sophomore standing.

231H Introduction to American Government I Honors 3:3:0
A study of the national and Texas constitutions; federalism; political socialization and participation; public opinion and interest groups; parties, voting and elections. Designed especially for honors students.
Prerequisite: Sophomore standing and departmental approval.

232 Introduction to American Government II 3:3:0
A study of the legislative, executive and judicial branches and the bureaucracy; policy formulation and implementation including civil rights and civil liberties, domestic and foreign policies.
Prerequisite: POLS 231.

232H Introduction to American Government II Honors 3:3:0
A study of the legislative, executive and judicial branches and the bureaucracy; policy formulation and implementation including civil rights and civil liberties; domestic and foreign policies. Designed especially for honors students.
Prerequisite: Sophomore standing and departmental approval.

Note: POLS 231-232 fulfill the six hour requirement in Political Science.

131 Introduction to Political Science 3:3:0
An introductory survey of political ideas and institutions and a review of the methods for analyzing the political behavior of individuals, groups and nations.

321 Legal Internship I 2:2:0
Practical experience in law office procedure and operation with career related assignments and projects under the guidance of a faculty member.
Prerequisite: Approval of department head.

322 Legal Internship II 2:2:0
Practical experience in law office procedure and operation with career related assignments and projects under the guidance of a faculty member.
Prerequisite: Approval of department head, POLS 321.

323 Legal Internship III 2:2:0
Practical experience in law office procedures and operation with career related assignments and projects under the guidance of a faculty member.
Prerequisite: Approval of department head, POLS 322.

331 The Politics of Developed Nations 3:3:0
An analysis of the political culture, political structure and decision-making process of developed nation-states with major emphasis on Western European systems.

332 Studies in International Politics 3:3:0
A study of the concepts underlying the Western State system; nationalism and imperialism; the techniques and instruments of power politics and the foreign policies of selected states.

334 American Political Parties and Pressure Groups 3:3:0
A study of political parties in terms of their theory, their history and their place in contemporary American politics; analysis of the role of economic and other groups in American politics; group organization and techniques of political influence.

335 The American Presidency 3:3:0
The role of the office in political and diplomatic, social and economic terms, as well as in the policy-making aspects.

337 The Politics of American Foreign Policy 3:3:0
An analytical and historical view of United States foreign policy; its domestic sources; the instruments of American diplomacy; United States involvement in world politics and the limitations and potentials of American foreign policy.

339 Urban Politics 3:3:0
Analysis of the organization and development of urban governments in the United States. Interrelationships among urban problems, political behavior and policy will be examined.

3301 The Legislative Process 3:3:0
The structure, functioning and political control of legislative bodies.

3313 The Judicial Process 3:3:0
The theory and structure of the American court system; its personnel and decision-making processes; the judicial process in the setting of the American criminal justice system.

3315 Conflict Management in American Politics 3:3:0
An examination of various approaches political, social, psychological, philosophical and legal to the study of conflict, and its management and resolution; specific cases of conflict to be studied will be drawn from American politics.

3316 Introduction to Public Administration 3:3:0
A survey of American public administration, with emphasis upon modern problems and trends.

3317 Politics of Developing Nations 3:3:0
An analysis of the political systems of Latin America, Africa, the Middle East and Asia, focusing on ideologies, interest groups, political parties, elites and problems in political development.

3319 Statistics for Social Scientists 3:3:0
Basic concepts and techniques of statistics employed in social science research including descriptive statistics; measures of central tendency and dispersion; correlation and regression analysis; inductive statistics; fundamentals of probability and tests of significance.

421 Legal Internship IV 2:2:0
Practical experience in law office procedure and operation with career related assignments and projects under the guidance of a faculty member.
Prerequisite: Approval of department head, POLS 323.

422 Legal Internship V 2:2:0
Practical experience in law office procedure and operation with career related assignments and projects under the guidance of a faculty member.
Prerequisite: Approval of department head, POLS 421.

423 Legal Internship VI 2:2:0
Practical experience in law office procedure and operation with career related assignments and projects under the guidance of a faculty member.
Prerequisite: Approval of department head, POLS 422.

430 Organization Theory and Behavior 3:3:0
A study of the structural and management aspects of public administration, theory and practice; policy formation processes and techniques.

432 Political Thought I 3:3:0
Topics in western political thought from the Greeks to the Nineteenth Century.

433 Political Thought II 3:3:0
Topics in political philosophy from Marx to the present with emphasis on contemporary theorists.

434 Formulation of Public Policy 3:3:0
The demands for public action on policy issues; organization and nature of political support; processes and problems of decision making in the formulation of public policy at the national, state and local levels. The issues studied will vary from semester to semester.

435 International Law and Institutions 3:3:0
An analysis of the political, legal and institutional foundations of the modern international system, including the United Nations. Emphasis include peaceful settlement of international disputes and the developing global system.

437 American Constitutional Law and Development 3:3:0
Development of the American Constitution through judicial interpretations. Particular emphasis on cases dealing with federalism, commerce, the three branches of government, due process, civil rights, and civil liberties.

439 Special Topics in Public Administration 3:3:0
This course is designed to cover fiscal administration, public personnel administration, comparative development administration, administrative regulation and related areas. Course may be repeated for credit when the topic varies.

4310 Directed Study 3:3:0
Students may study individually with an instructor in an area of mutual interest to the student and the instructor. *Prerequisite: Approval of head of Department of Political Science.*

4312 American State Politics 3:3:0
A survey of American state political systems from a comparative basis.with emphasis on Texas

4319 Advanced Research Methods 3:3:0
Analysis or study of special problems, topics, cases, models and theories in political science research.

4381 The Politics and Government of the Communist Nations 3:3:0
A study of the origin, development, structures, functions and behavior of the Communist political system with emphasis on the Soviet Union and China.

4383 Government and Politics of Latin America 3:3:0
An intensive comparative analysis of the political systems of Latin America with special emphasis on political culture, constitutional development, authoritative decision-making agencies, interest identification, leadership selection, political socialization and conflict resolution.

Department of Physics

Department Head: Joe Pizzo **230 Archer Building**

Professors: Pizzo, Rigney

Associate Professors: Peebles, Shepherd

Assistant Professor: Goines

Stockroom Supervisor: Scott

High school preparation for the physics major must include two units of algebra and unit of trigonometry. Those having inadequate high school mathematics must take Math 1334 to make up the deficiency, preferably in the Summer Session preceding the freshman year of college.

Physics is the fundamental science. A major in physics can serve as an excellent basis for almost any career. Accordingly, the program of study in physics at Lamar University is offered with many possible options. The individual student may choose a listed option or plan an alternative with the departmental counselor.

Emphasis is on quality education at the undergraduate level. Several faculty members are carrying out research involving innovative ways of presenting concepts in physics.

Bachelor of Science—Physics Major

A total of 128 semester hours are required for this degree. In addition to general university requirements for the bachelor's degree listed in this bulletin under Academic Regulations, the degree requirements in physics are 26 semester hours in physics with at least 13 semester hours at the junior-senior level, including 333 and 335 and one of the three laboratory courses 324, 346 or 448; 15 semester hours of mathematics including 331 or 4301; and chemistry 142. Physics 110 is required of all freshman physics majors.

Although the preparation for some careers requires study in graduate school or professional school, at least the following options are available to the physics major:

1. Physics (Graduate School)
2. Pre-medical
3. Life Science
4. Oceanography
5. Teaching
6. Chemistry
7. Liberal Arts
8. Environmental Science
9. Engineering
10. Geology/Geophysics

Recommended Program of Study

First Year	
Chm 141 or 143/142 or 144	8
Eng Composition	6
Mth 148-149 Cal & An G I & II	8
Phy	3-8
Phy 110 Phy Today	1
Electives	3
PE/MLb*/ROTC 2 sem	2 or 4
	31-38

Second Year	
Option	8
Eng Literature	6
Mth 241 Cal & An G III	4
Phy 247, 248	8
Electives	4-8
PE/MLb*/ROTC 2 sem	2 or 4
	32-37

Third Year	
POLS 231-232	6
His Soph American	6
Mth: Diff Eq	3
Phy 335 Modern Phy	3
Phy Electives	3-4
Option	12-15
	33-36

Fourth Year	
Phy 448 Optics	
or	
Phy 346 Electrical Measmnts	
or	
Phy 324 Modern Phy Lab	2-4
Phy Electives	6-8
Option	12-18
Electives	10-15
	30-35

*Offered Fall Semester only. If MLb 124 option is desired it should be added to third and fourth year as four semesters are required.

List of options:

Preparation for graduate school in physics: nine additional semester hours of mathematics and 12-16 additional semester hours of advanced physics. Suggested electives: two years of German.

Pre-medical: 16-20 additional semester hours of biology, 8-16 additional semester hours of chemistry, including Chm 341-342. Suggested electives: psychology and sociology.

Life Science: 16 additional semester hours of biology, 8-12 semester hours of geology, 8-12 additional semester hours of chemistry. Electives unrestricted.

Oceanography: 8-12 additional semester hours of biology, eight additional semester hours of chemistry, 16 semester hours of geology. Suggested electives: electronics, fluid mechanics.

Teaching: 18 semester hours of education, completion of 24 semester hours for second teaching field. Suggested electives: psychology and sociology.

Chemistry: 16-24 additional hours of chemistry. 8-12 additional semester hours of biology. Electives unrestricted.

Liberal Arts: 24-36 semester hours from English, history, government, sociology or philosophy. Electives unrestricted.

Environmental Science: 16-20 additional semester hours of chemistry, 8-12 additional semester hours of biology, three semester hours of civil engineering. Suggested electives: psychology and sociology.

Engineering: 12 semester hours of engineering Egr, 12-24 semester hours of advanced engineering. Suggested electives: economics and sociology.

Geology: 20 semester hours of geology, 3-9 semester hours of electronics. Electives unrestricted.

Cooperative Education Program

A Cooperative Education Program, in which the student spends alternate terms at study and at work, is available to qualified students in the Department of Physics. Details may be obtained from the department head.

Physics Courses (Phy)

110 **Physics Today** 1:1:0
A descriptive introduction to recent developments and noteworthy current problems, such as gravitational collapse.

111 **Astronomy Laboratory** 1:0:2
Measurements with astronomical instruments such as telescopes and spectroscopes. Use of photographs from astronomical observatories to identify variable stars and classify individual stars according to spectra and magnitudes.
Prerequisite: Credit for or registration in Phy 137.

130 **Mathematical Method in Physics** 3:0:3
Graphical analysis, vector operations,trigonometic operations for elementary physics problems; field and potentials.

132 Basics of Photography, Light and Optics 3:2:1
Light, cameras, lenses, film, filters, intensity, exposure, development, enlargement, color, infrared photography, Kirlian photography.

137 Descriptive Astronomy 3:3:0
A survey of facts and an introduction to important astronomical theories. The solar system, stars, nebulae and star systems.

141 General Physics Mechanics and Heat 4:3:2
Designed for majors in the physical or natural sciences. Emphasis is placed upon understanding and application of basic physical laws.
Prerequisite: Mth 1212 or 1335 or high school trigonometry.

142 General Physics, Sound, Light, Electricity and Magnetism 4:3:2
A continuation of Phy 141.
Prerequisite: Phy 141.

143 Conceptual Physics 4:3:2
Designed for non-science/non-engineering majors. The basic interactions in nature are studied: How things move and why. The approach is conceptual as opposed to mathematical. A student majoring in Science or the College of Engineering may not receive credit for Phy 143.

144 Conceptual Physics 4:3:2
Designed for non-science/non-engineering majors. Topics covered are: Heat, Virations and Waves, Sound, Light. The approach is conceptual as opposed to mathematical. A student majoring in Science or the College of Engineering may not receive credit. Phy 143 is NOT a pre-requisite for Phy 144.

234 Career Development I 3:A:0
Career related special projects, with detailed written report evaluated by a faculty member in physics.
Prerequisite: Permission of department head.

235 Career Development II 3:A:0
Career related special projects, with detailed written report evaluated by faculty member in physics.
Prerequisite: Phy 234.

245 Introductory Acoustics 4:3:2
Vibrations, waves, intensity and loudness, pitch and frequency, quality, intervals and scales, room acoustics, musical instruments, the human voice, electronic production of sound.
Prerequisite: Knowledge of scales and some ability to identify intervals.

247 Calculus Based Physics I 3:1:4
Mechanics, vibrations, heat.
Prerequisite: Registration in or credit for Mth 149 and permission of department head.

248 Calculus Based Physics II 3:1:4
Electricity, magnetism, sound waves, optics.
Prerequisite: Phy 247

324 Modern Physics Laboratory 2:1:3
Selected experiments such as determination of the electronic charge and mass, and of Planck's constant; black-body radiation; gamma ray spectroscopy; specific heats of crystalline solids, mobility of electrons in semiconductors.
Prerequisite: Registration in or credit for Phy 335.

330 Modern General Physics 3:3:0
Electronics, the photoelectric effect, atomic structure, X-rays, molecular and crystal structure, radioactivity and nuclear reactions. A student may not receive credit for both Phy 335 and Phy 330.
Prerequisite: Physics 142 and a year of chemistry.

333 Analytical Mechanics 3:3:0
Use of vector notation in formulating and applying Newton's laws and the principles of momentum and energy. Dynamics of particles and rigid bodies emphasized. Statics treated briefly.
Prerequisite: Phy 247 or 141-142 and credit for or registration in Differential Equations.

334 Career Development III 3:A:0
Career related special projects, with detailed written report evaluated by a faculty member in physics.
Prerequisite: Physics 235.

335 Modern Physics 3:3:0
Conservation laws; special relativity; quantum effects; atomic structure; X-rays, nuclear and solid state physics.
Prerequisite: Phy 248 or Phy 141-142 and Mth 241.

338 Electricity and Magnetism 3:3:0
Electrostatic fields; potential; capacitance; dielectrics; electromagnetic waves. Maxwell's equations; conduction in gases; thermoelectricity.
Prerequisite: Phy 248 or 141-142 and credit for or registration in Differential Equations.

339 Thermal Physics 3:3:0
Temperature and thermometry; internal energy, entropy and thermodynamic potentials; introduction to the kinetic theory of gases and the Maxwell-Boltzmann, Bose-Einstein and Fermi-Dirac statistics.
Prerequisite: Phy 248 or Phy 141-142 and Mth 241.

346 Electrical Measurements 4:2:4
Theoretical and practical definitions of electrical units; data handling and analysis; precision DC measurement of resistance, potential difference and current; galvanometer characteristics; AC bridge measurement of self and mutual inductance, capacitance and frequency; magnetic measurements.
Prerequisite: Phy 248 or 141-142 and Mth 241.

4101,4201,4301 Special Topics in Physics 1-3:A:0
Topics in undergraduate mechanics, electromagnetism, energy conversion or particle physics. Library work and conferences with a staff member. Student may repeat the course for credit when the area of study is different.

414,415 Experimental Projects 1:0:3
Building or assembly of experimental apparatus, and its use, under the supervision of a faculty member.
Prerequisite: 6 hours of physics numbered above 300.

416,417 Seminar 1:1:0
Reports on current publications and on topics not treated in other physics courses.
Prerequisite: 6 hours of physics numbered above 300.

430 Physical Oceanography 3:0:3
Mathematical methods necessary to understand properties and dynamics of oceans.

431 Classical Mechanics 3:3:0
Variational principles and Lagrange's equations; the kinematics of rigid body motion; the Hamilton equations of motion; small oscillations.
Prerequisite: Differential Equations and Phy 333 or M.E. 231.

432 Introductory Quantum Mechanics 3:3:0
Basic concepts of quantum mechanics. Schrodinger's equation; wave functions.
Prerequisite: Phy 333 or 431, Phy 335 and Mth 331 or 4301.

433 Solid State Physics 3:3:0
Crystal structure; binding forces; mechanical and thermal properties; electrical conductivity; semiconductors; dielectric properties; magnetic properties; surface effects, phosphors and photoconductivity.
Prerequisite: Phy 335.

434 Career Development IV 3:A:0
Career related special projects, with detailed written report evaluated by a faculty member in physics.
Prerequisite: Physics 334.

436 Nuclear Physics 3:3:0
Elementary particles; nuclear scattering of particles; reactions and nuclear structure.
Prerequisite: Phy 335.

437 Astrophysics 3:3:0
Analysis of light; stellar spectroscopy; atomic theory as applied to stars, double stars; luminosities; temperature and diameters of stars; variable stars; star clusters; the nebulae; stellar atmospheres and interiors; evolution of the stars.
Prerequisite: Phy 335.

448 Optics 4:3:3
Physical and Quantum Optics. Propagation of light; interference; diffraction; optics of solids; thermal radiation and light quanta; optical spectra; lasers.
Prerequisite: Phy 248 or Phy 141-142 and Mth 241.

Department of Sociology, Social Work and Criminal Justice

Department Head: Wayne C. Seelbach 55 Liberal Arts Building

Professor: Altemose

Associate Professors: Drenan, Frazier, Ma, Monroe, Seelbach

Assistant Professors: Birdwell-Pheasant, Fatino, Love, Sims, Smith, Stone

Department Secretary: Tam McGuire

Sociology, social work, and criminal justice share some common knowledge bases and are similar in many of their approaches to human behavior. The department strongly emphasizes personal academic counseling for all of its majors and encourages career oriented education. Courses in anthropology are also offered through this department.

The degrees offered by the department are: Bachelor of Science in Sociology, Bachelor of Arts in Sociology, Bachelor of Social Work, Bachelor of Science in Criminal Justice, and Associate of Science in Law Enforcement. Each bachelor's degree offered by this department requires 120 semester hours excluding 4 semesters of required physical activity and/or marching band and/or ROTC. Students exempted from the physical education requirement must submit elective hours approved by the major department in lieu of this requirement. Thus, the minimal total for a degree is 124 semester hours. The Associate of Science in Law Enforcement degree requires 60 semester hours excluding 2 required physical activity courses for a minimal total of 62 semester hours. The Social Work Program is fully accredited by the Council on Social Work Education. A major or an 18 semester hour minor in social work will entitle the graduate to apply for Texas licensure as a social worker.

Departmental Academic Policies

1. A grade of "C" or higher for each course in the major field (including transfer courses) and a 2.0 grade point average in the major are required for graduation.
2. English 137 is not an approved elective.
3. Each student's use of English is subject to review up to and including the semester in which s/he is scheduled to graduate. Any faculty member who identifies a departmental major having poor English skills will notify the student and the department head in writing. The department head will then review writing samples and consult with the Director of Freshman English. Based on the recommendations of the Director of Freshman English and the department head, additional diagnostic procedures and course work may be required before the student is recommended for graduation.
4. The departmental academic probation and suspension policy is identical to that of the College of Arts and Sciences and is available from the office of the Dean or department head.
5. Students who are majoring in this department and who are on academic probation or returning from academic suspension may not enroll in more than 12 semester hours (13-15 hours if a laboratory course and P.E. are taken) in any semester.

Pre—Law

Students may pursue the Bachelor of Arts or the Bachelor of Science in Sociology, the Bachelor of Social Work, or the Bachelor of Science in Criminal Justice as prospective candidates for admission to a school of law. The degree plan should include the following courses as electives or a minor:

Criminal Justice 1303—Fundamentals of Criminal Law
Criminal Justice 1305—The Courts and Criminal Procedure
Criminal Justice 234—Legal Aspects of Law Enforcement
Political Science 436—American Constitutional Law and Development
Political Science 437—American Constitutional Law and Development
Business Law 331—Business Law
Business Law 3311—Labor Law
Business Law 434—Advanced Legal Principles

Sociology

Program Director: Wayne C. Seelbach

Sociology is the study of social life and the social causes and consequences of human behavior. Sociology's subject matter ranges from the intimate family to the hostile mob, from crime to religion, from the division of race and social class to the shared beliefs of a common culture, from the sociology of sport to the sociology of work. Sociology is a popular major for students planning futures in such professions as law, business, education, architecture, politics, public administration, and even medicine. The research interests of Lamar's sociology faculty include social stratification, criminology, alienation, gender roles, geron-

tology, market and evaluation research, sociology of sport, and family structure and functioning. The Bachelor of Science degree is designed for students whose interests are more quantitative while the Bachelor of Arts offers a traditional liberal arts education.

Teacher Certification—Sociology

Students wishing to secure the Bachelor of Arts or Bachelor of Science degree in sociology and at the same time certify for a secondary teaching certificate with a teaching field in sociology, should consult with the department head.

Bachelor of Science—Sociology Major

The degree of Bachelor of Science in Sociology will be awarded upon completion of the following requirements:

A. General Requirements:
Meet the University's general requirements for a bachelor's degree which are described earlier in this bulletin under "Degree Requirements" and satisfy all departmental requirements.

B. Major—30 semester hours to include:
Sociology 131—Introduction to Sociology
Sociology 438—Research Methods
Sociology 439—Social Theory

C. Departmental Requirements—12 semester hours
Social Work—3 hours
Criminal Justice—3 hours
Anthropology—3 hours
Philosophy or Psychology—3 hours

D. Minor—an approved minor of 18 semester hours, 6 of which must be advanced.

E. Electives:
Sufficient approved electives to complete a minimum of 124 semester hours.

Recommended Program of Study

First Year

First Semester		Second Semester	
Eng 131 or 136	3	Eng 132, 134, or 135	3
Mth 1334	3	Mth 234	3
Lab Science	4	Lab Science	4
Swk	3	CJ	3
Soc 131	3	Soc	3
PE Activity	1-2	PE Activity	1-2
	17-18		17-18

Second Year

First Semester		Second Semester	
Eng Literature	3	Eng Lit, Eng 4335, Spc or Lang	3
His Soph Amer	3	His Soph Amer	3
Ant	3	Phl or Psy	3
Soc	3	Soc	3
Minor/Elective	3	Minor/Elective	3
PE Activity	1-2	PE Activity	1-2
	16-17		16-17

Third Year

First Semester		Second Semester	
POLS 231	3	POLS 232	3
Soc	6	Soc	6
Minor/Electives	6	Minor/Electives	6
	15		15

Fourth Year

First Semester		Second Semester	
Soc 438	3	Soc 439	3
Minor/Electives	9-11	Minor/Electives	9-11
	12-14		12-14

Bachelor of Arts—Sociology Major

The degree of Bachelor of Arts in Sociology will be awarded upon completion of the following requirements:

A. General Requirements: Meet the university's general requirements for a bachelor's degree which are described earlier in this bulletin under "Degree Requirements" and satisfy all departmental requirements.
Completion of the 232 course in a foreign language.
Literature—6 semester hours

B. Departmental requirements: The requirements concerning major, departmental requirements, minor, and electives are the same as for the Bachelor of Science degree listed above.

Recommended Program of Study

First Year

First Semester		Second Semester	
Eng 131 or 136	3	Eng 132, 134, or 135	3
Mth 1334	3	Mth 234	3
Lab Science	4	Lab Science	4
Foreigh Lang 131	3	Foreign Lang 132	3
Soc 131	3	Soc	3
PE Activity	1-2	PE Activity	1-2
	17-18		17-18

Second Year

First Semester		Second Semester	
Eng Literature	3	Eng Literature	3
His Soph Amer	3	His Soph Amer	3
Ant	3	Phl or Psy	3
Foreign Lang 231	3	Foreign Lang 232	3
Soc	3	Soc	3
PE Activity	1-2	PE Activity	1-2
	16-17		16-17

Third Year

First Semester		Second Semester	
POLS 231	3	POLS 232	3
Swk	3	CJ	3
Soc	6	Soc	6
Minor/Electives	3	Minor/Electives	3
	15		15

Fourth Year

First Semester		Second Semester	
Soc 438	3	Soc 439	3
Minor/Electives	9-11	Minor/Electives	9-11
	12-14		12-14

Social Work

Program Director: Vernice M. Monroe

Social Work is a profession that helps people improve their social functioning. Problems of personal and social adjustment are brought to the social worker whose work is devoted to helping individuals, groups and communities face difficulties and find solutions to problems. Social work practice involves more than a desire to "do good"; it involves the synthesis of knowing, doing, feeling and understanding. Lamar University's Social Work Program is fully accredited by the Council on Social Work Education. A major or 18 semester hour minor in social work will entitle the graduate to apply for Texas licensure as a social worker. The research interests of Lamar's social work faculty are in the areas of family violence, sexual abuse, counseling techniques, social work education, and social policy.

Bachelor of Social Work

The Bachelor of Social Work will be awarded upon completion of the following requirements:

A. General Requirements: Meet the university's general requirements for a bachelor's degree which are described earlier in this bulletin under "Degree Requirements" and satisfy all departmental requirements. The lab science course must be biology.

B. Major—33 semester hours to include:
Social Work 131, 231, 331, 332, 333, 334, 335, 432, 4321, 4324, plus 3 hours of electives in Social Work.

C. Departmental Requirements—24 semester hours
Sociology 131, 132, 336, 438
Psychology 131, and 234 or 235
Criminal Justice—3 hours
Anthropology—3 hours

D. Minor: An approved minor of 18 semester hours, 6 of which must be advanced. Students normally minor in either psychology or sociology unless they select one of the optional concentrations described below:
1. Concentration in Corrections—18 hours
The Corrections concentration prepares the prospective social worker for practice in community corrections, probation and parole departments, prisons, and jails. For this concentration, the following courses are required: Criminal Justice 1302, 1303 or 1305, 235, 236, 335, and 432.
2. Concentration in Family and Children's Services—18 hours
The Family and Children's Services concentration prepares the prospective social worker for specialized practice involving families and children. For this concentration, the following courses are required: Home Economics 137, 233, 239, 330 or 435, 334, and 339.

E. Electives—Sufficient approved electives to complete a minimum of 124 semester hours.

Recommended Program of Study

First Year

First Semester		Second Semester	
Eng 131 or 136	3	Eng 132, 134, or 135	3
Mth	3	Mth 1334 or higher	3
Bio 1400	4	Bio 1401	4
Soc 131	3	Soc 132	3
Swk 131	3	Swk 231	3
PE Activity	1-2	PE Activity	1-2
	17-18		17-18

Second Year

First Semester		Second Semester	
Eng Literature	3	Eng Lit, Eng 4335, Spc or Lang	3
His Soph Amer	3	His Soph Amer	3
Ant	3	CJ	3
Psy 131	3	Psy 234 or 235	3
Minor/Electives	3	Swk 331	3
PE Activity	1-2	PE Activity	1-2
	16-17		16-17

Third Year

First Semester		Second Semester	
POLS 231	3	POLS 232	3
Soc 336	3	Soc 438	3
Swk 332, 333	6	Swk 334, 335	6
Minor/Electives	3	Minor/Electives	3
	15		15

Fourth Year

First Semester		Second Semester	
Swk 432, 4321	6	Swk 4324, Swk	6
Minor/Electives	6-8	Minor/Electives	6-8
	12-14		12-14

Criminal Justice

Program Director: James J. Love

The Bachelor of Science degree in criminal justice prepares students for employment in a variety of criminal justice professions such as in corrections, law enforcement and court administration or for further study in either law or graduate school while the Associate of Science degree in law enforcement is designed for persons desiring employment in active law enforcement. The Criminal Justice program supervises the Lamar Regional Police Academy which employs a full-time director and staff to coordinate and provide police training in the South East Texas region. The Academy also provides in-service training for criminal justice professionals in the region.

Bachelor of Science—Criminal Justice Major

The Bachelor of Science in Criminal Justice will be awarded upon completion of the following requirements:

A. General Requirements:
Meet the university's general requirements for a bachelor's degree which are described earlier in this bulletin under "Degree Requirements" and satisfy all departmental requirements.

B. Criminal Justice Core—21 semester hours
12 semester hours required: CJ 1301, 1302, 1303, and 1305.
9 semester hours to be selected from: CJ 231, 232, 234, 235, and 236.

C. Criminal Justice Advanced Electives—12 semester hours

D. Departmental Requirements—12-18 semester hours
Sociology 131, 438
Social Work—3 hours
Anthropology—3 hours
Criminal Justice 434—(CJ majors without field experience must complete 6 hours of CJ 434.)

E. Minor or Approved Electives—an approved minor of 18 semester hours, 6 of which must be advanced. The minor with a concentration in corrections should consist of: CJ 1302, 1303 or 1305, 235, 236, 335, and 432 or 434. Students without field experience must take CJ 434.

F. Electives—Sufficient approved electives to complete a minimum of 124 semester hours.

Recommended Program of Study

First Year

First Semester		Second Semester	
Eng 131 or 136	3	Eng 132, 134, or 135	3
Mth	3	Mth 1334 or higher	3
Lab Science	4	Lab Science	4
Soc 131	3	Swk	3
CJ 1301	3	CJ 1302	3
PE Activity	1-2	PE Activity	1-2
	17-18		17-18

Second Year

First Semester		Second Semester	
Eng Literature	3	Eng Lit, Eng 4335, Spc or Lang	3
His Soph Amer	3	His Soph Amer	3
Ant	3	CJ Soph Electives	6
CJ Soph Elective	3	CJ 1305	3
CJ 1303	3	PE Activity	1-2
PE Activity	1-2		
	16-17		16-17

Third Year

First Semester		Second Semester	
POLS 231	3	POLS 232	3
CJ Advanced	3	CJ Advanced	3
Minor/Electives	9	Minor/Electives	9
	15		15

Fourth Year

First Semester		Second Semester	
Soc 438	3	CJ 434, 434	6
CJ Advanced	3	Minor Electives	6-8
Minor/Electives	6-8		
	12-14		12-14

Associate of Science—Law Enforcement Major

The Associate of Science in Law Enforcement will be awarded upon the completion of the following requirements:

A. General Requirements:
Meet the univeristy's general requirements for the associate of science degree which are described earlier in this bulletin under "Degree Requirements" except that all grade point averages for the Associate of Science in Law Enforcement shall be calculated in exactly the same manner as for the Bachelor's Degree. All departmental requirements described herein apply in the same manner as for the Bachelor's Degree.

B. Criminal Justice Core—21 semester hours
12 semester hours required: CJ 1301, 1302, 1303 and 1305
9 semester hours to be selected from: CJ 231, 232, 234, 235, and 236

C. Electives:
Sufficient approved electives to complete a minimum of 62 semester hours. (60 academic hours plus 2 semesters of P.E.).

Recommended Program of Study

First Year

First Semester		Second Semester	
Eng 131 or 136	3	Eng 132, 134, or 135	3
Mth or Lab Science	3-4	Mth or Lab Science	3-4
His Soph Amer	3	His Soph Amer	3
CJ 1301	3	CJ 1302	3
PE Activity	1-2	PE Activity	1-2
	13-15		13-15

Second Year

First Semester		Second Semester	
Eng Literature	3	POLS 232	3
POLS 231	3	CJ Soph Electives	6
CJ Soph Elective	3	CJ 1305	3
CJ 1303	3	Electives	6
Electives	6		
	18		18

Sociology Courses (Soc)

131 Introduction to Sociology 3:3:0
Sociology as a field of knowledge. Basic terms, concepts, theories of sociology applied to an explanation of human behavior, personality, groups and society.

132 Social Problems 3:3:0
Attributes of society and of persons which are subject to disapproval; the causes, extent and consequences of problems; programs and prospects of their resolution.

231 Deviant Behavior 3:3:0
The study of the major areas of social maladjustment from the standpoint of the processes underlying social and individual disorganizations, such as alcoholism, illegitimacy, suicide, drug addiction and other personal deviations.

233 Marriage and the Family 3:3:0
Characteristics of and problems within courtship, marriage and family in American society.

234 Social Gerontology 3:3:0
A general survey of the social phenomenon of aging in American society, attention given to the interrelationship among biological, individual, group and social variables.

235 Career Development I 3:A:0
Special assignments related to work-experience in cooperation with employer under faculty supervision.

236 Career Development II 3:A:0
Special assignments related to work-experience in cooperation with employer under faculty supervision.

330 American Society 3:3:0
Description and analysis of structural and functional characteristics of American society and culture.

331 Sociology of Gender 3:3:0
Analysis of the origin and social development of gender roles. Examination of changing roles for males and females and their impact on interpersonal relationships and societal institutions.

3313 Career Development III 3:A:0
Special assignments related to work-experience in cooperation with employer under faculty supervision.

3314 Career Development IV 3:A:0
Special assignments related to work-experience in cooperation with employer under faculty supervision.

332 Social Psychology 3:3:0
Social and cultural influences upon individual behavior and personality; interpersonal and intergroup relations and collective behavior.

333 Urban Sociology 3:3:0
Social and ecological processes in the urbanization movement; characteristics of urban society and culture.

334 Industrial Sociology 3:3:0
The social structure of industry and of the trade union interrelationships of industry, union and society; personal, social and cultural factors in industrial organization and operation.

335 The Family 3:3:0
Structural and functional characteristics of the family as a basic institution.

336 Race and Ethnic Relations 3:3:0
Racial and ethnic minority groups within the society; causes, distinctions and changes in the relationship between minority and dominant groups.

337 Sociology of Sport 0:0:0
Examination of the social aspects of sport and how sport is a microcosm of American society. Major issues to be studied include racial and sexual discrimination, violence, and sport as big business.

338 Criminology 3:3:0
Extent of and explanation for crime in American society; agencies dealing with crime and criminals; programs for control and prevention of crime and delinquency.

339 Juvenile Delinquency 3:3:0
The nature, incidence and explanations for juvenile delinquency in American society; agencies and programs for prevention and control of juvenile delinquency.

430 Seminar in Sociology 3:3:0
Basic concepts and general principles of sociology as applied to the study of selected topics. The course may be repeated for credit when the designated topics are varied.

4301 Directed Studies in Sociology 3:A:0
Individual study with an instructor in an area of mutual interest. May be repeated for credit when topic varies.

431 Population Problems 3:3:0
The growth and composition of population with emphasis on social, economic and political problems.

4311 Medical Sociology 3:3:0
A study of social organization in the medical field with emphasis on the social interaction between persons involved.

432 Sociology of Education 3:3:0
A study of the multicultural influences on the school system and the democratic society. Included will be an analysis of educational problems in the multicultural society of Texas.

433 Adult Development and Aging 3:3:0
An in-depth analysis of the social and psychological processes associated with the passage of individuals through the age structure of American society.

4331 Seminar in Gerontology 3:3:0
Pre-professional seminar examining current theories, research, issues and career opportunities in the field of aging.

434 Social Change and Futurology 3:3:0
Analysis of the nature, sources, and effects of contemporary social changes with emphasis given to future types of social organization and functioning. Science and technology as stimulators of change.

435 Sociology of Religion 3:3:0
Religion as a social institution in contemporary America; development of religious systems; cultural, social and individual functions of religion.

436 Social Movements 3:3:0
Historical, structural and tactical consideration in the development of major systems of belief and practice within society; political movements in American society.

437 Public Opinion 3:3:0
Factors and processes in formation and change of public opinion, influence of the mass media on communication; analysis and evaluation of propaganda.

438 Research Methods 3:3:0
Study of the logic, design, techniques and problems involved in social scientific research.

439 Social Theory 3:3:0
A survey of major sociological theorists and theories.

Social Work Courses (Swk)

131 Introduction to Social Work 3:3:0
An overview of the history, philosophy, field of practice and services of the social work profession. A field experience to introduce students to the social work profession is required.

231 Survey of the Social Welfare Institution 3:3:0
Study of the growth and development of the social welfare institution; with emphasis on selected pieces of social welfare legislation and the effect on social welfare services.

331 Social Work Practice I 3:3:0
Course designed to help students acquire basic skills for social work practice: basic helping skills; engagement skills; observation skills; and communication skills.

332 Human Behavior in the Social Environment 3:3:0
Life cycle approach to the study of growth and development as impacted upon by the social environment.

333 Social Work Practice II 3:3:0
Theories, concepts, principles and modalities generic to social work practice. Emphasis on the use of interventive skills with client systems.

334 Social Policy and Administration 3:3:0
Anlaysis of social policies as related to selected social problems at all governmental levels. Emphasis placed on integrating policy into the administering of human service programs.

335 Social Work Practice With Target Groups 3:3:0
Acquisition of knowledge, skills and techniques for practice with multiproblem families, low income families, racial or ethnic minorities, and other client groups using a crisis intervention model.
Prerequisite: Swk 331 and 333.

410, 420, 430 Special Topics in Social Work 1-3:A:0
Topics in various areas in social services. Includes field and/or library work and conferences with a staff member. A student may repeat the course for credit when the area of study is different.
Prerequisite: Consent of the instructor.

432 Seminar 3:3:0
Current topics in social work. May be repeated for credit when the topic is varied.

4321 Field Experience I 3:A:0
Integration of theory into practice through placement in community social service agencies. Course includes a weekly 4-hour seminar. Placement to be arranged.
Prerequisite: Consent of field placement coordinator, Swk 333, 335, plus three additional hours in Swk.

4324 Field Experience II 3:A:0
Continuation of Swk 4321. Placement to be arranged.
Prerequisite: Consent of the instructor.

Criminal Justice Courses (CJ)

1301 Crime in America 3:3:0
American crime problems in historical perspective; social and public policy factors affecting crime; impact and crime trends; social characteristics of specific crimes; prevention of crime.

1302 Introduction to Criminal Justice 3:3:0
History and philosophy of criminal justice and ethical considerations; crime defined: its nature and impact; overview of criminal justice system; law enforcement; court system; prosecution and defense; trial process; corrections.

1303 Fundamentals of Criminal Law 3:3:0
A study of the nature of criminal law; philosophical and historical development; major definitions and concepts; classification of crime; elements of crimes and penalties using Texas statutes as illustrations; criminal responsibility.

1305 Courts and Criminal Procedure 3:3:0
The judiciary in the criminal justice system; structure of the American court system; prosecution; right to counsel; pre-trial release; grand juries; adjudication process; types and rules of evidence; sentencing.

1311 Introduction to Law Enforcement (Academy) 3:3:0
A study of history and philosophy of law enforcement: structure of government; criminal justice system; Texas Penal Code of Criminal Procedure; search and seizure; civil procedures and laws of arrest.
Prerequisite: Admission to Police Academy and consent of instructor.

1312 Law Enforcement Related Fields (Academy) 3:3:0
A study of juvenile procedures; written and oral reports; interviews and interrogations; practical problems; first aid; courtroom demeanor and testimony; Texas liquor laws; speech; defensive tactics and firearms training.
Prerequisite: Admission to Police Academy and consent of instructor.

231 Police Systems and Practices 3:3:0
The police profession; organization of law enforcement systems; the police role; police discretion; ethics; police-community interaction; current and future issues.

232 Criminal Investigation 3:3:0
Investigative theory; collection and preservation of evidence; sources of information; interview and interrogation; uses of forensic sciences; case and trial preparation.

234, Legal Aspects of Law Enforcement 3:3:0
Police authority; responsibilities; constitutional constraints; laws of arrest, search, and seizure; police liability.

235 Correctional Systems and Practices 3:3:0
Corrections in the criminal justice system; organization of correctional systems; correctional role; institutional operations; alternatives to institutionalization; treatment and rehabilitation; current and future issues.

236 Community Resources in Corrections 3:3:0
An introductory study of the role of the community in corrections; community programs for adults and juveniles; administration of community programs; legal issues; future trends in community treatment.

332 Counseling 3:3:0
Basic counseling techniques for dealing with troubled individuals. Communication skills; crisis intervention.

335 Police/Juvenile Relations 3:3:0
An exploration of the different approaches to policing young people. Consideration of states' laws and landmark cases influencing policing the young.

336 Narcotics and Vice 3:3:0
Narcotics, alcohol abuse, sex and gambling offenses and offenders; legal, philosophical and sociological aspects of the role of the criminal justice system in controlling these offenses; methods of diversion.

337 Organized Crime 3:3:0
Survey of organized crime in America, past and present; areas and extent of influence; agencies and groups involved in prevention and control.

432 Seminar in Correctional Programs 3:3:0
Overview of programs in institutional and noninstitutional agencies; examination of such programs based upon various correctional theories.

434 Applications 3:A:0
Application of principles learned in the classroom to a non-classroom setting. Requirements for this course may be satisfied through a special project, internship, or other work experience. May be repeated for credit.
Prerequisite: Consent of the instructor.

435 Management and Organization in Criminal Justice 3:3:0
Principles of organizational behavior and management as applied to criminal justice organizations. Survey of managerial techniques.

4310 Ethical Issues in Criminal Justice 3:3:0
An examination of selected ethical issues and problems confronting criminal justice professionals.

4312 Contemporary Issues in Criminal Justice 3:3:0
Current topics in criminal justice. May be repeated for credit when the topic is varied.

Anthropology Courses (Ant)

231 Introduction to Cultural Anthropology 3:3:0
A holistic approach to the study of recent and contemporary human societies, including hunter-gatherers, primitive horticultural peoples, pastoral nomads, peasants and city-dwellers. Course will include cross-cultural comparisons of economic systems, sex roles, marriage patterns, political organization, religion and the arts.

232 Culture Areas 3:3:0
Peoples of Africa/Peoples of the Americas/Peoples of Asia. A series of area survey courses designed to introduce the student to the cultural diversity present in each area. Attention is given to cultural origins and pre-contact civilizations as well as to the impact of Western technology and colonization. The course may be repeated for credit when the designated topics are varied.

233 Introduction to Physical Anthropology 3:3:0
The physical nature of human beings is explored using evidence from primate studies, fossils and contemporary populations. Basic concepts of genetics, evolution and adaptation will be introduced.

235 Introduction to Archaeology 3:3:0
An overview of the human story before history, tracing human social and cultural development and movement throughout the world. Basic techniques and methods used by modern archaeologists will also be introduced.

333 Applied Anthropology 3:3:0
An examination of the use of anthropology in the modern world. Special attention is given to third-world development programs, urban anthropology, medical anthropology, and the anthropology of education.

335 Crime and Deviance in Primitive Society 3:3:0
An exploration of crime, deviant behavior and institutions of social control among primitive hunter-gatherers, horticultural peoples, and pastoral nomads. Questions of aggression, acquisitiveness and human nature will also be examined.

431 Topics in Anthropology 3:3:0
Topics will be selected on basis of need and interest. Course may be repeated for credit, when the designated topics are varied.


Principles
of Accounting
ECONOMICS

College of Business

Departments: Accounting; Administrative Services; Economics; Management, Marketing, and Finance

John A. Ryan, Ph.D., Dean

Robert A. Swerdlow, Graduate Coordinator

Charles F. Hawkins, Director of Research Services

Joel L. Allen, Director of J. D. Landes Center for Economic Education

Eleanor M. Stevens, Director of Advising Center

The College of Business was established by the University in 1972. Prior to this time, degrees in business and economics were granted by the Division of Business which was established in 1951 and the School of Business established in 1954. All undergraduate programs of the College of Business are accredited by the American Assembly of Collegiate Schools of Business.

Four departments—Accounting; Administrative Services; Economics; and Management, Marketing, and Finance—make up the College of Business. The Bachelor of Business Administration degree is granted in all areas. A Bachelor of Science degree is also granted in Economics.

The Master of Business Administration degree program also is offered. Details may be found in the Graduate Bulletin.

Objectives

Members of the faculty of the College of Business believe the education of the modern business man and woman should include a well-rounded general education as well as professional study to provide a thorough understanding of environment and heritage. Such an understanding is necessary if American industries are to meet their responsibilities in a changing social and industrial order.

Of equal importance is the business graduate's understanding of the social, legal, governmental and economic framework within which the American industrial organizations exist and operate. The general educational requirements are patterned to develop such understandings.

The professional programs offered reflect the belief that application as well as theory should be the proper concern of the undergraduate student. A common body of fundamental business and economics theory, principles and techniques is presented in the core pattern of business subjects. These theories and principles are developed along with certain basic quantitative tools of analysis and communication as preparation for the specialized professional courses.

Regardless of a graduate's position in the business world, he or she will need to understand the interaction of all areas and functions of business operations. The development of such basic business understandings is the objective of the core courses in business and economics required of all business graduates.

The specialized professional preparation of the student provides opportunities for study in a particular field of interest. It prepares a graduate to assume a position of responsibility in business, public service or education.

The attainment of these objectives requires not only a given pattern of courses but also successful teaching and research. In classroom presentation, the College utilizes many approaches including lecture, discussion, case method, individual research projects, etc. Lower level courses are presented primarily from historic and descriptive points of view, while the upper level courses are designed to develop the student's ability to analyze and utilize research findings in problem-solving situations.

Degrees

The Bachelor of Business Administration curriculum consists of three distinct phases: non-professional education, professional specialization, and electives.

The degree will be awarded upon the completion of the following:

I. Curriculum Requirements:

A. Non-professional education courses:
Eco 131, 132 Principles of Economics
English Composition six semester hours
Political Science 231, 232 American Government
Sophomore American History six semester hours
Literature three semester hours
Mth 134 Mathematics for Business Applications, Mth 1341 Elements of Analysis for Business Applications or Mth 236, 237 Calculus I and II
Four semesters of required physical activity and/or marching band and/or ROTC
Laboratory Science eight semester hours
Soc, Phl, Ant or Psy three semester hours
Spc 131 Speech Communication or
Spc 331 Business and Professional Speech
Approved non-professional education electives six to nine semester hours

B. Pre-professional courses:
Acc/AS/Eco/Mgt 130 Business Environment and Public Policy*
CS 133 Introduction to Computer Programming*

C. Professional core courses:*
Acc 231, 232 Principles of Accounting
BAC 331, 332 Business Analysis I & II
BLW 331 Business Law
Eco 334 Macro Economics or
Eco 339 Economics of the Firm
Fin 331 Principles of Finance
Mgt 331 Principles of Management
Mgt 332 Production Management
Mgt 437 Administrative Policy
Mkt 331 Principles of Marketing
OAS 335 Business Communications

D. Professional Specialization (18-24 semester hours):

Slightly different program of courses required by the Department of Administrative Services for students planning to secure teacher certification and for general business computer science and information systems management majors as well as by the Department of Economics for economics majors. See Department of Administrative Services and Department of Economics in this bulletin.

Accounting Major (24 semester hours)
Acc 331, 332 Inter Acc
Acc 334 Cost Acc
Acc 338, 339 Tax Acc
Acc 430 Auditing
Acc 431 Adv Acc
Acc 435 Acc. Systems

Economics Major (24 semester hours)
Eco 333 Inter Theory
Eco 332 Money & Banking
Eco electives 9 sem. hours
Eco 334 Macro
Eco 339 Economics of the Firm
Eco 4315 Gov & Business

Finance Major (21 semester hours)
Eco 332 Money & Banking
Fin 332 Financial Analysis
Fin 333 Insurance
Fin 431 Investments
Fin 432 Financial Markets
Fin 433 Financial Institutions
Fin 434 Real Estate

General Business Major (18-24 semester hours)

Business Concentration I
Acc 334 Cost Accounting or
Acc 338 Taxation Accounting
Fin 333 Insurance or
Fin 332 Financial Analysis
Mgt 333 Personnel Management
Mkt 431 Marketing Management
Mkt 438 Small Business Enterprise
OAS 431 Office Management

Advertising Communication Concentration II
Art 237 Graphic Design I
Art 3333 Graphic Design II

Art 3353 Fashion Layout and Illustration
Com 3383 Broadcast Advertising
Com 4383 Print Advertising
Mkt 333 Marketing Promotion

Industrial Engineering
Concentration III

IE 3301 Survey of Industrial Engineering
IE 333 Engineering Economy
IE 339 Materials Science and Manufacturing Processes
IE 4301 Quality Control Applications
IE 438 Methods Engineering
IE 4316 Industrial and Product Safety

Computer Science
Concentration IV

CS 132 Computer Programing II
CS 3301 Pascal Language
CS 3304 COBOL Programing
CS 4305 Data Structures and Algorithm Analysis
CS 4311 Information Systems I
CS 4312 Information Systems II
Mgt 438 Management of Computer Systems

Retail Merchandising
Concentration V

HEc 231 Textiles
HEc 331 Advanced Clothing Construction
HEc 432 Family Clothing
HEc 434 Fashion Production and Distribution
HEc 436 Home and Fashion Merchandising
Mkt 332 Principles of Retailing

Information Systems Management
Concentration VI

CS 132 Computer Programming II
Acc 334 Cost Accounting or Mgt 431 Budgetary Control
BAC 330 Micro Software for Business
BAC 437 Management Database Appl
Mgt 438 Mgt Computer Systems
OAS 331 Records Management
OAS 336 Office Information Systems
OAS 436 Bus Decision Support Systems

Pre-law Recommended Courses

Acc 338 Taxation Accounting
Acc 339 Taxation Accounting
BLW 434 Advanced Legal Principles
Fin 332 Financial Analysis or
Eco 336 Survey of Labor Economics
Fin 333 Insurance or
Fin 434 Real Estate
Mkt 438 Small Business Enterprise

Management Major (18 semester hours)

Acc 334 Cost Accounting
Mkt 431 Marketing Management
Mgt 333 Personnel Management
Mgt 431 Budgetary Control
Mgt 432 Organ Behav and Adm or
Mkt 435 Quant Tech in Mkt
BLW 332 Labor Law or
Eco 336 Survey of Labor Economics

Marketing Major (18 semester hours)

Mkt 332 Principles of Retailing
Mkt 333 Mkt Promotion or
Mkt 432 Buyer Behavior
Mkt 431 Marketing Management
Mkt 435 Quant Tech in Mkt or
Mkt 433 International Mkt
Mkt 436 Marketing Research
Mkt 437 Adv Marketing Problems

Office Administration Major — Plan I
(21 semester hours)

OAS 233 Advanced Typewriting
OAS 336 Word Proc Con & Admin
OAS 337 Elec Word Proc Sys
OAS 338 Sec Office Procedures
OAS 363 Advanced Shorthand & Transcription or
OAS 332 Advanced Dictation and
OAS 333 Advanced Transcription
OAS 431 Office Management

Office Administration Major — Plan II
(21 semester hours)

OAS 233 Advanced Typewriting
OAS 336 Word Proc Con & Admin
OAS 338 Sec Office Procedures
OAS 363 Advanced Shorthand & Transcription or
OAS 332 Advanced Dictation and
OAS 333 Advanced Transcription
OAS 431 Office Management
OAS 438 Business Edu Methods

Personnel Administration
(Accreditation) (21 semester hours)

Mgt 333 Personnel Management
Mgt 432 Organ Behav and Adm
Psy 335 Motivation
Psy 336 Psy Tests and Measure
BLW 332 Labor Law or
Eco 336 Survey of Labor Ecomonics
Mgt 433 Personnel Accred Review
OAS 431 Office Management

E. Approved electives to complete a total of 129 semester hours.

II. A minimum grade point average of 2.00 in all business and economics subjects.

III. A minimum grade point average of 2.00 on all courses attempted.

IV. Application for the degree must be made through the Office of the Dean of Business.

The **Bachelor of Science** degree in economics will be awarded upon completion of the following requirements:

I. The specific course requirements as set forth in the Department of Economics for the degree (see Department of Economics in this bulletin).
II. A minimum grade point average of 2.00 in all economics courses.
III. A minimum grade point average of 2.00 on all courses attempted.
IV. A minimum of 122 semester hours exclusive of physical education and band.
V. A minimum of 30 semester hours in the field of economics.
VI. A minor of 18 semester hours, six of which must be 300 or 400 level courses.

Requirements for the **Master of Business Administration** degree are given in detail in the Graduate Bulletin.

Admission to the College of Business

1. All newly entering freshmen who meet the University's general entrance requirements will be admitted to the College of Business.
2. All newly entering freshmen will be admitted to a "Pre-Business" classification only. No major will be declared until the following conditions are met:
   a. completion of 45 semester hours with a 2.0 or higher grade point average
   b. included in the 45 hours will be
      1) Eco 131
      2) Eco 132
      3) AS/Eco/Mgt 130 (not required of students who plan to pursue a major in Economics or in Office Administration, Plan II - Teacher Certification)
      4) Acc 231
      5) English Composition (6 hours)
      6) Mth 134 and Mth 1341 or Mth 236 and Mth 237
3. Transfer students with a grade point deficiency and/or those with fewer than 45 hours of credit as specified above will be classified as "Pre-Business."
4. After exiting the "Pre-Business" classification and declaring a major leading to a bachelor's degree in business, a student who incurs a grade point deficiency should make up that deficiency within the following semester.
5. No student will be allowed to enroll in 400-level business courses until his/her grade point average is 2.0 or higher.
6. Items 2 through 5 above do not apply to students pursuing a one- or two-year certificate program.

Minor Program in Business

Non-business students may minor in business but without any specialized field of study. Such students should complete Acc/AS/ECO/MGT 130, ECO 131, 132, Acc 231, 232, MGT 331, MKT 331, and FIN 331.

Students registering for business courses must meet all course prerequisites, including the implicit prerequisite indicated by the course level. Any exception must be approved by the head of the department offering the course.

Department of Accounting

Department Head: M. W. Veuleman — 235 Galloway Business Building

Professors: Bennett, Jones, Veuleman

Associate Professors: Barlow, Davis, Harris, Hudson, McGillivray

Business and industry are controlled largely through the findings of adequate accounting systems. Accounting is concerned with the analytical recording of transactions related to a large variety of business, institutions and industries, including interpretations of resulting data. Decisions and policies of significance are based on information obtained through the medium of accounting procedures.

The program in accounting is designed for those students seeking careers in either private or public accounting. Students pursuing this degree program must take all professional courses at Lamar University.

Bachelor of Business Administration — Accounting Major

Recommended Program of Study

First Year

Acc/AS/Eco/Mgt 130 Bus Envir & Pub Policy	3
CS 133 Introduction to Computers	3
Eco 131, 132 Principles	6
Eng Composition	6
Mth 134, 1341 Mathematics for Business Applications & Elements of Analysis for Business Applications or Mth 236, 237 Calculus I & II	6
Laboratory Science	8
PE Activity (2 semesters)	2
	34

Second Year

Acc 231, 232 Principles	6
Eng Literature	3
POLS 231, 232 American Government	6
His Sophomore American History	6
Soc, Phl, Ant or Psy	3
Spc 131 or 331	3
PE Activity (2 semesters)	2
Electives	3
	32

Third Year

Acc 331, 332 Intermediate	6
Acc 338 Taxation Accounting	3
Acc 334 Cost Accounting	3
BAC 331, 332 Business Analysis	6
BLW 331 Business Law	3
Fin 331 Principles of Finance	3
Mgt 331 Principles of Management	3
Mkt 331 Principles of Marketing	3
Electives	3
	33

Fourth Year

Acc 430 Auditing	3
Acc 431 Advanced Accounting	3
Acc 435 Accounting Systems	3
Eco 339 Economics of the Firm	3
Mgt 332 Production Management	3
Mgt 437 Administrative Policy	3
OAS 335 Business Communications	3
Accounting Elective	3
Electives (College of Business)	6
	30

Accounting Courses (Acc)

231 Principles of Accounting 3:3:0
Concepts and procedures of financial accounting. First, the information gathering, analysis, recording and reporting functions inherent in the complete accounting cycle. Second, the balance sheet areas of asset measurement and liability.

232 Principles of Accounting 3:3:0
A continuation of Acc 231 with additional financial accounting and concepts, procedures and uses of managerial accounting. First, accounting for partnership and corporate owner's equity and specialized accounting topics. Second, cost and managerial accounting with basic cost systems, budgeting and special analyses for management.
Prerequisite: Acc 231 with grade of "C".

331 Intermediate Accounting 3:3:0
Analysis of theory and its applications in the areas of cash, temporary investments, receivables, inventories, plant and intangible assets, long-term investments and present value concepts.
Prerequisite: Acc 231 with a grade of "B" and Acc 232 with a grade of "B".

332 Intermediate Acounting 3:3:0
Continuation of Acc 331 with emphasis on current liabilities, long-term debt, leases, pensions, owners' equity, revenue recognition, income tax accounting, earnings per share, changes in financial position and accounting for inflation.
Prerequisite: Acc 331 with grade of "C".

334 Cost Accounting 3:3:0
Cost accounting with a managerial emphasis: Job order and process cost; standard cost and variance analysis; budgetary control; relevant costing for decision making; capital budgeting.
Prerequisite: Acc 232.

337 Municipal and Governmental Accounting 3:3:0
Special procedures for enterprises operating under appropriated budgets with attention given to federal, state, municipal governmental units; bond funds; special assessment funds; general funds; budgets; financial statements.
Prerequisite: Acc 232.

338 Taxation Accounting 3:3:0
Provisions of the income tax code as applied to individuals: taxable income; gains and losses; capital gains; dividends; expenses; itemized deductions; depreciation; losses; zero bracket amounts; and credits.
Prerequisite: Acc 232.

339 Taxation Accounting 3:3:0
Provisions of the income tax code as applied to proprietorships, partnerships, estates, trusts and corporations; reorganizations; filing returns; refunds; social security taxes; estate taxes; gift taxes.
Prerequisite: Acc 338.

430 Auditing 3:3:0
Principles and procedures applied by public accountants and auditors in the examination of financial statements and accounts; verification of data; audit working papers; reports; types of audits; procedures.
Prerequisite: Acc 332 with grade of "C".

431 Advanced Accounting 3:3:0
Analysis of special problems and theories relative to partnership formation and operations: fund accounting; corporate mergers and acquisitions; consolidated statements; accounting for foreign operations.
Prerequisite: Acc 332 with a grade of "C".

433 C.P.A. Review 3:3:0
Preparation for candidates for the Certified Public Accountants' examination through review and study of problems and questions relative to the examination.
Prerequisite: Consent of the instructor.

434 Advanced Cost Accounting 3:3:0
In-depth study of process cost accounting; spoilage; overhead allocation; departmentalization; quantitative methods for planning and control.
Prerequisite: Acc 334.

435 Accounting Systems 3:3:0
Analysis of theoretical models illustrating structure, design and installation of specific accounting systems with emphasis on computer applications.
Prerequisite: Acc 331 and Acc 334.

439 Special Topics in Accounting 3:3:0
Intensive investigation of accounting topics. Research and conferences with supervising faculty member.
May be repeated when area of study differs.
Prerequisite: Senior standing; approval of department head and instructor.

Department of Administrative Services

Department Head: Nancy S. Darsey **237 Galloway Business Building**

Professors: Darsey, Kirksey, Spradley, White

Associate Professor: Johnson

Assistant Professors: Barnes, Burke, Dorrell, Drapeau, Stevens, Swerdlow, Vaughn

The Department of Administrative Services offers degrees in General Business and Office Administration as well as one-year and two-year certificates in Office Administration.

General Business

The general business curriculum enables a student to receive an education in the fundamentals of business and at the same time diversify into a secondary field of concentration. Four of the six fields of concentration available to a student are outside the College of Business. The six fields of concentration include: Business Concentration, Advertising Communication Concentration, Industrial Engineering Concentration, Information Systems Management Concentration, Computer Science Concentration and Retail Merchandising Concentration.

A seventh General Business program is recommended for pre-law students. After completion of the General Business recommended program, students may apply directly to the law school of their choice.

Office Administration

For the Bachelor of Business Administration degree in Office Administration, the general and specific requirements of the four-year curricula furnish a broad preparation and a highly specialized proficiency for the professional secretarial field, including word processing.

A major in Office Administration may be combined with courses in education. This plan will qualify a graduate for a teacher's certificate.

The department also offers a two-year program for students in Office Administration. Offered only on the Beaumont campus, the two-year curriculum is designed to develop competence in typewriting, shorthand, computer concepts, accounting, business correspondence, and word processing concepts and techniques. Successful students are prepared to pass civil service examinations and the employment tests given by large business and industrial offices. A Certificate of Completion is awarded. One-year stenographic and clerical options are also offered on the Beaumont campus.

Students should consider the many advantages of Office Administration. This field can be particularly rewarding because of its unlimited promotional opportunities, especially in the area of office management. Many successful persons in positions of leadership began their business careers as secretaries, business education teachers, or assistants to office managers.

Recommended Programs of Study

Bachelor of Business Administration

General Business Major—Business Concentration—Plan I

First Year

Acc/As/Eco/Mgt 130 Business Environment and Public Policy	3
CS 133 Introduction to Computers	3
Eco 131, 132 Principles	6
Eng Composition	6
Mth 134, 1341 Mathematics for Business Applications & Elements of Analysis for Business Applications or Mth 236, 237 Calculus I & II	6
Laboratory Science	8
PE Activity	2
	34

Second Year

Acc 231, 232 Principles	6
Eng Literature	3
POLS 231, 232 American Government	6
His Sophomore American History	6
Soc, Phl, Ant or Psy	3
Spc 131 Public Speaking or Spc 331 Business and Professional Speech	3
PE Activity	2
Electives (non-business)	3
	32

Third Year

BAC 331, 332 Business Analysis	6
BLW 331 Business Law	3
Fin 331 Principles of Finance	3
Mgt 331 Principles of Management	3
Mgt 332 Production Management	3
Mkt 331 Principles of Marketing	3
OAS 335 Business Communications	3
Electives (non-business)	3
Electives (College of Business 300 or 400 Level)	6
	33

Fourth Year

Acc 334 Cost Accounting or Acc 338 Tax Acc	3
Eco 334 Macro Economics or Eco 339 Economics of the Firm	3
Fin 333 Insurance or Fin 332 Financial Analysis	3
Mgt 333 Personnel Management	3
Mgt 437 Administrative Policy	3
Mkt 431 Marketing Management	3
Mkt 438 Small Business Ent	3
OAS 431 Office Management	3
Electives (College of Business 300 or 400 Level)	6
	30

Advertising Communication Concentration—Plan II

First Year

Acc/AS/Eco/Mgt 130 Business Environment and Public Policy	3
CS 133 Introduction to Computers	3
Eco 131, 132 Principles	6
Eng Composition	6
Mth 134, 1341 Mathematics for Business Applications & Elements of Analysis for Business Applications or Mth 236, 237 Calculus I & II	6
Laboratory Science	8
PE Activity	2
	34

Second Year

Acc 231, 232 Principles	6
Eng Literature	3
POLS 231, 232 American Government	6
His Sophomore American History	6
Soc, Phl, Ant or Psy	3
Spc 131 Public Speaking or Spc 331 Business and Professional Speech	3
PE Activity	2
Electives (non-business)	3
	32

Third Year

BAC 331, 332 Business Analysis 6
BLW 331 Business Law 3
Art 237 Graphic Design 3
Fin 331 Principles of Finance 3
Mgt 331 Principles of Management 3
Mgt 332 Production Management 3
Mkt 331 Principles of Marketing 3
OAS 335 Business Communications 3
Electives (College of Business 300 or 400 Level) 6

33

Fourth Year

Art 3333 Graphic Design II 3
Art 3353 Fashion Layout and Illustration 3
Com 3383 Broadcast Advertising 3
Com 4383 Print Advertising 3
Eco 334 Macro Economics or Eco 339 Economics of the Firm 3
Mgt 437 Administrative Policy 3
Mkt 333 Marketing Promotion 3
Elective (non-business) 3
Electives (College of Business 300 or 400 Level) 6

30

Industrial Engineering Concentration—Plan III

First Year

Acc/AS/Eco/Mgt 130 Business Environment and Public Policy 3
CS 133 Introduction to Computers 3
Eco 131, 132 Principles 6
Eng Composition 6
Mth 134, 1341 Mathematics for Business Applications & Elements of Analysis for Business Applications or Mth 236, 237 Calculus I & II 6
Laboratory Science 8
PE Activity 2

34

Second Year

Acc 231, 232 Principles 6
Eng Literature 3
POLS 231, 232 American Government 6
His Sophomore American History 6
Soc, Phl, Ant or Psy 3
Spc 131 Public Speaking or Spc 331 Business and Professional Speech 3
PE Activity 2
Elective (non-business) 3

32

Third Year

BAC 331, 332 Business Analysis 6
BLW 331 Business Law 3
Fin 331 Principles of Finance 3
IE 3301 Survey of Industrial Engineering 3
Mgt 331 Principles of Management 3
Mkt 331 Principles of Marketing 3
OAS 335 Business Communications 3
Elective (non-business) 3
Electives (College of Business 300 or 400 Level) 6

33

Fourth Year

Eco 334 Macro Economics or Eco 339 Economics of the Firm 3
IE 333 Engineering Economy 3
IE 339 Materials Science and Manufacturing Processes 3
IE 4301 Quality Control 3
IE 438 Methods Engineering 3
IE 4316 Industrial and Product Safety 3
Mgt 332 Production Management 3
Mgt 437 Administrative Policy 3
Electives (College of Business 300 or 400 Level) 6

30

Computer Science Concentration—Plan IV

First Year

Acc/AS/Eco/Mgt 130 Business Environment and Public Policy 3
CS 131 Computer Programing I 3
Eco 131, 132 Principles 6
Eng Composition 6
Mth 134, 1341 Mathematics for Business Applications & Elements of Analysis for Business Applications or Mth 236, 237 Calculus I & II 6
Laboratory Science 8
PE Activity 2

34

Second Year

Acc 231, 232 Principles 6
CS 132 Computer Programming II 3
Eng Literature 3
POLS 231, 232 American Government 6
His Sophomore American History 6
Soc, Phl, Ant or Psy 3
Spc 131 Public Speaking or Spc 331 Business and Professional Speech 3
PE Activity 2

32

Third Year

BAC 331, 332 Business Analysis 6
BLW 331 Business Law 3
CS 3301 Pascal Language 3
CS 3304 COBOL Programing 3
CS 4305 Data Structures and Alogrithm Analysis 3
Fin 331 Principles of Finance 3
Mgt 331 Principles of Management 3
Mkt 331 Principles of Marketing 3
OAS 335 Business Communications 3
Electives (non-business) 3

33

Fourth Year

CS 4311 Information Systems I 3
CS 4312 Information Systems II 3
Eco 334 Macro Economics or Eco 339 Economics of the Firm 3
Mgt 332 Production Management 3
Mgt 437 Administrative Policy 3
Mgt 438 Mgt Comp Systems 3
Elective (non-business) 3
Electives (College of Business 300 or 400 Level) 9

30

Retail Merchandising Concentration—Plan V

First Year

Acc/AS/Eco/Mgt 130 Business Environment and Public Policy	3
CS 133 Introduction to Computers	3
Eco 131, 132 Principles	6
Eng Composition	6
Mth 134, 1341 Mathematics for Business Applications & Elements of Analysis for Business Applications or Mth 236, 237 Calculus I & II	6
Laboratory Science	8
PE Activity	2
	34

Second Year

Acc 231, 232 Principles	6
Eng Literature	3
POLS 231, 232 American Government	6
His Sophomore American History	6
Soc, Phl, Ant or Psy	3
Spc 131 Public Speaking or Spc 331 Business and Professional Speaking	3
PE Activity	2
Elective (non-business)	3
	32

Third Year

BAC 331, 332 Business Analysis	6
BLW 331 Business Law	3
Fin 331 Principles of Finance	3
HEc 231 Textiles	3
HEc 331 Advanced Clothing Construction	3
Mgt 331 Principles of Management	3
Mkt 331 Principles of Marketing	3
OAS 335 Business Communications	3
Electives (College of Business 300 or 400 Level)	6
	33

Fourth Year

Eco 334 Macro Economics or Eco 339 Economics of the Firm	3
HEc 432 Family Clothing	3
HEc 434 Fashion Production and Distribution	3
HEc 436 Home and Fashion Merchandising	3
Mgt 332 Production Management	3
Mgt 437 Administrative Policy	3
Mkt 332 Retailing	3
Elective (non-business)	3
Electives (College of Business 300 or 400 Level)	6
	30

Information Systems Management Concentration—Plan VI

First Year

Acc/AS/Eco/Mgt 130 Business Environment and Public Policy	3
CS 131 Computer Programming	3
Eco 131, 132 Principles	6
Eng Comp	6
Mth 134, 1341 Mathematics for Business Applications & Elements of Analysis for Business Applications or Mth 236, 237 Calculus I & II	6
Laboratory Science	8
PE Activity	2
	34

Second Year

Acc 231, 232 Principles	6
CS 132 Computer Programming II	3
Eng Literature	3
POLS 231, 232 American Government	6
His Sophomore American History	6
Soc, Phl, Ant, or Psy	3
Spc 131 Public Speaking or Spc 331 Business and Professional Speech	3
PE Activity	2
	32

Third Year

BAC 330 Micro Software for Business	3
BAC 331, 332 Business Analysis	6
BLW 331 Business Law	3
Fin 331 Principles of Finance	3
Mgt 331 Principles of Management	3
Mkt 331 Principles of Marketing	3
OAS 331 Records Management	3
OAS 335 Business Communications	3
OAS 336 Office Information Systems	3
Elective (non-business)	3
	33

Fourth Year

Acc 334 Cost Accounting or Mgt 431 Budgetary Control	3
BAC 437 Management Database Appl	3
Eco 334 Macro Economics or Eco 339 Economics of the Firm	3
Mgt 332 Production Management	3
Mgt 437 Administrative Policy	3
Mgt 438 Management of Computer Systems	3
OAS 436 Bus Decision Support Systems	3
Elective (non-business)	3
Electives (College of Business 300 or 400 level)	6
	30

Pre-Law Recommended Courses

First Year

Acc/AS/Eco/Mgt 130 Business Environment and Public Policy	3
CS 133 Introduction to Computers	3
Eco 131, 132 Principles	6
Eng Composition	6
Mth 134, 1341 Mathematics for Business Applications & Elements of Analysis for Business Applications or Mth 236, 237 Calculus I & II	6
Laboratory Science	8
PE Activity	2
	34

Second Year

Acc 231, 232 Principles	6
Eng Literature	3
POLS 231, 232 American Government	6
His Sophomore American History	6
Soc, Phl, Ant or Psy	3
Spc 131 Public Speaking or Spc 331 Business and Professional Speech	3
PE Activity	2
Elective (non-business)	3
	32

Third Year

BAC 331, 332 Business Analysis	6
BLW 331 Business Law	3
Fin 331 Principles of Finance	3
Mgt 331 Principles of Management	3
Mgt 332 Production Management	3
Mkt 331 Principles of Marketing	3
OAS 335 Business Communications	3
Electives (non-business)	6
Electives (College of Business 300 or 400 Level)	3
	33

Fourth Year

Acc 338 and 339 Tax Acc	6
BLW 434 Advanced Legal Principles	3
Eco 334 Macro Economics or Eco 339 Economics of the Firm	3
Fin 332 Financial Analysis or Eco 336 Survey of Labor Economics	3
Fin 333 Insurance or Fin 434 Real Estate	3
Mgt 437 Administrative Policy	3
Mkt 438 Small Business Enterprise	3
Electives (College of Business 300 or 400 Level)	6
	30

Bachelor of Business Administration

Office Administration Major

Plan I —This program is designed for those students seeking professional careers in secretarial and office administration.

First Year

Acc/AS/Eco/Mgt 130 Business Environment and Public Policy	3
Eco 131, 132 Principles	6
Eng Composition	6
Laboratory Science	8
Mth 134 & Mathematics for Business Applications & Elements of Analysis for Business Applications or Mth 236 & 237 Calculus I & II	6
OAS 233 Advanced Typewriting	3
PE (2 semesters)	2
	34

Second Year

Acc 231, 232 Principles	6
CS 133 Introduction to Computers	3
Eng Literature	3
POLS 231, 232 American Government	6
His Sophomore American History	6
Spc 131 Public Speaking or Spc 331 Business and Professional Speech	3
PE (2 semesters)	2
Elective	3
	32

Third Year

BAC 331, 332 Business Analysis	6
BLW 331 Business Law	3
Fin 331 Principles of Finance	3
Mgt 331 Principles of Management	3
Mgt 332 Production Management	3
Mkt 331 Principles of Marketing	3
OAS 363 Advanced Shorthand & Transcription or OAS 332 Advanced Dictation and OAS 333 Advanced Transcription	6
Electives	3
	33

Fourth Year

Eco 334 Macro Economics or Eco 339 Economics of the Firm	3
Mgt 437 Administrative Policy	3
OAS 335 Business Communications	3
OAS 336 Office Information Systems	3
OAS 337 Electronic Word Processing Systems	3
OAS 338 Secretarial Office Procedures	3
OAS 431 Office Management	3
Soc, Phl or Ant	3
Electives (College of Business 300 or 400 Level)	9
	33

Plan II —This program is designed for those who wish to qualify for a provisional teacher's certificate—secondary—with a teaching field in business education.

First Year

CS 133 Comp Prog	3
Eco 131, 132 Principles	6
Eng Composition	6
Laboratory Science (same science)	8
Mth 134 & 1341 Mathematics for Business Applications and Elements of Analysis for Business Decisions or Mth 236 & 237 Calculus I & II	6
OAS 233 Advanced Typewriting	3
PE (2 semesters)	2
	34

Second Year

Acc 231, 232 Principles	6
Eng Literature	6
POLS 231, 232 American Government	6
His Sophomore American History	6
Spc 131 Public Speaking or 331 Business & Professional Speech	3
PE (2 semesters)	2
Elective	3
	32

Third Year

BAC 331 Business Analysis	3
BLW 331 Business Law	3
C&I 331 Foundations	3
C&I 332 Educational Psychology	3
C&I 338 Curriculum, Materials and Evaluation	3
Fin 331 Principles of Finance	3
Mgt 331 Principles of Management	3
Mkt 331 Principles of Marketing	3
OAS 363 Advanced Shorthand & Transcription or OAS 332 Advanced Dictation and OAS 333 Advanced Transcription	6
Elective (Restricted)	3
	33

Fourth Year

C&I 438 Classroom Management	3
C&I 462 Student Teaching	6
Mgt 332 Production Management	3
Mgt 437 Administrative Policy	3
OAS 335 Business Communications	3
OAS 336 Office Information Systems	3
OAS 338 Secretarial Office Procedures	3
OAS 431 Office Management	3
OAS 438 Business Education Methods	3
Elective	3
	33

Two-Year Certificate of Completion in Office Administration

First Year

Eco 131, 132 Principles	6
Eng Composition	6
Mth 134 Mathematics for Business Applications	3
OAS 131 Secretarial Communications	3
OAS 134 Office Machines	3
OAS 135 Records Management	3
OAS 233 Advanced Typewriting	3
Spc 131 Public Speaking	3
PE (Activity)	2
	32

Second Year

Acc 231, 232 Principles	6
BLW 331 Business Law	3
CS 133 Introduction to Computers	3
Eng Literature	3
OAS 336 Office Information Systems	3
OAS 337 Electronic Word Processing Systems	3
OAS 338 Secretarial Office Procedures	3
OAS 363 Advanced Shorthand & Transcription or OAS 332 Advanced Dictation and OAS 333 Advanced Transcription	6
Elective	3
	33

One-Year Certificates

Stenographic Option

CS 133 Introduction to Computers	3
Eng Composition	6
OAS 131 Secretarial Communications	3
OAS 134 Business Machines	3
OAS 135 Records Management	3
OAS Shorthand (2 courses)	6
OAS Typewriting (2 courses)	6
PE (Activity)	2
	32

Clerical Option

Acc 231 Prin	3
CS 133 Introduction to Computers	3
Eco 131 Principles	3
Eng Composition	6
OAS 131 Secretarial Communications	3
OAS 134 Business Machines	3
OAS 135 Records Management	3
OAS Typewriting (2 courses)	6
PE (Activity)	2
	32

Administrative Services Courses (AS)

130 Business Environment and Public Policy **3:3:0**

Survey course emphasizing interaction of business with its external and internal environments. Introduction to public policy process and issues with focus on ethical and moral considerations. Recommended for freshman, especially business majors.

411-414 Special Topics in Administrative Services **1:A:0**

Intensive investigation of topics in business analysis, business computers, law, or office administration. Library and/or laboratory and conferences with supervising faculty member. May be repeated when area of study differs.

Prerequisite: Approval of department head and instructor.

421-424 Special Topics in Administrative Services **2:A:0**

Intensive investigation of topics in business analysis, business computers, law, or office administration. Library and/or laboratory and conferences with supervising faculty member. May be repeated when area of study differs.

Prerequisite: Approval of department head and instructor.

431-434 Special Topics in Administrative Services **3:A:0**

Intensive investigation of topics in business analysis, business computers, law, or office administration. Library and/or laboratory and conferences with supervising faculty member. May be repeated when area of study differs.

Prerequisite: Approval of department head and instructor.

Business Analysis and Computers Courses (BAC)

330 Microcomputer Software Applications for Business 3:2:2
An introductory course to microcomputer software packages for business applications. Basic microcomputer operation; electronic spread sheets; database programs; word processing programs; interface among various software programs; specific business applications.
Prerequisite: CS 131 or CS 133.

331 Business Analysis I 3:3:0
Introduction to the quantitative methods of analysis as applied to business problems. Topics of study include collection of data, statistical description, business forecasting through time series analysis, index numbers, and probability in business decision making. Computer package programs are used throughout the course in analyzing realistic business problems.
Prerequisite: 6 hours of approved math.

332 Business Analysis II 3:3:0
A continuation of BAC 331. Emphasis on use of statistics in business decision making. Topics of study include probability distribution sampling and estimation, hypothesis testing in business research, business forecasting through regression analysis, Bayesian and chi-square analyses. Computer package programs are used throughout the course in analyzing realistic business problems.
Prerequisite: BAC 331.

433 Business Analysis III 3:3:0
An intermediate course in business analysis to prepare students for better utilization of quantitative techniques in every phase of business. Topics include analysis of variance, simple and multiple correlation and regression analysis, statistical decision theory and selected non-parametic statistical techniques.
Prerequisite: BAC 332.

437 Management Database Applications for Business 3:3:0
The application, logical sequence, and implementation of databases to aid in managerial decision making. Definition of data; survey of information needs in business organizations; concepts of management databases; integration of needs of functional departments through database applications for report generation.
Prerequisite: OAS 436.

Business Law Courses (BLW)

331 Business Law 3:3:0.
A survey of the legal environment and its impact upon business. Nature and sources of law, administrative and enforcement agencies, and governmental regulations. Students become aware of the legal framework of common business transactions.

332 Labor Law 3:3:0
Historical interpretations and present provisions of regulations governing labor. Common law; state and federal statues; Fair Labor Standards Act; workmen's compensation; social security; liability; United States Department of Labor; social legislation.

434 Advanced Legal Principles 3:3:0
Detailed study of applicable statutes governing sales, real property, bankruptcy, forms of business enterprise (corporations and partnerships), bulk transfers, documents of title and secured transactions, with particular emphasis given to the effect of the Uniform Commercial Code.
Prerequisite: BLW 331.

438 Petroleum Law 3:3:0
Survey of the legal factors involved in oil and gas ownership and production. Topics include rights and duties of the landowner; rights and duties of the producer and other parties to a lease; oil and gas leases; types of property interests in oil and gas leases; basics of pooling and utilization and problems commonly encountered in conveying of rights and ownership.
Prerequisite: BLW 331.

Office Administration Courses (OAS)

131 Secretarial Communications 3:3:0
Practical secretarial projects emphasizing use of functional English in correspondence; good judgement in other secretarial communications.
Limited to students pursuing one- or two-year certificate programs.

132 Intermediate Typewriting 3:2:2
Emphasis on speed and accuracy development and the transfer of typewriting skills to office production problems. Includes business letter styles, manuscript formats, and tabulation applications.
Prerequisite: Beginning typewriting or equivalent.

134 Business Machines 3:3:0
Practical projects emphasizing knowledge and skills necessary to operate adding and calculating machines, duplicating machines, transcription machines, key punch and automatic typewriter.
Prerequisite: OAS 230 or comparable typewriting skill.

135 Filing Systems 3:3:0
Methods and procedures in classifying, storing, and retrieving business records. Filing systems; records management; mechanical retrieval; microrecords and retrieval; equipment; records control.

230 Keyboarding 3:2:2
Introduction to touch typing system of keyboarding. Development of keyboarding techniques as a foundation for skill development and transfer to electronic keyboarding equipment, computer terminals, text editing equipment, etc. Simple letter forms and manuscripts for students' personal use.

231 Beginning Shorthand 3:2:2
Introduction of either Gregg Diamond Jubilee or Century 21 Shorthand. Reading; writing; theory principles; brief or speed forms; previewed dictation.

232 Intermediate Shorthand 3:2:2
Intensification of shorthand reading and writing skills. Brief form or speed form and theory review; speed-building dictation; pretranscription practice.
Prerequisite: OAS 231 or equivalent.

233 Advanced Typewriting 3:2:2
Application of acquired typewriting skills and knowledge to planning, organizing, and typewriting a variety of production problems with professional speed and efficiency. Includes business forms, statistical tables, financial statements, legal documents, reports, and correspondence.
Prerequisite: OAS 132 or equivalent.

262 Beginning-Intermediate Shorthand 6:4:4
Intensive introduction to either Gregg Diamond Jubilee Shorthand or Century 21 Shorthand. (OAS 262 equivalent to OAS 231 and OAS 232). Reading; writing; theory principles; brief or speed forms and theory; previewed dictation; pretranscription practice.

331 Records Management 3:3:0
The systematic approach to the management of business records for executive problem-solving and decision-making activities. Record cycle from creation to disposition; forms management; correspondence and reports control; auditing record programs; automated systems.

332 Advanced Dictation 3:2:2
Development of dictation speed, knowledge of nonshorthand elements of transcription, and ability to transcribe dictation into mailable form. Vocabulary development, theory reinforcement.
Prerequisite: OAS 232 or equivalent.

333 Advanced Transcription 3:2:2
Emphasis on refinement of shorthand skill—developing dictation speed and rapid, accurate transcription ability. Vocabulary development; office-style dictation; mailable letter production.
Prerequisite: OAS 332.

334 Dictation and Transcription 3:3:0
Stress on building shorthand speed and improving mailable-letter transcription skill. Vocabularly development; sustained dictation; volume production.
Prerequisite: OAS 363 or equivalent.

335 Business Communications 3:3:0
Theories, practices and problems involved in communications in business and industry with emphasis on use of practical psychology, good judgment. Letters; reports; memoranda.
Prerequisite: Junior standing preferable; practical knowledge of touch typewriting helpful.

336 Office Information Systems 3:3:0
An examination of office information and decision support systems. Information processing systems; analysis and management of support activities; electronic storage systems; reprographics; communications distribution; person/machine interfaces; appraisal of current and future technological trends.

337 Electronic Word Processing Systems 3:3:0
Basic operation of magnetic media automated typewriters in conjunction with transcription machines. Emphasis on recording, formatting, editing, temporary and permanent revising, merging, proof reading, and logging.
Prerequisite: OAS 132 and 336.

338 Secretarial Office Procedures 3:3:0
Capstone office administration course. Analysis of responsibilities and duties of the administrative secretary. Procedures; work simplification; supervision; office etiquette and ethics; sources of information.

363 Advanced Shorthand and Transcription 6:4:4
Improvement of ability to take dictation and transcribe mailable copy. (OAS 363 equivalent to OAS 332 and OAS 333) Theory principles; brief or speed form derivatives; vocabulary development; speed building; mailable transcription; office-style dictation.
Prerequisite: OAS 232 or equivalent.

431 Office Management 3:3:0
Administrative management of business offices; social, legal, and ethical considerations in office management; employee recruitment, training, supervision, and motivation; information systems; office location and layout; selection of equipment and supplies; office cost control.

432 CPS Review 3:3:0
A comprehensive review of the six subject matter areas covered by the Certified Professional Secretary examination. Individual research; group projects; discussion; sample examinations. Recommended for candidates sitting for CPS examination.

434 Women in Business 3:3:0
A reading-discussion course concerned with the issues the businesswoman of today encounters. Students survey the literature and discuss available opportunities for women as well as existing problems of the woman in business.

436 Business Decision Support Systems 3:3:0
An analysis of the role of support systems in business organizations. Fundamental concepts of systems; information flows; nature of information support systems; computer applications in decision systems; uses of output; decision support system design and application.
Prerequisites: BAC 330, BAC 331, and MGT 331.

438 Business Education in the Secondary School 3:3:0
Teaching theories, materials, methods, and evaluation in business education with emphasis on motor-skill subjects. Other topics include history and trends, course planning, teaching aids and resources, and ethics and professional growth.

Department of Economics

Department Head: Hi K. Kim **240 Galloway Business Building**

Professors: Hawkins, Kim, Parigi, Partin

Associate Professors: C.Allen, Pearson

Assistant Professors: J. Allen,Choi, Chudzinski, Montano, Price

Instructor: Elliott

The Department of Economics offers two degrees:

Bachelor of Business Administration: Recommended to the student who desires a thorough grounding in business courses to augment the Economics knowledge which is necessary for understanding the complexities of modern business, government and non-profit organizations.

Bachelor of Science: Recommended to the student particularly interested in working abroad, seeking the Doctor of Philosophy degree or desiring a supportive minor in another interest area such as mathematics, sociology, government, education, or computer science.

Representative employment opportunities for both degrees are found in banking, government, industrial relations, management, research and forecasting, communications, international trade and sales.

Teacher Certification—Economics

Students of secondary education wishing to certify in Economics as a teaching field, see Department of Secondary Education in this bulletin.

J. D. Landes Center for Economic Education

Director: Joel L. Allen

The Center for Economic Education, established in January 1976, offers programs in economic education for elementary, secondary and college teachers, and business, professional and civic groups. The purpose of the Center is to institute, develop and promote programs which will increase economic understanding in cooperation with teacher education, other university or community programs.

Center services include: community and consultant services for workshops, institutes, conferences; materials and teaching aids development, curriculum design and integration; economics courses for prospective and in-service teachers, university students and other interested adults, area business, professional and civic groups.

The Lamar University Center for Economic Education is a division of the Department of Economics, College of Business and is affiliated with the Joint Council and the Texas Council on Economics Education.

Recommended Program of Study

Bachelor of Business Administration — Economics Major

First Year

Eco 131, 132 Principles	6
Eng Composition	6
Mth 134 & 1341 Math for Bus. Analysis & Applications Mth 236 & 237 Calculus I & II	6
Laboratory Science	8
CS 133 Introduction to Computers	3
PE Activity	2
	31

Second Year

Acc 231, 232 Principles	6
Eng Literature	3
POLS 231, 232 American Government	6
His Sophomore American History	6
PE Activity	2
Soc, Phil or Ant	3
Spc 131 Public Speaking	3
Elective	3
	32

Third Year

BLW 331 Business Law	3
Fin 331 Principles of Finance	3
Mkt 331 Principles	3
BAC 331, 332 Business Analysis	6
Eco 333 Intermediate Theory	3
Eco 334 Macro Economics	3
Eco 339 Economics of the Firm	3
*Electives	9
	33

Fourth Year

Eco 332 Money and Banking	3
Eco 4315 Government and Business	3
Mgt 331 Principles of Management	3
Mgt 332 Production Management	3
Mgt 437 Administrative Policy	3
OAS 335 Business Communications	3
*Electives	12
	30

**Electives must include 9 semester hours of advanced courses in economics, and six semester hours of approved, advanced electives.*

Bachelor of Science—Economics Major

First Year

Eco 131, 132 Principles	6
Eng Composition	6
Mth 134 & 1341 Math for Bus Analysis and Applications Mth 236 & 237 Calculus I & II	6
Laboratory Science	8
PE Activity	2
CS 131 Computer Programming I	3
	31

Second Year

Acc 231, 232 Principles	6
CS 132 Computer Programming II	3
Eng Literature	3
His Sophomore American History	6
POLS 231, 232 American	6
Electives	6
PE Activity	2
	32

Third Year

Eco 333 Interm Theory	3
Eco 334 Macro Economics	3
BAC 331, 332 Business Analysis	6
Spc 331 Business and Professional Speech	3
Minor Courses	6
Advanced Electives (300 or 400 Level)	7
Elective	3
	31

Fourth Year

Economics Courses (Advanced Level)	18
Minor Courses (Advanced Level)	12
	30

Economics Courses (Eco)

131 Principles (Micro) **3:3:0**

Introduction to economic principles; allocation of resources; determination of output and prices; distribution; and managerial economics.

132 Principles (Macro) **3:3:0**

Emphasizes monetary theory; national income analysis; fluctuation and growth; public finance; international trade; and current economic problems.

230 Current Economic Issues **3:3:0**

A survey of current economic issues and problems: energy, environment, inflation, unemployment, tax structures, organization of industries and markets, and consumerism. Issues discussed will vary in order to emphasize topics of greatest concern. Course may be taken for credit by majors or non-majors.

233 Principles and Policies 3:3:0
Comprehensive introduction to economic principles and problems for non-business students. Resource utilization; price determination; distribution of income; fiscal and monetary problems; economic growth.

331 Economics of Entrepreneurship 3:3:0
Comprehensive analysis and practice exercises in entrepreneurship. Studies include demand analysis; pragmatic economic feasibility studies; identification and use of resources; function and use of profits.
Prerequisite: 6 hours of Economics.

332 Money and Banking 3:3:0
Functions and policies of the American monetary and banking system. Commercial banking; Federal Reserve System; monetary theories and policies; economic stabilization and growth.
Prerequisite: 6 hours of Economics.

333 Intermediate Theory 3:3:0
Economic analysis and methodology. Distribution theory; price theory; pure and imperfect competition.
Prerequisite: Eco 131.

334 Macro Economics 3:3:0
A descriptive-analytical approach to the dynamic forces that influence the aggregate level of economic activity. Income and employment determinants; levels of income and employment, stablilization theory; investment and income relationship; monetary and fiscal policies.
Prerequisite: Eco 132.

335 International Trade 3:3:0
Theories, practices and problems involved in international commerce between nations. Bases of trade; tariffs; exchange controls; international monetary policies; current problems.
Prerequisite: Six hours of Economics.

336 Survey of Labor Economics 3:3:0
Past development and present organizational structure of the labor movement in America and its impact on the industrial society. Labor markets; collective bargaining; wages; economic insecurity; labor legislation; governmental policies.
Prerequisite: Three hours of Economics or approval of the instructor.

337 Public Finance 3:3:0
Study of the constitutional, administrative and economic aspects of governmental fiscal activities; government debt; intergovernmental fiscal relations; federal, state and local taxes.
Prerequisite: 6 hours of Economics.

339 Economics of the Firm 3:3:0
The application of the techniques of economic analysis to managerial problems of business enterprises utilizing a problem solving or case study approach. Goals of the firm; business forecasting; demand analyses; cost analyses; game theory; pricing policies; governmental relations.
Prerequisite: Eco 131.

4301,4601 Institute in Economics 3-6:-6:0
Institutes are designed to advance the professional competence of participants. When courses are conducted in sufficiently different areas and with the approval of the department head, a participant may repeat the course for credit.

4311,4611 Problems in Economics 3-6:A:0
Investigation into special areas in economics under the direction of a faculty member. This course may be repeated for credit when topics of investigation differ.

430 Regional and Urban Economics 3:3:0
Analysis of regional development and industrial location; economic problems of urban areas in financing and supplying goods and services at adequate levels.
Prerequisite: Six hours of Economics.

431 Monetary Theory 3:3:0
An analytical, institutional, historical and empirical analysis of monetary theory, and its interrelations with the generally accepted economic goals.
Prerequisite: Eco 132, 332, or 334 or approval of instructor.

4315 Government and Business 3:3:0
Promotion, regulation and restriction of business enterprises by government. Regulatory agencies; antitrust laws; consumerism; transportation; industrial organization and concentration and the eco-legal environment.

433 History of Economic Thought 3:3:0
Historical development of economic thought from primitive periods to the present. Classical; historical; socialist; neoclassical; institutional thought.

434 Economic Development 3:3:0
Introduction to the theories and history of economic growth and development applicable to advanced and emerging economies; analysis of processes of growth including cultural, technological and economic factors; identification of problem areas with policy implications.
Prerequisite: 3 hours of Economics.

435 **Comparative Economic Systems** 3:3:0
A critical analysis of the basic theories and institutions of economic systems including a comparison of the American system with other existing systems. Capitalism; socialism; communism.
Prerequisite: 3 hours of Economics.

436 **Business Cycles** 3:3:0
The nature and causes of business cycles. Cyclical theories; business fluctuations; forecasting stabilization; current problems. *Prerequisite: 6 hours of Economics.*

438 **Economics of World Resources** 3:3:0
The world's physical and economic resources and their relationship to man's well being. Interrelationships between resources and industries, commerce and investments at the national and international level. Implications of government regulations on resource use and economic development.

439 **Mathematical Economics** 3:3:0
A formulation of economic theory in mathematical terms. Special attention is given to general equilibrium analysis; interindustry economics and activity analysis.
Prerequisite: Eco 131, 132, Mth 1341 or differential and integral calculus.

Department of Management—Marketing —Finance

Department Head: Richard T. Cherry **236 Galloway Business Building**
Professors: Cherry, McCullough, Ryan
Associate Professors: Brust, Brunson, Swerdlow, Taylor, Wooten
Assistant Professors: Caples, Corrigan, Godkin, Goetz, Jones, Steiert
Management-Marketing Coordinator: R.Lynn Godkin

Degree Programs

Finance

The finance program provides the student with a broad education in financial markets and institutions, in investments, and in the financial management of organizations. Electives can be selected to provide an emphasis in insurance, in real estate, in financial planning, or in financial management. Finance graduates are qualified for careers in banking or other financial institutions, stock brokerage firms, in the growing financial services industry, and in the financial division of major organizations.

Management

Management involves the coordination of resources — both human resources (people) and non-human resources (machine, materials, etc.) — so as to achieve organizational objectives efficiently. The curriculum in management, therefore, provides the student with an understanding of the specialized functional areas and with a broad, integrated view of the firm as a whole. Men and women with university degrees in management are equipped to advance more rapidly into positions of increasing responsibility in private business firms, in not-for-profit organizations, and in government.

Personnel Administration

Personnel administration involves the recruitment, selection, maintenance, and development of human resources by organizations. It includes such diverse functional areas as interviewing, training, compensation and benefits, health and safety, and labor relations. After passing an examination in one of the functional areas and meeting minimum experience requirements, a successful candidate will be awarded Accredited Personnel Specialist (APS) status. University graduates in personnel administration are found in all types of business firms, larger service organizations, and governmental agencies.

Marketing

Marketing, as a professional field, is concerned with the whole range of activities that facilitate the movement of goods and services from the producer to the ultimate consumer. The marketing curriculum provides the student with a fundamental understanding of each

of the specialties involved in the process as well as with the management of the marketing function generally. Typical kinds of careers open to marketing graduates include advertising, market research, sales and sales management, purchasing, retail merchandising, and retail management.

Academic Counseling

During the first two years of academic work in the College of Business, a finance, management, personnel administration or marketing major will be advised by a freshman and sophomore advisor located in room 120 of the Galloway Business Building. During the student's junior and senior years, he or she should maintain close contact with the faculty advisor and department head in selecting courses to achieve career objectives.

Non-Professional Core Program

The Non-Professional Core Program consists of the courses in which a business major enrolls during the freshman and sophomore years of study. Students should satisfactorily complete all of the Non-Professional Core courses (except non-business electives) before advancing to junior (300 level) courses. This will insure completion of junior level course prerequisites.

First Year

First Semester		Second Semester	
Acc/AS/Eco/Mgt 130 Business Environment and Public Policy	3	Eng Composition	3
Eng Composition	3	Eco 132 Principles	3
Eco 131 Principles	3	CS 133 Introduction to Computers	3
Mth 134 Mathematics for Business or Mth 236 Calculus I	3	Mth 1341 Elements of Analysis for Business or Mth 237 Calculus II	3
Laboratory Science	4	Laboratory Science	4
PE/MLb/ROTC	1-2	PE/MLb/ROTC	1-2
	17-18		17-18

Second Year

First Semester		Second Semester	
Eng Literature	3	*Spc 131 or 331	3
His Sophomore American History	3	His Sophomore American History	3
Acc 231 Principles	3	Acc 232 Principles	3
POLS 231 American Government I	3	POLS 232 American Government II	3
Soc or Psy	3	**Elective (non-business)	3
PE/MLb/ROTC	1-2	PE/MLb/ROTC	1-2
	16-17		16-17

Personnel Administration majors should take Spc 334.
**PE Activity not acceptable.*

Recommended Programs of Study

Bachelor of Business Administration—Finance Major

(See Core Program of First and Second Year)

In the last two years, the student majoring in Finance must select one of two tracks: Financial Management or Financial Services. Professional electives selected with the approval of the department head provide preparation in one of the two tracks.

Third Year

First Semester		Second Semester	
BAC 331 Business Analysis I	3	BAC 332 Business Analysis II	3
BLW 331 Business Law	3	Fin 332 Financial Analysis	3
Fin 331 Principles of Finance	3	Fin 431 Investments	3
Mkt 331 Principles of Marketing	3	Mgt 331 Principles of Management	3
*Professional track elective	3	*Professional track elective	3
**Elective (non-business)	3		
	18		15

Fourth Year

First Semester		Second Semester	
Eco 334 Macroeconomics	3	Fin 433 Commercial Banking	3
Fin 432 Financial Markets and Institutions	3	Mgt 437 Administrative Policy	3
Mgt 332 Production Management	3	OAS 335 Business Communications	3
*Professional track elective	3	***Elective (College of Business 300 or 400 Level)	6
***Elective (College of Business 300 or 400 Level)	3		
	15		15

*Requires approval of the department head.
**PE Activity not acceptable.
***The student should consult with his or her faculty advisor to select electives that will be most beneficial in terms of career goals.

Bachelor of Business Administration

Personnel Administration (Accreditation)

(See Core Program for First and Second Year)

Third Year

First Semester		Second Semester	
BLW 331 Business Law	3	Fin 331 Principles of Finance	3
Mkt 331 Principles of Marketing	3	Mgt 331 Principles of Management	3
BAC 331 Business Analysis I	3	BAC 332 Business Analysis II	3
Eco 334 Macro Economics or Eco 339 Economics of the Firm	3	OAS 335 Business Communications	3
*Elective (non-business)	3	Mgt 434 Productivity Management	3
	15		15

Fourth Year

First Semester		Second Semester	
Psy 336 Psy Tests & Measurements	3	BLW 332 Labor Law or Eco 336 Survey of Labor Economics	3
Mgt 333 Personnel Management	3	Mgt 437 Administrative Policy	3
Mgt 432 Organizational Behavior and Administration	3	Mgt 433 Contemporary Issues in Personnel Management	3
Mgt 332 Production Management	3	OAS 431 Office Management	3
Elective (College of Business 300 or 400 Level)	6	Elective (College of Business 300 or 400 Level)	3
	18		15

*PE Activity not acceptable.

Bachelor of Business Administration
Management Major

(See Core Program for First and Second Year)

Third Year

First Semester		Second Semester	
Acc 334 Cost Accounting	3	Fin 331 Principles of Finance	3
BAC 331 Business Analysis I	3	BAC 332 Business Analysis II	3
BLW 331 Business Law	3	Mgt 332 Production Management	3
Eco 334 Macro Economics or Eco 339 Economics of the Firm	3	Mgt 333 Personnel Management	3
Mgt 331 Principles of Management	3	Mkt 331 Principles of Marketing	3
*Elective (non-business)	3		
	18		15

Fourth Year

First Semester		Second Semester	
Mgt 434 Productivity Management	3	Mgt 437 Administrative Policy	3
Mgt 431 Budgetary Control	3	Mkt 431 Marketing Management	3
Mkt 435 Quantitative Techniques in Marketing or Mgt 432 Organizational Behavior and Administration	3	*Elective (non-business)	3
OAS 335 Business Communications	3	Mgt 438 Management of Computer Systems or Mkt 438 Small Business Enterprise	3
Elective (Bus. 300 or 400 Level)	3	Elective (College of Business 300 or 400 Level)	3
	15		15

PE Activity not acceptable.

Bachelor of Business Administration
Marketing Major

(See Core Program for First and Second Year)

Third Year

First Semester		Second Year	
BAC 331 Business Analysis I	3	BAC 332 Business Analysis II	3
Fin 331 Principles of Finance	3	BLW 331 Business Law	3
Eco 334 Macro Economics or Eco 339 Economics of the Firm	3	Mgt 332 Production Management	3
Mgt 331 Principles of Management	3	Mkt 332 Principles of Retailing	3
Mkt 331 Principles of Marketing	3	Mkt 333 Marketing Promotion or Mkt 432 Buyer Behavior	3
*Elective (non-business)	3		
	18		15

Fourth Year

First Semester		Second Semester	
Mkt 431 Marketing Management	3	Mgt 437 Administrative Policy	3
Mkt 435 Quantitative Techniques in Marketing or Mkt 433 International Marketing	3	Mkt 437 Advanced Marketing Problems	3
Mkt 436 Marketing Research	3	*Elective (non-business)	3
OAS 335 Business Communications	3	Elective (College of Business 300 or 400 Level)	3
Elective (College of Business 300 or 400 Level)	3	Elective (College of Business 300 or 400 Level)	3
	15		15

PE Activity not acceptable.

Management Courses (MGT)

130 Business Environment and Public Policy 3:3:0
A survey course emphasizing interaction of business with its external and internal environments. Introduction to public policy processes and issues with focus on ethical and moral considerations.
Recommended for freshmen who have an interest in business.

331 Principles of Management 3:3:0
Introduces and emphasizes the application of behavioral disciplines and principles of management to promote fundamental understanding of operating systems. Demonstrates the awareness of what managers should do or be aware of in the pursuit of good organizational performance.
Prerequisite: Eco 233 or Eco 131 and 132, Acc 232 and junior standing

332 Production Management 3:3:0
A survey of the production function and the analytical tools used to solve problems associated with the development and operation of a production system. Analytical tools include: linear programming, critical path scheduling, waiting line, statistical quality control and forecasting.
Prerequisite: Bac 331 and Mgt 331.

333 Personnel Management 3:3:0
A behavioral approach to the management of the human resource in business enterprise. The fundamentals of human relations and organizational behavior will be used to structure an understanding of the managerial problems of recruitment, selection, training, promotion and termination of personnel. Supervision of the work force will be considered as an examination of theories of motivation, communication and leadership.
Prerequisite: Mgt 331.

419 Special Problems in Business 1:A:0
Investigation into special areas in business under the direction of a faculty member.

429 Special Problems in Business 2:A:0
Investigation into special areas in business under the direction of a faculty member.

431 Budgetary Control 3:3:0
Theories, problems and techniques of internal financial and budgetary controls. Financial planning, budgetary construction, evaluation, performance rating, replanning.
Prerequisite: Mgt 331 and Fin 331.

432 Organizational Behavior and Administration 3:3:0
A survey of organization theory with emphasis on behavioral issues in both the private and public sectors.
Prerequisite: Mgt 331 and senior standing.

433 Contemporary Issues in Personnel Management 3:3:0
An analysis of current issues in the field of personnel and industrial relations, including fair employment and compensation practices, human utilization and motivation, individual rights, collective barganing, and personnel related laws, decisions, guidelines and executive orders.
Prerequisite: Mgt 333.

434 Productivity Management 3:3:0
A survey course emphasizing the need for improved productivity in profit and non-profit organizations The course will focus on the historical and current aspects of productivity as well as problems and methods of measuring, planning, and implementing productivity programs.
Prerequisite: Mgt 331

437 Administrative Policy 3:3:0
Fundamental considerations and procedures followed in business policy formulation and administration. Managerial structure; company objectives; coordination of departmental policies; organization of personnel; reappraisals.
Prerequisite: Fin 331, Mgt 331, 332, and senior standing.

438 Management of Computer Systems 3:3:0
Concepts of computers, information systems, capabilities and limitation, managerial implications in the introduction and use of computers, feasibility study and evaluation of computer systems. Methods of data storage, display and retrieval.
Prerequisite: CS 133.

439 Special Problems in Business 3:A:0
Investigation into special areas in business under the direction of a faculty member.

449 Special Problems in Business 4:A:0
Investigation into special areas in business under the direction of a faculty member.

Marketing Courses (MKT)

331 Principles of Marketing 3:3:0
A description and analysis of business activities designed to plan, price, promote and distribute products and services to customers. Topics studied include the marketing environment, consumer buying habits and motives, types of middlemen, marketing institutions and channels, governmental regulations, advertising and current marketing practices.
Prerequisite: Eco 233 or Eco 131 and 132, Acc 231 and junior standing.

332 Principles of Retailing 3:3:0
A comprehensive introduction to large scale retailing with emphasis on layout, merchandise management, pricing, inventory control and retail promotion.
Prerequisite: Mkt 331.

333 Marketing Promotion 3:3:0
An overview of the broad field of advertising. Creation of primary and selective demand, promotional program selection, media selection and determination of advertising effectiveness and coordination of the promotional mix.
Prerequisite: Mkt 331.

334 Professional Salesmanship 3:3:0
A survey of modern salesmanship as applied to selling of tangibles and intangibles. The salesman in relation to his/her firm, goods and customers, sales psychology, classroom sales demonstrations.

431 Marketing Management 3:3:0
The planning and execution of various marketing activities from the managerial viewpoint are presented, [viz:] determining the basic product or service market analysis, price policies, product promotion, management of the sales force and sales analysis and physical distribution with the logistics system concept.
Prerequisite: Mkt 331.

432 Buyer Behavior 3:3:0
Acquaints the student with consumer behavior models and behavior research techniques.
Prerequisite: Mkt 331.

433 International Marketing 3:3:0
A survey of international marketing, world markets, political restraints in trade and international marketing principles.
Prerequisite: Mkt 331.

434 Industrial Marketing 3:3:0
A comprehensive analysis of problems involved in marketing industrial goods with emphasis on market characteristics, purchasing and distribution systems, promotion mix and marketing strategy.
Prerequisite: Mkt 331.

435 Quantitative Techniques in Marketing 3:3:0.
Topics include Bayesian inference, payoff tables, sample design, analysis of variance, and multiple correlation and regression analysis.
Prerequisite: Bac 332.

436 Marketing Research 3:3:0
The importance and use of marketing research in U.S. business is stressed. A detailed analysis is made of each marketing research step from the formulation of the problem to the preparation of the research report and follow-up. The basic research methods survey, observational and experimental are presented.
Prerequisite: Mkt 331 and Bac 332.

437 Advanced Marketing Problems 3:3:0
Oral and written cases in the area of marketing management and marketing strategy are utilized (organization, product lines, pricing, channels of distribution, selling, etc). Emphasis is placed on simulated problem solving and decision making in the marketing environment.
Prerequisite: Mkt 431.

438 Small Business Enterprise 3:3:0
Designed to give the student actual experience in the management of a small business. The student is assigned to a local business as a "student-consultant." The student is required to submit a report outlining the problems of the business and recommended solutions.
Prerequisite: Bac 332 and senior standing in the College of Business.

Finance Courses (Fin)

331 Principles of Finance 3:3:0
An introductory survey of the principal issues, decision areas, and analytical procedures relevant to the financial management of private business firms including capital budgeting, cost of capital, short and long-term financing, dividend policy and valuation.
Prerequisite: Eco 233 or Eco 131 and 132, Acc 232 and junior standing.

332 Financial Analysis 3:3:0
Analytical techniques used in financial decision making, including ratio analysis, funds analysis, capital structure, dividend policy, financial forecasting, and valuation models.
Prerequisite: Fin 331.

333 Insurance 3:3:0
Application of fundamental principles to life, property and casualty insurance. Contracts, premiums, legal statutes, risk, programming.
Prerequisite: Junior standing.

336 Personal Finance 3:3:0
Introduction to financial problems of the consumer and business. Emphasis is placed on problems concerning financial planning, investments in real estate, personal property, insurance, and securities.
Prerequisite: Non-finance majors only.

430 Life and Health Insurance 3:3:0
The nature of life and health insurance, various ways of utilizing the protection it offers. Principal features of insurance and annuity contracts. Group insurance, hospitalization and disability, rating, reserving, and financial statement analysis.
Prerequisite: Fin 333.

431 Investments 3:3:0
An appraisal of investment alternatives in financial markets. Markets, securities, methods of analysis, investment programming.
Prerequisite: Fin 331.

432 Financial Markets and Institutions 3:3:0
A study of the supply of and demand for funds in financial markets; analysis of sectoral supply and demand in various submarkets; the role of financial intermediaries; interest rate forcasting.
Prerequisite: Fin 331.

433 Commercial Banking 3:3:0
An overview of the regulation, operation, and management of the commercial bank; asset and liability management policy; loan policy, investment policy, capital adequacy, liquidity management.
Prerequisite: Fin 331.

434 Real Estate 3:3:0
A survey of real estate principles and practices, including the law of real property, real estate appraisal, marketing and finance.
Prerequisite: Junior standing.

435 Property and Casualty Insurance 3:3:0
The nature of property and casualty insurance, coverages offered by property and casualty insurers with emphasis on the development, basic concepts, and legal basis of the various lines of property and casualty insurance.
Prerequisite: Fin 333.

436 Security Analysis and Portfolio Management 3:3:0
Analysis of investment alternatives in a portfolio context, recent theoretical developments in portfolio management, construction of portfolios to achieve specific investment objectives, investment portfolio monitoring and performance evaluation.
Prerequisite: Fin 431.

437 Valuation of Real Property 3:3:0
Economic theory of value with application to real estate. Real estate appraisal methods as applied to both residential and income properties.
Prerequisite: Fin 434.

439 Mortgage Lending 3:3:0
Methods of real estate financing, sources of funds from financial institutions and governmental agencies. Financial instruments available to the investor, mortgage risk analysis, and loan principles.
Prerequisite: Fin 434.

College of Education

Departments: Curriculum and Instruction; Health, Physical Education, and Dance; Home Economics; Professional Development and Graduate Studies.

Dennis P. McCabe Ed.D., Dean

James Lane, Ed.D., Director of Certification and Admissions

E. Lee Self, Ph.D., Director of Field Experiences and Advisement

The College of Education was established in 1959 and includes the Departments of Curriculum and Instruction; Health, Physical Education and Dance; and Home Economics; and Professional Development and Graduate Studies.

Providing education for prospective teachers is a tradition of the University. Non-teaching specialties in dance, food service management, interior design, fashion merchandising, home economics, health and physical education are more recent offerings representing diversification and growth of the College of Education.

Graduate programs in the College of Education are described in the Graduate Studies Catalog of the University.

Degree and certification programs are described in separate departmental sections of this bulletin.

Degrees Offered

Bachelor of Science with majors in the following fields:

- Elementary Education
- Secondary Education
- Special Education
- Dance
- Health Education
- Home Economics
- Physical Education
- Teacher of the Young Child (ages 3-6)

Bachelor of Arts with a major in Dance

Associate of Applied Science-Food Service Management

Associate of Science-Education

Objectives

The faculty of the College of Education plans its curricula to provide graduates with solid academic foundations. This general education provides background in the social, economic and cultural aspects of contemporary life and is designed to give prospective teachers more understanding and wider experience on which to base their professional careers.

Professional education programs have been built on a base of theory, principles, and techniques determined to be useful in the field of practice.

The faculty integrates academic and professional study through lectures, discussions, and simulations through the observation of children in the teaching-learning process, through supervised student teaching and through the utilization of the best available equipment and materials.

Teacher Education—A Shared Responsibility

The preparation of teachers is a responsibility shared by virtually all of the colleges of the University. Policies concerning teacher education programs and the actual curriculum requirements in each program are determined by the Teacher Education Council. This Council is composed of faculty members who represent the various colleges of the University offering teacher education programs. Within the framework of the policies established, the College of Education coordinates all teacher education programs throughout the institution.

Teacher Education Programs

Lamar University provides undergraduate teacher education programs which fulfill the curriculum requirements for the following Provisional Certificates in the State of Texas:

elementary education, secondary education, generic special education, mental retardation, physically handicapped, emotionally disturbed, language and/or learning disabilities, early childhood/exceptional children, education of the deaf, speech and hearing therapy, driver education, all-levels music, all-levels art, kindergarten education Teacher of the young child vocational home economics, and English as a second language.

Information concerning graduate teacher education programs and professional certification may be found in the Graduate Studies Bulletin.

Admission to Teacher Education

Application for admission to the teacher education program is made the semester prior to the beginning of the junior year and before the time students are enrolled in Education 331 or 332. To be eligible for Education 331 or 332 or the first course in education taken at Lamar University, in the case of transfer students, the student must present a 2.0, C, overall grade point average in all courses taken. The student also must have successfully completed 60 hours of academic credit including the required 100 and 200 level general education requirements as described in the Degree Requirements section of this catalog.

To be admitted to the College of Education's approved teacher education program, students must achieve a satisfactory level of performance on a competency examination of basic skills. The content to be tested and the criteria for satisfactory performance has been established by the Texas State Board of Education. Demonstrated competency on this examination, the Pre Professional Skills Tests (PPST) is necessary for admission into teacher education. This requirement applies to all persons admitted into education programs after May, 1984. Students are advised to take this examination during the sophomore year and before enrollment in teacher education courses. Individuals may take up to a maximum of 6 hours of advanced professional coursework before completing the PPST requirement. This is allowed only if the person meets all other requirements for admission to teacher education.

Admission to Student Teaching

Students wishing to enroll in student teaching must be selected and approved in order to be eligible to register. Applications for student teaching must be submitted to the director of Field Experiences by May 1, prior to the academic year for which student teaching is planned. This includes applications for the Spring Semester as well as applications for the Fall. Failure to follow this procedure may delay admission to the student teaching program by at least one semester.

In order to qualify for student teaching, students must meet the following standards:

1. Be of senior standing.
2. Possess a grade point average of 2.0 in all work taken, in all subject areas in which he/she intends to teach and in all professional education courses completed.
3. Have completed adequate hours and courses in content areas in which he/she is certifying to teach.
4. Have completed all prerequisite courses in professional education as follows:
   a. For elementary majors, all professional education courses through Education 434. Exceptions to this procedure must be approved.
   b. For kindergarten student teachers, in addition to the requirements for elementary major, six semester hours of specified courses must be completed.
   c. For secondary school students (excepted Home Economics majors), all professional education courses up to Education 438.
   d. For All-Levels Music and Art student teachers, all education courses up to Education 438.
   e. For Home Economics majors, the foundation courses in Education and Home Economics method courses through Home Economics 438.
   f. For speech and hearing therapy students, all required professional education courses through Education 434. At least thirty of the required thirty-six hours of specialized professional courses must be completed, and must be approved

by the department head. Deaf Education majors must have completed Speech 3393 and Speech 4393 prior to student teaching.

g. Sufficient work must have been completed in teaching fields to be used during student teaching. Twenty-one hours for Plan I students and forty hours for Plan II and III students are usually considered adequate preparation for student teaching.

5. Have demonstrated satisfactory performance on the state competency examination of basic skills and been admitted to teacher education.
6. Be approved by the Director of Field Experience and Advisement.
7. Have completed at least six semester hours in education courses at Lamar University prior to student teaching.
8. Have completed at least six hours in each teaching field (secondary), or in the area of specialization (elementary), at this University prior to student teaching (unless this requirement has been waived in writing by each of the concerned department heads).

Certification Policies

To be recommended for a teaching certificate, the applicant must present:

1. A grade point average of 2.0, (C) in all work undertaken at Lamar, 2.0 in elementary school specialization or in each teaching field and 2.0 in the professional education courses relevant to the certificate.
2. A minimum of six hours in residence at Lamar University in professional education courses.
3. A minimum of six hours in residence at Lamar University.
   a. In each teaching field for secondary education (unless this requirement is waived in writing by the head of the department).
   b. In the area of specialization for elementary education (unless this requirement is waived in writing by the head of the department).
4. Evidence of successfully completing student teaching requirements in the area of certification sought.
5. Successful completion of all sections of the pre-professional skills test and successful completion of a professional exit examination.

Provisional Certificate and Degree Requirements

Provisional Certificate programs are offered in elementary education, secondary education, special education-generic, vocational home economics, all-levels art, all-levels music and all-levels speech and hearing therapy. Provisional Certificate endorsements are available in driver education, kindergarten education, English as a second language and in several areas of special education. Information concerning these programs may be found in the following paragraphs or in departmental sections of this bulletin.

Provisional Certificate requirements and requirements for professional education degrees are identical. Each program is composed of four parts: (1) academic foundations, (2) academic specialization, (3) professional development, and (4) free electives. Programs require the completion of 126 to 132 semester hours.

Current academic foundation requirements for certificate programs are described below. Students wishing to secure the Bachelor of Arts or Bachelor of Science degree and at the same time to certify for provisional certificate with a teaching field will be required to meet a revised set of teacher education standards. All teacher education programs are subject to these new standards beginning in the fall of 1985. It will be necessary to consult with your department head or the College of Education Advising Center concerning the specifics of these requirements. Other requirements are outlined under the departmental sections of the bulletin.

Academic Foundations (54 to 60 semester hours)

The academic foundation program outlined below is required of all students working toward Provisional Certificates at this University. Within the general framework shown,

some course selections may be governed by the type of certification or degree obtained. Where appropriate, a maximum of six semester hours eight in science, taken in academic foundations may be included in any one teaching field.

1. Required core courses ..... 42 hours
   English Composition ..... 6 hours
   Eng Literature ..... 6 hours
   Mth (to include at least one course at or above the level of Mth 1334) ..... 6 hours
   Science Laboratory (same science) ..... 8 hours
   POLS 231 Intro Am Gov I ..... 3 hours
   POLS 232 Intro Am Gov II ..... 3 hours
   His Sophomore American History ..... 6 hours
   PE Activity (four semesters) ..... 4 hours

   42 hours

2. Foundations electives and degree requirements ..... 12 to 18 hours
   These hours must be selected from approved courses in the following groups with courses included from a minimum of three groups:
   Group I: English, Foreign Language, Philosophy, Bible.
   Group II: Art, Music, Speech.
   Group III: Biology, Chemistry, Mathematics, Geology, Physics.
   Group IV: History, Political Science, Economics, Geography.
   Group V: Sociology, Anthropology, Psychology.

Special Certificates and Endorsements

All-levels Art degree and certificate. Described in the "Art" section of this bulletin.

Athletic Training. Described in the "Division of Health, Physical Education and Dance" section of this bulletin.

Driver education endorsement. Described in the "Division of Health, Physical Education and Dance" section of this bulletin.

Kindergarten education endorsement. Described in the "Elementary Education" section of this bulletin.

All-levels Music degree and certificate. Described in the "Music" section of this bulletin.

Special education certificate endorsements. Described in the "Special Education" section of this bulletin.

Education of the deaf and speech and hearing therapy. Described in the "Communication" section of this bulletin.

Vocational Home Economics degree and certificate. Described in the "Home Economics" section of this bulletin.

English as a second language endorsement. Described in the English as a second language section of this bulletin. This endorsement may be added to any provisional teaching certificate by successful completion of the following coursework:
English 4312-Studies in Languages and Linguistics
ESL 432 Foundations in Teaching ESL
ESL 433-Psycholinguistics
ESL 434-Introduction to Linguistics

Certification for Persons with Bachelor's Degree (or higher) Who Are Not Certified To Teach in Texas

1. Information concerning these certification plans is available in the College of Education Certification Office.

2. Persons with degrees from Texas colleges and persons with degrees from out-of-state colleges also apply in the College of Education Certification Office for certification in Texas.

Certification for Persons With Texas Teaching Certificates Who Desire Additional Endorsements

Those persons with elementary certificates who desire secondary certification, those with secondary certificates who desire elementary certification, and those with elementary or secondary certificates who desire additional endorsements may obtain information from the College of Education Certification Office.

Professional Certificates

Requirements for Professional Certificates are described in the Graduate Bulletin.

Department of Curriculum and Instruction

Accredited by the National Council for the Accreditation of Teacher Education

Department Head: Dr. Greg Stefanich **202 Education Building**

Professors: Burke, Hargrove, Hogue, McLaughlin, Self, Snyder, Sontag

Assistant Professor: Blanks, Brazell, Bruneau, Cass, Cooper, Goulas, Karlin, Lane, Matheny

Bachelor of Science Degree in Education Elementary

The Bachelor of Science degree in Elementary Education is designed to meet the requirements for a Provisional Elementary Teaching Certificate in the State of Texas. The persons who major in elementary education also may receive a certificate endorsement to teach one or more special education fields, kindergarten and driver education by meeting the additional curriculum requirements as described in other sections of this bulletin.

In addition to completing the required academic foundations program (previously described), students must fulfill the requirements in the area of specialization, professional education and elective courses. This plan allows an overlap of six semester hours between academic foundations and the area of specialization, thus allowing 12 semester hours of free electives. If the area of specialization is in a discipline other than English, mathematics, science or history, the free electives may be reduced to six semester hours.

Academic Foundations (54-60 Semester Hours)

Described in prior section.

Academic Specialization (36 Hours)

A. Specialization in one area (18 hours, nine advanced, except in generic special education, life-earth science and home economics which require 24). Courses must be in one of the following areas: art, biology, chemistry, drama, economics, English, French, generic special education, geology, history, home economics, life-earth science, mathematics, music, physical education, psychology, reading, one science, sociology, spanish or speech. Courses may include six hours, (eight in science), taken as part of the academic foundations. A listing of course sequences is available in the office of the head of the Department of Curriculum and Instruction or the director of the Advising Center.

B. Work in a combination of subjects (18 semester hours). 237 or Geo 238 Art 3371 Elementary Art Education Spc 333 Interpretation of Children's Literature or

The 336 Creative Dramatics MPE or WPE 339 Physical Education in Elementary School MEd 131 Elements of Music His 134 History of Texas

Professional Development (30 semester hours)

C&I 331 Foundations in Education
C&I 332 Educational Psychology
C&I 333 Language Arts in the Elementary School

C&I 334 Child Development and Evaluation
C&I 335 Arithmetic in the Elementary School
C&I 339 Reading in the Elementary School
C&I 434 Classroom Management
C&I 437 Science & Social Studies in the Elementary School
C&I 465 Student Teaching in the Elementary School

Free Electives (six semester hours)
A minimum of six semester hours are to be chosen by the student as free electives.

Bachelor of Science — Elementary Education

Recommended Program of Study

The elementary education degree and certification requirements are shown in outline form below, comprising a desirable sequence of courses.

All teacher education programs are subject to new standards beginning in the fall of 1985. It will be necessary to consult with your department head or the College of Education Advisory Center concerning the specifics of these requirements.

First Year

Eng Composition	6
Science Laboratory	8
Mth 135, 136 Contemporary Mathematics	6
MEd 131 Elements of Music	3
His 134 History of Texas	3
PE Activity	2
Academic Foundations Electives	3
Geo 237 or 238 Physical, Cultural Geology	3
	34

Second Year

Eng Literature	6
His Sophomore American History	6
POLS 231 Introduction to American Government I	3
POLS 232 Introduction to American Government II	3
Science	3
PE 339 Physical Education in the Elementary School	3
PE Activity	2
Area of Specialization	3
Mth 3313 Modern Elementary Geometry	3
	32

Third Year

Art 3371 Elementary Art Education	3
C&I 331 Foundations of Education	3
C&I 332 Educational Psychology	3
C&I 333 Language Arts in the Elementary School	3
C&I 334 Child Development and Evaluation	3
C&I 335 Arithmetic in the Elementary School	3
C&I 339 Reading in the Elementary School	3
C&I 434 Classroom Management	3
Spc 333 Interpretation of Children's Literature	3
Area of Specialization	9
	36

Fourth Year

C&I 437 Science and Social Studies	3
C&I 465 Student Teaching in the Elementary School	6
Area of Specialization	6
Academic Foundations Electives	9
Free Electives	6
	30

Bachelor of Science—Elementary Education

(Reading Specialization)

The elementary education degree with a specialization in Reading is shown in outline form below, comprising a desirable sequence of courses.

First Year

Eng Composition	6
Science Laboratory	8
Mth 135, 136 Contemporary Mathematics	6
MEd 131 Elements of Music	3
His 134 History of Texas	3
PE Activity	2
Academic Foundations Electives	3
Geo 237 or 238 Physical, Cultural Geology	3
	34

Second Year

Eng Literature	6
His Sophomore American History	6
POLS 231 Introduction to American Government I	3
POLS 232 Introduction to American Government II	3
Science	3
PE 339 Physical Education in the Elementary School	3
Mth 3313 Modern Elementary Geometry	3
C&I 232 Foundations of Reading Instruction	3
C&I 233 Reading Skills	3
PE Activity	2
	35

Third Year

Art 3371 Elementary Art Education	3
C&I 331 Foundations of Education	3
C&I 332 Educational Psychology	3
C&I 333 Language Arts in the Elementary School	3
C&I 334 Child Development and Evaluation	3
C&I 335 Arithmetic in the Elementary School	3
C&I 339 Reading in the Elementary School	3
C&I 434 Classroom Management	3
C&I 336 Children's Literature	3
C&I 337 Materials and Resources	3
Spc 333 Interpretation of Children's Literature	3
	33

Fourth Year

C&I 437 Science and Social Studies	3
C&I 465 Student Teaching in the Elementary School	6
C&I 431 Diagnostic-Prescriptive Techniques	3
C&I 439 Reading Practicum	3
Academic Foundations Electives	9
Free Electives	6
	30

Bachelor of Science—Elementary Education

Special Education—Generic

The Bachelor of Science Degree in Elementary Education, with Special Education-Generic as an Area of Specialization, is shown below. Students wishing to secure the Bachelor of Arts or Bachelor of Science degree and at the same time to certify for provisional certificate with a teaching field will be required to meet a revised set of teacher education standards. All teacher education programs are subject to these new standards beginning in the fall of 1985. It will be necessary to consult with your department head or the College of Education Advising Center concerning the specifics of these requirements.

First Year

Eng Composition	6
Science-Laboratory	8
Mth 135, 136 Contemporary Mathematics	6
MEd 131 Elements of Music	3
His 134 History of Texas	3
PE Activity (1 per semester)	2
Academic Foundations Electives	3
Geo 237 or 238 Physical, Cultural Geology	3
	34

Second Year

Eng Literature	6
His Sophomore American History	6
POLS 231 Introduction to American Government I	3
POLS 232 Introduction to American Government II	3
PE Activity (1 per semester)	2
C&I 2301 Foundations of Special Education	3
C&I 2302 Identification of Exceptional Individual	3
Mth 3313 Modern Elementary Geometry	3
Science	3
	32

Third Year

C&I 3304 SpEd Needs Excp Ind	3
C&I 3305 Rdng/L.A. Excp Lrnr	3
C&I 4307 Prctm Rdng/L.A. Excp	3
PE 335 or 339 Atypical/Elem Schl	3
Art 3371 Elementary Art Education	3
C&I 331 Foundations of Education	3
C&I 332 Educational Psychology	3
C&I 333 Language Arts in the Elementary School	3
C&I 334 Child Development and Evaluation	3
C&I 335 Arithmetic in the Elementary School	3
C&I 339 Reading in the Elementary School	3
Free Electives	3
	36

Fourth Year

C&I 4308 Apprsl Proc Excp	3
C&I 4309 Instruction of Exceptional Learner	3
C&I 4310 Practicum Instructing Exceptional Learner	3
Spc 333 Interpretation of Children's Literature	3
C&I 437 Science and Social Studies	3
C&I 434 Classroom Management	3
C&I 463 Student Teaching-Special	6
Academic Foundations Electives	3
Free Electives	3
	30

Bachelor of Science—Teacher of Young Children Ages 3-8

Recommended Program of Study

This program is being revised. The revised program will lead to certification for ages 3 through Grade 6, effective in the fall of 1985. It will be necessary to consult with the Department of Curriculum and Instruction or the College of Education Advising Center concerning the specifics of these requirements.

First Year

Eng Composition	6
Science Laboratory	8
Mth 135, 136	6
HEC 137, 233	6
MED 131	3
PE Activity	2
Academic Found. Elect	3
	34

Second Year

Eng Literature	6
American Hist	6
POLS 231, 232	6
WPE 339	3
C&I 233,2301	6
HEC 239	3
PE Activity	2
	32

Third Year

C&I 330,336	6
C&I 333, 335	6
C&I 339, 4311	6
HEC 334, 339	6
WPE 433	3
Spc 3302	3
Acad. Found Elect	3
Art 3371	3
	36

Fourth Year

C&I 437,4312	6
C&I 4308	3
HEC 4327	3
Soc 432	3
Acad. Found Elect	3
Free Electives	6
C&I 463	6
	30

Kindergarten Certificate Requirements

Kindergarten education may be added as an additional endorsement to the Provisional Elementary Certificate and is based on the successful completion of the courses listed below.

C&I 4302 Early Childhood Development	3
C&I 4303 Instruction in Early Childhood	3
C&I 4304 History and Philosophy of Kindergarten	3
C&I 463 Student Teaching (three hours Elementary, three hours Kindergarten)	6
Total	15

Students who do not plan to student teach in kindergarten can certify after taking 12 hours of Kindergarten Education and after teaching one year in an accredited kindergarten.

Kindergarten certification course work can be obtained on the Master's degree in Elementary Education. See the Graduate Bulletin for further information.

An Early Childhood/Exceptional Children certificate is obtainable. For details see Curriculum and Instruction section of this bulletin.

Bachelor of Science Degree in Education—Secondary

The Bachelor of Science degree in Secondary Education is designed to meet the requirements for the Provisional Secondary Certificate in the State of Texas. Those who complete the requirements for the degree will be eligible for certification in the particular teaching fields selected or single field as explained previously in certification requirements. Persons who certify in secondary education may, through planning the use of electives or taking additional work, receive certificate endorsements qualifying them to teach in one or more areas of special education or driver education. Attention is called to the fact that students may qualify for a certificate to teach in secondary education or by fulfilling certification requirements while obtaining a degree in a specific discipline. Some programs are available through only one of the above avenues, as shown below:

Bachelor of Science Secondary Education	Bachelor's Degree in a Particular Discipline
Art	Art (all levels)
Biology	Business (Office Administration)
Chemistry	Communication (Journalism)
Communication (Journalism)	Dance
Computer Science	English
Earth Science	Health Education
Economics	History

English (second field only)
French
General Science
History
Life-Earth Science Middle School
Mathematics
Physical Education
Physical Science
Physics
Political Science
Psychology
Social Studies
Sociology
Spanish
Special Education Generic (second field only)
Speech
Theater
Home Economics
Mathematics
Music (all levels)
Physics
Political Science
Spanish
Special Education Generic
Speech

In addition to completing the academic foundations program (described previously in the explanation for certification), students must fulfill the requirements in the areas of specialization, professional education and elective courses. These plans allow for an overlap of six semester hours, (eight in case of sciences), taken in academic foundations which may be included in any one teaching field. This allows an increase of free electives to 12 semester hours if there is an overlap in one field (14 in the area of science) and to 18 semester hours (20 if one field is science) if there is an overlap in each field. Of course, if there is no overlap between the academic foundations and the teaching fields, the free electives are limited to six semester hours. The requirements are explained in the four following areas.

1. **Academic Foundation** (54-60 Semester Hours) Described in introductory section for College of Education
2. **Academic Specialization** (48 Semester Hours Minimum All curricula leading to certification in secondary fields require a minimum of 24 semester hours, (12 advanced), in each of the two teaching fields or a minimum of 48 semester hours, (18 advanced), in a single area of specialization. All programs at this University except office administration, general science, home economics, all-levels art, all-levels music and social studies require two teaching fields.

Students certifying under Plan I, (two teaching fields), are required to select one academic field as being of greatest interest. Details concerning specific requirements in the various specialization areas may be found in the sequence below:

Art Specialization: (24 semester hours) Art 131, 133, 134, 231, 3316, 3381, 4341 and 3 hours advanced electives (Academic foundation must include Art 235 and 236).

Art (All Levels) Specialization: (48 semester hours) Art 131, 132, 133, 134, 231, 233, 3316, 3355, 3371, 3376, 3381, 4331, 4341, (plus nine hours of advanced electives).

Biology Specialization: (24 semester hours) completion of Biology core which includes Bio 245 or 243 345, 346, 347, 444 or 240, plus four additional hours in an advanced Biology laboratory science formal course. Bio 141 and 142 must be included in Foundation Core. Chm 141 and 142 required as foundation electives.

Note: Bio 143-144 are not prerequisite to advanced Biology courses as Foundation electives.

Business Education Office Administration (Plan II Composite Field), Specialization: (54 semester hours) Acc 231, 232, BAC 331, BLW 331, CS 133, Fin 331, MGT 331, 332, 437, MKT 331, OAS 233, 335, 336, 338, 363, 431, 438. (Academic Foundations must include Eco 131, 132, Spc 131, plus three hours from a third group).

Chemistry Specialization: (24 semester hours) Chm 141, 142, 333, 343, plus nine additional hours. The nine additional hours must include five advanced hours.

Computer Science Specialization: (24 semester hours) CS 131, 132, 3301, 4305, 4321, plus nine hours to be selected from: CS 3302, 3304, 4306, 4307, 4311, 4312

Dance See Division of Health, Physical Education and Dance in this bulletin.

Drama (See Theater).

Earth Science Specialization: (24 semester hours) Geo 141, 142, 237, 336, 4350, 4370, 4380, 418. Physics 137 Astronomy is required in the Foundation Area.

Economics Specialization: (24 semester hours) Eco 131, 132, 333, 334, plus 12 semester hours from any 300 or 400 level Eco course.

English Specialization: (27 semester hours) Six hours of sophomore literature; nine hours of advanced British Literature; six hours of advanced American Literature; Eng 3321; Eng 430 or 4312. Foundations programs must include a foreign language through 232 for students who had foreign language in high school and a foreign language through 132 for students who had no foreign language in high school. (When selected as area of greatest interest, program must include a foreign language through 232).

French Specialization: (24 semester hours) Required: Fre 131, 132, 231, 232, 330, 337, 338, plus three hours of advanced French.

General Science (Plan II Composite Field) Specialization: (50 semester hours) Bio 141, 142; Chm 141, 143, Chm 142, 144; Geo 141, 142; Phy 141, 143, Phy 142, 144, plus 18 hours of advanced science courses.

Health Education Specialization: (24 semester hours) HEd 131, 133, 234, 237, 331, 337, 434, 437. Foundations program must include Bio 141, 142, 330.

History Specialization: (24 semester hours) His 131, 132, six hours advanced American History, six hours advanced World History, plus His 231, 232 which are included in foundations program. (When selected as area of greatest interest program must include History 339 and Foreign Language through 232).

Home Economics Specialization: (48 semester hours) HEc 138, 233, 239, 330, 334, 339, 4327, 437. See Home Economics section of this bulletin for complete description of certification plan in this area.

Journalism Communication Specialization: (24 semester hours) Com 131, 133, 231, 232, 333, 3381, 431, 4382.

Life-Earth Science Middle School Specialization: (24 semester hours) Bio 141, 142; Geo 141, 142; plus eight additional hours, six must be advanced, to be selected from: Bio 240, 245, 345, 346, 347, 444, 446; Geo 237, 336, 418, 4350, 4370, 4380. (Foundation electives must include Phy 137).

Mathematics Specialization: (26 semester hours) Mth 148, 149, 233, 234 or 3370, 335, 333 or 338, and any two courses from the following group: Mth 331, 3311, 3321, 4315, 4316, 4321, 433.

Music (All Levels) See Music Department in this bulletin.

Physical Education See Division of Health, Physical Education and Dance in this Bulletin.

Physical Science Specialization: (28-30 semester hours) Chm 141, 142, Phy 141, 142; plus 12 hours to be selected from: Chm 333, 341, 342, 4401, 438; Phy 330, 335, 324, 414 or 415, 416 or 417; or Phy 143, 144; plus six advanced hours to be selected from: Chm 333, 341, 342, 4401, 438; Phy 330, 335, 324, 414 or 415, 416, or 417. (Foundation electives must include Mth 148 and 149 if not taken in required core.)

Physics Specialization: (24 semester hours) Phy 141, 142 or 247, 248, 333, 335; one course selected from 324, 346, 448; plus 6 to 8 hours selected from 324, 338, 416, 417, 436, 448.

Political Science Specialization: (24 semester hours) POLS 131 and at least one advanced Political Science course from each of five fields: American politics; political philosophy; international relations; comparative politics; public administration. (See Political Science Department in this bulletin for listing of courses). Also required: POLS 231 and POLS 232, which are included in core requirements of academic foundations. (When selected as area of greatest interest, program must include a foreign language through 232).

Psychology Specialization: (24 semester hours) Psy 131, 241, 332, 333, 336, 432, 436, 431 or 438.

Social Studies (Plan II Composite Field) Specialization: (48 semester hours)

A. Thirty semester hours: six hours economics, six hours geography, six hours sociology, six hours advanced government, six hours advanced American history.

B. Twelve semester hours: selected from one of the following: Non-U.S. History, advanced government, sociology and economics (at least six hours advanced).

C. Six semester hours: selected from one of the fields not selected in "B" above (must be advanced).

Sociology Specialization: (24 semester hours) Soc 131, 438, 439; plus 15 additional hours (6 advanced hours) in sociology.

Spanish Specialization: (24 semester hours) Spa 131, 132, 231, 232, 330, 335, plus six hours of advanced Spanish.

Special Education-Generic Specialization: (24 semester hours) C&I 2301, 2302, 3304, 3305, 4307, 4308, 4309, 4310. (See Special Education section of this bulletin).

Speech Specialization: (24 semester hours) Spc 1302, 131, 232, 235, 238, 332, 334, 434.

Theater (Drama) Specialization: (24 semester hours) The 131, 137, 231, 232, 332, 335, 436, 437.

3. **Professional Development** (18 semester hours)
   C&I 331 Foundations of Education
   C&I 332 Educational Psychology
   C&I 338 Curriculum, Materials and Evaluation in the Secondary School
   C&I 438 Classroom Management
   C&I 462 Student Teaching in the Secondary School
4. **Free Electives** (six semester hours)
   A minimum of six semester hours are to be chosen by the student as free electives.

Recommended Program of Study

The secondary education degree and certification requirements are shown in outline below.

Students wishing to secure the Bachelor of Arts or Bachelor of Science degree and at the same time to certify for a provisional certificate with a teaching field will be required to meet a revised set of teacher education standards. All teacher education programs are subject to these new standards beginning in the Fall 1985. It will be necessary to consult with your department head of the College of Education Advising Center concerning the specifics of these requirements.

Many variations are possible based upon the choice of teaching fields, overlaps of teaching field and academic foundation requirements, free electives. The outline does provide a desirable sequence of courses:

First Year

Eng Composition	6
Mth	6
Science Laboratory	8
PE Activity (2 semesters)	2
First Teaching Field	3
Second Teaching Field	3
Academic Foundations Electives	6
	34

Second Year

Eng Literature	6
Six hours of Sophomore American History from: 231, 232, 233, 234, 235, 236	6
POLS 231-232 Introduction to American Politics	6
PE Activity (2 semesters)	2
First Teaching Field	6
Second Teaching Field	6
Academic Foundations Electives	3
	35

Third Year

C&I 331 Foundations of Education	3
C&I 332 Educational Psychology	3
C&I 338 Curriculum and Materials	3
First Teaching Field (6 hours advanced)	9
Second Teaching Field (6 hours advanced)	9
Academic Foundations Electives	6
	33

Fourth Year

C&I 438 Classroom Management	3
C&I 462 Student Teaching in the Secondary School	6
First Teaching Field (Advanced)	6
Second Teaching Field (Advanced)	6
Academic Foundations Electives	3
Free Electives	6
	30

Bachelor of Science Degree in Education—Special Education

Students may secure the Bachelor of Science degree in Special Education-Generic and at the same time certify for a Provisional Certificate—Secondary with a teaching field in Special Education-Generic. Students wishing to secure the Bachelor of Arts or Bachelor of Science degree and at the same time to certify for a provisional certificate with a teaching field will be required to meet a revised set of teacher education standards. All teacher education programs are subject to these new standards beginning in the fall of 1985. It will be necessary to consult with your department head or the College of Education Advising Center concerning the specifics of these requirements. The Generic Program will train special educators who can meet the demands of Comprehensive Special Education in the State of Texas. The preparation is broader and more flexible than for those whose training is based on disability categories.

With successful completion of the degree requirements, the student may apply for a Special Education-Generic Certificate, and one additional Provisional Certificate endorsement in a Special Education categorical area. Teachers holding any of these described certificates or endorsements may be assigned to any level of a special education instructional program, pre-school through high school.

Specific information concerning the program may be obtained from the Department of Curriculum and Instruction or from the Advisement Office.

Special Education-Generic and Categorical Certificate Requirements

A student may complete the requirements for Special Education Certification within the Elementary or Secondary Education undergraduate program. It is also possible to obtain certification in conjunction with or following the completion of any other valid Texas teaching certificate.

Certification may be obtained in Special Education-Generic or in the area of mental retardation, physically handicapped, emotionally disturbed, learning disabilities and early childhood/exceptional children.

To obtain certification in one or more areas of Special Education, students follow the same curriculum that is outlined for elementary or secondary teachers along with the selected Special Education sequence.

Select courses in the Generic series are considered acceptable substitutions for categorical needs when the categorical requirements are unavailable. Specific information concerning these substitutions may be obtained from the Department of Curriculum and Instruction or from the Advisement Office.

The Special Education categorical requirements are as follows:

Mental Retardation

C&I 2301 Foundations of Special Education
C&I 3311 Identification and Habilitation of the Mentally Retarded
C&I 430 Education of the Mentally Retarded
C&I 2302 Identifications and Characteristics of the Exceptional Individual
C&I 463 Student Teaching-Special

Physically Handicapped

C&I 2301 Foundations of Special Education
C&I 3312 Education of the Physically Handicapped
C&I 2302 Identifications and Characteristics of the Exceptional Individual
C&I 4309 Instruction of the Exceptional Learner
C&I 463 Student Teaching-Special

Emotionally Disturbed

C&I 2301 Foundations of Special Education
C&I 3313 Behavioral Characteristics and Learning Procedures of the Emotionally Disturbed
C&I 4314 Educational Needs of the Emotionally Disturbed
C&I 4310 Practicum in Instructing the Exceptional Individual
C&I 463 Student Teaching-Special

Learning Disabilities

C&I 2301 Foundations of Special Education
C&I 3316 Identification of Language and Learning Disorders
C&I 4309 Instruction of the Exceptional Learner
C&I 4310 Practicum in Instructing the Exceptional Individual
C&I 463 Student Teaching-Special

Note: Six additional semester hours are required for L/LD certification.

Early Childhood/Exceptional Children

Select three hours from one of the following:
C&I 2301 Foundations of Special Education
Edu 5361 Survey of Learning Potentials of Exceptional Children
Select three hours from one of the following:
C&I 2302 Identification and Characteristics of the Exceptional Individual
C&I 3304 Educational Needs of the Exceptional Individual
C&I 4308 Appraisal Processes in Programming for the Exceptional Individual
C&I 4309 Instruction of the Exceptional Individual
Select six hours from any two of the early childhood or kindergarten courses.

Multiple Special Education Certification

An additional six to 12 hours from categorical certification programs for mental retardation, physically handicapped, language and/or learning disabilities or emotionally disturbed over and above the hours required for the completion of one area will entitle the student to two or more certificates in Special Education along with certification in any major area in which a student has or is obtaining a valid Texas Teacher Certificate.

Any of the courses may be taken as elective hours by students who do not wish to certify in any of the Special Education areas. Additional information may be obtained from the head of the Department of Curriculum and Instruction.

Recommended Program of Study

The Bachelor of Science in Education-Special Education degree, with Generic certification requirements, is shown below.

Students wishing to secure the Bachelor of Arts or Bachelor of Science degree and at the same time to certify for a provisional certificate with a teaching field will be required to meet a revised set of teacher education standards. All teacher education programs are subject to these new standards beginning in the fall of 1985. It will be necessary to consult with your department head or the College of Education Advising Center concerning the specifics of these requirements. Variations to meet individual student needs in the program of study are possible. Specific information may be obtained from the Department of Curriculum and Instruction.

First Year

Eng-Composition	6
Mth	6
Science Laboratory	8
PE Activity (1 per sem)	2
Second Teaching Field	6
Academic Foundations Electives	6
	34

Second Year

Eng Literature	6
His Sophomore American History	6
POLS 231-232 Introduction to American Politics	6
PE Activity (1 per semester)	2
C&I 2301 Foundations of Special Education	3
C&I 2302 Identification of the Exceptional Individual	3
Second Teaching Field	6
Academic Foundations Elective	3
	35

Third Year	
C&I 331 Foundations of Education	3
C&I 332 Educational Psychology	3
C&I 338 Curriculum and Materials	3
C&I 3304 Educational Needs of Exceptional Individual	3
C&I 3305 Rdng/L.A. Excp Lrnr	3
C&I 4307 Prctm Rdng/L.A. Excp	3
Second Teaching Field (Advanced)	6
Academic Foundations Elective	3
Free Electives	6
	33

Fourth Year	
C&I 438 Classroom Management	3
C&I 4308 Appraisal Processes for Exceptional Individuals	3
C&I 4309 Instruction of the Exceptional Learner	3
C&I 4310 Practicum Instructing Exceptional Individual	3
C&I 463 Student Teaching-Special	6
Second Teaching Field (Advanced)	6
Free Electives	6
	30

Bachelor of Science in Education—Elementary With Special Education—Generic

Students desiring the degree in Elementary Education with Special Education-Generic can do so by following the prescribed Elementary Education plan along with the 24 semester hour Special Education-Generic Area of Specialization inclusion. Specific information may be obtained from either the Department of Curriculum and Instruction or the Advisement Office.

Associate of Science — Education

The Associate of Science in Education is administered by the Department of Curriculum and Instruction.

Students completing this program will be prepared to function as instructional aides in a variety of public school and other programs directly concerned with the education of children. The total hours completed in this degree are acceptable toward a Bachelor of Science in Education Degree if that is the student's objective.

Recommended Program of Study

The Associate of Science Degree in Education is shown below. Variations to meet individual student needs in the program of study are possible. Specific information must be obtained from the Department of Curriculum and Instruction or the Advisement Office.

First Year	
Eng Composition	6
Mth/Laboratory Science	3-4
His Sophomore American History	6
PE Activity (1 per semester)	2
Psy 234 or 235 Child/Adolescent Psychology	3
C&I 2301 Foundations of Special Education	3
Free Electives	9
	32-33

Second Year	
Eng Literature	3
Mth/Laboratory Science	3-4
POLS 231 Introduction to American Government I	3
POLS 232 Introduction to American Government II	3
C&I 231 Instructional Media in Classroom	3
C&I 2302 Identification of Exceptional Individual	3
C&I 3305 Rdng/L.A. Excp Lrnr	3
Free Electives	9
	30-31

Curriculum and Instruction Courses (C&I)

*Note: To enroll in pre-professional education courses, it is not necessary for students to be admitted to the teacher education program. Pre-professional education courses: C&I 1201, 2310, 231, 232, 233, 2301, 2302

1201 College Reading and Writing Skills 2:1:2

Provide procedures, practices, and individual help with reading assignments, writing papers, taking essay examinations, and taking lecture notes. Not applicable to TEA certification plans.

2310 Peer Advisor-Counselor Training 3:2:2

Designed primarily for those who will be learning about systematic helping and interpersonal relating by practicing the skills that constitute the helping process. Content based on learning theory, social-influence theory, behavior-modification principles and practice, and skills-training and problem-solving methodologies. Not applicable to TEA certification plans.

Prerequisite: Permission of the instructor.

2301 Foundations of Special Education 3:3:0

An orientation to background, terminology and programs for those who are exceptional. Designed as an overview of Special Education. A first course for those planning to certify in Special Education.

2302 Identification and Characteristics of the Exceptional Individual 3:3:0
Principles of normal and abnormal child growth and development. Nature and causes of behavioral and physical characteristics and basic techniques of management.

2310 Peer Advisor-Counselor Training 3:2:2
Designed primarily for those who will be learning about systematic helping and interpersonal relating by practicing the skills that constitute the helping process. Content based on learning theory, social-influence theory, behavior-modification principles and practice, and skills-training and problem-solving methodologies. Not applicable to TEA certification plans.
Prerequisite: Permission of the instructor.

231 Instructional Media in the Classroom 3:3:0
The course is designed to familiarize students with the many types of instructional media and teaching machines found in modern classrooms, including development and construction of typical teacher-made materials.

232 Foundations of Reading Instruction 3:3:0
An orientation to background, terminology and programs for the teaching of reading. Designed to give an overview of the history of the English language, the reading process and the psychology of reading instruction.
Prerequisite: Sophomore standing.

233 Reading Skills 3:3:0
Analysis of scope and sequence of reading skills with teaching strategies for developmental reading and reading in the content areas.
Prerequisite: Sophomore standing.

*Note: Students ***must*** be admitted to the teacher education program in the College of Education to enroll in the following professional education courses. Standards for admission to teacher education are found on page •• of this bulletin. In order to be admitted, students must have completed 60 semester hours of coursework, including six hours of 100 level mathematics courses, six hours of 100 level English, excluding English 137, posses a 2.0 or above grade point average, and achieved a passing score on the state's competency entrance examination.

3304 Educational Needs of the Exceptional Individual 3:3:0
Evaluation and application of various techniques for determining educational needs of the exceptional individual and general instructional arrangement considerations.

3305 Instructional Alternatives for Teaching Reading and Language Arts to the Exceptional Learner 3:3:0
Identification of skill deficiencies, modification of curriculum, designing and implementation of instructional strategies for pupils evidencing disabilities in reading and language arts.

331 Foundations of Education 3:3:0
Focuses on the historical, philosophical, organizational, professional and cultural-ethnic components of American education with particular emphasis on awareness and understanding of specific needs of children and youth of various cultural-ethnic components. Selective field experiences required.
Prerequisite: Junior standing.

3311 Identification and Habilitation of the Mentally Retarded 3:3:0
Nature and causes of mental retardation, physical and mental characteristics; the organization and administration of classes; evaluation, integration and adaptation of the program to meet socio-economic needs. Includes experience in observing the behavior of mentally retarded children.

3312 Education of the Physically Handicapped 3:3:0
Description and characteristics of children with physical disabilities. Consideration of etiological factors and limitations in regular and special classes, hospital and homebound instruction. Includes experience in observing the behavior of physically handicapped children.

3313 Behavioral Characteristics and Learning Procedures of the Emotionally Disturbed 3:3:0
The principles of normal and abnormal child growth and development, including biological and socio-cultural determinants of growth; classification and description of relevant psychological terminology as related to the behavior of the emotionally distrubed.

3316 Identification of Language and Learning Disorders 3:3:0
The identification of specific behavioral characteristics that interfere with adequate learning, with special emphasis on techniques to alter behavior. Discussion and presentation of theories of perception and cognition.

3317 Learning Potentials in the Severely and Profoundly Handicapped 3:3:0
Determining the degree of modifiability of pupil behaviors. Identifying functional levels, individual project.

3318 Practicum in Learning Potentials 3:3:0
Application of assessment procedures to be used with the severely and profoundly handicapped. Emphasis on both formal and informal measures. Formulation of educational programs from assessment. Individual projects.

332 Educational Psychology 3:3:0
Principles and psychological problems involved in education with emphasis on learning theories and the practical application of psychological principles to teaching.
Prerequisite: Junior standing.

333 Language Arts in the Elementary School 3:3:0
The study and use of materials and techniques in the teaching of oral and written communication.
Prerequisite: C&I 331.

334 Child Development and Evaluation 3:3:0
Principles of growth and development. Measurement and evaluation of learning.

335 Arithmetic in the Elementary School 3:3:0
A study of the content, materials and methods used in teaching arithmetic.
Prerequisite: C&I 331.

336 Children's Literature 3:3:0
A study designed to provide students with information about children's books, periodicals and related media and their use with children. Techniques and materials for motivating children to develop a continuing interest in reading.
Prerequisite: Junior standing.

337 Materials and Resources for Teaching Reading 3:3:0
A concentration on planning, producing, selecting, organizing and evaluating instructional materials and equipment to be used in teaching reading.
Prerequisite: C&I 233 or C&I 339.

338 Curriculum, Materials and Evaluation in the Secondary School 3:3:0
The structure and organization of the curriculum, materials used and types of evaluation utilized.
Prerequisite: C&I 331.

339 Reading in the Elementary School 3:3:0
Methods and materials for teaching reading in the elementary school. Emphasis upon the placement of materials and lesson planning.
Prerequisite: C&I 331.

4101, 4201, 4301, 4601 Institute or Workshop in Education 1-6:1-6:0
A number of institutes or workshops are designed to advance the professional competence of teachers. For each, a description of the particular area of study will be indicated. May be repeated for credit when nature of workshop or institute differs sufficiently from one previously taken.

4111, 4211, 4311 Individual Study in Special Education 1-3:A:0
Investigation into special areas in special education under the direction of a faculty member. This course may be repeated for credit when topics of investigation differ.
Prerequisite: Consent of the department head.

430 Education of the Mentally Retarded 3:3:0
Problems of the selection, preparation, development and use of curriculum materials. Use of resources, selection of equipment, employment opportunities and a review of recent research. Includes experience in observing and modifying the behavior of mentally retarded children.

4302 Early Childhood Development 3:3:0
A study of the psychological development of children from birth to age six, with recognition given to their basic needs. Includes some of the appropriate educational experiences for the early years.

4303 Instruction in Early Childhood 3:3:0
A comprehensive study of methods and materials for preschool and kindergarten-age children. Focus on oral language experiences, science and mathematics concepts and creative expression.

4304 History and Philosophy of the Kindergarten 3:3:0
A comparative study of the early childhood educational movements of the past and their impact on present and future programs.

4305 Seminar in Early Childhood Educational Research 3:3:0
A survey of research studies in learning theory and in instructional practices for young children.

4306 Special Topics 3:3:0
Significant topics in Elementary. Secondary and Special Education. The description of the particular area of study will appear on the printed semester schedule. A student may repeat for a maximum of six semester hours when the area of study is different.

4307 Practicum in Instructional Alternatives in Reading and Language Arts for the Exceptional Learner 3:A:0
Practicum experience in the identification and instruction of pupils evidencing disabilities in reading and language arts.
Prerequisite: C&I 3305 or instructor's approval.

4308 Appraisal Processes in Programming for the Exceptional Individual 3:3:0
Formal and informal methods of appraising the educational needs of the exceptional learner and the use of interpretative data to prescribe appropriate curriculum modification, instructional materials, teaching strategies and classroom management.

4309 Instruction of the Exceptional Learner 3:3:0
Classroom management, teaching strategies, instructional materials for the exceptional learner. Various approaches and rationales are presented.

4310 Practicum in Instructing the Exceptional Individual 3:A:0
Practicum experience with the exceptional learner. Includes identification, interpretation of data, development of instructional goals and implementation of instructional objectives. When experience is with emotionally disturbed it includes at least 54 contact clock hours of work.

431 Diagnostic-Prescriptive Techniques in the Teaching of Reading 3:3:0
Techniques for ascertaining reading strengths and weaknesses. Planning and implementing instruction to meet individual needs.
Prerequisite: Junior standing, 3 hours from C&I 233, 337, 339.

4314 Educational Needs of the Emotionally Disturbed 3:3:0
Programming possibilities based on the characteristics and severity of the individual's emotional problems. Integration of knowledge and competencies to provide an instructional program to meet the needs of emotionally disturbed children.

4315 Education of Gifted Children 3:3:0
Identification, programs, guidance and administrative structure for gifted children.

4316 Instructional Processes with the Severely and Profoundly Handicapped 3:3:0
Translating the behaviors of the severely handicapped into developmental categories and applied instructional modification processes.

432 Educating the Culturally Different 3:3:0
Delineates personal characteristics and the affective domain of the culturally different and identifies educational strategies applicable to the teaching process.

433 Teaching Media and Audio-Visual Technology 3:3:0
Observation, demonstration and practice in utilizing modern teaching media, including teaching machines and programming.

4336 Methods of Teaching Secondary School Science 3:3:0
A study of modern inquiry methods common to the separate secondary science disciplines. Emphasis is placed upon the investigative or discovery approach to science instruction.

4337 Tests and Measurements 3:3:0
Principles of human measurement and evaluation. Familiarity with most used tests and evaluation procedures in educational settings.

434 Classroom Management Elementary 3:3:0
A study of problems relating to classroom management and curriculum.
Prerequisite: C&I 331 and 332.

435 Indivudalized Instruction Through Technology 3:3:0
Individualized instruction as the basic conceptual tool for the study, personalization and production of actual materials and modules useful in traditional and performance based instruction. The course will be conducted as a practicum in the theory and practice of individualized instruction.

436 Student Teaching in the Kindergarten 3:A:0
Supervised observation and teaching in the kindergarten. Three hours in kindergarten classrooms five days per week for eight weeks.

437 Science and Social Studies in the Elementary School 3:3:0
Content, methods and materials for teaching science and social studies in the elementary school.
Prerequisite: 331 and 332.

438 Classroom Management Secondary 3:3:0
Organization of subject matter, lesson planning, classroom management and general methods of teaching.
Prerequisite: C&I 338.

439 Reading Practicum 3:3:0
Participation in a directed field experience. The students will work with typical class, groups and individuals in the application of concepts, skills and techniques.
Prerequisite: Twelve semester hours of reading including C&I 337 or by special permission of the department head.

462 Student Teaching in the Secondary School 6:A:0
Supervised observation and teaching in the secondary school.
Prerequisite: See Admission to Student Teaching in this catalog. Three hours in secondary classroom 5 days per week for 16 weeks.

463 Student Teaching—Special 6:A:0
Special student teaching situations designed for students working toward all-level certificates, special education, kindergarten education and speech and hearing.
Prerequisite: See Admission to Student Teaching in this catalog. Class: the number of hours equivalent to 15 hours per week for 16 weeks.

465 Student Teaching in the Elementary School 6:A:0
Supervised observation and teaching in the elementary school.
Prerequisite: See Admission to Student Teaching in this catalog. Class: 3 hours in elementary classrooms 5 days per week for 16 weeks.

Department of Health, Physical Education and Dance

Assistant Dean and Director: Belle M. Holm

Director of Academic Programs: Mildred A. Lowrey

Activity Program Director: Bob L. Frederick

Dance Coordinator: Rebecca O. Hill

Graduate, Health and Physical Education Coordinator: Virginia Raye Holt

Professors: Bell, Crowder, Higgins, Holm, Holt, Yates

Associate Professor: Jolly, Lowrey

Assistant Professors: Frederick, Gremillion, Hill, Lobstein, Park, Payton, Rogas, Stivers, Worsham

Instructors: Gilligan, Kindl, Lihs, Newberry, Sullivan, Treadway, Westbrooks, Zeek

Lecturers: Bell, Brooks, Bussell, Calvert, Crawford, DiCaro, Foster, Ghezzi, Green, Grost, Horne, Huffstickler, Mason, Senorski

The Division of Health, Physical Education and Dance provides several career options for students. Three teacher education certification programs are offered: dance education, health education and physical education. Two programs of study are available which do not lead to teacher certification: dance education and health education. Undergraduate programs lead to a Bachelor of Science degree in Health Education or Physical Education or Dance or a Bachelor of Arts degree in Dance. Graduate programs leading to a Master of Science degree are described in the Graduate Bulletin.

The general physical activity four semester program for all university students provides a varied selection of activities which include aquatics, dance fitness and sports. The activity program is designed to enhance the general education objectives of the University.

Bachelor of Science

Recommended Programs of Study

Dance Education

The dance division offers two programs of study. A student choosing a public school teaching career should follow the certification program which leads to certification to teach dance plus an approved additional teaching field at the secondary level. A student selecting the non-certification program prepares for a career in private studio teaching, administration or professional performance.

Dance Education Certification Program

First Year	
Bio 143-144 Human Anat. and Physio	8
Eng Composition	6
Mth	6
Dan 127 Folk Dance	2
Dan 123	2
Dan 129 or Dan 1252/1253	2
*Elective	3
Dance Elective Ballet or Modern	4
	33

Second Year	
Eng Literature	6
His Sophomore American History	6
POLS 231-232 American Government	6
PEPA 2201 Gymnastics Techniques	2
Second Teaching Field	9
Dance Elective Ballet or Modern	4
	33

Third Year

PEPT 231 Anatomy and Physiology	3
C&I 331 Foundations of Education	3
C&I 332 Educational Psychology	3
C&I 338 Curriculum and Materials	3
PEPT 343 Exercise Physiology	3
Dan 3301 Theater Dance Forms or PEPT 332 Management Skills	3
Dan 335 Principles of Creative Dance	3
Dan 2221 Ballet Company or Dan 2222 Modern Dance Company	2
Second Teaching Field	6
Dance Elective Ballet or Modern	4
	33

Fourth Year

C&I 438 Classroom Management	3
C&I 462 Student Teaching in the Secondary School	6
Dan 336 Choreography and Dance Production	3
Dan 434 Methods and Materials in Dance Education	3
Dan 439 History and Theory of Dance	3
Second Teaching Field	9
*Elective	6
	33

Total 132 hours

In order to develop and maintain a high technical level, dance education majors are required to take ballet technique or modern dance technique daily each semester.

Dance Education Non-Certification

First Year

Bio 143-144 Human Anat Physio	8
Dan 1261, 1262, 1263 or 1264 Ballet Technique	2
Dan 127 Folk Dance	2
Dan 1281, 1282, 1283 or 1284 Modern Dance	2
Eng Composition	6
Mth	6
MEd 131 Elements of Music	3
Dan 123 Introduction to Dance	2
	31

Second Year

Eng Literature	6
POLS 231-232 American Government	6
His Sophomore American History	6
PEPA 2201 Gymnastics Techniques	2
Dan 129 Tap Dance	2
Dan 2221 Ballet Company	2
Dan 2222 Modern Dance Company	2
Dan 2223, 1253, 2260 Ensemble, Jazz or Musical Comedy	2
*Electives	8
	36

Third Year

PEPT 231 Anatomy and Physiology	3
Art 139, 235 or 236	3
PEPT 343 Exercise Physiology	4
Dan 3301 Theatre Dance Forms	3
Dan 335 Principles of Creative Dance	3
*Electives	18
	34

Fourth Year

Dan 336 Choreography and Dance Production	3
Dan 430 Individual Study in Dance Education or Dan 4301 Workshop in Dance Education	3
Dan 434 Methods and Materials in Dance Education	3
Dan 439 History and Theory of Dance	3
*Electives	18
	30

Total 128 semester hours

**Electives should include the following:*
A related arts minor program of 18 semester hours approved by counselor.
A related elective program of 18 semester hours guided by counselor.
In order to develop and maintain a high technical level dance education majors are required to take ballet technique or modern dance technique daily each semester.

Bachelor of Art—Dance Major

Same as the above program except for the completion of the course numbered 232 in a foreign language.

Health Education

The health education program of study of offers two options for a career in health. A student choosing a teaching career should follow the certification program which leads to certification to teach health plus an approved additional teaching field at the secondary level. A student selecting the non-certification program prepares for a career in health agencies and municipal health departments.

Health Education Certification Program

First Year

PE Activity	2
Bio 143-144 Human Anat and Physio	8
Elective	3
Eng Composition	6
HEd 131 Emergency Care, Safety and Survival	3
HEd 133 Personal Health	3
Mth	6
Academic Foundation Elective	3
	34

Second Year

PE Activity	2
Academic Foundation Electives	6
Eng Literature	6
POLS 231-232 American Government	6
HEd 234 Public and Consumer Health	3
HEd 237 Health Education in the Secondary School	3
His Sophomore American History	6
	32

Third Year

PEPT 231 Anatomy and Physiology	3
C&I 331 Foundations of Education	3
C&I 332 Educational Psychology	3
C&I 338 Curriculum and Materials	3
Elective	3
HEd 331 Measurement in Health	3
HEd 337 Contemporary Health Problems	3
Second Teaching Field	12
	33

Fourth Year

C&I 438 Classroom Management	3
C&I 462 Student Teaching in the Secondary School	6
Academic Foundation Electives	6
HEd 434 Health and Human Ecology	3
HEd 437 Health Science and Epidemiology	3
Second Teaching Field	12
	33

Total 132 semester hours

**Academic foundation program required. Electives may not include more than six semester hours (eight in science) overlap with any teaching field.*

Health Education Non-Certification

First Year

PE Activity	1
Bio 143-144 Human Anat and Physio	8
*Elective	3
Eng Composition	6
HEd 131 Emergency Care, Safety and Survival	3
HEd 133 Personal Health	3
Mth	6
Psy 131 Introduction to Psychology	3
PEPA 2208 Aerobic Techniques	2
	35

Second Year

PE Activity	1
Eco 233 Principles and Policies	3
*Elective	3
Eng Literature	6
POLS 231-232 American Government	6
HEd 234 Public and Consumer Health	3
HEd 237 Health Education in the Secondary School	3
His Sophomore American History	6
PEPA 2206 Water Safety Instruction	2
	33

Third Year

PEPT 231 Anatomy and Physiology	3
*Electives	14
POLS 3316 Introduction to Public Administration	3
HEd 337 Contemporary Health Problems	3
Spc 238 Oral Controversy	3
PEPT 343 Exercise Physiology	4
	29

Fourth Year

*Electives	14
HEd 430 Individual Study in Health Education	3
HEd 4301 Workshop in Health Education	3
HEd 434 Health and Human Ecology	3
HEd 437 Health Science and Epidemiology	3
Soc 437 Public Opinion	3
	29

Total 126 semester hours

**Electives should include the following:*
A related minor of 18 semester hours approved by counselor.
A related elective program of 16 semester hours guided by counselor.

Physical Education

The physical education program of study prepares the student for a teaching career in physical education for an advanced degree. A companion program of specialization in elementary physical education is available through the Bachelor of Science in Curriculum and Instruction (see Department of Elementary Education in this bulletin for further information.)

The course of study leading to a baccalaureate degree and teacher certification in physical education encompasses three areas of work: (1) the required block of professional theory courses; (2) the required block of professional education courses; and (3) the required block of professional activity courses.

The required block of professional theory courses are PEPT 132, 231, 332, 334, 335, 343, 436, 443, and six hours to be selected from PEPT 232, 233, 234, 336, 337, 339, 431, and 438. An overall average must be earned in professional theory courses.

The required block of professional education courses are C&I 331, 332, 338, 438 and 462. A student must be admitted to the College of Education's teacher education program before enrolling in professional education courses. An overall "C" average must be earned in professional education courses.

The required block of professional activity courses are PEPA 129, Dance 127 or 128, and PEPA 2201. Fourteen additional hours must be selected from Dan 127 or 128, PEPA 2202, 2203, 2204, 2205 2206, 2207, 2208, 2209, 3201, 3202, 3303, 3304, 3305, 3306. A minimum of six hours must be selected from the advanced level courses. An overall "B" average must be earned in the physical education professional activity courses.

Physical Education

Certification Program

First Year

Eng Composition	6
Mth 1334 (or above)	3
Mth (or laboratory science)	3
Bio 143-144 Anat and Physiology	8
PEPT 132 Found of Phys. Ed	3
Dan 127 or 128 Folk or Square Dan	2
PEPA 129 Swimming	2
PEPA Electives	4
Elective	3
	34

Second Year

Eng Literature	6
POLS 231-232 American Government	6
His American History	6
PEPT 231 Functional Anat. & Physio	3
PEPT 332 Management Skills	3
PEPT Elective	3
PEPA 2201 Gymnastics Techniques	2
PEPA Electives	4
Elective	3
	36

Third Year

PEPT 334 Care & Prevention of Sports Injuries	3
PEPT 335 Adapted Phys Ed	3
PEPT 343 Exercise Physiology	4
C&I 331 Foundations of Education	3
C&I 332 Education Psychology	3
C&I 338 Curriculum and Materials	3
PEPA Electives	6
Second Teaching Field	9
	34

Fourth Year

PEPT 436 Measurement & Evaluation	3
PEPT 443 Motor Learning	4
C&I 438 Classroom Management	3
C&I 462 Student Teaching	6
PEPT Elective	3
Second Teaching Field	15
	34

Total 138 semester hours

Dance Education Courses (Dan)

123 Introduction to Dance 2:1:2
A general introduction to dance. Emphasis is on basic terms, movements, concepts, and principles of dance.

1251, 1252, 1253 Jazz 2:1:2
Instruction and practice in jazz dance. May be repeated for credit.

1261, 1262, 1263, 1264 Ballet Technique 2:1:2
Instruction and practice in ballet technique. Emphasis is placed upon accurate technique and placement. May be repeated for credit.

127 Folk Dance Techniques 2:1:2
Instruction practice in beginning folk dance. Emphasis is placed upon the historical and cultural background of the various national dances.

128 Square Dance Techniques 2:1:2
Instruction and practice in square dance. Emphasis on class organization and teaching methods.

1281, 1282, 1283, 1284 Modern Dance Technique 2:1:2
Instruction and practice in the techniques of modern dance and composition. May be repeated for credit.

129 Tap Dance 2:1:2
Instruction and practice in beginning tap dance.

2221 Ballet Company 2:1:5
The instruction, rehearsal and production of classical ballets. May be repeated for credit.

2222 Modern Dance Company 2:1:5
The instruction, rehearsal and production of modern dance and jazz works. May be repeated for credit.

2223 Dance Ensemble 2:1:5
The instruction, rehearsal and production of various and divergent dance forms. May be repeated for credit.

2260 Musical Comedy Dance 2:1:5
A laboratory course providing both background study and practical work in the specialized field of musical comedy including participation in the presentation of a full production. Open by audition or by consent of the instructor to students from all departments who are interested in dance as applied to musical comedy. May be repeated for credit.

3301 Theater Dance Forms 3:1:2
Instruction, study and practice of the various dance forms utilized in the theater.

335 Principles of Creative Dance 3:3:0
Theory and practice of instructing creative dance. Emphasis is placed on positive reinforcement of the student as an individual and leading the student to gather self-expression in a dance/movement activity.

336 Choreography and Dance Production 3:2:1
Principles of the art of choreography and the study of the various facets utilized in dance production.

4101 Workshop in Dance Education 1:1:0
A number of workshops are designed to advance the professional competence of dance teachers. For each, a description of the particular area of study will be indicated. May be repeated for credit when nature of workshop differs from one previously taken.

4201 Workshop in Dance Education 2:2:0
A number of workshops are designed to advance the professional competence of dance teacher. For each, a description of the particular area of study will be indicated. May be repeated for credit when nature of workshop differs from one previously taken.

4301 Workshop in Dance Education 3:3:0
A number of workshops are designed to advance the professional competence of dance teachers. For each, a description of the particular area of study will be indicated. May be repeated for credit when nature of workshop differs from one previously taken.

430 Individual Study in Dance Education 3:A:0
Selected problems in Dance Education.
Prerequisite: Senior standing and consent of department head. May be repeated for credit. Class by consultation.

434 Methods and Materials in Dance Education 3:3:0
Objectives, methods and techniques of teaching dance: Classroom instruction and field laboratory assignments are included for demonstration and practice.

439 History and Theory of Dance 3:3:0
Chronological summary of characteristics and forms of dance from primitive rites to contemporary art forms; origins and evaluation of classic and contemporary dance forms.

Health Education Courses (HEd)

131 Emergency Care, Safety and Survival 3:3:0
Standard American Red Cross First Aid certification course, plus the Public Health Service Office of Civil Defense Medical Self-Help course and Safety Education. Among specific course requirements is one field trip.

133 Personal Health 3:3:0
A study of body organs and diseases, systems, physical and mental health concepts, knowledges and appraisal of individual health. Designed to extend the students' skills in using facts to arrive at well informed decisions concerning their own personal health.

234 Public and Consumer Health 3:3:0
Traditional and modern methods of meeting public and consumer health needs; investigation and analysis of public and consumer health problems; functions and organization of consumer services at the local, state, regional and national levels.

237 Health Education in the Secondary School 3:3:0
Presentation of health media in conjuntion with curriculum design and teaching methods. Emphasis placed upon the conceptual approach to teaching health education. Competencies regarding ten selected conceptual areas within the scope of health education are stressed.

331 Measurement and Evaluation in Health Education 3:3:0
Designed to provide the student with the understandings and tools needed to evaluate the secondary students' health status and progress within the school health program. Special emphasis placed upon competencies in detection and referral procedures for individual health appraisal. Evaluative measures and resources within schools and communities will be studied.

337 Contemporary Health Problems 3:3:0
The course deals with problems associated with current health issues which are related to individual and social adjustment in society. Emphasis will be placed upon social and psychological factors which promote successful interpersonal and family relationships.

338 **Health Education in the Elementary School** 3:3:0
Includes health problems and interests of elementary school children, the promotion of the healthful school environment, understanding of health appraisal of school children and the conceptual approach to curriculum construction.

4101 **Workshop in Health Education** 1:1:0
A number of workshops are designed to advance the professional competence of teachers. For each description, the particular area of study will be indicated. May be repeated for credit when nature of workshop differs from one previously taken.

4201 **Workshop in Health Education** 2:2:0
A number of workshops are designed to advance the professional competence of teachers. For each description, the particular area of study will be indicated. May be repeated for credit when nature of workshop differs from one previously taken.

4301 **Workshop in Health Education** 3:3:0
A number of workshops are designed to advance the professional competence of teachers. For each description, the particular area of study will be indicated. May be repeated for credit when nature of workshop differs from one previously taken.

430 **Individual Study in Health Education** 3:A:0
Selected problems in health.
Prerequisite: Senior standing and consent of department head. May be repeated for credit. Class by consultation.

434 **Health and Human Ecology** 3:3:0
Emphasis on the human organism with the many aspects of environment and the implications in each area with regard to health. The course will cover aspects of air, land and water pollution with major sources of pollution being designated and categorized into the areas of transportation, industry, power plants, refuse disposal and recreational contributions.

437 **Health Science and Epidemiology** 3:3:0
A study of infectious and non-infectious diseases. The course treats epidemiology as a basic science of preventive medicine as well as the study of occurrence of disease in human populations.

Physical Education Courses

Professional Theory Courses (PEPT)

132 **Foundations of Physical Education** 3:3:0
Introduction to elementary and secondary physical education and to specialized related areas. Includes, history, principles and philosophy of physical education; professional qualifications of leadership; and analysis of the place of physical education in modern day society.

231 **Functional Anatomy and Physiology** 3:3:0
A study of human movement from the perspectives of anatomy, physiology and kinesiology. Emphasis on the analysis of sport-skill performance.

232 **Sport In Contemporary American Society** 3:3:0
A study of various sociocultural factors in American society and their relationship to the sport experience.

233 **Biomechanics of Exercise and Sport** 3:3:0
A study of basic principles of human mechanics with application to motor performance and sport.

234 **Psychosocial Aspects of Teaching and Coaching** 3:3:0
Psychological and sociological perspectives of sport; social psychology as it relates to physical activity, social processes, personalities of sports participants, and current literature related to psychosocial aspects of sport.

332 **Management Skills in Teaching of Physical Education** 3:3:0
A study of the organization and administration of programs in physical education and athletics. Understanding and application of management skills.

334 **Care and Prevention of Sports Injuries** 3:3:0
A study of the treatment and prevention of specific sport injuries.

335 **Adapted Physical Education** 3:3:0
A study of the special programs of physical education appropriate to individuals with specific handicaps. Emphasis on developing personalized developmental programs. Field experience required.

336 **Physical Education Programs: Secondary Schools** 3:3:0
A study of curriculum methods and materials for physical education at the secondary level.

337 **Motor Development** 3:3:0
Principles of motor development in children, including developmental stages and the understanding of motoric trends in human growth and development from birth throughout life.

PEPT 338 **Driver Education** 3:3:0
Traffic rules and regulations and the basic facts concerning the cause and prevention of accidents. The course includes behind-the-wheel training in the use of training automobile while instructing students. For teaching professional students how to teach driver education.

339 Physical Education Program: Elementary Schools 3:3:0
The theory of teaching physical education activities in the elementary grades. Classroom instruction and field laboratory assignments are included for demonstration and practice.

343 Exercise Physiology 3:3:0
A study of the functions of the physiological systems during and after exercise.
Prerequisite: Bio 143-144, PEPT 231.

PEPT 416 Student Teaching in Driver Education 1:1:0
Supervised observation and teaching of driver education in actual class behind-the-wheel training.
Prerequisite: HED 131 and PEPT 338.

4101 Workshop in Physical Education 1:1:0
A number of workshops are designed to advance the professional competence of teachers. For each description, the particular area of study will be indicated. May be repeated for credit when nature of workshop differs from one previously taken. Not to be used in lieu of a required course.

4201 Workshop in Physical Education 2:2:0
A number of workshops are designed to advance the professional competence of teachers. For each description, the particular area of study will be indicated. May be repeated for credit when nature of workshop differs from one previously taken. Not to be used in lieu of a required course.

4301 Workshop in Physical Education 3:3:0
A number of workshops are designed to advance the professional competence of teachers. For each description, the particular area of study will be indicated. May be repeated for credit when nature of workshop differs from one previously taken. Not to be used in lieu of a class.

430 Individual Study in Physical Education 3:A:0
Selected problems in physical education; not to be used in lieu of a class. May be repeated for credit. Class by consultation.
Prerequisite: Senior standing and consent of department head.

431 Scientific Principles of Athletic Coaching 3:3:0
Anatomical and physiological factors that influence optimal athletic performance.

443 Motor Learning 4:3:2
Principles of neuromuscular control mechanisms and correlates of movement behavior and motor learning. Presentation of materials dealing with the learning process, aspects of the learner, variables influencing the state of the performer and application of these concepts to the teaching of motor skills.

436 Measurement and Evaluation in Physical Education 3:3:0
A study of practical measurement and evaluation procedures used in physical education. Includes construction of evaluation instruments, experience in test administration and the use of elementary statistical procedures in test score interpretations.

438 The Teaching of Physical Education 3:3:0
A study of programs, lesson planning, class organization and control, teaching styles, nature and needs of students and teaching problems.

Professional Activity Courses (PEPA)

129 Swimming Techniques 2:1:2
Demonstrations, lectures and practice in the basic techniques of swimming and water safety skills. Students who wish to major or seek an emphasis in physical education must demonstrate basic swimming skills.

2201 Gymnastics Techniques: Tumbling & Gymnastics 2:1:2
Development of tumbling skills with knowledge of movement principles, spotting techniques and class organization. Includes instruction and practice of floor exercise. Emphasis on spotting techniques and teaching methods.

2202 Gymnastics Techniques: Apparatus 2:1:2
Instruction and practice on gymnastics appratus. Emphasis on class organization, spotting techniques and teaching methods.
Prerequisite: PEPA 2201.

2203 Combative Techniques 2:1:2
Lecture, demonstration and practice in combative sports.

2204 Soccer/Softball Techniques 2:1:2
Instruction and practice in the field sports of soccer and softball. Emphasis on class organization and teaching methods.

2205 Aerobic Techniques 2:1:2
Instruction and practice in aerobic programs. Emphasis on class organization and teaching methods.

2206 Water Safety Instruction 2:1:2
The theory and study for teaching water safety techniques and procedures. Completion of course includes American Red Cross certification.

2207 **Archery/Badminton Techniques** 2:1:2
Instruction and practice in the sports of archery and badminton. Emphasis on class organization and teaching methods.

2208 **Tennis Techniques** 2:1:2
Instruction and practice in the sport of tennis. Emphasis on class organization and teaching methods.

2209 **Sports Officiating** 2:1:2
Rules interpretation and techniques of officiating basketball, football and volleyball. The course is designed to develop skill and knowledge required to officiate.

3201 **Baseball: Teaching and Coaching** 2:1:2
Teaching and coaching techniques in baseball including trends in strategies and tactics.

3202 **Basketball: Teaching and Coaching** 2:1:2
Teaching and coaching techniques in basketball including current trends and offensive and defensive systems.

3203 **Football: Teaching and Coaching** 2:1:2
Teaching and coaching techniques in football including fundamental techniques of playing and game theory.

3204 **Tennis: Teaching and Coaching** 2:1:2
Teaching and coaching techniques in tennis including strategies and tactics.

3205 **Track/Field** 2:1:2
Teaching and coaching techniques in track and field. Emphasis on instructional methods and varsity coaching.

3206 **Volleyball: Teaching and Coaching** 2:1:2
Teaching and coaching techniques in volleyball including trends in strategies and tactics.

Physical Education General Activity (PEGA)

The activity courses from which four semesters are to be selected for graduation are listed below. The activity requirement is met during both semesters of the freshman and sophomore years. The classes are designed to enlarge the educational experience of the student by development of skills and understandings associated with aquatics, dance and sports. The activities available provide for individual student interests and personal exercise needs at various experience levels. Many students take more than four semesters of activity.

Aquatics: PEGA The aquatic sections offer beginning swimming through advanced synchronized and competitive swimming, lifesaving and water safety instruction; diving from beginning through scuba and advanced springboard.

Dance: DAN The dance sections offer ballet, jazz, and modern dance at the beginning, intermediate, advanced and performance levels: folk dance and tap dance at the beginning and intermediate levels.

Fitness: PEGA The fitness sections offer general and individualized aerobics, conditioning, jogging, strength training and field sports designed to provide conditioning and sports skill development.

Sports: PEGA The sports sections offer instruction from beginning to competitive in badminton, baseball, basketball, fencing, golf, gymnastics, handball, martial arts, racketball, tennis, track and field, soccer, softball, and volleyball.

Aquatics Courses (PEGA)

120 **Swimming** 2:1:2
Demonstrations, lectures and practice in the basic techniques of swimming and water safety skills. May be repeated for credit.

121 **Swimming and Diving** 2:1:2
Demonstrations, lectures and practice in the techniques and analysis of selected swimming strokes and dives.

220 **Advanced Aquatic Sports** 2:1:2
Lecture, demonstration and practice in synchronized or competitive swimming, scuba or springboard diving. Swimming proficiency test required. May be repeated for credit as topic varies.

225 **Small Craft** 2:1:2
The course is designed to create an interest in sailing and canoeing and to develop sufficient knowledge and skill to safely enjoy the sport as a recreational activity. Swimming proficiency test required.

226 **Lifesaving** 2:1:2
Development of proficiency in lifesaving. Completion of course includes American Red Cross certification. *Prerequisite: Intermediate Swimming Skills.*

Dance Courses (DAN)

See Department of Dance Education in this bulletin for further information.

Activity Courses (PEGA)

Several types of activities are listed under PEGA 111, 112, 113, 114, 221, 222, 223, or 224. Students should review the activities schedule for appropriate selection of activities.

111, 112, 113, 114 Activity 1:1:2

Physical activities directed toward concepts of fitness and basic movement skills inherent in conditioning and sports. May be repeated for credit.

221, 222, 223, 224 Activity 2:1:2

Physical activities directed toward development of lifetime skills in sports. May be repeated for credit.

Students enrolled in physical education activity classes are required to wear regulation costumes suggested by the instructor. These may be purchased at the University Bookstore. Equipment for class may be provided by the student. A suit/towel rental and laundry fee, payable the first week of class, is charged for all swimming classes.

Athletic Training Specialization

Certification and licensing of athletic trainers is available through meeting the following requirements:

1. Teacher certification with a teaching field in physical education.
2. N.A.T.A. Certification upon passing certification examination.
3. Licensed Athletic Trainer by State of Texas upon passing state board examination.

Application must be made through athletic trainer as the number of students is limited.

Driver Education Certification Requirements

Certification to teach driver education is available as a special designation on an existing Texas Teaching Certificate. Specific course requirements are HEd 131, PEPT 338 and PEPT 416.

Department of Home Economics

Department Head: Fern Rennebohm 115 Home Economics Building.

Professor: Rennebohm, Davidson

Associate Professors: Anderson, McAdams

Assistant Professors: Hinchey, Gates, Scott

Instructor: Elliff, Pemberton, Suiter

Bachelor of Science in Home Economics

The Department of Home Economics offers undergraduate instruction leading to the Bachelor of Science degree in Home Economics. The program is designed to prepare students for a professional career, for personal development and for the responsibilities of a contributing family member and citizen.

The home economics program offers opportunities for specialized professional preparation in the areas of home economics education, food service and dietetics, family and community service, fashion retailin and merchandising and interior design. Each of these areas of study is described on the following pages.

Students may minor in home economics by earning 18 semester hours of credit approved by the department head. Students majoring in elementary education may use home economics as an area of specialization by completing 24 semester hours of approved courses. Some home economics courses may be taken as electives by students with other majors.

The degree of Bachelor of Science in Home Economics will be awarded upon the completion of the following requirements:

A. General Requirements

English Composition	6 hours
Literature	3 hours
Eng 4335, Lit, Spc 300/400 or For Lang	3 hours
Math	3 hours

Lab Science	4-8 hours
Math or Lab Science	3-4 hours
Soph Am History	6 hours
POLS 231-232	6 hours
Physical Ed or Band	4 semesters

B. Professional Core Courses

HEc 111 Foundations of Home Economics	1
HEc 112 Orientation to Home Economics as a Profession	1
HEc 133 Visual Design	3
HEc 137 Intimate Relationships: Marriage and the Family	3
HEc 231 Textiles	3
HEc 239 Nutrition	3
HEc 411 Senior Seminar	1

C. Professional Specialization as described in the following Home Economics programs.

Recommended Programs of Study

General Home Economics

The General Home Economics Program provides a broad background of preparation for the student who wishes to work as a Home Economist in one of many varied career options. A 36 hour prescribed Home Economics curriculum provides a strong base in each of the areas of Home Economics. An 18 hour specialization in Home Economics provides for specialization in one area or further strengthening of the general program. An 18 hour to 24 hour minor of the student's choice is required. Some popular minor programs are Communication, Business, Art, political science or one of the natural or behavioral sciences.

First Year

Eng Composition	6
Math 1334 College Algebra	3
Lab Science	4
Math or Lab Science	3-4
HEc 111 Foundations of Home Economics	1
HEc 112 Orientation to Home Economics as a Profession	1
HEc 133 Visual Design	3
HEc 137 Intimate Relationships: Marriage & the Family	3
PE Activity (2 semesters)	2-4
General HEc lower level Electives	6
	32-33

Second Year

Literature	3
Math or Lab Science	3-4
POLS 231-232	6
HEc 230 Personal Resource Mgt	3
HEc 231 Textiles	3
HEc 239 Nutrition	3
HEc lower level	6
Minor	3
PE Activity (2 semesters)	2-4
	32-34

Third Year

Eng 4335 Technical Report Writing, Lit, Spc 300/400, or For Language	3
American History	3
HEc 330 Family & Consumer Finance	3
HEc upper level	12
Minor	6
Elective	6
	36

Fourth Year

HEc 411 Senior Seminar	1
HEc 439 Resource Mgt Systems	3
HEc Internship	3
HEc Emphasis	6
Minor Emphasis	9
Electives or Minor	6
	28

Home Economics Education

The Home Economics Education program provides professional training for careers requiring technical knowledge of home economics and the art of teaching. Graduates of this curriculum meet the state requirement for Vocational Home Economics Certification. This program also provides the basis for endorsement in special education and early childhood education. Students wishing to secure the Bachelor of Science degree in Home Economics and at the same time to certify for a provisional certificate for teaching vocational home economics will be required to meet a revised set of teacher education standards. All teacher education programs are subject to comply beginning in the Fall of 1985. It will be necessary to consult with the department head in the Department of Home Economics concerning the specifics of these requirements.

First Year

Eng Composition	6
Chm or Bio	8
HEc 111 Foundations of Home Economics	1
HEc 112 Orientation to Home Economics as a Profession	1
HEc 131 Food Selection and Preparation	3
HEc 133 Visual Design	3
HEc 137 Intimate Relationships: Marriage and the Family	3
Mth 1334 or above	6
PEGA/DAN	2
Supportive Elective	3
	36

Second Year

Eng Literature	3
POLS 231, 232	6
HEc 231 Textiles	3
HEc 232 Dress Design	3
HEc 233 Early Childhood Development	3
HEc 235 Meal Management	3
HEc 239 Nutrition	3
HEc 334 Environments and Programs for Young Children	3
PEGA/DAN	2
Supportive Elective	3
	32

Third Year

Eng 4335 Technical Report Writing	3
C&I 433 Teaching Media and Audio Visual Techniques	3
C&I 331 Foundations of Education	3
C&I 332 Educational Psychology	3
HEc 330 Family and Consumer Finance	3
HEc 339 Seminar in Family and Human Relations	3
HEc 435 Consumer Housing	3
His (soph)	6
Spc 131 Public Speaking	3
Supportive Elective	3
Free Elective	3
	36

Fourth Year

C&I 4309 Instruction of the Exceptional Child	3
C&I 4308 Occupational Home Economics	3
HEc 338 Philosophy and Principles of Vocational Home Economics	3
HEc 411 Senior Seminar	1
HEc 422 Demonstration Techniques	2
HEc 433 Household Equipment	3
HEc 438 Methods and Materials for Teaching Home Economics	3
HEc 439 Resource Management Systems	3
HEc 462 Student Teaching in Home Economics	6
Free Elective	3
	30

Foods, Nutrition and Dietetics

The Foods, Nutrition and Dietetics curriculum provides professional preparation which meets the academic requirement of Plan IV of the American Dietetic Association. Graduates of this program are eligible for an accredited dietetic internship.

First Year

Eng Composition	6
Bio 143-144 Human Physiology	8
Mth 1334 College Algebra	3
Eco 233 Principles and Policies	3
HEc 111 Foundations of Home Economics	1
HEc 112 Orientation to Home Economics as a Profession	1
HEc 131 Food Selection and Preparation	3
HEc 132 Clothing Selection and Construction or HEc 432 Family Clothing	3
HEc 235 Meal Management	3
PE Activity (2 semesters)	2
	33

Second Year

Eng Literature	3
Eng 4335 Technical Report Writing	3
POLS 231 Introduction to American Government I	3
POLS 232 Introduction to American Government II	3
Psy 131 Introduction to Psychology	3
Chm 143 & 144 General	8
Bio 245 Introductory Microbiology	4
HEc 137 Intimate Relationships: Marriage and the Family	3
HEc 239 Nutrition or HEc 138	3
PE Activity (2 semesters)	2
	35

Third Year

Soc 332 Social Psychology	3
His Sophomore American History	6
Acc 231-232 Principles of Accounting	6
HEc 230 Personal Resource Management	3
HEc 332 Advanced Nutrition	3
HEc 333 Food Chemistry	3
HEc 336 Institutional Food Service	3
C&I 332 Educational Psychology	3
Electives	6
	36

Fourth Year

Mgt 331 Principles of Management	3
Mgt 333 Personnel Management	3
CS 133 Introduction to Computers or Mth 234 Elementary Statistics	3
HEc 337 Personal Management	3
HEc 338 Philosophy & Principles of Vocational Home Economics	3
HEc 411 Senior Seminar	1
HEc 430 Theraputic Nutrition	3
HEc 433 Household Equipment	3
Electives	6
	28

Family and Community Service

The Family and Community Service curriculum prepares the student for a career in government and private agencies which serve families. A broad based knowledge of home economics equips the student to aid families in personal relationships, homemaking and consumer skills. A choice of two minors is provided.

A minor in Social Work, including field experience in a social agency, meets the requirements for Texas certification as a social worker.

A minor in Applied Child Development including field experience with infant and early childhood program prepares the student to work with pre-school age children.

First Year

Eng Composition	6
Mth 1334 College Algebra	3
Lab Science	4
Lab Science or Mth	3-4
HEc 111 Foundations of Home Economics	1
HEc 112 Orientation to Home Economics as a Profession	1
HEc 133 Visual Design	3
HEc 137 Intimate Relationships: Marriage & the Family	3
Psy 131 Introduction to Psychology	3
Soc 131 Introduction to Sociology	3
PE Activity (2 semesters)	2-4
	32 or 35

Second Year

Literature	3
Lab Science or Mth	3-4
POLS 231-232	6
HEc 230 Personal Resource Mgt	3
HEc 231 Textiles	3
HEc 233 Early Childhood Development	3
HEc 235 Meal Management	3
HEc 239 Nutrition	3
PE Activity (2 semester)	2-4
MINOR:	
C&I 2301 Foundations of Special Education	3
OR	
SWk 231 Survey of the Social Welfare Institution	3
	32-35

Third Year

Eng 4335 Technical Report Writing, Spc 300/400, Lit or For Lang	3
Am History	3
Psychology or Sociology elective	3
Home Economics 300 level	3
HEc 334 Environments & Programs for Young Children	3
HEc 339 Seminar in Family and Human Relations	3
MINOR:	
HEc 4313 Prenatal & Infant Development	3
Spc 3302 Language Development & Language Disorders	3
OR	
SWk 331 Social Work Practice I	3
SWk 333 Social Work Practice II	3
SWk 335 Social Work Practice with Target Groups	3
	30-33

Fourth Year

HEc 411 Senior Seminar	1
HEc 432 Family Clothing	3
HEc 435 Consumer Housing	3
HEc 4327 Family Life and Parenting Behavior	3
HEc 439 Resource Management Systems	3
Sociology-Psychology Elective	3
Electives	9
MINOR:	
HEc 4367 Internship in Home Economics	6
PEPT 433 Motor Learning	3
OR	
SWk 4321 Field Experience I	3
SWk 4324 Field Experience II	3
	31-34

Fashion Retailing and Merchandising

The Fashion Retailing and Merchandising specialization provides professional training for positions in fashion coordination, visual merchandising, buying and retail management. The cirriculum includes on-the-job training through an internship program. Students may elect to study at the Fashion Institute of Technology in New York during their junior year.

First Year

Eng Composition	6
Mth 1334 College Algebra	3
Lab Science	4
Mth or Lab Science	3-4
Spc 131 Public Speaking	3
HEc 111 Foundations of Home Economics	1
HEc 112 Orientation to Home Economics as a Profession	1
HEc 133 Visual Design	3
HEc 137 Intimate Relationships: Marriage & the Family	3
HEc 132 Clothing Selection and Preparation	3
PE/DAN Activity	2
	32

Second Year

Eng Literature	3
POLS 231 & 232	6
Mth or Lab Science	3-4
HEc 130 Social and Psychological Aspects of Clothing	3
HEc 230 Personal Resource Mgt	3
HEc 231 Textiles	3
HEc 239 Nutrition	3
HEc 234 Introduction to Retailing	3
Eco 233 Principles & Policies	3
Acc 231 Principles of Accounting	3
PEGA/DAN Activity	2
	35

Third Year

Sophomore History	3
His 234 American History: The Arts in America	3
CS 133 Introduction to Computers	3
HEc 232 Dress Design	3
HEc 337 Professional Image	3
HEc 3306 Merchandising Products	3
Mkt 331 Principles of Mgt	3
Mkt 333 Marketing Promotion	3
Mkt 432 Buyer Behavior	3
MM 138, MM 231, or MM 232	3
Free Elective	3
	33

Fourth Year

Spc 334 Interviewing	3
HEc 411 Senior Seminar	1
HEc 432 Family Clothing	3
HEc 434 Fashion Production and Distribution	3
HEc 436 Retail Management	3
HEc 4337 Advanced Textiles	3
HEc 4317 Internship in Fashion Merchandising	3
Business elective 300/400	6
Free elective	3
	33

Interior Design

The Interior Design specialization provides professional training for a wide range of design problems extending from personal to public environments. The program requires a 24 hour minor in Art.

First Year

Eng Composition	6
Phy 144	4
Lab Science	3-4
HEc 111 Foundations of Home Economics	1
HEc 112 Orientation to Home Economics as a Profession	1
HEc 133 Visual Design	3
HEc 137 Intimate Relationships: Marriage & the Family	3
Art 131 Drawing I	3
Art 132 Drawing II	3
Egr 135 Arch Graphics	3
PE Activity (2 semesters)	2
	32-33

Second Year

Eng Literature	3
POLS 231 Introduction to American Government I	3
POLS 232 Introduction to American Government II	3
Mth 1334 College Algebra	3
HEc 230 Personal Resource Mgt	3
HEc 231 Textiles	3
HEc 2307 Hist of Arch & ID	3
HEc 2327 Treat. of ID	3
HEc 237 Fund of ID	3
Art 134 Design II	3
PE Activity (2 semester)	2
	32

Third Year

Acc 231 Principles of Accounting	3
Eco 233 Principles and Policies	3
His 233 Am His-Dev of Society	3
His 234 Am His-Arts in America	3
Spc 331 or 334 or For Lang	3
Lab Science or Mth	3-4
HEc 239 Nutrition	3
HEc 3304 Res Space Plan	3
HEc 3305 Comp & Systems	3
HEc 3327 Contemp Arch & ID	3
Art 3313 Illustration I	3
	33-34

Fourth Year

HEc 411 Senior Seminar	1
HEc 4305 Adv Int Design	3
HEc 4307 Prof Prin & Prac	3
HEc 433 Equip & Layout	3
HEc 4347 Intern in ID	3
Art 3323 Illustration II	3
Art His Elec: 235 or 236 or 4358, 4368, or 4388	6
Art Elective 300/400	3
Electives	6
	31

Associate of Applied Science Degree in Food Service Management

This program is designed to prepare students to be effective food service managers in the three basic segments of the food service industry: 1. Commercial food service operations; 2. Health care facilities food service operations; and 3. School food service operations.

First Year

Semester 1

HEc 131 Food Selection and Preparation	3
HEc 1301 Sanitation and Safety in Food Service	3
HEc 239 Nutrition	3
HEc 1302 Orientation to Food Service Management Systems	3
HEc 1303 Food Purchasing, Handling and Storage	3
BC 132 Business Communication or ENG 131 Composition	3
	18

Semester 2

HEc 235 Meal Management	3
HEc 1304 Food Service Equipment and Layout	3
MM 138 Fundamentals of Supervision & Leadership	3
HEc 1205 Supervised Field Experience I	2
TM 134 Business Mathematics	3
HEc 137 Intimate Relationships: Marriage and the Family	3
	17

Second Year

Semester 1		Semester 2	
HEc 2301 Quantity Food Preparation and Work Simplification	3	HEc 2304 Advanced Quantity Food Preparation and Service	3
HEc 2302 Food Service Financial Management	3	MM 132 Free Enterprise I	3
HEc 2305 Supervised Field Experience II	3	HEc 2415 Supervised Field Experience III	4
HEc 2103 Food Service Management Seminar I	1	MM 232 Human Resources Management	3
JR 231 Job Relations	3	HEc 2103 Food Service Management Seminar II	1
	13		14

One of the following courses according to concentration 3

Conc. 1: HEc 2310 Garde-Manger, HEc 2311 Bakery Training, HEc 2312 Saucier Training
Conc. 2: HEc 2313 Clinical Nutrition
Conc. 3: HEc 2314 Child Nutrition and Menu Planning

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One of the following courses according to concentration 3

Conc. 1: HEc 2322 Beverage and Dining Room Operations and Service or MM 133 Principles of Selling
Conc. 2: HEc 2323 Community Nutrition
Conc. 3: HEc 2324 School Food Programs and Government Commodities

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Home Economics Courses (HEc)

111 Foundations of Home Economics 1:1:0
Introduction to Home Economics as a discipline. History, root disciplines and philosophy will be explored. Registration required the first Fall semester of enrollment in a home economics program.

112 Orientation to Home Economics as a Profession 1:1:0
An overview of the home economics profession which includes contact with professionals in varied careers. Registration required the first Spring semester of enrollment in a home economics program.

1303 Food Purchasing, Handling, and Storage 3:3:0
Study of procedures for purchasing, handling and storing food in quantity.

1205 Supervised Field Experience I 2:A:0
Minimum of 100 hours supervised field experience in food service; emphasis on food service organization, equipment, and layout.

130 Social and Psychological Aspects of Clothing 3:3:0
An interdisciplinary approach to clothing emphasizing the cultural, psychological, sociological and economical aspects of wearing apparel.

1301 Sanitation and Safety in Food Service 3:3:0
Study of sanitation and safety standards and procedures in food service.

1302 Orientation to Food Service Management Systems 3:3:0
Emphasis on the economics of the food service industry: organization, marketing, production, personnel, cost control.

1304 Food Service Equipment and Layout 3:3:0
Study of selection, use and care of food service equipment: design and layout of food service facility is emphasized.

131 Food Selection and Preparation 3:2:4
Study of food science principles and their application in the preparation of foods and food products.

132 Clothing Selection and Construction 3:2:4
A study of clothing construction principles with consideration given to new fabrics. Includes problems and procedures of consumer buying.

133 Visual Design 3:2:3
Study of art elements with experiences in applying the principles of design. Develops an appreciation of natural and man-made designs in the daily environment.

137 Intimate Relationships: Marriage and the Family 3:3:0
A study of the individual and the family. Special emphasis on individual development, sexuality, tasks of marriage and parenting skills in relation to the family life cycle.

138 Principles of Nutrition 3:3:0
Basic principles of nutrition in health and disease. Food selection and quality of nutrients in normal and therapeutic diets related to physiological and psychological needs of individuals considering socio-economic background.

2103 Food Service Management Seminar 1:1:0
Study of current topics of interest in food service. May be repeated for credit.

230 Personal Resource Management 3:3:0
An analysis of management processes with emphasis on personal resource identification and factors that might impact on management and decision making.

2301 Quantity Food Preparation and Work Simplification 3:2:4
Study of quantity food preparation techniques with emphasis on efficiency and quality control.

2302 Food Service Financial Management 3:3:0
Study of principles and procedures in the financial management of food service.

2304 Advanced Quantity Food Preparation and Service 3:2:4
Planning and management of quantity food production.

2305 Supervised Field Experience II 3:A:0
Minimum of 150 hours supervised field experience in food service; emphasis on food cost control and quantity food production problems.

2307 History of Architecture and Interior Design 3:3:0
A study of period design in architecture, interiors and furnishings from antiquity to World War II.

2310 Garde-Manger 3:2:4
Principles of preparation of the cold buffet.

2311 Bakery Training 3:2:4
Principles of preparation of doughs, breads, pastries, cookies, and cakes.

2312 Saucier Training 3:2:4
Principles of preparation of soups, sauces, vegetables, meats, fish, poultry and game.

2313 Clinical Nutrition 3:3:0
Study of nutritional needs during illness and for special problems.

2314 Child Nutrition and Menu Planning 3:3:0
Study of nutritional needs from birth through adolescence; emphasis on menu planning for groups of children.

231 Textiles 3:3:0
A study of the physical and chemical properties of textiles. Emphasis on consumer selection and care of fabrics.

2322 Beverage and Dining Room Operations and Service 3:2:4
Emphasis on basic bar operations and dining room service.

2323 Community Nutrition 3:3:0
Ethnic, cultural, socioeconomic, and psychological aspects of food; the techniques of evaluating nutritional care systems in the community.

2324 School Food Programs and Government Commodities 3:2:4
Administration of school food program; efficient use of government commodities.

2327 Treatments of Interior Design 3:3:3
A study of the elements, principles and objectives of design as applied to residential and commercial interiors: Planning furnishings to meet human needs; introduction to practices and procedures in interior design.
Prerequisites: HEc 133, Art 132, Phy 144

232 Dress Design 3:2:3
Study principles of fashion design and flat pattern making. Master pattern is developed to design, draft and construct garments.
Prerequisite: HEc 132.

233 Early Childhood Development 3:3:0
A study of the young child as a basis for understanding the dynamics of child growth and development with emphasis on education for parenthood.

234 Introduction to Home and Fashion Retailing 3:3:0
An introductory study of the contemporary aspects of retailing. A broad view of retailing and its diverse operation with emphasis on home and fashion retailing.

235 Meal Management 3:1:4
Emphasis on management of time, money and energy in planning menus and purchasing, preparing and serving food. Includes study of laws and regulations that affect food supply.

237 Fundamentals of Interior Design 3:0:6
Visual and verbal communication as related to the interior design profession. Emphasis on presentation analysis and techniques, use of media, design development, individual and/or group creative design problem solving.
Prerequisites: HEc 2327, Egr 135

239 Nutrition 3:3:0
Study of the nutritional needs of the body and proper selection of foods to meet these needs throughout the life cycle.

2415 Supervised Field Experience III 4:A;0
Minimum of 200 hours supervised field experience in food service management.

330 Family and Consumer Finance 3:3:0
Consumer principles and rational decision-making skills for coping with consumer issues affecting families and individuals.

3304 Residential Space Planning: Studio I 3:0:6
Studio experiences in the analysis, development and evaluation of residential interior environments. (Individual creative problem solving.)
Prerequisites: HEc 2307, HEc 231, HEc 237, Art 134

3305 Components of Interior Design: Studio II 3:0:6
Studio experiences dealing with small to medium commercial building construction, materials, environmental controls, and interior furnishings. Group creative problem solving.
Prerequisites: HEc 3304, HEc 3327, Art 3313

3306 Merchandising Products 3:3:0
A study of textile and non-textile products. Special emphasis on housewares, furniture, accessories, home furnishings, and appliances.

331 Advanced Clothing Construction 3:3:2
A study of specialized techniques in the construction of a tailored garment. Emphasis is given to new technological advancement in fabric.

332 Advanced Nutrition 3:3:0
A study of nutrient metabolism. Concepts of biological values, bioenergetics and nutrition in health and disease.
Prerequisite: HEc 239.

3327 Contemporary Architecture and Interior Design 3:3:0
A study of the classical, organic and post modern designs in archetecture, interiors, and furnishings from World War II to the present.
Prerequisite: HEc 2307

333 Food Chemistry 3:3:0
An introduction to the properties and metabolism of amino acids, enzymes, hormones, proteins, nucleic acids, carbohydrates, lipids, vitamins and minerals with an emphasis on their metabolic interrelationships in health and disease.
Prerequisite: Chm 143 and 144.

334 Environments and Programs for Young Children 3:2:3
Parenting skills and Nursery School organization and procedures developed through observation and participation experience with children under five.
Prerequisite: HEc 233.

335 Housing and Home Furnishings 3:2:3
A study based on an understanding of historical design in architecture and furniture; application of design principles in choice of home and furnishings to meet individual needs.
Prerequisite: HEc 133.

336 Institutional Food Service 3:2:3
A study of institutional equipment, maintenance and organization. Special emphasis on institutional food purchasing, quantity preparation, storage, inventory and cost control.
Prerequisite: HEc 131 and 235.

337 Personal Management 3:3:0
Basic management concepts as applied to individual and professional development.

338 Philosophy and Principles of Vocational Home Economics 3:3:0
Interpretation of home economics as a discipline concerned with quality of life for families and individuals. Provides experiential foundation for developing sound educational programs in varied settings.

339 Seminar in Family and Human Relations 3:3:0
In-depth study of selected topics. The family and the larger society; family structure and function; cultural patterns and life styles; community resources; and family life education.

411 Senior Seminar 1:1:0
A reading-discussion course concerned with the issues the home economics graduate of today encounters.

421, 431 Special Topics 1-3:1-3:0
Special topics including workshops and institutes in home economics. A description of the particular area of study will appear on the printed semester schedule. May be repeated for a maximum of six semester hours when the area of study is different.
A. Clothing/Textiles/Merchandising
B. Family Relations/Child Development
C. Food/Nutrition
D. Home Economics Education
E. Housing/Home Furnishings/Interior Design
F. Home Management/Equipment/Consumer Economics

422 Demonstration Techniques 2:2:0
A study of demonstration as an instructional method. Students will research, write and present a variety of demonstrations.

430 Therapeutic Nutrition 3:3:2
Biochemical changes in diseases, particularly those of nutritional origin; prevention, and the dietary modifications for their correction. Special emphasis on patient care, rehabilitation and nutritional education.
Prerequisite: HEc 332, 333, 336.

4305 Advanced Interior Design: Studio III 3:0:6
Studio experiences analyzing, developing and evaluation of complex commercial interior environments. Individual and/or group creative problem solving.
Prerequisites: HEc 3305, Art 3323

4307 Professional Practices & Procedures in Interior Design 3:3:0
Study of objectives, practices, procedures, and ethics for the professional residential or non-residential interior designer. Preparation of a resume and portfolio of professional expression and illustration. Emphasis on client and designer relations.
Prerequisite: HEc 4305, Senior standing or consent of the instructor.

4308 Occupational Home Economics 3:2:1
In-depth study of occupational home economics education programs in Texas with emphasis on special techniques of teaching and working with students in each program. Each student will participate in an approved field experience.

4313 Prenatal and Infant Development 3:3:0
Study of physical, social, emotional and cognitive development from conception to age two.

4317 Internship in Fashion Merchandising 3:A:0
Supervised work experience of at least 20 hours a week for 8 weeks or its equivalent in sales experience and management training in a retail firm. Weekly conference and/or seminar will be required.
Prerequisite: Senior standing and consent of instructor. Advanced registration required. May be repeated with varied experiences for a maximum of 6 hours credit.

432 Family Clothing 3:3:0
A study of cultural, functional and technological aspects of textiles and clothing with emphasis on clothing consumption needs during various stages of the family life cycle.
Prerequisite: Junior or senior standing.

4327 Family Life and Parenting Behavior 3:A:0
A study of the importance of family relationships in the development of the child and individual behavior. Specific study of parenting skills, interaction between parent and child, interrelationships between family and larger community.
Prerequisite: Senior standing and consent of instructor. Advanced registration required. May be repeated with varied experiences for a maximum of 6 hours credit.

433 Equipment, Layout, and Space Planning 3:3:0
Selection, use and care of basic residential and commercial equipment; adapting work centers to individual needs and demonstration techniques.
Prerequisite: HEc 237 or 335

4337 Advanced Textiles 3:A:0
A study of consumer merchandising aspects of textiles. Includes selecting appropriate fabrics for apparel and home furnishings, testing fabrics, textile specifications, and the textile industry.

434 Fashion Production and Distribution 3:3:0
A Study of the textile and apparel industry with emphasis on the production, distribution and marketing of products. Includes off campus experiences through field trips.

4347 Internship in Interior Design 3:A:0
Supervised work experience of at least 20 hours a week for 8 weeks or its equivalent with interior designer, architect, home or office furnishings firm, speciality shop, research and restoration. Weekly conference and/or seminar will be required.
Prerequisite: HEc 4307, Senior standing and consent of the instructor. Advanced registration required. May be repeated with varied experiences for a maximum of 6 hours credit.

435 Consumer Housing 3:3:0
A study of the home as the environment that shapes human lives. Designed to create an awareness of the social responsibilities related to housing and to provide experiences associated with planning and selecting suitable homes.

4357 Internship in Food Service 3:A:0
Supervised work experience of at least 20 hours a week for 8 weeks or its equivalent in hospital, nursing home, school, or commercial food service organizations. Weekly conference and/or seminar will be required.
Prerequisite: Senior standing and consent of instructor. Advanced registration required. May be repeated with varied experiences for a maximum of 6 hours credit.

436 Retail Management 3:3:0
Principles and methods; problems of store location and layout, sales promotion, buying, pricing, selling, personnel management, credit, and stock control.

4367 Internship in Home Economics 3:A:0
Supervised work experience of at least 20 hours a week for 8 weeks or its equivalent in a Home Economics related occupation. Weekly conference and/or seminar will be required.
Prerequisite: Senior standing and consent of instructor. Advanced registration required. May be repeated with varied experiences for a maximum of 6 hours credit.

437 Individual Problems in Home Economics 3:A:0
Designed to afford research opportunities and work experience for senior students. Under supervision, the students pursue individual interests in the profession of home economics.
Advance registration required. May be repeated with varied experience for up to 6 hours credit.

438 Methods and Materials for Teaching Home Economics 3:3:0
Objectives, methods and techniques of teaching vocational home economics in the public school.
Prerequisite: C&I 331 and 332; and HEc 338.

439 Resource Mgt. Systems 3:2:3
A conceptual study of philosophies and principles of resource management. Practical application through individual and group problems.
Prerequisite: 24 hours in Home Economics or permission of instructor.

462 Student Teaching in Home Economics 6:A:0
Supervised observation and teaching in the secondary school.
Prerequisite: HEc 438. Class: 6 hours in an approved vocational program 5 days per week for 8 weeks. Advanced registration required.

College of Engineering

Departments: Chemical Engineering, Civil Engineering, Computer Science, Electrical Engineering, Industrial Engineering, Mathematics and Mechanical Engineering
Fred M. Young, P.E., Ph.D., Dean

Degrees

Computer Science

B.S., Bachelor of Science, Computer Science—Engineering/Science

B.S., Bachelor of Science, Computer Science—Information Systems

M.S., Master of Science, Computer Science

Engineering

B.S., Bachelor of Science, Chemical Engineering

B.S., Bachelor of Science, Civil Engineering

B.S., Bachelor of Science, Electrical Engineering

B.S., Bachelor of Science, Industrial Engineering

B.S., Bachelor of Science, Mechanical Engineering

B.S., Bachelor of Science, Industrial Technology

M.S., Master of Engineering Science

M.E., Master of Engineering

M.E.M., Master of Engineering Management

D.E., Doctor of Engineering Science

Mathematics

B.A., Bachelor of Arts

B.S., Bachelor of Science

B.S., Bachelor of Science, Mathematical Sciences (Statistics)

B.S., Bachelor of Science, Mathematical Sciences (Applied Mathematics)

M.S., Master of Science, Mathematics

Each department in the College of Engineering is associated with the chapter of its national honor society which include: Alpha Pi Mu, Chi Epsilon, Eta Kappa Nu, Omega Chi Epsilon, Pi Mu Epsilon, Pi Tau Sigma, Tau Beta Pi, and Upsilon Pi Epsilon.

Cooperative Education Program

A Cooperative (Coop) Education Program, in which the student spends alternate terms at work and at study, is offered to qualified students in the College of Engineering. Programs are available for computer science, engineering, industrial technology, and mathematics students.

To meet the minimum qualifications for the Coop program a student must have:

1. Completed all the work in the first two semesters of the degree program.
2. At least a 2.5 over-all grade point average for engineering and mathematics or 3.0 over-all G.P.A. for computer science.

To remain in the program, the student must maintain a grade point average above a 2.5 and perform in a manner satisfactory to the employer and Lamar University.

A student may participate in the Coop program through the regular sophomore and junior years. By participating in the Coop program throughout the sophomore and junior years a student extends the time required to obtain a degree to five years. However, in doing so, he gains the equivalent of almost two years experience in industry.

A student may apply for admission to the Coop program through the Engineering Cooperative Education Office.

Engineering Programs

The five undergraduate curricula in engineering are accredited by the Accreditation Board for Engineering and Technology. The Accreditation Board for Engineering and Technology defines engineering as the "profession in which a knowledge of the mathematical and natural sciences gained by study, experience and practice is applied with judgment to develop ways to utilize, economically, the materials and forces of nature for the benefit of mankind." Clearly, from this definition, engineers are to form the interface between science and society as they apply, in realistic terms, the findings of science.

Entrance Requirements

Entering freshmen and new transfer students are considered provisional majors. The College of Engineering Advisement Center is responsible for the academic advisement of provisional engineering majors.

The entrance requirements from high school for engineering degree programs are:

1. English	4 units
2. Mathematics	
Algebra	2 units
Trigonometry	1/2 unit
Natural Sciences	
3. Chemistry	1 unit
Physics	1 unit
4. Social Sciences	2 units
5. Electives	4-1/2 units
Total	15 units

Students who meet the general entrance requirements of the University, but lack in specific requirements for the engineering curricula may, upon approval of the dean, be permitted to enroll in the College of Engineering; however, all deficiencies must be removed before the end of the second academic year. Students having entrance deficiencies or weaknesses are urged to use the summer terms preceding the freshman year in college to remove them. In addition, each person desiring to enter the College of Engineering must take the Level I Mathematics Test, a mathematics placement test, and chemistry placement exam. Students attaining a sufficiently high grade in the CEEB Mathematics Level I exam may be eligible for advanced placement in the Calculus and Analytic Geometry sequence. These tests are administered during the freshmen orientation periods and during the regular registration periods.

Transfer students are required to have a minimum 2.0 GPA on all work attempted before entering the College of Engineering. Normally transfer credit is considered for course work with a grade of "C" or better.

Standards

In addition to the University requirements, the College of Engineering enforces the following standards:

1. Students are required to take courses in the sequence shown in the University Bulletin for each degree program.
2. Engineering students are expected to maintain a GPA of 2.25 to remain in a program. Students who drop below 2.25 GPA will be placed on probation (maximum load of 13 semester hours). Students who drop below a 2.0 GPA will be suspended from the College of Engineering for one long term. Students returning from suspension must prepare a performance contract in consultation with their academic advisor. A minimum term of the contract requires the student to remove deficiencies every semester of which he or she is enrolled. Students who fail to meet the terms of their contract will be permanently suspended.
3. Degree credit is normally allowed only for courses in which a grade of "C" or better is earned. A course may be repeated for additional credit toward a degree only as specified by the official course description in the University Bulletin. Excluding

courses which may be taken for additional credit toward a degree, a student may not register for any course more than four times. Any student who wishes to repeat a course must do so before completing a more advanced course in the same subject matter field.

4. Upon the completion of at least 51 semester hours of the Common Program with a GPA of 2.25 or more on all required courses, a student will be considered for admission to an engineering program. For all engineering programs, it is required that forty-five semester hours (at least twenty-five semester hours in engineering at the 300 and 400 level) be earned after admission to the professional program.
5. All electives must be approved by the student's advisor.

The Dean of Engineering may require students to meet the current degree requirements or program standards.

Common Program for Engineering

First Year

First Semester		Second Semester	
Chm 141 Gen Chm	4	Chm 142 Gen Chem	4
English Composition	3	English Composition	3
Mth 148 Calc & Anal Geom I	4	Mth 149 Calc & Anal Geom II	4
Egr 111 Introduction to Engineering	1	Egr 1221 Introduction to Computers II	2
Egr 114 Egr Graphics I	1	Phy 247 Mechanics and Heat	4
Egr 1121 Introduction to Computers I	1	PE (1)	
American History	3		
PE (1)			
	17		17

Second Year

First Semester		Second Semester	
Phy 248 Elec, Mag	4	Egr 233 Circuits	3
Mth 241 Calc & Anal Geom III	4	Egr 231 Dynamics	3
Egr 230 Statics	3	Egr 210 Introduction to Computer Aided Design	1
Egr 234 Thermo	3	175 /1__Mth 3301 Diff Equ	3
Egr 215 Egr Graphics II	1	PE	1
Egr 223 Egr Econ	2	Specified by Major (2)	6-7
PE (1)			
	17		17-18

Note:
(1) All students must meet the University's requirement for Physical Education, Marching Band or Military Science. However, neither the credit hours nor the grade points will count toward an Engineering Degree or GPA requirements.
(2) The following courses are specified for each engineering major:

Chemical Engineering: Chm 241, ChE 334

Civil Engineering: CE 232, CE 320, Geology or Approved CE Elective, Approved Math Elective

Electrical Engineering: His 232, EE 217, POLS 231

Industrial Engineering: Mth 233, IE 330

Mechanical Engineering: CE 232, Approved Science Electives (3), IE 212

Engineering Courses (Egr)

111 Introduction to Engineering 1:1:0
History of engineering, philosophy of engineering practice, the electronic calculator and analysis of the problems of being an engineering student.

1121 Introduction to Computers I 1:1:0
Flow charting, digital computers, BASIC, BASIC programming.

114 Engineering Graphics I 1:0:3
Principles of orthographic projection combined with descriptive geometry to solve space problems graphically. Lettering and drafting techniques emphasized.

1221 Introduction to Computers II 2:2:0
Flow charting, digital computers, FORTRAN, FORTRAN programming.
Prerequisite: Egr 1121

135 Architectural Graphics for Interior Design 3:2:2
Designed to provide students with the basics of architecture necessary to prepare layouts, general specifications, traffic patterns, plans and elevations, and other subjects required to design modern homes, townhouses, condominiums, and general commercial facilities. Modular design will be stressed to take advantage of the standardization within the building industry.

210 Introduction to Computer Aided Design 1:0:3
An introduction to computer aided design, elementary graphics, display, data input and output.
Prerequisite: Mth 241 or concurrent, Egr 1121, Egr 230.

215 Engineering Graphics II 1:0:3
Descriptive geometry, an introduction to computer graphics, and special problems approved by the instructor.
Prerequisite: Egr 114 and Egr 1121

223 Engineering Economics 2:3:0
The time value of economic resources, engineering project investment analysis, effect of taxes on engineering project decisions.
Prerequisite: Mth 148, Egr 1121 or Egr 1221.

230 Statics 3:3:0
Statics of particles and rigid bodies. Use is made of basic physics, calculus and vector algebra.
Prerequisite: Physics 247.

231 Dynamics 3:3:0
Kinematics of rigid bodies, kinetics of rigid bodies, work and energy, impulse and momentum.
Prerequisite: Egr 230 or equivalent, Mth 241 or concurrent.

233 Circuits I 3:3:0
Linear network analysis. Fundamental network laws and methods. Transient response. Sinusoidal steady state analysis and response.
Prerequisite: Mth 149, Phy 248, Egr 1221, English Composition (6 hrs).
Corequisite: EE 217, for EE students.

234 Thermodynamics 3:3:0
The fundamental laws of thermodynamics; properties of systems solids, gases and liquids and thermodynamic tables.
Prerequisite: Phy 247; Phy 248 or concurrent.

236 Career Development I 3:3:0
Comprehensive treatment of career-related special assignments and projects, specialization areas under guidance of a faculty member.
Prerequisite: Approval of academic dean.

237 Career Development II 3:3:0
Comprehensive treatment of career-related special assignments and projects, specialization areas under guidance of a faculty member.
Prerequisite: Egr 236.

330 Energy and Society 3:3:0
Principles and practices of energy engineering are surveyed and used as background for understanding how energy and the environment are related to the industrial, business, economic, political and public sectors of society. Designed for students not enrolled in engineering, the course may not be used for credit toward any engineering degree.
Prerequisite: Junior standing.

335 Computer Aided Design 3:3:0
Course stresses two- and three-dimensional applications on the CAD system. Elementary two-dimensional geometric design: Advanced two-dimensional geometric design and application. Three-dimensional curve, surface and solid design with three-dimensional geometric analysis: Design optimization and interfacing computer aided design and computer aided manufacturing.
Prerequisite: Junior standing (admitted into a professional engineering program).

336 Career Development III 3:3:0
Comprehensive treatment of career-related special assignments and projects, specialization areas under guidance of a faculty member.
Prerequisite: Egr 237.

337 Career Development IV 3:3:0
Comprehensive treatment of career-related special assignments and projects, specialization areas under guidance of a faculty member.
Prerequisite: Egr 336.

4101, 4201, 4301, 4401 Special Topics 1-4:A:0
An investigation into specialized areas of engineering under the guidance of a faculty member. This course may be repeated for credit when topics of investigation differ.

421 Data Processing 3:1:3
A study of AM, FM and pulse width modulation for telemetry of data and use of analog and digital computers for storing and analyzing the data.

436 Career Development V 3:3:0
Comprehensive treatment of career-related special assignments and projects, specialization areas under guidance of a faculty member.
Prerequisite: Egr 337.

Department of Computer Science

Department Head: Bobby R. Waldron **106 Liberal Arts Building**
Professor: McGuire, Nylin, Read, Waldron
Associate Professor: Harvill
Assistant Professor: Jordan, Koh
Instructor: Foreman
Adjunct Instructors: Chan, Harris, Logan, Wiemers

Bachelor of Science — Computer Science

The Computer Science program at Lamar is a broad based program in Computer Science emphasizing the areas of programming languages, data structures, information systems theory of programming languages, complier theory, applications of Computer Science and computer architecture. The program requires 42 hours in Computer Science, 18 hours in an area of specialization, 18 to 20 hours in mathematics, 6 hours in business, 6 to 8 hours in free electives as well as the general University requirements for a bachelor's degree. The student who completes this four-year (4) academic program is awarded a Bachelor of Science degree in Computer Science and is well prepared to pursue a professional career in his/her area of specialization.

Computer Science Academic Policy

1. No course can be counted towards the Bachelor of Science degree in computer science if a grade of less than a "C" is made in the course.
2. Students must make a grade of "C" or better in all prerequisite courses for a given course before that course may be taken. This applies to both computer science majors and non-computer science majors who desire to enroll in a computer science course.
3. Students whose grade point average falls below 2.3 will be placed on departmental probation and will be suspended from the Computer Science Department, if they do not regain an overall grade point average of 2.3 within one long semester.
4. Students on departmental probation may not take more than 12 academic hours or 13 academic hours provided a laboratory course is included per long semester.

Computing Laboratories

Students who are majoring or minoring in Computer Science have access to a wide variety of the latest computing hardware and software. The Computer Science Department maintains computing laboratories which include the following.

1. A VAX 11/750, a 32-bit "super mini" computer, system currently equiped with 40 terminals, 3.5 mega-bytes of memory, line-printer, tape drive and 150 mega-bytes of on-line disk storage.
2. A micro laboratory equiped with 12 micro-computers. A terminal room in the computing labs with 20 terminals connected to the University's mainframe computer.

The Computer Science laboratories are totally operated by computer science majors. This includes operations, system software development, planning, procuring and installation of both new hardware and software.

In addition, students in the department have access to the University's computing system which is a medium size mainframe with a large variety of terminals and other peripheral equipment.

Requirements for becoming a Computer Science Major

First semester students must have a combined score of 850 or greater on the SAT test or equivalent ACT test score.

Students who have already earned academic credit from another college or university must have a combined score of 850 or greater on the SAT test or have at least an overall grade point average of 2.3 on all academic work, or, must have completed at least 30 academic semester hours with an overall grade point average of 2.3 or better.

Requirements for a minor in Computer Science

CS 131, CS 132, CS 3301 (PASCAL), CS 3304, CS 4305, plus six (6) additional hours taken from 300/3000 and/or 400/4000 level courses.

Recommended Program of Study

First Year

First Semester		Second Semester	
CS 131 Computer Programming I	3	CS 132 Computer Programming II	3
English Composition	3	English Composition	3
Mth 148/Mth 236	3-4	Mth 149/Mth 237	3-4
His 231 American History	3	His 232-236	3
Academic Elective	3	Mth 234-Stat	3
PE/MLb/MS	1	PE/MS/MLB	1
	16-17		16-17

Second Year

First Semester		Second Semester	
CS 3302 Introduction to Computer Systems	3	CS 3301 Pascal	3
Mth Elective	3	Mth 233 Computational Linear Algebra	3
POLS 231	3	Acc 231	3
Lab Science	4	POLS 232	3
English Literature	3	Lab Science	4
PE/MLb/MS	1	PE/MS/MLB	1
	17		17

Third Year

First Semester		Second Semester	
CS 3304 COBOL Programming	3	CS 4302 Operating Systems and Computer Architecture I	3
CS 4305 Data Structure & Algorithm Analysis	3	CS 3305	3
CS 331	3	Specialization	3
Specialization	6	English Lit/Speech	3
		Mth 4316/IE 4302	3
	15		15

Fourth Year

First Semester		Second Semester	
CS 4307 Organization of Programming Languages	3	CS Elective	6
Specialization	6	CS 4306	3
Academic Electives	3 or 5	Specialization	3
Elective Business	3	CS 431	3
	15 or 17		15

Total Semester Hours 128

Comments:

1. An area of specialization is chosen by the student and consists of at least 18 semester credit hours which must be approved byhis or her advisor.
2. Students whose area of specialization is Math, Engineering, or Physics must take Mth 148, Mth 149, and Mth 241 as their Math elective.

3. Students whose area of specialization is Engineering must take Phy 247 and Phy 248 as their lab science.
4. A student must take 12 semester credit hours of Computer Science electives which must be approved by his or her advisor with at least 9 semester credit hours in courses numbered 300/3000 or above.
5. No more than 4 semester hours of PE activities will count toward the degree in Computer Science.

Computer Science Courses (CS)

130 Computers and Society 3:3:0
Introduction to computers, their history, their uses in society and the consequences of their applications to society and man. Interaction with computers will be accomplished by using the BASIC programming language.

131 Computer Programming I 3:3:0
Introduction to problem solving methods; algorithm development; and how to design, code, debug, and document programs using good programming style and a high level language.

132 Computer Programming II 3:3:0
Continuation of the development of discipline in program design, in style, in debugging and testing; algorithmic analysis; and basic aspects of string processing, recursion, internal search/sort methods and simple data structure.
Prerequisite: CS 131 and Mth 1334 or concurrent enrollment in Mth 1334.

133 Introduction to Computers 3:3:0
Utilization of digital computers using the FORTRAN higher level language to solve business oriented problems.

230 RPG Programming 3:3:0
An introduction to RPG programming RPG techniques, specifications and routines.
Prerequisite: CS 131 or CS 133.

235 Engineering Computation II 3:3:0
Problem theory, flow charting, advanced FORTRAN programming. Solution of advanced problems from various engineering disciplines.
Prerequisite: CS 132 and Mth 149 or Mth 237

3101 Special Language Topics 1:1:0
The study of the theory and applications of specialized computer languages and language packages. This course may be repeated for different languages and language packages.
Prerequisite: Consent of instructor.

3201 Special Language Topics 2:2:0
The study of the theory and applications of specialized computer languages and language packages. This course may be repeated for different languages and language packages.
Prerequisite: Consent of instructor.

3301 Special Languages Topics 3:3:0
The study of the theory and applications of specialized computer languages and language packages. This course may be repeated for different languages and language packages.
Prerequisite: Consent of instructor.

3302 Introduction to Computer Systems 3:3:0
Introduction to computer architecture; basic concepts of computer systems; and machine, assembler level and micro languages.
Prerequisite: CS 132.

3304 COBOL Programming 3:3:0
A thorough coverage of the COBOL language and some of its variations is presented in this course. The emphasis is placed on the language, its flexibility and power as well as on applications.
Prerequisite: CS 131 .

3305 Introduction to Computer Organization 3:3:0
The introduction and the structure of the major hardware components; the mechanics of information transfer and control within a digital computer system; and the fundamentals of logic design.
Prerequisite: CS 3302.

331 Mini-computer Laboratory 3:1:6
Study of hardware, software, peripherals and their interfacing of mini-computers in a laboratory environment.
Prerequisite: CS 3302 and consent of instructor.

4104, 4201, 4301, 4401 Special Topics 1-4:A:0
An investigation into specialized areas of computer science under the guidance of a faculty member. This course may be repeated for credit when topics of investigation differ.

4302 Operating Systems and Computer Architecture I 3:3:0
To introduce the major concept areas of operating systems principles; develop an understanding of the organization and architecture of computer systems at the register-transfer and programming levels of system description; and the inter-relationships between the operating system and the architecture of computer systems.
Prerequisite: CS 3302 and CS 4305.

4305 Data Structures and Algorithm Analysis 3:3:0
Data structure; analysis and design techniques for non-numeric algorithms which act on data structures; and utilization of algorithmic analysis and design criteria in the selection of methods for data manipulation.
Prerequisite: CS 132 and CS 3301

4306 Techniques of Information Processing and Retrieval 3:3:0
Continuation of CS 4305. Keyword and descriptive indexing, decision tables, real time information processing and total information systems.
Prerequisite: CS 4305 and CS 3304

4307 Organization of Programming Languages 3:3:0
The organization of programming languages, especially run-time behavior of programs; the formal study of programming language specification and analysis; and the continued development of problem solution and programming skills.
Prerequisite: CS 3302, 4305.

4308 Theory of Programming Languages 3:3:0
Formal definition of programming languages, including specifications of syntax, semantics, statements and notations used in the construction of compilers, structure of translators and compilers.
Prerequisite: CS 4307.

4309 Introduction to Simulation Techniques 3:3:0
External properties of multivariate functions with and without constraints, convex functions, linear programming. Computer simulation utilizing logical, numerical and Monte Carlo modeling. The generation, termination and flow of entities through storage and processing facilities.
Prerequisite: CS 132, EGR 1221 and Mth 234 or 438.

431 Project Laboratory 3:2:3
Senior projects with hardware/software implementation and testing.
Prerequisite: CS 4302 and senior standing.

4310 Computer Architecture 3:3:0
Representation of information, calculators, storage, addressing, input, output, memory and control. Credit will not be given for both CS 4310 and EE 4310.
Prerequisite: EE 4303 or CS 3305. Assembly language desirable.

4311 Information Systems I 3:3:0
The analysis, design, installation documentation, maintenance, and modifications of informations systems including both hardware and software.
Prerequisite: CS 3304, 4305.

4312 Information Systems II 3:3:0
A continuation of CS 4311 with special emphasis on using state of the art computer technology in maintenance and modification of information systems.

4321 Micro-Computers
Hardware components, languages, operating systems, date file systems, utilities and software development for micro-computers.

Department of Chemical Engineering

Program accredited by the Accreditation Board for Engineering and Technology.

Department Head: Jack R. Hopper **100 Lucas Building**

Professors: Hopper, Walker, Yaws

Associate Professor: Li

Assistant Professors: Chen, Ho

Adjunct Professor: Shaver

Laboratory Technician: Stauffer

Chemical engineering is the profession in which a knowledge of mathematics, chemistry and other natural sciences gained by study, experience and practice is applied with judgement to develop economic ways of using materials and energy for the benefit of mankind. The chemical engineer enters into almost every modern industry. From petroleum to synthetic rubber, from steel to medicines, the chemical engineer engages in design, research, devel-

opment, production, sales and management. Among the fields in which the chemical engineer is of prime importance are petroleum, petrochemicals, metals, plastics, paints, foods, paper, glass, dyes, synthetic fibers and a host of others.

The Department of Chemical Engineering will permit transfer of up to 78 semester hours from a junior college or a community college, if appropriate courses were taken at the junior (community) college level. The appropriate list of courses for a particular college can be made available upon request.

Bachelor of Science — Chemical Engineering

Recommended Program of Study

First and Second Year

(See Common Program)

Third Year

First Semester		Second Semester	
**ChE 333 Thermodynamics	3	**ChE 332 Heat Transfer	3
ChE/ME 3311 Momentum Transfer	3	**ChE 441 Reaction Kinetics	4
*ChE 437 Computer Applications	3	POLS 232 Introduction to American Government II	3
POLS 231 Introduction to American Government	3	Chm 432 Physical Chm II	3
Chm 341 Organic I	4	Chm 342 Organic II	4
	16		17

Fourth Year

First Semester		Second Semester	
ChE 442 Mass Transfer	4	ChE 433 Process Control	3
ChE 431 Laboratory I	3	American Hist	3
ChE 436 Plant Design I	3	ChE 434 Plant Design II	3
ChE 414 Seminar	1	ChE 435 Advanced Analysis	3
Elective	3	***Chm Elective	2
English Literature	3	English Lit/Tech Rpt Writ	3
	17		17

Total Semester Hours 135

Notes:
* These courses are offered during both Fall & Spring Semester.
** These courses are also offered during the Summer Session.
*** Requires approval of Department Head for 300-400 level chemistry course.

Chemical Engineering Courses (ChE)

3311 Momentum Transfer 3:3:0
Fluid-flow concepts are presented through the derivation of the basic equations of continuity, energy and momentum. Engineering aspects of flow measurement, pressure-drop calculations and pumping requirements are considered. Same as ME 3311. Che 3311 and ME 3311 may not both be counted for credit.
Prerequisite: Egr 234, ChE 334

332 Heat Transfer 3:3:0
Principles of conduction, convection and radiation, and their application to the design of heat transfer equipment and systems.
Prerequisite: ChE 3311, ChE 333

333 Thermodynamics 3:3:0
Application of the First and Second Laws to chemical processes. Thermodynamic properties of pure fluids and mixtures. Physical equilibrium.
Prerequisite: ChE 334, Egr 234, Chm 341 or concurrent.

334 Process Analysis 3:3:0
Application of mathematics, physics and chemistry to the solution of problems in industrial chemistry. Material and energy balance calculations on processes undergoing physical and chemical changes.
Prerequisite: Egr 234 or concurrent.

4111 Seminar 1:1:0
Oral presentation of advanced topics or research work in chemical engineering.

414 Seminar 1:1:0
Oral and written presentation of selected topics in chemical engineering from recent technical publications.
Prerequisite: Senior standing in Chemical Engineering.

422 Laboratory II 2:0:6
A continuation of ChE 431. Intensive experimental work in one or more areas studied in ChE 431. May be taken on an individual instruction basis.
Prerequisite: ChE 431.

431 Laboratory I 3:1:6
Experiments in heat transfer, mass transfer, fluid flow, reaction kinetics and thermodynamics.
Prerequisite: ChE 442 or concurrent.

4316 Stagewise Processes 3:3:0
Advanced study of absorption, extraction, distillation and diffusion, with emphasis on multicomponent mixtures.

4318 Advanced Distilation 3:3:0
Principles of multicomponent distillation, including prediction of equilibrium compositions of multicomponent mixture.

4321 Process Economics 3:3:0
Calculations involving economic evaluation of processes and equipment. Optimization of plants for least cost or maximum profit.

4322 Unit Operations 3:3:0
A study of chemical engineering operations not considered in other courses. An advanced study of one or more selected chemical engineering operations.

4323 Engineering Materials 3:3:0
Engineering properties of solid, liquid and gaseous materials. Selection and deterioration of materials for various industrial applications.

4325 Introduction to Nuclear Engineering 3:3:0
Interaction of neutrons with matter, nuclear properties of materials, shielding and control of reactors, production of neutrons by nuclear fission, discussion of the various types of reactors and introduction to reactor theory and design.

433 Process Control 3:3:0
Selection of equipment to measure and control process variables. Analysis of process response to variations in process parameters.
Prerequisite: ChE 437, 441, 442, Mth 3301.

434 Plant Design II 3:1:6
A continuation of ChE 436, with emphasis on a major design project.
Prerequisite: ChE 436.

435 Advanced Analysis 3:3:0
Development of mathematical equations for chemical engineering applications. Solution of ordinary and partial differential equations.
Prerequisite: ChE 333, 3311, 332, 437, 441, Mth 3301.

436 Plant Design I 3:3:0
Application of chemical engineering principles to the design of chemical processes and plants. Equipment design and specifications. Economic evaluation of processes and equipment.
Prerequisite: ChE 441; ChE 442 or concurrent.

437 Computer Applications 3:3:0
Use of the digital computer in performing process calculations. Advanced techniques of FORTRAN programming.
Prerequisite: Egr 1121, 1221, ChE 334, ChE 333 or concurrent.

438 Introductory Petroleum Engineering 3:3:0
The modern techniques of producing oil will be reviewed. Drilling operations, primarily and secondary recovery operations, methods of evaluation, production rate potential and reserve, as well as other aspects of reservoir engineering will be studied.
Prerequisite: Senior/graduate standing.

441 Reaction Kinetics 4:3:3
Chemical equilibrium. Analysis of experimental data to determine reaction rate parameters in homogeneous, heterogeneous, catayltic and non-catalytic reactions. Development of equations for batch, stirred-tank and tubular flow reactors. Application of differential equations to process and reactor design.
Prerequisite: ChE 332 or concurrent, ChE 333 or concurrent.

442 Mass Transfer 4:3:3
Principles of diffusion. Simultaneous mass, energy and momentum transfer. Analysis of absorption, extraction and distillation processes.
Prerequisite: ChE 333, 332.

Department of Civil Engineering

Program accredited by the Accreditation Board for Engineering and Technology.

Department Head: Enno Koehn **2010 Cherry Engineering Building**

Professors: Beale, Koehn, Morgan, Rogers

Associate Professors: Grubert, Mantz

Assistant Professor: Daniali

Instructor: Ramel

Adjunct: Fischer, Mittra

Civil Engineering is vital to the world's economic, political and social well-being. Modern technological developments are ever widening the vistas of this profession and deepening its scientific roots. These trends are accentuating and creating needs that can be met only by truly professional people whose education has the breadth of a liberal education and the depth of a firm foundation in mathematics and science. This curriculum is designed to meet these requirements. It is strong in the engineering sciences including the natural and earth sciences. It embraces a sound core of mathematics, physics and chemistry. Completion of this curriculum will enable a student to enter the professional field of practice or to pursue an advanced program of study leading to a graduate degree in civil engineering. Areas of activity include soil, structural, hydraulic, sanitary, transportation, surveying and mapping, and power engineering. This curriculum is modern and designed to meet the requirements of the space and atomic age. Options are provided to fit the individual interest of the civil engineering student.

Bachelor of Science — Civil Engineering

Additional Degree Requirements:

Candidates for degrees in this program are strongly encouraged to consider sitting for the National Council of Engineering Examiners Examination on "Fundamentals of Engineering" as administered by the State Board of Registration for Professional Engineers.

Recommended Program of Study

First and Second Years

(See Common Program)

Third Year

First Semester		Second Semester	
Statistics Elective	3	CE 212 Route Surveying	1
CE 211 Engineering Measurements	1	CE 320 Materials Engineering	2
CE 331 Environmental Science	3	CE 336 Hydrology	3
CE 334 Structural Mechanics	3	CE 337 Water Utility Systems	3
CE 335 Hydraulics I	3	CE 339 Soil Science	3
BLW 331 Business Law or CE Elective	3	His 231-236 American History Elective	3
	16		15

Fourth Year

First Semester		Second Semester	
Eco-Princ and Policies or CE Elective	3	CE 439 Structural Steel Design	3
POLS 231 American Government	3	POLS 232 American Government	3
CE 434 Soil Engineering	3	CE 411 Seminar	1
CE 438 Reinforced Concrete Design	3	CE 420 Photogrammetry	2
CE 432 Management, Planning, Scheduling and Estimating	3	CE 431 Hydraulics II	3
Elective Literature	3	Elective Literature	3
		Elective CE	3
	18		18

Total Semester Hours 136

211 Engineering Measurements 1:0:3
Introduction to basic principles of surveying. Use of equipment for measurement of horizontal and vertical distances and angles. Computer utilized in calculations.

212 Route Surveying 1:0:3
Field practice and calculations associated with design and layout of highway curves including vertical and horizontal alignments. Transition spirals. Surveying for transmission systems. Computer utilized.
Prerequisite: CE 211.

232 Mechanics of Solids 3:3:0
Effect of loads on deformable bodies, uniexial and biaxial stress-strain relationships, indeterminate systems. Study of stresses due to axial, torsional and bending effects. Buckling of columns.
Prerequisite: Egr 230.

320 Materials Engineering 2:1:3
Principles/Techniques for investigating properties and behavior of engineering members and materials using experimental methods.
Corequisite: CE 232

331 Environmental Science 3:2:3
Introduction to the hydrologic cycle and the chemistry and microbiology of the natural aquatic environment, with emphasis on the physical, chemical and biological aspects of water and waste water systems in relation to man's environment. Laboratory work in the physical, chemical and biological analysis of water and waste water.
Prerequisite: Chm 142.

334 Structural Mechanics 3:2:3
Analysis of loadings for bridges and buildings. Dynamic effects of moving loads. Influence lines. Shear and moment diagrams, analysis of indeterminate structures. Introduction to structural design investigation of frames, girders and bents.
Prerequisite: CE 232.

335 Hydraulics 3:2:3
Basic principles of fluid flow. Friction and drag studies. Calibration of flow measuring devices. Flow characteristics of open channels and closed conduits Boundary Layer Theory.
Prerequisite: Egr 231.

336 Hydrology 3:3:0
Precipitation, surface water, infiltration, sub-surface water. Analysis of rainfall and runoff data. Collection studies. Hydraulics of wells. Net storm rain; peak discharge and floor runoff.
Prerequisite: Egr 231.

337 Water Utility Systems 3:3:0
General survey of environmental engineering covering water supply and sanitary sewerage systems.
Prerequisite: CE 331, CE 335.

339 Soil Science 3:2:3
Basic principles of soil behavior under load. Soil properties and classification. Study of hydraulics as applied to soil mechanics.
Prerequisite: Egr 231.

411 Seminar 1:0:3
Discussion of professional topics. Study of technical journals and transactions. Presentation of oral and written reports. Completed thesis required.
Prerequisite: Senior standing.

420 Photogrammetry 2:1:3
Principles of aerial photography applied to map making, route locations and ground control. Introduction to use of photogrammetry equipment, including stereoscopes and plotters.
Prerequisite: CE 212

430 Indeterminate Structures 3:2:3
Basic principles of structural analysis and design, based upon requirements of equilibrium and continuity. Classical methods of strain energy, slope deflection and moment distribution used for analysis of frames, trusses and beams. Digital computer methods stressed.
Prerequisite: CE 334.

431 Hydraulics II 3:2:3
Continuation of CE 335-Hydraulics emphasizing practical applications of basic fluid mechanics principles in fluid measurement, machinery, closed conduit flow, open channel flow and hydraulic transients.
Prerequisite: CE 335.

4310 Soil-Structure Interaction 3:2:3
Analysis of the mechanical behavior of soil-structure systems under the effect of static and dynamic loading, impact and stress wave propagation. Applications to structures supported by shallow and deep substructure and underground structures. Computer techniques are employed.
Prerequisite: CE 434.

4312 Structural Systems Design 3:2:3
Design principles associated with elastic and plastic design of steel, pre-stressed concrete, composite structures, hybrid girders and thin shell concrete. Computer methods of analysis utilized.
Prerequisite: CE 334.
Corequisite: CE 438, CE 439.

432 Management, Planning, Scheduling, and Estimating 3:2:3
Principles governing the effective, efficient management of engineering projects including the application of comprehensive planning, scheduling, and cost estimative procedures.

433 Environmental Health Engineering 3:3:0
Problems of public health in rural, urban and industrial centers with water, housing, heating, cooling, ventilation, milk, food, insects and rodents. Biostatistics and public health laws, ordinances and regulations.
Prerequisite: Bio 243 or CE 331.

434 Soil Engineering 3:2:3
Compressibility and Strength characteristics. Stress distribution. Shallow and deep foundations, earth pressure theories, retaining walls, stability slopes.
Prerequisite: CE 339.

435 Water and Waste Water Treatment 3:3:0
Principles of physical, chemical and biological processes employed in water and waste water treatment. Design of selected units within water and waste water treatment systems.
Prerequisite: CE 337.

437 Transportation Engineering 3:3:0
Study of highway pavements. History and development of transportation facilities. Drainage requirements. Fundamentals of highway location, design, construction and maintenance.

438 Reinforced Concrete Design 3:2:3
The design of structural concrete members based upon elastic and plastic theory. Study of standard specifications. Introduction to prestressed concrete.
Prerequisite: CE 334.

439 Structural Steel Design 3:2:3
The elastic design of buildings and bridge components according to standard specifications. Plastic design of steel structures.
Prerequisite: CE 334.

Department of Electrical Engineering

Program accredited by the Accreditation Board for Engineering and Technology.

Department Head: William R. Wakeland **2006 Cherry Building**

Professors: Bean, Cooke, Crum, Wakeland, Watt

Associate Professors: Carlin

Assistant Professors: Viviani

Laboratory Technician: Ingram

For many years the use of electricity has played a major role in the advancement of societies throughout the world. From megawatts of electrical power to microprocessors not as large as the pupil of the eye, the world of tomorrow will depend even more heavily than today upon the use of electricity.

Men and women who are electrical engineers will play vital roles in key areas affecting everyone's life by working in such areas as: micro processor based instrumentation systems; advanced computer systems—both large scale and personal size; medical instrumentation, and computer-aided diagnostic and information systems; automatic control systems for mass transit, food production and process control; power generation and distribution systems. If these challenges sound worthwhile and you want to contribute, an Electrical Engineering degree will provide you that opportunity.

The Department of Electrical Engineering will permit transfer of up to 72 semester hours from a junior college or a community college if appropriate courses were taken at the junior or community college level. The appropriate list of courses for a particular college are available upon request.

The academic standards of the College of Engineering require that a student satisfy certain criteria for admission to a particular engineering program. In addition, there are four electrical sequences of courses which serve as the foundation for advanced courses in elec-

trical engineering. Poor performance in these courses will seriously handicap a student in the advanced courses. Therefore, after admittance to the Electrical Engineering program, and during the course of study, no more than one "unimproved D" is allowed in each of the following sequences of courses in order to continue the sequences, or to graduate.

a. EGR 233, EE 331, 3305, 332
b. EE 333, 431, 432, 4302
c. EGR 1121, 1221, EE 3301
d. EE 217, 318, 319, 3201, 416, 417

A "D" in a course is considered "improved" when the course has been repeated with a "C" or better.

Bachelor of Science — Electrical Engineering

Recommended Program of Study

First and Second Year

(See Common Program)

Third Year

First Semester		Second Semester	
EE 318 Electronics Laboratory	1	EE 319 Electric Machinery Laboratory	1
EE 331 Circuits II	3	EE 3201 Digital Laboratory	2
EE 333 Electronics I	3	EE 332 Circuit Design	3
EE 3301 Electrical Analysis	3	EE 336 Electrical Machinery/Transformers	3
EE 3305 Logical Design of Switching Systems	3	EE 337 Electromagnetic Fields I	3
Phy 335 Modern Physics	3	EE 431 Electronics II	3
		*Math Elective	2
	16		17

Fourth Year

First Semester		Second Semester	
EE 411 Electrical Engineering Seminar I	1	EE 412 Electrical Engineering Seminar II	1
EE 416 Projects Laboratory	1	EE 417 Projects Laboratory	1
EE 436 Control Engineering	3	****EE Electives	6
****EE Electives	6	English Literature	3
**Hum/Soc Elective	3	***Elective	3
Spc or Technical Writing	3	POLS 232	3
	17		17

Total Semester Hours 135

Notes:
* From list of approved courses: Mth Elective: 4202, 4203
** Hum/Soc Elective:
(a) Any humanities, phiolsophy, anthropology, literature course
(b) History 330, 331, 332, 333, 337, 338, any 400 level course
(c) Sociology 131, 132, 230, 330, 332, 333, 334, 336, 337, 431, 433, 434, 435, 436
*** Outside of department, approved by advisor.
**** Total elective design content must be minimum of 4 hours.

Electrical Engineering Courses (EE)

217 Circuits Laboratory 1:0:3
Experience in the use of elementary electrical equipment and elements, including the oscilloscope.
Corequisite: Egr 233.

318 Electronics Laboratory 1:0:3
Design of power supplies and amplifiers using diodes, transistors, thysistors and linear integrated circuits.
Prerequisite: EE 217.
Corequisite: EE 333.

319 Electric Machinery Laboratory 1:0:3
Three phase circuits, DC and AC motors and generators; transformers.
Prerequisite: EE 217.
Corequisite: EE 336.

3201 Digital Laboratory 2:1:3
Testing and design of digital circuits; introduction to small computer hardware and software.
Prerequisite: EE/CS 3305.

3301 Electrical Analysis 3:3:0
Application of the digital computer to analysis and design of electrical systems using numerical methods.
Prerequisite: Mth 3301, Egr 233, 1221, 1121.

3305 Logical Design of Switching Systems 3:3:0
Switching algebra. Formulate and manipulate switching functions. Combinational networks. Flip-flops. Sequential networks.
Prerequisite: Egr 233.

331 Circuits II 3:3:0
Power calculations, polyphase circuits. Frequency response, resonance, magnetically coupled circuits, two port networks. Fourier series, Fourier and Laplace transform application.
Prerequisite: Egr 233.
Corequisite: Mth 3301.

332 Circuit Design 3:3:0
Circuit design concepts using frequency domain. Pole-zero characterization of system response. Synthesis of passive and active networks.
Prerequisite: EE 331.

333 Electronics I 3:3:0
An analysis of both digital and analog signal processing methods by the use of solid state electronic devices, Bipolar, FET and linear integrated circuits.
Prerequisite: Egr 233
Corequisite: EE 318 for EE students.

335 Direct Energy Conversion 3:3:0
An introductory study of direct heat to electrical energy conversion methods such as those employed by thermoelectric devices, thermionic converters, magnetohydrodynamic engines, solar and fuel cells.
Prerequisite: Egr 233, 234.
Corequisite: EE 333.

336 Electric Machinery/Transformers 3:3:0
A study of transformers and conventional electric machinery, DC motors and generators, synchronous machines and induction motors.
Prerequisite: EE 331.
Corequisite: EE 319.

337 Electromagnetic Fields I 3:3:0
Vector analysis, coordinate systems, static electric fields, electric potential, dielectrics, conductors, capacitance, current, static magnetic fields, magnetic materials, magnetic potentials, inductance, electromagnetic forces. Maxwell's equations, time-varying fields, plane waves.
Prerequisite: Mth 3301, Phy 241, Egr 233.

4101 Individual Study 1:1:0
Independent study under the direction of a faculty member. May be repeated for credit.

411 Electrical Engineering Seminar I 1:1:0
A study of the literature of electrical and related engineering fields; preparation and presentation of papers on electrical subjects.
Prerequisite: EE 3301.
Pre or Corequisite: EE 416 or 417.

412 Electrical Engineering Seminar II 1:1:0
Preparation, presentation and discussion of material on the engineering profession, the interface between technology and society, and new areas of engineering involvement.
Prerequisite: EE 3301.
Pre or Corequisite: EE 416 or 417.

416 Projects Laboratory 1:0:3
Senior projects with hardware implementation and testing.
Prerequisite: EE 217, 318, 319, 3201, 431.

417 Projects Laboratory 1:0:3
Senior projects with hardware implementation and testing.
Prerequisite: EE 217, 318, 319, 3201, 431.

4201 Digital Logic Laboratory 2:1:3
Laboratory study of digital devices and systems.
Prerequisite: EE 3305 or CS 3305.

4302 Communication Theory 3:3:0
Principles of modulation; random signal theory and network analysis; basic information theory; analysis of noise. 1 hour design content.
Prerequisite: EE 332.

4304 Advanced Topics 3:3:0
Topics are selected on the basis of the needs of an adequate number of students. May be repeated for credit when topics vary.
Prerequisite: EE 331.

4305 Digital Systems 3:3:0
Coding, iterative circuits, special purpose circuits vs. computers, and algorithms.
Prerequisite: EE 3305 or CS 3305.

4306 Minicomputers 3:3:0
Introduction to assembly language programming and small computer organization. 1-1/2 hours design content.
Prerequisite: EE/CS 3305.

4307 Microcomputers 3:3:0
Microcomputer organization, peripheral devices, systems software for small computers. 1-1/2 hours design content.
Prerequisite: EE 4306 or CS 3302.

4308 Automata Theory 3:3:0
Sets, relations, structure of sequential machines, incompletely specified machines, partition methods, state identification and fault detection. 1 hour design content.
Prerequisite: EE 3305 or CS 3305.

4309 Electric Power Systems 3:3:0
An introduction to electric power system analysis. Transmission line calculations, system operation, short circuit computations. 1.5 hour design content.
Prerequisite: EE 336, 337.

4310/CS 4310 Computer Architecture 3:3:0
Representation of information, calculators, storage, addressing, input/output, memory and control. 1 hour design content.
Prerequisite: EE 3305 or CS 3305. Assembly language desirable.

431 Electronics II 3:3:0
Indepth study of semiconductor device characteristics, BJT's, FET's, SSI logic and linear integrated circuits.
Prerequisite: EE 333, 3305.

4311 Introduction to Nuclear Power 3:3:0
Nuclear reaction mechanics; radioactivity; neutron reactions; fission products, decay; reactor kinetics, systems; radiation, dose limits, shielding. 1/2 hour design content.
Prerequisite: Egr 234 and Phy 335.

432 Electronics III 3:3:0
Analog systems with semiconductor elements. Frequency response, feedback and feed forward amplifier design, power electronic devices with regulated power supplies. 2 hours design content.
Prerequisite: EE 431.

436 Control Engineering 3:3:0
Transfer functions; state variables; time response; frequency response and stability.
Prerequisite: EE 332.

438 Instrumentation 3:3:0
Unified methods for the design of signal conditioning circuits between sensors and computers. Accepted practice for sensor based microprocessor and minicomputer data acquisition and processing systems. Instrumentation amplifier circuits. 2 hours design content.
Prerequisite: EE 333, 3305.

Department Of Industrial Engineering

Program accredited by the Accreditation Board for Engineering and Technology.

Department Head: Victor Zaloom **2014 Cherry Building**

Professors: Brennan, Gates, Zaloom

Associate Professor: Carruth, Thomas

Assistant Professor: Chu

Laboratory Technician: Costa

The Department of Industrial Engineering offers the Bachelor of Science degree in Industrial Engineering and in Industrial Technology.

Industrial Engineering

Industrial engineering serves vital functions in today's world and provides a wide range of career opportunities.

Industrial engineering deals not only with things but also with people. It especially deals with managerial problems requiring a knowledge of fundamental science and engineering practice for their solution.

Industrial engineers combine advanced study in management systems, economics and decision-making to answer such questions as: "What products or services should we offer?... What materials and methods should we use?...How can we best motivate and reward people?...How can we improve quality, productivity and service?"

Typical responsibilities of the industrial engineer involve design, operation and management. While manufacturing industry demands many graduates, increasing numbers are finding satisfying employment in other kinds of businesses. Airlines, banks, restaurant chains, department stores and hospitals, e.g. all use industrial engineers. Governmental agencies of all sorts are attracting graduates.

Women find special opportunities in industrial engineering. Responsible jobs and excellent salaries accompany a demand which far exceeds the supply of women in the field. Advancement on the same basis as that experienced by men makes the profession especially attractive.

The Department of Industrial Engineering at Lamar University is one of the leaders in integrating computer-aided design and computer-aided manufacturing into the curriculum. The Department of Industrial Engineering also offers a Bachelor of Science degree in Industrial Technology. This curriculum is especially designed to prepare two-year technology graduates to work effectively in the engineer-technologist team and to assume management responsibilities.

The first two years of this program are administered by the College of Technical Arts. Students entering Lamar as freshmen will be advised on their technology major by Technical Arts. This degree requires successful completion of Lamar University's Associate of Applied Science degree—or equivalent—composed of a minimum of 36 semester hours of related and sequential courses. Technology courses beyond those specified in a major field must be approved by the Industrial Engineering Department.

Admission to the Industrial Technology Program will be granted, upon application, after completion of a minimum of 45 semester hours toward the Associate of Applied Science Degree or the Engineering common program with a grade point average (GPA) of at least 2.00. Six hours of Freshman English Composition and Mth 1334 and Mth 1341 or higher level math courses must be included in the 45 semester hour minimum.

Any student in the Industrial Technology program considering working toward an Industrial Engineering degree at any time in the future should so inform his or her advisor, since certain adjustments in the Industrial Technology program will make it easier to obtain an Industrial Engineering degree.

Bachelor of Science — Industrial Engineering

Recommended Program of Study

First and Second Year

(See Common Program)

Third Year

First Semester		Second Semester	
IE 222 Introduction to Manufacturing	2	IE 3303 Economic Analysis and Design	3
IE 335 Accounting for Engineers	3	IE 338 Work Design	3
IE 332 Industrial Engineering Analysis I	3	IE 432 Statistical Decision Making for Engineers	3
IE 311 IE Seminar I	1	English Literature (1)	3
Eng 4335 Technical Report Writing	3	POLS 232 Introduction to American Government II	3
His 232 American Histoy II	3	Hum/Soc Elective (2)	3
POLS 231 Introduction to American Government I	3		
	18		18

Fourth Year

First Semester		Second Semester	
IE 435 Production and Inventory Control	3	IE 436 Design of Production Facilities	3
IE 430 Quality Control	3	IE 437 Operations Research	3
IE 434 Materials Science and Manufacturing Processes	3	IE 431 Computer Applications in IE	3
ME 3311 Momentum Transfer	3	IE 4316 Industrial and Product Safety	3
IE 4315 Organization and Management	3	Free Elective (4)	3
Technical Elective (3)	3		
	18		15

Total Semester Hours 136

Notes:
(1) Any course in Sophomore Literature (Eng 2311—2319) 1311 will satisfy this requirement.
(2) Psychology, Sociology or Economics will be approved.
(3) An upper level course in Engineering, Math, Business or Computer Science, with approval of advisor.
(4) Physical Education, Engineering or Mathematics may 1316 not be elected. Approval of advisor required.

Bachelor of Science — Industrial Technology

Recommended Program of Study

First Year

First Semester		Second Semester	
Technology Courses	12	Technology Courses	12
Eng 131 Composition(1)	3	English Composition(1)	3
HPE/MLB/MS	1 or 2	HPE/MS	1 or 2
	16-17		16-17

Second Year

First Semester		Second Semester	
Technology Courses	12	Technology Courses	12
Technology Course or Elective	3	Technology Course or Elective	3
HPE/MLB /MS	2	HPE/MS	2
	17		17

Third Year

First Semester		Second Semester	
Mth 1334 College Algebra	3	Mth 1341 Elements of Analysis	3
CS 131 Computer Programming I	3	Chm 143 Introductory	4
POLS 231 Introduction to American Government I	3	POLS 232 Introduction to American Government II	3
IE 3301 Survey of IE	3	English Literature (2)	3
IE 311 IE Seminar I	1	IE 438 Work Measurement	3
Elective I (3)	3	IE 212 Production and Fabrication Processes	1
	16		17

Fourth Year

First Semester		Second Semester	
Mth 234 Elementary Statistics	1	His 232 American History II	3
IE 333 Engineering Economy	3	IE 4301 Survey of Quality Control	3
IE 339 Materials Science and Manfacturing Processes	3	IE 4315 Organization and Management	3
His 231 American History I	3	IE 335 Accounting for Engineers	3
Elective II (4)	3	Eng 4335 Technical Report Writing (5)	3
	15		15

Total Semester Hours 131-133

Notes:
(1) Any of Eng 132—Eng 135 will satisfy this requirement.
(2) Any of Eng 2311—Eng 2316 will satisfy this requirement.
(3) 300 level courses in Psychology, Sociology, Economics or Business, from approved list.
(4) A 300 or 400 level IE course, from approved list.
(5) SPC 331 may be substituted with approval of advisor.

Industrial Engineering Courses (IE)

212 Production and Fabrication Processes 1:0:3
Machinery, welding, casting, forming and joining operations on materials of engineering importance. Demonstrations, lectures and laboratory exercises.

222 Introduction to Manufacturing 2:1:3
Production planning, programming and operation of metal cutting machinery.

311 IE Seminar I 1:1:0
Identifying and analyzing Industrial Engineering problems.

330 Industrial Engineering 3:3:0
Introduction to Industrial Engineering, its tools and techniques.

3301 Survey of Industrial Engineering 3:3:0
The orgins and evolution of Industrial Engineering. The problem solving techniques available and their applications. For non-engineering students.

3303 Economic Analysis and Design 3:3:0
Capital budgeting. Depreciation and income taxes. Decisions under uncertainty.
Prerequisite: Egr 223, Mth 3370

332 Industrial Engineering Analysis I 3:3:0
Descriptive analysis of Engineering Data, probability distributions applied to engineering design, sampling in an engineering environment, estimation.
Prerequisite: Mth 241

333 Engineering Economy 3:3:0
Economics applied to the evaluation of engineering proposals. The effects of depreciation, taxation and interest rates.
Not open to students majoring in engineering.
Prerequisite: Mth 1341.

335 Accounting for Engineers 3:3:0
Introduction to principles of bookkeeping and cost accounting. Use of cost records to help the engineer/executive make decisions.

338 Work Design 3:2:3
Determination of work content, layout, methods, and times required for manufacturing tasks. Design of jobs and workplace for productivity and human value content.
Prerequisite: IE 332, 222

339 Manufacturing Materials and Process 3:3:0
Functional and economic selection of materials and processes in manufacturing. For non-engineering students.
Prerequisite: Chm 143 or equivalent.

430 Quality Assurance and Control 3:3:0
Assurance that products perform as intended. Reducing or eliminating defective output.
Prerequisite: Mth 234.

4301 Quality Control Applications 3:3:0
Quality assurance and the application of statistics to the control of quality. Control charts, acceptance sampling reliability and the role of standards in the quality function. For non-engineering students.

431 Computer Applications in Industrial Engineering 3:3:0
Open ended problems in the areas of production control, economic analysis, scheduling, inventory control and other traditional areas of Industrial Engineering.

4313 Human Engineering 3:2:3
The engineering design of tools and equipment to meet the physiological needs of human beings.

4315 Organization and Management 3:3:0
The theory of organization and management. How the executive functions to achieve the organization's goals.

4316 Industrial and Product Safety 3:3:0
Loss control engineering. Mandatory and voluntary standards. Product liability.
Prerequisite: Senior standing.

432 Statistical Decision Making for Engineers 3:3:0
Analysis of data to help the engineer/executive make decisions. Evaluation of performance claims.
Prerequisite: Mth 3370, Mth 3301, Junior standing in engineering

434 Materials Science and Manufacturing processes 3:3:0
Basic principles underlying the behavior of engineering materials and methods of processing these materials.
Prerequisite: Chm 141 or equivalent

435 Production and Inventory Control 3:3:0
Techniques for planning and controlling production and inventories. Modern materials requirements planning.
Prerequisite: Mth 3370, IE 330.

436 Design of Production Facilities 3:1:6
Use of the principles from other IE courses to determine the location, layout, needed equipment and facilities and other factors in facilities design.
Prerequisite: IE 212, 330, 3303, 338, 434.

437 Operations Research 3:3:0
An introduction to the construction of mathematical models of organizational systems to aid executives in making decisions.
Prerequisite: Mth 3370, IE 333.

438 Work Measurement 3:2:3
Analysis of layout, methods and motion. Measurement of work content and time manual and machine tasks. Setting time standards.

Department of Mechanical Engineering

Program accredited by the Accreditation Board for Engineering and Technology.

Department Head: Otto G. Brown **2008 Cherry Building**

Professors: Brown, Martinez, Mei, Young

Associate Professors: Bruyere, Joshi

Assistant Professors: Chern, Nguyen

Adjunct Associate Professor: Boughton

Adjunct Instructors: Adams, Craigue

Laboratory Technician: Colville

Mechanical engineering is a very diverse profession which includes the analysis, design, synthesis and selection of materials for mechanical and thermal systems. This wide range of applications requires a solid foundation in the basic sciences and mathematics as well as in the engineering sciences.

Application of the sciences to the many phases of mechanical engineering is initiated in the junior year. Opportunity is provided the student at the senior level to examine certain aspects of mechanical engineering in more detail or to prepare for graduate study.

Mechanical engineers are found in virtually every phase of industry. They are engaged in professional engineering, research, development, management, and public service. The end products resulting from the application of their knowledge and professional skills are many and a list would include, for example, energy conversion, energy economics, all forms of transportation, central power plants, nuclear reactors, space vehicles, computers, and complex and challenging engineering endeavors.

Bachelor of Science — Mechanical Engineering

Recommended Program of Study

First and Second Year

(See Common Program)

Third Year

First Semester		Second Semester	
ME 330 Kinematics	3	ME 321 Instrumentation and Testing Laboratory	2
ME 3311 Momentum Transfer	3	ME 331 Transport Theory	3
ME 338 Thermodynamics II	3	ME 332 Elements of Mechanical Design I	3
Mth Elective	2	ME 334 Engineering Analysis I	3
American History	3	EE 333 Electronics I	3
English Literature	3	English Literature	3
	17		17

Fourth Year

First Semester		Second Semester	
ME 421 Engineering Systems Design	2	ME 4316 Engineering Design Project	3
ME 4313 Thermal Systems Design	3	ME 4317 Engineering Analysis II	3
ME 4319 Materials Science	3	ME Elective	3
ME 4323 Elements of Mechanical Design II	3	POLS 232 Introduction to American Government II	3
*ME Elective	3	Free Elective	3
POLS 231 Introduction to American Government I	3	ME 411 Seminar	1
	17		16

Total Semester Hours 135

At least 3 hours must be an ME design elective course.

Mechanical Engineering Courses (ME)

321 Instrumentation and Testing Laboratory 2:1:3
Various instruments with mechanical engineering applications are studied and tests are made. Emphasis is on pressure, temperature, speed, power, torque, frequency and various types of flow measurements.
Prerequisite: ME 3311 and ME 338 or parallel with both.

330 Kinematics 3:3:0
Analysis of mechanisms. Centros, velocities and accelerations in plane mechanisms; rolling and sliding in belts, chains and cams; gears in plain and epicyclic trains.
Prerequisite: Egr 231 and CE 232 or parallel.

331 Transport Theory 3:3:0
Theory of conduction and potential flow, radiation and convection with engineering techniques and applications.
Prerequisite: Mth 3301 and ME 3311.

3311 Momentum Transfer 3:3:0
Fluid-flow concepts are presented through the derivation of the basic equations of continuity, energy and momentum. Engineering aspects of flow measurement, pressure-drop calculations and pumping requirements are considered.
Prerequisite: Egr 234, 231, CE 232 and Mth 3301.

332 Elements of Mechanical Design I 3:2:3
The design of machine components including shafting, columns, springs and frames with regard to static and dynamic forces employing analytical and graphical analysis.
Prerequisite: CE 232 and ME 330.

334 Engineering Analysis I 3:3:0
Methods of analysis of engineering situations requiring application of fundamentals of engineering science and mathematics are studied. Mathematical methods of engineering analysis are presented and applied.
Prerequisite: ME 3311.

338 Thermodynamics II 3:3:0
A continuation of Egr 234 including vapor and gas cycles, mixtures of gases, thermodynamics of chemical systems and psychrometrics.
Prerequisite: Mth 3301 and Egr 234.

411 Seminar 1:1:0
Oral and written presentation and discussion of selected topics including those from current literature of fields related to mechanical engineering. Professional activities are encouraged.

421 Engineering Systems Design 2:1:3
The design techniques of integrated component systems are treated. The student is required to utilize these techniques by designing such a system.
Prerequisite: ME 334 and senior standing.

4311 Controls Engineering 3:3:0
The theory of integrated automatic controls systems with application to combustion, temperature, pressure, flow and humidity control. Industrial control systems are considered.
Prerequisite: ME 331 and ME 334.

4312 Gas Dynamics 3:3:0
Fundamentals of one-dimensional compressible flow. An introduction to multidimensional wave phenomena with various applications.
Prerequisite: ME 4313 or parallel.

4313 Thermal Systems Design 3:3:0
Heat transfer study with emphasis on heat exchanger design, optimization of energy exchange, economics and design feasibility.
Prerequisite: ME 331, 334, 338.

4314 Fundamentals of Physical Metallurgy 3:3:0
Fundamental and scientific principles of physical metallurgy to include nucleation theory of solidification, behavior of single and polycrystalline solids under stress and heat treatment plastic deformation and recrystallization and basic principles of X-ray diffraction used in physical metallurgy.
Prerequisite: ME 4319 or parallel.

4315 Thermodynamics III 3:3:0
Topics in applied thermodynamics selected from any of the following: Psychrometrics, combustion, equilibrium reactions, compressible flow, thermodynamic machinery and optimization of power plant and utility systems using availability analysis and/or linear programming. May be repeated for credit with consent of instructor.
Prerequisite: ME 334, ME 338; ME 4313 in parallel.

4316 Engineering Design Project 3:1:6
Student research projects are planned, scheduled, designed and evaluated. Experience is gained in the execution of an engineering project and a formal technical report is required.
Prerequisite: ME 421, 4313.

4317 Engineering Analysis II 3:3:0
A continuation of ME 334 with some emphasis being placed on analog methods and computer techniques in solving engineering problems.
Prerequisite: ME 334.

4319 Materials Science 3:2:3
Properties of materials. Aspects of elastic behavior as well as stress and strain measurement, yield phenomena, tensions, torsion, hardness and assorted effects are considered. Criteria for selected proper engineering materials are discussed.
Prerequisite: CE 232.

432 Mechanical Vibrations 3:3:0
The theory of vibrating systems, including kinematics or vibrations, harmonic and non-harmonic, single and multiple degrees of freedom; free and forced vibrations, with and without damping. Applications to crank and slider, rotating machinery, balancing, vibration isolation and absorption, and instrumentation.
Prerequisite: ME 334 and senior standing.

4320 Propulsion Systems 3:3:0
Space mission parameters. Basic elements of propulsion systems and propulsion systems parameters. Selected problems of thermochemical systems and electro-magneto-thermal systems.
Prerequisite: ME 331 and 338.

4323 Elements of Mechanical Design II 3:2:3
The design of power transmission machinery. Completed design of some assigned machine.
Prerequisite: ME 332.

433 Aerodynamics 3:3:0
Topics include circulation and curl, irrotational flow, velocity potential, vortex theorems, the equations of motion, flow about a body, and the thin airfoil. Vector and complex notation is used.
Prerequisite: ME 3311 and ME 331 or parallel.

434 Internal Combustion Engines 3:2:3
The principles of design and analysis of various types of internal combustion engines.
Prerequisite: ME 331 and ME 338.

435 Turbomachinery 3:3:0
Flow problems encountered in the design of water, gas and steam turbines, centrifugal and axial-flow pumps and compressors.
Prerequisite: ME 3311 and ME 338.

436 Dynamics of Machinery 3:2:3
Kinematics of mechanisms, gears and epicyclic gear trains. Synthesis of linkages. Calculation of inertia forces and shaking forces on machines. Multi-cyclinder engine balancing. Graphical and analytical methods are employed.
Prerequisite: ME 332 and ME 334.

437 Advanced Machine Design 3:2:3
The application of machine design principles to an integrated design of a complete machine, including fabrication and economic consideration.
Prerequisite: ME 4323.

438 Environmental Systems Engineering 3:2:3
Design of refrigeration and air-conditioning systems including selection of mechanical equipment, controls, piping and duct layout.
Prerequisite: ME 331 and ME 338.

439 Advanced Strength of Materials **3:3:0**
Introduction to the fundamental theory of three-dimensional elasticity. Specialization of the general theory to provide the theory of plane stress and plane strain. Determination of stress and deflections in a beam on elastic foundations, plates, shells and cylinders. Study of torsion of bars and cylinders.
Prerequisite: CE 232 and ME 334.

Department of Mathematics

Department Head:George D. Poole **205 Lucas Building**

Director of Mathematics Instruction: Sam M. Wood, Jr.

Professors: Berzsenyi, Crim, Poole, Stark

Professor Emeritus: Bell (1979), Latimer (1979)

Associate Professors: Baj, Bell, Brookner, Brenizer, Dingle, Laidacker, Price, Wood

Assistant Professors: Green, Harvill, Kohli, Lauffer, Lee, Matheson, Parrish, Read, Saet, Thames

The Department of Mathematics offers courses in applied and pure mathematics, computer science, mathematics education for elementary and secondary school certification, and statistics. These programs permit students to select courses suited to a variety of interests and career goals. Advising plays an integral role in achieving these objectives. Consequently each student is assigned an advisor to assist with scheduling and career planning. An active mathematics club and computer science club provide students with the opportunity to work with fellow mathematics and computer science majors in a number of activities.

The department offers the following Baccalaureate degrees:

Bachelor of Arts in Mathematics

Bachelor of Science in Mathematics

Bachelor of Science in Mathematical Sciences (Applied Mathematics Concentration)

Bachelor of Science in Mathematical Sciences (Statistics Concentration)

The first two degree programs emphasize the traditional aspects of mathematics, both as a basic science and as the major tool in solving problems. They provide depth in analytical reasoning, abstraction and structure. Students graduating with these degrees are equipped to enter secondary teaching or to pursue graduate programs, in mathematics or statistics.

The last two programs prepare students for careers in a variety of fields, including positions in industry, business and government. Students who chose one of the latter two programs, concentrating in applied mathematics or statistics, will have the appropriate information recorded on their transcripts.

The importance of the mathematical sciences to the ambitious scientist and engineer cannot be overemphasized. Many phenomena of nature can best be understood when translated into the language of mathematics. A student majoring in science or engineering at a university should become acquainted with the basic tools of mathematics.

Undergraduate education in mathematics has, and will continue, to undergo substantial changes during this decade. The computer is primarily responsible for this. High speed computing machines have for many years been an important mathematical applications tool in business, industry and government.This has created new demands for professional applied mathematicians. Such people optimally have a solid background in basic mathematics, an understanding of algorithm design and analysis, a programing skill in at least one programming language, and finally, a mastery of important techniques in applied mathematics, such as operations research and in statistics.

People with such qualifications may secure positions in industrial management, market forecasting, high-technology fabrication plants and other comparable positions.

Finally, those with an interest in statistics are quite valuable to firms-for example, banking and insurance-who deal with a large amount of data and thus need professional mathematicians to develop and maintain the associated computer software.

Placement Test

The Mathematics Department has developed a Placement Test for entrance into freshman mathematics courses. This test will assist the department in placing a student in the course for which the student's chances for successful completion are best. The test will be given during the summer orientation and regular registration periods. For information concerning the test, contact the Mathematics Department, Box 10047, Lamar University, Beaumont, Texas, 77710. All entering students are required to take the placement test before entering Mth 1333, 134, 1334, 1335, 148 or 236. Entrance into all other mathematics courses is determined by the advisor in the student's major department, consistent with course prerequisites.

Teacher Certification Mathematics

Those wishing to secure the Bachelor of Arts or the Bachelor of Science in Mathematics and at the same time certify for a provisional secondary school certificate with a teaching field in mathematics must include in their degree program the following:

1. 24 hours of professional education (consult the Director of Mathematics Instruction)
2. Minor to be expanded to include an approved 24 hour teaching field other than mathematics (Consult this bulletin—College of Education).
3. 12 hours of advanced mathematics to include Mth 333 or 433.

Elementary certification requires the Mathematics sequence 135, 136, 3313. This can be expanded into either an 18 or 24 semester hour specialization in elementary mathematics. For specific courses, contact the Department of Mathematics.

Recommended Programs of Study

Requirements Common to all Four Degree Programs:

1. General requirements: (Minimum) 36 hours
   a. Eng—Composition—six semester hours (Eng 131, 132)
   b. Eng—Literature—six semester hours
   c. Laboratory science—eight semester hours (same science)*
   d. POLS 231, 232
   e. History—Soph Am His—six semester hours
   f. PE (Activity)—four semester hours (minimum)
2. Major requirements: 46-48 hours
   a. Mth 148, 149, 241—Calculus and Analytic Geometry
   b. Mth 233, 331, 3311, 335, 338, 3370 (or 438), 4315
   c. Mth Electives—7-9 semester hours at the 300/3000 level or higher depending on program of study.
   d. CS 131, CS 132
3. Minor requirements (see program below)
4. Electives (see program below)

To be chosen from Phy 141/142, or 247/248 Chem, Bio or Geo 141/142

Bachelor of Arts—Mathematics Major—Total Hours 124-126

1. Additional General Requirements: 10-12 Hours
   Foreign Lanugage
2. Additional Major requirements:
   Select Three Courses from the List: Mth 333, 3321, 4202, 4203, 431, 433, 4316, 4321, 4322, 4325
3. Minor Requirements: 18 Hours
4. Electives: 12 Hours
   At least six hours other than mathematics

Bachelor of Science—Mathematics Major—Total Hours 124-126

1. Additional general requirements:— None
2. Additional major requirements: 7-9 hours
   Select three courses from the list: Mth 333, 3321, 4202, 4203, 431, 433, 4316, 4322, 4325
3. Professional Area: 27 hours
   Courses to be approved by the department.
4. Electives: 15 hours
   At least six hours (to be approved by the department) must be from the Humanities and Social Sciences.

Bachelor of Science—Mathematical Sciences—Applied Mathematics Concentration

This is a professional program that prepares the student to start an industrial or government career immediately after graduation. However, the student's training will be sufficiently comprehensive to allow entry into most graduate programs in the engineering, mathematical, physical, life or management sciences as well as computer science.

1. Additional General Requirements: None
2. Additional Major Requirements: 7-9 hours
   Select three courses from the list: Mth 4202, 4203, 431, 4316, 4325
3. Professional Area: 27 hours
   Courses to be approved by Department
4. Electives: 15 hours
   At least six hours (to be approved by the Department) must be from the Humanities and Social Sciences

Bachelor of Science—Mathematical Sciences—Statistics Concentration

(See Description under Bachelor of Science—Mathematics Science—Applied Mathematics Concentration)

1. Additional General Requirements: None
2. Additional Major Requirements: 9 hours
   Select one course from the list:
   a. Mth 3321, 433, 4316
   b. Mth 4321, 4322
   Professional Area: 27 hours
3. Courses to be approved by Department
4. Electives: 15 hours
   At least six hours (to be approved by the Department) must be from the Humanities and Social Sciences

Standard Curriculum—For All Degree Programs

First Year

First Semester		Second Semester	
Eng Comp	3	Eng Composition	3
Mth 148 Calculus and Analytic Geometry I	4	CS 132 Computer Programming II	3
CS 131 Computer Programming I	3	Mth 149 Calculus and Analytic Geometry	4
Humanities & Social Science Elective or Foreign Language	3-4	Mth 233 Linear Algebra I	3
PE/MLb/MS	1	Science/Lab Elective or Foreign Language	4
		**PE/MLb/MS	1
	14 or 15		18

Second Year

First Semester		Second Semester	
Mth 241 Calculus and Analytic Geometry III	4	English Literature (1)	3
English Literature	3	Mth 331 Ordinary Diff Equ	3
His Soph American	3	Mth 3370 Intro to Theory Stat Info	3
POLS 231	3	POLS 232	3
PE/MLb/MS	1	His Soph American	3
		**PE/MS	1
	17		16

Third Year

First Semester		Second Semester	
Mth 3311 Set Theory	3	Mth 338 Advanced Calculus	3
335 Modern Algebra	3	Mth 4315 Numerical Analysis	3
Science/Lab Elective	4	Mth Sci Elective	3
*Professional Elective	3	Professional Elective	3
Mth Sci Elective	3	Elective	3
	16		15

Fourth Year

First Semester		Second Semester	
Mth Sci Elective	3-6	Mth Sci Elective	3
Professional Elective	6	Humanities and Social Science Elective	3
**Elective	3-6	Professional Elective	3
		***Elective	3-6
	15-18		15

*Professional electives are courses selected in consultation with the student's advisor. ***To be selected with the approval of the student's counselor.*

(1) In place of English literature, the student may choose a course in Speech, Technical Report Writing or Foreign Language.

Bachelor of Arts/Bachelor of Science—Teacher Certification

Those students desiring to complete the requirements for the Bachelor of Arts Degree or the Bachelor of Science Degree may, at the same time, complete requirements for secondary teacher certification by including the following additional requirements in their program:

1. Mathematics: ..... Mathematics electives must include Mth 333 or 433.
2. Education (18 hours):

   Students wishing to secure the Bachelor of Arts or Bachelor of Science degree and at the same time to certify for a provisional certificate with a secondary teaching field will be required to meet a revised set of teacher education standards. All teacher education programs are subject to comply beginning in the fall of 1985. It will be necessary to consult with your department head or the College of Education Advising Center concerning the specifics of these requirements.
3. The minor/professional area in the B.A./B.S. Program may be replaced with a 24-hour teaching minor. Consult the Mathematics Department for additional details.

Mathematics Courses (Mth)

1313 Individualized Tutorial Computational Skills **3:3:0**

Study of basic concepts and fundamental operations involved in computations. Includes some elementary algebra. Not recommended for students who have received credit for a course in which this or its equivalent is a prerequisite.

1314 Individualized Tutorial Intermediate Algebra **3:3:0**

Review of skills and concepts of intermediate algebra. Signed numbers, linear equations, linear equalities, quadratic equations, quadratic inequalities, systems of equations, determinants and logarithms. Recommended for those who need a review before taking Mth 134 or 1334.

Prerequisite: Mth 1313 or its equivalent.

1333 Trigonometry 3:3:0
Study of trigonometric functions, identities, inverse functions, trigonometric equations, graphs and applications of trigonometry. Recommended for students who have not had high school trigonometry.
Prerequisite: Two years of high school algebra or Mth 1314.

1334 College Algebra 3:3:0
Linear, quadratic equations and inequalities, determinants, matrices, systems of equations, partial fractions, binomial theorem, logarithms, theory of equations.
Prerequisite: Mth 1314 or its equivalent.

1335 Precalculus Mathematics 3:3:0
Fundamentals of algebra, trigonometry and analytic geometry. Prepares students for Mth 148 and 236.
Prerequisite: Mth 1334 or its equivalent.

1336 Survey of Mathematics 3:3:0
Mathematics history, sets, logic, problem solving, probability and related topics.
Prerequisite: High School Algebra I, II, III and IV (two years) or Mth 1334.

134 Mathematics for Business Applications 3:3:0
Review of basic algebraic techniques, linear equations and inequalities; the mathematics of finance, matrices, linear programming, and an introduction to probability and statistics.
Prerequisite: Mth 1314 or its equivalent.

1341 Elements of Analysis for Business Applications 3:3:0
An introduction to calculus. The derivative, applications of the derivative, techniques of differentiation, exponential and natural logarithmic functions, an introduction to the integral calculus.
Prerequisite: Mth 134 or 1334, or their equivalent.

135 Contemporary Mathematics I 3:3:0
Logic, introduction to mathematical reasoning, sets and relations, the system of whole numbers, numeration systems, systems of integers and elementary number theory.
Prerequisite: Mth 1314 or its equivalent. For elementary education majors only.

136 Contemporary Mathematics II 3:3:0
Real numbers with emphasis on fractions, decimals, percents, ratio and proportion. Concepts of probability and statistics, graphs, and introduction to BASIC programming.
Prerequisite: Mth 135 or its equivalent. For elementary education majors only.

148 Calculus and Analytic Geometry I 4:4:0
Functions, limits, derivatives of algebraic, trigonometric, exponential and logarithmic functions, curve sketching, related rates, maximum and minimum problems, definite and indefinite integrals with applications.
Prerequisite: Mth 1335 or its equivalent.

149 Calculus and Analytic Geometry II 4:4:0
Methods of integration, polar co-ordinates, and vector analysis.
Prerequisite: Mth 149 or its equivalent.

233 Linear Algebra I 3:3:0
A first course in linear algebra, including vector and matrix arithmetic, solutions of linear systems and the Eigenvalue-Eigenvector problem. Elementary vector space and linear transformation theory.
Prerequisite: Mth 148 (Mth 236) or current enrollment in Mth 148 (Mth 236).

234 Elementary Statistics 3:3:0
Non-calculus based introduction to statistics. Statistical measures of data, statistical description of data, elementary probability, random variables, binomial and normal distribution, estimation, testing hypotheses.
Prerequisite: Mth 1334 or its equivalent.

236 Calculus I 3:3:0
Sets, functions, limits, derivatives and applications. Introduction to integral calculus. Designed for students majoring in business, social and life sciences.
Prerequisite: Mth 1335 or its equivalent.

237 Calculus II 3:3:0
Integral calculus and applications. Functions of several variables. Convergence and divergence of series and sequences. Designed for students majoring in business, social and life sciences.
Prerequisite: Mth 236.

241 Calculus and Analytic Geometry III 4:4:0
Vectors, parametric equations, functions of several variables, partial derivatives, multiple integrals, differential equations.
Prerequisite: Mth 149 or equivalent.

330 Principles of Mathematics for Elementary Education Majors 3:3:0
Introduction to some modern mathematical concepts. Structure of the number system, groups and related structures, sets and counting.
Prerequisite: Mth 1334 or its equivalent, and Mth 136.

3301 Applied Differential Equations 3:3:0
Ordinary differential equations designed for engineering students. Classical solutions to first and second order equations, including Laplace transforms and series solution.
Prerequisite: Mth 241

331 Ordinary Differential Equations 3:3:0
Classical and numerical solutions of ordinary differential equations and linear systems. Existence and uniqueness of solutions.
Prerequisite: Mth 149 and 233.

3311 Set Theory 3:3:0
Infinite sets, cardinal and ordinal arithmetic, axiom of choice, transfinite induction, introduction to topology.
Prerequisite: Mth 149

3313 Geometry for Elementary Education Majors 3:3:0
The development of Euclidean geometry, concepts of measurement and co-ordinate geometry.
Prerequisite: Mth 136, or permission of instructor.

3315 Number Theory for Elementary Education Majors 3:3:0
A development of the elementary theory of numbers, Diophantine equations, congruences, Fibonacci numbers and magic squares.
Prerequisite: Mth 1334 or its equivalent, and Mth 136.

3317 Problem Solving for Elementary Education Majors 3:3:0
Role of inductive and deductive methods in solving and posing problems, motivational techniques to help children become problem solvers. Methodology is introduced via illustrative examples.
Prerequisite: Mth 1334 or its equivalent, and Mth 136.

3321 Discrete Structures 3:3:0
Combinatorics, graphs, Boolean algebra, algebraic structures, coding theory, finite state machines, machine design and computability.
Prerequisite: Mth 149 and 233, and CS 132.

333 Higher Geometry 3:3:0
Axiomatic and set-theoretic treatment of geometry. An analysis of the metric and synthetic approach to Euclidean geometry. Introduction to non-Euclidean geometries.
Prerequisite: Mth 149.

335 Modern Algebra 3:3:0
An introduction to algebraic structures, groups, rings, integral domains and fields.
Prerequisite: Mth 233 and Mth 149.

3370 Introduction to the Theory of Statistical Inference 3:3:0
A calculus-based introduction to statistics. Probability, special probability distribution, nature of statistical methods, sampling theory, estimation, testing hypotheses.
Prerequisite: Mth 149 or 237.

338 Advanced Calculus 3:3:0
Sequences, series, Riemann integral, Weierstrass approximation theorem, Picard existence theorem for differential equations, Lebesque integral.
Prerequisite: Mth 241

4131, 4231, 4331 Special Problems 1-3:1-3:0
Special advanced problems in mathematics to suit the needs of individual students. Course may be repeated for credit when the topic varies.
Prerequisite: Consent of instructor.

4142, 4242, 4342 Special Topics in Analysis 1-3:1-3:0
Special advanced problems in analysis to suit the needs of individual students. Course may be repeated for credit when the topic varies.
Prerequisite: Consent of instructor.

4202 Partial Differential Equations 2:2:0
Fourier series. Solution of boundary value problems including the heat equation, the wave equation, and the potential equation.
Prerequisite: Mth 241, and Mth 3301 or Mth 331.

4203 Vector Analysis 2:2:0
Vector algebra, vector calculus of three dimensional vector fields (gradients, curl, divergence Laplacian) Green's, Gauss' and Stokes' theorems.
Prerequisite: Mth 241

431 (G) Complex Variables 3:3:0
Complex numbers, analytic functions, complex line integrals, Cauchy integral formula and applications.
Prerequisite: Mth 241

4315 (G) Numerical Analysis 3:3:0
Algorithms for solving linear and non-linear equations and systems thereof. Interpolating polynomials, finite difference approximations of derivatives, techniques of numerical integration. One-step and multi-step methods for solving ordinary differential equations and systems thereof.
Prerequisite: Mth 241 and CS 132, or its equivalent.

4316 (G) Linear Programming 3:3:0
Theory, development and computational aspects of the simplex method; convexity; degeneracy problems; revised simplex method; transportation problems, network flow problems; industrial applications.
Prerequisite: Mth 149, Mth 233 and CS 132.

4321 Regression Analysis 3:3:0
The simple linear model and the principle of least squares. Inference about slope parameter, prediction of future values, model checking, polynomial regression, multiple regression analysis, regression using matrix algebra.
Prerequisite: Mth 3370 or 438, & Mth 233.

4322 (G) Analysis of Variance 3:3:0
Single sample inference, two sample inference, single factor analysis of variance, multiple comparison in ANOVA, multi-factor analysis of variance, 2p factorial experiment.
Prerequisite: Mth 3370 or 438

4325 (G) Finite Element Analysis 3:3:0
Fundamentals of the finite element method. Domain and discretization, interpolation functions and computer implementation. Applications to heat transfer, torsion of noncircular sections and irrotational flow.
Prerequisite: Mth 3301 or Mth 331, or equivalent.

433 (G) Linear Algebra II 3:3:0
Vector-spaces, linear transformations, matrices, determinants, Eigenvalues, Eigenvectors, canonical forms, bilinear mappings and quadratic forms.
Prerequisite: Mth 149 and 233.

437 (G) Mathematical Theory of Probability 3:3:0
Calculus-based introduction to formal probability theory. Basic probability theory, independence and dependence, mean and variance, random variables, expectation, sums of independent random variables, central limit theorem.
A student cannot receive credit for both Mth 3370 and 437.
Prerequisite: Mth 241.

438 (G) Theory of Statistical Inference 3:3:0
A formal introduction to statistical inference: sampling theory, general principles of statistical inference, goodness of fit test, regression and correlation, analysis of variance.
Prerequisite: Mth 3370 or 437


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SONY

College of Fine Arts and Communication

Departments: Art, Communication, Music

W. Brock Brentlinger, Ph.D., Dean

Aims and Purposes

In Relation to the University: Within the context of a philosophy that suggests that art and science may improve upon nature, the College of Fine Arts and Communication provides work on a professional level in several creative and practical disciplines. The College also assumes the role of contributing to the education of the "whole" man or woman; therefore, with the possible exception of some of the upper level courses, all of the work available in the College is open to and within the capabilities of most students enrolled in the University. It is the purpose of those courses in the fine arts to confront the unknown from a non-science oriented approach to knowledge to encourage the development of aesthetic sensitivity and to provide for an enriching artistic experience. Several programs in Communication are available within the College. The goal of the coursework in these areas is to educate students for professional work within the fields of public speaking, the mass media, and speech and hearing therapy.

In Relation to the Departments: The College of Fine Arts and Communication offers the following basic degree programs:

1. Bachelor of Fine Arts Art Major
   a. Graphic Design
   b. Studio Art
2. Bachelor of Science Art Major
   a. Plan I Graphic Design
   b. Plan II Studio Art
   c. Plan III All Level Teacher Certification
   d. Secondary Art
3. Bachelor of Music Major in:
   a. All Applied Fields
   b. Theory and Composition
   c. Music Education (Teacher Certification, all levels)
4. Bachelor of Science Speech or Mass Communication Major
   a. Plan I Teacher Certification in Speech, Theater or Journalism
   b. Plan II Teacher Certification in Speech and Hearing Therapy
   c. Plan III Bachelor of Science - Mass Communication
   d. Plan IV Speech and Hearing Therapy, Speech communication or, Theater.
5. Bachelor of Arts Speech Communication major, available in all four plans listed
   a. Bachelor of Science Communication Majors
   b. Bachelor of General Studies Fine Arts

Descriptions of graduate programs leading to the Master of Music, Master of Music Education and master of speech in speech, speech pathology, audiology and deaf education degrees are included in the Graduate Bulletin.

Humanities Courses (Hum)

The departments of art, communication and music of the College of Fine and Applied Arts cooperate in the offering of three interdisciplinary courses in fine arts appreciation.

130 **Appreciation of Art and Music** 3:3:0

Survey course of art and music appreciation. Introduces student to major monuments of painting, sculpture and architecture. The course is concerned with basic principles of line, color, space and form common to visual art. The music section seeks to develop the student's perception of "sound" and "time" in music. A wide spectrum of music is presented including jazz, rock, opera, nonwestern and traditional classical.

131 Appreciation of Music and Theater 3:3:0
A survey course of music and theater appreciation. Introduces student to the concepts of "sound" and "time" in music. A wide spectrum of music will be presented including jass, rock, opera, nonwestern and traditional classical. The theater section presents theater as a fine art including comment on the related fields of motion pictures and television.

132 Appreciation of Theater and Art 3:3:0
A survey course of theater and art appreciation. Introduces the student to theater as a fine art including comment of the related fields of motion pictures and television. The art section of the course presents the major monuments of painting, sculpture and architecture. Explains the basic principles of line, color, space and form common to all visual arts.

231 Studies in Italian Culture 3:2:4
Exposure to and study of the history of the development of the cultural arts in central Italy by means of lectures and exploratory visits to churches, museums and important historical sites in Rome, Naples, Florence and nearby cities.
Summers only. (LU-Rome only.)

331 Experiential Learning in the Arts 3:0:9
Design and implementation of experiential learning study project under guidance of faculty advisor. Provides opportunity to apply classroom learning to actual experiences in community art programs. May be repeated for credit.

335 Topics in Museum Studies 3:3:0
Research seminars and individual directed study conference courses on selected topics, techniques and developments in museology. May be repeated for a maximum of six semester hours when the area of study is different.

439 Seminar in the Fine Arts 3:3:0
A study of aesthetics, i.e., the theory of fine arts and people's response to them particularly in reference to the visual arts, music and theater.

Bachelor of General Studies — Fine Arts

The Bachelor of General Studies Fine Arts degree offers a program of interest to those who desire a wide knowledge of the arts without the intent of becoming practicing professional artists and teachers of the arts. Thus, the program offered through this degree resists any tendency toward specialization within the arts. It does provide opportunity, however, for an individual to construct his/her own curricular plan, i.e., to follow a special interest within the arts, *or* to complement his/her appreciation and understanding of the arts through the selection of a rather broadbased program of elective courses from the University offerings as a whole.

Recommended Program of Study

First Year

First Semester		Second Semester	
The 233 Introduction to Theater	3	Art 135 Art Appreciation	3
MLt 122 Music Literature	2	His 234 American History: Arts in America	3
MEd 131 Elements of Music	3	MLt 122 Music Literature	2
English Composition	3	English Composition	3
Mth/Sci	3-4	Mth/Sci	3-4
PE Activity	1	PE Activity	1
	15-16		15-16

Second Year

First Semester		Second Semester	
MLt 113 Pop Music Survey	1	Art 236 Art History II	3
Art 235 Art History Survey I	3	Eng Literature/Spc/Foreign Language	3
Eng 2311 English Literature	3	POLS 232 Introduction to American Government II	3
POLS 231 Introduction to American Government I	3	Mth	3
Mth/Sci	3-4	His 231 American History	3
PE Activity	1	PE Activity	1
	14-15		16-17

Third Year

First Semester		Second Semester	
MLt 333 Music History I	3	MLt 334 Music History II	3
Eng 337/4317 Drama	3	The 334 Stagecraft	3
Hum 331 Experiential Learning	3	Hum 331 Experiential Learning	3
Elective	4	Elective	3
Elective	4	Elective	4
	16		16

Fourth Year

First Semester		Second Semester	
The 436 History of Theater	3	Hum 439 Seminar Fine Arts	3
Hum 331 Experiential Learning	3	Elective	3
Elective	3	Elective	3
Elective	3	Elective	3
Elective	3		
	15		12

Department of Art

Department Head: Robert C. Rogan **107B Art Building**

Professors: Rogan, Newman

Associate Professors: Madden, O'Neill

Assistant Professors: Fitzpatrick, Jack, Lokensgard

Instructors: Fournet, Sommerfeld

Adjunct Instructor: Dubuisson

The Department of Art offers undergraduate instruction leading to the Bachelor of Fine Arts degree with specialization in the following areas: Graphic Design, Painting, Drawing, Printmaking, Sculpture, and Ceramics, and the Bachelor of Science degree in studio art and graphic design. Art courses are designed for the general student as well as those who intend to enter the visual arts professionally.

Art majors are required to follow the prescribed sequence of courses. The letter grade "C" will be the minimum prerequisite grade for continuing studio courses in sequence.

All graduating art majors must be counseled by the Art Department Chairman during the first semester of their senior year.

During the senior year, a candidate for a degree in art will be required to prepare a one-person exhibit or to participate in a group exhibit. The Department of Art reserves the right to retain a selected work from each graduate for its collection.

A nonmajor student may be admitted to an art course requiring prerequisites with the consent of the instructor.

Students may minor in art by earning 18 hours of credit approved by the department head.

Recommended Programs of Study

Bachelor of Fine Arts

Specialization in Graphic Design

First Year

First Semester		Second Semester	
Art 131 Drawing I	3	Art 132 Drawing II	3
Art 133 Design I	3	Art 134 Design II	3
Art 135 Art Appreciation	3	Hum 131 Appreciation of Music and Theater	3
English Composition	3	English Composition	3
PE Activity	1	PE Activity	1
Mth/Laboratory Science	3-4	Mth/Laboratory Science	3-4
	16-17		16-17

Second Year

First Semester		Second Semester	
Art 231 Drawing III	3	Art 232 Drawing IV	3
Art 233 Design III	3	Art 236 Art History II	3
Art 235 Art History Survey I	3	Art 237 Graphic Design I	3
PE Activity	2	PE Activity	2
Eng Literature	3	Eng Literature/Spc/Foreign Language	3
Mth/Laboratory Science	3-4	Mth/Laboratory Science	3-4
	17-18		17-18

Third Year*

First Semester		Second Semester	
Art 139 Photography I	3	Art 1393 Photography II	3
Art 3313 Illustration I	3	Art 3343 Graphic Design III	3
Art 3333 Graphic Design II	3	Art History Elective	3
Sophomore American History	3	Sophomore American History	3
POLS 231 Introduction to American Government I	3	POLS 232 Introduction to American Government II	3
CS 131 Introduction to Programming	3	Elective	3
	18		18

Fourth Year

First Semester		Second Semester	
Graphic Design Elective	3	Art 4399 Thesis	3
Art 3355 Printmaking I	3	Art Elective	3
Art 3316 Watercolor I	3	Art Elective	3
Art History Elective	3	Art History Elective	3
Elective	3	Elective	3
	15		15

**Art 235-236 prerequisite to all Art 300-400 level courses for art majors.*

Bachelor of Fine Arts

Specialization in Computer Graphics

First Year

First Semester		Second Semester	
Art 131 Drawing I	3	Art 132 Drawing II	3
Art 133 Design I	3	Art 134 Design II	3
Art 135 Art Appreciation	3	Hum 131 Apprec of Music & Theatre	3
English Composition	3	English Composition	3
PE Activity	1	PE Activity	1
Mth/Laboratory Science	3-4	Mth/Laboratory Science	3-4
	16-17		16-17

Second Year

First Semester		Second Semester	
Art 231 Drawing III	3	Art 232 Drawing IV	3
Art 233 Design III	3	Art 236 Art History II	3
Art 235 Art History Survey I	3	Art 237 Graphic Design I	3
PE Activity	2	PE Activity	2
Eng Literature	3	Eng Literature/Spc/Foreign Language	3
Mth/Laboratory Science	3-4	Mth/Laboratory Science	3-4
	17-18		17-18

Third Year*

First Semester		Second Semester	
Art 3343 Graphic Design III	3	Art 4343 Computer Graphics I	3
Art 3313 Illustration I	3	Art History Elective	3
Sophomore American History	3	Sophomore American History	3
POLS 231 Intro to American Gov I	3	POLS 232 Intro to American Gov II	3
CS 131 Intro to Programming	3	Art 139 Photography I	3
		Elective	3
	15		18

Fourth Year

First Semester		Second Semester	
Art 4353 Computer Graphics II	3	Art 4399 Thesis	3
Art 3355 Printmaking I	3	Art Elective	3
Art 3316 Watercolor I	3	Art Studio Elective	3
Art History Elective	3	Art History Elective	3
Elective	3	Elective	3
	15		15

**Art 235-236 prerequisite to all Art 300-400 level courses for art majors.*

Bachelor of Fine Arts

Specialization in Illustration

First Year

First Semester		Second Semester	
Art 131 Drawing I	3	Art 132 Drawing II	3
Art 133 Design I	3	Art 134 Design II	3
Art 135 Art Appreciation	3	Hum 131 Apprec of Music & Theatre	3
English Composition	3	English Composition	3
PE Activity	1	PE Activity	1
Mth/Laboratory Science	3-4	Mth/Laboratory Science	3-4
	16-17		16-17

Second Year

First Semester		Second Semester	
Art 231 Drawing III	3	Art 232 Drawing IV	3
Art 233 Design III	3	Art 236 Art History II	3
Art 235 Art History Survey I	3	Art 237 Graphic Design I	3
PE Activity	2	PE Activity	2
Eng Literature	3	Eng Lit/Spc/Foreign Language	3
Mth/Laboratory Science	3-4	Mth/Laboratory Science	3-4
	17-18		17-18

Third Year*

First Semester		Second Semester	
Art 139 Photography I	3	Art 3323 Illustration II	3
Art 3313 Illustration I	3	Art 3343 Graphic Design III	3
Art 3315 Drawing V	3	Art History Elective	3
Sophomore American History	3	So[illegible]nore American History	3
POLS 231 Intro to American Gov	3	PO[illegible] 232 Intro to American Gov II	3
CS 131 Intro to Programming	3	Elect[illegible]e	3
	18		18

Fourth Year

First Semester		Second Semester	
Art 3353 Illustration III	3	Art 4399 Thesis	3
Art 3355 Printmaking I	3	Art Elective	3
Art 3316 Watercolor I	3	Art Studio Elective	3
Art History Elective	3	Art History Elective	3
Elective	3	Elective	3
	15		15

**Art 235-236 prerequisite to all Art 300-400 level courses for art majors.*

Specialization in Studio Art

Bachelor of Fine Arts, with a Studio emphasis in one of the following media: Painting, Drawing, Printmaking, Sculpture, or Ceramics.

Painting Emphasis:

72 credit hours of academic foundations, 60 credit hours of professional program; to include:

Art 131, 132, 133, 134, 139, 231, 232, 233, 234, 238, 3315, 3355, 3335 or 3376, 4399, four courses from courses Art 3316, 3317, 3326, 3327, 4316, or 4326, and two upper division art electives.

Printmaking Emphasis:

72 credit hours of academic foundations, 60 credit hours professional program; to include:

Art 131, 132, 133, 134, 139, 231, 232, 233, 234, 238, 3315, 3355, 3335 or 3376, 4399, four courses from courses Art 3365* and 4355*, 4399, and two upper division art electives.

Drawing Emphasis:

72 credit hours of academic foundations, 60 credit hours professional program, to include:

Art 131, 132, 133, 134, 139, 231, 232, 233, 234, 238, 3315, 3355, 3335 or 3376, 4399, four courses from courses Art 3325* 4315*, 4325*, and two upper division art electives.

Sculpture Emphasis:

72 credit hours of academic foundations, 60 credit hours professional program, to include:

Art 131, 132, 133, 134, 139, 231, 232, 233, 234, 238, 3315, 3355, 3335 or 3376, 4399, four courses from courses Art 3375*, and 4375*, and two upper division art electives.

Ceramic Emphasis:

72 credit hours of academic foundations, 60 credit hours professional program, to include:

Art 131, 132, 133, 134, 139, 231, 233, 234, 238, 3315, 3355, 3376, 4399, four courses from courses 3386* and 4376*.

These courses can be repeated for credit.

Bachelor of Science

Specialization in Graphic Design

First Year

First Semester		Second Semester	
Art 131 Drawing I	3	Art 132 Drawing II	3
Art 133 Design I	3	Art 134 Design II	3
English Composition	3	English Composition	3
PE Activity	1	PE Activity	1
Hum 131 Appreciation of Music and Theater	3	Mth/Laboratory Science	3-4
Mth/Laboratory Science	3-4	CS 131 Intro to Programming	3
	16-17		16-17

Second Year

First Semester		Second Semester	
Art 231 Drawing III	3	Art 236 Art History II	3
Art 233 Design III	3	Art 237 Graphic Design I	3
Art 235 Art History Survey I	3	Art 139 Photography I	3
English Literature	3	PE Activity	2
PE Activity	2	Elective	3
Elective	3	Eng Literature/Spc/Foreign Language	3
	17		17

Third Year*

First Semester		Second Semester	
Art 3313 Illustration I	3	Art 3343 Graphic Design III	3
Art 3333 Graphic Design II	3	Art 1393 Photography II	3
Sophomore American History	3	Sophomore American History	3
Mth/Laboratory Science	3-4	Mth/Laboratory Science	3-4
Elective	3	Elective	3
	15-16		15-16

Fourth Year

First Semester		Second Semester	
Art 3355 Printmaking I	3	Art 4399 Thesis	3
Art 3316 Watercolor I	3	Art Elective	3
POLS 231 Introduction to American Government I	3	POLS 232 Introduction to American Government II	3
Electives	9	Electives	9
	18		18

**Art 235-236 prerequisite to all Art 300-400 level courses for art majors.*

Bachelor of Science

Specialization in Computer Graphics

First Year

First Semester		Second Semester	
Art 131 Drawing I	3	Art 132 Drawing II	3
Art 133 Design I	3	Art 134 Design II	3
English Composition	3	English Composition	3
PE Activity	1	PE Activity	1
Hum 131 Apprec of Music/Theatre	3	Mth/Laboratory Science	3-4
Mth/Laboratory Science	3-4	CS 131 Intro to Programming	3
	16-17		16-17

Second Year

First Semester		Second Semester	
Art 231 Drawing III	3	Art 236 Art History II	3
Art 233 Design III	3	Art 237 Graphic Design I	3
Art 235 Art History Survey I	3	Art 139 Photography I	3
English Literature	3	PE Activity	2
PE Activity	2	Elective	3
Elective	3	Eng Lit/Spc/Foreign Language	3
	17		17

Third Year*

First Semester		Second Semester	
Art 3313 Illustration I	3	Art 4343 Computer Graphics I	3
Art 3343 Graphic Design III	3	Art 3316 Watercolor I	3
Sophomore American History	3	Sophomore American History	3
Mth/Laboratory Science	3-4	Mth/Laboratory Science	3-4
Elective	3	Elective	3
	15-16		15-16

Fourth Year

First Semester		Second Semester	
Art 3355 Printmaking I	3	Art 4399 Thesis	3
Art 4353 Computer Graphics II	3	Art Elective	3
POLS 231 Intro to American Gov		POLS 232 Intro to American Gov II	3
Electives	9	Electives	9
	18		18

**Art 235-236 prerequisite to all Art 300-400 level courses for art majors.*

Bachelor of Science

Specialization in Illustration

First Year

First Semester		Second Semester	
Art 131 Drawing I	3	Art 132 Drawing II	3
Art 133 Design I	3	Art 134 Design II	3
English Composition	3	English Composition	3
PE Activity	1	PE Activity	1
Hum 131 Apprec of Music & Theater	3	Mth/Laboratory Science	3-4
Mth/Laboratory Science	3-4	CS Intro to Programming	3
	16-17		16-17

Second Year

First Semester		Second Semester	
Art 231 Drawing III	3	Art 236 Art History II	3
Art 233 Design III	3	Art 237 Graphic Design I	3
Art 235 Art History Survey I	3	Art 139 Photography I	3
English Literature	3	PE Activity	2
PE Activity	2	Elective	3
Elective	3	Eng Lit/Spc/Foreign Language	3
	17		17

Third Year*

First Semester		Second Semester	
Art 3313 Illustration I	3	Art 3343 Graphic Design III	3
Art 3315 Drawing V	3	Art 3323 Illustration II	3
Sophomore American History	3	Sophomore American History	3
Mth/Laboratory Science	3-4	Mth/Laboratory Science	3-4
Elective	3	Elective	3
	15-16		15-16

Fourth Year

First Semester		Second Semester	
Art 3316 Watercolor I	3	Art 4399 Thesis	3
Art 3353 Illustration III	3	Art Elective	3
POLS 231 Intro to Am Gov I	3	POLS 232 Intro to Am Gov II	3
Electives	9	Electives	9
	18		18

**Art 235-236 prerequisite to all Art 300-400 level courses for art majors.*

Bachelor of Science

Specialization in Studio Art

First Year

First Semester		Second Semester	
Art 131 Drawing I	3	Art 132 Drawing II	3
Art 133 Design I	3	Art 134 Design II	3
English Composition	3	Art 135 Art Appreciation	3
PE Activity	1	English Composition	3
Hum 131 Appreciation of Music and Theater	3	PE Activity	1
Mth/Laboratory Science	3-4	Mth/Laboratory Science	3-4
	16-17		16-17

Second Year

First Semester		Second Semester	
Art 231 Drawing III	3	Art 231 Drawing IV	3
Art 233 Design III	3	Art 234 Sculpture I	3
Art 235 Art History Survey I	3	Art 236 Art History II	3
PE Activity	2	Art 238 Painting I	3
English Literature	3	PE Activity	2
Mth/Laboratory Science	3-4	Eng Literature/Spc/Foreign Language	3
	17-18		17

Third Year*

First Semester		Second Semester	
Art 3316 Watercolor I	3	Art 3327 Painting III	3
Art 3317 Painting II	3	Sophomore American History	3
Art 3355 Printmaking I	3	Electives	6
Sophomore American History	3	Mth/Laboratory Science	3-4
Electives	3		
	15		15-16

Fourth Year

First Semester		Second Semester	
Art History	3	Art 4399 Senior Thesis and Exhibit	3
POLS 231 Introduction to American Government I	3	Art History	3
Electives	12	POLS 232 Introduction to American Government II	3
		Electives	9
	18		18

Art 235-236 prerequisite to all Art 300-400 level courses for art majors.

Bachelor of Science

All-Levels Certification

First Year

First Semester		Second Semester	
Art 131 Drawing I	3	Art 132 Drawing II	3
Art 133 Design I	3	Art 134 Design II	3
English Composition	3	English Composition	3
PE Activity	1	PE Activity	1
Mth	3	Mth	3
Elective	3	Elective	3
	16		16

Second Year

First Semester		Second Semester	
Art 231 Drawing III	3	Art 236 Art History II	3
Art 233 Design III	3	English Literature	3
Art 235 Art History Survey I	3	PE Activity	2
English Literature	3	Science (Laboratory)	4
PE Activity	2	Electives	6
Science (Laboratory)	4		
	18		18

Third Year*

First Semester		Second Semester	
Art 3316 Watercolor I	3	Art 3381 Secondary Art	3
Art 3371 Elementary Art Education	3	C&I 334 Child Development and Evaluation	3
C&I 331 Foundations of Education	3	POLS 232 Introduction to American Government II	3
C&I 332 Educational Psychology	3	Sophomore American History	3
POLS 231 Introduction to American Government I	3	Elective	4
Sophomore American History	3		
	18		16

Fourth Year

First Semester		Second Semester	
Art 3355 Printmaking I	3	Art 4341 Crafts Sec Edu	3
Art 3376 Ceramics I	3	Art 4381 Problems: Art Education	3
Art 4331 Crafts Elementary Education	3	C&I 463 Student Teaching—Special	6
C&I 438 Classroom Management Secondary	3	Electives	3
Electives	3		
	15		15

Art 235-236 prerequisite to all Art 300-400 level courses for art majors.

Teacher Certification—Art

Students wishing to obtain the Bachelor of Science degree in art and at the same time to certify for a provisional secondary certificate with a teaching field in art, must include in their degree program the following:

1. An approved 24 hour additional teaching field. (See list of approved teaching fields in the College of Education section of this Bulletin).

2. Professional Development
3. Approved electives to complete a total of 132 semester hours.

Art Courses (Art)

131 Drawing I 3:6:0
A beginning course investigating a variety of drawing media, techniques and subjects, exploring perceptual and descriptive possibilities.

132 Drawing II 3:6:0
Continuation of Drawing I stressing the expressive and conceptual aspects of drawing.
Prerequisite: Art 131.

133 Design I 3:6:0
The study of the elements and concepts of two-dimensional design.

134 Design II 3:6:0
Continuation of Design I with emphasis upon three-dimensional concept.
Prerequisite: Art 133.

135 Art Appreciation 3:3:0
An introductory course emphasizing the understanding and appreciation of visual arts (painting, sculpture, architecture) Open to all students.

139 Photography I 3:6:0
An introduction to basic photographic processes and techniques used as an art medium.

1393 Photography II 3:6:0
Advanced study of black and white photography as an art medium.
Prerequisite: Art 139

231 Drawing III 3:6:0
A life drawing course emphasizing structure and action of the human figure.
Prerequisite: Art 132.

232 Drawing IV 3:6:0
A continuation of Drawing III with emphasis on individual expression.
Prerequisite: Art 231.

233 Design III 3:6:0
An advanced investigation into the problems of two-dimensional form with emphasis on individual expression.
Prerequisite: Art 134.

234 Sculpture I 3:6:0
An exploration of the various sculptural approaches in a variety of media including additive and subtractive techniques.
Prerequisite: Art 132 and 134.

235 Art History Survey I 3:3:0
A survey of painting, sculpture, architecture and the minor arts from prehistoric times to the 14th Century.

236 Art History Survey II 3:3:0
A survey of painting, sculpture, architecture and the minor arts from the 14th Century to the present.

237 Graphic Design I 3:6:0
An introduction to the field of graphic design with emphasis on typography and basic layout.

238 Painting I 3:6:0
Exploring the potentials of painting media with emphasis on color and composition.
Prerequisite: Art 132 and 134.

239 Color I 3:6:0
An introduction to color printing techniques and the use of color analyzers.
Prerequisite: Art 1393

3313 Illustration I 3:6:0
A media course. The preparation and execution of graphic material for reproduction.

3315 Drawing V 3:6:0
Continuation of drawing. Experimentation with various media and their adaptability to drawing principles.
Prerequisite: Art 232.

3316 Watercolor I 3:6:0
Study and practice in the planning and execution of paintings in transparent and opaque watercolor.
Prerequisite: Art 233. May be repeated for credit.

3317 Painting II 3:6:0
Continuation of Painting I with emphasis on individual expression.
Prerequisite: Art 238. May be repeated for credit.

3323 Illustration II 3:6:0
Experimentation with various techniques and/or media. Continuation of Art 3313.
Prerequisite: Art 3313.

3325 Drawing VI 3:6:0
Continuation of Art 3315.
Prerequisite: Art 3315.

3326 Watercolor II 3:6:0
A continuation of 3316. May be repeated for credit.
Prerequisite: Art 3316.

3327 Painting III 3:6:0
Continuation of 3317. May be repeated for credit.
Prerequisite: Art 3317.

3333 Graphic Design II 3:6:0
The study of advanced layout for media advertising, collateral and editorial material and the basic preparation of art for reproduction.
Prerequisite: Art 237.

3335 Crafts 3:6:0
Basic processes of textile design, weaving, leather and jewelry. May be repeated for credit.

3343 Graphic Design III 3:6:0
Photo-mechanical reproduction, camera ready art for reproduction, introduction to computer imaging with emphasis on type, typesetting and text design and page layout. Advertising layout in color and introductory package design. Hard copy production and use in practical problems of design and reproduction.
Prerequisite: Art 139, 3313, 3333

3353 Fashion Layout and Illustration 3:6:0
A study of basic layout and illustration for fashion advertising.

3355 Printmaking I 3:6:0
An introduction to printmaking with an emphasis on intaglio and relief processes.
Prerequisite: Art 233.

3365 Printmaking II 3:6:0
A continuation of Art 3355 with emphasis on planographic and serigraphic techniques. May be repeated for credit.
Prerequisite: Art 3355.

3371 Elementary Art Education 3:3:0
Curricula, methods, and materials for the elementary school.

3375 Sculpture II 3:6:0
Application of the principles of sculpture through experiment in clay, plaster and various materials. May be repeated for credit.
Prerequisite: Art 234.

3376 Ceramics I 3:6:0
Investigation and practice in ceramic processes: forming and firing techniques. May be repeated for credit.
Prerequisite: Art 234 or permission of instructor.

3381 Secondary Art Education 3:3:0
Curricula, methods, and materials for the secondary school.
Spring semester only.

3386 Ceramics II 3:6:0
Opportunities for specialization in ceramic processes. May be repeated for credit.
Prerequisite: Art 3376.

339 Large Format Camera Photography 3:6:0
Introduction to the use of the view camera.
Prerequisite: Art 1393.

4315 Drawing VII 3:6:0
Specialized problems in studio area. May be repeated for credit.
Prerequisite: Art 232.

4316 Painting IV 3:6:0
Specialized problems in studio area. May be repeated for credit.

4325 Drawing VIII 3:6:0
A continuation of Drawing VII.
Prerequisite: Art 3325.

4326 Painting V 3:6:0
A continuation of Painting IV. May be repeated for credit.
Prerequisite: Art 4316.

4331 Crafts Elementary Education 3:6:0
An introduction to various craft materials and techniques used in the elementary school. Course may be repeated for credit.

4333 Problems in Graphic Design 3:6:0
Further study of commercial art techniques and typography.
Prerequisite: Art 3343.

4336 Professional Practices 3:3:0
A study of the practical aspects of the art profession with emphasis on health hazards, business procedures, and art law.

4338 Renaissance Art 3:3:0
Study of 15th and 16th century art in the Western world.

4341 Crafts Secondary Education 3:6:0
An introduction to the various craft materials and techniques used in the secondary school. Course may be repeated for credit.

4343 Computer Graphics I 3:6:0
Three dimensional imaging. Advanced work to package design, color modelling, structures. Advanced work in page design for editorial layout and electronic illustration/simulation for TV commercials.
Prerequisite: Art 3343

4348 Nineteenth & Twentieth Century Abstract Art 3:3:0
Foundation of Abstraction in European Art from Neo-Classicism through Surrealism.

4353 Computer Graphics II 3:6:0
Development of computer images for interactive video/film for educational communications. Animation and video for creative communications.
Prerequisite: Art 3343.

4355 Printmaking III 3:6:0
Specialized problems in studio area. May be repeated for credit.
Prerequisite: Art 3365.

4358 American Art 3:3:0
The development of painting, sculpture and architecture in the United States from Colonial times to the present.

4363 Computer Graphics III 3:6:0
(Specified elective for CG majors). Advanced problems in Computer Graphics. Student selected problems dealing with specific areas of computer images. Work done on a contract basis with specific areas of computer images. Work done on a contract basis with specified objectives and tangible results.
Prerequisite: Art 3343.

4368 Contemporary Art 3:3:0
A historical and critical analysis of painting, sculpture, and architecture in Europe and the Americas from 1900 to the present.

4373 Field Study in Graphic Design 3:6:0
Familiarization with the overall commercial art field through actual experience. Time to be arranged. Permission of instructor.

4375 Sculpture III 3:6:0
Specialized problems in studio area. May be repeated for credit.
Prerequisite: Art 3375.

4376 Ceramics III 3:6:0
Specialized problems in studio area. May be repeated for credit.
Prerequisite: Art 3376.

4378 Primitive Art 3:3:0
A study of the development and nature of primitive art.

4381 Problems: Art Education 3:6:0
Individual projects to be completed under faculty supervision.
Prerequisite: Art 3371, 3381.

4388 Modern Architecture and Sculpture 3:3:0
The development and evolution of modern architecture and sculpture from the late 19th century to the present in America and Europe.

4391 Directed Individual Study 3:A:0
Study of specialized area within art education field. May be repeated for credit.
Prerequisite: Permission of instructor.

4393 Directed Individual Study 3:A:0
Study of specialized area within commercial art field. May be repeated for credit.
Prerequisite: Permission of instructor.

4395 Directed Individual Study 3:A:0
Study of specialized area within fine arts field. May be repeated for credit.
Prerequisite: Permission of instructor.

4398 History of Photography 3:3:0
The development and evolution of photography from its invention in 1839 to the present.

4399 Thesis 3:6:0
Student selected problem encompassing an area of emphasis with suitable research, production, written support and oral presentation to a faculty committee.

Department of Communication

Department Head: John P. Johnson **201 Communication Building**

Professors: Achilles, Brentlinger, Holland, James, Moulton, Pederson

Associate Professors: Baker, Campbell, Johnson, Harrigan, Lin, McIntosh, Roth

Assistant Professors: King, Myers, Wilkerson, Winney

Instructors: Eddy, Holcomb

Adjunct Instructors: Cockrell, Lee, Perkins, Shatto

The Department of Communication has four plans of study with majors in speech communication, speech and hearing science, mass communication and theater. Secondary teacher certification is offered in speech, drama or journalism under Plan I. Plan II is a generic speech and hearing science degree that is a foundation for the master's degree and for professional teacher certification in speech pathology or deaf education. Plan III is the mass communication degree and Plan IV is an individualized program in any of the areas of the department. It does not lead to teacher certification, but being highly flexible it lends itself to specialized professional interests or to preparation for graduate study. Areas of concentration include radio/TV/film, journalism, public relations, interpersonal or organizational communication, theater, speech pathology and deaf education.

Speech and mass communication under Plan IV programs serve as appropriate degrees for entry into law schools. Either of these plans also may serve as a three year pre-law foundation for special degree programs described earlier under Degree Requirements. See the head of the Communication Department for details.

Theater majors, whether for degree or teacher certification purposes, are required to take Theater 210-Theater Practicum during four different semesters or summer terms. Two of these practicums may be transferred from other colleges.

Speech communication majors, regardless of area of concentration, are required to take Speech 1302, 131, 232, 235, 238, 332, 334, 4324, 433, and 434. The department does not accept grades of "D" in the major area.

Students wishing to major in one of the degree programs of study in the Department must meet the following admission requirements: 1) A minimum score of 700 on the Scholastic Aptitude Test or 15 on the ACT: and 2) A minimum score of 35 on the Test of Standard written English (TSWE). Transfer students and those wishing to change their major to one of the degree programs in the Department may do so by meeting the above requirements or by having a minimum grade point average of 2.25 based on at least 30 semester hours of college study.

Recommended Programs of Study

Bachelor of Science — Speech Communication

Plan I This program is designed 1081 for those who wish to qualify for a secondary teacher's certificate in speech, drama or journalism. Two teaching fields of 24 semester hours each are required for certification.

First Year

First Semester		Second Semester	
English Composition	3	English Composition	3
PE Activity	1	PE Activity	1
Science (Laboratory)	4	Science (Laboratory)	4
Mth	3	Mth	3
Major Required	6	Major Required	3
		Hum 132 Appreciation of Art and Theater	3
	17		17

Second Year

First Semester		Second Semester	
English Literature	3	English Literature	3
His United States (Soph)	3	His United States (Soph)	3
PE Activity	1	PE Activity	1
Major Required	6	Major Required	3
Electives	3	Electives	6
	16		16

Third Year

First Semester		Second Semester	
C&I 331 Foundations of Education	3	C&I 338 Curriculum, Materials and Evaluation	3
C&I 332 Educational Psychology	3	POLS 232 Introduction to American Government II	3
POLS 231 Introduction to American Government I	3	Major Adv	6
Major Adv	3	Teaching Field Two and/or Electives	6
Teaching Field Two and/or Electives	6		
	18		18

Fourth Year

First Semester		Second Semester	
C&I 438 Classroom Management Secondary	3	C&I 462 Student Teaching—Special	6
Major Adv	3	Teaching Field Two and/or Electives	6
Teaching Field Two and/or Electives	12		
	18		12

Below are the courses required for certification in each area. Speech Communication: Spc. 233, 232, 235, 238, 332, 334, 4324, 434

In addition, Speech 1302 and 433 are degree requirements.

Courses in the theater/drama area are: The 210, 132, 135, 137, 232, 332, 338, 435, 4371. In addition, Theater 1311 is a degree requirement.

Courses included in the journalism area are: Com 133, 231, 232, 333, 3381, 4383, 431 and 234. In addition, Com 131 is a degree requirement.

Plan II General Speech and Hearing Science. This program lays the foundation for teacher certification in speech therapy and deaf education and for preprofessional training in audiology, which may be completed on the graduate level. For specifics on undergraduate provisional teacher certification, please see the Director of the Communication Disorders Program.

NOTE: ASHA Certification requires completion of a master's degree in speech pathology or audiology.

First Year

First Semester		Second Semester	
Bio 141 General Biology	4	Bio 142 General Biology	4
English Composition	3	Hum 130, 131 or 132	3
PE Activity	1	English Composition	3
Mth	3	PE Activity	1
Spc 1301 Introduction to Speech and Language Disorders	3	Mth	3
Spc 1302 Phonology	3	Spc 1303 Speech, Hearing and Voice Science	3
	17		17

Second Year

First Semester		Second Semester	
English Literature	3	English Literature	3
His United States (Soph)	3	His United States (Soph)	3
PE Activity	1	PE Activity	1
Spc 2302 Introduction to Deaf Education	3	Spc 2303 Introduction to Audiology	3
Elective	6	Spc 2301 Introduction to Speech Pathology	3
		Elective	3
	16		16

Third Year

First Semester		Second Semester	
C&I 331 Foundations of Education	3	Spc 3302 Language Development and Language Disorders	3
C&I 332 Educational Psychology	3	SpEd 2301 Foundations of Special Education	3
POLS 231 Introduction to American Government I	3	C&I 334 Child Development and Evaluation	3
Spc 3303 Introduction to Manual Communication Systems	3	POLS 232 Introduction to American Government II	3
Spc 3301 Research	3	Elective	6
Spc 3304 Anatomy and Physiology of Speech and Hearing	3		
	18		18

Fourth Year

First Semester		Second Semester	
C&I 434 Classroom Management Elementary	3	Spc 4303 Clinical Practicum	3
Spc 4302 Advanced Audiology	3	Electives	9
Spc 4301 Advanced Speech Pathology	3		
Electives	9		
	18		12

Total 132

Plan III

Bachelor of Science — Mass Communication

The purpose of this degree program is a broadly-based preparation for university students who are interested in professional careers in mass communication, e.g., radio, television, film, journalism, public relations, industrial media, sales and advertising. In its attempt to prepare students for the communications industry as a whole, rather than for a specific position, the program focuses attention upon significant concepts of the mass communication process in contrast to efforts to refine and perfect specific skills. The program does, however, give attention to the development of basic speech, media, art and writing proficiency. Thus, a unique characteristic of this degree is its purpose to provide the student with an interdisciplinary experience in the study of communication involving several departments. For this reason, the major requirement is 43 hours instead of the usual 24 or 30 hours. Within this total program, 30 hours of specific coursework is required, and the student will complete the 43-hour total by selecting 13 hours from a second group of related courses referred to in the degree plan as 'major electives.' Credit for internship may be granted through the major and free elective areas. Each student will complete at least one internship.

The student may desire to emphasize non-quantitative business administration courses or teacher certification (Journalism) through careful use of electives in order to give a wider vocational opportunity.

First Year

First Semester		Second Semester	
English Composition	3	Eng 134 Composition	3
Science (Laboratory)	4	Science (Laboratory)	4
Spc 131 Public Speaking	3	Eco 233 Principles and Policies	3
Com 131 Introduction to Mass Communication	3	Com 133 News Writing	3
Hum 130, 131 or 132	3	CS 130 Computers and Society	3
PE Activity	1	PE Activity	1
	17		17

Second Year

First Semester		Second Semester	
Eng Literature or Spc 235	3	Spc 235 English Literature	3
Mth 1314	3	Mth 1334	3
His 231 American History	3	POLS 232 Introduction to American Government II	3
POLS 231 Introduction to American Government I	3	His 232 American History	3
Com 2384 Evolution of Motion Pictures	3	Major Elective	3
PE Activity	1	PE Activity	1
	16		16

Third Year

First Semester		Second Semester	
Com 234 Introduction to Broadcasting	3	Com 4383 Print Advertising	3
Foundation elective	3	Foundation elective	3
Com 431 Laws and Ethics of the Mass Media	3	Major electives	6
Eng 4326 Expository Writing or Com 231 News Reporting (R)	3	Foundation elective	3
Spc 434/332/439	3		
	15		15

Fourth Year

First Semester		Second Semester	
Foundation elective	6	Major electives	7
Major elective	3	General electives	8
General electives	3		
Com 3383 Broadcast Advertising	3		
	15		15

Total 124

Plan IV (For those not desiring teacher certification or the mass communication degree). It is designed primarily for those wishing concentrations in speech communication, theater or speech and hearing therapy, for purposes other than teacher certification. The plan provides a maximum of flexibility in the composition of the courses for the major. The first and second years of Plan IV are essentially the same as Plan I. It requires 124 semester hours. It may serve as preprofessional training for the field of law. It requires 120 semester hours exclusive of the required physical education courses/marching band/MS.

Bachelor of Arts — Speech Communication

Same as any of the above programs except for the completion of the course numbered 232 in a foreign language, six semester hours of literature, and an eighteen semester hour minor including six advanced hours. The B.A. is not available in Communication, Plan III.

Mass Communication Courses (Com)

131 Introduction to Mass Communication 3:3:0
Study of mass communication, analysis of media conglomerates, advertising, popular culture, and media-audience interaction.

133 News Writing 3:2:3
A study of the principles of news writing, with emphasis upon concise, accurate, objective writing. Proficiency in typewriting is required.

231 News Reporting 3:2:3
A basic course in gathering material and writing news stories for publication. Proficiency in typewriting is required. Course may be repeated for a maximum of six semester hours.
Prerequisite: Com 133 with a grade of C or higher.

232 Editing and Copyreading 3:2:3
The development and use of printing, type recognition, type harmony, preparing editorial material, writing headlines and correcting copy.
Prerequisite: Com 231.

234 Introduction to Broadcasting 3:2:3
A general introduction to the field of broadcasting, including a study of station and network organization and control by law and societal forces.

2341 Principles of Broadcast Production 3:2:3
Training in radio and television basic production with emphasis on oper campus broadcast facilities. Different formats will be considered. Practical experience in announcing, planning, production of programs.
Prerequisite: Com 234 or consent of instructor.

2384 Evolution of Motion Pictures 3:3:0
Development of American film as an art form, industry, mass medium and "language."

2385 Film Genre 3:3:0
Familiar entertainment film types: science fiction, horror, gangster, and Westerns are analyzed for formal properties and ideological content. May be repeated when units vary.

3234 Practicum in Communication 2:0:6
Laboratory experience in an actual setting. Assignment may be made for specific on the job experience in newspaper offices, radio stations, television stations, advertising agencies, etc. May be repeated for a total of eight semester hours.

333 Advanced Journalism Writing 3:2:3
Writing focusing on skills required for sports, human interest, feature, editorial and specific subject area columns.
Prerequisite: Com 231 or equivalent.

335 Magazine Production 3:2:3
Analysis and participation in all phases of magazine production.

337 Audio Production 3:2:3
Principles and practice of introductory professional audio recording and editing.

338 Television Production 3:2:3
Activities in writing, acting, directing, producing, announcing and engineering various types of television productions.

3381 Photo Journalism 3:2:3
Principles of photography applied to the specific area of photojournalism. No experience is required, but each student must have access to a 35 mm adjustable camera.

3383 Broadcast Advertising 3:3:0
Broadcast advertising theory and techniques in the total marketing 1389 mix.

339 Television Field Production 3:3:0
Principles and practices, editing and post production.

430 Communication Problems and Projects 3:3:3
Problems analyzed and evaluated under individual guidance of faculty. Course may be repeated for credit three times.

431 Laws and Ethics of the Mass Media 3:3:0
A study of the responsibilities of the media, including ethical responsibilities to news sources, persons in the news, readers and employers and legal rights and restrictions.

432 History and Principles of American Journalism 3:3:0
The growth of modern newspapers, with emphasis on important persons in American journalism and the influence of their publications on the history of the United States.

433 Mass Communication and Society 3:3:0
Analysis of impact of mass communication on society.

438 Broadcast News 3:2:3
Study and practice in developing news for broadcasting. Various types of news material, including the documentary, its procurement and presentation.
Prerequisite: Com 234 or consent of instructor.

4383 Print Advertising 3:2:3
A study of advertising, including copy writing, type selection, layout and design for print media.

4391 Advanced Television Production 3:2:3
Seeks to develop professional competence in television production of news, commercials, documentaries and special program.

Speech Communication Courses (Spc)

1301 Introduction to Speech, Hearing and Language Disorders 3:3:0
Overview of the profession of speech pathology, audiology and deaf education.

1302 Phonology 3:3:0
Descriptive phonetics, phonetic alphabet systems.

1303 Speech, Hearing and Voice Science 3:3:0
Introduction to the scientific variables of speech, hearing, and voice.

131 Public Speaking 3:3:0
Principles and practice of public speaking.

211 Parliamentary Procedure 1:1:0
Theory and practice in conducting a business meeting through standard parliamentary procedures.

222 Forensic Activity 2:0:4
Participation in forensics and co-curricular speaking events including campus, community and intercollegiate occasions. May be repeated for a maximum of eight semester hours credit.
Prerequisite: Permission of instructor required.

230 Articulation Disorders 3:3:0
Prevention, assessment, etiology and remediation of articulation disorders.

2301 Introduction to Speech Pathology 3:3:0
Etiology and treatment of speech disorders with emphasis on functional disorders.

2302 Introduction to Deaf Education 3:3:0
Historical and current considerations in the deaf education profession.

2303 Introduction to Audiology 3:3:0
Anatomy of ear, physics of sound, test modes and procedures.

232 Interpersonal Communication 3:3:0
Principles and practices of interpersonal communication in various settings.

233 Advanced Public Speaking 3:3:0
Principles and practice in special occasion speaking.

235 Oral Interpretation of Literature 3:3:0
Instruction and practice in the principles of speech applied to performance in the interpretation of prose and poetry.

238 Oral Controversy 3:3:0
A study of evidence and reasoning and a critique of them as reflected in current public affairs.

239 Language for the Deaf 3:3:0
Survey of systems of teaching language development in nursery and preschool age children.

3301 Research and Literature in Speech and Hearing 3:3:0
Literature and research methods specific to speech and hearing.

3302 Language Development and Language Disorders 3:3:0
Normal language development, language assessment, language, intervention.

3303 Introduction to Manual Communication Systems 3:3:0
Introduction to fingerspelling and the language of signs.

3304 Anatomy and Physiology of Speech and Hearing 3:3:0
Study of the anatomy/physiology of speech and auditory mechanisms.

331 Business and Professional Speech 3:3:0
Application of the fundamentals of speech production to the needs of the professional person.

332 Group Methods and Discussion 3:3:0
Communication theory of group processes. Practice in group problem solving.

333 Interpretation of Children's Literature 3:3:0
Study of materials for different ages of children; sources of program material, practice in adapting material into programs; practice in presenting program in laboratory and in nearby schools, hospitals and homes.

334 Interviewing 3:3:0
Theory and practice in the several types of interviews current in the United States.

3391 Speech Reading, Auditory Training and Amplification Devices 3:3:0
A survey of the literature, theory, and practice in rehabilitation of the hearing impaired.

430 Problems and Projects in Speech 3:A:0
These problems are discussed and analyzed through discussion and research. Each student elects a project or problem on which he/she does extensive research and presents a report to the department faculty. Course may be repeated three times for credit. Permission of instructor required.

4301 Advanced Speech Pathology 3:3:0
Advanced speech pathology: introduction to specific communication disorders, diagnostic procedures and therapy programs.

4302 Advanced Audiology 3:3:0
Hearing evaluation procedures, clinical evaluation techniques and instrumentation.

4303 Clinical Practicum 3:0:9
Introduction to clinical practice in speech pathology, audiology and deaf education. This course may be repeated for clinical clock hours accumulation.

4304 Intermediate Manual Communication 3:3:0
Intermediate skills course in the language of sign.

432 Public Relations 3:3:0
Theory, principles, and practice of public relations.

4321 Advanced Language for the Deaf 3:3:0
Principles and techniques for systematic development of language from the first through the sixth grades.

4322 Advanced Speech for the Deaf 3:3:0
The study for problems of speech development and the maintenance of intelligible speech.

4324 Non Verbal Communication 3:3:0
Theory, research, analysis and practice in non verbal communication.

433 Organizational Communication 3:3:0
Theory, principles, and practice of communication within organizations.

434 Persuasion 3:3:0
The psychological and emotional principles involved in influencing individuals and groups. An analysis and practice with the speech devices and techniques in effectively motivating audience reaction.

4341 Advanced Interviewing 3:3:0
Study of modern communication and related research as applied in business and professional interviews.

4381 Rhetoric of Social Movements 3:3:0
Analysis of the rhetoric of selected social movements in American history.

439 Rhetoric and Public Address 3:3:0
A study and analysis of some of the world's great speeches with application of the principles of original speeches of special types.

Theater Courses (The)

131 Introduction to Theater 3:2:3
A general survey of the major fields of theater arts. For students who have a limited theatrical experience or knowledge. Emphasis on the various types and styles of plays, knowledge of the functions of the actor, director, costumer, scene designer, light designer and other elements of theater production.

1311 Voice and Diction 3:3:0
Vocal development, vocabulary building and prounciation Skills through systematic drills.

132 Stage Craft 3:2:3
Basic course on the handling and construction of scenery, the care of stage properties, lighting and theatrical nomenclature.

135 Fundamentals of Stage Makeup 3:2:3
Principles and practices of stage makeup for a performance.

137 Elements of Acting 3:2:3
Introductory principles and practice for acting.

210 Theater Practicum 1:0:3
Laboratory instruction in production techniques required in the area of scenery, lighting, costumes and other technical areas. It may be repeated three times for credit of four hours.

231 Costume Construction 3:2:3
Basic course in costume construction designed to emphasize all aspects of construction principles and techniques. Participation in theatrical production (s) required.

232 Fundamentals of Stage Lighting 3:2:3
Basic course in stage lighting with emphasis on elements of electricity, lighting instruments and their control. Participation in theatrical production (s) required.
Prerequisite: The 132

235 Advanced Stage Makeup 3:2:3
Principles and practices of handling makeup problems; beards, wigs, prostheses and three dimensional affect.
Prerequisite: The 135

237 Stage Movement 3:2:3
Principles and practices of bodily movement in period and in style for acting.
Prerequisite: The 137

331 Auditioning 3:2:3
Principles of selection, preparation and execution of effective scenes for auditioning.
Prerequisite: The 237

332 Fundamentals of Scene Design 3:2:3
Introduction to scene design practices. Drafting and rendering techniques emphasized.
Prerequisite: The 132

333 Lighting Design 3:2:3
Emphasis on designer's practice and process of lighting for special affects.
Prerequisite: The 232

334 Dramatic Literature/Play Analysis 3:2:3
Study and analysis of dramatic literature and playwrights from Greeks through mid-nineteenth century.

336 Theatre History I 3:3:0
A survey of theatre from its beginnings through the Elizabethan periods.

337 Acting III 3:2:3
Detailed study of approaches to character development, stage combat, and improvisation through scene study and special problem assignments.
Prerequisite: The 237

338 Fundamentals of Play Directing 3:2:3
Introductory principles and practices for directing stage productions.
Prerequisite: The 132, 137

339 Creative Dramatics 3:3:0
Instruction in the methods of introducing creative projects related to the development of creative play making in the home, community and school.

3360 Children's Theater 3:2:3
Instruction and practice in advanced principles of theater as applied to plays for children's audiences. Participation in theatrical production required. May be repeated once for credit.

430 Creative Communication 3:3:0
This is a process oriented approach to creative learning through creative communications. It is of special value to the communication of information in or out of the classroom at any age level.

431 Problems and Projects in Theater 3:A:0
Students will perform activities in one of the following areas: acting, directing, producing, designing and constructing costumes and stage settings for the school theater.
May be repeated three times for credit.

432 Advanced Scene Design 3:2:3
Advanced study of the history and development of scene design.
Prerequisite: The 332

4360 Musical Commedy 2:0:6
A laboratory course providing background study and practical work in the field of musical comedy, including participation in the presentation of a full production. Open by audition or by consent of the instructor to students from all departments who are interested in acting or technical work in the theater, especially as applied to musical comedy. May be repeated for credit up to six hours.

4371 Directing Secondary School Dramatic Activities 3:3:0
Principles involved in directing activities in secondary schools. Practical experience with workshops constitutes part of this course.

433 Theatre Management and Public Relations 3:3:3

434 Contemporary Dramatic Literature 3:3:3
Study and analysis of dramatic literature and playwrights from Isben to the present.
Prerequisite: The 334

435 Costume Design 3:2:3
Advanced study of principles and practices of costume design. Emphasis on drafting and historical accuracy.
Prerequisite: The 332

436 History of Theater II 3:3:0
A survey of theater from the Restoration to the present day.
Prerequisite: The 336

437 Acting IV 3:3:0
Detailed study of period styles and techniques for acting.
Prerequisite: The 337

438 Advanced Directing 3:3:3
Principles and practices of play directing. For upper level theatre majors only.

439 Summer Repetory Theater 3:2:3
Participation in a variety of shows during the summer season to enable the student to work in a professional repetory atmosphere. May be repeated two times for credit.

Department of Music

Department Head: George L. Parks **106 Music Building**

Professors: Carlucci, Parks

Associate Professors: Collier, Holmes, LeBlanc, Simmons, Truncale

Assistant Professors: Culbertson, Dyess, Ornelas

Instructors: Babin, Berthiaume, Johnson, Morehouse, Parks

Adjunct Instructors: Booker, Boone, Graham, Rives

The degrees of Bachelor of Music in voice, piano, theory and composition, instrumental major and music education are granted under the following conditions:

1. Meet the basic requirements for all degree programs.
2. Complete one of the programs of study listed below.
3. Pass a department qualifying examination given by the music faculty before the end of the first semester of the senior year. Junior level music history and music theory must be taken before the oral examination.
4. All students must continue to take secondary piano for as many consecutive semesters as are required for the completion of the barrier. Application for the piano barrier exam may be made during any semester of the student's enrollment except when otherwise specified.
5. Participate in student recitals as recommended by the department.

6. For graduation, all music majors must present a recital during the senior year as recommended by the department head.
7. All students, including transfers, must show adequate proficiency in their areas of specialization, as determined by the music faculty.
8. Auditions are required for junior level standings in the Bachelor of Music in Performance degree programs.
9. All music majors will be required to take Humanities 132.
10. All band instrumental majors who elect marching band in lieu of physical education requirements will be required to take an additional non-music elective.

Recommended Programs of Study

Bachelor of Music — Composition

First Year

First Semester		Second Semester	
AM Major Instrument	2	AM Major Instrument	2
MLb Band, Choir, Orchestra	1	MLb Band, Choir, Orchestra	1
MTy 132 Elementary Harmony	3	MTy 133 Elementary Harmony	3
MLt 121 Music Literature	2	MLt 122 Music Literature	2
English (Composition)	3	English (Composition)	3
PE	1	PE	1
AM Elective (must be piano with the exception of piano and organ majors)	1	AM Elective (must be piano with the exception of piano and organ majors)	1
Elective (Math, Science)	4	Elective (Math, Science)	4
MLb 114 Repertoire & Pedagogy	1	MLb 114 Repertoire & Pedagogy	1
	18		18

Second Year

First Semester		Second Semester	
AM 2283	2	AM 2284	2
MLb Band, Choir, Orchestra	1	MLb Band, Choir, Orchestra	1
MTy 232 Advanced Harmony	3	MTy 233 Advanced Harmony	3
English Literature	3	*Elective (non-music)	3
Sophomore American History	3	Sophomore American History	3
POLS 231 Introduction to American Government I	3	POLS 232 Introduction to American Government II	3
PE	1	PE	1
MLb 114 Repertoire & Pedagogy	1	MLb 114 Repertoire & Pedagogy	1
	17		17

Third Year

First Semester		Second Semester	
AM 3483	4	AM 3484	4
MLb Band, Choir, Orchestra	1	MLb Band, Choir, Orchestra	1
MTy 321 Counterpoint	2	MTy 322 Counterpoint	2
MLt 333 Music History	3	MLt 334 Music History	3
MLb 114 Repertoire & Pedagogy	1	MLb 114 Repertoire & Pedagogy	1
Elective (Math, Science)	3	Elective (Math, Science)	3
Hum 132 Appreciation of Theater and Art	3	Elective non-music	3
	17		17

Fourth Year

First Semester		Second Semester	
AM 4483	4	AM 4484	4
MLb Band, Choir, Orchestra	1	MLb Band, Choir, Orchestra	1
MTy 421 Form and Analysis	2	MTy 422 Orchestration	2
MLt 336 or MLt 337	3	MEd 337 or MEd 338	3
MTy 425 Band Arranging	2	MLb 114 Repertoire & Pedagogy	1
Music Elective	2	Music Elective	2
MLb 114 Repertoire & Pedagogy	1		
	15		13
Total			132

*Must be 3 semester hours of literature, technical report writing, speech communication or foreign language.

Instrumental (Strings)

First Year

First Semester		Second Semester	
AM Major Instrument	2	AM Major Instrument	2
MLb 114 Repertoire & Pedagogy	1	MLb 114 Repertoire & Pedagogy	1
AM 1143	1	AM 1143	1
MTy 132 Elementary Harmony	3	MTy 133 Elementary Harmony	3
MLb 122 Orchestra	2	MLb 122 Orchestra	2
MLt 121 Music Literature	2	MLt 122 Music Literature	2
English (Composition)	3	English (Composition)	3
PE	1	PE	1
Elective (Math, Science)	4	Elective (Math, Science)	4
	19		19

Second Year

First Semester		Second Semester	
AM Major Instrument	2	AM Major Instrument	2
MLb 114 Repertoire & Pedagogy	1	MLb 114 Repertoire & Pedagogy	1
MLb 423 Chamber Music Ensemble	1	MLb 423 Chamber Music Ensemble	1
MTy 232 Advanced Harmony	3	MTy 233 Advanced Harmony	3
MLb 122 Orchestra	2	MLb 122 Orchestra	2
Sophomore American History	3	Sophomore American History	3
Elective (non-music)	3	Hum 132 Appreciation of Theater and Art	3
PE	1	PE	1
English Literature	3	*Elective (Non-music)	3
	19		19

Third Year

First Semester		Second Semester	
AM Major Instrument	4	AM Major Instrument	4
MLb 114 Repertoire & Pedagogy	1	MLb 114 Repertoire & Pedagogy	1
MLb 122 Orchestra	2	MLb 122 Orchestra	2
MLt 333 Music History	3	MLt 334 Music History	3
POLS 231 Introduction to American Government I	3	POLS 232 Introduction to American Government II	3
Elective (Math, Science)	3	Elective (Math, Science)	3
MTy 321 Counterpoint	2	MTy 322 Counterpoint	2
	18		18

Fourth Year

First Semester		Second Semester	
AM Major Instrument	4	AM Major Instrument	4
MLb 114 Repertoire & Pedagogy	1	MLb 114 Repertoire & Pedagogy	1
MLb 122 Orchestra	2	MLb 122 Orchestra	2
MLt 337 Instrumental Literature	3	MEd 338 Instrumental Conducting	3
MTy 421 Form and Analysis	2	MTy 422 Orchestration	2
Chamber Music Elective	1	Chamber Music Elective	1
Elective (non-music)	3		
	16		13

Total 141

*Must be 3 semester hours of literature, technical report writing, speech communication or foreign language.

Instrumental (Wind, Percussion, or Jazz Studies)

First Year

First Semester		Second Semester	
AM Major Instrument	2	AM Major Instrument	2
MLb 114 Repertoire & Pedagogy or MLb 117 Dance Band	1	MLb 114 Repertoire & Pedagogy or MLb 117 Dance Band	1
AM 1143	1	AM 1143	1
MTy 132 Elementary Harmony	3	MTy 133 Elementary Harmony	3
MLb 124 Marching Band or PE	2	MLb 125 Symphonic Band	2
MLt 121 Music Literature	2	MLt 122 Music Literature	2
Music Elective or MLb 115 Jazz Combo	1	Music Elective or MLb 115 Jazz Combo	1
English (Composition)	3	English (Composition)	3
Elective (Math, Science) or Mth and MLb 113 Jazz Improvization	4	Elective (Math, Science) or Mth and MLb 113 Jazz Improvization	4
	19		19

Second Year

First Semester		Second Semester	
AM Major Instrument	2	AM Major Instrument	2
MLb 114 Repertoire & Pedagogy or MLb 117 Dance Band	1	MLb 114 Repertoire & Pedagogy or MLb 117 Dance Band	1
MTy 232 Advanced Harmony	3	MTy 233 Advanced Harmony	3
Music Elective or MLb 115 Jazz Combo	1	Music Elective or MLb 115 Jazz Combo	1
MLb 124 Marching Band or PE	2	MLb 125 Symphonic Band	2
Sophomore American History	3	Sophomore American History	3
English (Literature)	3	*Elective (non-music)	3
Elective (non-music) or MLb 111, 113	2	Elective (non-music) or MLb 111, 113	2
	17		17

Third Year

First Semester		Second Semester	
AM Major Instrument (2 hours for jazz studies)	4	AM Major Instrument (2 hours for jazz studies and MTy 323 Jazz Arranging)	4
MLb 114 Repertoire & Pedagogy or MLb 117 Dance Band	1	MLb 114 Repertoire & Pedagogy or MLb 117 Dance Band	1
MLt 333 Music History	3	MLt 334 Music History	3
MLb 423 Chamber Music Ensemble or MLb 115 Jazz Combo	1	MLb 423 Chamber Music Ensemble or MLb 115 Jazz Combo	1
MTy 321 Counterpoint	2	MTy 322 Counterpoint	2
MLb 124 Marching Band or PE	2	MLb 125 Symphonic Band	2
POLS 231 Introduction to American Government I	3	POLS 232 Introduction to American Government II	3
Elective (Math, Science)	3	Elective (Math, Science)	3
	19		19

Fourth Year

First Semester		Second Semester	
AM Major Instrument (2 hours for jazz studies and MLb 115 Jazz Combo)	4	AM Major Instrument (2 hours for jazz studies and MLb 115 Jazz Combo	4
MLb 114 Repertoire & Pedagogy or MLb 117 Dance Band	1	MLb 114 Repertoire & Pedagogy or MLb 117 Dance Band	1
MLt 337 Instrumental Literature or MEd Recording Techniques	3	MEd 338 Instrumental Conducting or MEd 431 Jazz Electronic Music	3
MTy 421 Form and Analysis	2	MTy 422 or 425	2
MLb 124 Marching Band or PE	2	MLb 125 Symphonic Band	2
MEd 333 High School Stage Band	3	Elective (non-music)	3
MLt 330 Jazz History	3		
	18		15

Total 143

*Must be 3 semester hours of literature, technical report writing, speech communication or foreign language.

Piano And/Or Organ

First Year

First Semester		Second Semester	
AM Major Instrument	2	AM Major Instrument	2
MLb 114 Repertoire & Pedagogy	1	MLb 114 Repertoire & Pedagogy	1
Major Performing Ensemble	1	Major Performing Ensemble	1
AM Elective	1	AM Elective	1
MLt 121 Music Literature	2	MLt 122 Music Literature	2
MTy 132 Elementary Harmony	3	MTy 133 Elementary Harmony	3
English (Composition)	3	English (Composition)	3
PE	1	PE	1
Elective (Math, Science)	4	Elective (Math, Science)	4
	18		18

Second Year

First Semester		Second Semester	
AM Major Instrument	2	AM Major Instrument	2
MLb 114 Repertoire & Pedagogy	1	MLb 114 Repertoire & Pedagogy	1
Major Performing Ensemble	1	Major Performing Ensemble	1
MLb 423 Chamber Music Ensemble	1	MLb 423 Chamber Music Ensemble	1
MTy 232 Advanced Harmony	3	MTy 233 Advanced Harmony	3
English Literature	3	*Elective (non-music)	3
Sophomore American History	3	Sophomore American History	3
Elective (non-music)	3	Elective (non-music)	3
PE	1	PE	1
	18		18

Third Year

First Semester		Second Semester	
AM Major Instrument	4	AM Major Instrument	4
MLb 114 Repertoire & Pedagogy	1	MLb 114 Repertoire & Pedagogy	1
Major Performing Ensemble	1	Major Performing Ensemble	1
MLb 423 Chamber Music Ensemble	1	MLb 423 Chamber Music Ensemble	1
MTy 321 Counterpoint	2	MTy 322 Counterpoint	2
MLt 333 Music History	3	MLt 334 Music History	3
POLS 231 Introduction to American Government I	3	POLS 232 Introduction to American Government II	3
Elective (Math, Science)	3	Elective (Math, Science)	3
	18		18

Fourth Year

First Semester		Second Semester	
AM Major Instrument	4	AM Major Instrument	4
MLb 114 Repertoire & Pedagogy	1	MLb 114 Repertoire & Pedagogy	1
Major Performing Ensemble	1	Major Performing Ensemble	1
MTy 421 Form and Analysis	2	MTy 422 Orchestration	2
MLt 336 or MLt 337	3	MEd 337 or MEd 338	3
Hum 132 Appreciation of Theater and Art	3	Elective (non-music)	3
	14		14

Total 136

*Must be 3 semester hours of literature, technical report writing, speech communication or foreign language.

Vocal

First Year

First Semester		Second Semester	
AM 1281	2	AM 1282	2
MLb 114 Repertoire & Pedagogy	1	MLb 114 Repertoire & Pedagogy	1
AM 1143	1	AM 1143	1
MLb 1104 Grand Chorus	1	MLb 1104 Grand Chorus	1
MTy 132 Elementary Harmony	3	MTy 133 Elementary Harmony	3
MLt 121 Music Literature	2	MLt 122 Music Literature	2
English (Composition)	3	English (Composition)	3
Italian	3	German	3
PE	1	PE	1
	17		17

Second Year

First Semester		Second Semester	
AM 2281	2	AM 2282	2
MLb 114 Repertoire & Pedagogy	1	MLb 114 Repertoire & Pedagogy	1
MLb 1104 Grand Chorus	1	MLb 1104 Grand Chorus	1
MTy 232 Advanced Harmony	3	MTy 233 Advanced Harmony	3
Spc 1302 Phonology	3	English Literature	3
French	3	Elective (Math, Science)	3
Sophomore American History	3	Sophomore American History	3
PE	1	PE	1
	17		17

Third Year

First Semester		Second Semester	
AM 3481	4	AM 3482	4
MLb 114 Repertoire & Pedagogy	1	MLb 114 Repertoire & Pedagogy	1
MLb 1104 Grand Chorus	1	MLb 1104 Grand Chorus	1
MLb 210 Opera	1	MLb 210 Opera	1
MTy 321 Counterpoint	2	MTy 322 Counterpoint	2
MLt 336 Choral Literature	3	MEd 337 Choral Conducting	3
MLt 333 Music History	3	MLt 334 Music History	3
Science (laboratory)	4	Science (laboratory)	4
	19		19

Fourth Year

First Semester		Second Semester	
AM 4481	4	AM 4482	4
MLb 114 Repertoire & Pedagogy	1	MLb 114 Repertoire & Pedagogy	1
MLb 1104 Grand Chorus	1	MLb 1104 Grand Chorus	1
MLb 210 Opera	1	MLb 210 Opera	1
MTy 421 Form and Analysis	2	MTy 422 Orchestration	2
POLS 231 Introduction to American Government I	3	POLS 232 Introduction to American Government II	3
Hum 132 Appreciation of Theater and Art	3	Elective (Math, Science)	3
	15		15

Total 136

Bachelor of Music in Music Education (Winds, Brass, Percussion)

(Qualifies for teacher certification music, all-levels)

First Year

First Semester		Second Semester	
AM Major Instrument	2	AM Major Instrument	2
MLb Marching Band or PE	2	MLb 125 Symphonic Band	2
AM 1143	1	AM 1143	1
Sophomore American History	3	Sophomore American History	3
English Composition	3	Eng (Composition)	3
Mth 1334 College Algebra	3	Mth 134 Mathematics for Business Applications	3
MTy 132 Elementary Harmony	3	MTy 133 Elementary Harmony	3
MLt 121 Music Literature	2	MLt 122 Music Literature	2
	19		19

Second Year

First Semester		Second Semester	
AM Major Instrument	2	AM Major Instrument	2
MLb Marching Band or PE	2	MLb 125 Symphonic Band	2
AM 1143	1	AM 1143	1
POLS 231 Introduction to American Government I	3	POLS 232 Introduction to American Government II	3
Science (laboratory)	4	Science (laboratory)	4
MTy 232 Advanced Harmony	3	MTy 233 Advanced Harmony	3
English Literature	3	English Literature	3
	18		18

Third Year

First Semester		Second Semester	
AM Major Instrument	2	AM Major Instrument	2
MLb Marching Band or PE	2	MLb 125 Symphonic Band	2
MEd 311, 313	2	MEd 312, 314, 411	3
MEd 336 Instrumental Music	3	MEd 338 Instrumental Conducting	3
MLt 333 Music History	3	MLt 334 Music History	3
C&I 331, 332	6	C&I 334 Child Development and Evaluation	3
MTy 321 Counterpoint	2	MTy 322 Counterpoint	2
	20		18

Fourth Year

First Semester		Second Semester	
AM Major Instrument	2	AM Major Instrument	2
MLb Marching Band or PE	2	MLb 125 Symphonic Band	2
C&I 438 Classroom Management Secondary	3	C&I 463 Student Teaching — Special	6
MTy 421 Form and Analysis	2	MTy 422 or 425	2
MEd 412 Woodwinds	1	MEd 315, 317	2
Elective (Foundation)	3		
Elective (Foundation)	3		
Hum 132 Appreciation of Theater and Art	3		
	19		14

Total Hours 145

The six hours of foundation electives must be chosen from two different foundation groups, and if marching band is taken for PE credit, an additional non-music elective must be taken.

Bachelor of Music in Music Education (Strings)

(Qualifies for teacher certification music, all-levels)

First Year

First Semester		Second Semester	
AM Major Instrument	2	AM Major Instrument	2
MLb 122 Orchestra	2	MLb 122 Orchestra	2
AM 1143	1	AM 1143	1
Sophomore American History	3	Sophomore American History	3
Eng (Composition)	3	Eng (Composition)	3
MTy 132 Elementary Harmony	3	MTy 133 Elementary Harmony	3
MLt 121 Music Literature	2	MLt 122 Music Literature	2
PE	1	PE	1
Mth 1334 College Algebra	3	Mth 134 Mathematics for Business Applications	3
	20		20

Second Year

First Semester		Second Semester	
AM Major Instrument	2	AM Major Instrument	2
MLb 122 Orchestra	2	MLb 122 Orchestra	2
POLS 231 Introduction to American Government I	3	POLS 232 Introduction to American Government II	3
Science (Laboratory)	4	Science (laboratory)	4
MTy 232 Advanced Harmony	3	MTy 233 Advanced Harmony	3
PE	1	PE	1
English Literature	3	English Literature	3
	18		18

Third Year

First Semester		Second Semester	
AM Major Instrument	2	AM Major Instrument	2
MLb 122 Orchestra	2	MLb 122 Orchestra	2
MEd 311 or 312	1	MEd 313 or 314	1
MEd 336 Instrumental Music	3	MEd 338 Instrumental Conducting	3
MLt 333 Music History	3	MLt 334 Music History	3
C&I 331, 332	6	C&I 334 Child Development and Evaluation	3
MTy 321 Counterpoint	2	MTy 322 Counterpoint	2
		Hum 132 Appreciation of Theater and Art	3
	19		19

Fourth Year

First Semester		Second Semester	
AM Major Instrument	2	AM Major Instrument	2
MLb 122 Orchestra	2	MLb 122 Orchestra	2
C&I 438 Classroom Management Secondary	3	C&I 463 Student Teaching — Special	6
MTy 421 Form and Analysis	2	MTy 422 Orchestration	2
MEd 411 or 412	1	MEd 315 Percussion	1
Elective (Foundation)	3		
Elective (Foundation)	3		
	16		13

Total Hours 143

The six hours of foundation electives must be chosen from two different foundation groups.

Bachelor of Music in Music Education (Piano/Organ, Voice)

(Qualifies for teacher certification music, all-levels)

First Year

First Semester		Second Semester	
AM 1241 or 1281	2	AM 1242 or 1282	2
MLb 1104 Grand Chorus	1	MLb 1104 Grand Chorus	1
AM 1183 or 1143	1	AM 1184 or 1143	1
Sophomore American History	3	Sophomore American History	3
Eng (Composition)	3	Eng (Composition)	3
Mth 1334	3	Mth 134	3
MTy 132 Elementary Harmony	3	MTy 133 Elementary Harmony	3
MLt 121 Music Literature	2	MLt 122 Music Literature	2
PE	1	PE	1
	19		19

Second Year

First Semester		Second Semester	
AM 2241 or 2281	2	AM 2242 or 2282	2
MLb 1104 Grand Chorus	1	MLb 1104 Grand Chorus	1
AM 1183 or 1143	1	AM 1184 or 1143	1
POLS 231 Introduction to American Government I	3	POLS 232 Introduction to American Government II	3
Science (laboratory)	4	Science (laboratory)	4
PE	1	PE	1
MTy 232 Advanced Harmony	3	MTy 233 Advanced Harmony	3
MLb 210 Opera	1	MLb 210 Opera	1
English Literature	3	English Literature	3
	19		19

Third Year

First Semester		Second Semester	
AM 3241 or 3281	2	AM 3242 or 3282	2
MLb 1104 Grand Chorus	1	MLb 1104 Grand Chorus	1
MEd 331 Elementary Methods and Materials	3	MEd 332 Techniques and Materials	3
MEd 335 Choral Music	3	MEd 337 Choral Conducting	3
MLt 333 Music History	3	MLt 334 Music History	3
C&I 331, 332	6	C&I 334 Child Development and Evaluation	3
MTy 321 Counterpoint	2	MTy 322 Counterpoint	2
		Hum 132 Appreciation of Theater and Art	3
	20		20

Fourth Year

First Semester		Second Semester	
AM 4241 or 4281	2	AM 4242 or 4282	2
MLb 1104 Grand Chorus	1	MLb 1104 Grand Chorus	1
C&I 438 Classroom Management Secondary	3	C&I 463 Student Teaching — Special	6
MTy 421 Form and Analysis	2	MTy 422 Orchestration	2
MLb 210 Opera	1	MLb 210 Opera	1
Elective (Foundation)	3		
Elective (Foundation)	3		
	15		12

Total Hours 143

The six hours of foundation electives must be chosen from two different foundation groups. Organ majors will substitute organ for all piano. Piano/Organ majors may take band or orchestra, but must have at least four semesters of choir.

Bachelor of Music—Music Education

Theory and Composition

Qualifies for teacher certification music, all levels

First Year

First Semester		Second Semester	
English (Composition)	3	English (Composition)	3
Mth 1334 College Algebra	3	Mth 134 Mathematics for Business Applications	3
Science (Laboratory)	4	Science (Laboratory)	4
AM Major Instrument	2	AM Major Instrument	2
MTy 132 Elementary Harmony	3	MTy 133 Elementary Harmony	3
MLt 121 Music Literature	2	MLt 122 Music Literature	2
MLb Band, Chorus, Orchestra	1	MLb Band, Chorus, Orchestra	1
PE	1	PE	1
	19		19

Second Year

First Semester		Second Semester	
English Literature	3	English Literature	3
Sophomore American History	3	Sophomore American History	3
POLS 231 Introduction to American Government I	3	POLS 232 Introduction to American Government II	3
AM 1241	2	AM 1242	2
MTy 232 Advanced Harmony	3	MTy 233 Advanced Harmony	3
MLb Band, Chorus, Orchestra	1	MLb Band, Chorus, Orchestra	1
PE	1	PE	1
		Elective (non-music)	3
	16		19

Third Year

First Semester		Second Semester	
C&I 331 Foundations of Education	3	C&I 334 Child Development and Evaluation	3
C&I 332 Educational Psychology	3	AM 3284	2
AM 3283	2	MTy 322 Counterpoint	2
MTy 321 Counterpoint	2	MEd 337 or 338	3
MEd 335 or 336	3	MLt 334 Music History	3
MLt 333 Music History	3	MEd 332 Techniques and Materials	3
MEd 331 Elementary Methods and Materials	3	MLb Band, Chorus, Orchestra	1
MLb Band, Chorus, Orchestra	1		
	20		17

Fourth Year

First Semester		Second Semester	
C&I 438 Classroom Management Secondary	3	C&I 463	6
MTy 421 Form and Analysis	2	MTy 422 Orchestration	2
MTy 425 Band Arranging	2	AM 4284	2
AM 4283	2	Elective (non-music)	3
Elective (Music)	2	MLb Band, Chorus, Orchestra	1
MLb Band, Chorus, Orchestra	1		
	12		14
Total			136

The six elective hours must be chosen from two different academic foundation groups.

Theory and Composition majors certifying in instrumental music may elect six hours from Percussion 315, Brass 311, 312, Strings 313, 314 or Woodwinds 411, 412. Those certifying in instrumental music electing marching band in lieu of physical education will be required to take an additional non-music elective.

Applied Music Courses (AM)

1101 Beginning Band or Orchestral Instruments 1:1:0
1143 Secondary Piano 1:1:0
1183, 1184 Secondary Voice 1:1:0
1203, 1204, 2203, 2204, 3203, 3204, 4203, 4204 Bassoon 2:1.5*:0
3403, 3404, 4403, 4404 Bassoon 4:2**:0
1211, 1212, 2211, 2212, 3211, 3212, 4211, 4212 Cello 2:1.5*:0
3411, 3412, 4411, 4412 Cello 4:2**:0
1215, 1216, 2215, 2216, 3215, 3216, 4215, 4216 Clarinet 2:1.5*:0
3415, 3416, 4415, 4416 Clarinet 4:2**:0
1217, 1218, 2217, 2218, 3217, 3218, 4217, 4218 Cornet-Trumpet 2:1.5*:0
3417, 3418, 4417, 4418 Cornet-Trumpet 4:2**:0
1221, 1222, 2221, 2222, 3221, 3222, 4221, 4222 Flute 2:1.5*:0
3421, 3422, 4421, 4422 Flute 4:2**:0
1223, 1224, 2223, 2224, 3223, 3224, 4223, 4224 French Horn 2:1.5*:0
3423, 3424, 4423, 4424 French Horn 4:2**:0
1231, 1232, 2231, 2232, 3231, 3232, 4231, 4232 Oboe 2:1.5*:0
3431, 3432, 4431, 4432 Oboe 4:2**:0
1233, 1234, 2233, 2234, 3233, 3234, 4233, 4234 Organ 2:1.5*:0
3433, 3434, 4433, 4434 Organ 4:2**:0
1241, 1242, 2241, 2242, 3241, 3242, 4241, 4242 Piano 2:1.5*:0
3441, 3442, 4441, 4442 Piano 4:2**:0
1251, 1252, 2251, 2252, 3251, 3252, 4251, 4252 Saxophone 2:1.5*:0
3451, 3452, 4451, 4452 Saxophone 4:2**:0
1253, 1254, 2253, 2254, 3253, 3254, 4253, 4254 Percussion 2:1.5*:0
3453, 3454, 4453, 4454 Percussion 4:2**:0
1257, 1258, 2257, 2258, 3257, 3258, 4257, 4258 String Bass 2:1.5*:0
3457, 3458, 4457, 4458 String Bass 4:2**:0
1261, 1262, 2261, 2262, 3261, 3262, 4261, 4262 Trombone or Baritone 2:1.5*:0
3461, 3462, 4461, 4462 Trombone or Baritone 4:2**:0
1263, 1264, 2263, 2264, 3263, 3264, 4263, 4264 Tuba 2:1.5*:0
3463, 3464, 4463, 4464 Tuba 4:2**:0
1271, 1272, 2271, 2272, 3271, 3272, 4271, 4272 Viola 2:1.5*:0
3471, 3472, 4471, 4472 Viola 4:2**:0
1273, 1274, 2273, 2274, 3273, 3274, 4273, 4274 Violin 2:1.5*:0
3473, 3474, 4473, 4474 Violin 4:2**:0
1281, 1282, 2281, 2282, 3281, 3282, 4281, 4282 Voice 2:1.5*:0
3481, 3482, 4481, 4482 Voice 4:2**:0
2283, 2284 Composition 2:1.5*:0
3283, 3284, 4283, 4284 Composition 2:1.5*:0
3483, 3484, 4483, 4484 Composition 4:2**:0

One 30-minute private lesson and one one-hour class per week.
**One hour private lesson and one one-hour class per week.*

Music Education Courses (MEd)

131 Elements of Music 3:3:0
Designed to familiarize non-music majors with the meaning of musical notation and the harmonic, melodic and rhythmic structure of music.

311 Brass 1:1:0
Techniques and materials in the teaching of instrumental music in the elementary school. Trumpet and Horn.

312 Brass 1:1:0
Techniques and materials in the teaching of instrumental music in the elementary school. Trombone, Baritone and Tuba.

313 Strings 1:1:0
Techniques and materials in the teaching of instrumental music in the elementary school. Violin and Viola.

314 Strings 1:1:0
Techniques and materials in the teaching of instrumental music in the elementary school. Cello and Bass.

315 Percussion 1:1:1
Materials for the percussion instruments. Performance on all percussion instruments.

317 Marching Methods 1:2:0
Basic marching maneuvers. Charting various types of half-time shows for football games, such as the pageant type and the precision drills, and arranging the music for these shows. Term project: a completely charted half-time show with music.

331 Elementary Methods and Materials 3:3:0
Techniques and materials in teaching of music in the lower elementary grades. The child's voice, rote singing; rhythmics, introduction of notation, creative music activities.
Prerequisite: MTy 131 or equivalent.

332 Techniques and Materials in Teaching of Music in the Upper Elementary Grades 3:3:0
Creative music, rhythmic activity, rote singing, reading of notation and effective use of materials.
Prerequisite: MTy 131 or equivalent.

333 The Organization and Development of the High School Stage Band 3:3:0
The relationship of the jazz band to the over-all music program; instrumentation; sources of music; types of presentation; rehearsal and techniques; study of the effective application of dynamics, phrasing, intonation and balance for improved performance.

334 Hymnody 3:3:0
A course designed for the music major and non-major. It is a chronological survey of Christian hymnody designed to aid in the understanding and appreciation of the hymns used in today's churches.

335 Choral Music 3:3:0
A detailed study, primarily at the secondary level, of the organization and administration of choirs, glee clubs, small ensembles and vocal problems encountered in the choral music class.

336 Instrumental Music 3:3:0
Materials and problems encountered in the instrumental music field of the high school. A detailed study of the organization and administration of bands, orchestras, etc.

337 Choral Conducting 3:3:0
Basic patterns and rudiments of choral techniques as applied to secondary school choral groups. Limited to music majors.
Prerequisite: Some vocal study, piano keyboard, one year of vocal laboratory and music theory.

338 Instrumental Conducting 3:3:0
The rudiments of conducting as applied to high school instrumental groups, phrasing interpretation, etc. of the instrumental field, both band and orchestra.

410 Seminar 1:1:0
A general study of the problems encountered in music.

411 Woodwinds 1:1:0
Techniques and materials in the teaching of instrumental music the elementary school. Flute, Clarinet and Saxophone.

412 Woodwinds 1:1:0
Techniques and materials in the teaching of instrumental music in the elementary school. Oboe and Bassoon.

430 Recording Techniques 3:3:0
Step-by-step familiarization with studio recording techniques, professional equipment, special effects and production theories.

431 Jazz Electronic Music 3:3:0
An introduction to electronic jazz keyboard instruments (synthesizer) through an analysis of the styles of pop, jazz and contemporary performers.
Prerequisite: Completion of the piano barrier.

Music Laboratory (MLb)*

**Courses in Music Laboratory may be repeated for credit. Total credit not to exceed eight semester hours for any one course.*

111 Jazz Piano 1:1:0
A study of contemporary jazz piano styles.

112 Fender (Electric) Bass 1:1:0
Basic fundamentals of jazz and pop Fender bass performance.

113 Jazz Improvisation 1:1:0
Designed to provide background in the art of improvisation.

114 Repertoire and Pedagogy 1:1:0
A presentation and study of the literature, its performance, styles and means of presentation for a particular instrument or instruments. Eight semesters in the same instrument required (AM-Applied) of each major.

115 Jazz Combo 1:1:0
Basic fundamentals of small ensemble jazz performance Must be taken concurrent with MLB 113 (Jazz Improvisation).

117 Dance Band 1:0:3
Organized to furnish training in all styles of dance band performance. Open to any student who can qualify.

122 Orchestra 2:0:6
A performing ensemble open to all university students who can qualify. Required of any student majoring in a string instrument.

124 Marching Band 2:0:6
The study and performance of march music and military drill. Open to any student who can qualify. Four semesters completes PE requirement.

125 Symphonic Band 2:0:6
Performs symphonic wind ensemble and band repertoire. Tryout required for admittance.

1101 A Cappella Choir 1:0:6
A course in choral singing, organized to furnish training in the more important works of choral literature. Presentation of selections in public throughout the year. Audition required. Open to qualified students from other departments.

1102 Cardinal Singers 1:0:6
Performing choral ensemble with instrumental combo accompaniment specializing in popular and folk repertoire. Audition required. Open to qualified students from other departments.

1104 Grand Chorus 1:0:3
A course in choral singing designed to acquaint the student with the larger works in choral literature. A public concert is given each semester. Open to qualified students from other departments.

1105 Cardinal Moods 1:0:6
Performing choral ensemble with instrumental combo accompaniment specializing in popular and folk repertoire. Audition required. Open to qualified students from other departments. LU at Orange only

1106 Cardinal Reflections 1:0:6
Performing choral ensemble with instrumental combo accompaniment specializing in popular and folk repertoire. Audition required. Open to qualified students from other departments. LU at Port Arthur only.

210 Opera 1:0:3
A laboratory class for advanced voice students providing study of complete operatic roles, scenes and excerpts for presentation in the opera-theater. Annual full scale opera production. Auditions open to all qualified students.

2260 Musical Comedy 2:0:6
A laboratory course providing both background study and practical work in the specialized field of musical comedy, including participation in the presentation of a full production. Open to both vocalists and instrumentalists from all departments by audition or by consent of instructor.

423 Chamber Music Ensemble 2:0:5
String ensemble, woodwind, brass ensemble and percussion ensemble. A course designed to give the student an opportunity to study and perform music written for the smaller instrumental ensembles. These groups will participate in various recital programs throughout the year. Open to any student upon recommendation of the instructor.

Music Literature Courses (MLt)

111, 112 Music Principles 1:0:2
An appraisal of the important events in music history with emphasis upon those aspects of music associated with style, form and performance. Familiarization of the student with music terminology and a thorough briefing on score reading through the use of recordings from the significant periods of music history.

113 Pop Music Survey 1:1:0
A study of present day pop music.

121-122 Music Literature 2:2:0
An appraisal of the important events in music history with emphasis upon those aspects of music associated with style, form and performance. Familiarization of the student with music terminology and a thorough briefing on score reading through the use of recordings from the significant periods of music history.
Prerequisite: MLt 121 must be taken before MLt 122.

213 Piano Pedagogy 1:2:0
A brief, chronological survey and analysis of the styles and forms of compositions in relation to keyboard instruments. Minimum knowledge of all keyboard instruments will be required. Special emphasis will be placed on the contribution of the performers, composers and compositions in the field of piano literature.

330 Jazz History 3:3:0
A survey of literature and advances made in the jazz field, with views to historical and cultural background.

331 Music of Non-West Cultures 3:3:0
The music of China, Japan, and India will be examined by historical survey, by analysis of musical scores, and by other appreciational methods.

332 Music Appreciation 3:3:0
A course designed to acquaint the non-music major with some phases and aspects of music listening, theory, rhythm and other forms of musical enjoyment.

333 Music History 3:3:2
A survey of the literature and advances made in music from the early Christian era through the middle Baroque (c. 1700). Two hours of listening required per week in addition to class lecture.
Prerequisite: MLt 121-122 and MTy 232-233.

334 Music History 3:3:2
A survey of the literature and advances made in music from the late Baroque (J. S. Bach and others) through the present time. Two hours of listening required per week in addition to class lecture.
Prerequisite: May be taken before Music History 333, so long as prerequisites for Music History 333 have been satisfied.

335 Music of the Afro-American 3:3:0
A general study of the present day American Negro music and a study of the Afro-American music historical background.

336 Choral Literature 3:3:0
A study of music written for combinations of vocal music groups from the 12th century to the present day.
Prerequisite: Junior status.

337 Instrumental Literature 3:3:0
An in depth study of the literature and pedagogy of symphonic literature for strings and winds.
Prerequisite: Junior status.

338 Chamber Opera 3:3:0
A class in chamber opera of short operatic works for students providing study of complete roles and ensemble operatic excerpts for presentation in concert. Open to all students from all departments by audition. LU-Rome only.

339 Grand Opera 3:3:0
A class providing study of complete operatic roles, scenes and excerpts from standard and contemporary works for presentation in opera-theater. Auditions open to all qualified students from all departments. LU-Rome only.

Music Theory Courses (MTy)

131 Elements of Music 3:3:0
Designed to prepare students for advanced study in music theory. A study of scales, chords, musical terminology, key signatures, sight singing, rhythm, musical notation and the harmonic, melodic and rhythmic structure of music.

132, 133 Elementary Harmony 3:5:0
Elementary keyboard and written harmony, sight singing; ear training.
Prerequisite: MTy 131 or by advanced standing exam.

232, 233 Advanced Harmony 3:5:0
Advanced keyboard and written harmony; sight singing; ear training.
Prerequisite: MTy 133.

321, 322 Counterpoint 2:2:0
16th and 18th century contrapuntal techniques through analysis and creative writing.
Prerequisite: MTy 233.

323 Jazz Arranging 2:2:0
A study and analysis of jazz harmony, melody and rhythm as applied to jazz band instrumentation; a workshop wherein arrangements are written and played.

421 Form and Analysis 2:2:0
Analytical study of musical forms and styles.
Prerequisite: MTy 233.

422 Orchestration 2:2:0
Techniques of writing and arranging for orchestral instruments in small combinations and for full orchestra.
Prerequisite: MTy 233.

425 Band Arranging 2:2:0
Techniques of writing, transcribing from orchestra score and arranging for the instrumentation of the high school marching and concert bands.

College of Health and Behavioral Sciences

Departments: Allied Health, Nursing, Psychology
Myrtle L. Bell, Ed.D., Dean

The College of Health and Behavioral Sciences was formed in 1981 when the Department of Psychology merged with the Departments of Allied Health and Nursing which had been in the College of Health Sciences. The departmental merger brought together programs of instruction in psychology, baccalaureate nursing, associate degree nursing, vocational nursing, dental hygiene, radiologic technology, and respiratory technology.

Goals of the College

The over-all goal of the College of Health and Behavioral Sciences continues the tradition of the College of Health Sciences—to produce high caliber health specialists in specific areas of need and in sufficient numbers to contribute significantly to the improvement of health care of Southeast Texas citizens.

Since education of the health professional draws on concepts from the reservoir of knowledge in general and scientific education, health and behavioral science students are exposed to those concepts through university courses during the preprofessional semesters.

The bringing together of Psychology with Allied Health and Nursing initiates a broadening scope of interdisciplinary approaches to the education of future professionals in their respective fields. The major purposes of the Bachelor of Arts degree program are to acquaint the students with the tools and techniques of psychologist and to prepare them academically for employment with various social or mental health agencies under the supervision of licensed or certified personnel. Opportunities are also available in industrial and organizational settings. Although the same career opportunities as stated above are available for the student who completes the Bachelor of Science degree program, the program is designed primarily for the student who wishes to continue graduate study in psychology.

The College and its faculty are dedicated to responding to the health manpower needs of urban and rural health delivery systems. The tangible offerings include certificates, associate degrees, and baccalaureate degrees listed below.

Degrees Offered

Bachelor of Arts—Psychology

Bachelor of Science—Psychology

Bachelor of Science—Nursing

Associate of Science—Nursing

Associate of Applied Science: Dental Hygiene,* Radiologic Technology,* Respiratory Therapy.*

Certificate of Completion: Respiratory Technology,* Vocational Nursing.*

*These programs are offered with the approval of the Texas Education Agency.

Department of Allied Health

Department Head: William David Short **254A Ward Health Sciences Building**

Assistant Professors: Atherton, Bailey, Short

Instructors: Bronson, Fearing, Godwin, King, Reynard, Young

Clinical Instructors: Fleischer, Hoosier, Huval, Meador

Adjunct Professors: Bharathi, Darnell, Giglio, Gish, Jepson, Koehler, Maddox, Coleman, Pinchback, Shaw, Sweet, Toups, Weaver

Part-time Clinical Instructors: Booker, Sherri

The health occupations within the department provide specific services to people in a variety of health care settings under the supervision of physicians or dentists. The goal of

delivering services through a team of health specialists working cooperatively characterizes allied health disciplines. The faculty aims to achieve this goal by providing an academic environment in which students can learn the theory underlying practice, gain positive attitudes toward their contribution to health care, and achieve clinical competence through supervised application of knowledge.

Admission to Department of Allied Health Programs

Students enrolled at Lamar University must submit an Application for Admission to the Department.

Students not enrolled at Lamar must submit two separate applications: one for admission to Lamar (obtained from the Office of Admissions and Records) and one for admission to the specific program (obtained from the program director, Ward Health Sciences Building).

Completed Application for Admission to Allied Health programs, with required transcripts, test scores and related documents, must be received on specific dates (see program statement) of each year, to be considered for admission to Summer Session I. Applicants are urged to follow application instructions carefully to ensure processing by program admission committees.

Applications for Admission are evaluated on the following basis:

1. Admission to the University (Admission section of this bulletin).
2. SAT or ACT scores.
3. Transcripts and grades in high school and previous college work.
4. Evidence of physical and emotional capability of completing the program of instruction and clinical practice. Health examinations are required. Forms are available with application forms.
5. Motivation for allied health practice demonstrated through letters of recommendation, employment and volunteer records and references, a statement of career goals and, in most cases, a personal interview.
6. Admission may be limited by available space.

Additional costs above tuition and fees are required in all Allied Health Department programs. Uniforms, equipment and instruments, liability insurance, health examinations and transportation to clinical facilities are the responsibility of the student. A wrist watch with a second hand is needed. Financial aids are available to eligible students: see Financial Aid and Award section of this bulletin.

Liability insurance and health examinations must be renewed each year of a health science program.

Students may be assigned to clinical experiences during day, evening, night or weekend hours.

Clinical agencies may require additional health examinations, dress codes or conformity with other policies. Students will be informed in advance of each requirement.

Health Sciences Courses (HS)

121 Health Care Concepts 2:2:0

Lecture course designed to provide the basic concepts appropriate to health. The various health care worker roles, professional ethics, communication, growth and development and related topics will be presented. The rationale for skills which are common to all health personnel will be introduced. The course is required for all health science majors and will be prerequisite for the beginning skill courses in the various programs.

330 Human Sexuality 3:3:0

A lecture and discussion class exploring the biological, psychological, social and cultural aspects of human sexuality for health professionals.

430 Concepts of Loss 3:3:0

Study of a variety of losses experienced through the life span. Includes loss of relationships, jobs, body function, youth and independence, spouses, mobility, dying and death. Sensitivity exercises. Strategies for helping people cope with and adapt to losses.

433 Concepts of Health Care Administration 3:3:0

Study and application of management, supervision and administrative theory and techniques in health care settings. Emphasis on planning, implementing and evaluating delivery of health care.

434 **Advanced Concepts in Community Health** 3:3:0
Advanced concepts in community and public health; including application of epidemiology, research and legislative processes to assess, plan for, implement and evaluate community health needs and programs.
Prerequisite: Introductory course in Community Health, or consent of instructor.

Dental Hygiene

Program Director: Frieda Atherton

The purpose of the Dental Hygiene Program is to prepare highly competent dental hygienists to meet the oral health care needs of the public.

The program is designed to produce practitioners who will meet part of the preventive, maintenance and therapeutic needs of the community and state concerning oral health and its effect on total health. Through basic education in the Dental Hygiene Program, students acquire knowledge and proficiency to become functioning members of the health care delivery team.

Applications for Admission to the Dental Hygiene Program and criteria for admission procedures are available from the Dental Hygiene Program office, Ward Health Sciences Building. Applications and supporting materials are due by January 15 of each year.

To progress in the Dental Hygiene Program, a minimum grade of "C" (2.0) is required in all phases (lecture and laboratory/clinical practice) of dental hygiene courses and in science courses.

A minimum grade point average of 2.0 must be maintained in all courses submitted on the degree plan to obtain the Associat of Applied Science degree. Graduates who successfully pass the Dental Hygiene National Board Examination are eligible to take state licensing exams in states where they plan to practice.

Associate of Applied Science — Dental Hygiene

Recommended Program of Study

First Year

Summer Session I

Bio 143 Anatomy and Physiology	4
DH 131 Orientation to Dental Hygiene	3
HS 121 Health Care Concepts	2
	9

Summer Session II

Bio 144 Anatomy and Physiology	4
DH 127 Morphology and Occlusion	2
	6

Fall Semester

DH 132 Dental Radiology	3
DH 134 Head and Neck Anatomy and Physiology	3
DH 155 Pre Clinic	5
Chem 143 Introductory Chemistry	4
	15

Spring Semester

DH 147 Dental Materials	4
DH 148 General and Oral Pathology	4
DH 146 Clinic I	4
Bio 245 Introductiery Microbiology	4
	16

Second Year

Summer Session I

HEc 138 Principles of Nutrition	3
English Composition	3
	6

Summer Session II

DH 221 Diet Analysis	2
DH 223 Periodontology	2
	4

Fall Semester

Psy 131 Introduction to Psych	3
DH 224 Pharmacology	2
DH 233 Community Dentistry I	3
DH 265 Clinic II	6
	14

Spring Semester

DH 225 Community Dentistry II	2
DH 266 Clinic III	6
English Composition	3
Soc 131 Introduction to Sociology	3
	14

NOTE: Credit by examination may be earned in some Dental Hygiene courses. See the program director.

Dental Hygiene Courses (DH)

127 Dental Morphology and Occlusion 2:1:3
A detailed anatomical study of human teeth, their eruption, exfoliation and occlusion.
Prerequisite: Admission to the program.

131 Orientation to Dental Hygiene Practice 3:2:3
Orientation and introduction to the practice of dental hygiene, including his/her role in all phases of dental specialty practice.
Prerequisite: Admission to the program.

132 Dental Radiology 3:2:3
A detailed study of theories, clinical techniques and principles of dental radiographic practice. Radiation safety, protection, exposure, production, development and interpretation are emphasized.
Prerequisite: Admission to the program.

134 Head and Neck Anatomy and Physiology 3:3:0
A detailed study of the embryology, histology, anatomy and physiology of the head and neck region, including common dysfunctions of the temporal-mandibular joint.
Prerequisite: Admission to the program or permission of program director.

147 Dental Materials 4:3:3
A study of the sources, properties, uses and techniques of manipulation of the various materials used in dentistry.
Prerequisite: Admission to the program.

148 General and Oral Pathology 4:4:0
A histopathological study of oral lesions, pathogenic conditions of particular significance to dentistry and principles of general and oral pathology.
Prerequisite: Admission to the program.

155 Pre-Clinic 5:3:6
Theoretical and clinical instruction in oral prophylaxis and preventive procedures. Transfer to patient simulation completed on manikins and class partners.
Prerequisite: Admission to the program.

146 Clinic I 4:2:8
Continuation and mastery of basic oral prophylaxis procedures. Advancement of complete patient care conducted in the dental hygiene clinic.
Prerequisite: Admission to the program.

221 Dietary Analysis 2:2:0
Study and application of diet analysis consultation skills in effecting patient behavior change relative to diet and dental disease.
Prerequisite: Admission to the program.

223 Periodontology 2:2:0
Comparative study of normal and diseased periodontium and the effects of structural, functional and environmental agents.
Prerequisite: Admission to the program.

224 Pharmacology 2:2:0
Study of the uses and actions of drugs including drug side effects, contra-indications and oral manifestations.
Prerequisite: Admission to the program.

225 Community Dentistry II 2:1:3
Application of program planning skills enhanced through actual community implementation. Analytical skills concerning critical evaluation of scientific data emphasized through a review of scientific literature.
Prerequisite: Admission to the program.

233 Community Dentistry I 3:3:0
Theory and principles of public health including epidemiology, statistics, preventive medicine, health behavior and program planning related to governmental, sociological, environmental and cultural concerns.
Prerequisite: Admission to the program.

265 Clinic II 6:3:12
Advancement of clinical prophylaxis skills applied to periodontally involved patients. Clinic and theoretical framework expanded through the addition of amalgam polishing procedures and diet consultation procedures.
Prerequisite: Admission to the dental hygiene program; DH 145 and 146.

266 Clinic III 6:3:12
Continuation and advancement of dental hygiene skills including advanced scaling and root smoothing procedures. Time utilization emphasized.
Prerequisite: Admission to the program; DH 255.

Radiologic Technology

Program Director: William David Short

The purpose of this program is to prepare students for a career in Radiologic Technology. Each student will be assisted in the pursuit of technical competence through lectures, demonstrations, supervised study and practical experience. A graduate of this two-year instructional program is awarded the Associate of Applied Science degree and becomes eligible to take the American Registry Examination for Radiologic Technology.

Students are accepted into the Radiologic Technology Program in the summer of each year. Admission to the program is based upon evidence of personal, physical, intellectual and emotional characteristics which are assumed to be consonant with a successful career in radiologic technology.

Radiologic Technology application for admission forms, criteria and admission procedures are available from the Radiologic Technology Program director, Ward Health Sciences Building. Applications are due by April 15 of each year.

A minimum grade of "C" (2.0) must be earned in all radiologic technology and science courses for progression in the program. In addition, a grade point average of 2.0 must be maintained in all courses submitted on the degree plan to obtain the Associate of Applied Science degree.

Associate of Applied Science — Radiologic Technology

Recommended Program of Study

First Year

Summer Session I

Bio 143 Anatomy and Physiology	4
HS 121 Health Care Concepts	2
	6

Summer Session II

Bio 144 Anatomy and Physiology	4
RA 131 Orientation to Radiologic Technology	3
	7

Fall Semester

RA 132 Radiographic Principles	3
RA 143 Radiographic Positioning	4
Math	3
English Composition	3
RA 152 Radiographic Practicum I	5
	18

Spring Semester

RA 133 Advanced Positioning & Pathology	3
RA 144 Radiographic Physics	4
English Composition	3
Psy or Soc	3
RA 154 Radiographic Practicum II	5
	18

Second Year

Summer Session I

RA 234 Radiographic Practicum III	3

Summer Session II

RA 235 Radiographic Practicum IV	3

Fall Semester

RA 231 Special Procedures	3
RA 242 Advanced Procedures	4
RA 262 Radiographic Practicum V	6
	13

Spring Semester

RA 236 Radiographic Technology Seminar	3
RA 233 Radiation Biology	3
RA 264 Practicum VI	6
	12

Radiologic Technology Courses (RA)

131 **Orientation to Radiologic Technology** 3:2:3
Introduction to Radiology; including history, organization, production of X-rays, radiation protection, darkroom technique, terminology. Examinations performed in radiology department.

132 **Radiographic Principles** 3:3:0
Study of basic principles of X-ray production; emphasis on the relationship between milliamperage, kilovoltage, time and distance as related to density and contrast on a radiograph. Film critique and dark room technique.

133 **Advanced Positioning & Pathology** 3:3:0
An intensive study in radiographic positioning to include Skulls, trauma, pediatrics and pathology identifications.

143 **Radiographic Positioning** 4:3:4
Procedures in radiology. Basic, advanced contraindications are explored. Topographic anatomy included.

144 Radiographic Physics 4:3:2
Intensive study of electromagnetism, electric transformers, electrical rectification, production of X-rays and the preventive maintenance of X-ray machines.

152 Radiographic Practicum I 5:0:24
Introduction to the clinical environment in affiliate hospitals. Rotation through different work centers to observe and assist in the operation of the radiology department.
Course requires 24 hours week of clinical participation.

154 Radiographic Practicum II 5:0:24
Students make standard radiographs under close supervision by a qualified radiologic technologist.
Course requires 24 hours week in clinical participation.

231 Special Procedures 3:3:0
Procedures uncommon to the radiology department. Specialized equipment involved. Anatomy, contrast media and radiographic projections used. Analysis of film quality.

233 Radiation Biology 3:3:0
Effects of radiation on the human population, methods of protection and dosimetry. Basic principles of radiation therapy and nuclear medicine.

234 Radiographic Practicum III 3:0:40
Clinical study to broaden the students' application of radiographic procedures. Proficiencies in diagnostic radiology will be emphasized. Course requires 40 hrs/week of clinical participation.

235 Radiographic Practicum IV 3:0:40
A continuation of Ra 234 with increasing emphasis in diagnostic radiology. Course requires 40 hrs/week of clinical participation.
Prerequisite: Ra 234.

236 Radiologic Technology Seminar 3:3:0
An indepth study of testing methodology. Also covered will be new advances in the field of radiology.

242 Advanced Procedures 4:3:2
Specialized technical procedures in radiology. Basic image detector principles, reducing patient exposure, accessory devices for patient safety, comparison of radiographic tubes, enlargement techniques, comparison of timing devices, mobile or bedside radiography, body section radiography and electronic image systems. Pediatric radiology included.

262 Radiographic Practicum V 6:0:32
Rotation through specialized procedure areas during clinical practice under limited supervision. Course requires 32 hrs/week of clinical participation.

264 Radiographic Practicum VI 6:0:32
Rotation through specialized areas in a radiology department. Emphasis on job responsibilities and confidence in skill performance. Course requires 32 hrs/week clinical participation.

Respiratory Technology/Therapy

Program Director: Paul A. Bronson

The purpose of this program is to prepare students for careers in respiratory therapy through lectures, laboratories and clinical experiences aimed at qualifying the student for certification in respiratory therapy. Upon successful completion of the course, the graduate may take the entry level certification examination given by the National Board for Respiratory Therapy.

A passing score on the examination will qualify the individual as a Certified Respiratory Therapy Technician (C.R.T.T.).

The student may option to continue into the second year of the program which leads to an Associate of Applied Science degree in Respiratory Therapy. Admission criteria into the second year are: 1) Successful completion of a one-year CAHEA Accredited Respiratory Therapy Technician Program; 2) or Certification by the NBRT as a Certified Respiratory Therapy Technician (CRTT). 3) Completion of application form for two-year AAS degree program.

Upon successful completion of the two-year course, the graduate may take the written registry examination given by the National Board for Respiratory Care. Obtaining a passing grade on the written examination qualifies the graduate to take the Clinical Simulation Examination. A passing grade on this examination qualifies the individual as a Registered Respiratory Therapist (R.R.T.).

Completed application forms must be submitted to the director of the respiratory technology/therapy program by April 15 of each year. These forms and the admission procedures are available from the program director, Ward Health Sciences Building.

A minimum grade of "C" 2.0 must be earned in all respiratory technology and science courses for progression in the program. In addition, a grade point average of at least 2.0 must be maintained in all courses to obtain the Certificate of Completion in Respiratory Technology, or the Associate of Applied Science Degree in Respiratory Therapy.

Certificate of Completion — Respiratory Technology

Recommended Program of Study

First Year

Summer Session I

Bio 143 Anatomy and Physiology	4
HS 121 Health Care Concepts	2
RT 123 Basic Respiratory Technology Care	2
	8

Summer Session II

Bio 144 Anatomy and Physiology	4
RT 131 Orientation to RT Practice	3
	7

Fall Semester

RT 121 Clinical Medicine I	2
RT 141 RT Procedures I	4
RT 143 RT Sciences	4
RT 160 RT Clinic I	6
	16

Spring Semester

RT 122 Clinical Medicine II	2
RT 137 RT Procedures II	3
RT 138 Cardiopulm Tech	3
RT 161 RT Clinic II	6
	14

Second Year

Summer Session I

English Composition	3
RT 232 Card-Pulm-Renal Anatomy & Physiology	3
	6

Summer Session II

English Composition	3
RT 231 RT Procedures III	3
	6

Fall Semester

Chem 143 Introductory Chemistry	4
Math	3
RT 221 Pulmonary Pathophysiology	2
RT 233 RT Clinical III	3
Psy 131 or Soc 131	3
	15

Spring Semester

Bio 245 Intro Microbiology	4
Phy 141 General Physics	4
RT 234 RT Procedures IV	3
RT 235 RT Clinical IV	3
	14

Respiratory Technology Therapy Courses (RT)

121 Clinical Medicine I 2:2:0
Basic pathological process applicable to disease conditions important to the respiratory technician. Emphasis on chronic respiratory diseases.

122 Clinical Medicine II 2:2:0
Prepares the student for the management of acute respiratory failure in newborn, pediatric, medical, surgical, obstetric and gynecology patients. Respiratory therapy involvement is emphasized.

123 Basic Respiratory Technology Care 2:2:0
A basic introduction to the concepts of oxygen care, physical examinations, gas modalities and oxygen analyzers.

131 Orientation to RT Practice 3:3:6
An orientation to the concepts of oxygen manufacture, transport and storage, flow meters, regulators, tanks, humidifiers, oxygen concentrators, and an indepth moduel in CPR.

137 Respiratory Therapy Procedures II 3:2:3
Prepares the student to skillfully operate various volume ventilators and to effectively administer assistance required by medical staff.
Prerequisite: Concurrent enrollment in RT 138, 122, and 161.

138 Cardiopulmonary Technology 3:2:3
Emphasizes the importance of the heart and lungs to respiratory therapy. Relates the cardiopulmonary systems to airway management, cardiopulmonary resuscitation, blood gas analysis, pulmonary function studies and chest physiotherapy.

141 Respiratory Therapy Procedures I 4:3:4
Instruction and application of techniques and skills necessary to administer common methods of gas, aerosol and humidity therapy. Pharmacology for respiratory therapy discussed in detail and correlated with intermittent positive pressure breathing procedures and equipment.

143 Respiratory Therapy Sciences 4:3:2
Basics of mathematics, chemistry, physics and microbiology as they relate to respiratory therapy principles and procedures.

160 Respiratory Therapy Clinic I 6:0:24
Introduces the student to the respiratory therapy department in clinical facilities. Observation of techniques of therapists and technicians as they perform services. The student will participate in basic respiratory therapy procedures including intermittent positive pressure breathing, aerosol, humidity and gas therapy.
Prerequisite: Concurrent enrollement in RT 141, 143 and 121.

161 Respiratory Therapy Clinic II 6:0:24
Clinical application of treatment conditions discussed concurrently in RT 122, 137 and 138. Special emphasis on practice in critical care areas utilizing volume ventilators. Experience in the management of artificial airways, tracheobronchial aspiration, blood gas analysis and pulmonary function testing are included.

221 Pulmonary Pathophysiology 2:2:0
An advanced study of disease with emphasis on the diseases which compromise the function of the respiratory appratus.

231 Respiratory Therapy Procedures III 2:3:3
Emphasizes advanced pulmonary function studies including nitrogen washout, helium closed circuit, body box, closing volumes, flow volume loops, chest X-ray interpretation, stress testing and heart catheterization.

232 Cardiopulmonary/Renal Anatomy & Physiology 3:3:0
Emphasizes the anatomy and physiology of the heart, circulatory system, respiratory system and the excretory system.

233 Respiratory Therapy Clinical III 0:3:16
Clinical application of therapeutic modalilties as related to specific disease entities diagnosed from results of lab tests.

234 Respiratory Therapy Procedures IV 2:3:3:
Will be divided into three sections: Pulmonary rehabilitation/home care; organization and administration of Respiratory Therapy Departments; teaching techniques in Respiratory Therapy.

235 Respiratory Therapy Clinical IV 0:3:16
Clinical rotation will be divided into three sections: a clinical rotation through the pulmonary rehabilitation unit concurrently with a respiratory home care agency; a clinical rotation with the department heads of each affiliating hospital; a clinical teaching rotation.

Department of Nursing

Department Head: Eileen Tiedt **233B Ward Health Sciences Building**

Professor: Grubb, Tiedt

Associate Professor: Taylor

Assistant Professors: Boyd, Esperat, Kendall, Malone, Moss, Price-Nealy, Rabalais, Smith, Twiname, Wohler

Instructors: Cloud, Gilmore, Kilpartick, Kirksey, Hale, Roberts, Slaydon, Usrey

Instructor II: Rudloff

Instructor I: Mason

Clinical Instructors: Fisher, Gregory, Kamla, McGuffin, Richard, Richardson, Stinson

Nursing education began at Lamar University in 1951, when the Vocational Nursing Program was approved in the College of Technical Arts. Eventually, the way was paved for the development of Registered Nurse preparation. The Associate of Science in Nursing program accepted students in January 1974, and the Bachelor of Science in Nursing Program admitted the first class in January 1976.

Nursing programs differ in their focus on education and clinical practice. It is pertinent then, to state the department's view of nursing education and nursing service.

Basic to the philosophy of the department is the belief that all people have the right to optimal health care. Nursing shares with other health sciences the goal of promoting health for individuals, families, and communities, as well as the responsibility for the care, comfort, and coordination of services to clients experiencing acute, chronic, and terminal illness. To accomplish this goal, nurses function in collaboration with other members of the health team, in a supportive role to the medical plan, and as independent practitioners of nursing. Nurses also function as patient/client advocates. Based on scientific knowledge, caring attitudes and technical skills, nurses focus on promotion of health, prevention of illness and disease. Nursing is concerned with expansion and application of new knowledge and methods of care, and with improvement of health care delivery systems.

To implement this philosophy, the curricula focus on the behavior of people in various levels of wellness. The programs provide understanding of the systems which influence living and care giving, and people's psychology and physiology under normal and pathological conditions. Attaining clinical competence is stressed.

Students of nursing meet course requirements through didactic courses, laboratory assignments, and clinical experiences in health care facilities under supervision of University faculty. Students are expected to adhere to rules and regulations of Lamar University and the various facilities to which they are assigned. Specific policies may be obtained from program directors.

Admission to Department of Nursing Programs

Students enrolled at Lamar University must submit an application for Admission to Nursing programs.

Students not enrolled at Lamar must submit two separate applications: one for admission to Lamar (obtained from the Office of Admissions and Records), and one for admission to the specific program (obtained from the Advising Center, Room 257, Ward Health Sciences Building).

Completed Application for Admission to Nursing programs, with required transcripts, test scores and related documents must be received on specified dates (see program statements to be considered for admission). Applicants are urged to follow application instructions carefully to ensure processing by admission committees.

Applications for Admission are evaluated on the following bases:

1. Admission to the University (Admissions section of this bulletin.)
2. Transcripts and grades in high school and previous college work. Specified test scores may be required.
3. Evidence of physical and emotional capability of completing the program of instruction and clinical practice. Health examinations are required. Forms are available with application forms.
4. Motivation for nursing practice demonstrated through letters of recommendation, employment and volunteer records and references, statement of career goals and, in most cases, a personal interview.
5. Admission may be limited by available space.
6. An overall grade point average of 2.0 for the Associate Degree, 2.5 in Behavioral/Biological Science courses and 2.0 in all other college work for the Baccalaureate Degree and an SAT score of 550 for the Vocational Nursing certificate, is the minimum required for consideration for admission to these programs. Applicants who exceed the minimum requirements will gain more favorable recognition.

Additional costs above tuition and fees are involved in nursing programs. Uniforms, equipment, instruments, liability insurance, health examinations, special testing fees, course packet fees, additional laboratory fees, and transportation to clinical facilities are the student's responsibility. Financial aids are available for eligible students (see Financial Aid and Awards section of this bulletin.)

Liability insurance and health examinations must be renewed each year of Nursing programs.

Students may be assigned to clinical experiences during day, evening, night, or weekend hours.

Clinical agencies may require additional health examinations, dress codes or conformity with other policies. Students will be informed in advance of such requirements.

Transfer credits from other institutions will be evaluated on an individual basis.

Courses taught during the summer sessions may require different registration procedures.

Bachelor of Science — Nursing

Program Director: Eileen Tiedt

The purpose of the baccalaureate nursing program is to prepare professional nurse practitioners to meet community and state needs for nurses who can assume leadership in the delivery of health care.

The program is designed to prepare the graduate for beginning roles in assessing, planning, implementing and evaluating nursing and health care needs of individuals, families and groups in a variety of settings. This program also lays the foundation necessary for graduate study in clinical specialities, supervision, administration, education, and/or research.

Completion of the program leads to a Bachelor of Science in Nursing degree. Recipients of the degree are eligible to make application to write the examination given by the Board of Nurse Examiners to become a Registered Nurse (RN).

The baccalaureate program also provides an opportunity for Registered Nurses who wish to pursue a Bachelor of Science Degree in Nursing.

Application for admission to the program is made during the spring semester preceding the sophomore year. Students are encouraged to develop and maintain early counseling contact with the department.

Admission to the nursing major follows criteria of the College of Health and Behavioral Sciences. Admission is determined by the Admissions Committee and is based on evaluation of the student's application and available space. To be considered for admission the student must:

1) Have a minimum overall grade point average (GPA) of 2.50 in Behavioral/Biological Science courses and 2.0 in all other college work.
2) Have completed all prerequisite courses.
3) Submit a complete application and attendant materials to the Admissions Committee by April 15 prior to the sophomore year.

Credit may be earned by examination in selected nursing courses. Criteria for eligibility to take competency/equivalency examinations, fees, policies, procedures and other details may be obtained from the program director, Ward Health Sciences Building.

Students may be required to validate their knowledge of social, psychological or biological science courses which were taken more than 10 years prior to the date of application to the nursing program.

Nursing courses may be repeated once by special permission, after demonstration of prerequisite knowledge and skills (see program director and/or Student Handbook for specific policies and procedures).

Bachelor of Science — Nursing Major

Recommended Program of Study

First Year

First Semester		Second Semester	
Bio 143 Human Anatomy and Physiology	4	Bio 144 Human Anatomy and Physiology	4
Chm 143 Introduction	4	Chm 144 Introduction	4
Psy 131 Introduction to Psychology	3	Psy 234 Child Psychology	3
HEc 138 Principles of Nutrition	3	Soc 131 Introduction to Sociology	3
Eng 131 Composition	3	Eng 132 Composition	3
HPE	1	HPE	1
	18		18

Second Year

First Semester		Second Semester	
Bio 245 Introductory Microbiology	4	Nur 221 Concepts Basic to Nursing Practice	2
Mth 1334 College Algebra	3	Nur 284 Nursing Care of the Adult Client I	8
Nur 253 Concepts and Practice of Clinical Nursing	5	Nur 332 Pharmacologic Basis of Nursing Practice	3
Nur 233 Basic Pathophysiology	3	Eng 231 Literature	3
HPE	1	HPE	1
	16		17

Third Year

First Semester		Second Semester	
Nur 328 Ecology of Nursing	2	Nur 331 The Community as a Client	3
Nur 353 Nursing Care of Adult Client II	5	Nur 382 Nursing the Family I	8
Nur 355 Nursing Care of Adult Client III	5	Eng Literature (2)	2
His 231 American History	3	POLS 231 Introduction to American Government I	3
*Elective (Non Major)	3		
	18		17

Fourth Year

First Semester		Second Semester	
Nur 481 Nursing the Family II	8	Nur 491 Comprehensive Nursing Practice	9
Nur 430 Research Process in Nursing	3	Nur 433 Senior Seminar	3
His 232 American History	3	POLS 232 Introduction to American Government II	3
*Nur Elective	3	*Elective (non-major)	3
	17		18

Students are encouraged to take these courses earlier, if possible.

Bachelors Degree Nursing Courses (Nur)

221 Concepts Basic to Nursing Practice **2:2:0**
Introduction to selected concepts which serve as a framework for nursing practice. Beginning integration of content from the natural, physical, and social sciences applied to health care.
Prerequisite: Admission to the BSN Program or departmental consent.

233 Basic Pathophysiology **3:3:0**
Study of basic pathophysiology with emphasis on disease processes. Focus on implications for nursing practice.
Prerequisite: Admission to the BSN program or department consent.

253 Concepts and Practice of Clinical Nursing **5:3:6**
Beginning application of the nursing process and physical assessment skills. Emphasis on health assessment, maintenance and history taking.

284 Nursing Care of the Adult Client I **8:4:12**
Application of the nursing process and physical assessment skills, emphasizing planning and intervention skills with adult clients experiencing interference in biological health.
Prerequisite: Nur 221, 233, 253, admission to BSN Program.

328 Ecology of Nursing **2:2:0**
Consideration of nursing from historical perspective to aid understanding of contemporary practice. Emphasis on roles of the nurse. Introduction to legal and ethical issues and to the scientific approach to nursing. Focus on the inter-relatedness of nursing education and practice within the health care system.
Prerequisite: Nur 221, 233, 253, 284 and Departmental consent.

3305 Directed Study in Nursing **3:3:0**
This elective provides the nursing student with an opportunity for individualized study of selected concepts and/or problems in professional nursing. Course may be repeated as content varies.
Prerequisite: Departmental consent.

331 The Community as a Client **3:3:0**
Expands previously presented concepts to include the delivery of health care to large and small groups. Emphasis is given to the concepts of the community as a client within the context of primary, secondary and tertiary health care.
Prerequisite: Departmental consent.

332 Pharmacologic Basis of Nursing Practice **3:3:0**
An introduction to pharmacology, principles of therapeutics and clinical applications.
Prerequisite: Departmental consent.

3331 Folk Medicine 3:3:0
Study of societal influence on health attitudes and beliefs of different cultures. Components such as religion language, family structure, and traditional community life style are examined with regard to their implications for health providers.
Prerequisite: Departmental consent.

3332 Ethical Issues in Health Care 3:3:0
Wide range exploration of ethical issues central to providing health care in contemporary America.
Prerequisite: Departmental consent.

3333 Legal Concepts in Health Care 3:3:0
Study of the principles of law that affect the delivery of health care.
Prerequisite: Department consent.

3334 Health Planning 3:3:0
Introduction to planning process in health systems development including specific planning issues relating to facilities, services, and manpower.
Prerequisite: Departmental consent.

3335 Trends in Health Professions 3:3:0
Examines major forces affecting health care delivery and implications for health workers. Topics include demographies, technological changes, disease trends, governmental action and changes in the health delivery system.
Prerequisite: Departmental consent.

3336 Ethnic Consideration of Health Care 3:3:0
Application of the theory of major biological, psychological, sociological and cultural characteristics of ethnic people of color. Current concepts of ethnic variations and their principles for health practice will be focused upon.
Prerequisite: Department consent.

3337 Teaching in Health Sciences 3:3:0
Principles and methods of the teaching-learning process for health professions will be examined. Using a systems approach to instructional development, health teaching in a variety of setting will be explored. Topics include classroom and clinical instruction of health students; patient and public health education; and continuing education for health professionals.
Prerequisite: Department consent.

336 Oncology Nursing 3:3:0
Emphasis is on the bio-psycho-social needs of clients with cancer. Course content includes pathophysiology, diagnosis and staging, modes of therapy, psychosocial problems, the nurse's role and support groups.
Prerequisite: Departmental consent.

339 Psycho-Social Aspects of Nursing 3:3:0
Enhances student's ability to transfer knowledge from psychology, sociology and nursing, to care of clients with disturbances in mental, social, and physical health.
Prerequisite: Departmental consent.

345 Physical Assesment 4:3:3
Clinical laboratory and classroom experience in applying physical assessment skills. Appropriate for junior and senior nursing students.
Prerequisite: Nur 233 or departmental consent.

353 Nursing Care of the Adult Client II 5:2:9
A continuation of Nur 284, with emphasis on the adult client experiencing interference with biological health.
Prerequisites: Nur 253, 284.

355 Nursing Care of the Adult Client III 5:3:6
Application of nursing process, emphasizing planning and intervention skills with adult clients experiencing interferences in psychological health.
Prerequisites: Nur 253, 284.

382 Nursing Care of the Family I 8:3:15
Application of nursing process, emphasizing health maintenance of clients and families in community settings.
Prerequisites: Nur 253, 284, 353, 355.

411 Directed Reading in Nursing 1:1:0
Provides the senior nursing student an opportunity to engage in reading and library study of selected concepts in nursing, under faculty supervision. May not be repeated.
Prerequisite: Departmental consent.

4301 Special Topics Nursing 3:3:0
Nursing elective introducing topics related to health care. Designed to expand the student's professional role in various health care settings and areas of specialization.
Prerequisite: Departmental Consent.

4305 Directed Study in Nursing 3:3:0
This elective provides the senior nursing student with an opportunity for individualized study of selected concepts and/or problems in professional nursing. The course may repeated as the content varies.
Prerequisite: Departmental consent.

430 Research Process in Nursing 3:3:0
Introduction to the philosophy and values of research, the major methods of conducting investigations and the application of research findings to nursing and health care.
Prerequisite: Departmental consent.

431 Clinical Elective in Nursing 3:1:6
Opportunity to expand knowledge of theory and practice in selected areas of nursing. Course may be repeated as content varies.
Prerequisite: Departmental consent.

432 Nursing of Children in Crisis 3:3:0
Use of the nursing process in the care of children and their families facing crisis. This course covers the dynamics of the crisis situation and the adaptive responses of the child and family.
Prerequisite: Departmental consent.

433 Senior Seminar 3:3:0
Provides the senior nursing student the opportunity to study and discuss complex nursing and health care issues.
Prerequisite: Department consent.

434 Media in Nursing 3:3:0
An introduction to the use and development of media in a variety of nursing settings.
Prerequisite: Departmental consent.

435 Managing Time and People 3:3:0
A lecture-discussion and clinical practice course designed for nurses in management positions. Emphasis on solving on-the-job problems through application of practical management strategies. Focus on improving time management skills, including setting priorities, increasing job and life satisfaction. Includes managment skills in delegating and evaluation of personnel. Strategies for coping with people and situations which cause problems for nurse managers. Students will choose current on-the-job problems and devote on-duty time on their resolution.
Prerequisite: Employment in a managerial position, or department consent.

436 Occupational Health Nursing 3:3:0
Considers occupational health nursing from a variety of viewpoints. Analysis of current and projected trends and continuing need to assure industrial workers maximal level of wellness, safe work environment, and optimal production.
Prerequisite: Departmental consent.

437 Concepts of Child Health Promotion and Maintenance 3:3:0
Expansion of assessment, diagnostic, and nursing intervention skills to facilitate child health promotion and maintenance. Designed for nurses interested in health of children in community settings and schools.
Prerequisite: Nur 481 or departmental consent.

439 Nursing Care of Clients with Cardiopulmonary Problems 3:3:0
Intensive study of clients with selected complex disturbances in cardiopulmonary function.
Prerequisite: Departmental consent.

441 Advanced Neonatal Nursing 4:3:4
The physiology, pathology and nursing skills necessary to care for neonatal infants in intensive care units. Relationship of health status of infant on the maternal-infant bonding process emphasized.
Prerequisite: Nur 382 or departmental consent.

442 Emergency and Disaster Nursing 4:2:6
A lecture/discussion and clinical practice course designed to provide theory and practice for students interested in emergency and disaster nursing.
Prerequisite: Departmental consent.

443 Health Seminar 4:4:0
Examines complex health issues from an interdisciplinary prospective.

444 Surgical Nursing 4:2:6
Opportunity to expand knowledge of theory and practice in the care of clients requiring surgical intervention.

481 Nursing Care of the Family II 8:3:15
Application of nursing process emphasizing health restoration and rehabilitation of clients and families in the childbearing and childrearing cycles.
Prerequisite: Nur 382.

491 Comprehensive Nursing Practice 9:3:18
Application of nursing process to comprehensive nursing care. Leadership and management of nursing service delivery systems.
Prerequisite: Nur 481, 430.

Associate of Science — Nursing

Program Director: Doris J. Price-Nealy

The purpose of the Associate of Science degree nursing program is to prepare a practitioner for beginning roles in assessing, planning, implementing, and evaluating, with assistance, the nursing and health care needs of clients in the hospital setting.

The associate degree nursing program may be completed in two calendar years. Students receive classroom instruction and coordinated clinical experience in the nursing care of patients at local hospitals and community agencies. Each recipient of the degree is eligible to make application to write the state licensing examination given by the State Board of Nurse Examiners to become a registered nurse (RN).

A minimum grade of "C" must be maintained in all nursing and science courses for admission and progression in the program, as well as to obtain the Associate of Science degree. For progression in the program an overall GPA of 2.0 must be maintained in all course work. A student who fails to perform satisfactorily in clinical practice will receive a failing grade in the nursing course regardless of the theory grade. Nursing courses may be repeated once by special permission, after demonstration of prerequisite knowledge and skills (see program director and/or Student Handbook for specific policies and procedures).

To be considered for admission, the student must submit an application to the admissions committee of the associate degree nursing program by April 15 of each year. This form, and information concerning admission procedures may be procured from the Advising Center, Room 257, Ward Health Science Building. The student must also complete the required courses offered in Summer Session I and Summer Session II with a grade of "C" or better. Students are encouraged to develop and maintain early counseling contact with the department. Admissions is determined by the Admissions Committee and is based on evaluation of the student's application and available space.

Associate of Science — Nursing

Recommended Program of Study

First Year

Summer Session I

HS 121 Health Care Concepts	2
Bio 143 Human Anatomy and Physiology	4
PE Activity	1-2
	7-8

Summer Session II

Nur 132 Basic Nursing Skills	3
Bio 144 Human Anatomy and Physiology	4
	7

Fall Semester

Eng 131 Composition	3
Psy 131 Introduction	3
Nur 161 Mental and Physical Health	6
POLS 231 Intro. Am. Gov. I	3
	15

Spring Semester

Bio 245 Microbiology	4
Eng 132 Composition	3
Nur 172 Nursing Adult Client I	7
His 231 American History	3
	17

Summer Session I and II

Nur 281 Maternity Nursing	8

Second Year

Fall Semester

Nur 282 Nursing Child Client	8
POLS 232 Intro. Am. Gov. II	3
PE Activity	1-2
Soc 131 Introduction	3
	15-16

Spring Semester

Nur 283 Nursing Adult Client II	8
His 232 American History	3
Eng Literature	3
	14

Associate Degree Nursing Courses (Nur)

132 Basic Nursing Skills 3:2:3

Focuses on the development of basic nursing skills, mathematical and measurement skills and terminology. Required for all ADN and BSN applicants.

161 Mental and Physical Health I 6:3:12
Introduction to nursing concepts which form the framework for the nursing process. Includes physiology, nutrition, pharmacology, mental health, growth and development. Emphasis on technical, observational, and communication skills needed for effective nursing care.
Prerequisite: Nur 132, admission to ADN program.

172 Nursing Care of the Adult Client I 7:3:16
Continues integration of concepts basic to the nursing process. Emphasis on application of nursing process to care of hospitalized adults with disturbances in physical or mental health.
Prerequisite: Nur 161.

2301 Special Topics in Nursing 1-4:1-4:0
Nursing elective introducing topics related to health care. Designed to expand the student's professional role in various health care settings and areas of specialization.
Prerequisite: Departmental consent.

281 Maternity Nursing 8:4:16
Application of concepts basic to the nursing process to the hospitalized maternity client. Emphasis on physiology, growth and development, emotional and environmental influences on childbearing.
Prerequisite: Nur 172.

282 Nursing Care of the Child Client 8:4:16
Application of concepts basic to the nursing process to the hospitalized child.
Prerequisite: Nur 281.

283 Nursing Care of the Adult Client II 8:3:20
Application of all concepts included in the nursing process to hospitalized adults with complex disturbances in physical and mental health. Introduction to management in hospital nursing service.
Prerequisite: Nur 282.

Vocational Nursing

Program Director: Sandra Boyd

Vocational Nurses provide basic nursing care under the direct supervision of a Registered Nurse or physician. Upon successful completion of the program, graduates receive a certificate of completion and are eligible to make application to write the examination given by the State Board of Vocational Nurse Examiners to become a Licensed Vocational Nurse (LVN).

Vocational nursing classes begin in the Fall and Spring Semesters with application deadlines being July 1 and November 1 of each year. To be considered for admission applicants must submit an SAT score of at least 550 or an ACT score of at least 11. Application forms and procedures are available from the Advising Center, Room 257, Ward Health Sciences Building.

A minimum grade of "C" must be obtained in theory courses and an "S" (Satisfactory) in all clinical courses for progression in the program. Vocational nursing courses may be repeated once by special permission.

Vocational Nursing

Recommended Program of Study

First Semester

VN 175 Nursing Skills I	7
VN 144 Anatomy	4
VN 122 Nutrition	2
VN 166 Clinical Practice I	6
	19

Second Semester

VN 163 Nursing Skills II	6
VN 136 Medical Surgical Nursing I	3
VN 133 Pharmacology	3
VN 167 Clinical Practice II	6
	18

Third Semester

VN 137 Medical Surgical Nursing II	3
VN 138 Obstetrical Nursing	3
VN 139 Pediatric Nursing	3
VN 121 Personal and Vocational Adjustments	2
VN 168 Clinical Practice III	6
	17

Vocational Nursing Courses (VN)

121 Personal and Vocational Adjustments 2:2:0
Introduction to health care delivery systems, professional organizations, mechanics of licensure and transition to graduate status.

122 Nutrition and Diet Therapy 2:2:0
Fundamental principles of basic nutrition, the relationship of food to normal health and the application of basic principles of nutrition to diet therapy in the treatment of disease.

133 Pharmacology 3:3:0
This course is designed to introduce the student to pharmacology and the administration of medicines.

136 Medical Surgical Nursing I 3:3:0
Specific theory in the diseases and conditions of integumentary, special sensory, respiratory, endocrine, muscular and cardiovascular systems.

137 Medical Surgical Nursing II 3:3:0
Specific theory in the disease and conditions of gastrointestinal, genitourinary, male and female reproductive, nervous and skeletal systems.

138 Obstetrical Nursing 3:3:0
Specific theory on the care of mothers and newborn infants.

139 Pediatric Nursing 3:3:0
Specific theory on the care of sick children.

144 Anatomy and Physiology 4:4:0
The primary objective is to introduce principles of the biological and physical sciences that contribute to the student's understanding of the human body process in normal and certain abnormal conditions.

163 Nursing Skills II 6:2:8
Continuation of basic care skills, adding more complex skills such as drug administration, sterile technique and assisting with special procedures.

166 Clinical Practice I 6:0:24
Introduction to basic needs of hospitalized adults and children.

167 Clinical Practice II 6:0:24
Refinement of skills presented in Clinical Practice I with emphasis on nursing care needs of adults and children experiencing common medical-surgical problems.

168 Clinical Practice III 6:0:24
Continues development of skills from previous Clinical Practice with introduction to basic care of the obstetrical patient and newborn infant.

175 Nursing Skills I 7:2:8
Presentation of basic patient care skills; basic microbiology; mental health and illness; personal and professional ethical and legal responsibilities.

Department of Psychology

Department Head: Richard G. Marriott **103 Psychology Building**

Professors: Barrington, Bell

Associate Professors: Die, Esser, Marriott, Walker

Assistant Professors: Dippel, Lindoerfer

Bachelor of Arts — Psychology Major

The degree of Bachelor of Arts in Psychology will be awarded upon completion of the following:

1. General Requirements:
   English Composition six semester hours
   Literature six semester hours
   Mathematics six semester hours
   (A minimum of 3 semester hours at or above the level of Mth 1334)
   Biology 141-142 General eight semester hours
   Foreign Language 12 semester hours completion of the 232 course in a foreign lanaguage
   Political Science 231, 232 American Government six semester hours
   Sophomore American History six semester hours
   Physical Activity four semesters

2. Major:
   Psychology 131 Introduction to Psychology
   Psychology 241 Statistical Methods in Psychology
   Psychology 342 Methods in Psychology
   Psychology Additional 1245 15 semester hours, a minimum of 12 semester hours must be on the advanced level
3. Minor:
   An approved minor of 18 semester hours, a minimum of six semester hours must be on the advanced level
4. Electives:
   A sufficient number of approved electives to complete a total of 126 semester hours.

Recommended Program of Study

First Year

Bio 141, 142 General Biology	8
Eng Composition	6
Foreign Language	6
Mth	6
Psy 131 Introduction to Psychology	3
PE Activity	2-4
	31-33

Second Year

Eng Literature	6
Foreign Language	6
His Sophomore American History	6
Psy 241 Introduction to Statistical Methods	4
Electives	8
PE Activity	2-4
	32-34

Third Year

Pols 231, 232 Introduction to American Government	6
Psy 342 Methods in Psychology	4
Psy Advanced 3 hrs	6
Minor	9
Electives	6
	31

Fourth Year

Psy, Advanced	9
Minor	9
Electives	12
	30

Total 126 Hours

Bachelor of Science — Psychology Major

The degree of Bachelor of Science in Psychology will be awarded upon completion of the following:

1. General Requirements:
   English Composition six semester hours
   Literature six semester hours
   *Mathematics 6-12 semester hours; completion of Mth 236, 237 or the equivalent, maximum of 6 semester hours in computer science may be substituted for the 200 level mathematics courses upon completion of six semester hours in mathematics including Mth 1335.
   Biology 141-142 General eight semester hours
   Political Science 231, 232 American Government six 1292 semester hours
   Sophomore American History six semester hours
   Science eight semester hours
   Physical Activity four semesters
2. Major:
   Psychology 131 Introduction to Psychology
   Psychology 241 Statistical Methods in Psychology
   Psychology 342 Methods in Psychology
   Psychology 443 Experimental Psychology
   Psychology Additional 18 semester hours, to include nine semester hours selected from Psychology 331,332,333 and 432 and nine semester hours selected from Psychology 336, 431, 436, and 438.
3. Minor:
   An approved minor of 18 semester hours a minimum of six semester hours must be on the advanced level
4. Electives:
   A sufficient number of approved electives to complete a total of 128 semester hours.

Recommended Program of Study

First Year

Bio 141-142 General Biology	8
Eng Composition	6
Mth	6
Science	8
Psy 131 Introduction to Psychology	3
PE Activity	2-4
	33-35

Second Year

Eng Literature	6
Mth	6
Psychology	3
Psy 241 Introduction to Statistical Methods	4
Minor	6
Electives	3
PE Activity	2-4
	30-32

Third Year

POLS 231, 232 Introduction to American Government	6
Psy 342 Methods in Psychology	4
Psy, Advanced	6
Minor	6
Electives and other Psy	9
	34

Fourth Year

His Sophomore American History	6
Psy 443 Experimental Psychology	4
Psy Advanced	6
Minor	6
Electives and other Psy	9
	31

Total 128 hours

*Deviations from the Mth 236, 237 sequence require prior approval of department head.

*Bachelor of Science in Psychology

*Bachelor of Science in Biology

First Year

Bio 141, 142 General Biology	8
Chm 141, 142 General	8
Eng Composition	6
Mth 1335 Precalculus Mathematics	3
Psy 131 Introduction to Psychology	3
Psy 241 Introduction to Statistical Methods	4
PE Activity	2-4
	34-36

Second Year

Chm 341, 342 Organic	8
Bio 240 Comparative Anatomy or 444 Vertebrate Natural History	4
Bio 245 or 243 Microbiology	4
Psy 342 Methods	4
Eng Soph Literature	6
Mth 236 Calculus I	3
Mth 237 Calculus II or CS 131	3
***Psy Advanced	3
	35

Summer

POLS 231, 232 Introduction to American Government	6
PE Activity	2-4
Electives	6
	14-16

Third Year

His Sophomore American History	6
Phy 141, 142 General	8
Bio 347 Genetics	4
Bio 345 Botany	4
Psy 443 Experimental Psy	4
***Psy Advanced	9
	35

Fourth Year

Bio 346 Invertebrate Zoology	4
Bio 417 Classical Biological Literature	2
**Bio Electives	12
***Psy Advanced	6
Electives	13
	37

*Both degrees must be awarded simultaneously.
**Biology electives chosen from Bio 342, 344, 446, 447.
***Advanced Psychology elective: Group I (choose any three): Psy 331, 332, 333, 432; Group II (choose any three): Psy 336, 431, 436, 438.

Psychology Courses (Psy)

120 **Psychological Processes in Career Selection** 2:2:0

A study of the factors influencing the decision making process and methods used in resolving conflicts regarding career selection. Includes lectures, administration of standardized interest inventories, self-exploration, and review of majors available to students.

Prerequisite: Undeclared majors or consent of instructor.

131 Introduction to Psychology 3:3:0
An introductory survey of the major areas of psychology such as learning, personality, social, testing, developmental and physiological. Emphasis is on psychology as the scientific study of behavior and includes both human and animal behavior.

132 Fields of Applied Psychology 3:3:0
A survey of the major fields of applied psychology such as personal and vocational adjustment, industrial-organizational psychology, consumer psychology and environmental psychology. Emphasis is on ways in which the principles of psychology can be applied to practical problems in life and work.
Prerequisite: Psy 131.

234 Child Psychology 3:3:0
A study of the growth and development of behavior patterns in children.

235 Adolescent Psychology 3:3:0
A study of the growth and development of behavior patterns in adolescents.

241 Introduction to Statistical Methods 4:3:2
Statistical concepts and techniques used in behavioral science research. Topics include graphs, measures of position, central tendency and dispersion, correlation and regression, probability, tests of significance and introduction to non-parametric techniques.

342 Methods in Psychology 4:3:2
An introduction to the methods of research employed in the scientific study of behavior. Topics include nature and philosophy of science, experimental design, data analysis and report writing. Several experiments are designed, conducted and reported by students.
Prerequisite: Psy 131 and 241.

330 Psychology of Communication 3:3:0
A study of the theory, structure and function of communication patterns in various group settings.
Prerequisite: Psy 131.

331 Systems and History of Psychology 3:3:0
Historical development of psychology. Emphasis on the evolution of major systems of psychology.
Prerequisite: Psy 131.

332 Psychology of Personality 3:3:0
A study of several of the major theories of personality organization and adjustment processes.
Prerequisite: Psy 131.

333 Psychology of Social Interaction 3:3:0
Investigation of psychological basis of interpersonal behavior. Emphasis is on the study of individual experience and behavior in relation to the social environment, and how individual behavior both affects and is affected by social interaction.
Prerequisite: Psy 131.

334 Industrial Psychology 3:3:0
Introduction to Psychological processes and techniques as they apply in industrial settings. Emphasis on selecting, training and evaluating workers. Emphasis also on organizational influences on behavior.
Prerequisite: Psy 131

335 Motivation 3:3:0
A study of contemporary concepts, theories and research in motivation.
Prerequisite: Psy 131.

336 Psychological Tests and Measurements 3:3:0
Theory and use of instruments for measurements of intelligence, interests, aptitude and attitudes.
Prerequisite: Psy 131, 241 or equivalent or permission of instructor.

337 Psychology of Adjustment 3:3:0
A study of normal adjustment and commonly used defenses against anxieties.

339 Psychology and Biology of Sexuality 3:3:0
Understanding of human sexuality through progressive study of conception and birth, through the development of sex roles, to the acquisition of sexual maturity and functioning in society. Credit may not be recieved for both Bio 339 and Psy 339.

410,420,430 Undergraduate Research 1-3:A:0
Designed to provide an opportunity for advanced psychology students to pursue an individual research project under the direction and supervision of a faculty member. May be repeated for credit.
Prerequisite: 9 hours of psychology and permission of instructor.

4101,4201,4301 Special Topics in Psychology 1-3:A:0
Topics in developmental, physiological, social, differential, experimental, quantitative, cognitive or clinical psychology. Includes library and/or laboratory work and conferences with a staff member. A description of the particular area of study will be indicated. A student may repeat the course for credit when the area of study varies.

431 Sensation and Perception 3:3:0
A review of research and theory regarding the structure and function of the basic sensory processes and sensory perception.
Prerequisite: Psy 131.

432 Abnormal Psychology 3:3:0
A study of abnormal behavior. Special emphasis on the symptomatology, etiology and therapeutic approaches.
Prerequisite: Psy 131.

434 An Introduction to Group Psychotherapy 3:3:0
An introduction to the theory and techniques of group psychotherapy. Instruction will be combined with experimental learning of the basic skills used in group psychotherapy.
Prerequisite: Psy 131.

435 Leadership and Group Dynamics 3:3:0
A study of the nature, evaluation and utilization of intra and inter-personal forces producing behavior in various group structures.
Prerequisite: Psy 131.

436 Learning 3:3:0
Theories and research concerning learning processes, with a consideration of practical implications.
Prerequisite: Psy 131.

438 Physiological Psychology 3:3:0
Survey of the physiological bases of behavior with emphasis on the mechanisms in the central nervous system.
Prerequisite: Psy 131.

439 Contemporary Problems in Psychology 3:3:0
A critical and comprehensive examination of current problems in selected areas of psychology. Topics will vary from semester to semester.
Prerequisite: Nine hours in psychology or permission of instructor. May be repeated for credit when topics vary.

443 Experimental Psychology 4:3:2
Techniques to demonstrate and investigate concepts in psychology. Includes planning and executing an original research project.
Prerequisite: Psy 342.

College of Technical Arts

Departments: Adult Training, Industrial, Related 1528 Arts, Technical

Kenneth E. Shipper, Ph.D., Dean

The College of Technical Arts provides technical and industrial education for thousands of men and women from Texas, other states and many foreign countries. It is housed in a modern plant consisting of six buildings containing 125,000 feet of classroom, shop and office space. The Cecil R. Beeson Technical Arts classroom and office building was completed for occupancy for the fall of 1977. Parking for 480 cars is provided adjacent to these buildings. Entrance to this area, located in the 4400 block of Spur 380 Beaumont-Port Arthur Highway, is on Lavaca Street. The Port Arthur and Orange campuses also offer similar courses and programs.

An Associate of Applied Science degree is awarded at the Beaumont campus in the following fields of study: business data processing; child care technology; drafting technology; diesel mechanics; fire protection technology; electrical technology; industrial electronics technology; industrial supervision; mid-management; machine tools; occupational safety and health; property tax administration; refrigeration and air conditioning technology; maintenance pipefitting; real estate; and welding.

A student may earn a diploma for satisfactorily completing Appliance Repair; electronics; marine construction; or office occupations.

The child care technology, industrial supervision, maintenance pipefitting, occupational safety and health, plant maintenance plate welding, real estate, and refrigeration programs have provisions for offering a Certificate of Completion when the specified course requirements have been satisfied.

Associate Degree Programs

The College of Technical Arts offers career-oriented education in 17 degree programs in four departments in the College.

Adult Training Programs

- Child Care Technology
- Electrical Technology
- Fire Protection Technology
- Maintenance Pipefitting
- Occupational Safety and Health

Industrial Department

- Diesel Mechanics
- Machine Tools
- Refrigeration and Air Conditioning Technology
- Welding

Related Arts Department

- Business Data Processing
- Industrial Supervision
- Mid-Management
- Property Tax Administration
- Real Estate

Technical Department

- Drafting Technology
- Industrial and Electronics Technology

Lamar University - Orange

- Drafting Technology
- General Secretary
- Industrial Electronics Technology

Industrial Supervision
Mid-Management
Real Estate
Technical Accounting
Welding

Lamar University - Port Arthur

Automotive Body Repair
Automotive Mechanics
Business Data Processing
Child Care Technology
Drafting Technology
Electronics Technology
General Secretary
Legal Secretary
Medical Secretary
Mid-Management
Welding
Word Processing

All of the above two-year programs are designed to give the student training prior to entry into an occupation. Successful completion of one of these programs should provide the student with sufficient knowledge, skill and confidence to enter and advance rapidly in a selected field.

The curriculum of each program is designed to allow a student to enter in any semester and is arranged so that a student can take supporting work in either the College of Technical Arts or in other colleges in the University.

Course descriptions and further information about the College of Technical Arts are included in a separate bulletin. Requests for copies of the College of Technical Arts catalog should be addressed to the Office of the Dean, College of Technical Arts, Box 10043, Lamar University Station, Beaumont, Texas 77710.

College of Graduate Studies

Charles P. Turco, Ph.D., Dean
Howell H. Gwin, Jr., Ph.D., Director

The Graduate College

The Dean of the College of Graduate Studies is responsible for the direction of graduate programs of the University. The Dean is assisted by the Graduate Council, a body that serves in an advisory capacity to the Dean. The Council consists of representatives from each College offering graduate degrees.

Degrees Offered

Master of Arts in
- English
- History
- Political Science

Master of Business Administration

Master of Education in
- Elementary Education
- Guidance and Counseling
- School Administration
- Secondary Education
- Special Education
- Supervision

Master of Engineering

Master of Engineering Management
- Master of Engineering Science
- Master of Music
- Master of Music Education
- Master of Public Administration

Master of Science in
- Biology
- Chemistry
- Computer Science
- Health and Physical Education
- Home Economics
- Mathematics
- Psychology
- Speech Communication
- Theater
- Deaf Education
- Speech Audiology and Pathology
- Doctor of Engineering

The Graduate Bulletin

The Graduate Bulletin contains a complete listing of courses, admission requirements and other information of value to graduate students. Requests for copies should be directed to the Office of the Dean of the College of Graduate Studies, Lamar University, Box 10000, Lamar University Station, Beaumont, Texas 77710.

Admission to a Degree Program

1. For admission to a degree program the applicant must meet the following minimum standards and have submitted the following credentials to the office of Admissions and Records at least four weeks before registration.

A. An applicant must hold a bachelor's degree from an institution approved by a recognized accrediting agency.
B. Two official transcripts sent directly from each college previously attended.
C. Scores on the aptitude section of the Graduate Record Examination (GRE) are sent directly to the Office of Admissions and Records by the Educational Testing Service. The Lamar Testing and Counselling Center, located in the Wimberly Student Affairs Building, administers the GRE. Application forms and information about the GRE are available at this center. Applicants for the Master of Business Administration are not required to take the GRE, but are required to take the Graduate Management Admission Test. (See the College of Business section of the Graduate Bulletin for specific requirements).

NOTE: GRE, GMAT, or NTE scores more than five years old will be accepted only by special permission of the Graduate Dean/Director.

D. Applicants for the Doctor of Engineering degree also should write a letter to the Dean of the College of Engineering. This letter should include information about the applicant, engineering experience, present employment and chief interests. Applicants also should indicate what type of work they would like to undertake for their field study.
E. All students are required to complete the University Health Form.
F. An application for admission sent to the Office of Admissions and Records.
G. The applicant's undergraduate grade point average and GRE scores must be above the minimum standard established by the college of Graduate Studies. For all students, except those wishing to pursue the Master of Business Administration degree, one of the following requirements for admission must be met:
   (1) A minimum overall grade point average of 2.5 on a four point scale, and a minimum composite score, (verbal, quantitative and analytical), of 1100 on the aptitude section of the GRE.
   (2) A minimum grade point average of 2.5 on the last 60 hours of undergraduate course work and a minimum composite score of 1100 on the aptitude section of the GRE.
   (3) A grade point average lower than 2.5 but with a score of at least 540 on an appropriate section or the GRE aptitude test. A composite score of 1100 is also required. Departmental requirements are as follows:

540 in either V or Q	540 in V	540 in Q
Biology	English	Audiology
Education	History	Chemistry
HPED	Speech	Engineering
Home Economics	Speech Pathology	Mathematics
Music		
Political Science		
Psychology		
Public Administration		

   (4) A minimum overall grade point average of 2.5 on a four point scale and a score at or above the 25th percentile on the appropriate Advanced Test of the GRE, (appropriate test will be determined by the department in which the graduate program is offered), or, in the case of students applying to the College of Education, a score at or above the 25th percentile on the appropriate Area Exam of the National Teachers Examination. This does not exempt students from submitting GRE aptitude scores before admission.
   (5) A minimum overall grade point average of 3.0 on all work and the recommendation of the department in which the graduate program is offered. This does not exempt students from submitting GRE aptitude scores prior to admission.

(6) The Graduate Council has approved higher standards for admission to some programs. These are stated in the particular departmental section of this Bulletin.

2. Students wishing to pursue the Master of Business Administration degree should refer to the College of Business section of the Graduate Bulletin for specific requirements.
3. Provisional admission to a degree program for one term may be granted to some applicants who show promise of the ability to successfully complete a graduate degree program, but who have not submitted the necessary credentials, (see above), four weeks before registration. Students admitted with provisional admission may not register for more than twelve hours graduate credit and must submit all required credentials and meet the minimum standards stated above during the first term. Provisional admissions may not be extended past one term, and students so admitted who do not meet the minimum standards will not be allowed to re-enroll. International students will not be admitted on a provisional basis.
4. Admissions requirements for international students are evaluated on an individual basis after the following information is received:
   A. Two official transcripts from each college previously attended. Complete and official English translations must be furnished along with the certified copies of the transcripts.
   B. Scores on the aptitude section of the GRE and scores on the Test of English as a Foreign Language, (TOEFL), must be submitted. In general, an international student whose native language is not English is expected to score 500 or above on the TOEFL and over 1100 on the aptitude section of the GRE. Application form, test scores, financial statement and complete educational records for international students must be on file by the dates indicated: term beginning in August, by June 15; January, by November 1; June by March 15.
   C. an original statement of financial resources. The University provides a form for this purpose. Other forms will not be accepted.
5. Any other applicant whose native language is not English and who attended foreign secondary schools, colleges, or universities must submit **TOEFL** scores of 500 or above in addition to the requirements stated above. Individual departments may require even higher scores.
6. A student who wishes to pursue graduate work in any area for which he/she has not had the prerequisites will be required to make up deficiencies as prescribed by the Graduate Council. In general, the student is required to have a minimum of 24 semester hours, (12 of which must be on the junior-senior level), of undergraduate work in the subject chosen as the graduate major. For a minor, 12 semester hours of undergraduate work are required.
7. Admission to the College of Graduate Studies does not imply candidacy for a degree.
8. The dean of admissions will notify the applicant upon admission to the College of Graduate Studies. All transcripts, certificates, etc. become the property of Lamar University and are not returnable.
9. Admission requirements stated above are minimum requirements. The applicant must also have the approval of the departments in which the degree program is offered.

Post Baccalaureate Admission

1. Students who wish to take graduate courses but do not wish to be admitted to the College of Graduate Studies, or who have not met all requirements for admission to the College of Graduate Studies, may be admitted as Post Baccalaureate students in one of the undergraduate colleges under the following conditions:
   A. The applicant must hold the bachelor's degree.
   B. The applicant must submit an application for admission to the Post Baccalaureate program.

C. The applicant must submit official transcripts from each college previously attended.
D. The applicant must complete the University Health Form.
E. The applicant must be approved for admission by the dean of admissions.

2. International students will not be admitted as Post Baccalaureate students.
3. If application for admission to a graduate degree is received in a subsequent semester and requirements for admission to the College of Graduate studies are completed, a maximum of 12 semester hours previously completed *may* be counted for degree credit with the approval of the department and the Graduate Dean/Director.
4. No post baccalaureate student may apply more than 12 hours toward a graduate degree.
5. Post baccalaureate students are not permitted to enroll in Business courses for graduate credit without the prior permission of the Graduate Coordinator, College of Business.

Directory of Personnel 1985-86

Faculty 1985-86

The following list reflects the status of the Lamar University faculty as of August, 1984. The date following each name is the academic year of first service to the University and does not necessarily imply continuous service.

Achee, Henri A., Jr. *1980, Reference Librarian, Instructor*
B.A., M.L.S., Louisiana State University

Achilles, Robert F. *1963, Regents' Professor of Speech*
B.S., McPherson College; M.A., Ph.D., Wichita State University

Adams, Eugenia C. *1984, Instructor, Reference Librarian*
B.S., Southwestern University; M.L.S., University of Texas

Akers, Hugh A. *1977, Associate Professor of Chemistry*
B.S., University of California, Riverside; Ph.D., University of California-Berkeley

Allen, Charles L. *1979, Associate Professor of Economics*
B.A., East Texas State University; M.A., Ph.D., University of Arkansas

Allen, Joel L. *1960, Assistant Professor of Economics*
B.S., Arkansas Agricultural and Mechanical College; M.S., Baylor University

Altemose, John R., Jr. *1973, Professor of Criminal Justice*
A.B., Davidson College; M.Ed., Lamar University; M.A., Ph.D., Sam Houston State University

Amberg, Julie S. *1984, Adjunct Instructor of English*
B.A., Boston University; M.A., University of Michigan

Anderson, Adrian N. *1967, Professor of History; Head, Department of History*
B.S., M.A., Ph.D., Texas Tech University

Anderson, Virginia N. *1960, Associate Professor of Home Economics*
B.S., Georgia State College for Women; M.Ed., Trinity University

Aronow, Saul *1955, Professor of Geology*
B.A., City University of New York, Brooklyn College; M.S., State University of Iowa; Ph.D., University of Wisconsin

Atherton, Frieda L. *1976, Assistant Professor of Dental Hygiene; Director, Dental Hygiene Program*
B.S., Baylor University; M.S., University of Missouri-Kansas City; Registered Dental Hygienist

Atteberry, Phillip D. *1983, Adjunct Instructor of English*
B.A. University of Evansville; M.A., Ph.D., Washington University

Autry, Bruce C. *1982, Adjunct Instructor of English*
B.A., University of North Carolina, Chapel Hill; M.A. East Carolina University

Babin, L. Randolph *1968, Instructor of Music*
B.M.Ed., M.M.Ed., Louisiana State University

Bailey, P. Gail *1975, Assistant Professor of Dental Hygiene*
B.S., M.Ed., Lamar University; Registered Dental Hygienist

Baj, Joseph A., II *1964, Associate Professor of Mathematics*
B.A., Kent State University; M.A., University of Texas

Baker, B. Joanne *Visiting Assistant Professor of Mathematics*
B.A., Lamar University; M.A., Ph.D., University of Texas at Austin

Baker, Barbara C. *1983, Instructor I of Related Arts*
B.A., M.A. University of Southwestern Louisiana

Baker, Christopher P. *1976, Associate Professor of English; Director, Freshman English*
B.A., St. Lawrence University; M.A., Ph.D., University of North Carolina

Baker, Mary Alice *1969, Associate Professor of Speech; Director, Forensics*
B.S., M.A., University of Oklahoma; Ph.D., Purdue University

Barlow, H. A. *1951, Regents' Professor, Associate Professor of Accounting*
B.S., Louisiana Tech University; M.B.A., Louisiana State University; Certified Public Accountant

Barnes, Cynthia *1982, Assistant Professor of Office Administration*
B.S. Howard Payne University; MEd., Texas Tech University; Ed.D. North Texas State University.

Barnes, Robert J. *1960, Regents' Professor of English*
B.A., M.A., University of Kansas; Ph.D., University of Texas

Barrett, Mary French *1959, Assistant Professor of Music*
B.M., M.M., Eastman School of Music, University of Rochester; Performer's Certificate, Eastman School of Music

Barrington, Billy Ray *1967, Professor of Psychology*
B.S., Southwest Texas State University; M.Ed., Sam Houston State University; Ph.D., University of Houston

Bean, Wendell C. *1968, Professor of Electrical and Nuclear Engineering*
B.A., B.S., Lamar University; M.S., Ph.D., University of Pittsburgh; Registered Professional Engineer

Bechler, David L. *1981, Assistant Professor of Biology*
B.A., Indiana University; M.S., Northeast Louisiana University; Ph.D., Saint Louis University

Bell, Alice C. *1971, Professor of Health, Physical Education and Dance; Associate Athletic Director; Primary Woman Administrator*
B.S., M.A., Ph.D., Texas Woman's University

Bell, James W. *1983, Lecturer for Health, Physical Education and Dance; Assistant Football Coach*
B.S.E. University of Central Arkansas

Bell, Myrtle L. *1963, Professor of Psychology; Dean, College of Health and Behavioral Sciences*
B.S., M.S., Texas A&I University; Ed.D., University of Texas

Bennett, Richmond O. *1957, Professor of Accounting*
B.S., M.S., Texas A&M University; Ph.D., University of Texas; Certified Public Accountant

Berthiaume, Gerald B. *1978, Instructor of Music*
B.M., University of Puget Sound; M.M., New England Conservatory of Music

Berzsenyi, George *1969, Professor of Mathematics*
B.A., University of Dallas; M.S., Ph.D., Texas Christian University

Birdwell-Pheasant, Donna *1984, Assistant Professor of Anthropology*
B.A., M.A., Ph.D., Southern Methodist University

Blanks, Patricia, *1982, Assistant Professor of Education*
B.A., Kansas State University; M.A., Our Lady of the Lake

Bonton, Donald R. *1981, Instructor I of Drafting*
A.A.S., Lamar University

Bost, David L. *1949, Professor of Education*
B.A., Hardin-Simmons University; M.J., University of Texas; Ph.D., East Texas State University; Licensed Psychologist

Boughton, James K. *1980, Adjunct Associate Professor of Mechanical Engineering*
B.S., Illinois Institute of Technology; M.S., Lamar University; Registered Professional Engineer

Boyd, Sandra M. *1979, Assistant Professor of Nursing; Director, Vocational Nursing Program*
B.S.N., Wayne State University; M.S., University of Houston; Registered Nurse

Brazell, Wayne *1982, Assistant Professor of Education*
B.S., M.Ed., University of South Carolina; Ph.D. University of Georgia

Brenizer, Joan E. *1957, Associate Professor of Mathematics*
B.S., Lamar University; M.A., University of Texas

Brentlinger, W. Brock *1969, Professor of Speech; Dean, College of Fine Arts and Communication*
B.A., Greenville College; M.A., Indiana State University; Ph.D., University of Illinois

Briggs, Kenneth R. *1966, Regents' Professor of Education; Director, Lamar University Teacher's Center*
B.S., M.Ed., Ed.D., North Texas State University

Bronson, Paul A. *1976, Instructor of Respiratory Therapy; Program Director, Respiratory Technology*
B.S., Southern Colorado State College; M.Ed., Lamar University; Registered Respiratory Therapist

Brookner, Ralph G. *1981, Associate Professor of Mathematics*
B.A., Rice University; M.A., University of Michigan; Ph.D., Columbia University

Brooks, Alvin *1982, Lecturer Health, Physical Education and Dance; Assistant Basketball Coach*
A.S. Henderson Junior College; B.A., Lamar University

Brown, Otto George *1962, Professor of Mechanical Engineering; Head, Department of Mechanical Engineering*
B.S., University of Oklahoma; M.S., Ph.D., University of Texas; Registered Professional Engineer

Bruneau, Odette *1982, Assistant Professor of Education*
B.S., University of Minnesota; M.A., College of St. Thomas; Ph.D., Texas Woman's University

Brunson, Richard W., *1982, Associate Professor of Management, Marketing, and Finance*
B.S., U.S. Military Academy; M.B.A., Babson College; Ph.D., Michigan State University

Brust, Melvin F. *1978, Associate Professor of Management and Finance*
B.S.E.E., M.S.E.E., University of Texas; Ph.D., North Texas State University; Registered Professional Engineer

Bryan, George A., Jr. *1964, Assistant Professor of Biology*
B.S., University of Texas at El Paso; M.S., Pennsylvania State University

Burke, Charles M. *1970, Professor of Education; Director, Lamar Early Access Program*
B.A., Southeastern Louisiana University; M.Ed., Louisiana State University; Ed.D., University of Southern Mississippi

Burke, William T. III *1982 Assistant Professor of Business Law*
B.A., Morehouse College; J.D., Howard University Law Center.

Bussell, Karen A. *1979, Lecturer of Health, Physical Education and Dance; Women's Swim Coach; Director, Aquatics*
B.S., Texas Tech University; M.S., Lamar University

Calvert, Patricia H. *1979, Lecturer of Health, Physical Education and Dance; Women's Softball Coach; Assistant to Associate Athletic Director for Women's Athletics*
B.S., M.S., Lamar University

Cameron, Margaret D. *1956, Regents' Professor of Chemistry*
B.A., Texas Woman's University; M.S., University of Houston; Ph.D., Tulane University

Campbell, Don R. *1984, Associate Professor of Communication*
B.A., Brigham Young University; M.S., Gallaudet College; M.A., California State University; Ed.D., Brigham Young University

Campbell, Jerry W. *1976, Instructor II of Diesel Mechanics*
C.C., A.A.S.,, Lamar University

Caples, Stephen C., *1984, Assistant Professor of Finance*
B.A., Lake Superior College; M.B.A., Louisiana Tech University

Carley, Wayne W. *1983, Assistant Professor of Biology*
B.S., M.A., Ph.D., University of California

Carlin, Dewey R., Jr. *1958, Associate Professor of Electrical Engineering*
B.S., Lamar University; M.S., University of Texas

Carlucci, Joseph B. *1971, Professor of Music*
B.M., M.M., Yale University; D.M.A., Eastman School of Music, University of Rochester

Carroll, David J. *1975, Instructor, Head, Catalog Department*
B.A., Kansas State University; M.L.S., University of Denver

Carroll, John M. *1972, Associate Professor of History*
A.B., Brown University; M.A., Providence College; Ph.D., University of Kentucky

Carruth, Carl *1966, Associate Professor of Industrial Engineering*
B.S., Lamar University; M.S., University of Houston; Ph.D., University of Texas-Arlington; Registered Professional Engineer

Cass, Michael *1981, Assistant Professor of Education*
M.A., Ed.D., University of Alabama

Cater, Alice W. *1974, Instructor IV of Real Estate*
B.B.A., Southern Methodist University; M.B.A. University of Texas

Chan, Chen-Wen Wendy *1984, Adjunct Instructor/Computer Lab Supervisor*
B.S., Lamar University

Chen, Daniel Hao *1982, Assistant Professor of Chemical Engineering*
B.S., National Cheng Kung University; M.S., National Taiwan University; Ph.D., Oklahoma State University

Chern, Shui-Sheng, *1983, Assistant Professor of Mechanical Engineering*
B.S., M.S., National Tsing-Hua University-Taiwan; Ph.D., University of Minnesota

Cherry, Richard T. *1966, Regents' Professor of Finance; Head, Department of Management, Marketing and Finance.*
B.A., Texas A&M University; M.A., Ph.D., University of Texas

Choi, Jai-Young *1982, Assistant Professor of Economics*
B.A., Yonsei University; M.A., University of Kansas; Ph.D., University of Oklahoma

Chu, Hsing-wei *1979, Assistant Professor of Industrial Engineering*
B.S., Tunghai University; M.S., Asian Institute of Technology; Ph.D., University of Texas

Chudzinski, James *1983, Assistant Professor of Economics*
B.S., University of Tulsa; M.A., Ball State University

Clark, Lynnwood M., Jr. *1972, Instructor II of Business Data Processing*
B.S., Lamar University

Cloud, Patricia *1980, Instructor of Nursing*
B.S.N., McNeese State University; M.S.N., University of Texas-Galveston; Registered Nurse

Coates, Nita F. *1979, Instructor II of Drafting Technology*
A.A.S., Lamar University

Collier, J. N. *1955, Associate Professor of Music*
B.M., University of Houston; M.M., Southern Methodist University

Coody, Betty *1963, Regents' Professor of Education*
B.A., East Texas State University; M.Ed., Ph.D., University of Texas

Cooke, James L. *1956, Regents' Professor of Electrical Engineering*
B.S., Texas Tech University; M.S., University of Texas; Ph.D., Northwestern University; Registered Professional Engineer

Cooper, Mark *1984, Assistant Professor of Education*
B.S.E., M.S.E., Henderson State University; Ph.D., Georgia State University

Corrigan, Daniel R., *1983, Assistant Professor of Marketing*
B.B.A., University of Texas-Arlington; M.B.A., East Texas State University; Ph.D., University of Arkansas.

Coskren, T. Dennis *1984, Assistant Professor of Geology*
B.S., Massachusetts Institute of Technology; M.S., Ph.D., University of Kentucky

Crawford, Katrinka J. *1981, Lecturer Health, Physical Education and Dance; Head, Volleyball Coach*
B.S., Utah State

Crim, Sterling C. *1964, Professor of Mathematics*
B.A., Lamar University; B.S., Baylor University; M.Ed., North Texas State University; M.A., George Peabody College for Teachers; Ph.D., University of Texas

Crowder, Vernon Roy *1967, Professor of Health, Physical Education and Dance*
B.S., Lamar University; M.S., Ph.D., Louisiana State University

Crum, Floyd M. *1955, Regents' Professor of Electrical Engineering*
B.S., M.S., Louisiana State University; Registered Professional Engineer

Culbertson, Robert M., Jr. *1974, Assistant Professor of Music*
B.M., Northern Illinois University; M.M., University of Wisconsin

Daigrepont, Lloyd M. *1981, Assistant Professor of English*
B.A., M.A., Ph.D., Louisiana State University

Daniali, Saeed *1981, Assistant Professor of Civil Engineering*
B.S., Tehran Polytechnique; M.S., School of Engineering of Strasbourg; Ph.D., University of Lille; Registered Professional Engineer

Danna, John C. *1979, Instructor II of Drafting Technology*
A.A.S., Lamar University

Darsey, Nancy S. *1955, Professor of Office Administration; Head, Department of Administrative Services*
B.B.A., M.B.A., Texas Tech University; Ph.D., Louisiana State University

Davidson, Jane S. *1970, Professor of Home Economics*
B.S., Texas Woman's University; M.S., Sam Houston State University; Ph.D., Texas Woman's University

Davis, Elvis C. *1956, Associate Professor of Accounting*
B.B.A., Lamar University; M.B.A., University of Arkansas; Certified Public Accountant
De Rose, Peter L. *1975, Assistant Professor of English*
B.A., Fordham University; Ph.D., Indiana University
DiCaro, Joseph *1981, Lecturer in HPED; Assistant Baseball Coach*
B.S., M.Ed., Arizona State University
Die, Ann M. *1977, Associate Professor of Psychology*
B.S., Lamar University; M.Ed., University of Houston; Ph.D., Texas A&M University
Dietert, Linda *1980, Instructor, Head Interlibrary Loans Department*
B.A., University of Texas at Arlington; M.L.S., North Texas State University
Dingle, Robert L. *1959, Associate Professor of Mathematics*
B.S., M.Ed., University of Houston; M.S., University of Arkansas
Dippel, Raye Lynne *1984, Assistant Professor of Psychology*
B.S., East Texas State University; Ph.D., Texas Tech University
Dorrell, Jean T. *1956, Assistant Professor of Office Administration*
B.S., Northwestern Louisiana University; M.S., Louisiana State University
Dorris, Kenneth L. *1965, Associate Professor of Chemistry*
B.S., Ph.D., University of Texas
Drapeau, Richard A. *1983, Assistant Professor of Business Statistics*
B.S., Arizonia State University; M.B.A., Lamar University; Ph.D., Texas A&M University.
Droddy, Frances B., *1983, Instructor I of Child Care Technology*
B.S., Northwestern State College; M.S., Lamar University
Drury, Bruce R. *1971, Professor of Political Science*
B.A., M.A., University of Nebraska; Ph.D., University of Florida
Dubitsky, Tony M. *1982, Assistant Professor of Psychology*
B.S., State University of New York; M.S., Ph.D., Kansas State University
DuBose, Elbert T., Jr. *1974, Assistant Professor of Political Science*
B.A., Southwest Texas State University; M.A., Texas Tech University; Ph.D., University of Oklahoma
Dugger, Linda J. *1970, Assistant Professor, Head, Acquisitions Department*
B.A., M.L.S., North Texas State University
Durgin, Thomas R. *1980, Instructor II of Industrial Electronics Technology*
Dyess, J. Wayne *1977, Assistant Professor of Music*
B.M., Stephen F. Austin State University; M.M., Catholic University of America
Eddy, Louise *1978, Instructor of Speech*
B.S., M.S., Lamar University
Ellery, Jon Christopher *1983, Adjunct Instructor of English*
B.F.A., Arkansas Tech University; M.A. University of Arkansas
Elliff, Connie Jo *1976, Instructor of Home Economics*
B.S., Southwest Texas State University; M.S., Kansas State University; Registered Dietitian
Elliott, Eric G. *1983, Instructor of Economics*
B.A., Eastern Illinois University; M.A. University of Texas
Ellis, M. Leroy *1969, Professor of Modern Languages*
B.A., M.A., University of South Carolina; Ph.D., University of Aix-Marseille
Esperat, Maria Christina *1979, Assistant Professor of Nursing*
B.S.N., M.S.N., Silliman University; Registered Nurse
Esser, James K. *1976, Associate Professor of Psychology*
B.S., University of Iowa; Ph.D., Indiana University
Fatino, Betty W. *1982, Assistant Professor of Social Work*
B.S., Lamar University; M.S.W., University of Houston
Fearing, Ruth O. *1980, Instructor of Dental Hygiene*
B.S., Northeastern University; M.S., Boston University School of Dentistry; Registered Dental Hygienist
Fisher, Vicki *1980, Clinical Instructor of Nursing*
B.S.N., Lamar University; Registered Nurse

Fitzpatrick, Phillip M. *1977, Assistant Professor of Art*
B.F.A., M.F.A., Auburn University

Fleischer, Vickie *1983, Clinical Instructor of Respiratory Therapy*
A.A.S., Hines Jr. College; Registered Respiratory Therapist

Fleming, Stephen *1983, Lecturer in HPED; Assistant Football Coach*
B.S., Lamar University

Fontenot, Cynthia C. *1979, Adjunct Instructor of Accounting*
B.A., M.B.A., Lamar University; Certified Public Accountant

Foreman, Myers L. *1984, Instructor of Computer Science*
B.S., M.S., Lamar University; M.S., University of Southwestern Louisiana

Foster, Pat *1980, Lecturer of Health, Physical Education and Dance; Head, Basketball Coach; Athletic Director*
B.S., University of Arkansas

Fournet, Annette E. *1984, Instructor of Art*
B.F.A., Memphis Academy of Arts; M.F.A., Memphis State University

Francis, Nathan Travis *1962, Associate Professor of Modern Languages*
B.A., Texas Tech University; M.A., Texas Christian University; Ph.D.; Texas Tech University

Frazier, Robert L. *1974, Associate Professor of Criminal Justice*
B.S., M.A., Ph.D., Sam Houston State University

Frederick, Bob L. *1965, Assistant Professor of Health, Physical Education and Dance; Director, Activity Programs*
B.S., Lamar University; M.S., University of Texas

Frederick, Maurice, *1982, Instructor I of Refrigeration & Air Conditioning Technology*

Fritze, Ronald H. *1984, Assistant Professor of History*
B.A., Concordia College; M.A., M.L.S., Louisiana State University; Ph.D., University of Cambridge

Gardner, Kathryn A. *1979, Instructor II of Business Data Processing*
B.B.A., Lamar University

Gates, David G. *1963, Professor of Industrial Engineering*
B.S., M.S., University of Arkansas; Ph.D., Oklahoma State University; Registered Professional Engineer

Georgas, Marilyn D. *1962, Professor of English*
B.A., Sam Houston State University; M.A., Lamar University; Ph.D., University of Texas

German, Harvey Norman *1982, Adjunct Instructor of English*
B.A., McNeese State University; M.A., University of Texas; Ph.D., University of Southwestern Louisiana

Ghezzi, Debby L. *1980, Lecturer of Health, Physical Education and Dance; Women's Tennis Coach*
B.S., M.Ed., Ohio University

Gilligan, James P. *1972, Instructor of Health, Physical Education and Dance; Baseball Coach*
B.S., M.S., Lamar University

Gilmore, Patricia *1980, Instructor of Nursing*
B.S.N., University of Texas at San Antonio; M.S.N., University of Texas Medical Branch-Galveston; Registered Nurse

Godkin, Roy Lynn *1981, Assistant Professor of Management*
A.B., Bethany Nazarene College; M.R.E., Nazarene Theological Seminary; M.A., Sangamon State University; Ph.D., North Texas State University

Godwin, Sharon G. *1981, Clinical Instructor of Allied Health*
B.S., Northwestern State University; M.Ed., University Of Houston; Registered Radiographer

Goines, Oscar T. *1961, Assistant Professor of Physics*
B.S., Stephen F. Austin State University; M.S., Texas A&M University

Goulas, Fara *1975, Assistant Professor of Education*
B.A., Lamar Universty; M.A., University of Colorado; Ed.D., McNeese State University

Green, Annie Sue *1964, Assistant Professor of Mathematics; Director, Engineering Advisement Center*
B.A., M.S., Lamar University

Green, Marcia L. *1972, Instructor III of Related Arts*
B.A., Bishop College; M.A., Stephen F. Austin State University; M.Ed., Lamar University; Ph. D. Texas Woman's University

Green, Steve *1981, Lecturer, Health, Physical Education and Dance; Assistant Basketball Coach*
B.S.E., Oklahoma Christian College

Gregory, O. Delilah *1973, Clinical Instructor of Nursing*
B.S.N., University of Texas Medical Branch-Galveston; Registered Nurse

Gremillion, Rae R. *1961, Assistant Professor of Health, Physical Education and Dance*
B.S., M.S., Northwestern State University of Louisiana

Grost, Gregg *1981, Lecturer of Health, Physical Education and Dance; Golf Coach*
B.S. Texas Christian University

Grubb, Carolyn *1981, Professor of Nursing*
B.S., Millikin University; M.S.N., Wayne State University; Ph.D., University of Pittsburgh; Registered Nurse

Grubbs, Donald R. *1974, Instructor III of Welding*
B.S., Lamar University

Grubert, John P. *1981, Associate Professor of Civil Engineering*
B.S., M.Phil., London University; Ph.D., City University Chartered Engineer (UK)

Gwin, Howell H., Jr. *1962, Professor of History; Director, Graduate Studies*
B.A., M.A., Ph.D., Mississippi State University

Gwynn, Robert S. *1976, Assistant Professor of English*
A.B., Davidson College; M.A., M.F.A., University of Arkansas

Haiduk, Michael *1983, Assistant Professor of Biology*
B.S., M.S., Texas A&M University; Ph.D., Texas Tech University

Hale, Elizabeth Ann *1979, Instructor of Nursing*
B.S.N., University of Texas-Houston; M.S.N., University of Texas-Galveston; Registered Nurse

Hansen, Keith C. *1967, Professor of Chemistry; Head, Department of Chemistry*
B.S., Lamar University; Ph.D., Tulane University

Haque, Munzer *1984, Instructor I of Adult Training*
B.S.E.E., Lamar University

Hargrove, W. Richard *1964, Professor of Education*
B.S., M.Ed., North Texas State University; Ed.D., George Peabody College for Teachers

Harmon, Anne *1959, Associate Professor of Chemistry*
B.S., Monmouth College; M.S., Baylor University

Harrel, Richard C. *1966, Professor of Biology*
B.S., East Central State College; M.S.Ed., University of Georgia; Ph.D., Oklahoma State University

Harrigan, W. Patrick, III *1969, Associate Professor of Speech*
B.S., Loyola University; M.F.A., Tulane University; Ph.D., Louisiana State University

Harris, Carolyn R. *1983, Adjunct Instructor of Computer Science*
B.A., Texas Tech University; M.S., University of Mississippi

Harris, Robert *1979, Instructor II of Machine Tools*
A.A.S., Lamar University

Harris, William T. *1983, Associate Professor of Accounting*
B.B.A., M.B.A., Texas Tech University; Ph.D., Louisiana State University; Certified Public Accountant

Hartford, William *1947, Instructor III of Job Relations*

Harvill, John B. *1984, Associate Professor of Computer Science*
B.A., M.A., North Texas State University; Ph.D, Southern Methodist University

Harvill, John F. *1965, Assistant Professor of Mathematics*
B.S., M.S., Northwestern State University of Louisiana

Haven, Sandra L. *1973, Associate Professor of Education*
B.S., Lamar University; M.A., Central Michigan University; Ed.D., University of Houston

Hawkins, Charla J. *1982, Adjunct Instructor of Mathematics*
B.B.A., M.S., Lamar University

Hawkins, Charles F. *1966, Regents' Professor of Economics*
B.A., Lamar University; M.A., Ph.D, Louisiana State University

Hill, Rebecca O. *1965, Assistant Professor of Health, Physical Education and Dance*
B.A., Butler University; M.A., University of Michigan

Hinchey, Jane A. *1968, Assistant Professor of Home Economics*
B.S., Winthrop College; M.S., University of Tennessee

Ho, Tho-Ching *1982, Assistant Professor of Chemical Engineering*
B.S., National Taiwan University; M.S., Ph.D., Kansas State University

Hogue, Bradley B. *1967, Professor of Education*
B.A., M.Ed., Southern Methodist University; Ed.D., North Texas State University

Holcomb, Richard E. *1983, Instructor of Theater*
B.A., M.A., Midwestern University

Holland, DeWitte T. *1971, Professor of Speech*
B.S., United States Merchant Marine Academy; A.B., Howard College; B.D., Southern Baptist Theological Seminary; M.A., University of Alabama; Ph.D., Northwestern University

Holland, Mary M. *1976, Instructor, Head, Documents/Special Collections*
A.B., Birmingham Southern College; M.L.S., Drexel University

Holm, Belle Mead *1963, Professor of Health, Physical Education and Dance; Division Head of Health, Physical Education and Dance; Assistant Dean*
B.S., M.S., George Peabody College for Teachers; Ph.D., Texas Woman's University

Holmes, Paul W. *1953, Associate Professor of Music*
B.M., Hardin-Simmons University; M.M., University of Texas

Holt, Marion W. *1960, Associate Professor of History*
B.A., Hendrix College; M.A., Louisiana State University

Holt, Virginia Raye *1975, Professor of Health, Physical Education and Dance*
B.S., Georgia State College for Women; M.S., Baylor University; Ed.D., University of Tennessee

Hoosier, Peggy *1982, Clinical Instructor of Radiologic Technology*
A.A.S., Lamar University; Registered Radiographer

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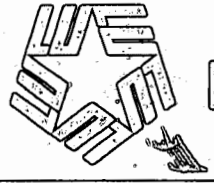

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