

LAMAR UNIVERSITY • BEAUMONT



1989-1990 GENERAL CATALOG



LAMAR UNIVERSITY BEAUMONT

1989-90 Bulletin • Volume 38 Number 1

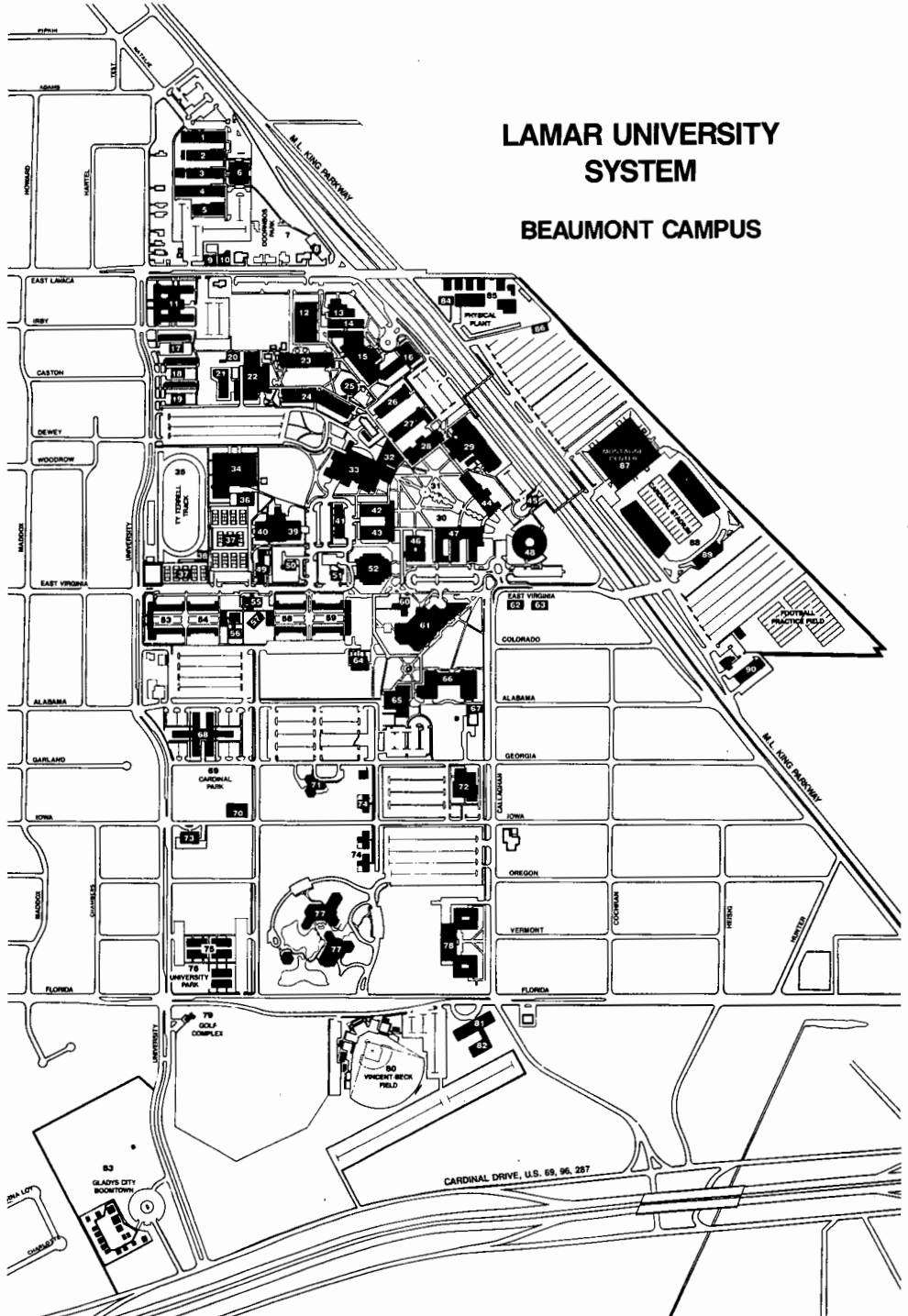
Thirty-eighth annual catalog issue with announcements for 1989-90. Founded in 1923, and established as a four-year coeducational state-supported college on September 1, 1951.

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).

Third class postage paid at Beaumont, Texas 77710. Published monthly except in June, July and August.



LAMAR UNIVERSITY SYSTEM

BEAUMONT CAMPUS

CARDINAL DRIVE, U.S. 69, 96, 287

LEGEND TO MAP OF LAMAR UNIVERSITY • BEAUMONT

Administration (Plummer Bldg.)	48	Residences:	
Alumni House	50	Unit I	19
Army ROTC	64	Unit II	18
Art Building	14	Unit III	17
Biology (Hayes Bldg.)	23	University Drive Apartments	75
Bookstore	32	(Men's residence halls)	
Business (Galloway Bldg.)	29	Combs	58
Campus Planning	84	Morris	59
Cardinal Park	69	Plummer	68
Cardinal Stadium	88	Shivers	78
Chancellor's Home	71	Stadium Hall (football)	90
Chemistry Bldg.	24	(Women's residence halls)	
Communication Bldg.	15	Brooks	78
Computer Energy Management Facility	67	Campbell	54
Continuing Education	87	Gentry (sorority)	11
Custodial Services	41	Gray	53
Dental Hygiene Clinic	12	Resource Management Center	10
Dining Hall	39	Science Auditorium	25
Dishman Art Gallery	13	Setzer Student Center	33
Doornbos Park	7	Shipping and Receiving	86
Early Childhood Development Center	81	Speech and Hearing Center	72
Education Bldg.	65	Spindletop Museum	82
Employment Office	9	Student Services (Wimberly Bldg.)	44
Engineering I (Lucas Bldg.)	47	Supply Center	42
Engineering II	43	System Offices	52
Engineering III (Cherry Bldg.)	61	Technical Arts Main Bldg. (Beeson)	6
Faculty-Staff Dining Room	40	Technical Arts 1	1
Fraternity Row	74	Technical Arts 2	2
Geology Bldg.	27	Technical Arts 3	3
Gladys City Boomtown	83	Technical Arts 4	4
Golf Complex	79	Technical Arts 5	5
Gray Institute	77	Theatre	15
Gray Library	52	Tennis Courts	37
Gym Annex	20	Tennis Pro Shop	38
Health Sciences (Mamie McFaddin Ward Bldg.)	12	Ty Terrell Track	35
Health Center	49	University Park	76
Home Economics Bldg.	46	University Press	33
Housing Office	51	Vincent-Beck Stadium	80
Information Center	45	Women's Gym	22
J. B. Higgins Fieldhouse	89		
KVLU Radio Station	15		
Maes Bldg.	66		
McDonald Gym	34		
Mirabeau B. Lamar Statue	31		
Montagne Center	87		
Music Bldg.	16		
Parking Office	8		
Physical Plant	85		
Physics (Archer Bldg.)	28		
Placement Center	29		
Police Department	41		
Pool (indoor)	22		
Pool (outdoor)	21		
Post Office	41		
President's Home	73		
Print Shop	42		
Psychology Bldg.	26		
Public Affairs Bldg.	60		
Quadrangle	30		
Quick Copy Center	42		
Racquetball-Handball Court	36		
Recreational Pavilion	70		
Religious Centers			
Baptist Student Center	57		
Church of Christ Center	63		
Episcopal Center	55		
Newman Catholic Center	62		
Wesley Foundation Methodist Center	56		

REGISTER OF OFFICES

<u>Office</u>	<u>Building Number</u>
Academic deans (by college)	
Arts and Sciences	24
Business	29
Education	65
Engineering	61
Fine Arts and Communication	13
Graduate Studies and Research	44
Health and Behavioral Sciences	12
Technical Arts	6
Academic and Student Affairs	44
Academic Services	44
Admissions Services	44
Chancellor & System Offices	52
Computer Center	61
Counseling and Testing	44
Financial Aid	44
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1989-90 Calendar

Fall Semester-1989

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

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

OCTOBER

S	M	T	W	T	F	S
1	2	3	4	5	6	7
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15	16	17	18	19	20	21
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29	30	31				

NOVEMBER

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19	20	21	22	23	24	25
26	27	28	29	30		

DECEMBER

S	M	T	W	T	F	S
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10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

August

- 20 Dormitories open at 1 p.m.
Dining halls open at 4:30 p.m.
- 21 Registration begins
- 22 Registration
- 24 Classes begin
Schedule revisions — late registration
- 25 Last day for schedule revisions and/or late registration

September

- 4 Labor Day — no classes
- 11 Twelfth Class Day

October

- 4 Last day to drop or withdraw without academic penalty
- Last day to petition for no grade
- 20 Last day to apply for December graduation
- Last day to pay for diploma; cap and gown

November

- 14 Last day to drop or withdraw
- 13-17 Early registration for Spring semester
- 22 Thanksgiving recess begins at 10 p.m.
Dining halls close at 6 p.m.
Dormitories close at 10 p.m.
- 26 Dormitories open at 1 p.m.
Dining halls open at 4:30 p.m.
- 27 Classes resume at 8 a.m.

December

- 6 Finals preparation day — no classes prior to 5 p.m.
- 6-13 Final examinations
- 14 Dining halls close at 10 a.m.
Dormitories close at 12 noon
- 14 Grades for graduating students due 8:30 a.m.
All grades due by 4 p.m.
- 16 Commencement

Spring Semester-1990

JANUARY

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			

FEBRUARY

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			

MARCH

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

APRIL

S	M	T	W	T	F	S
1	2	3	4	5	6	7
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15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

MAY

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		

January

- 7 Dormitories open at 1 p.m.
Dining halls open at 4:30 p.m.
- 8 Registration begins
- 9 Registration
- 11 Classes begin
Schedule revisions — late registration
- 12 Last day for schedule revisions and/or late registration
- 26 Twelfth Class Day

February

- 21 Last day to drop or withdraw without academic penalty
Last day to petition for no grade

March

- 9 Spring recess begins at 5 p.m.
Dining halls and dormitories close at 6 p.m.
- 18 Dormitories open at 1 p.m.
Dining halls open at 4:30 p.m.
- 19 Classes resume at 8 a.m.
- 23 Last day to apply for May graduation
Last day to pay for diploma; cap and gown

April

- 10 Last day to drop or withdraw
- 13 Good Friday — no classes
- 16-20 Early registration for Fall semester

May

- 2 Finals preparation day — no classes prior to 5 p.m.
- 2-9 Final examinations
- 10 Dining halls close at 10 a.m.
Dormitories close at 12 noon
- 10 Grades for graduating students due 8:30 a.m.
All grades due by 4 p.m.
- 12 Commencement

Summer Session-1990 First Term

JUNE

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

- June**
- 3 Dormitories open at 1 p.m.
Dining halls open at 4:30 p.m.
 - 4 Registration
 - 5 Classes begin — schedule revisions and/or late registration
 - 6 Last day for schedule revisions and/or late registration
 - 8 Fourth Class Day
 - 18 Last day to drop or withdraw without academic penalty
Last day to petition for no grade
 - 29 Last day to apply for August graduation
Last day to pay for diploma; cap and gown

- July**
- 3 Last day to drop or withdraw
 - 4 Independence Day — no classes
 - 11 Last class day
 - 12 All grades due by 4 p.m.

Summer Session-1990 Second Term

JULY

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				

- July**
- 11 Registration
 - 12 Classes begin — schedule revisions and/or late registration
 - 13 Last day for schedule revisions and/or late registration
 - 17 Fourth Class Day
 - 25 Last day to drop or withdraw without academic penalty
Last day to petition for no grade

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	

- August**
- 9 Last day to drop or withdraw
 - 16 Last class day
Dining halls and dormitories close at 6 p.m.
 - 17 Senior grades due by 8:30 a.m. All grades due by 12 noon
 - 18 Commencement



Lamar University seeks to advance knowledge, intensify specialization, develop research skill and promote independent thought.



Lamar students develop critical thinking ability, effective communication skills and an understanding of the government issues of the time with learning activities, internships.

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On the Cover: The joy of graduating with an education for life.

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Photography With Text by Jan Johnson, Rick Campbell and Pete Churton



Lamar's students benefit from the tremendous research capabilities offered by the outstanding Mary & John Gray Library.

General Information

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 a progressive city in the Sunbelt, offering private and public schools, churches, museums, shopping districts and a wide range of leisure-time activities to serve a 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 of the Lamar University System are located in Orange and Port Arthur, Texas.

History

Lamar University originated on March 8, 1923, when the South Park School District in Beaumont authorized its superintendent to proceed with plans to open "a Junior College of the first class." On September 17, South Park Junior College opened with 125 students and a faculty of 14. Located on the third floor of the South Park High School building, the college shared the library and athletic facilities with the high school. In 1932, separate facilities were provided and the name of the institution was changed to Lamar College, to honor Mirabeau G. Lamar, second president of the Republic of Texas and the "Father of Education" in Texas.

On June 8, 1942, as a result of a public campaign, a new campus was purchased and classes were held for the first time on the present day campus in Beaumont. After World War II, the College grew to 1,079, and a bill to make Lamar University a state-supported senior college was introduced in the House of Representatives. The legislature approved the Lamar bill (House Bill-52) on June 4, 1949, creating Lamar State College of Technology effective September 1, 1951. Lamar was the first junior college in Texas to become a four-year state-supported college. Uniquely, Lamar retained much of its traditional community college mission, particularly in vocational programs, while continuing to grow with strong programs in engineering, sciences, business and education.

In 1962, a graduate school was established offering Master's degrees in several fields. The Doctorate in Engineering was established in 1971. In the same year, House Bill-590 became law changing the institution's status to university. Lamar State College of Technology, with an enrollment of 10,874, officially became Lamar University on August 23, 1971.

In 1969, an extension center was opened in Orange, and, in 1975, the long-standing private Port Arthur College became Lamar University at Port Arthur. The Lamar University System, of which Lamar University-Beaumont is the primary component, was established by the 68th Session of the Texas Legislature with the passage of SB-620, which took effect in August 1983.

Since Lamar University-Beaumont first opened in 1923, it has achieved a unique position in the community of higher education with its traditional academic degree programs, including graduate and baccalaureate curricula, offered alongside one- and two-year degree programs and certification programs in vocational-technical fields. Diplomas and certificate programs are offered in 15 areas of training. Degrees are offered in more than 130 fields of study.

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.

Mission Statement

Lamar University-Beaumont is a multipurpose university commissioned by the Texas Legislature to provide an environment for learning for the people of the state. The University is an educational, scientific, technical and cultural resource center committed to the three-fold mission of teaching, research and service. The University seeks partnerships with business, governmental, industrial and other educational organizations to more efficiently accomplish its goals.

Teaching Mission

Lamar University-Beaumont emphasizes general education, student access to faculty and careful student counseling. The University creates a liberating educational experience for each student which expands knowledge, awakens new intellectual interests, examines values, develops talents, provides new skills and prepares each student to assume an effective role as a citizen in a democracy.

The University's mission in graduate education is broadbased at the master's level, and includes the doctorate in engineering. Other doctoral level educational opportunities for the region are enhanced through cooperative arrangements between Lamar University-Beaumont and other institutions of higher education. The University's mission in graduate education is characterized by an emphasis on professional fields of study. The main thrust of the University continues in engineering, business, sciences, health sciences and education.

Dating from its origins as a junior college, the mission of Lamar University-Beaumont also still accommodates post-secondary vocational-technical education, with particular emphasis on programs designed to meet the special needs of industrially oriented Southeast Texas.

Although basically traditional in its goals, Lamar University-Beaumont is strongly committed to the continual enhancement of the teaching/learning methodologies used in delivering its programs, and systematic assessment of new methodologies for application in other educational settings.

Research Mission

As a multipurpose university with extensive educational programs in professional fields, the University's research efforts are predominantly directed to "applied research" and deliberately concentrated in areas of unique strength.

Lamar University-Beaumont accepts as a fundamental obligation the maintenance of a faculty that is professionally creative and productive in its respective disciplines. The University encourages faculty members to assume responsibility for professional growth through research, the pursuit of professional interest and the production of creative materials.

Service Mission

The University's educational mission extends to all residents of the Southeast Texas area, and, in special cases, beyond the region. In recognition of that mission, the University provides continuing education programs for professional up-dating in scientific, technical, and administrative skills for practitioners; broad, cultural enrichment; and personal growth.

The University contributes to the cultural life of the region through cultural and artistic presentations and events utilizing the talents of faculty, students and visiting artists and performers.

Accreditation

Lamar is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools to award Associate, Bachelor's, Master's and Doctor's degrees and is approved by the Texas Education Agency.

Several departments and programs have been accredited by professional agencies. In the College of Engineering, the programs in Chemical, Civil, Electrical, Industrial and Mechanical Engineering are accredited by the Accreditation Board for Engineering and Technology. The undergraduate and graduate programs of the College of Business are accredited by the American Assembly for Collegiate Schools of Business.

In the College of Health and Behavioral Sciences, Dental Hygiene is accredited by the American Dental Association; Radiologic Technology, Respiratory Technology and Respiratory Therapy by the American Medical Association; and Nursing by the National League for Nursing.

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 College of 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.

Teacher Certification

All teacher education programs of the University are approved by the Texas Education Agency. Students seeking teacher certification should consult the Director of Teacher Certification and Admissions regarding requirements.

Degree Offerings

Associate of Arts

Associate of Science

Associate of Applied Science

Bachelor of Applied Arts and Sciences

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 (with Teacher Certification)

Bachelor of Science in Art Education, Biology, Chemistry, Communication, Criminal Justice, Dance, Deaf Education/Habilitation, Education (Elementary, Secondary, and Special), Energy Resources Management, Environmental Science, Geology, Graphic Design, Health Education, Home Economics, Mass Communication, Mathematics, Mathematical Sciences, Medical Technology, Music (with Teacher Certification), 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.

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 5 p.m. are considered Evening Classes, sometimes called "Extended Day" 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 Office of Evening Services, Room 106 Wimberly Student Services Building.

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.

The ROTC Department provides financial assistance through four main sources:

1. Scholarships.
2. Payment of \$100 each month for each long semester of Junior and Senior year ROTC participation.
3. Payment for attendance at advanced camp, between Junior and Senior year of ROTC.
4. Payment for participation in the Simultaneous Membership Program (simultaneous participation as an Advanced Course ROTC Cadet and an Army Reserve or National Guard member).

Specific information concerning ROTC financial assistance may be obtained by writing: Professor of Military Science, Lamar University, Box 10060, Beaumont, Texas 77710. Phone calls may be made collect to: (409) 880-8560.

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 registra-

tion assistance, tutoring, adaptive equipment and other personalized services. For additional information contact the Coordinator of Services for Handicapped Students, 105 Wimberly Student Services Building, P.O. Box 10043, Lamar University Station, Beaumont, Texas 77710, telephone (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 assistants the rate is \$5 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 Commission 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 October 18, 1983.

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.

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.

Early Childhood Development Center

Lamar University's Early Childhood Development Center is located at 950 East Florida. The Center provides high quality extended day-care services and certified kindergarten programs for children between the ages of 18 months and six years.

The Center is staffed with degreed teachers who create a stimulating environment and provide unlimited opportunities for learning. In addition to providing care for young children, the Center provides a site for college students to observe and work with children as part of their course work and training.

The Early Childhood Development Center accepts children on a part-time or full-time basis with the fees based on the number of hours children are in attendance.

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. More than 90 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 30 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 16 asynchronous terminals.

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 seven floors with open access to 800,000 volumes. Seating accommodates 1,200 students and faculty.

The first floor service areas include circulation, reference 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 floor houses the library administrative offices, the Media Services Department and Special Collections.

The eighth floor offers expansion space for the future, but is presently shared with other University services. This spacious and elegant 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.

Montagne Center

The 10,000-seat Montagne Center, home of the Lamar University basketball team, is a multi-purpose facility that provides opportunities for educational and extra-curricular

programs. The center houses the athletic offices, center staff, University ticket office, and continuing education programs.

Sam Houston Regional Library and Research Center

The Sam Houston Regional Library and Research Center, a part of the Texas State Library's Local Records Division, has been affiliated with Lamar University since 1977. The Center is the Regional Historical Resource Depository for local government records, archives and other items which document the history of Southeast Texas which is geographically defined as the counties of San Jacinto, Polk, Tyler, Jasper, Newton, Hardin, Chambers, Orange, Liberty and Jefferson. The Center houses maps, photographs, rare books, a large Texana Collection, more than 6,000 cubic feet of county records and more than 500 manuscript collections from the area!

Lamar University utilizes the Center's classrooms and resources for research and field-centered courses, graduate seminars and workshops. Other facilities located on the 114 acre site are the Price Daniel House and the 1848 Gillard-Duncan House.

Located in Liberty, the Center is open Monday through Friday, 8 a.m. to 5 p.m. and by special appointment. Telephone (409/336-7097) or write to P.O. Box 989, Liberty, Texas 77575 for further information.

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 the Associate Vice President for Research 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 research 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.

Public Affairs and Development

The Public Affairs Office, formerly named University Relations, was established in 1975 and includes areas of public relations, public information, development, publications, graphics, photographic services and the Library Reception Center.

The Development 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.

Gladys City Outdoor Museum

The Gladys City Outdoor Museum, operated by Lamar University, is located at University and Cardinal Drives. It has artifacts and exhibits of the early days of the oil industry in Texas, which began on January 10, 1901, when Lucas gusher blew in at Spindletop hill

not far from the present Lamar campus. Gladys City is a recreation of a boom town that sprang up at Spindletop after the Lucas discovery.

Gladys City may be visited from 1-5 p.m. Sunday through Friday, and from 9 a.m. to 5 p.m. Saturday. Admission is 50 cents for adults, 25 cents for those under 18 years of age and free to Lamar students with their student activity cards.

Texas Energy Museum

The Spindletop collection of artifacts depicting the early days of the Texas oil industry, formerly located on the Lamar campus, is now a part of the Texas Energy Museum created by the joint efforts of Lamar University and the City of Beaumont. This museum, which also contains the energy collection formerly belonging to the Western Company of Fort Worth, is located in downtown Beaumont at Main and Forsythe Streets. There is no admission charge to the Texas Energy Museum.

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.

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.

The Gray 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

Lamar University-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.

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.

Lamar University-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.

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-Beaumont.

The Office of Admission Services, 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.)

Effective with the Fall, 1987, semester the admissions requirements into four-year Baccalaureate Programs are:

- I. Regular (Unconditional) Admission
 - A. Regular Admission will be granted to students who meet the following prerequisites:
 - 1. Attainment of a high school diploma from an accredited high school AND
 - 2. Successful completion of 14 high school units in college preparatory courses including:
 - a) 4 units in college preparatory English courses (English I, II, III, and English IV or English IV-academic or higher level English courses).
 - b) 3 units of college preparatory mathematics courses (Algebra I, II, Geometry, or higher level mathematics courses).
 - c) 2 units of laboratory science courses (any 2 units from Biology I, II, Chemistry I, II, Physics I, II, or Geology).
 - d) 2-1/2 units of social science courses (U.S. History, 1 unit, and U.S. Government, 1/2 unit, and World History Studies, 1 unit, or World Geography Studies, 1 unit).
 - e) 2-1/2 units of approved college preparatory course electives.
 - B. In addition, students must graduate in the top half of their high school class OR achieve a composite score on the SAT/ACT as follows:

Rank in High School Class	1989	1990	1991
by Quarter			
1st Quarter	—	—	—
2nd Quarter	—	—	—
3rd Quarter	800/18	850/20	900/21
4th Quarter	900/21	950/23	1000/24

- II. Provisional Admission
 - A. Students who attain a high school diploma from an accredited high school but who fail to meet the requirements for Regular Admission will be permitted to attend Lamar University-Beaumont on a Provisional Admission basis.

- B. Students admitted on a Provisional basis will be granted Regular Admission status at the end of the semester in which they complete 24 or more hours if they have earned:
 1. A 2.0 grade point average in courses taken at Lamar University-Beaumont (not including required activity courses in physical education, marching band, or ROTC) AND
 2. Satisfactory grades in English 131 and Math 1314 (or a higher level math course).
- C. Students who do not satisfactorily complete the terms of Provisional Admission will be denied readmission to Lamar University-Beaumont for one full year.

III. Exceptions

- A. These general admission standards do not apply to students entering associate degree, vocational, or technical programs. However, students will still be required to meet the internal standards within individual associate, vocational, or technical programs.
- B. Any applicant over 25 years of age will be granted admission with proof of high school graduation.

IV. Additional Requirements

In addition to these general admission standards, Lamar University-Beaumont pre-professional and professional programs may require separate, more rigorous standards commensurate with the demands of the various program.

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 Provisional Admission as an individual-approval student. Applicants must furnish evidence of preparation substantially equivalent to that required of other applicants. Evidence of preparation may include proof of G.E.D. completion, SAT or ACT scores and/or transcripts of previous academic work. Applicants must demonstrate 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 the proposed registration date to be considered. Arrangements for the interview should be made after records and scores are received by the University 30 days in advance of registration.

Entrance Examination Requirement

Applicants may submit either SAT or ACT scores in fulfillment 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.

Although ACT scores are acceptable for admission purposes, students are required to take the Test for Standard Written English (TSWE), which is a part of the SAT, for placement in English classes. Students not having taken the SAT will be required to take the TSWE before enrolling in English classes.

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 a complete high school transcript sent to the University Admissions Office immediately after 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

Acceptance notices 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 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 Records. Change of address forms are available in the Office of 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 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. Students are advised that former names will be carried on all official transcripts.

Graduates of Non-Accredited High Schools

Applicants who have graduated from a non-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.

New Student Orientation and Registration

A series of new student orientation and registration programs are 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 department 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. Advance reservations for the Summer orientation sessions are recommended. Details of the program including the dates, cost, and reservation forms are sent to new students with admission acceptance notices. Reservations should be requested early in order to select a preferable date. Parents are invited to sessions designed

especially for them. One-day orientation programs are conducted for new students at the beginning of the Fall and Spring semesters.

Academic Advising

College advising centers have been established to assist students in designing a program of study meeting the degree plan requirements of the department and guide 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 that 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 the College Level Examination Program (CLEP).

1. Advanced Placement Examinations (Optional)

Applicants who wish to receive credit for college-level work completed in high school may do so by submitting scores from 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		
A Test	Score of 4 or 5	CS 1411
AB Test	Score of 4 or 5	CS 1411 and 1413
English	Score of 4 or 5	Eng 131-132
	Score of 3	Eng 131 (Student receiving such credit must complete Eng 136)
Government/POLS	Score of 3 or above	POLS 232
Foreign Language	Score of 3	131
	Score of 4	131, 132
	Score of 5	131, 132, 231
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		
AB Test	Score of 3 or above	Mth 1341 or Mth 148 or Mth 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 the College Level Examination Program (CLEP). Details are in the Academic Regulations section.

Admission Requirements for College Transfers

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 18 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 transferable but departments may refuse to count them toward a 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 Sophomore 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, Lamar University, Box 10009, Beaumont, Texas 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. Students will not be allowed to register until all college transcripts are on file in the Admissions Office.
3. Take the prescribed entrance tests and/or have a record of test scores sent to the Office of Admissions.

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. All credentials must be on file within one week after the first day of class, however, 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 after one week of class is completed 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 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 Non-degree 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 non-degree student by submitting a high school transcript and application for admission. If the student desires to take an English or Math course, however, the SAT examination is required.

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 Records 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 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; participation in officially recognized activities and sports; weight and height of members of athletic teams; dates of attendance; degrees and awards received, with dates; and the 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 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 the Internal Revenue Service.

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 activities 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, a requirement that the student be 18 years of age and eligibility 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 post-secondary 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). Scores of 500 or above on the Test of English as a Foreign Language (TOEFL) are required. 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. Students should be aware that certain departments may require higher academic proficiency for admission to their program.

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.

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, Beaumont, Texas 77710, U.S.A. The program is designed to facilitate a smooth 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.

Early Admission Program

Early admission is possible at Lamar University for the academically superior student. For further information, contact the Director of Admissions, Box 10009, Beaumont, Texas 77710.

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-plus" 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. In order to take a course in mathematics, the student must have scored at least 500 or equivalent on the PSAT, SAT, or ACT Quantitative section, and the student must have the permission of his/her high school counselor and the counselor recommends which mathematics courses will best serve the needs of that particular student. 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 officials and the Lamar Director of Admissions.

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

Lamar Early Access Program (LEAP)

In addition to the other programs described above, the Lamar Early Access Program (LEAP) is a cooperative program between Lamar and participating high schools which allows high school seniors to take university courses in their high schools taught by their high school teachers.

Students enrolled in the program may receive both high school and college credit concurrently upon satisfactory completion of the course. The courses are regular offerings of the University, taught by carefully selected high school teachers designated as adjunct instructors of Lamar University.

Lamar credits earned through LEAP are transferable to other universities throughout the state and nation. For additional information contact the Director of the Lamar Early Access Program, Box 10033, Beaumont, Texas 77710.

Information About the Texas Academic Skills Program (TASP) Test

The Texas Academic Skills Program (TASP) is required by Texas law to ensure that students enrolled in Texas public colleges possess the academic skills needed to perform effectively in college-level coursework. TASP includes a testing component designed to identify and provide diagnostic information about the reading, mathematics and writing skills of each student.

Any student who has earned at least three college-level credit hours prior to September of 1989 is not required to take the TASP examination. Otherwise prior to the accumulation of nine or more collegiate-level credit hours, all students in the following categories who enter Texas public institutions of higher education in the Fall of 1989 and thereafter must take the TASP examination for reading, writing, and mathematical skills:

- (1) All full-time and part-time Freshmen enrolled in a collegiate-level certificate or degree program.
- (2) Any other student, including transfers from private or out of state institutions, enrolled in a collegiate-level certificate or degree program.

A collegiate-level certificate or degree program is one which requires nine or more credit hours or the equivalent of basic core general education courses as defined by the Southern Association of Colleges and Schools. Students who are required to take TASP examination must do so before accumulating nine or more collegiate-level credit hours. However, to assist with placement decisions only, institutions may elect to administer a "Campus Form" of the TASP along with other appropriate diagnostic instruments designated by the institution. Students who are placed on the basis of this "Campus Form" must then take the "Certification Form" of the TASP prior to the end of the semester in which they accumulate fifteen or more collegiate-level credit hours.

Students who fail to take the "Certification Form" of the TASP during the designated semester are not permitted to re-enroll or to enroll in any other Texas public higher education institution in any courses other than non-credit remedial, developmental, or pre-collegiate courses until they have taken the "Certification Form" of the TASP examination. Pre-collegiate courses, such as remedial reading, writing, and mathematics, are not counted in calculating the credit hours for meeting the testing requirements.

Based on the level of your skills, you should seek advice from the Director of the Counseling, Testing & Career Center (116 Wimberly Building) on the best time for you to take the TASP Test, e.g., before or after you have had an opportunity to review or obtain any necessary remediation in reading, mathematics, and writing.

For information on who must take the TASP Test and to obtain a copy of the TASP Registration Bulletin and the official TASP Study Guide, contact the Director of the Counseling, Testing, & Career Center (116 Wimberly Building), Lamar University.

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 that 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 the 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 that cover all or 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. Students applying for scholarships administered by the University should apply to the Office of Student Financial Aid. 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 Stafford Student Loan Program (formerly GSL), the Perkins Loan Program, the Hinson-Hazelwood College Student Loan Act, Supplemental Student Loans (SLS), and Parent Loans for Undergraduate Students (PLUS). Those interested in one of these loan programs should contact the Student Financial 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 that 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. Other 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 (409/835-2511).

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 or has paid the down payment on the installment plan and signed the agreement. Payment may be made by check, Mastercard/Visa, 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).

Installment Payment Agreement

Students who are *not* using financial aid, such as scholarships and grants, to pay fees may enter into an installment agreement with the University. Tuition and certain other fees can be paid on either a 2 or 4 payment plan in the Fall and Spring semesters.

Students are required to enter into a legally binding contract that obligates them to pay the full amount of the fees, regardless of whether they complete the semester. The student whose fees are to be paid in installments must sign the installment agreement. Tuition refunds for students using the installment payment plan are calculated as a percentage of the total fees assessed, *not* as a percentage of any partial payments.

Non-refundable service charges of \$10 and \$20 are assessed for the 2 and 4 payment plans, respectively. Late fees of \$15 will be assessed beginning the first day after an installment due date for each delinquent installment.

Students who are delinquent on installments will be barred from class attendance. A single delinquent installment results in the entire remaining balance being immediately due and payable. Continued delinquency may result in withdrawal from the University and prohibition against further enrollment. Also, holds are placed on academic records so that students cannot obtain transcripts until all installments are paid.

All delinquent installment accounts will be released to a collection agency/Credit Bureau. All costs of collecting delinquent installments are payable by the student.

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. (For cost of University housing, see p. 58 of this catalog.)

Texas residents taking a 15-hour academic work load*:

Tuition	\$270
Student Services Fee	75
General Use Fee	90
Setzer Student Center Fee	30
Student Health Fee	15
Parking Fee (if desired)	15
Health Insurance (if desired)(\$52 Fall; \$100 Spring & Summer)	76
Books (estimated)	200
	\$771
	+ lab fees

Part-time Student (Six semester hours):

Tuition.....	\$108
Student Services Fee.....	61
General Use Fee.....	36
Setzer Student Center Fee.....	30
Student Health Fee.....	6
Parking Fee (if desired).....	15
Health Insurance (if desired) (\$52 Fall; \$100 Spring & Summer).....	76
Books (estimated).....	80
	\$412
	+ lab fees

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

*Tuition rate per semester hour for Texas residents is \$18 with a minimum of \$100. A full-time student is one who takes 12 or more semester hours of course work. Non-Texas U.S. rate for tuition is \$120 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.

Fall 1989

No. of Semester Hours	Tuition		Student Service Fee	General Use Fee	Setzer Center Fee	Health Center Fee	Total Charge**	
	Texas Resident	Non-Texas Resident*					Texas Resident	Non-Texas Resident
1	\$100	\$ 122	\$26	\$20	\$30	\$ 5	\$181	\$ 203
2	100	244	33	20	30	5	188	332
3	100	366	40	20	30	5	195	461
4	100	488	47	24	30	5	206	594
5	100	610	54	30	30	5	219	729
6	108	732	61	36	30	6	241	865
7	126	854	68	42	30	7	273	1,001
8	144	976	75	48	30	8	305	1,137
9	162	1,098	75	54	30	9	330	1,266
10	180	1,220	75	60	30	10	355	1,395
11	198	1,342	75	66	30	11	380	1,524
12	216	1,464	75	72	30	12	405	1,653
13	234	1,586	75	78	30	13	430	1,782
14	252	1,708	75	84	30	14	455	1,911
15	270	1,830	75	90	30	15	480	2,040
16	288	1,952	75	90	30	15	498	2,162
17	306	2,074	75	90	30	15	516	2,284
18	324	2,196	75	90	30	15	534	2,406
19	342	2,318	75	90	30	15	552	2,528
20	360	2,440	75	90	30	15	570	2,650

Summer 1990

1	\$ 50	\$ 122	\$26	\$20	\$15	\$ 5	\$116	\$ 188
2	50	244	33	20	15	5	123	317
3	54	366	37	20	15	5	131	443
4	72	488	37	24	15	5	153	569
5	90	610	37	30	15	5	177	697
6	108	732	37	36	15	6	202	826
7	126	854	37	42	15	7	227	955
8	144	976	37	48	15	8	252	1,084
9	162	1,098	37	54	15	9	277	1,213
10	180	1,220	37	60	15	10	302	1,342

*Non-Texas Resident tuition will be revised each January for the following academic year (Sept.-Aug.).

**Not included is a one-time property deposit fee which will be refunded upon application by the student upon graduation or formal withdrawal if not used for replacement of property.

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 or a non-Texas resident. 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.

Applied Music Fees

Applied music course fees are calculated at \$18 per semester hour credit, i.e., lab fee for a two semester hour course is \$36, for a one semester hour course is \$18.

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.

Property Deposit

Each student will be required to pay a \$10 property deposit. Any unused portion of the \$10 will be refunded upon written request after the student graduates or withdraws from the University.

Health and Accident Insurance

Health and accident insurance coverage is available at registration for students carrying nine or more semester hours. Insurance fees are as follows: Fall semester, \$52; Spring and Summer semesters, \$100; yearly fee, \$152. This or similar insurance is required of all international students. Additional information may be obtained from the Student Housing Office.

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.

Students who feel they may be exempt from some fees should contact the Finance Office. For example:

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 \$200. 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 10 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 have classes both on campus and off campus will have health fees based on the number of hours on the main campus.

Examples of the above where fees are waived are:

- (1) Field-center courses
- (2) Summer trips for credit
- (3) Nursing courses that conduct all their classes at the hospital.
- (4) 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.)

Examples where fees are not waived:

- (1) Student enrolled only for a thesis course during the Fall or Spring (pays only \$50 for tuition) plus all other normal fees.
- (2) 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 the same service.

Refund of Tuition and/or Fees

Students requesting a refund of tuition and/or fees resulting from dropped courses or from withdrawing from the University should direct questions to the Finance Office. Refunds are calculated as a percentage of *total* fees assessed, *not* as a percentage of partial payments on installments.

Dropped Courses

Students who drop courses during the drop period will receive a refund on tuition and fees, based on the following:

Fall or Spring Semester

1. Through the twelfth class day, 100 percent.
2. After the twelfth class day, no refund.

Summer Session

1. Through the fourth class day, 100 percent.
2. After the fourth class day, no refund.

In order to receive a refund for dropped courses, a student *must* remain enrolled in the University. If a student withdraws, after having previously dropped one or more courses, *no* refunds will be given for the dropped course(s). Refunds are processed *after* the end of each semester.

Withdrawal from the University

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 percent.
2. During the first five class days, 80 percent.
3. During the second week of the semester, 70 percent.
4. During the third week of the semester, 50 percent.
5. During the fourth week of the semester, 25 percent.
6. After the fourth week of the semester, none.

Summer Session

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

The \$10 Property Deposit is refundable upon written request by the student to the Finance Office.

Withdrawing from the University does not relieve the student of any financial obligations under the Installment Payment Agreement or for any student loans as these are the student's legal financial commitments.

NOTE: Students withdrawing from the University are required to surrender their Student Identification Card and their Parking Permit. Also, withdrawal from the University precludes the student from receiving a refund for dropped courses.

Returned Check Fees

Checks written in payment of registration fees and returned to the University due to insufficient funds will result in a \$10 check charge plus a \$15 late registration fee.

A student already enrolled in the University 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.

Matriculation Fee

A matriculation fee of \$15 will be incurred by students who withdraw prior to the first day of class. This \$15 fee will be deducted from refunds.

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)	15.00*
Transcript Fee	2.00
Advanced Standing Examination (per course)	25.00
GED Examination	15.00
Photo Identification	2.00
Lost Photo I.D.	5.00
Swimming Pools (suits and towels) Per Semester	15.00

*Subject to 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.

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. Classification will follow the guidelines in Title 3, Texas Education Code. Students with question should contact the Director of Admissions, P.O. Box 10009, Beaumont, Texas 77710.

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; 5 and 6, Graduate 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 as being 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.

Twelve semester hours is the minimum full-time load (nine for graduate students) in Fall and Spring, four semester hours in Summer (three for graduate students).

Maximum Course Loads

The normal course load in a regular semester is 15-18 semester hours; for a six-week summer term, six-to-eight 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 in a regular term or nine semester hours in a summer term regardless of the number of grade points earned the preceding semester.

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 Records and Registration 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.

Policy on Student Absences on Religious Holy Days

In accordance with the Texas Education Code 51.911, a student who is absent from classes in observance of a religious holy day will be permitted to take an examination or complete an assignment scheduled for that day at a time specified by the instructor if not later than the 15th day after the first day of the semester, the student notifies the instructor of each class the student had scheduled on that date that the student would be absent for a religious holy day.

"Religious-holy day" means a holy day observed by a religion whose places of worship are exempt from property taxation under Section 11.20, Tax Code.

Notifications of planned absences must be in writing and must be delivered by the student either (a) personally to the instructor of each class, with receipt of the notification acknowledged and dated by the instructor, or (b) by certified mail, return receipt requested, addressed to the instructor of each class. A form, *Notification of Planned Absence for Religious Holy Days*, may be obtained from the Office of Records and Registrar, Wimberly Building, for the purpose of notification. The completed form must be delivered by the student to the instructor of each class affected by the absence. Upon review of the Notification form, instructors will sign and date the receipt of the notice, retaining a copy for the instructor and returning one copy to the student.

Instructors may refer any questions regarding the qualification of the absence to the Associate Vice President/Dean of Students. Students may be required to present to the Associate Vice President/Dean of Students a written statement documenting that such absence qualifies under the terms of a religious holy day.

Postponed Final Examinations

Arrangements for taking postponed final examinations are made with the instructor concerned, but must be approved by the instructor's department head.

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 by the Director of Freshman English. 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. Only students validly enrolled in English 137 may take the post-test (TSWE and paragraph) to determine their eligibility for English 131.

Students enrolled in English 137 shall receive grades as follows.

- a. "S" if they score 36 or more on a post-test using 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 advisor 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.

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 semester.

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 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. A written petition to the Dean of the College in which the course is offered is required of students wishing to drop a course after the official drop date.

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. However, if the student is unable at the time of withdrawal to clear financial obligations to the University and files with the Office of Records an affidavit of inability to pay, the student will be permitted to withdraw with the acknowledgement that transcripts will be withheld and re-entry to Lamar University as a student will not be permitted until all financial obligations are cleared. Copies of the withdrawal form signed by the department head and the Director of Library Services are presented to the Office of 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 penalty-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. Students wishing to withdraw after the official withdrawal date may review the issue with the Dean of the student's major.

Enforced Withdrawal Due to Illness

The director of the Health Center and the Associate Vice President/Dean of Students, on the advice of competent medical personnel, may require withdrawal or deny admission of a student for health reasons (mental or physical).

Change of Major

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 course work 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 correspondence. 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 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 Records no later than the last date to apply for graduation.

Seniors must file correspondence transcripts at least 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 nationally recognized examinations and local advanced standing examinations administered by academic departments. These programs are described below. Advanced Placement testing programs are discussed in the Admissions section of this Catalog.

Except for satisfying the course work-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 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 Records 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 for and is pursuing a graduate degree (see graduate studies catalogue).

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 nine or more semester hours in Fall/Spring (three or more in a Summer term). Some sources of student financing reduce payments to students dropping below full-time status.

Grading System

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

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 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 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 the major department head, instructor and instructor's department head and Records Office verification. Student semester hours attempted will be reduced by appropriate number of hours.

Students are responsible for completing and filing the appropriate petition form with the Records Office. The deadline each semester for filing the petition for "No Grade" with the Records Office is the same as the deadline for dropping or withdrawing from a course without penalty.

This deadline does not apply for thesis, dissertation or other courses specifically approved in advance for using No Grade "NG" to indicate that continued academic progress is being made by the student.

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 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 credentials 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. Students should report any errors or discrepancies to the Office of Records.

Deans' List

At the end of each semester, the Office of 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 Deans' List and is announced by the academic dean of each college.

Scholastic Probation and Suspension

Students are expected to maintain a “C” or 2.0 grade point average. Grade point deficiencies result when the total grade points accumulated are less than twice the number of 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. Students with a grade point deficiency of 25 or more grade points at the end of the Fall, Spring, or Summer shall be suspended.

Academic suspension designates the loss of “good academic standing” and disruption of “satisfactory progress” toward degree completion.

Students suspended from Fall, Spring or Summer semesters 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 and 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 Executive Vice President for Academic and Student 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) 30 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 Executive Vice President for Academic and Student Affairs for a final decision. Endorsements and/or recommendations shall be required at each academic level. When approved by the Executive Vice President for Academic and Student 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 on all courses in the major field and on all courses attempted (some departments may require a higher grade point average).
 - 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, of which 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) Six semester hours in political science. (see note 1)
 - (5) Six semester hours in American history. (see note 2)
 - (6) 12 semester hours in English (not to include English 137) including six semester hours in Freshman composition and six semester hours in literature. Three semester hours of technical report writing or three semester hours of speech communication or three semester hours of foreign language may be substituted for three 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 (not to include Math 1313 or Math 1314):
 - (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 1362, Mathematics II for Elementary School Teachers
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) Four semesters of physical activity and/or marching band and/or ROTC. (see note 4)
 - (9) Six 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's degree and pay all designated fees.
 5. Graduating students are expected to attend the official graduation exercise.

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 minimum of 30 additional hours, as specified by the department granting the second degree, 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 Applied Arts and Sciences Degree*

Bachelor of Business Administration Degree*

Bachelor of Fine Arts Degree*

Bachelor of General Studies Degree*

Bachelor of Music Degree*

Bachelor of Music (with Teacher Certification) Degree*

Bachelor of Science Degree*

Bachelor of Social Work Degree*

1. Meet the University's general education requirements for a Bachelor's degree.
- * 2. Meet the specific requirements of the selected program of study as listed in the department or program 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. Thirty 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. Sixty 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. Thirty 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. Sixty 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. One course in laboratory science and one course in 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. Meet the following minimum requirements:
 - a. Three semester hours of business of English; or three semester hours of speech or other humanities.
 - b. Three semester hours of mathematics (not to include TM 131 and Mth 1314).
 - c. Three semester hours of social or behavioral sciences.
 - d. Six semester hours from humanities, fine arts, communications, computer sciences, mathematics, natural sciences or behavioral/social sciences.
3. Complete an approved degree plan.
4. 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.
5. Complete 24 semester hours of major work at Lamar with 12 hours in 200-level courses.
6. No more than 15 semester hours of correspondence and/or extension credit may be applied toward the degree.
7. 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 minimum of 15 additional hours, as specified by the department granting the second degree, must be completed at Lamar University.

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 231-237 sequence or other appropriate American 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 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 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 Univer-

sity 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 "cum laude" (honors), 3.65 to 3.79 for "magna cum laude" (high honors), and 3.80 to 4.00 for "summa cum laude" (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

The Division of Student Affairs is administered by the Associate Vice President/Dean of Students who, as the chief student personnel administrator of the University, reports to the Executive Vice President for Academic and Student Affairs. The primary responsibilities of the Division are to provide services and programs that enhance the general education and development of students, enrich the quality of student life, and support the teaching, service and research missions of the University.

The Division consists of the Department of Student Development, the Setzer Student Center, the Special Services Program, the Health Center, Recreational Sports and Student Publications.

Office of the Associate Vice President/Dean of Students

The Associate Vice President/Dean of Students provides primary leadership in the formulation and administration of policies and procedures related to student life and to the rights and responsibilities that accompany student citizenship in the University community. The "Student Conduct Code" as well as other important information pertaining to student life is included in the *Student Handbook*. It is the student's responsibility to be knowledgeable of established University policies and procedures that are contained in the *Student Handbook* and to comply with them. Copies of the *Student Handbook* are available upon request in Office 109 of the Wimberly Student Services Building.

Department of Student Development

Programs and services that focus on personal, interpersonal, career, and learning skills development are provided by the Department of Student Development. These are administered by the Dean of Student Development/Student Services along with departmental directors of Orientation, Counseling Services, Learning Skills Programs and Placement Services.

Office of Student Development

The Office of Student Development, located in Room 107 of the Wimberly Student Services Building, provides numerous services that are available to students when assistance is most important.

In the event of an **emergency** between the hours of 8 a.m. and 4:30 p.m., members of the office staff will attempt to locate a student on campus for the purpose of relaying a message.

Students may also request the office to notify a faculty member(s) prior to or during an *extended absence* due to personal injury, illness, or hospitalization. The notification does not constitute an excused absence from class(es); however, it does advise the faculty member(s) as to the reason for the absence and of the anticipated date of return to class.

The Dean of Student Development/Student Services, the Director of Student Development/Orientation and the Director of Leadership Lamar Institute are available in this office for assistance and advisement of individuals or student groups. The primary roles and responsibilities of the professional staff are to provide leadership and interpersonal skill development training and to plan and coordinate the new student orientation programs. Information about Leadership Lamar Institute and the orientation program is available upon request.

Counseling Center

Lamar University maintains a Counseling Center in Room 116 of the Wimberly Student Services Building that offers a wide range of services to students. A licensed psychologist and a counselor are available to provide educational, diagnostic, and career testing and assessment; instruction for individual computer-assisted career exploration; and,

educational, personal, and career counseling to assist students in the resolution of their problems.

The Counseling Center does not address problems of a long-term therapeutic nature; however, personal counseling is available to students on an individual or group basis at no charge. All counseling contacts are confidential.

Career exploration, decision making and student selection of an academic major are facilitated through counseling, utilization of one or more of the three computerized career exploration and information systems, and access to the career resource library.

The Counseling Center also coordinates testing required by Lamar University and provides individual testing services such as administration and interpretation of career interest and personality self-assessment inventories.

The office acts as a national test center for administration of the Graduate Record Examination (GRE), Law School Admission Test (LSAT), Graduate Management Admission Test (GMAT), Scholastic Aptitude Test (SAT), American College Testing Program (ACT), College Level Examination Program (CLEP), Miller Analogies Test and the Pre-Professional Skills Test (PPST). Information and application forms concerning these and other tests are available in the Center.

Learning Skills Program

The Learning Skills Program is designed to aid students in the development of skills necessary for successful performance in their academic course work and completion of their degree or certificate program. The program office is in Room 102 of the Galloway Business Building.

Carefully selected and trained student counselors conduct a systematic instructional program under the direct supervision of the Director of Learning Skills. Individual computer-assisted instruction is also available. The program is designed to serve all students, both the very capable learner and the student with potential academic problems. More information is available upon request.

Placement Center

The Placement Center is a centralized operation responsible for placement activities for all colleges of the University. Placement services are available at no charge to students, faculty, staff and alumni. The Center maintains updated information on career fields, job areas and opportunities, employers, and the kind of employees being sought. Interviews are scheduled regularly with companies, government agencies, schools and other prospective employers.

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

Setzer Student Center and Student Activities

The Richard W. Setzer Student Center and the student activities program are administered by the Director of the Setzer Student Center. The Director is assisted by the Director of Student Activities, Assistant Director for Programs and Interfraternity Council Advisor, Assistant Director for Operations, Assistant to the Director for Student Organization Services and the Panhellenic Advisor.

The Setzer Student Center provides facilities for leisure-time recreation and it is the campus center for many extracurricular activities and programs. Facilities and services include an information center, two games areas, TV rooms, a check cashing and ticket sales outlet, locker rentals, a music listening room, graphics operations, the reservations office, a video lounge, a ballroom, a reading room, various meeting rooms and lounges, The Redbird Perch, a pizza parlor and delicatessen operation and The Cardinal Nest, a fast food operation. Commercial businesses housed in the Center include the Lamar University Bookstore, the Roost Ice Cream Shop, and a copying service.

Housed in the Center are the offices of the Setzer Student Center Council, Student Government Association, Student Organizations, Student Publications and the professional staff members who serve as advisors to these organizations and to many others. The office of the Director serves as the advising and coordinating center for sororities and fraternities.

Student Organizations

More than 175 student organizations are currently active at Lamar and offer student membership opportunities in one or more of the following groups: professional, religious, academic class, mutual interest, honor, sorority, fraternity, spirit and 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.

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 Setzer Student Center for a majority of its functions.

The Council is composed of 11 committees: concert, performing arts, forum, contemporary film, coffeehouse, recreation, social, travel, video tape, campus radio station and homecoming. Membership on the committees is open to all students who meet the University's extracurricular activity policy standards. The President is elected in the general student election.

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 elected 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 office is located in Room 212 of the Setzer Student Center.

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.

Student Support Services

The Student Support Services Program, located in Room 249 of the Education Building, 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. The program is administered by the Director of Student Support Services who is assisted by an Academic Counselor and a Writing Specialist.

Students enrolled at Lamar University who are recognized as first generation college students, economically disadvantaged, veterans or physically handicapped are eligible to receive tutoring and to participate in the activities of the program.

The program operates in close cooperation with the Counseling Center.

Health Center

The University maintains a Health Center for use by Lamar students. Outpatient service is available for illness or injury that does not require constant supervision.

While it is not possible for the University to provide unlimited medical service, some routine laboratory tests are available at the clinic at a reasonable cost. More extensive laboratory tests and X-rays are available from private physicians if requested by the Health Center Director.

All drugs, splints, and special bandages, as well as serums, vaccines, and gamma globulin, which may be prescribed by 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 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.

Student Health Center services are available during regular hours when the University is in session.

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 interrelationships occurring in athletic competition.

Sports Clubs are made up of individuals interested in a special sport and who 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 114 of McDonald Gym.

Student Publications

University Student Publications include the *University Press*, a campus student newspaper published twice a week during the long semesters. The *University Press*, with offices at 200 Setzer Student Center, serves as a training opportunity for students interested in journalism.

The *Student Telephone Directory*—containing a listing of the names, addresses, and telephone numbers of students, faculty, and administrators—is published each Fall under the auspices of the Setzer Student Center and the University Press. It is distributed by the Setzer Student Center. Students should contact the Registrar to complete a form if they wish not to be listed in the *Student Telephone Directory*.

Pulse, a literary magazine, showcases student prose, poetry, and art.

Student Life

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, non-credit study, and counseling to aid in developing a meaningful context for the student's university years.

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.

Conduct and Discipline

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. 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

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.

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.

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 chief student affairs officer 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 fourth week of each Summer term. After the 12th week in the long semester and the fourth week of each 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 chief student affairs officer 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 Associate Vice President/Dean of Students.

Parking

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

Auxiliary Services

Intercollegiate Athletics

Lamar University became a founding member of the American South Athletic Conference (ASAC) in 1987 after 23 years of affiliation with the Southland Conference, which Lamar also helped establish. As a member of ASAC, Lamar fields National Collegiate Athletic Association Division 1-A teams for conference competition in 11 sports. The University sponsors three sports, including Division AA football, on an independent level.

Programs and policies for intercollegiate athletics are administered under the advice of the University Athletic Committee and the Athletic Director.

Lamar has a heritage of excellence in a well-balanced program of athletics for both men and women. It is a campus tradition that athletic achievement, the spirit of good sportsmanship and trained discipline contribute to the educational environment of campus life.

Eligibility

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 American South Athletic 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 Baccalaureate degree in a designed program of studies since the beginning of the student athlete's last season of completion (hours earned in summer school may be utilized to satisfy

this requirement); 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.

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

Housing

The student housing program is designed to supplement the academic program by providing opportunities for social and intellectual development and recreation in an educational environment. A variety of living styles include semiprivate 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 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.

Applications

To apply for a room in a University residence hall, contact the Housing Office. A check or money order of \$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

Room 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

The cost of University housing varies, depending upon the meal plan chosen and the type of housing selected. In the 1988-89 academic year this ranged from \$1,179 to \$1,298 per long semester. The University reserves the right to change fees as approved by the Board of Regents.

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 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 fourth week of each Summer term. After the 12th week in the long semester and the fourth week of each 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, P. O. Box 10041, Beaumont, Texas 77710.



The practical use of the professional business environment is students as they concentrate on their project in a laboratory.

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

101 Chemistry Building, Phone 880-8508

Boyd L. Lanier, Director, Advising Center

111 ROTC Building, Phone 880-8907

Jeanne Beard, Adjunct Advisor, Advising Center

Devra Simpson, Adjunct Advisor, Advising Center

John W. Storey, Director, University Honors Program

**93 Maes Building,
Phone 880-8511/8514**

**Boyd L. Lanier, Director, Bachelor Applied Arts
and Sciences Program**

**77 Maes Building,
Phone 880-8534**

Organization and Function

The College of Arts and Sciences, the largest academic unit in the University, enrolls approximately 25 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, criminal justice, political science, sociology and social work). 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 40 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, a Bachelor of Applied Arts and Sciences 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 Applied Arts and Sciences

Bachelor of Arts with majors in the following fields:

Chemistry	Political Science
English	Sociology
French	Spanish
History	

Bachelor of General Studies—Liberal Arts

Bachelor of Science with majors in the following fields:

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

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. In addition, majors in the College must:

1. Complete the Freshman English composition requirement with no less than a grade of "C".
2. Complete all department courses required in their major with at least a grade of "C".

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 student in college for the first time at the end of the first semester of attendance.

University Honors Program

Director: John W. Storey

93 Maes Building, Phone 880-8511/8514

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 more challenging and creative than regular courses. 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 administered 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: the prestige of having been selected for an accelerated academic program; 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, the additional learning opportunities afforded those enrolled in Honors courses.

The Honors Program currently includes Honors sections of Freshman composition (Eng 136), literature (Eng 2318 and Eng 2319), political science (POLS 231H and POLS 232H), American history (His 231H and His 232H), general biology (Bio 141H and Bio 142H), general chemistry (Chm 142H), sociology (Soc 131H), psychology (Psy 131H), economics (Eco 131H and 132H), speech (Spc 131H), and two advanced interdisciplinary courses especially designed for the program (Hon 331 and Hon 431). Plans are to expand the program to include Honors course offerings in several additional areas.

Honors Courses (Hon)

- | | | |
|------------|---|--------------|
| 331 | Honors Seminar I
An interdisciplinary course designed for the Honors Program. The content depends upon the combination of disciplines involved.
<i>May be repeated for credit when topic varies.</i> | 3:3:0 |
| 431 | Honors Seminar
An interdisciplinary course designed for the Honors Program. The content depends upon the combination of disciplines involved.
<i>May be repeated for credit when topic varies.</i> | 3:3:0 |

Bachelor of Applied Arts and Sciences

Director: Boyd Lanier

77 Maes Building, Phone 880-8534

The Bachelor of Applied Arts and Sciences degree exists to facilitate the completion of a college degree by those individuals already possessing training in a vocational field. Students wishing to improve their vocational and professional competency or to meet educational requirements of the contemporary workplace will find this program useful.

The Bachelor of Applied Arts and Sciences will be granted upon the completion of the General Degree Requirements of the University, including up to 24 hours of experiential credit granted, upon petition by the student and approval by the program director, for learning outside the traditional college setting. Taken together with prior acceptable college work, these hours are added to additional work prescribed to satisfy all the University and the College requirements for graduation. Course selection is subject of the approval of the program director. As experiential credit is usually very specific and vocationally ori-

ented, it will often constitute the major field of a Bachelor of Applied Arts and Sciences program. Since this is completed early in a student's career, the Bachelor of Applied Arts and Sciences is considered an "inverted degree," completing a student's curriculum with courses ordinarily elected at the start of college study. Thirty hours of course work must have been completed at Lamar University with 24 having been earned after obtaining Senior status.

Bachelor of General Studies - Liberal Arts

Advisor: Boyd L. Lanier

77 Maes Building, Phone 880-8534

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, with at least two of the above disciplines being represented in upper-level Liberal Arts courses. Normally at least nine hours of these upper-level courses will be 400 level.

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

Undecided Majors Program

Advisor: Christopher P. Baker

111 ROTC Building, Phone 880-8907

The Undecided Majors Program assists students who have not yet focused on a college major and who seek counseling in course selection for completion of general degree requirements as they choose a specific field of study. Undecided majors are restricted to 100- and 200-level courses; they may take no engineering courses, but are free to enroll in other lower-level electives while taking general education subjects. Normally a student should choose a major by the third semester of enrollment. Undecided majors must abide by the College's probation and suspension policy.

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

Advisor: Boyd L. Lanier

56 Maes Building, Phone 880-8526

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 Physician's Assistant

Advisor: Michael E. Warren

101 Hayes Building, Phone 880-8262

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

217 Chemistry Building, Phone 880-8267

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 curricula 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-Medical and Pre-Dental

Recommended Program of Study

First Year	Second Year
Eng 131, 132 Composition 6	Bio 245 Microbiology 4
Bio 141, 142 General 8	Bio 347 Genetics 4
Chm 141, 142 General 8	Chm 341-342 Organic 8
*Mth 1335 Precalculus 3	Phy 141, 142 General 8
*Mth 236 Calculus I 3	His 231, 232 American 6
PE/ROTC/MLb 2-4	PE/ROTC/MLb 2-4

Third and Fourth Years

Pre-Medical students should choose a major and take the appropriate courses to satisfy the requirements for a Bachelor degree in that major. They should begin application procedures at the end of the third year (See the pre-medical advisor).

Pre-Dental students should begin the application procedure at the end of the second year. (See pre-dental advisor).

**Dental schools have no specific mathematic requirements, but do require six semester hours of credit.*

Pre-Veterinary Medicine

Recommended Program of Study

First Year	Second Year
Eng 131, 132 Composition 6	Bio 243 Microbiology 4
Bio 141, 142 General 8	Bio 347 Genetics 4
Chm 141, 142 General 8	Chm 341,342 Organic 8
Mth 1335 Precalculus 3	Phy 141, 142 General 8
Mth 236 Calculus I 3	His 231, 232 American 6
CS 131 3	PE/ROTC/MLb 2-4
PE/ROTC/MLb 2-4	
33-35	32-34
Third Year	
Bio 442 Entomology 4	
Chm 441, 442 Biochemistry 8	
POLS 231, 232 6	
Eng 4335, Tech. Report Writing 3	
or Spc 131 Public Speaking 9	
*Animal Science 9	
31	

**Not offered at Lamar. See the Pre-veterinary advisor.*

Pre-Pharmacy

Advisor: Anne Harmon

217 Chemistry Building, Phone 880-8267

Professional training in pharmacy is offered at three institutions in Texas—Texas Southern University, University of Houston, and University of Texas. General requirements for admission to the professional schools are listed below. Following that are modifications for individual programs.

General Requirements:

Bio 141-142
 Bio 245
 Chm 141-142
 Chm 341-342
 Phy 141-142
 Eco 233
 Mth

Eng 131-132
 Eng 2311, or 2312, or 2313
 Pols 231-232
 His 231-232
 PEGA
 Electives

Modifications:

Texas Southern University

Eng: Six hours of literature
 Bio: Bio 245 IS NOT required
 Bio 240 IS required
 PEGA: Two hours
 Mth: Six hours including 1334 and 1333
 Psy: Three hours
 Pharmacy College Admissions Test is required.

University of Houston

Eng: Six hours of literature

Mth: Six hours including 1341 or 236

(University requires successful completion of algebra or equivalent)

PEGA: Two hours

Electives: Social and Behavioral Sciences, six hours (Eco 233 may be used as three hours)

Cultural Heritage, six hours

University of Texas

Phy: Phy 141-142 ARE NOT required

Eco: Eco IS NOT required

Mth: 1335 and 234

Electives: Fine Arts and Humanities, three hours

Social and Behavioral Sciences, three hours

Electives of the student's choice, six hours

(University has a language requirement)

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 Officers' 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 (Co-op) 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 A critical study of the Old Testament and its relevance to Western culture.	3:3:0
132	Survey of the New Testament A critical study of the New Testament, its historical context and the beginnings of the Christian Church.	3:3:0
133	New Testament: Gospels A critical study of the Gospels, the person and work of Jesus of Nazareth.	3:3:0
134	New Testament: Paul A study of the life and ministry of St. Paul and the major portion of the Pauline letters.	3:3:0
135	Introduction to Christian Thought 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.	3:3:0
212	Current Issues in Religion An interpretation of religious events through the reading of current religious and secular periodicals.	1:1:0
231	Church History The history of the Christian Church, including the General Councils, the missionary movements, the Reformation and the transition to the modern scene.	3:3:0
232	Christian Ethics The relation of the Christian Faith to daily living, with particular emphasis on vocation, courtship and marriage, the person and society.	3:3:0
233	Old Testament: Prophets A study of the major and minor prophets and the role they played in the development of the religion of Israel.	3:3:0
314	Thematic Approach to Religion A critical study of significant ideas or writings in religion.	1:1:0
324	Thematic Approach to Religion A critical study of significant ideas or writings in religion.	2:2:0
331	Philosophy of Religion 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.	3:3:0
332	Major Themes of the Bible Planned to present Biblical concepts of God, man, history, covenant, prophecy, vocation and related ideas.	3:3:0
333	Comparative Religion A comparative study of the world's major religions, e.g. Judaism, Christianity, Islam, Hinduism, Buddaism.	3:3:0
334	Thematic Approach to Religion A critical study of significant ideas or writings in religion.	3:3:0

Department of Biology

Department Chair: Michael E. Warren **101 Hayes Building, Phone 880-8262**

Professors: Harrel, McGraw, Ramsey, Turco, Warren

Associate Professors: Bechler, Carley, Haiduk, Malnassy, Runnels, Sullivan

Assistant Professors: Bryan, Hunt

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 are 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 Room 101 of the 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—20 semester hours
 - Biology electives—12 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 six hours in PE, ROTC, or MLB)

Recommended Program of Study

First Year	Second Year
Eng 131 3	Soph Eng Literature 6
Eng Composition 3	Chm 341, 342 Organic 8
Bio 141, 142 General 8	Phy 141, 142 General 8
Chm 141, 142 General 8	**Bio selected from core 12
Mth 1335 Precalculus or 236 3	PE/MLb 124***/ROTC 2 sem 2-4
Mth 236 Calculus or 237 3	
Electives 4	
PE/MLb 124***/ROTC 2 sem 2-4	
34-36	34-36
Third Year	Fourth Year
POLS 231, 232 American Government I, II 6	Bio 416, 417 Bio Lit 2
Electives 7	Bio Electives 4
Psy 241 Statistics 4	Electives 18
**Bio selected from core 8	Soph Am His 6
Bio Elective 8	
Chm 441 or Bio 4302 3-4	
36-37	30

***The following courses must be included in the Biology Core: Bio 243 or 245, Microbiology; Bio 346, Invertebrate Zoology; Bio 345, Botany; Bio 240 or 444, Comparative Anatomy or Vertebrate 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.*

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 obtain 24 semester hours in an additional teaching field.

For details concerning requirements for teacher certification and information on professional education courses, consult the College of Education section in this bulletin.

* Bachelor of Science in Psychology

* Bachelor of Science in Biology

First Year	Second Year
Bio 141, 142 General 8	Chm 341, 342 Organic 8
Chm 141, 142 General 8	Bio 240 Comparative Anatomy or 444 Vert Nat Hist 4
Eng Composition 6	Bio 245 or 243 Microbiology 4
Mth 1335 Precalculus 3	Psy 342 Methods 4
Psy 131 Intro to Psy 3	Eng Soph Literature 6
Psy 241 Intro to Stat Math 4	Mth 236 Calculus I 3
PE Activity 2-4	Mth 237 Calculus II or CS 131 3
	***Psy Advanced 3
<hr/>	<hr/>
34-36	35
Summer	
POLS 231, 232 American Government I, II 6	
PE Activity 2-4	
Electives 6	
<hr/>	
14-16	
Third Year	Fourth Year
Soph Am His 6	Bio 346 Invert Zool 4
Phy 141, 142 General 8	Bio 416-417 Bio Literature 2
Bio 347 Genetics 4	**Bio Electives 12
Bio 345 Botany 4	***Psy Advanced 6
Psy 443 Experimental Psy 4	Electives 13
***Psy Advanced 9	
<hr/>	<hr/>
35	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	Second Year
Bio 141-142 General 8	Chm 341-342 Organic 8
Chm 141-142 General 8	Mth 237 Calculus 3
Eng Composition 6	Eng Literature 6
Mth 1335 Precalculus 3	Phy 141-142 General 8
Mth 236 Calculus 3	Bio Elective 4
PE/MLb 124**/ROTC 2-4	POLS 231, 232 American Government I, II 6
Electives 6	PE/MLb 124**/ROTC 2-4
<hr/>	<hr/>
36-38	37-39
Summer	
Phy 335 Modern 3	
***Bio Elective from Core 4	
Chm 241 Quantitative 4	
Electives 3	
<hr/>	
14	

Third Year	Fourth Year
Bio selected from core*** 16	Bio 416 and 417 Bio Lit. 2
Soph Am His 6	Bio Electives 8
Chm 413, 414 Physical Lab 2	Chm 441 Biochem 4
Chm 333 Inorganic 3	Chm Electives* min 8
Chm 431, 432 Physical 6	Electives 10
Electives 3	
36	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, 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 Advisors: M.D. Hunt

205-12 Hayes Building, Phone 880-8254

J.T. Sullivan

205-5 Hayes Building, Phone 880-8257

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—three semester hours

English—Sci report writing

Mathematics—three semester hours to include Mth 1335

Statistics—Psy 241

Computer Science—CS 1311

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, 245 Microbiology, 246 Medical Microbiology, 344 Advanced Physiology, 441 Parasitology, 4405 Immunology

Chemistry: 141-142 General, 341-342 Organic Chm, 441 Biochemistry or Bio 4302 Cell Physiology

Physics: 141-142 General

C. Electives:

8 semester hours to total 104-106 semester hours (Psy 334 recommended), plus one year internship. See below:

Recommended Program of Study

First Year	Second Year
Eng 131 3	Eng 331 Sci Report Writing 3
Eng Composition 3	Eng Literature 3
Bio 141, 142 General 8	Bio 245-246 Microbiology;
Chm 141, 142 General 8	Med Microbiology 8
CS 1311 3	Chm 341-342 Organic 8
Mth 1335 Precalculus 3	Phy 141-142 General 8
HS 121 2	PE/MLb 124*/ROTC 2-4
PE/MLb 124*/ROTC 2 sem 2-4	
32-34	32-34

Third Year

Bio 344 Adv Physiology	4
Bio 4405 Immunology	4
Chm 441 or BIO 4302	3-4
Soph Am His	6
Bio 441 Parasitology	4
**Electives	8-9
Psy 241 Statistics	4
POLS 231, 232 American Government I, II	6

39-41

*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 accredited for teaching by the Committee on Allied Health Education and Accreditation of the American Medical Association (AMA). A list of clinical affiliate hospital schools and education coordinators is available for the Lamar Medical Technology advisors. After satisfactorily completing this training, the student is awarded the degree of Bachelor of Science Medical Technology.

The Program shown will fulfill certification requirements.

Physical Therapy†

Major Advisor: M.E. Warren

101 Hayes Building, Phone 880-8262

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 1333-Trig)	3
Psy 131 Introduction	3
Elective*	3
Psy 234 Child	3

34

Second Year

Physics 141-142	8
Soc 131	3
Speech	3
Bio 344 Adv Physiology	4
Psy 241 Statistics	4
His 231-232	6
POLS 231, 232 American Government I, II	6

34

Third Year

Bio 240 Comparative Anatomy	4
Eng Literature	3
Psy 337 Adjustment	3
Psy 432 Abnormal	3
Electives minimum*	13

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 18 months 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 Building, Phone 880-8262

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	Eng Lit
Eng Composition	Speech
Bio 141-142 General	His 231-232 United States
Chm 141 General	POLS 231, 232 American Government I, II
Psy 131	Soc 131
Psy 241 Statistics	Sociology or Psychology*
Psy Elective	Bio 143 and 144 Anatomy & Physiology
Electives	
32	32

Plus two years clinical affiliation

*Social Psychology recommended.

Physician's Assistant†

Major Advisor: M.E. Warren

101 Hayes Building, Phone 880-8262

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 Building, Phone 880-8256

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 our 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—Meteorology 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, 245, 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, 223, 230, 231, 233, 234
 Chemical Engineering 3311
 Civil Engineering 213, 220, 232, 331, 339, 413
 Electrical Engineering 3305, 333, 438
 Mathematics 148, 149, 241
 Geology 220, 342, 433
 Physics 247, 248

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

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

Third or Fourth Summer	
Bio 361 Field Course	6

Minimum Total 137

Second Year	
Geo 141-142 Phys, His	8
Phy 141-142 General	8
Mth 237 Calc II	3
Bio 245 Microbiology	4
Statistics	3
Soph Eng Literature	6
PE 120, 226 Swim, Life	4

35

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 American Government I, II	6
Approved Electives	3-4
Free Electives	9

32

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 120, 226 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

Fourth Year

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

32

Third or Fourth Summer

Bio 361 Field Course	6
Minimum Total 139	

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 220	2
Eng Composition	6
Egr 114 Graphics I	2
PE Activity	2-4
Elective	3

31-33

Second Year

Phy 247, 248	8
Mth 241 Analysis III	4
Egr 1121 Intro Computers I	1
Egr 1221 Intro Computers II	2
Egr 230 Statics	3
Electives	4
Egr 231 Dynamics	3
Eng Literature	6
PE 120, 226 Swim, Life	4

35

Third Year

CE 331 Environ Sci	3
CE 339 Soils Sci	3
Egr 223	2
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

33

Fourth Year

Geo 4370 Meteorology	3
Bio 418 Ocean Seminar	1
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 American Government I, II	6
Elective	12

33

Third or Fourth Summer

Bio 361 Field Course	6
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
Vertebrate 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 Structure and function of the circulatory, digestive, excretory and reproductive systems. <i>Prerequisite: Bio 143.</i>	4:3:2
240	Comparative Anatomy of the Vertebrates Comparative anatomy presented from systemic viewpoint. Two three-hour labs per week. (Offered Fall semester) <i>Prerequisite: Bio 141-142.</i>	4:2:6
245	Introductory Microbiology Micro-organisms with emphasis on those of medical significance and problems of personal and community health.	4:3:2
246	Medical Microbiology A study of the pathogenesis, epidemiology, prevention and therapy of major infectious diseases. Laboratory includes diagnostic procedures used in identification. <i>Prerequisite: Bio 245</i>	4:3:3
341	Histology Study of normal tissues of vertebrates including human tissue. (Offered Spring semester) <i>Prerequisite: Bio 141-142 and 240 or 243-244.</i>	4:3:3
342	Embryology Comparative study of meiosis, fertilization, cleavage and early embryology as it relates to human development of vertebrates. (Offered Spring semester) <i>Prerequisite: Bio 141-142, 240.</i>	4:3:3
344	Advanced Physiology General physiology, muscle-nerve relations, digestive, circulatory, respiratory, excretory, nervous and endocrine systems. <i>Prerequisite: Bio 141-142 and Chm 141-142. (Recommended: Chm 341-342.)</i>	4:3:3
345	General Botany Introduction to plant structure and function with emphasis on the seed plants. <i>Prerequisite: Bio 141-142.</i>	4:3:3
346	Invertebrate Zoology Classification, natural history, phylogenetic relationships and economic importance of the invertebrate phyla. (Offered Fall semester) <i>Prerequisite: Bio -142.</i>	4:3:3
347	Genetics General principles of heredity, including human inheritance. <i>Prerequisite: Bio 141-142.</i>	4:3:3
348	Epidemiology A study of the distribution and determinants of diseases and injuries in human populations. Laboratory utilizes a case history approach. <i>Prerequisite: Microbiology, statistics recommended.</i>	4:3:3
349	General Oceanography Principles of oceanography. Geological, chemical, physical and biological environments of the ocean. (Offered Fall semester) <i>Prerequisite: Geo 141, Chm 141.</i>	3:3:3
361	Field Course in Estuarine and Coastal Oceanography 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. (Offered Summer semester) <i>Prerequisite: Bio 349, PE 228.</i>	6:5:40
4101, 4201, 4301, 4401	Special Topics in Biology 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.	1-4:A:0
416	Classical Biological Literature A survey of major written works in biology. <i>Prerequisite: Senior standing in biology.</i>	1:1:0
417	Current Biological Literature A survey of modern biological works published in recent journals. <i>Prerequisite: Senior standing in biology.</i>	1:1:0
418	Oceanographic Technology Seminar Reports on current literature in oceanography for Oceanographic Technology majors. <i>Prerequisite: Bio 349.</i>	1:1:0

430	Undergraduate Problems	3:0:6
	Individual investigation of a problem in biology. Formal report of research to be approved by two faculty members. <i>Prerequisite: Written permission of instructor.</i>	
4302	Cellular Physiology	3:3:0
	Basic processes in physiology, metabolism, transport, energetics, molecular and cellular mechanisms. (Offered Spring semester) <i>Prerequisite: Junior standing, credit for organic chemistry.</i>	
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. <i>Prerequisite: Bio 4303 and consent of instructor.</i> <i>Supplementary lab fee.</i>	
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.	
4405	Immunology	4:3:3
	Organs, tissues, cells, and molecules of the immune response and their interactions. <i>Prerequisite: Bio 243</i>	
441	Parasitology	4:3:3
	A study of the morphology, life history and host-parasite relationships of parasites of man and other animals. <i>Prerequisite: Bio 141-142.</i>	
442	Entomology	4:3:3
	Physiology, morphology, life history, collection, classification and control of insects. <i>Prerequisite: Bio 141-142.</i>	
443	Limnology	4:3:3
	Fauna, flora, ecology and productivity of fresh water. <i>Prerequisite: Bio 141-142.</i>	
444	Vertebrate Natural History	4:3:3
	Collection, identification and natural history of area fish, amphibians, reptiles, birds and mammals. (Offered Spring semester) <i>Prerequisite: Bio 141-142.</i>	
445	Marine Biology	4:3:3
	Habitats and community relationships of marine plants and animals. <i>Prerequisite: Bio 141-142.</i>	
446	Ecology	4:3:3
	Quantitative approach to both field and experimental studies. Interrelationships of organisms and their environment. <i>Prerequisite: Bio 141-142.</i>	
447	Cellular Biology	4:3:3
	Structure and function of the cell and its organelles. <i>Prerequisite: Bio 141-142.</i>	
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.	
480	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. (Offered Summer semester) <i>Prerequisite: Bio 345, 20 hours credit in biology and consent of instructor. Field trip required and special fee assessed.</i>	

Department of Chemistry

Department Chair: Keith C. Hansen **217 Chemistry Building, Phone 880-8267**

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

Associate Professors: Dorris, Harmon, Mejia

Assistant Professors: Shukla

Adjunct Research Professor: Aminabhavi

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, dentistry, veterinary medicine, and pharmacy. The Chemistry Department has active research programs in several areas including organic synthesis, organic reaction mechanisms, electrochemistry, environmental chemistry, transition metal coordination chemistry, iron metabolism, and molecular spectroscopy. Undergraduate 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 1311, 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:
Six to eight semester hours Advanced Chemistry electives
15 semester hours general electives

*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)

Recommended Programs of Study

First Year		Second Year	
Chm 141, 142 General	8	Chm 241 Quantitative	4
Bio/Geo 141, 142 General	8	Chm 333 Inorganic	3
Mth 148, 149 Calc An Geo I, II	8	Phy 247, 248 General	8
Eng Composition	6	Eng Literature****	6
HPE/MLb**/ROTC	2-4	Electives	6
		Mth 241 Calc An Geo III	4
		HPE/MLb**/ROTC	2-4

Third Year	
Chm 341, 342 Organic	8
Chm 431, 432 Physical	6
Chm 413, 414 Physical Lab.....	2
Phy 335 Modern	3
CS 1311, 132 Intro.....	6
His 231, 232 Amer. His.....	6

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 American Government I, II	6
Electives (outside of major)	9

31

Minimum 126 semester hours + HPE/MLb/ROTC

34-36

**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 three 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 Chemical Literature
Chm 412 Seminar
- D. Electives:
10-12 semester hours advanced chemistry or biology electives
Six semester hours general electives

*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)

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

Second Year	
Chm 241 Quantitative.....	4
Chm 333 Inorganic	3
Bio 243, 244 Microbio.....	8
POLS 231, 232 American Government I, II	6
Phy 141, 142	
or	
Phy 247, 248.....	8
Eng Literature	3
HPE/MLb**/ROTC.....	2-4

30-32

34-36

Third Year	Fourth Year
Chm 341, 342 Organic 8	Chm 441, 442 Biochem 8
Chm 431, 432 Physical 6	Chm 446 Instrumental 4
Chm 413, 414 Physical Lab 2	Chm 436 Inorganic 3
Bio 341 Histology or	Chm 411 Chm Literature 1
Bio 347 Genetics 4	Chm 412 Sr Seminar 1
Phy 335 3	Eng Literature
His 231, 232 Amer. His 6	or
Chm/Bio Electives*** 3-4	Eng 4335 Report Writing 3
32-33	Bio/Chm Electives*** 7-8
	Electives 6
	33-34

Minimum 125 hours + HPE/MLb ROTC

**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 437, 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 six semester hours must be in advanced courses.

Recommended Program of Study

First Year	Second Year
Chm 141, 142 General 8	Chm 241 Quantitative 4
Bio/Geo 141, 142 General 8	Chm 333 Inorganic 3
Mth 236, 237 Calculus I, II 6	Phy 141, 142 General 8
Eng Composition 6	Fre 131, 132 Elementary 6
HPE/MLb*/ROTC 2-4	His 231 Am Hist 6
30-32	Eng Literature 6
	HPE/MLb*/ROTC 2-4
	35-37
Third Year	Fourth Year
Chm 341, 342 Organic 8	Chm 431, 432 Physical 6
Phy 335 3	Chm 413, 414 Physical Lab 2
Fre 231, 232 Reading 6	Chm 411 Literature 1
POLS 231, 232 American Government I, II 6	Chm 412 Seminar 1
CS 1311, 132 6	Minor/Electives 20
Minor/Electives 3	
32	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 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
Eight additional semester hours of advanced chemistry
- E. Electives
23 semester hours general electives

Recommended Program of Study

First Year	Second Year
Bio 141-142 General 8	Chm 341-342 Organic 8
Chm 141-142 General 8	Mth 237 Calculus 3
Eng Composition 6	Eng Literature 6
Mth 1335 Precalculus 3	Phy 141-142 General 8
Mth 236 Calculus 3	Bio Elective 4
PE/MLb 124**/ROTC 2-4	POLS 231, 232 American Government I, II 6
Electives 6	PE/MLb 124**/ROTC 2-4
36-38	37-39
Summer	Fourth Year
Phy 335 Modern 3	Bio 416 and 417 Bio Lit. 2
Bio 243 or Bio 245 4	Bioelectives 8
Chm 241 4	Chm 441 Biochem 4
Electives 3	Chm Electives* min 8
14	Electives 10
Third Year	32
***Bio from core 16	
His 231, 232 Am His 6	
Chm 413, 414 Physical Lab 2	
Chm 333 Inorganic 3	
Chm 431, 432 Physical 6	
Electives 3	
36	

*Chm electives to be selected from Chm 430, 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.

***See Biology department listing.

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 fundamental 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: Shyam S. Shukla

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 requirements for a B.S. degree. (see Degree Requirements)
- B. Biology:
Bio 141, 142, 243 or 245, 443, 446
Six-to-eight hours of Biology electives**
- C. Chemistry:
Chm 141, 142, 241, 341, 342, 411, 412, 446, 448
Six-to-eight hours of Chemistry electives**
- D. Science and Mathematics:
Phy 141, 142
CS 1311, 132
Mth 236, 237
CE 331
- E. Health Education
HED 434, 437

First Year

Bio 141, 142 General	8
Chm 141, 142 General	8
Eng 131, 132 Composition	6
Mth 236, 237 Calculus	6
Elective	3
HPE/MLb*/ROTC	2-4

33-35

Third Year

Bio 446 Ecology	4
Chm 446 Instrumental Analysis	4
Chm Elective**	3-4
CE 331 Envir Sci	3
His 231, 232 Am His	6
CS 1311, 132	6
HED 437 Health/Human Ecology	3
HED 437 or Bio 348 Epidemiology	3-4

32-34

Second Year

Bio 243 or 245 Microbiology	4
Chm 241 Quantitative Analysis	4
Chm 341, 342 Organic	4
Eng Literature	3
Phy 141, 142 General	8
Bio Elective**	3-4
HPE/MLb*/ROTC	2-4

32-35

Fourth Year

Bio 443 Limnology	4
Chm 448 Environmental Analysis	4
Chm 411 Literature	1
Chm Seminar	1
Chm Elective**	3-4
POLS 231, 232 American Government I, II	6
Eng 4335 Technical Report Writing	3
Electives	6
Bio Elective**	3-4

31-33

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

**Must be approved by Program Director

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)

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.	
	<i>NOTE: It is strongly recommended that students enrolling have mathematics competency at or above the level of Mth 1334</i>	
141	General	4:3:3
	General practices, problems, fundamental laws and theories.	
	<i>Prerequisite: Chm 135 with a grade of "C" or better or satisfactory performance on diagnostic test.</i>	

142	General A continuation of Chm 141. Properties of the elements. Elementary qualitative analysis and theories of solutions and equilibrium. <i>Prerequisite: Chm 141.</i>	4:3:3
143	Introductory For nonscience majors. A survey course in elementary inorganic chemistry.	4:3:2
144	Introductory For nonscience majors. Continuation of Chm 143. Nuclear science, elementary organic and physiological chemistry. <i>Prerequisite: Chm 143 or 141.</i>	4:3:2
241	Quantitative Analysis Theory and practice of analytical chemistry utilizing gravimetric and titrimetric techniques. <i>Prerequisite: Chm 142 with a grade of "C" or better.</i>	4:3:5
333	Inorganic Generalization involving atomic and nuclear theory; properties of the elements with emphasis on periodicity; non-aqueous solvents, acids, bases, oxidation-reduction, etc. <i>Prerequisite: Chm 142 with grade of "C" or better.</i>	3:3:0
341	Organic Current theories and chemical principles as they relate to the field of structure and reaction of the various types of organic compounds. <i>Prerequisite: Chm 142.</i>	4:3:4
342	Organic A continuation of Chm 341. <i>Prerequisite: Chm 341.</i>	4:3:4
411	Chemical Literature Lecture and assigned reading in the chemical literature. Chemical literature search on an advanced level. <i>Prerequisite: 20 semester hours of chemistry.</i>	1:1:0
412	Senior Seminar Reports and assigned reading. <i>Prerequisite: Senior standing in chemistry.</i>	1:1:0
413	Physical Laboratory Laboratory applications of modern theory in physical chemistry. <i>Prerequisite: Chm 241, 431 or parallel.</i>	1:0:4
414	Physical Laboratory Continuation of Chm 413. <i>Prerequisite: Chm 413, Chm 432 or parallel.</i>	1:0:4
430	Organic Polymers Chemistry of industrial polymerization of organic compounds, petro-chemistry of organic monomer preparation and chemical characteristics of organic polymers. Industrial field trip(s). <i>Prerequisite: Chm 342, Chm 431 or CHE 441 or parallel.</i>	3:3:0
431	Physical Modern chemical theory as applied to gases, liquids, solids and solutions. <i>Prerequisite: Chm 142, Phy 142 or 248, Mth 241 or 237 or parallel.</i>	3:3:0
432	Physical A continuation of Chm 431. <i>Prerequisite: Chm 431 or equivalent.</i>	3:3:0
436	Inorganic Study of the quantized atom, valency and the chemical bond, and coordination chemistry with applications to biological systems. <i>Prerequisite: Chm 431.</i>	3:3:0
441	Biochemistry I Structures chemistry and functions of biological compounds. A survey of the detailed structures, chemistry and functions of the various classes of biologically important compounds. <i>Prerequisite: Chm 342.</i>	4:3:4
442	Biochemistry II A detailed survey of metabolic pathways and processes. <i>Prerequisite: Chm 441.</i>	4:3:4
444	Qualitative Organic Analysis A study of systematic methods for the identification of organic compounds and mixtures of organic compounds. <i>Prerequisite: Chm 241 and 342.</i>	4:2:8

- 446 Instrumental Chemical Analysis** 4:3:4
Instrumental techniques of chemistry. Theory and practice in optical, electrometric and chromatographic methods.
Prerequisite: Chm 241, 342, 431.
- 448 Environmental Analysis** 4:3:4
The course will focus attention on the causes of environmental pollution, how environmental samples are collected and analyzed, and on current governmental regulations concerning pollutants.
- 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 eight semester hours of chemistry above the freshman level and permission of instructor.
- 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 Chair: Charles Timothy Summerlin 4 Maes Building, Phone 880-8558

Director of Freshman English: Christopher P. Baker

3 Maes Building, Phone 880-8555

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

1 Maes Building, Phone 880-8586

Professors: Barnes, Ellis, Georgas, Jones, Strickland, Summerlin, Thomas, Wall

Associate Professors: Baker, Francis, Gwynn, Platt, Price, Sheppeard

Assistant Professors: Clark, Daigrepoint, Duncan, Heumann, Hutchings, Pineda, Priest, G. Smith, Yearwood

Lecturers: Adell, Bruner, Francis, Gordon, Ingham, Kavanaugh, Leach, Lenihan, Palmer, Popp, Saur, Scearce, West

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, 18th 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.

History 131 and 132 (not required for persons who earn a teacher's certificate).

Sophomore American history: six semester hours.

Sophomore American political science: six semester hours.

Physical activity courses, marching band or ROTC: four semesters.

- 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 and world literature: twelve semester hours.
 English 430 (except as indicated under Teacher Certification below).
 English elective: three semester hours.
 One may substitute nine hours of advanced writing courses (drawn from English 331, 335, 4326, 4345, and 4355) for nine of the 18 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).

Technical Writing Program

Students from any academic discipline who wish to better prepare themselves for employment in business, the professions, or government service may be interested in the technical writing program offered by the department. This program emphasizes mastery of written communication skills, particularly those required in the authoring and editing of reports, proposals, manuals, news releases and other documents. Hands-on experience producing such documents on microcomputer is offered. Course work in this technical writing program should complement virtually any major. See the Head of the Department of English and Foreign Languages.

Teacher Certification - English

Students wishing to certify for a provisional certificate-secondary with English as the primary teaching field should major in the Department of English and Foreign Languages and receive a Bachelor of Arts degree in English with certification. They may choose one of three options: Option 1 requires 36 hours of English (all totals *exclude* Freshman composition hours) and a twelve-hour supporting field but no second teaching field; Option 2 requires 30 hours of English and an approved 24-hour second teaching field; Option 4 requires 48 hours of English, communications, and reading and no second teaching field (English Language Arts).

Those receiving the Bachelor of Arts in English with a provisional certificate-secondary take the same program as that outlined above with the following exceptions:

- A. General Requirements
 Speech: Spc 131 or 331
 Computing and Technology: CS 130, 1311 or equivalent
 Fine Arts: Three semester hours
 Reading: C&I 3326
 History: His 131 and 132 are *not* required
- B. Major
 Eng 3321
 Eng 4326
 The remaining advanced English hours vary according to option selected.

For further details concerning requirements for teacher certification, including elementary certification with English specialization, and information on professional education courses, consult the College of Education section in this bulletin.

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, 232 American Government I, II.....	6
Mth.....	6	Foreign Languages 231-232.....	6
Electives.....	6	Electives.....	6
PE Activity.....	2	PE Activity.....	2
	32		32
Third Year		Fourth Year	
Eng.....	9	Eng 430 History of the English Language.....	3
Laboratory Science.....	8	Eng.....	6
Minor.....	9	Minor.....	9
Electives.....	6	Electives.....	12
	32		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 composition: six semester hours
 - Literature: six semester hours
 - Mathematics and Laboratory Science: four courses, at least one in mathematics and one in laboratory science.
 - No courses less advanced than college algebra will fulfill the mathematics requirement.
 - Sophomore American History: six semester hours
 - Sophomore American Political Science: 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: nine semester hours of literature and civilization
 - Spanish
 - Spanish 131-132: Elementary Spanish
 - Spanish 231-232: Reading, Composition, Conversation
 - Spanish 330: Spanish Conversation
 - Spanish 335: Advanced Grammar and Composition
 - Advanced Spanish: twelve semester hours of literature and civilization
- 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.

Teacher Certification - French, Spanish

Students wishing to certify for a provisional certificate-secondary with French or Spanish as the primary teaching field should major in the Department of English and Foreign Languages and receive a Bachelor of Arts degree in French or Spanish. Requirements in the major are the same as for non-certifying French or Spanish majors. For changes in general requirements, see Teacher Certification-English.

For further details concerning requirements for teacher certification, including elementary certification with French or Spanish specialization, and information on professional education courses consult the College of Education section in this bulletin.

Recommended Program of Study - French or Spanish

First Year		Second Year	
*Maj Lang 131-132 Elementary	6	Maj Lang 231, 232 Intermediate	6
Eng Composition	6	Eng Literature	6
Mth	6	Sophomore American His	6
HPE Activity	2	Sci	8
Elec	12	HPE	4
	32	Elec	2
	32		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.

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 Department of English and Foreign Languages. Admission through AP test or a combination of SAT verbal and English achievement test normally.
Offered Fall semesters. 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 requirements 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 seven 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 19th and 20th 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.	
331	Technical Report Writing	3:3:0
	Supervised preparation of technical and scientific reports according to standard usage recommended by scientific and engineering societies. <i>Prerequisite: Completion of six hours of Freshman English or permission of the instructor.</i>	
334	Mythology	3:3:0
	A study of the mythologies of the ancient Greeks, Romans, and Norse peoples and other cultures.	
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.	
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	English Language Arts Concepts and Skills	3:3:0
	Concepts and skills in writing, language, literature, reading, speaking, and listening for the secondary teacher. Junior standing required.	
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 16th 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. May be taken for credit more than once if the topic varies.	
435	Survey of 17th 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.	
436	Studies in 18th 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 Modern Drama** 3:3:0
A study of dramatic trends and representative plays from Ibsen to the present.
- 4318 Modern Poetry** 3:3:0
A study of poetry developments in England and America with emphasis on representative poets from Hardy to the present.
- 4319 Modern 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 19th and 20th 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 20th 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.
- 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 331, 4326, or 4345 (when technically oriented or permission of the instructor).

Philosophy Courses (Phi)

Advisor: George D. Wall

18 Maes Building, Phone 880-8592

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.

- 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 19th century; emphasis upon philosophers of the 17th and 18th 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

1 Maes Building, Phone 880-8586

Students for whom English is a second language are required to demonstrate English proficiency by scoring a minimum of 80 on the proficiency/placement test required of entering students. Those students whose scores fall below 80 are placed in a developmental support course until satisfactory scores are achieved.

A student placed in ESL 134 must enroll for the course, *and the section* in which he is placed, during the semester in which he is tested; the course may not be dropped by the student.

- 134 **Developmental Skills in ESL** 3:3:0
Students for whom English is a second language are placed in the course when English proficiency scores fall below the required minimum. Does not satisfy degree requirements in English. Graded on Unsatisfactory-Satisfactory-No Grade (retain) basis.

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

Freshman Composition:

ESL 135 and ESL 136 are parallel in content to the freshman composition courses taken by native speakers of English. The ESL sections differ only in teaching methods that speak to distinctive needs of a non-native user of English.

ESL 135 is prerequisite to ESL 136, and the courses may not be taken concurrently. These six hours must be taken the first two long semesters in which the student is enrolled.

- 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.

Literature:

ESL 231, ESL 232 or ESL 233 satisfies the degree requirement in literature for the student for whom English is not a native language. ESL 135 and ESL 136 are prerequisite to all the literature courses. The literature courses may not be taken concurrently with ESL 134, 135 or 136.

- 231 **Masterpieces in British Literature** 3:3:0
Critical study of six-to-ten major works in British 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.
Prerequisite: ESL 135 and 136.
- 232 **World Masterpieces in English Translation**
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.
Prerequisite: ESL 135 and 136.

233 Masterpieces in American Literature

Critical study of six-to-ten major works in American literature, including representative works from most of the major periods. Applies toward the sophomore literature requirements for students for whom English is a second language.

Prerequisite: ESL 135 and 136.

ESL Endorsement:

Prospective ESL teachers may satisfy the course work requirement for ESL endorsement in the state of Texas by completing 12 hours of prescribed courses: ESL 431, 432, 433, 434.

- 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.) May be repeated for credit with approval of department head.
Prerequisite: Fre 231 or equivalent.
- 331 Contemporary French Drama**
A study of representative plays of the 20th century with emphasis on the theater of post World War II. Dramatists studied include Giraudoux, Sartre, Camus, Ionesco, Beckett, Arrabal.
Prerequisite: French 232 or equivalent.
- 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 or equivalent.
- 338 French Phonetics** 3:3:A
A study of the French sound system. Laboratory exercises to improve pronunciation.
Prerequisite: Fre 232 or equivalent.
- 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.
- 430, 430G Teaching Spoken French** 3:3:0
Prerequisite: Approval of department head.
- 435 Survey of French Literature through the 18th Century** 3:3:0
Readings from significant works. Lectures, readings, oral and written reports. May be repeated for credit when the topic varies.
Prerequisite: Fre 232 or equivalent.

- 436 **Survey of French Literature Since the 18th Century** 3:3:0
Readings from significant works. Lectures, readings, oral and written reports. May be repeated for credit when the topic varies.
Prerequisite: Fre 232 or equivalent.
- 437, 437G **Teaching French Composition** 3:3:0
Prerequisite: Approval of department head.

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.
- 231 **Reading, Composition, Conversation** 3:3:0
Prerequisite: Ger 132 or equivalent.
- 232 **Reading, Composition, Conversation** 3:3:0
Prerequisite: Ger 231 or equivalent.

Italian Courses (Ita)

- 131 **Elementary Italian** 3:3:0
Conversation, reading, dictation, grammar. Use of tapes. Emphasis will be placed on vocabulary and pronunciation.

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 or equivalent.
- 333 **Survey of Spanish-American Literature** 3:3:0
A study of outstanding writers and their works up to the 19th century *modernista* movement. Lectures, readings, oral and written reports.
Prerequisite: Spa 232 or equivalent.
- 335 **Advanced Grammar and 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 or equivalent.
- 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 or equivalent.
- 430, 430G **Teaching Spoken Spanish** 3:3:0
Prerequisite: Approval of department head.
- 431 **Contemporary Spanish Literature** 3:3:0
Prerequisite: Spa 232 or equivalent.

- 432 The Spanish Novel** 3:3:0
A study of the development of the Spanish novel from Cervantes to the 20th century.
- 436 Spanish American Novel** 3:3:0
Prerequisite: Spa 232 or equivalent.
- 437, 437G Teaching Spanish Composition** 3:3:0
Prerequisite: Approval of department head.
- 438 Studies in Spanish and Spanish American Literature** 3:3:0
Studies in an area of mutual interest to students and instructor. May be taken for credit more than once if topic varies.

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 four- or five-week 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 Chair: Donald E. Owen, 214 Geology Building, Phone 880-8236

Professors: Aronow, Owen, Pampe, Stevens

Associate Professor: Cooper, Jordan

Energy Resources Management Coordinator: William R. Pampe
208 Geology Building, Phone 880-8236

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, hydrogeology and environmental geology), by government agencies, or elect to take graduate training at another institution. A specialization 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 stratigraphy, sedimentology, petroleum geology, geomorphology, petrology, and geochemistry as well as soils and Pleistocene geology of the Gulf Coast, lunar geology, geology of the Big Bend region, computer applications to geology, 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—11 semester hours
 - Chemistry—eight semester hours
 - Physics—eight semester hours
 - Introduction to computers—three semester hours
- B. Geology Requirements—60 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
 - Sedimentology—four semester hours
 - Summer Field Course—six semester hours
 - Seminar—one semester hour
 - Geophysics—three semester hours
 - Geomorphology—four semester hours
 - Economic Mineral Deposits or Fossil Fuels—three semester hours
 - Principles of Stratigraphy—four semester hours
 - Stratigraphic Paleontology—four semester hours
 - Geochemistry or Tectonics of North America—three semester hours

C. Electives—15 semester hours
Minimum Total: 133 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

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Third Year

Geo 341 Stat-Data Proc	4
Geo 342 Structural Geo	4
Geo 345 Petrology	4
Geo 346 Sedimentology	4
Geo 441 Stratigraphy	4
Phy 141-142 General*	8
**Elective	6

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Third or Fourth Summer

Geo 360 Field Camp	6
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Minimum Total 133

*Those planning to specialize in Geophysics should substitute the sequence Phy 247, 248.

**At least six semester hours of electives must be other than Geology courses.

Second Year

Geo 241 Mineralogy	4
Geo 243 Optical Min	4
Mth 149 Analyt Calculus II	4
CS 133 Intro Computers	3
Eng Literature	3
Spc 331 or OAS 335 or Eng 4326	3
POLS 231, 232 American Government I, II	6
PE Activity	4

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Fourth Year

Geo 419 Seminar	1
Geo 433 Geophysics	3
Geo 436 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

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Bachelor of Science - Energy Resources Management

Major Advisor: W.R. Pampe

208 Geology Building, Phone 880-8236

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
- Economics of World Resources—three semester hours
- Principles of Management—three semester hours
- D. Electives—14 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

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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

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Minimum Total 134

**At least six semester hours of electives must be other than Geology courses, and no electives can be taken in business courses.*

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
CS 1311 Computers.	3
POLS 231 American Government I.	3
PE Activity	2-4

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Fourth Year	
Geo 438 Fossil Fuels	3
Geo 346 Sedimentology	4
Che 438 Petroleum Egr	3
Mgt 331 Management	3
BLW 434 Adv. Legal Princ	3
BLW 438 Petroleum Law	3
POLS 232 American Government II	3
His 232 Am Hist	3
Eco 438 Economic of World Resources	3
*Electives	8

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Teacher Education in Earth Science

Students pursuing a Bachelor of Science degree in Secondary Education with a specialization in earth science must comply with the revised teacher education standards as established by the Texas State Board of Education.

For details concerning requirements for teacher certification and information on professional education courses, consult the College of Education section in this bulletin.

Geology Courses (Geo)

141	Physical Geology Earth materials, structures, land forms, mineral resources, and the processes which formed them.	4:3:2
142	Historical Geology History of the earth and its inhabitants during geologic time. <i>Prerequisite: Geo 141</i>	4:3:2
235	U.S. and Texas Geography The major landforms, climatic zones, and geographical features and interrelationships among natural resources, industry, agriculture, and geography of the fifty United States, with special emphasis on Texas.	3:3:0
236	Regional Geography National, regional and continental units considered from the viewpoint of language, race, religion, political organization, economy, and physical landscape.	3:3:0
237	Physical Geography The fundamental concepts of local, regional, and global geography. <i>Prerequisite: Sophomore standing.</i>	3:3:0
238	Cultural Geography History and distribution of cultural groups, with emphasis upon the interaction between geographic environment and human cultures.	3:3:0

239	History of Life	3:3:0
	Origin of life on the Earth. Fossils and the evolution of organisms during geologic time, including the emergence of <i>Homo sapiens</i> .	
241	Mineralogy	4:3:3
	The classification, properties, occurrence, and identification of minerals. Field trip and special fee required. <i>Prerequisite: Geo 141 and Chm 141 or 143.</i>	
243	Optical Mineralogy	4:3:3
	Optical properties of minerals. Use of the polarizing microscope in the identification of minerals. <i>Prerequisite: Geo 241.</i>	
336	Geology of Texas	3:3:0
	The topography, physiography, structure, geologic history, and mineral deposits of Texas. Field trip and special fee required. <i>Prerequisite: Geo 141 or Geo 239.</i>	
341	Statistics and Data Processing	4:3:3
	The application of digital computer and statistical techniques to the analysis of earth science data. <i>Prerequisite: Egr 1221, CS 235, Geo 345.</i>	
342	Structural Geology	4:3:3
	Rock deformation and geologic structures. Field trip and special fee required. <i>Prerequisite: Geo 241, Mth 148.</i>	
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. <i>Prerequisite: Geo 243.</i>	
346	Sedimentology	4:3:3
	The derivation and deposition of sediments. The environmental interpretation of sedimentary strata. Field trip and special fee required. <i>Prerequisite: Geo 345.</i>	
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. <i>Prerequisite: Geo 342, 345.</i>	
419	Seminar	1:1:0
	Written and oral reports on current geological literature. May be repeated for credit. <i>Prerequisite: 20 semester hours of Geology.</i>	
427, 428	Special Project	4:A:0
	An individual library, laboratory, or field project. To receive credit, an acceptable typewritten report is required. <i>Prerequisite: Consent of instructor</i>	
433	Geophysics	3:3:0
	Application of the principles of physics to geologic problems. Use of geophysical techniques in petroleum exploration. <i>Prerequisite: Geo 342, Phy 142, Mth 149.</i>	
436	Geochemistry	3:3:0
	The application of the science of chemistry to the solution of geological problems. <i>Prerequisite: Chem 142, Geo 243</i>	
437	Economic Mineral Deposits	3:3:0
	Origin and occurrence of commercially valuable minerals and rocks. Field trip and special fee required. <i>Prerequisite: Geo 345 or 4350</i>	
438	Fossil Fuels	3:3:0
	Origin and occurrence of coal, oil, and gas deposits. Field trip and special fee required. <i>Prerequisite: Geo 345 or 4350.</i>	
439	Tectonics of North America	3:3:0
	The development of tectonic theory as evidenced by and applied to the North American continent. <i>Prerequisite: Geo 342.</i>	
441	Principles of Stratigraphy	4:3:3
	Fundamental principles: nomenclature; correlation; facies; unconformities; transgression/regression; genetic and event stratigraphy; subsurface and seismic stratigraphy. Field trip and special fee required. <i>Prerequisite: Geo. 142 and consent of instructor.</i>	
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. <i>Prerequisite: Geo 142 and consent of instructor.</i>	

445	Geomorphology The development and classification of land forms. Field trip and special fee required. <i>Prerequisite: Geo 342.</i>	4:3:3
4101, 4201, 4301	Special Topics in Earth Science Topics in the earth sciences. May be repeated for credit when the area of study is different. <i>Prerequisite: Consent of instructor.</i>	3:A:0
4350	Earth Materials 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. <i>Prerequisite: Geo 141 or 237.</i>	3:3:0
4370	Meteorology The composition and processes of the atmosphere. Weather and climate and their effect on human activities. <i>Prerequisite: Eight hours of science.</i>	3:3:0
4380	Oceanography The structure, properties, and processes of the hydrosphere. The role of the seas and oceans in the total environment. <i>Prerequisite: Eight hours of science.</i>	3:3:0

Department of History

Department Chair: Adrian N. Anderson **57 Maes Building, Phone 880-8511**

Professors: Anderson, Carroll, Gwin, Isaac, Mackey, Satterfield, Storey, Sutton, Wooster

Associate Professors: Holt, Woodland

Assistant Professors: 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 may select one of two options: Option 1 requires 36 hours of history and a minor but not an additional teaching field; Option 2 requires 30 hours of history and an additional approved 24 hour teaching field.

Students must fulfill all requirements for a Bachelor of Arts in History and include in their degree program one of the following:

Option 1

1. Six hours of mathematics and eight hours of science. Must be selected from list of approved courses.
2. C&I 2101, 331, 332, 3325, 3326, 338, 438, 462.
3. Spc 131 or 331, CS 130, Geo 237 or 238, Eco 233.
4. Additional requirements in History: History 134; Advanced United States History—three semester hours (a total of nine semester hours of Advanced United States History); Advanced World History (Non-United States)—three semester hours (a total of nine semester hours of Advanced World History).
5. Sufficient approved electives to complete a total of 133 semester hours.

Option 2

1. Six hours of mathematics and eight hours of science. Must be selected from list of approved courses.
2. C&I 2101, 331, 332, 3325, 3326, 338, 438, 462.
3. Spc 131 or 331, CS 130, Geo 237 or 238, Eco 233.
4. Additional requirement in History: History 134.
5. An approved teaching field of at least 24 hours (in addition to a teaching field in history of 30 hours).
6. Sufficient approved electives to complete a total of 133 semester hours.

For details concerning requirements for teacher certification and information on professional education courses, consult the College of Education section in this bulletin.

Recommended Program of Study

First Year	Second Year
His 131-132—World History 6	Sophomore American History 6
Freshman English 6	Literature (including Eng 2311) 6
Foreign Language 6	Foreign Language 6
Mth 6	Science 8
Electives 6	Sophomore POLS 6
PE—Activity 2	PE—Activity 4
32	36
Third Year	Fourth Year
His 339 3	His (Adv) 6
His (Adv) 6	Edu 438 and 462 or Minor (or other Teaching Field) and Electives 15-17
Electives 9	
Minor (or other Teaching Field) and Electives . 12-14	
30-32	30-32

History Courses (His)

131	History of World Civilization Survey of world history to 1660.	3:3:0
132	History of World Civilization Survey of world history from 1660 to 1965.	3:3:0
134	History of Texas Survey of Texas history from the beginning to the present time.	3:3:0
231	American History: History of the United States, 1783 to 1877 Survey of United States history from the revolutionary period through reconstruction.	3:3:0

231H	American History: History of the United States, 1763 to 1877 Survey of United States from the revolutionary period through reconstruction, designed especially for honors students. <i>Prerequisite: Departmental approval.</i>	3:3:0
232	American History: History of the United States, 1877 to the Present Survey of United States history from the post-reconstruction period to the present.	3:3:0
232H	American History: History of the United States, 1877 to the Present Survey of United States history from the post-reconstruction period to the present, designed especially for honors students. <i>Prerequisite: Departmental approval.</i>	3:3:0
233	American History: The Development of Society in America A historical survey of social change in the United States.	3:3:0
234	American History: The Arts in America A historical survey of cultural life in the United States.	3:3:0
235	American History: The Americas to 1810 The United States and the Western Hemisphere from the beginning to 1810.	3:3:0
236	American History: The Americas since 1810 The United States and the Western Hemisphere since 1810.	3:3:0
237	Military History of the United States 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 the American history requirement by taking any two courses selected from History 231, 232, 233, 234, 235, 236 or 237.	3:3:0
330	History of Ideas The Judeo-Christian and Greco-Roman elements in the Western intellectual tradition.	3:3:0
331	Social and Intellectual History of the United States to 1865 Life and thought in the United States prior to 1865.	3:3:0
332	American Thought Since Darwin Life and thought in the United States since 1865.	3:3:0
333	History of American Economic Life A study of economic change in the context of institutional development in the United States.	3:3:0
337	Diplomatic History of the United States Historical development of American diplomacy.	3:3:0
338	Urban History of the United States The origin and development of cities in the United States.	3:3:0
339	Historical Research Principles and methods of historical research.	3:3:0
430	Era of the Renaissance and Reformation Western Europe from 1453 to 1610.	3:3:0
431	The Old Regime Western Europe from 1610 to 1783.	3:3:0
432	The French Revolution and Napoleon Western Europe from 1783 to 1815.	3:3:0
433	Russia and Eastern Europe to 1860 Russia, Poland, and the Balkans from the period of the Byzantine Empire to 1860.	3:3:0
434	19th Century Europe Europe from 1815 to 1914.	3:3:0
435	20th Century Europe Europe since 1914.	3:3:0
438	The American West The American West from colonial times to the present.	3:3:0
437	The Old South The American South from colonial times to the Civil War.	3:3:0
438	The New South The American South from the Civil War to the present.	3:3:0
439	Honors Program A tutorial program for honors seniors. Admission by invitation only.	3:A:0
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 Greece and Rome from earliest times to the fall of the Roman Empire in the West.	3:3:0
4319	Medieval Civilization Western Europe and the Mediterranean area from the late Roman period to 1453.	3:3:0
4321	The Far East to 1800 Japan, China, Indo-China and India to 1800.	3:3:0
4322	The Far East since 1800 Japan, China, Indo-China and India since 1800.	3:3:0
4323	Latin America to 1810	3:3:0
4324	Latin America Since 1810	3:3:0
4325	Tudor and Stuart England England from 1485 to 1688.	3:3:0
4326	18th Century England England Great Britain from 1688 to 1815.	3:3:0
4327	Victorian England Great Britain from 1815 to 1914.	3:3:0
4328	Contemporary America: The United States Since 1940	3:3:0
4329	Modern European Intellectual History An examination of the major European intellectual movements and thinkers from the Renaissance to the present.	3:3:0
4331	Russia Since 1860 The development of modern Russia, from 1860 to the present.	3:3:0
4332	Afro-American History to 1865 The black experience in Africa and in the Western Hemisphere prior to emancipation.	3:3:0
4333	Afro-American History since 1865 The black experience toward achieving freedom in the United States.	3:3:0
4334	Early National Period The United States from 1789 to 1820.	3:3:0
4335	Topics in History Selected special topics in major areas of history. Course may be repeated for a maximum of six semester hours credit when the topic varies.	3:3:0
4336	Ancient Near East The civilizations of the Near East from the earliest times to the pre-classical period.	3:3:0
4337	Directed Studies in European History 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. <i>Prerequisite: Departmental permission.</i>	3:A:0
4338	Directed Studies in American History 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. <i>Prerequisite: Departmental permission.</i>	3:A:0
4339	Directed Studies in Historical Research Individual study with an instructor on historiography and historical research methods. <i>Prerequisite: Departmental permission.</i>	3:A:0
4341	World War II A military, political and social history of World War II.	3:3:0
4342	Nazi Germany A military, political, and social history of Nazi Germany.	3:3:0

Department of Military Science

Department Chair: Major Lewis

ROTC Building, Phone 880-8560

Assistant Professor: Captain Eddy, Captain Jellison

Instructor: SGM Bobby Smith

ROTC Program

Practical leadership and management training applicable to both civilian and military career options is offered through the Lamar University Reserve Officers' Training Corps Program. The ROTC program has as its primary objective the commissioning 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 of all academic majors.

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 students, 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. Due to the physical requirements, no physically impaired students are normally accepted in the Military Science Program. Additionally, developmental students are strongly discouraged from taking Military Science courses until they have completed their remediation. Juniors and Seniors may take Freshman level courses with permission of the Department Head only. Basic course students are required to attend the Leadership Lab.

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 2.0 or better quality point average, complete the basic course or who qualify by 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 cannot 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 6 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 April 15. Students who are unable to attend the course in Fort Knox are still eligible to be considered for enrollment in Junior-year ROTC courses, without prior military or ROTC experience.

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.

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** 2:2:2
An introduction course designed to emphasize leadership principles and confidence building through activities such as mountaineering, orienteering, and class discussions, as well as basic leadership skills — all of which are inherent in learning what it takes to lead.
- 122 Woodland Skills/Survival** 2:2:2
Instruction includes basic survival and field skills emphasizing leadership principles and ethics. Survival techniques taught include shelter construction, first aid, water procurement, and directional finding techniques. Exercises on group dynamics and corporate survival skills are also included.
- 221 Small Unit Leadership Skills** 2:2:2
Course consists of basic skills necessary for a small unit to perform in a military environment. Subjects covered in the course include: Weapons, tactics, leadership 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 Leadership and Management** 2:2:2
Human behavior, values, ethics, motivational techniques, and leadership are examined as they relate to accomplishment of objectives. The functions of management, planning, organizing, directing, staffing, and controlling are introduced. 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** 2:2:2
In-depth instruction in a wide range of leadership skills to include motivation, group dynamics and responsibilities of leaders. Practical experience in leading peer groups will be gained through advanced mountaineering, small unit tactical leadership applications, extensive student led physical fitness programs, and land navigation techniques. Students will participate in field trips to practice leadership skills.
Prerequisite: MS 121, 221 and Permission of Department Head.

Advanced Courses

Note: Prerequisites for enrollment in the advanced courses are as determined by the Professor of Military Science.

- 331 Military Roles** 3:3:2
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** 3:3:2
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 advanced 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** 3:3:2
Methods of organization, administrative management, and personnel management are examined through conferences and practical exercises. Staff operation of the cadet corps and practical exercises in leadership are conducted during a leadership laboratory.
- 432 Military Ethics** 3:3:2
The organization, capabilities, and mission of military units are examined through lectures and conferences. A block of instruction emphasizes the military law system. 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 students.

Special Programs

U.S. Army ROTC Basic Camp

(Maximum of eight 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 (four 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 resourcefulness. Members participate in several field training exercises during the semester. Open to all interested and qualified students with at least a 2.0 GPA.

Adventure Training

Students may apply to attend Northern Operations Training (Alaska), Airborne – Parachutist – Training (Georgia), or Air Assault Training (Kentucky).

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 through 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.

ROTC Scholarships

Competitive three- and two-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 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.

Department of Physics

Department Chair: Cruse Melvin

230 Archer Building, Phone 880-8241

Professors: Melvin, Pizzo, Rigney

Associate Professors: Peebles

Assistant Professor: Goines

Physics is the fundamental science. A major in physics serves 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. Lamar physics majors have successfully pursued careers in medicine, life sciences, teaching, geophysics, environmental science, engineering, and physics research. Many Lamar physics majors have earned doctorates from outstanding graduate institutions.

The emphasis of the Physics program is on quality education at the undergraduate level. Faculty members are involved in innovative research to present physics concepts through creative demonstrations and experiments. Personal faculty support is offered to every physics major, and the physics majors are encouraged to apply for student work in the department.

Minor in Physics

A minor in physics must complete 20 semester hours of physics; including general physics, modern physics, and six semester hours numbered above 300.

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 Physics I, Physics II, Modern Physics, Analytical Mechanics (Phy 343), Electricity and Magnetism (Phy 338), Quantum Mechanics (Phy 432) and a minimum of ten additional semester hours above 300 including one laboratory course; 15 semester hours of Mathematics including 331 or 3301; and Chemistry 142.

In addition to these minimum requirements most majors will take Phy 130 as a preparation for Phy 247. Phy 133 & 134 are recommended for students with limited computing skills. Students preparing for graduate school in physics are encouraged to take as many of the following courses as possible:

1. Thermal Physics (Phy 339)
2. Electrical Measurements (Phy 346)
3. Introduction to Research (Phy 421, 422)
4. Classical Mechanics (Phy 431)
5. Optics (Phy 448)
6. Partial Differential Equations
7. Vector Analysis
8. Numerical Analysis
9. Advanced Calculus

Placement

Physics majors must obtain sufficient mathematical skills in Algebra and Trigonometry to be placed in Calculus I (Math 148). See Mathematics Placement Test Section or take pre-calculus mathematics (Math 1335) to make up the deficiency.

Flexible Program of Study

The flexible program of study allows the student to combine a physics major with study in another academic discipline. Some of the elective hours may be used to meet option requirements. Selected Options are listed below.

First Year	Second Year
Phy..... 3-8	Phy 247, 248..... 8
Eng. Composition..... 6	Eng. Literature..... 6
Chem. 141-142..... 8	Mth. 241..... 4
Mth. 148, 149..... 8	Electives..... 12-16
Electives..... 4	PE/MLB*/ROTC 2 sem..... 2 or 4
PE/MLB*/ROTC 2 sem..... 2 or 4	
<u>31-38</u>	<u>32-37</u>
Third Year	Fourth Year
Phy 345, 343..... 8	Phy 432, 338..... 7-8
Phy elective above 300..... 4	Phy above 300..... 6
His Soph American..... 6	Electives..... 17-21
POLS 231, 232..... 6	
Mth. Diff. Eq..... 3	
Electives..... 5-8	
<u>33-36</u>	<u>30-35</u>
Total: 128 or more.	

*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 Some Options With the Flexible Program

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: 24-26 semester hours from English, history, political science, 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.), and 12-24 semester hours of advanced engineering. Suggested electives: economics and sociology.

Geology: 20 semester hours of geology, three-to-nine semester hours of electronics. Electives unrestricted.

Recommended Program of Study Preparation for Graduate School in Physics:

First Year	Second Year
Phy 130 or 141, 247, 133	Phy 248, 345, 134
Eng. Composition	Eng. Literature
Chem. 141, 142	Mth. 241
Mth. 148, 149	Foreign Language
PE/MLB*/ROTC 2 sem.....	His Soph. American
2 or 4	2 or 4
<hr/>	<hr/>
31-34	32-34
Third Year	Fourth Year
Phy 343, 338, select A(1)	Phy 421, 422
Mth 331 or 3301,	Phy 432, select A(2)
select B(1)	Mth Select B(2)
Foreign Language	Electives
POLS 231, 232	15
Electives	<hr/>
12	32-36
<hr/>	
33-36	

Total: 128 or more.

*Offered Full Semester only. If MLB 124 option is desired it should be added to third and fourth year as four semesters are required.

Select A - choose from Phy 339, 348, 431, 448.

Select B - choose from Mth 335, 338, 4202, 4203.

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)

130	Mathematical Methods in Physics Graphical analysis, vector operations, trigonometric operations for elementary physics problems; field and potentials.	3:0:3
133	Science and Computing I General Computer use in scientific work. Data Storage: Data manipulation; and introduction to Pascal programming. <i>Prerequisite: One year of science.</i>	3:2:2

- 134 Science and Computing II** 3:2:2
Pascal programming and scientific applications.
Prerequisite: One year of science.
- 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, Vibrations 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.
- 247 Calculus Based Physics I** 4:3:3
Mechanics, vibrations, heat.
Prerequisite: Registration in or credit for Mth 149 and permission of department head.
- 248 Calculus Based Physics II** 4:3:3
Electricity, magnetism, sound waves, optics.
Prerequisite: Phy 247
- 324 Physics Experiments I** 2:1:3
Prerequisite: Registration in or credit for Phy 335.
- 325 Physics Experiments II** 2:1:3
Prerequisite: Phy 335
- 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.
- 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.
- 343 Analytical Mechanics** 4:3:3
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 registration in Differential Equations.
- 345 Modern Physics** 4:3:3
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.
- 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. <i>Prerequisite: Six hours of physics numbered above 300.</i>		
421	Research I	2:0:6
Introduction to Physics Research. Starting a research investigation defining a problem conducting literature search, assembling resources, and initiating a project. <i>Prerequisite: Phy 345, and (343 or 338).</i>		
422	Research II	2:0:6
Introduction to Physics Research. Completing a project started in Phy 421. Completing the project and writing a report in publication form. <i>Prerequisite: Phy 421.</i>		
431(G)	Classical Mechanics	3:3:0
Variational principles and Lagrange's equations; the kinematics of rigid body motion; the Hamilton equations of motion; small oscillations. <i>Prerequisite: Differential Equations and Phy 333 or M.E. 231.</i>		
432(G)	Introductory Quantum Mechanics	3:3:0
Basic concepts of quantum mechanics. Schrodinger's equation; wave functions. <i>Prerequisite: Phy 333 or 431, Phy 335 and Mth 331 or 4301.</i>		
433(G)	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. <i>Prerequisite: Phy 335.</i>		
436(G)	Applied Nuclear Physics	3:2:2
Nuclear structure, decay processes, nuclear forces, scattering; spectroscopy and health effects. <i>Prerequisite: Phy 345 or Phy 340.</i>		
448(G)	Optics	4:3:3
Physical and Quantum Optics. Propagation of light; interference; diffraction; optics of solids; thermal radiation and light quanta; optical spectra; lasers. <i>Prerequisite: Phy 248 or Phy 141-142 and Mth 241.</i>		

Department of Political Science

Department Chair: William M. Pearson

56 Maes Building, Phone 880-8526

Professors: Drury, Pearson, Utter

Associate Professors: Lanier, Sanders, Stidham

Assistant Professors: Castle, Dubose, Laslovich, Vanderleeuw

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: southern politics; party realignment; congressional elections and casework; administrative accountability in state government; empirical-normative links between voting and political obligation; the trial courts' responses to Supreme Court policy changes; Brazilian public policy; minority politics and social policy analysis; public personnel and budgetary policy; Canadian-U.S. 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 Science in Political Science, Bachelor of Arts in Political Science with Teacher Certification, and Bachelor of Science in Political Science with Teacher Certification. 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 student's 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 131—Introduction to Political Science
 - Political Science 231-232—Introduction to American Government I and II
 - 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); 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.

Recommended Program of Study - Bachelor of Arts

First Year	Second Year
POLS 131 3	Eng—Literature 6
Eng—Composition 6	Foreign Language 6
Foreign Language 6	PE Activity 4
Mth (incl 1334) 6	AM His 6
PE Activity 2	POLS 231-232 6
Electives 6	POLS 3319 3
<u>29</u>	<u>31</u>
Third Year	Fourth Year
POLS (Adv) 9	POLS (Adv) 6
Electives 9	Electives 9
Laboratory Science 8	Minor and Electives 15-18
Minor and Electives 5-8	
<u>31-34</u>	<u>30-33</u>

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 1311 or 133; POLS 4319 and nine additional hours to be selected from two of the following areas: Accounting 231-232; Economics 131-132, 233 or advanced; Mathematics—advanced; Psychology—advanced.; Computer Science—advanced.

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 133 or 1311 3	PE Activity 4
Electives 12	Approved Electives 6
<u>32</u>	<u>31</u>
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	
<u>30-34</u>	<u>27-30</u>

Bachelor of Arts - Teacher Certification Political Science

Students wishing to secure the Bachelor of Arts in Political Science and at the same time certify for a provisional certificate with Political Science as a teaching field must meet the following requirements:

- A. General Requirements:
 - Freshman English—six semester hours
 - Literature—six semester hours
 - Mathematics—1334 and three additional hours
 - Laboratory science—eight semester hours in same science
 - Sophomore American History—six semester hours
 - Speech 131 or 331
 - Computer Science 130
 - Physical activity courses, Band, or ROTC—four semesters
- B. Teaching Field I—24 hours in Political Science:
 - POLS 131—Introduction to Political Science
 - POLS 231-232—Introduction to American Government I and II

Advanced Political Science (at least one course in each of five fields)—15 semester hours. The fields are American politics (POLS 334, 335, 339, 437, 3301, 4312, 3313); 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. Teaching Field II—an approved 24 additional teaching field in place of the minor. Consult this catalog, College of Education.
- D. Curriculum and Instruction—25 semester hours
C&I 2101, 3225, 3226, 331, 332, 338, 438, 482.
- E. Foundation and Degree Requirements—completion of 232 in a foreign language, POLS 3319 and sufficient electives (with at least one three-hour course chosen from Anthropology, Psychology, Sociology, Economics, Art, Music, Theater, Dance, or Philosophy) to complete a total of 133 semester hours.
- F. Total Semester Hours: 133

For details concerning requirements for teacher certification and information on professional education courses, consult the College of Education section in this bulletin.

Recommended Program of Study - Bachelor of Arts Teacher Certification - Political Science

First Year	Second Year
POLS 131	Eng Literature
Eng Composition	Foreign Language
Foreign Language	POLS 231-232
Mathematics (including 1334)	POLS 3319
American History	Lab Science
Activity	Second Teaching Field
C&I 2101	Activity
Computer Science 130	
33	34
Third Year	Fourth Year
POLS-Advanced	Elective
Second Teaching Field	POLS-Advanced
C&I 3225, 3226, 331, 332, 338	Second Teaching Field
Speech 131 or 331	C&I 438, 482
34	32

Bachelor of Science - Teacher Certification Political Science

Students wishing to secure the Bachelor of Science in Political Science and at the same time certify for a provisional certificate with Political Science as a teaching field must meet the following requirements:

- A. General Requirements:
 - Freshman English—six semester hours
 - Literature—six semester hours
 - Mathematics—1334 and three additional hours
 - Laboratory science—eight semester hours in same science
 - Sophomore American History—six semester hours
 - Speech 131 or 331
 - Computer Science 130
 - Physical activity, Band, or ROTC—four semesters
- B. Teaching Field I—24 hours in Political Science:
 - POLS 131—Introduction to Political Science
 - POLS 231-232—Introduction to American Government I and II
 - Advanced Political Science (at least one course in each of five fields)—15 semester hours. The fields are American politics (POLS 334, 335, 339, 437, 3301, 4312, 3313); 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. Teaching Field II—an approved 24 hour additional teaching field in place of the minor. Consult this catalog, College of Education.
- D. Curriculum and Instruction—25 semester hours
C&I 2101, 3225, 3226, 331, 332, 338, 438, 482.
- E. Foundation and Degree Requirements—18 semester hours: Psychology 131, Computer Science 1311 or 133, Economics 131-132, Political Science 4319, and Political Science 3319.
- F. Total semester hours: 133

For details concerning requirements for teacher certification and information on professional education courses, consult the College of Education section in this bulletin.

Recommended Program of Study - Bachelor of Science - Teacher Certification - Political Science

First Year	Second Year
POLS 131 3	Eng Literature 6
Eng composition 6	POLS 231-232..... 6
Mathematics (including 1334) 6	Lab Science 8
Psychology 131 3	Eco 131, 132..... 6
American History 6	POLS 3319 3
Computer Science 130, 133, or 1311..... 6	Second Teaching Field 3
Activity 2	Activity..... 2
C&I 2101..... 1	
33	34
Third Year	Fourth Year
POLS 4319 3	POLS-Advanced..... 6
POLS-Advanced..... 9	Second Teaching Field 12
C&I 3225, 3226, 331, 332, 338..... 13	C&I 438, 482..... 11
Second Teaching Field 9	Speech 131 or 331 3
34	32

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. | |
| | <i>Prerequisite: Sophomore standing.</i> | |
| 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. | |
| | <i>Prerequisite: Sophomore standing and departmental approval.</i> | |
| 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. | |
| | <i>Prerequisite: POLS 231.</i> | |
| 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. | |
| | <i>Prerequisite: Sophomore standing and departmental approval.</i> | |
| | <i>NOTE: POLS 231-232 fulfills the six-hour requirement in Political Science.</i> | |
| 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. Formal research design required. | |
| 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. | |
| | <i>Prerequisite: Approval of department head.</i> | |

- 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.
- 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 19th 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 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.	3:3:0
435	International Law and Institutions 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.	3:3:0
437	American Constitutional Law and Development 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.	3:3:0
439	Special Topics in Public Administration 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.	3:3:0
4310	Directed Study Students may study individually with an instructor in an area of mutual interest to the student and the instructor. <i>Prerequisite: Approval of head of Department of Political Science.</i>	3:3:0
4312	American State Politics A survey of American state political systems from a comparative basis with emphasis on Texas.	3:3:0
4319	Advanced Research Methods Analysis or study of special problems, topics, cases, models and theories in political science research.	3:3:0
4381	The Politics and Government of the Communist Nations A study of the origin, development, structures, functions and behavior of the Communist political system with emphasis on the Soviet Union and China.	3:3:0
4383	Government and Politics of Latin America 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.	3:3:0

Department of Sociology, Social Work and Criminal Justice

Department Chair: Kevin B. Smith

55 Maes Building, Phone 880-8538

Professors: Altemose, Frazier, Ma, Seelbach

Associate Professors: Monroe, Sims, Smith, Stone

Assistant Professors: Birdwell-Pheasant, Love, Saur, Wilson-Wilke, Wright

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 four 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 two 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 in social work will entitle the graduate to apply for Texas certification 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 he or she 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.
6. All departmental majors (full-time and part-time) must have satisfied both the University's and the College of Arts and Sciences' requirements for English composition and mathematics before registering for 300 and 400 level courses offered by the department.

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 332—Labor Law
- Business Law 434—Advanced Legal Principles

Sociology

Program Director: Kevin B. Smith

55 Maes Building, Phone 880-8538

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, gerontology, market and evaluation research, sociology of sport, sociology of religion, 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.

For details concerning requirements for teacher certification and information on professional education courses, consult the College of Education section in this bulletin.

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—Three hours
Criminal Justice—Three hours
Anthropology—Three hours
Philosophy or Psychology—Three hours
- D. Minor—an approved minor of 18 semester hours, six 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
<u>17-18</u>	<u>17-18</u>

Second Year

First Semester	Second Semester
Eng Literature..... 3	Eng Lit, Eng 331, 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
<u>16-17</u>	<u>16-17</u>

Third Year

First Semester	Second Semester
POLS 231 American Government I..... 3	POLS 232 American Government II..... 3
Soc..... 6	Soc..... 6
Minor/Electives..... 6	Minor/Electives..... 6
<u>15</u>	<u>15</u>

Fourth Year

First Semester	Second Semester
Soc 438..... 3	Soc 439..... 3
Minor/Electives..... 9-11	Minor/Electives..... 9-11
<u>12-14</u>	<u>12-14</u>

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—Six 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
Foreign 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 American Government I..... 3	POLS 232 American Government II..... 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

53 Maes Building, Phone 880-8552

Social Work, an action-oriented profession, 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, families, groups, organizations and communities face difficulties and find solutions to problems. Social work practice is an art and science. It 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 in social work will entitle the

graduate to apply for Texas certification 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, which prepares students for entry-level social work practice, 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 three 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—Three hours
Anthropology—Three hours
- D. Minor: An approved minor of 18 semester hours, six 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	3	Second Semester	3
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	3	Second Semester	3
Eng Literature.....	3	Eng Lit, Eng 331, 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 American Government I.....	3	POLS 232 American Government II.....	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

58 Maes Building, Phone 880-8538

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. The Associate of Science degree in law enforcement is designed for persons desiring employment in active law enforcement.

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.
Nine 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—Three hours
Anthropology—Three hours
Criminal Justice 434—(CJ majors without field experience must complete six hours of CJ 434.)
- E. Minor or Approved Electives—an approved minor of 18 semester hours, six 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 1334 or higher.....	3	Mth 1334 or Lab Science.....	3
Lab Science.....	4	Lab Science or Math.....	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 331, 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	
<u>16-17</u>	<u>16-17</u>

Third Year

First Semester	Second Semester
POLS 231 American Government I 3	POLS 232 American Government II 3
CJ Advanced 3	CJ Advanced 3
Minor/Electives 9	Minor/Electives 9
<u>15</u>	<u>15</u>

Fourth Year

First Semester	Second Semester
Soc 438 3	CJ 434, 434 6
CJ Advanced 3	Minor Electives 3-5
Minor/Electives 6-8	CJ Advanced 3
<u>12-14</u>	<u>12-14</u>

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 University'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 two 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 1334 or higher or Lab Science 3-4	Mth 1334 or higher 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
<u>13-15</u>	<u>13-15</u>

Second Year

First Semester	
Eng Literature	3
POLS 231 American Government I	3
CJ Soph Elective	3
CJ 1303	3
Electives	6
18	

Second Semester	
POLS 232 American Government II	3
CJ Soph Electives	6
CJ 1305	3
Electives	6
18	

Anthropology

Faculty Advisor: Donna Birdwell-Pheasant

61 Maes Building, Phone 880-8541

Anthropology is the study of mankind at its most inclusive. The Human experience in all parts of the world and throughout the millennia of human existence serves as the subject matter of anthropology. The discipline maintains an appreciation of humans as biological creatures as well as social beings and bearers of culture. Course offerings encourage a fuller appreciation of human diversity while allowing students to compare our way of life with lifeways in other times and places.

A minor in anthropology is a useful complement to majors in sociology, social work, criminal justice, history and psychology. Selected courses in Anthropology are useful electives for majors in a variety of fields, including biology, geology, business and economics. Students interested in pursuing careers in anthropology should consult with the faculty advisor in anthropology.

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 for their resolution.	
132H	Social Problems—Honors	3:3:0
	Attributes of society and of persons which are subject to disapproval; the causes, extent and consequences of problems; programs and prospects for their resolution. Designed especially for honors students. <i>Prerequisite: Departmental approval.</i>	
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.	
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.	
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.
- 411 Proseminar in Sociology**
Detailed examination of the profession of sociology. Topics include career opportunities, application of theories and research, program assessment, and professional ethics.
Prerequisite: Senior standing in sociology
- 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.
- 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
	Analysis 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. <i>Prerequisite: Swk 331 and 333.</i>	
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. <i>Prerequisite: Consent of the instructor.</i>	
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. <i>Prerequisite: Consent of field placement coordinator, Swk 333, 335, plus three additional hours in Swk.</i>	
4324	Field Experience II	3:A:0
	Continuation of Swk 4321. Placement to be arranged. <i>Prerequisite: Consent of the instructor.</i>	

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. <i>Prerequisite: Admission to Police Academy and consent of instructor.</i>	
1312	Law Enforcement Related Fields (Academy)	3:3:0
	A study of juvenile procedures; written and oral reports; interviews and interrogations; practical problems; courtroom demeanor and testimony; Texas liquor laws; and speech. <i>Prerequisite: Admission to Police Academy and consent of instructor.</i>	
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 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.	3:3:0
238	Introduction to Police Management Basic principles of management and organization applied to police agencies. Practical exercises in budgeting, leadership, discipline and related police problems.	3:3:0
332	Counseling Basic counseling techniques for dealing with troubled individuals. Communication skills; crisis intervention.	3:3:0
335	Police/Juvenile Relations An exploration of the different approaches to policing young people. Consideration of states' laws and landmark cases influencing policing the young.	3:3:0
336	Narcotics and Vice 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.	3:3:0
337	Organized Crime Survey of organized crime in America, past and present; areas and extent of influence; agencies and groups involved in prevention and control.	3:3:0
432	Seminar in Correctional Programs Overview of programs in institutional and noninstitutional agencies; examination of such programs based upon various correctional theories.	3:3:0
433	Police Problems Advanced treatment of major contemporary police problems from the viewpoint of both the administrative and line operations officer; integration of established scientific knowledge with practical police experience.	3:3:0
434	Applications 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. <i>Prerequisite: Consent of the instructor.</i>	3:A:0
4310	Ethical Issues in Criminal Justice An examination of selected ethical issues and problems confronting criminal justice professionals.	3:3:0
4312	Contemporary Issues in Criminal Justice Current topics in criminal justice. May be repeated for credit when the topic is varied.	3:3:0
4321	Responses to Crime A study of contemporary thought on crime, criminals, and the criminal justice system using critical analysis of recently written materials as a source for research, discussion, and student seminar. <i>Prerequisite: Junior standing.</i>	3:3:0
4322	Criminal Justice Planning Examination of planning including terminology, techniques, and practical exercises. Introduction to PERT, MBO, goal setting and master plan design. <i>Prerequisite: Junior standing.</i>	3:3:0
4332	Criminal Investigation of J.F.K. assassination The Kennedy assassination is studied in detail. Major assassination theories are examined in view of the physical evidence and findings of the Warren Commission, The House Select Committee on Assassinations, independent researchers and literature review. Students are required to participate in overnight field trip to attend lectures and study the crime scene.	3:3:0

Anthropology Courses (Ant)

231	Introduction to Cultural Anthropology 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.	3:3:0
232	Culture Areas 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.	3:3:0
233	Introduction to Physical Anthropology 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.	3:3:0

- 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.



Lamar students learn to use computers as decision making tools while mastering the challenges of business.

College of Business

Departments: Accounting; Administrative Services; Economics and Finance; Management and Marketing

Charles F. Hawkins, Acting Dean 232 Galloway Business Bldg., Phone 880-8603

Robert A. Swerdlow, Coordinator of Graduate Studies 232 Galloway Business Bldg. Phone 880-8604

Joel L. Allen, Director of J.D. Landes Center for Economic Education 204 Galloway Business Bldg. Phone 880-8657

Eleanor Stevens, Director of Advising Center 120 Galloway Business Bldg. Phone 880-8607

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 and graduate programs of the College of Business are accredited by the American Assembly of Collegiate Schools of Business.

Four departments—Accounting; Administrative Services; Economics and Finance; and Management and Marketing—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

As a professional school within a university environment, the College of Business has set objectives which complement and expand the educational objectives of Lamar University. The fundamental objective of the College of Business is to educate men and women who can function effectively and responsibly in managerial and/or professional roles in both private and public organizations. To provide this education, the College maintains a highly qualified faculty committed to teaching excellence and keeping abreast of new developments through research and professional involvement.

Degrees

The **Bachelor of Business Administration** curriculum consists of three distinct phases: non-professional general education, professional specialization, and electives.

The general educational requirements are patterned to develop an understanding the business graduate needs of the manner American industries strive to meet their responsibilities in a changing social and industrial order and knowledge of the social, legal, governmental and economic frameworks within which the American industrial organizations exist and operate.

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. The development of understanding of the interaction of all areas and functions of business operations 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. This specialized study should enable a graduate to assume a position of responsibility in business, public service, or education.

Finally, the student may choose electives which complement and supplement the specialization area.

The Bachelor of Business Administration degree will be awarded upon 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 1311 Micro-Computers I*

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

OAS 436 Business Decision Support Systems

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, 333 Inter Acc

Acc 334 Cost Acc

Acc 338 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)

Fin 332 Financial Analysis

Fin 431 Investments

Fin 432 Financial Markets

Fin 433 Commercial Markets

Professional Track Elective

Professional Track Elective

Professional Track Elective

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 4318 Industrial and Product Safety

Computer Science

Concentration IV

CS 1413 Principles of Computer Science II

CS 2411 COBOL Programming

CS 3307 Data Base Systems

CS 4311 Information Systems I

CS 4312 Information Systems II

BAC 330 Micro Software for Business

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 1413 Principles of Computer Science II

Acc 334 Cost Accounting or Mgt 431 Budgetary Control

BAC 330 Micro Software for Business

BAC 437 Management Database Appl

OAS 331 Records Management

OAS 336 Office Information Systems

Pre-law Recommended Courses

BLW 332 Employment Law

BLW 434 Advanced Legal Principles

BLW 438 Petroleum Law

OAS 336 Office Information Systems or

OAS 431 Office Management

Com 431 Laws and Ethics of the Mass Media or

SpC 434 Persuasion

His 339 Historical Research or

Eng 4326 Expository Writing

Management Major (21 semester hours)

Acc 334 Cost Accounting

Mkt 431 Marketing Management

Mgt 333 Personnel Management

Mgt 431 Budgetary Control

Mgt 432 Organ Behav

Mgt 434 Productivity Management

Mgt 438 Mgt of Computer Sys or

Mkt 438 Small Business Enterprise

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 232 Intermediate Shorthand

OAS 233 Advanced Typewriting

OAS 331 Records Management

OAS 336 Office Information Systems

OAS 337 Electronic Word Processing Systems

OAS 338 Secretarial Office Procedures

OAS 431 Office Management

Office Administration Major — Plan II

(21 semester hours)

BAC 330 Microcomputer Applications

OAS 232 Intermediate Shorthand

OAS 233 Advanced Typewriting

OAS 336 Office Information Systems

OAS 338 Secretarial Office Procedures

OAS 431 Office Management

OAS 438 Business Education Methods

Personnel Administration

(Accreditation) (21 semester hours)

Mgt 333 Personnel Management

Mgt 432 Organ Behav and Adm

Psy 335 Motivation

Psy 338 Psy Tests and Measure

BLW 332 Employment Law or

Eco 336 Survey of Labor Economics

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 Accounting, Economics or in Office Administration, Plan II - Teacher Certification)
 - 4) Acc 231
 - 5) English Composition (six 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 the student's 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 Chair: R. W. Jones 235 Galloway Business Building, Phone 880-8610

Emeritus Professor: Bennett

Professors: Jones, Veuleman

Associate Professors: Barlow, Davis, Harris, Hudson, McGillivray

Assistant Professor: Aly

Adjunct Instructor: Fontenot

Objectives

The principal objective of the accounting department is to develop in the student the knowledge, intellectual abilities, values, attitudes, skills, and leadership qualities needed:

1. To perform effectively in an entry-level position on an accounting track in business, government, education, or other fields and to advance to levels of increasing responsibility.
2. To grow and to develop as an individual both professionally and personally.
3. To become a contributing member of society.

The attainment of this objective requires successful teaching, research and service from the accounting faculty.

Requirements for Becoming an Accounting Major

1. Present an SAT Score.
2. Completion of curriculum presented for prebusiness program and ACC 232 with a grade point average of 2.5 (a grade of "B" is required in both ACC 231 and ACC 232). Transfer students must meet the equivalent of the above requirements.
3. Completion of the Accounting Program Admission Test (APAT). This test is to be taken after ACC 232 and before enrollment in ACC 331 (in special circumstances, the student may enroll in ACC 331 on condition that he/she take the test at the next available test date).

Requirements for Graduation

In addition to the College of Business degree requirements, the accounting major must have a GPA of 2.0 for all accounting courses attempted. 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	Second Year
CS 1311 Micro-Computers I	Acc 231, 232 Principles
Eco 131, 132 Principles	Eng Literature
Eng Composition	POLS 231, 232 American Government I, II
Mth 134, 1341 Mathematics for Business Applications and Elements of Analysis for Business Applications or Mth 236, 237 Calculus I & II	His Sophomore American History
Laboratory Science	Soc, Phil, Ant or Psy
PE Activity (2 semesters)	Spc 131 or 331
31	PE Activity (2 semesters)
	Electives
	32
Third Year	Fourth Year
Acc 331, 332, 333 Intermediate	Acc 430 Auditing
Acc 338 Taxation Accounting	Acc 431 Advanced Accounting
Acc 334 Cost Accounting	Acc 435 Accounting Systems
BAC 331, 332 Business Analysis	BLW 434 Advanced Legal Principles
BLW 331 Business Law	Eco 339 Economics of the Firm
Fin 331 Principles of Finance	Mgt 332 Production Management
Mgt 331 Principles of Management	Mgt 437 Administrative Policy
Mkt 331 Principles of Marketing	OAS 335 Business Communications
OAS 436 Business Decision Support Systems	Accounting Elective
36	Electives (College of Business)
	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. Third, accounting for partnerships.
- 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 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 I 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" and completion of the Accounting Program Admission Test (APAT).

332	Intermediate Accounting II Continuation of Acc 331 with emphasis on long-term debt, short-term liabilities, leases, pensions, owners' equity, revenue recognition, income tax accounting and earnings per share. <i>Prerequisite: Acc 331 with grade of "C."</i>	3:3:0
333	Intermediate Accounting III Completion of intermediate accounting and other financial accounting topics. Emphasis on statement of changes in financial position; inflation accounting; accounting for not-for-profit organizations; international accounting topics; and introduction to SEC practices. <i>Prerequisite: Acc 332 with grade of "C."</i>	3:3:0
334	Cost Accounting 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. <i>Prerequisite: Acc 232.</i>	3:3:0
338	Taxation Accounting 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. <i>Prerequisite: Acc 232.</i>	3:3:0
339	Taxation Accounting 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. <i>Prerequisite: Acc 338.</i>	3:3:0
430	Auditing 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. <i>Prerequisites: Acc 332 and Acc 435 with grade of "C."</i>	3:3:0
431	Advanced Accounting Analysis of special problems and theories relative to partnership formation and operations; fund accounting; corporate mergers and acquisitions; consolidated statements; accounting for foreign operations. <i>Prerequisite: Acc 332 with a grade of "C."</i>	3:3:0
433	Contemporary Accounting Theory A comprehensive study of the contemporary approaches to the development of accounting theory. Includes a study of historical development as well as recent contributions of present day scholars. Significant oral and written reports are required. <i>Prerequisite: Acc 333; Senior standing; 3.0 GPA and consent of the instructor.</i>	3:3:0
434	Advanced Cost Accounting In-depth study of process cost accounting; spoilage; overhead allocation; departmentalization; quantitative methods for planning and control. <i>Prerequisite: Acc 334.</i>	3:3:0
435	Accounting Systems Analysis of theoretical models illustrating structure, design and installation of specific accounting systems with emphasis on computer applications. <i>Prerequisites: Acc 332 and QAS 436 with grade of "C."</i>	3:3:0
439	Special Topics in Accounting Intensive investigation of accounting topics. Research and conferences with supervising faculty member. May be repeated when area of study differs. <i>Prerequisite: Senior standing; approval of department head and instructor.</i>	3:3:0

Department of Administrative Services

Department Chair: Nancy S. Darsey

237 Galloway Business Building

Professors: Darsey, Spradley

Associate Professors: Barnes, Burke, Pearson, M. Swerdlow

Assistant Professors: Cavaliere, Dorrell, Drapeau, Stevens, Vaughn

Adjunct Instructor: Duncan

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.

The general business pre-law program prepares students for admission to and completion of law school, as well as the successful management of a law practice. Advanced coursework in composition, communication, office practice, and the law complements the student's general business education. After completion of the program, students may apply directly to the law schools 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.

Minor in Office Administration

Students interested in Office Administration as a minor should take 18 hours of Office Administration courses including OAS 232 and OAS 233. Six of the 18 hours must be upper level (300 or 400) courses.

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	Second Year
Acc/AS/Eco/Mgt 130 Business Environment and Public Policy	Acc 231, 232 Principles
3	6
CS 1311 Micro-Computers I	Eng Literature
3	3
Eco 131, 132 Principles	POLS 231, 232 American Government I, II
6	6
Eng Composition	His Sophomore American History
6	6
Mth 134, 1341 Mathematics for Business Applications and Elements of Analysis for Business Applications or Mth 236, 237 Calculus I & II	Soc, Phl, Ant or Psy
6	3
Laboratory Science	Spc 131 Public Speaking or Spc 331 Business and Professional Speech
8	3
PE Activity	PE Activity
2	2
	Electives (non-business)
	3

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
 OAS 436 Business Decision Support Systems 3
 Electives (College of Business
 300 or 400 Level) 3

30

Advertising Communication Concentration-Plan II

First Year

Acc/AS/Eco/Mgt 130 Business Environment
 and Public Policy 3
 CS 1311 Micro-Computers I 3
 Eco 131, 132 Principles 6
 Eng Composition 6
 Mth 134, 1341 Mathematics for Business
 Applications and 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 I, II 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
 OAS 436 Business Decision Support Systems 3
 Elective (non-business) 3
 Electives (College of Business
 300 or 400 Level) 3

30

Industrial Engineering Concentration-Plan III

First Year

Acc/AS/Eco/Mgt 130 Business Environment
 and Public Policy 3
 CS 1311 Micro-Computers I 3
 Eco 131, 132 Principles 6
 Eng Composition 6
 Mth 134, 1341 Mathematics for Business
 Applications and 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 I, II 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
OAS 436 Business Decision Support Systems	3
Electives (College of Business 300 or 400 Level)	3

30

Computer Science Concentration-Plan IV

First Year

Acc/AS/Eco/Mgt 130 Business Environment and Public Policy	3
CS 1411 Principles of Computer Science I	4
Eco 131, 132 Principles	6
Eng Composition	6
Mth 1345 Discrete Mathematics and Mth 1341 Elements of Analysis for Business Applications or Other Approved Mathematics Courses	6
Laboratory Science	8
PE Activity	2

35

Second Year

Acc 231, 232 Principles	6
CS 1413 Principles of Computer Science II	4
Eng Literature	3
POLS 231, 232 American Government I, II	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

33

Third Year

BAC 331, 332 Business Analysis	6
BLW 331 Business Law	3
CS 2411 COBOL Programming	4
CS 3307 Data Base Systems	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

31

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
BAC 330 Micro Software for Business	3
OAS 436 Business Decision Support Systems	3
Elective (non-business)	3
Electives (College of Business 300 or 400 Level)	6

30

Retail Merchandising Concentration-Plan V

First Year

Acc/AS/Eco/Mgt 130 Business Environment and Public Policy	3
CS 1311 Micro-Computers I	3
Eco 131, 132 Principles	6
Eng Composition	6
Mth 134, 1341 Mathematics for Business Applications and 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 I, II	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
 OAS 436 Business Decision Support Systems ... 3
 Elective (non-business) 3
 Electives (College of Business
 300 or 400 Level)..... 3

30

Information Systems Management Concentration-Plan VI

First Year

Acc/AS/Eco/Mgt 130 Business Environment and
 Public Policy 3
 CS 1411 Principles of Computer Science I 4
 Eco 131, 132 Principles 6
 Eng Comp 6
 Mth 1345 Discrete Mathematics
 and Mth 1341 Elements of Analysis for
 Business Applications
 or Other Approved Mathematics Course 6
 Laboratory Science 8
 PE Activity 2

35

Second Year

Acc 231, 232 Principles 6
 CS 1413 Principles of Computer Science II 4
 Eng Literature 3
 POLS 231, 232 American Government I, II 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

33

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

30

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
 OAS 436 Bus Decision Support Systems 3
 Elective (non-business) 4
 Electives (College of Business 300 or 400 level) ... 9

31

Pre-Law

Recommended Courses

First Year

Acc/AS/Eco/Mgt 130 Business Environment
 and Public Policy 3
 CS 1311 Micro-Computers I 3
 Eco 131, 132 Principles 6
 Eng Composition 6
 Mth 134, 1341 Mathematics for Business
 Applications and 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 I, II 6
 His Sophomore American History 6
 Soc, Phl, Ant or Psy 3
 Spc 131 Public Speaking
 or Spc 331 Business & 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

*Check with pre-law advisor for suggested electives.

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 & 1341 Mathematics for Business Applications and Elements of Analysis for Business Applications or Mth 236 & 237 Calculus I & II	6
OAS 233 Advanced Typewriting	3
PE (2 semesters)	2

34

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 232 Intermediate Shorthand	3
OAS 331 Records Management	3
Electives	3

30

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.

For details concerning requirements for teacher certification and information on professional education courses, consult the College of Education section in this bulletin.

Fourth Year	
BLW 332 Employment Law	3
BLW 434 Advanced Legal Principles	3
BLW 438 Property and Mineral Law	3
Eco 334 Macro Economics or Eco 339 Economics of the Firm	3
OAS 336 Office Information Systems or OAS 431 Office Management	3
POLS 437 Am Constitutional Law or POLS 3313 Judicial Process	3
His 339 Historical Research or Eng 4326 Expository Writing	3
Mgt 437 Administrative Policy	3
OAS 436 Business Decision Support Systems	3
*Electives (College of Business 300 or 400 Level)	3

30

Second Year	
Acc 231, 232 Principles	6
CS 1311 Micro-Computers I	3
Eng Literature	3
POLS 231, 232 American Government I, II	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

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
OAS 436 Business Decision Support Systems	3
Soc, Phl or Ant	3
Electives (College of Business 300 or 400 Level)	6

33

First Year

CS 1311 Micro-Computers I 3
 Eco 131, 132 Principles 6
 Eng Composition 6
 Laboratory Science (same science) 8
 Mth 134 & 1341 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

Third Year

BAC 330 Micro Applications 3
 BAC 331 Business Analysis 3
 BLW 331 Business Law 3
 C&I 331 Foundations 3
 C&I 3325 Needs of Special Learners 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 232 Intermediate Shorthand 3
 OAS 436 Business Decision Support Systems 3

36

Second Year

Acc 231, 232 Principles 6
 C&I 2101 Intro to Education 1
 Eng Literature 6
 POLS 231, 232 American Government I, II 6
 His Sophomore American History 6
 Spc 131 Public Speaking
 or Spc 331 Business & Professional Speech 3
 PE (2 semesters) 2
 Elective 3
 Elective (Restricted) 3

36

Fourth Year

C&I 3326 Reading Strategies 3
 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

36

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 Business Writing Fundamentals 3
 OAS 134 Office Machines 3
 OAS 135 Filing Systems 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 1311 Micro-Computers I 3
 Eng Literature 3
 OAS 336 Office Information Systems 3
 OAS 337 Electronic Word Processing Systems 3
 OAS 338 Secretarial Office Procedures 3
 OAS 232 Intermediate Shorthand 3
 Elective 6

33

One-Year Certificates

Stenographic Option

CS 1311 Micro-Computers I 3
 Eng Composition 6
 OAS 131 Business Writing Fundamentals 3
 OAS 134 Business Machines 3
 OAS 135 Filing Systems 3
 OAS Shorthand (2 courses) 6
 OAS Typewriting (2 courses) 6
 PE (Activity) 2

32

Clerical Option

Acc 231 Prin. 3
 CS 1311 Micro-Computers I 3
 Eco 131 Principles 3
 Eng Composition 6
 OAS 131 Business Writing Fundamentals 3
 OAS 134 Business Machines 3
 OAS 135 Filing Systems 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.
- 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.

- 435 Administrative Internship** 3:3:0
 Experiential learning in a business or professional setting with career-related assignments and projects under the guidance of a faculty member. (Because of a limited number of placement opportunities, applicants are not guaranteed an assignment; thus, assignments are competitive.)
Prerequisites: 2.5 minimum grade-point average and pre-registration consent of 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 1311 or CS 1411.
- 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, probability theory, probability distributions, sampling theory, estimation, and introduction to test of hypothesis.
Prerequisite: Six hours of approved mathematics.
- 332 Business Analysis II** 3:3:0
 Emphasis on use of statistics in business decision making. Topics of study include hypothesis testing, inferences between two populations, analysis of variance, chi-squared and other non-parametric tests, simple-multiple linear regression/correlation analysis, classical time series analysis, and index numbers.
Prerequisite: BAC 331.
- 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: QAS 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 Employment Law** 3:3:0
 Historical interpretations and present provisions of regulations governing labor. Common law; state and federal statutes; Fair Labor Standards Act; worker's compensation; social security; liability; United States Department of Labor; social legislation; fair employment practices.
- 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 Property and Mineral Law** 3:3:0
 Survey of real property and oil and gas law. Topics include types of ownership interests in land and minerals; methods of acquiring title (deeds, probate, gift); usage of courthouse records; rights and duties of land-owners and producers; oil and gas leases; pooling and unitization; and problems commonly encountered in conveying rights and ownership
Prerequisite: BLW 331.

Office Administration Courses (OAS)

- 131 Business Writing Fundamentals** 3:3:0
 Refinement of writing skills; research basics; introduction to business letters and reports; business vocabulary development.
- 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 calculating machines and transcription machines and to perform word processing applications on microcomputers.
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 (Beginning Typewriting)** 3:2:2
Introduction to touch 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** 3:3:0
Introduction of Gregg Series 90 Shorthand. Reading; writing; theory principles; brief forms; previewed dictation.
- 232 Intermediate Shorthand** 3:3:0
Intensification of shorthand reading and writing skills. Brief form and theory review; speed-building dictation; transcription 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.
- 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.
- 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.
- 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.
- 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 331 and MGT 331.
- 438 Business Education in the Secondary School** 3:3:0
An examination of business courses offered in secondary schools with emphasis on review of content in such courses. Other topics include planning, resources, ethics, and professional growth.

Department of Economics and Finance

Department Chair: Charles F. Hawkins 240 Galloway Business Building

Professors: Cherry, Hawkins, Parigi, Sellekaerts Phone 880-8647

Associate Professors: C. Allen, Choi, Montano, Pearson, Price

Assistant Professors: J. Allen, Moss

Two degrees are offered in Economics:

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.

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.

Teacher Certification-Economics

For details concerning requirements for teacher certification and information on professional education courses, consult the College of Education section 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		Second Year	
Eco 131, 132 Principles.....	6	Acc 231, 232 Principles	6
Eng Composition.....	6	Eng Literature	3
Mth 134 & 1341 Math for Bus. Analysis & Applications		POLS 231, 232 American Government I, II	6
Mth 236 & 237 Calculus I & II	6	His Sophomore American History	6
Laboratory Science	8	PE Activity.....	2
CS 1311 Micro-Computers	3	Soc, Phil or Ant.....	3
PE Activity.....	2	Spc 131 Public Speaking.....	3
	31	Elective.....	3
			32
Third Year		Fourth Year	
BLW 331 Business Law.....	3	Eco 332 Money and Banking.....	3
Fin 331 Principles of Finance	3	Eco 4315 Government and Business.....	3
Mkt 331 Principles	3	Mgt 331 Principles of Management	3
BAC 331, 332 Business Analysis	6	Mgt 332 Production Management.....	3
Eco 333 Intermediate Theory	3	Mgt 437 Administrative Policy.....	3
Eco 334 Macro Economics.....	3	OAS 335 Business Communications	3
Eco 339 Economics of the Firm.....	3	OAS 436 Business Decision Support Systems	3
*Electives	9	*Electives	9
	33		30

*Electives must include nine semester hours of advanced courses in economics, and six semester hours of approved, advanced electives.

Bachelor of Science-Economics Major

First Year		Second Year	
Eco 131, 132 Principles.....	6	Acc 231, 232 Principles	6
Eng Composition.....	6	Eng Literature	3
Mth 134 & 1341 Math for Bus Analysis and Applications		His Sophomore American History	6
Mth 236 & 237 Calculus I & II	6	POLS 231, 232 American Government I, II	6
Laboratory Science	8	Electives	9
PE Activity.....	2	PE Activity.....	2
CS 1311 Micro-Computers I.....	3		
	31		32
Third Year		Fourth Year	
BAC 330 Micro Software for Business	3	Economics Courses (Advanced Level)	18
Eco 333 Intern Theory.....	3	Minor Courses (Advanced Level).....	12
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		
	31		30

Bachelor of Business Administration - Finance Major

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 1311 Micro-Computers I.....	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.

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) 3
***Elective (College of Business 300 or 400 Level) 3	OAS 436 Business Decision Support Systems 3
15	15

*Requires approval of the department head.

**PE Activity not acceptable.

***The faculty advisor should be consulted by the student to select electives that will be most beneficial in terms of career goals.

Economics Courses (Eco)

131	Principles (Micro) Introduction to economic principles; allocation of resources; determination of output and prices; distribution; and managerial economics.	3:3:0
132	Principles (Macro) Emphasizes monetary theory; national income analysis; fluctuation and growth; public finance; international trade; and current economic problems.	3:3:0
233	Principles and Policies Comprehensive introduction to economic principles and problems for non-business students. Resource utilization; price determination; distribution of income; fiscal and monetary problems; economic growth.	3:3:0
331	Economics of Entrepreneurship 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. <i>Prerequisite: Six hours of Economics.</i>	3:3:0
332	Money and Banking Functions and policies of the American monetary and banking system. Commercial banking; Federal Reserve System; monetary theories and policies; economic stabilization and growth. <i>Prerequisite: Six hours of Economics.</i>	3:3:0
333	Intermediate Theory Economic analysis and methodology. Distribution theory; price theory; pure and imperfect competition. <i>Prerequisite: Eco 131.</i>	3:3:0

- 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, stabilization 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: Six 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: Three 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: Three 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: Six 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.

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. 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 forecasting.
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.

Department of Management - Marketing

Acting Department Chair: Alfred F. Steiert

236 Galloway Business Building

Professors: R. Swerdlow, Wooten

Phone 880-8622

Associate Professors: Brust, Brunson, Godkin

Assistant Professors: Anusorn, Steiert, Wellan

Degree Programs

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. 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 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	
Acc/AS/Eco/Mgt 130 Business Environment and Public Policy	3
Eng Composition	3
Eco 131 Principles	3
Mth 134 Mathematics for Business or Mth 236 Calculus I	3
Laboratory Science	4
PE/MLb/ROTC	1-2
	17-18

Second Semester	
Eng Composition	3
Eco 132 Principles	3
CS-1311 Micro-Computers I	3
Mth 1341 Elements of Analysis for Business or Mth 237 Calculus II	3
Laboratory Science	4
PE/MLb/ROTC	1-2
	17-18

Second Year

First Semester	
Eng Literature	3
His Sophomore American History	3
Acc 231 Principles	3
POLS 231 American Government I	3
*Soc or Psy	3
PE/MLb/ROTC	1-2
	16-17

Second Semester	
**Spc 131 or 331	3
His Sophomore American History	3
Acc 232 Principles	3
POLS 232 American Government II	3
***Elective (non-business)	3
PE/MLb/ROTC	1-2
	16-17

*Personnel Administration majors should take Psy 131.

**Personnel Administration majors should take Spc 334.

***PE Activity not acceptable.

Recommended Programs of Study

Bachelor of Business Administration

Personnel Administration (Accreditation)

(See Core Program for First and Second Year)

Third Year

First Semester	
BLW 331 Business Law	3
Mkt 331 Principles of Marketing	3
BAC 331 Business Analysis I	3
Eco 334 Macro Economics or Eco 339 Economics of the Firm	3
*Elective (non-business)	3
	15

Second Semester	
Fin 331 Principles of Finance	3
Mgt 331 Principles of Management	3
BAC 332 Business Analysis II	3
OAS 335 Business Communications	3
BLW 332 Employment Law or ECO 336 Survey of Labor Economics	3
	15

Fourth Year

First Semester	
Psy 336 Psy Tests & Measurements	3
Mgt 333 Personnel Management	3
Mgt 432 Organizational Behavior and Administration	3
Mgt 332 Production Management	3
Elective (College of Business 300 or 400 Level)	3
OAS 436 Business Decision Support Systems	3
	18

Second Semester	
Mgt 434 Productivity Management	3
Mgt 437 Administrative Policy	3
Mgt 433 Contemporary Issues in Personnel Management	3
OAS 431 Office Management	3
Elective (College of Business 300 or 400 Level)	3
	18

*PE Activity not acceptable.

Bachelor of Business Administration Management Major

(See Core Program for First and Second Year)

Third Year

First Semester	3	Second Semester	3
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	3	Second Semester	3
Mgt 431 Budgetary Control	3	Mgt 434 Productivity Management	3
Mkt 431 Marketing Management	3	Mgt 437 Administrative Policy	3
Mkt 435 Quantitative Techniques in Marketing or Mgt 432 Organizational Behavior and Administration	3	OAS 436 Business Decision Support Systems	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	3	Second Semester	3
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	3	Second Semester	3
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	OAS 436 Business Decision Support Systems	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.
- 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 bargaining, 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 332
- 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, Mkt 331, 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 1311.
- 439 Special Problems in Business** 3: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.



Experiential learning programs assist teachers by successful means in education.

College of Education

Departments: Curriculum and Instruction; Health, Physical Education, and Dance; Home Economics; and, Professional Development and Graduate Studies.

LeBland McAdams, Acting Dean

105 Education Building, Phone 880-8661

James E. Lane, Director of Certification and Admissions

**103 Education Building,
Phone 880-8902**

E. Lee Self, Director of Field Experiences and Advisement

**206 Education Building,
Phone 880-8690**

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 since its establishment in 1959.

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.

Lamar University reserves the right to modify degree requirements and teaching certificate requirements in keeping with legislative acts and rules established by the Texas Higher Education Coordinating Board and the State Board of Education.

NOTICE: The degree programs and teacher certification requirements listed in this catalog are appropriate for students completing degrees and teacher certificates BEFORE September 1, 1991. Students seeking teacher certification AFTER September 1, 1991, must complete new requirements presently being formulated.

Degrees Offered

Bachelor of Science Degree in Education with majors in the following fields:

Elementary Education
Secondary Education
Special Education
Dance

Health
Home Economics
Kinesiology

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 curricu-

lum 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, education of the deaf, driver education, all-levels music, all-levels art, all-levels physical education, kindergarten education, 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.

All teacher education programs are accredited by the National Council for the Accreditation of Teacher Education.

Early Childhood Development Center

The Lamar University Early Childhood Development Center is an educationally oriented, model program for three, four, and five year old children. The Center, under the direction of the College of Education, serves as a part of the instructional experiences for college students in understanding and facilitating the development of young children.

The laboratory school provides an appropriate setting for preparing pre-professional teachers to direct the learning of young children who exhibit both typical and atypical development. In addition, the Center provides interdisciplinary research opportunities for faculty and graduate students, including the study of child behavior and the generation of effective strategies for promoting optimal human development and family interactions.

Admission to Teacher Education

Application for admission to the teacher education program is made upon enrollment in C&I 331 or 332.

Lamar University reserves the right to modify degree requirements and teaching certificate requirements in keeping with legislative acts and rules established by the Texas Higher Education Coordinating Board and the State Board of Education.

Admission requirements.

1. An overall grade point average 2.0, "C".
2. Successful completion of 60 semester hours.
3. Successful completion of the required 100 level courses in English.
4. Successful completion of the required mathematics courses listed in Academic Foundations.
5. *Completion of all sections of the Pre-Professional Skills Test in accordance with the state policy.
6. Successful completion of C&I 2101.

It is the student's responsibility to meet the above listed requirements before requesting admission to the Lamar Teacher education program. Any student who enrolls in C&I 300 or 400 level professional development courses without the prerequisites will be dropped from the course(s). The drop may come at a time which will be too late to add other courses.

**Students enrolled in a four-year degree program leading to certification who have met all admissions standards for acceptance into teacher education except the PPST requirements will be allowed to register for up to six hours (C&I 331 and C&I 332) in the Department of Curriculum & Instruction.*

Admission to Student Teaching and the Professional Semester

Student teaching shall be scheduled for the final Spring or Fall semester prior to graduation from Lamar University together with two other C&I courses. This 12 semester hour blocking of courses, (six hours for student teaching and two, three semester hour C&I courses) constitutes a "professional semester."

The first three weeks of this semester will be devoted to the campus courses. For elementary degree/certification programs, these courses are C&I 434 and 3325. For all-levels certification programs these courses are C&I 434 and 3325.

Students are reminded that during this "professional semester" it is possible to schedule only 12 hours of course work.

Students who are eligible and who desire to enroll in the "professional semester" must apply to the Director of Field Experiences by May 1, prior to the academic year for which student teaching is planned.

In order to qualify for the professional semester students must meet the following standards:

1. Be admitted to Teacher Education.
2. Be of Senior standing.
3. Possess a grade point average of 2.0 in:
 - a. All work taken
 - b. All teaching fields (areas of specialization for elementary).
 - c. All professional education courses completed.
4. Completed all prerequisite courses in professional education as follows:
 - a. For elementary majors, Options I, II and III, all professional education courses except C&I 3325, 434 and 463 or 465.
 - b. For elementary major, options IV, all professional education courses except C&I 3325, 4300, and 463.
 - c. For secondary education students except Home Economics majors, all professional education courses except C&I 3325, 438 and 462.
 - d. For Home Economics majors, C&I 331, 332, 3326, HEc 338 and 438, C&I 3325 will be taken in block fashion during the professional semester.
 - e. For all-levels students (Art, Hearing Impaired, Music and Physical Education) all professional education courses except C&I 3325, 434 and 463.
5. Completed prerequisites in academic content area as follows:
 - a. For elementary education majors, all courses in academic area of specialization.
 - b. For the kindergarten and ESL endorsements, nine hours of required courses.
 - c. For the Driver education endorsement all seven hours.
 - d. For secondary education Option I all-levels, Hearing Impaired, and all-levels Art and Music students, 42 hours in the composite teaching field.
6. Must have written approval of the Director of Field Experiences.

Certification Policies

Lamar University reserves the right to modify degree requirements and teaching certificate requirements in keeping with legislative acts and rules established by the Texas Higher Education Coordinating Board and the State Board of Education.

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 12 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.
 - b. In the area of specialization for elementary education.
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 the appropriate EXCET examinations.

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, all-levels physical education, and all-levels hearing impaired. Provisional Certificate endorsements are available in driver education, kindergarten education, and English as a second language. 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

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:

English Composition	6
Eng Literature	6
Mth (to include at least one course at or above the level of Mth 1334)	6
Science Laboratory (same science)	8
POLS 231 Am Gov I	3
POLS 232 Am Gov II	3
CS 130	3
Spch 131	3
His 134 (Elem)	3
His Sophomore American History	6
PE Activity (four semesters)	4
	48-51
2. Foundations electives and degree requirements 10
 C&I 2101 and nine hours to be selected from approved courses in the following groups with courses included from a minimum of two groups:
 - Group I: Anthropology, Psychology, Sociology, Child & Family Development, Health.

Group II: Economics.

Group III: Foreign Language, Manual Communication.

Group IV: Art, Drama, Music, Dance.

Group V: Philosophy, Bible, Humanities.

Special Certificates and Endorsements

All-levels Art degree and certificate. Described in the "Art" section of this bulletin.

Driver education endorsement. Described in the "Division of Movement Science and Health" 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.

Education of the hearing impaired. 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.

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 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 obtain information from the College of Education Certification Office.

Professional Certificates

Requirements for Professional Certificates are described in the Graduate Bulletin.

NOTICE: The information given below is correct as of December 1, 1988. However, the Texas College Coordinating Board and the Texas Education Agency are now in the process of reviewing and revising all state-wide education programs.

Prospective students are therefore URGED to contact the Head of the Department of Professional Development and Graduate Studies to obtain the latest information regarding these programs.

Department of Curriculum and Instruction

Department Chair: Dr. Doyle Watts

202 Education Building

Professors: Briggs, Burke, Hargrove, Hogue, Self, Snyder, Sontag

Phone 880-8673

Associate Professor: Henry, Karlin, McCaskill, Rice

Assistant Professor: Cooper, Goulas, Lane, Matheny

Bachelor of Science Degree in Elementary Education

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 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 9-to-15 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.

Academic Foundations

Described in introductory section for College of Education.

Academic Specialization (36 Hours)

A. Elementary Options

Option II—18 hours

Art—Art 131 or 132, 133, 135, 4331; six hours from: 3316, 3335, 3355, 3376, 4358, 4368.

Biology—141, 142; Three courses selected from: 245, 345, 347, 446 (nine hours must be advanced).

Earth Science—Geo 141, 142, 336, 419, 4350, 4370, 4380, and Phy 137.

English—Three semester hours of composition and six semester hours of literature are in the general education courses. Eng 4312 or ESL 434, 2 courses from Eng 339, 332, 3324, 4328, 4329, 4336, 333, 338, 3316, 432, 434, 435, 438, 439, or equivalent.

French—Fre 131, 132, 231, 232, 330, 337, 338.

Health—HEd 131, 133, 234, 331, 338, 434.

History—His 131 or 132, 231, 232, one course Advanced U.S. History, Non U.S. History and History.

Math—Mth 1360, 1362, 12 hours (nine advanced) selected from: Mth 1334, 330, 3313, 3315, 3317, 4331.

Music—AM 1143, *AM 1183, 1184, MTY 132, 133, MUS 331, 332, 337.

Kinesiology (required)—KIN 335, 337 or 443, 438, KINA 2201; Dan 127; six hours selected from: KIN 231, 343, 436.

Reading—C&I 232, 336, 337, 339, 431, 439.

Spanish—Spa 131, 132, 231, 232, 330, 331, and 335.

Speech—Spc 1302, 232, 235, 331, or Spc 332, 334, 434, or 433.

Option III—24 hours

Life-Earth Science—Bio 141, 142, 345, Geo 237, 235 or 236, 4380, Biology (three hours advanced); Geology 141, 142 **required in Academic Foundations**, and Phy 137.

Physical Science—Chm 141, 142; Phy 141 or 143, 142, 144, and nine hours upper division Chemistry or Physics courses.

Social Studies—Geo 237, 238; Eco 131, 132; POLS (six hours-three hours advanced); His 131, and advanced, U.S. History.

Special Education—C&I 2301, 2302, 3304, 3305, 4307, 4308, 4309, and 4310.

Option IV—24 hours

Early Childhood—C&I 333, 336, 4302, 4303, 4304; HEc 334, 339 or 4327; PEPT 337 and a combination of subjects (12 or 18 hours).

B. Work in a combination of subjects (18 semester hours).

Option II—18 hours

Art 3371, Geo 237, or 238, C&I 337, C&I 339, MEd 131, PEPT 339.

Option II—18 hours

Reading—Art 3371, Geo 237 or 238, His 134, MEd 131, HPE 339, The 430 or 336.
 Option III—12 hours
 C&I 337, C&I 339, MEd 131, PEPT 339 or 335.
 Option IV—12 hours
 Art 3371, MEd 131, HEc 233, PEPT 339.

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 3325 Need of the Special Learner
- C&I 434 Classroom Management (C&I 4300 for Opt. IV)
- C&I 437 Science & Social Studies in the Elementary School
- C&I 465 Student Teaching in the Elementary School

Free Electives A minimum of three semester hours are to be chosen by the student as free electives.

Bachelor of Science Degree in Education - Elementary

Recommended Program of Study - Option II (except reading)

The elementary education degree and certification requirements are shown in outline form below, comprising a desirable sequence of courses.

First Year	Second Year
Eng Composition..... 6	Eng Literature 6
Science Laboratory 8	His Sophomore American History 6
Mth 1360, 1362 Contemporary Mathematics..... 6	POLS 231 American Government I..... 3
MUS 131 Basics of Music 3	POLS 232 American Government II 3
His 134 History of Texas..... 3	Speech 131/331 3
PE Activity..... 2	PEPT 339 Physical Education in the Elementary School 3
Academic Foundations Electives..... 3	C&I 2101..... 1
Geo 237 Physical Geography, or Geo 235 U.S./Texas Geography, or Geo 236 Physical Geography..... 3	PE Activity..... 2
<hr style="width: 20%; margin-left: auto; margin-right: 0;"/> 34	Area of Specialization..... 3
	CS 130..... 3
	<hr style="width: 20%; margin-left: auto; margin-right: 0;"/> 33
Third Year	Fourth Year
Art 3371 Elementary Art Education 3	C&I 3325 Need of the Special Learner 3
C&I 331 Foundations of Education 3	C&I 437 Science and Social Studies 3
C&I 332 Educational Psychology..... 3	C&I 434 Classroom Management Elementary 3
C&I 333 Language Arts in the Elementary School . 3	C&I 465 Student Teaching in the Elementary School 6
C&I 334 Child Development and Evaluation 3	Area of Specialization..... 6
C&I 335 Arithmetic in the Elementary School..... 3	Academic Foundations Electives..... 6
C&I 339 Reading in the Elementary School 3	Free Electives..... 3
C&I 337 Materials & Resources for Teaching	
Reading..... 3	
Area of Specialization..... 9	
<hr style="width: 20%; margin-left: auto; margin-right: 0;"/> 33	
	<hr style="width: 20%; margin-left: auto; margin-right: 0;"/> 30

Bachelor of Science Degree in Education - Elementary

(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 1360, 1362 Contemporary Mathematics.....	6
MUS 131 Basics of Music.....	3
His 134 History of Texas.....	3
PE Activity.....	2
Academic Foundations Electives.....	3
Geo 237 Physical Geography, or Geo 235 U.S./Texas Geography, or Geo 236 Physical Geography.....	3

34

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 437.....	3
C&I 337 Materials and Resources.....	3
The 430.....	3
Free Electives.....	3

33

Second Year

Eng Literature.....	6
His Sophomore American History.....	6
POLS 231 American Government I.....	3
POLS 232 American Government II.....	3
Speech 131/331.....	3
PEPT 339 Physical Education in the Elementary School.....	3
CS 130.....	3
C&I 2101 Seminar for Teacher Education.....	1
C&I 232 Foundations of Reading Instruction.....	3
C&I 336 Children's Literature.....	3
PE Activity.....	2

36

Fourth Year

C&I 434.....	3
C&I 3325.....	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.....	6
Free Electives.....	6

30

Bachelor of Science Degree in Education - Elementary**Option III**

The elementary education degree and certification requirements are shown in outline form below, composing a desirable sequence of courses.

First Year

Eng Composition.....	6
Science-Laboratory.....	8
Mth 1360, 1362 Contemporary Mathematics.....	6
MUS 131 Basics of Music.....	3
His 134 History of Texas.....	3
PE Activity (1 per semester).....	2
Academic Foundations Electives.....	6

34

Third Year

C&I 3304 SpEd Needs Excp Ind.....	3
C&I 3305 Rdng/L.A. Excp Lrn.....	3
C&I 4307 Prctm Rdng/L.A. Excp.....	3
PEPT 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
C&I 437 Science and Social Studies in the Elementary School.....	3

36

Second Year

Eng Literature.....	6
His Sophomore American History.....	6
POLS 231 American Government I.....	3
POLS 232 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
CS 130.....	3
C&I 2101.....	3

33

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
C&I 337 Materials and Resources for Teaching Reading.....	3
C&I 3325 Need of the Special Learner.....	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 Degree in Education - Option IV

First Year	Second Year
English Composition 6	English Literature 6
Science Laboratory 8	His Sophomore American History 6
Mth 1360, 1362 Contemporary Mathematics 6	POLS 231 Intro to American Government I 3
MUS 131 Basics of Music 3	POLS 232 Intro to American Government II 3
His 134 History of Texas 3	Spc 131 or 331 3
CS 3	PEPT 339 Physical Edu Prog; Elem. Schl. 3
PE Activity 2	PE Activity 2
Academic Foundations Electives 3	HEc 233 Early Childhood Development 3
	Art 3371 Elementary Art Education 3
	C&I 2101 Seminar in Teacher Education 1
34	33
Third Year	Fourth Year
C&I 331 Foundation of Education 3	C&I 4303 Instructional Strategies for Early Childhood/Elementary Edu. 3
C&I 332 Educational Psychology 3	C&I 4304 Survey of the History of Early Education 3
C&I 333 Language Arts in the Elem Schl 3	C&I 437 Science and Social Studies 3
C&I 335 Arithmetic in the Elem Schl 3	C&I 3325 Needs of the Special Learner 3
C&I 336 Children's Literature 3	C&I 4300 Behavioral Management and Classroom Procedures 3
C&I 337 Materials & Resources for Teaching Reading 3	C&I 463 Student Teaching in the Elementary School 6
C&I 339 Reading in the Elem Schl 3	Academic Foundation Electives 3
HEc Seminar in Family & Human Relations or HEc 4327 Family Life & Parenting Behavior 3	Free Electives 5
KIN 337 Motor Development 3	
C&I 4302 Early Childhood Development 3	
HEc 334 Environments & Programs for Young Children 3	
Academic Foundations Electives 3	
36	30

Kindergarten Certificate Endorsement 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	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.

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. 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
 Art—Opt II
 Biology—Opt I & II
 Chemistry—Opt II
 Communication (Journalism)—Opt II
 Computer Information
 Systems—Opt II
 Earth Science—Opt II
 Economics—Opt II
 English—Opt II
 French—Opt II
 General Science—Opt IV
 History—Opt II
 Life-Earth Science Middle
 School—Opt II
 Mathematics—Opt II
 Kinesiology—Opt I
 Kinesiology (all levels)
 Physical Science—Opt II
 Physics—Opt II
 Political Science—Opt II
 Psychology—Opt II
 Reading—Opt II
 Social Studies—Opt IV
 Sociology—Opt II
 Spanish—Opt II
 Special Education
 Generic—Opt II (second field only)
 Speech—Opt II
 Theater—Opt II

Bachelor's Degree in a Particular
 Discipline
 Art (all levels)
 Business (Office Administration)—Opt
 III
 Communication (Journalism)—Opt II
 Dance—Opt II
 English—Opt I & II
 English Language Arts—Opt IV
 Health—Opt II
 Hearing Impaired (all levels)
 History—Opt I & II
 Home Economics—Vocational
 Mathematics—Opt I & II
 Music (all levels)
 Physics—Opt II
 Political Science—Opt II
 Spanish—Opt II
 Special Education
 Generic—Opt II
 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

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—Opt II Specialization: (24 semester hours) Art 131, 133, 134, 239, 3316, 3381, 4341 and 3376 (Academic foundation must include Art 235 & 236).

Art (All Levels) Specialization: (48 semester hours) Art 131, 132, 133, 134, 231, 233, 237, 239 3316, 3355, 3371, 3376, 3381, 4331, 4341, (plus three hours of advanced electives). Academic foundation must include Art 235 and 236.

Biology—Opt I Bio 141, 142, 240, 245, 344, 345, 347, 446, Chm 142 (Chm 141 must be taken as Academic Foundations).

Biology—Opt II Specialization: (24 semester hours) completion of Biology core which includes Bio 245, 344, 345, 446, 347, 240. Bio 141 and 142 must be included in Foundation Core.

Business Composite—Opt III Office Administration (Plan II Composite Field), Specialization: (51 semester hours) Acc 231, 232, BAC 331, BLW 331, Fin 331, MGT 331, 332, 437, MKT 331, OAS 233, 332, 333, 335, 336, 338, 431, 438. (Academic Foundations must include Eco 131, 132, Spc 131, plus three hours from a third group).

Chemistry—Opt II Specialization: (24 semester hours) Chm 141, 142, 241, 333, 341, 342, 412.

Computer Information Systems—Opt II Specialization: (24 semester hours) CS 131, 132, 3301, 4305, 4321, plus nine hours to be selected from: CS 3302, 3304, 3305, 4302, 4306, 4308, 4309, 4311, 4312

Dance—Opt II See Division of Movement Science and Health in this bulletin.

Drama (See Theater).

Earth Science—Opt II Specialization: (27 semester hours) Geo 141, 142, 237, 336, 419, 4350, 4370, 4380. Physics 137 Astronomy.

Economics—Opt II Specialization: (24 semester hours) Eco 131, 132, 230, 336, 337, 4315, 435, plus three semester hours from Eco 332, 333, 334.

English—Opt I (36 semester hours) Six semester hours of composition and six semester hours of literature; English 3321; one course from English 430, 4312, or ESL 434; two courses from English 339, 3322, 3324, 4328, 4329, 4336, or equivalent; four courses from English 336, 338, 3316, 432, 434, 435, 438, 439, 4311, 4317, 4318, 4319, 4322, 4333, 4334, 4337, or equivalent. Must include a foreign language through 232.

English—Opt II (27 semester hours) Six semester hours sophomore literature; English 3321; one course from English 430, 4312, or ESL 434; two courses from English 339, 3322, 3324, 4328, 4329, 4336, or equivalent; three courses from English 333, 336, 338, 3316, 432, 434, 435, 438, 439, 4311, 4317, 4318, 4319, 4322, 4333, 4334, 4337, or equivalent. When selected as area of greatest interest, must include a foreign language through 232; as second teaching field, must include a foreign language through 132.

English Language Arts (48 semester hours) English 3321, 4312, 4326; Nine hours of advanced literature; three hours of speech 131 or 331 are in the General Education courses. Speech 235, Communications 133, 231. C&I 339, 333; 12 hours of English (six hours of composition and six hours of literature) in the General Education course sequence.

French—Opt II Specialization: (24 semester hours) Required: Fre 131, 132, 231, 232, 330, 337, 338, plus three hours from Fre 331, 332, 339, 435, 436, 4371, 4372, 4373, 4374.

General Science—Opt IV (Plan II Composite Field) Specialization: (48 semester hours) Bio 141, 142; Chm 141, 143, Chm 142, 144; Geo 141, 142; Phy 141, 143, Phy 142, 144, plus 16 hours (12 advanced) in a single area (Bio, Chm, Phy, Geo).

Health—Opt II Specialization: (27 semester hours) Hlth 131, 133, 234, 331, 336, 337, 434, 437, HEC 138. Foundations program must include Bio 143, 144.

History—Opt I Specialization: (36 semester hours) His 131, 132, 134, 339. 24 additional hours—15 hours advanced (nine hours U.S., nine hours Non U.S. History).

History—Opt II Specialization: (24 semester hours) His 131, 132, six hours advanced American History, six hours advanced World History, plus His 134 and 339. (When selected as area of greatest interest program must include Foreign Language through 232).

Vocational Home Economics Specialization: (52 semester hours) HEc 111, 112, 131, 132, 133, 137, 231, 232, 233, 239, 330, 334, 335, 336, 339, 411, 4308, 423, 439, 4101. See Home Economics section of this bulletin for complete description of certification plan in this area.

Journalism Communication—Opt II Specialization: (24 semester hours) Com 133, 231, 232, 234, 333, 3381, 431, 4383.

Life-Earth Science Middle School—Opt II Specialization: (27 semester hours) Bio 141, 142; Geo 237, 335 or 336, 4380; Bio 345; Bio (three hours advanced); Phy 137. Geo 141, 142 must be included in academic foundations.

Mathematics—Opt I Specialization: (36 semester hours) Mth 148, 149, 241, 3370, 233, 3311, 333, 335, 331 or Mth 3301, Mth 338. At least one course selected from the following list: Mth 3321, 4331, 431, 4315, 4316, 433, 438, 4321.

Mathematics—Opt II 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.

Kinesiology—Opt I See Division of Movement Science and Health in this bulletin.

Kinesiology—All Levels See Division of Movement Science and Health in this bulletin.

Physical Science—Opt II Specialization: (28-30 semester hours) Chm 141, 142; Phy 141 or 143, 142 or 144; plus 12 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—Opt II Specialization: (24 semester hours) Phy 141, 142, or 247, 248, 333, 335; one course selected from 324, 346, 448; plus six to eight hours selected from 324, 338, 416, 417, 436, 448.

Political Science Specialization: (24 semester hours) POLS 131, 231 or 231H, 232 or 232H, plus one course from each group bracketed: (334, 335, 339, 437, 3301, 3313, 3315, 4312), (432, 433), (332, 337, 435), (331, 3317, 4381, 4383), (3316, 430, 434, 439). Foreign Language proficiency through 232 for B.A.

Psychology—Opt II Specialization: (24 semester hours) Psy 131, 234, 241, 332, 333, 336, 432, 436.

Reading—Opt II Specialization: (24 semester hours) C&I 232, 337, 3346, 3326, 431, 439; C&I 3305, 339.

Social Studies—Opt IV (Plan II Composite Field) Specialization: (49 semester hours)

- A. Thirty semester hours: Eco 131, 132; Geo 141, 237, 238; six hours POLS; His 131, 132, 134.
- B. Eighteen semester hours (12 advanced) selected from the following: History, political science, geography, or Economics.

Sociology—Opt II Specialization: (24 semester hours) Soc 131, 132; one course from Soc 231, 336, 338 or 339; one course from Soc 233, 330, 335, 432, or 435; four courses from Soc 332, 432, 333, 434, 436, 438, or 439.

Spanish—Opt II Specialization: (24 semester hours) Spa 131, 132, 231, 232, 330, 335, plus six hours from Spa 331, 333, 337, 338, 431, 432, 433, 434, or 436.

Special Education-Generic—Opt II Specialization: (24 semester hours) C&I 2301, 2302, 3304, 3305, 4307, 4308, 4309, 4310. (See Special Education section of this bulletin).

Speech—Opt II Specialization: (24 semester hours) Spc 232, 233, 235, 238, 332, 334, 4324, 434.

Theater (Drama)—Opt II Specialization: (25 semester hours) The 132, 135, 137, 210, 232, 332, 338, 435, 4371. (Departmental participation in productions also required each semester.)

3. **Professional Development** (24 semester hours)
C&I 331 Foundations of Education

- C&I 332 Educational Psychology
- C&I 3325 Need of the Special Learner
- C&I 3326 Reading Strategies the Content Areas
- 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** (three-to-six semester hours)
 A minimum of three semester hours are to be chosen by the student as free electives.

Below are listed the required Curriculum and Instruction courses and the year that they should be taken.

- A. Secondary Certification Sequence
 - Year I
 - Year II: C&I 2101
 - Year III: C&I 331, 332, 3326
 - Year IV: C&I 338, *3325, *438, *462
- B. All-Level Certification Sequence (Phys Edu, Music, Art, Hearing Impaired)
 - Year I
 - Year II: C&I 2101
 - Year III: C&I 331, 332, 3326
 - Year IV: C&I 338, *3325, *434, *463

**These courses will be taken concurrently and will comprise a professional semester.*

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 teacher education standards. 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	Second Year
Eng Composition 6	Eng Literature 6
Mth 6	Six hours of Sophomore
Science Laboratory 8	American History from:
PE Activity (2 semesters) 2	231, 232, 233, 234, 235, 236 6
First Teaching Field 3	POLS 231, 232 American Government I, II 6
Second Teaching Field 3	PE Activity (2 semesters) 2
Spc 131/ 331 3	First Teaching Field 6
CS 130 3	Second Teaching Field 6
34	Academic Foundations Electives 3
	C&I Seminar in Teacher Education 1
	36
Third Year	Fourth Year
C&I 331 Foundations of Education 3	C&I 3325 Need of the Special Learner 3
C&I 332 Educational Psychology 3	C&I 438 Classroom Management 3
C&I 3326 Reading Strategies the Content Areas . . . 3	C&I 462 Student Teaching in the Secondary
C&I 338 Curriculum and Materials 3	School 6
First Teaching Field (6 hours advanced) 9	First Teaching Field (Advanced) 6
Second Teaching Field (6 hours advanced) 9	Second Teaching Field (Advanced) 6
Academic Foundations Electives 6	Free Electives 2
36	26

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 teacher education standards. 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.

Specific information concerning the program may be obtained from the Department of Curriculum and Instruction or from the Advisement Office.

Special Education-Generic 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.

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 teacher education standards. Specific information may be obtained from the Department of Curriculum and Instruction.

First Year	Second Year
Eng-Composition..... 6	Eng Literature 6
Mth..... 6	His Sophomore American History 6
Science Laboratory..... 8	POLS 231, 232 American Government I, II 6
PE Activity (1 per sem)..... 2	PE Activity (1 per semester)..... 2
Second Teaching Field..... 6	C&I 2301 Foundations of Special Education 3
Spc 131/331..... 3	C&I 2302 Identification of the Exceptional Individual 3
CS 130..... 3	C&I 2101 Seminar in Teacher Education 1
Academic Foundations Electives..... 6	Second Teaching Field 6
34	Academic Foundations Elective 3
	36
Third Year	Fourth Year
C&I 331 Foundations of Education..... 3	C&I 3325 Need of the Special Learner 3
C&I 332 Educational Psychology..... 3	C&I 438 Classroom Management 3
C&I 338 Curriculum and Materials..... 3	C&I 4308 Appraisal Processes for Exceptional Individuals 3
C&I 3304 Educational Needs of Exceptional Individual..... 3	C&I 4309 Instruction of the Exceptional Learner .. 3
C&I 3305 Rdng/L.A. Excp Lrnrr..... 3	C&I 4310 Practicum Instructing Exceptional Individual 3
C&I 4307 Prctm Rdng/L.A. Excp..... 3	C&I 463 Student Teaching-Special..... 6
C&I 3326 Reading Strategies the Content Areas..... 3	Second Teaching Field (Advanced)..... 6
Second Teaching Field (Advanced)..... 6	
Academic Foundations Elective 6	
Free Electives..... 2	
35	

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	Second Year
Eng Composition 6	Eng Literature 3
Mth/Laboratory Science Science 3-4	Mth/Laboratory Science 3-4
His Sophomore American History 6	POLS 231 American Government I 3
PE Activity (1 per semester) 2	POLS 232 American Government II 3
Psy 234 or 235 Child/Adolescent Psychology 3	C&I 231 Instructional Media in Classroom 3
C&I 2301 Foundations of Special Education 3	C&I 2302 Identification of Exceptional Individual 3
Free Electives 9	C&I 3305 Rdnng/L.A. Excp Lrn 3
32-33	30-31

Curriculum and Instruction Courses (C&I)

Note: To enroll in non-professional development courses, it is not necessary for students to be admitted to the teacher education program.

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.	
2101 Seminar in Teacher Education	0:0:0
Designed to introduce students at the pre-professional level to career choices and acquaint them with procedures for entering teacher education.	
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.	
<i>Prerequisite: Permission of the instructor.</i>	

- 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.
- 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, C&I 2101.
- 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, C&I 2101.
- 3325 Need of the Special Learner 0:0:0**
An orientation to knowledge and skills concerning the unique needs of multicultural and special education students.
- 3326 Reading Strategies for the Content Areas 0:0:0**
This course is designed to provide the basic principles, concepts and procedures of reading and to enable prospective teachers to incorporate reading instructional techniques effectively into the content areas. Emphasis will be placed on the sound teaching practices within the confines of the content area classroom.
- 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.
Prerequisite: C&I 331.
- 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.

- 4300 Behavioral Management & Classroom Procedures** 0:0:0
A comprehensive study of behavioral management in early childhood/elementary school environments. A developmental perspective will be presented and related to a discipline management system.
- 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 Instructional Strategies for 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 Survey of the History of Early Education** 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, three hours from C&I 233, 337, 339.
- 4315 Education of Gifted Children** 3:3:0
Identification, programs, guidance and administrative structure for gifted children.
- 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.
- 4331 Microcomputer Applications** 3:3:0
A practical course using the Apple II Microcomputers to master word processing, data base, and the spreadsheet. The use and evaluation of selected software along with current issues in microcomputers is included.
- 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 Individualized 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 339 and 431 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 catalogue. All day in secondary professional semester classroom, five days per week for 12 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 catalogue. Class: All day in a professional classroom setting, five days per week for 12 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 catalogue. Class: All day in elementary professional classroom, five days per week for 12 weeks.

Department of Health, Physical Education and Dance

Department Chair: Alice C. Bell **102 McDonald Gym, Phone 880-8716**

Director of Academic Programs: Mildred A. Lowrey

Director of Required Service Programs: Douglas Boatwright

Dance Coordinator: Julio de Bittencourt

Health Coordinator: Joel R. Barton

Graduate and Kinesiology Coordinator: Virginia Raye Holt

Professors: Bell, Crowder, Holt, Lowrey

Associate Professor: Barton

Assistant Professors: Boatwright, Chaisson, Gremillion, Morris, Park, Payton, Rogas, Worsham

Instructors: Gilligan, Lihs, Ramos, Wesbrooks, Zeek

Lecturers: Barbre, Collins, Core, Cortez, Crawford, Crowley, Guiton, Perkins, Todd

Artist in Residence: de Bittencourt

The Department of Health, Physical Education and Dance provides several career options for students. Three teacher education certification programs are offered: dance, health and kinesiology. Two programs of study are available which do not lead to teacher certification: dance and health. Undergraduate programs lead to a Bachelor of Science degree in Health or Kinesiology 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.

Recommended Programs of Study

Dance

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, choreography, professional performance and other dance-related fields. A student must have completed the English, Math, Biology, Political Science, and History General Education Requirements prior to enrolling in the 300 and 400 level dance theory courses. A grade of "C" must be earned in each of the dance theory courses.

Bachelor of Science - Dance

Teacher Certification Program†

First Year	Second Year
Eng 131-132 Composition 6	Eng Literature 6
Mth 1334 College Algebra 3	His 231-232 American History 6
Mth 3	POLS 231-232 American Government 6
Bio 143-144 Anat and Physiology 8	Dan 231 Dance Production 3
Spc 131 3	Dan 233 Rhythmic Analysis of Dance 3
CS 130 or 1311 3	Kin 231 Functional Anat & Physiology 3
C&I 2101 1	Dan 2221 or 2222 Dance Co. 2
Dan 127 Folk Dance 2	Second Teaching Field 6
Dance Tech Ballet or Modern 2	
Academic Foundation Elective 3	
Fine Arts 3	
<hr/> 37	<hr/> 35
Third Year	Fourth Year
C&I 331 Intro. to American Public Education 3	C&I 338 Curriculum and Methodology 3
C&I 332 Human Learning 3	C&I 438 Secondary Methodology and Classroom Management 3
C&I 3326 Reading Strategies 3	C&I 462 Student Teaching-Secondary 6
Kin 343 Exercise Physiology 4	Dan 336 Choreography 3
Dan 235 Composition 3	Dan Theory Course 3
Dan 335 Principles of Creative Dance 3	Dan 438 Dance History 3
Dan Tech. Ballet or Modern 2	Second Teaching Field 9
Academic Foundation Electives 6	
Second Teaching Field 9	
<hr/> 36	<hr/> 30

Total 138 semester hours

In order to develop and maintain a high technical level, dance majors are required to take ballet technique and/or modern dance technique daily each semester.

†For details concerning requirements for teacher certification and information on professional development courses, consult the College of Education section in this bulletin.

Bachelor of Science - Dance Non-Certification Program

First Year	Second Year
Eng 131-132 Composition 6	Eng Literature 3
Mth 1334 3	Eng Literature (or equivalent) 3
Mth (or lab science) 3	His 231-232 American History 6
Bio 143-144 Anat and Physiology 8	POLS 231-232 American Government 6
Academic Foundation Elective 6	Kin 231 Functional Anat & Physiology 3
Dan 127 Folk Dance 2	Dan 231 Dance Production 3
Dance Studio Courses 6	Dan 233 Rhythmic Analysis of Dance 3
<hr/> 34	<hr/> 5
	<hr/> 32

In order to develop and maintain a high technical level dance majors are required to take ballet technique and/or modern dance technique daily each semester.

Third Year

Dan 235 Composition	3
Dan 335 Principles of Creative Dance	3
Dance Theory Courses	6
Dan 127 Tap Dance	2
Dan 1263 Ballet Tech.	2
Dan 1283 Modern Dance Tech.	2
Related Arts Minor	9
Electives	6

33

Fourth Year

Dan 336 Choreography	3
Dan 438 Dance History	3
Dance Theory Courses	6
Dance Studio Courses	4
Related Arts Minor	9
Electives	9

34

Total 133 semester hours

Bachelor of Art - Dance Major Non-Certification Program

Same as the above program except for the completion of the course numbered 232 in a foreign language.

Health

The health program of study 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. A student must have completed the English, Math, Biology, Political Science, and History General Education Requirements prior to enrolling in the 300 and 400 level health professional courses. A grade of "C" must be earned in each of the health professional courses.

Bachelor of Science - Health Teacher Certification Program†

First Year

Eng 131-132 Composition	6
Mth 1334 College Algebra	3
Mth	3
Bio 143-144 Anat and Physiology	8
Spc 131 or 331	3
Physical Activity	2
Academic Foundation Elective	3
Hlth 131 Emergency Care & Safety	3
Hlth 133 Personal Health	3
C&I 2101	1

35

Second Year

Eng Literature	6
POLS 231-232 American Government	6
His 231-232 American History	6
Academic Foundation Elective	3
CS 130 or 1311	3
Physical Activity	2
HEc 138 Nutrition	3
Hlth 234 Public and Consumer Health	3
Fine Arts	3

35

Third Year

Academic Foundation Elective	3
Hlth 331 Human Sexuality and Sexually Transmitted Diseases	3
Hlth 336 Health in the Secondary School	3
Hlth 337 Contemporary Health Problems	3
C&I 331 Intro. to American Public Ed	3
C&I 332 Human Learning	3
C&I 3326 Reading Strategies	3
C&I 338 Secondary Curriculum and Methodology	3
Second Teaching Field	12

36

Fourth Year

Hlth 434 Health and Human Ecology	3
Hlth 437 Health Science & Epidemiology	3
C&I 438 Secondary Methodology and Classroom Management	3
C&I 462 Student Teaching-Secondary	6
Second Teaching Field	12

27

Total 133 semester hours

†For details concerning requirements for teacher certification and information on professional development courses, consult the College of Education section in this bulletin.

Bachelor of Science - Health Non-Certification Program

First Year	Second Year
Eng Composition 6	Eng Literature 6
Mth 1334 (or above) 3	POLS 231-232 American Government 6
Mth 3	His. Soph. American History 6
Bio 143-144 Anat and Physiology 8	Academic Foundation Elective 3
Academic Foundation Elective 3	Physical Activity 2
Physical Activity 2	Eco 233 Principles and Policies 3
Psy 131 Introduction to Psychology 3	HEc 138 Nutrition 3
HLTH 131 Emergency Care and Safety 3	HLTH 234 Public and Consumer Health 3
HLTH 133 Personal Health 3	HLTH 336 Health in the Secondary School 3
34	35
Third Year	Fourth Year
HLTH 331 Human Sexuality and Sexually Transmitted Diseases 3	HLTH 434 Health and Human Ecology 3
HLTH 337 Contemporary Health Problems 3	HLTH 437 Health Science & Epidemiology 3
POLS 3316 Intro. to Public Admin. 3	HLTH 436 Practicum in Health 3
Spc 334 Interviewing 3	HLTH 446 Health Internship 4
*Electives 21	Soc 437 Public Opinion 3
33	*Electives 13
	29
Total 131 semester hours	

*Electives should include the following:

A related minor of 18 semester hours approved by department chair.

A related elective program of 16 semester hours approved by department chair.

Kinesiology

The kinesiology program of study prepares the student for a teaching career in kinesiology for an advanced degree. A companion program of specialization in elementary kinesiology is available through the Bachelor of Science in Curriculum and Instruction (see Department of Curriculum and Instruction in this bulletin for further information.)

The kinesiology teaching certification program offers the following:

Secondary Option I (one teaching field)

All-Level Option II (one teaching field)

The course of study leading to a baccalaureate degree and teacher certification in kinesiology encompasses three areas of work: (1) the required block of professional theory courses; (2) the required block of professional development courses; and (3) the required block of professional activity courses.

The required block of professional theory courses will vary contingent upon the degree option selected. A grade of "C" must be earned in professional theory courses. A student must have completed the English, Math, Biology, Political Science, and History General Education Requirements prior to enrolling in the 300 and 400 level professional theory courses.

The required block of professional development courses are C&I 331, 332, 3325, 3326, 338, 438 and 462. A student must be admitted to the College of Education's teacher education program before enrolling in professional development courses. A grade of "C" must be earned in each of the kinesiology professional courses.

The required block of professional activity courses are KinA 129, Dance 127 or 128, and KinA 2201. Fourteen additional hours must be selected from Dan 127 or 128, KinA 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 3201, 3202, 3203, 3204, 3205, 3206, 3207. A minimum of six hours must be selected from the advanced level courses. Of the 20 hours taken to meet degree requirements, a grade of "B" or higher must be earned. A student must have completed the English, Math, Biology, Political Science, and History General Education Requirements prior to enrolling in the 3000 level professional activity courses.

Entrance Requirements

1. All newly entering Freshmen who meet the University's general entrance requirements will be admitted to the Department of Health, Physical Education and Dance.
2. Students who wish to enter the Department of Health, Physical Education and Dance must have a minimum 2.0 GPA on all work attempted.

Bachelor of Science - Kinesiology Teacher Certification Program - Secondary Option I†

First Year	
Eng 131-132 Composition.....	6
Mth 1334 College Algebra.....	3
Mth.....	3
Bio 143-144 Anat & Physiology.....	8
Spc 131 or 331.....	3
Kin 132 Foundations.....	3
Dan 127 or 128 Folk or Square Dance.....	2
KinA 129 Swimming.....	2
KinA Electives.....	4
C&I 2101.....	1
	35

Third Year	
Kin 332 Management Skills.....	3
Kin 335 Atypical Child.....	3
Kin 343 Exercise Physiology.....	4
Kin Elective.....	3
Dan 335 Principles of Creative Dance.....	3
HLTH 236 Care & Prevention of Sports.....	3
KinA Electives.....	4
C&I 331 Intro. to Am Public Edu.....	3
C&I 332 Human Learning.....	3
C&I 338 Secondary Curriculum and Methodology.....	3
C&I 3326 Reading Strategies.....	3
	35

Second Year	
Eng Literature.....	6
POLS 231-232 American Government.....	6
His 231-232 American History.....	6
CS 130 or 1311.....	3
Kin 231 Functional Anat & Physio.....	3
KinA 2201 Gymnastics Techniques.....	2
KinA Electives.....	6
Academic Foundation Elective.....	3
	35

Fourth Year	
Kin 436 Measurement & Evaluation.....	3
Kin 443 Motor Learning.....	4
Kin 438 Strategies in Kinesiology.....	3
Kin Electives.....	9
Academic Foundation Elective.....	3
C&I 438 Secondary Methodology and Classroom Management.....	3
C&I 462 Student Teaching-Secondary.....	6
	31

Total 136 semester hours

† For details concerning requirements for teacher certification and information on professional development courses, consult the College of Education section in this bulletin.

Bachelor of Science - Kinesiology Teacher Certification Program - All Level Option II†

First Year	
Eng 131-132 Composition.....	6
Mth 1334 College Algebra.....	3
Mth.....	3
Bio 143-144 Anat and Physiology.....	8
Spc 131 or 331.....	3
Kin 132 Foundations.....	3
Dan 127 or 128 Folk or Square Dance.....	2
KinA 129 Swimming.....	2
KinA Electives.....	4
C&I 2101.....	1
	35

Second Year	
Eng Literature.....	6
POLS 231-232 American Government.....	6
His 231-232 American History.....	6
CS 130-1311.....	3
HLTH 236 Care & Prevention of Sports.....	3
Kin 231 Functional Anat & Physiology.....	3
KinA 2201 Gymnastics Techniques.....	2
KinA Electives.....	6
	35

Third Year

Kin 332 Management Skills	3
Kin 335 Atypical Child	3
Kin 336 Contemporary Problems in Secondary School	3
Kin 337 Motor Development	3
Kin 339 Movement Experiences for the Young Child	3
Kin 343 Exercise Physiology	4
KinA Electives	4
Dan 335 Principles of Creative Dance	3
C&I 331 Intro to Am Public Ed	3
C&I 332 Human Learning	3
C&I 3326 Reading Strategies	3
C&I 338 Secondary Curriculum and Methodology	3
	<hr/>
	38

Fourth Year

Kin 436 Measurement & Evaluation	3
Kin 438 Strategies in Kinesiology	3
Kin 443 Motor Learning	4
Kin Elective	3
C&I 434 Elementary Methodology and Classroom Management	3
C&I 463 Student Teaching-All Level	6
Academic Foundation Electives	6

28

Total 136 semester hours

†For details concerning requirements for teacher certification and information on professional development courses, consult the College of Education section in this bulletin.

Dance Studio Courses (Dan)

Dance studio courses (except 2110) will fulfill the physical activity requirements.

1240 Selected Dance Techniques	2:1:2
Instruction and practice in selected dance techniques. May be repeated for credit.	
1251, 1252, 1253 Jazz I, II, III	2:1:2
Instruction and practice in jazz dance. May be repeated for credit.	
1261, 1262, 1263, 1264 Ballet Technique I, II, III, IV	2:1:2
Instruction and practice in ballet technique. Emphasis is placed on 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 I, II, III, IV	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.	
2110 Dance Production Workshop	1:1:2
Practical application of the technical skills utilized in dance production including lighting, scenery and costuming. May be repeated for credit.	
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.	
2250 Improvisation	2:1:2
Exploration of human movement potential through imagery and/or movement manipulation.	
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.	
2280 Social Dance	2:1:2
An introduction to partner, line and round dance forms of the 20th century.	

Dance Theory Courses (Dan)

231	Dance Production The study and practical application of the various elements utilized in dance production including lighting, scene design, costuming and publicity.	3:2:1
233	Rhythmic Analysis of Dance The analysis of movement in relationship to rhythmic patterns, meter, tempo, metric pulse, accents and melodic phrasing.	3:2:1
235	Composition The analysis of the basic elements of dance and the craft of composing dances.	3:2:1
3301	Theatre Dance Forms The study of various dance forms utilized in the theater including character dance.	3:1:2
331	Dance Notation The study of the primary forms of dance notation including Labanotation and Benesh notation and its application to various dance forms.	3:2:1
335	Principles of Creative Dance The study of creative exploration in a constructive and positive environment for children.	3:3:0
336	Choreography Analysis of the elements of choreography and its development and evaluation when applied to composition. <i>Prerequisite: Dan 235</i>	3:2:1
4101	Workshop in Dance A number of workshops are designed to advance the competence of students. A description of the particular area of study will be indicated for each workshop.	1:1:0
4201	Workshop in Dance A number of workshops are designed to advance the competence of students. A description of the particular area of study will be indicated for each workshop.	2:2:0
4301	Workshop in Dance A number of workshops are designed to advance the competence of students. A description of the particular area of study will be indicated for each workshop.	3:3:0
430	Individual Study in Dance Selected problems and research in the area of dance. <i>Prerequisite: Senior standing and consent of department head. May be repeated for credit. Class by consultation.</i>	3:A:0
434	Contemporary Strategies of Dance The study of current trends, issues, and problems associated with the implementation of dance programs.	3:3:0
438	Dance History: Primitive Through 20th Centuries The evolution of dance from prehistoric times to current social and theatrical forms.	3:3:0

Health Courses (HLTH)

131	Emergency Care and Safety American Red Cross standard first aid and personal safety course. CPR certification is included.	3:3:0
133	Personal Health 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.	3:3:0
234	Public and Consumer Health 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.	3:3:0
236	Care and Prevention of Sports Injuries A study of the treatment and prevention of specific sport injuries. The injuries may be a result of activity in the home, recreational, intramural, or extramural settings.	3:3:0
331	Human Sexuality and Sexually Transmitted Diseases This course is concerned with the basic information regarding the physical, psychological, social, and comparative cultural aspects of family health, sexual behavior, sex education, and sexually transmitted diseases. Emphasis will be placed on the relationship between personal health and human sexuality. The understanding of human sexuality through self-awareness, value clarification and decision-making will also be a concern.	3:3:0
336	Health in the Secondary School A critical and comprehensive examination of current trends and issues or programs at the secondary schools.	3:3:0

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. Special emphasis will be given to substance abuse, stress management, and problems relating to aging.	
338	Health in the Elementary School	3:3:0
	A critical and comprehensive examination of current trends and issues of programs at the elementary level.	
4101	Workshop in Health	1:1:0
	A number of workshops are designed to advance the professional competence of health practitioners. 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	2:2:0
	A number of workshops are designed to advance the professional competence of health practitioners. 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	3:3:0
	A number of workshops are designed to advance the professional competence of health practitioners. 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	3:A:0
	Selected problems in health. Not to be used in lieu of a required course. <i>Prerequisite: Senior standing and consent of department head. May be repeated for credit. Class by consultation.</i>	
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.	
436	Practicum in Health	3:3:0
	Observation and study of health programs and organizations. <i>Prerequisite: Approval of department head.</i>	
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.	
446	Health Internship	4:3:2
	Supervised internship at selected community, public or private health agencies and/or organizations. <i>Prerequisite: Approval of department head.</i>	

Kinesiology Theory Courses (Kin)

132	Foundations	3:3:0
	Introduction to history, principles and philosophy of kinesiology; professional qualifications of leadership; special emphasis on theoretical and practical aspects.	
216	Practicum in Driver Programs	1:1:0
	Supervised observation and provision of actual experience in behind the wheel strategies for individuals conducting driver programs. <i>Prerequisites: HLTH 131, Kin 238.</i>	
238	Driver Program	3:3:0
	Traffic rules and regulations and the basic facts concerning the cause and prevention of accidents. The course includes behind the wheel experiences.	
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. <i>Prerequisite: Bio 143-144.</i>	
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	Psychology of Sport	3:3:0
	Psychological perspectives of sport; personalities of sports participants and current literature related to psychological aspects of sport.	
332	Management Skills	3:3:0
	A study of the organization and administration of programs in recreation, dance, sports and athletics.	

335	Atypical Child A study of the classification of atypical students who require modified programs. Special emphasis on developing personalized developmental programs. Field experience required.	3:3:0
336	Contemporary Programs in Secondary Schools A critical and comprehensive examination of current trends and issues of programs at the secondary level.	3:3:0
337	Motor Development Principles of motor development in children, including developmental stages and the understanding of motoric trends in human growth and development from birth throughout life.	3:3:0
339	Movement Experience for the Young Child A study of movement experiences in dance, gymnastics, and games for the young child. Functional and practical application will be emphasized.	3:3:0
343	Exercise Physiology A study of the functions of the physiological systems during and after exercise. <i>Prerequisites: Bio 143-144, Kin 231.</i>	4:3:2
4101	Workshop A number of workshops are designed to advance the professional competence of students. 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.	1:1:0
4201	Workshop A number of workshops are designed to advance the professional competence of students. 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.	2:2:0
4301	Workshop A number of workshops are designed to advance the professional competence of students. 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.	3:3:0
430	Individual Study Selected problems in the discipline; not to be used in lieu of a class. May be repeated for credit. Class by consultation. <i>Prerequisites: Senior standing and consent of department head.</i>	3:A:0
431	Scientific Principles of Human Performance Anatomical and physiological factors that influence optimal performance. <i>Prerequisites: Kin 343 and permission of instructor.</i>	3:3:0
436	Measurement and Evaluation A study of practical measurement and evaluation procedures used in the assessment of human performance. Includes construction of evaluation instruments, experience in test administration and the use of elementary statistical procedures in test score interpretations.	3:3:0
436	Strategies in Kinesiology A study of programs and problems associated with the implementation of programs.	3:3:0
443	Motor Learning 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 acquisition of motor skills.	4:3:2
462	Kinesiology Internship Supervised internship at selected public or private agencies and/or institutions.	

Kinesiology Activities (KinA)

129	Swimming The introduction and development of skills and basic conditioning related to swimming with particular emphasis on acquisition of skill, appreciation of safety and skill progression.	2:1:2
2201	Gymnastics: Tumbling and Gymnastics The introduction and development of skills, general rules, and strategy related to gymnastics with particular emphasis on acquisition of skill, appreciation of safety and skill progression.	2:1:2
2202	Gymnastics: Apparatus The introduction and development of skills, general rules, and strategy related to gymnastics with particular emphasis on acquisition of skill, appreciation of safety and skill progression.	2:1:2
2203	Golf The introduction and development of skills, general rules, and strategy related to golf with particular emphasis on acquisition of skill, appreciation of safety and skill progression.	2:1:2
2204	Small Craft The introduction and development of skills, general rules, and strategy related to small craft with particular emphasis on acquisition of skill, appreciation of safety and skill progression.	2:1:2

2205	Aerobic Fitness The introduction and development of skills, understanding of body functions and basic conditioning related to aerobic fitness with particular emphasis on acquisition of skill, appreciation of safety and skill progression.	2:1:2
2206	Water Safety Instruction The introduction and development of skills, general rules, and strategy related to water safety instruction with particular emphasis on acquisition of skill, appreciation of safety and skill progression.	2:1:2
2207	Archery/Badminton The introduction and development of skills, general rules, and strategy related to archery and badminton with particular emphasis on skill, appreciation of safety and skill progression.	2:1:2
2208	Strength Training The introduction and development of skills and general guidelines establishing a training program related to strength training with particular emphasis on acquisition of skill, appreciation of safety and skill progression.	2:1:2
2209	Sports Officiating The introduction and development of skills, general rules, and strategy related to sports officiating with particular emphasis on acquisition of skill, appreciation of safety and skill progression.	2:1:2
3201	Baseball Activities organized to focus on advanced strategies and coaching aspects of team sports.	2:1:2
3202	Basketball Activities organized to focus on advanced strategies and coaching aspects of team sports.	2:1:2
3203	Football Activities organized to focus on advanced strategies and coaching aspects of team sports.	2:1:2
3204	Tennis Activities organized to focus on advanced strategies and coaching aspects of team sports.	2:1:2
3205	Track/Field Activities organized to focus on advanced strategies and coaching aspects of team and individual sports.	2:1:2
3206	Volleyball Activities organized to focus on advanced strategies and coaching aspects of team sports.	2:1:2
3207	Soccer Activities organized to focus on advanced strategies and coaching aspects of team sports.	2:1:2

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 Demonstrations, lectures and practice in the basic techniques of swimming and water safety skills. May be repeated for credit.	2:1:2
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121	Swimming and Diving Demonstrations, lectures and practice in the techniques and analysis of selected swimming strokes and dives.	2:1:2
220	Advanced Aquatic Sports 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.	2:1:2
225	Small Craft 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.	2:1:2
226	Lifesaving Development of proficiency in lifesaving. Completion of course includes American Red Cross certification. <i>Prerequisite: Intermediate Swimming Skills.</i>	2:1:2

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. Students enrolled in golf will be assessed a range fee payable the first week of class.

Athletic Training Specialization

Certification and licensing of athletic trainers is available through meeting the following requirements:

1. Teacher certification with choice of teaching fields.
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 Certification Requirements

Certification to teach driving is available as a special designation on an existing Texas Teaching Certificate. Specific course requirements are Hlth 131, Kin 238 and Kin 216.

Department of Home Economics

Department Chair: LeBland McAdams

115 Home Economics Building

Professor: Davidson

Phone 880-8663

Associate Professors: Anderson, Hinchey, McAdams

Assistant Professors: Camp, Thompson

Instructors: Elliff, Pemberton, Suiter, Nichols

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, dietetics, family and community service, fashion retailing and merchandising and interior design. Each of these areas of study is described on the following pages. A Master's Degree in Home Economics is also offered. Details may be found in the Graduate Bulletin.

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
 - Literature 3
 - Eng 4335, Lit, Spc 300/400 or For Lang 3
 - Math 1334 (or above) 3
 - Lab Science 4-8
 - Math or Lab Science 3-4
 - Soph Am History 6
 - POLS 231-232 6
 - Physical Ed or Band (four semesters) 4
- 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 330 Consumer Economics 3
 - HEc 411 Senior Seminar 1
- C. Professional Specialization as described in the following Home Economics programs.

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 all course work are required for graduation.
2. Students are expected to take courses in the sequence shown in the University Bulletin for each degree program.

- Students must enroll in HEC 111 their first Fall semester and HEC 112 their first Spring semester.
 - All 100/200 level HEC core courses, Freshman English and Mathematics requirements must be completed prior to enrollment in 300/400 level HEC courses.
 - Exceptions, including transfer and change of major students, will require department head and instructor approval.
3. Each student's use of English is subject to review up to and including the semester in which the student is scheduled to graduate. 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. No student will be allowed to enroll in 400 level home economics courses until his/her grade point average is 2.0 or higher. Students are required to enroll in HEC 411 the Fall or Spring semester of the year in which they graduate.
 5. Students returning from suspension, including transfer and change of major students, must prepare a performance contract in consultation with their academic advisor.

Recommended Programs of Study

General Home Economics

Advisor: Virginia Anderson

125 HE Bldg

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 in-depth study in one specialization area. An 18 hour to 24 hour minor of the student's choice is required and may be chosen from Communication, Business, Art, Political Science or one of the natural or behavioral sciences.

First Year	Second Year
Eng Composition 6	Literature 3
Mth 1334 College Algebra 3	Mth or Lab Science 3-4
Lab Science 4	POLS 231, 232 American Government I, II 6
Mth or Lab Science 3-4	HEC 231 Textiles 3
HEC 111 Foundations of Home Economics 1	HEC 239 Nutrition 3
HEC 112 Orientation to Home Economics as a Profession 1	HEC* 6
HEC 133 Visual Design 3	American History 6
HEC 137 Intimate Relationships: Marriage & the Family 3	PE Activity (2 semesters) 2-4
PE Activity (2 semesters) 2-4	
General HEC 100/200* 6	
32-33	32-34
Third Year	Fourth Year
Eng 331 Technical Report Writing, Lit, Spc 300/400, or For Language 3	HEC 411 Senior Seminar 1
HEC 330 Consumer Economics 3	HEC 439 Resource Mgt Systems 3
HEC 300/400* 9	HEC Internship 3
Minor 9	HEC Emphasis* 9
Elective 6	Minor 9
30	Electives or Minor 6
	31

*Special courses are selected in conference with academic advisor and must be approved by the advisor.

Home Economics Education

**Advisors: Dr. Jane S. Davidson
Dr. LeBland McAdams**

**100 B HE Bldg
115A HE Bldg**

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 with revised standards which began in the Fall of 1985. It will be necessary to consult with the department head in the Department of Home Economics concerning the specifics or these requirements.

First Year

Eng Composition.....	6
Chm or Bio.....	8
HEc 111 Foundations of Home Economics.....	1
HEc 112 Orientation to Home Economics.....	1
HEc 131 Basic Foods.....	3
HEc 132 Clothing Construction.....	3
HEc 133 Visual Design.....	3
HEc 137 Intimate Relationships: Marriage and the Family.....	3
Mth 1334 or above.....	3
Mth.....	3
PEGA/DAN (2 semesters).....	2
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	36

Third Year

Eng 331 Technical Report Writing.....	3
C&I 3325 Needs of Special Learner.....	3
C&I 331 Foundations of Education.....	3
C&I 332 Educational Psychology.....	3
HEc 330 Consumer Economics.....	3
HEc 335 Housing & Home Furnishings.....	3
HEc 339 Seminar in Family and Human Relations.....	3
His (Soph).....	6
Spc 131 Public Speaking.....	3
Supportive Electives.....	3
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	33

Second Year

Eng Literature.....	3
POLS 231, 232 American Government I, II.....	6
HEc 231 Textiles.....	3
HEc 232 Dress Design.....	3
HEc 233 Early Childhood Development.....	3
HEc 239 Nutrition.....	3
HEc 334 Adv Child Development.....	3
HEc 336 Institutional Food Service.....	3
Supportive Elective.....	6
PEGA/DAN (2 semesters).....	2
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	35

Fourth Year

C&I 3326 Reading Strategies for Content Area.....	3
CS 130 or equivalent.....	3
HEc 338 Philosophy and Principles of Vocational Home Economics.....	3
HEc 411 Senior Seminar.....	1
HEc 4308 World of Work.....	3
HEc 433 Household Equipment.....	3
HEc 438 Methods & Materials for Teaching Home Economics.....	3
HEc 439 Resource Management Systems.....	3
HEc 462 Student Teaching in Home Economics.....	6
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	28

Foods, Nutrition and Dietetics

**Advisors: Connie Elliff
Amy Pemberton**

**102 HE Bldg
123 HE Bldg**

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 Basic Foods	3
HEc 231 Textiles	3
HEc 133 Visual Design	3
PE Activity (2 semesters)	2
	<hr/> 33

Third Year	
Soc 332 Social Psychology	3
His Sophomore American History	6
Acc 231-232 Principles of Accounting	6
HEc 330 Consumer Economics	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
	<hr/> 36

Second Year	
Eng Literature	3
Eng 331 Technical Report Writing	3
POLS 231 American Government I	3
POLS 232 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	3
PE Activity (2 semesters)	2
	<hr/> 35

Fourth Year	
Mgt 331 Principles of Management	3
Mgt 333 Personnel Management	3
CS Equivalent or Mth 234 Elementary Statistics	3
HEc 338 Philosophy & Principles of Vocational Home Economics	3
HEc 411 Senior Seminar	1
HEc 430 Therapeutic Nutrition	3
HEC 1304 Food Service Equipment and Layout	3
Electives HEC/BIO/CHM/Business	9
	<hr/> 28

Family and Community Service

Advisor: Virginia Anderson

125 HE Bldg

The Family and Community Service curriculum prepares the student for a career in government and private agencies that 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 the state examination for designation as a social worker.

A minor in Child Development including field experience with infant and early childhood program prepares the student to work with pre-school age children in settings other than the public school.

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
	<hr/> 32 or 35

Second Year	
Literature	3
Lab Science or Mth	3-4
POLS 231, 232 American Government I, II	6
Behavioral Science elective	3
HEc 231 Textiles	3
HEc 233 Early Childhood Development	3
HEc 2314 Child Nutr or upper level nutrition	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
	<hr/> 32-35

Third Year

Eng 4335 Technical Report Writing,
Spc 300/400, Lit or
For Lang 3
Am History 6
HEc 330 Consumer Eco 3
Home Economics 337 Prof Image 3
HEc 334 Adv Child Development 3
HEc 339 Seminar in Family and Human
Relations 3
MINOR:
HEc 4313 Prenatal & Infant Development 3
C&I 336 Childrens Literature 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

33-36

Fourth Year

HEc 338 Philosophy & Principles of
Vocational Home Eco 3
HEc 411 Senior Seminar 1
HEc 432 Family Clothing 3
HEc 435 Consumer Housing 3
HEc 4327 Parenting 3
HEc 439 Resource Management Systems 3
Behavioral Science elective 3
Electives 6
MINOR:
HEc 4367 Internship in Home Economics 6
C&I 4303 Instructional Strategies for
Early Childhood 3
OR
Swk 4321 Field Experience I 3
Swk 4324 Field Experience II 3

31-34

Fashion Retailing and Merchandising

**Advisors: Dr. LeBland McAdams
Paula Nichols
Coleta Suiter**

**115A HE Bldg
113A HE Bldg
106 HE Bldg**

The Fashion Retailing and Merchandising specialization provides professional training for positions in fashion coordination, visual merchandising, buying and retail management. The curriculum 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 Construction 3
PE/DAN Activity 2

32

Second Year

Eng Literature 3
POLS 231, 232 American Government I, II 6
Mth or Lab Science 3-4
HEc 130 Social and Psychological Aspects
of Clothing 3
HEc 231 Textiles 3
HEc 239 Nutrition 3
HEc 234 Introduction to Fashion Retailing 3
CS 1311 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
HEc 330 Consumer Economics 3
HEc 232 Dress Design 3
HEc 337 Professional Image 3
HEc 3306 Merchandising Products 3
Mkt 331 Principles of Mkt 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... 6
HEc 439 Resource Mgt Systems 3
Business elective 300/400 6
Free elective 3

34

Interior Design

Advisors: **Kathryn Camp**
Dr. Jane Hinchey

107A HE Bldg
127 HE Bldg

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	Second Year
Eng Composition 6	Eng Literature 3
Mth 1334 3	POLS 231 American Government I 3
HEc 111 Foundations of Home Economics 1	POLS 232 American Government II 3
HEc 112 Orientation to Home Economics 1	Lab Science 4
HEc 133 Visual Design 3	HEc 330 Consumer Economics 3
HEc 137 Intimate Relationships: Marriage & the Family 3	HEc 231 Textiles 3
Art 131 Drawing I 3	HEc 2307 Hist of Arch & ID 3
Art 132 Drawing II 3	HEc 2327 Contemp Arch & ID 3
Art 134 Design II 3	HEc 237 Fundamentals of ID 3
Egr 135 Arch. Graphics 3	Phy 144 4
Egr 137 3	PE Activity (2 semesters) 2
PE Activity (2 semesters) 2	
34	34
Third Year	Fourth Year
Acc 231 Principles of Accounting 3	HEc 411 Senior Seminar 1
Eco 233 Principles and Policies 3	HEc 4305 Adv Int Design 3
His 233 Am His-Dev of Society 3	HEc 433 Equip & Layout 3
His 234 Am His-Arts in America 3	HEc 4347 Internship in Int Design & Business Practices 3
Spc 331 or 334 or For Lang 3	HEc 439 Resource Mgt Systems 3
Lab Science or Mth 3-4	Egr 33- 3
HEc 239 Nutrition 3	Art History Elective: 235 or 236 or 4358, 4368, 4388 6
HEc 3304 Res Space Plan 3	Art Electives 300/400 6
HEc 3305 Comp & Systems 3	Electives 6
HEc 3327 Treat. of ID 3	
Art 3313 Illustration I 3	
33-34	34

Restaurant/Institutional Food Management

Advisors: **Dr. Lee Thompson**
Connie Elliff

119 HE Bldg
102 HE Bldg

The Restaurant/Institutional Food Management curriculum prepares students to assume management positions in restaurants, clubs, hotels, schools, health care facilities, and other establishments where food is served in quantity. A number of scholarships for students who wish to enroll in this program have been made available by the Texas Restaurant Association and others.

First Year	Second Year
Eng Composition 6	Eng Literature 3
Mth 1334 College Algebra 3	Fre 131 Elementary French 3
Bio 143-144 Human Physiology 8	POLS 231 American Government I 3
Eco 233 Principles & Policies 3	POLS 232 American Government II 3
HEc 111 Foundations of Home Economics 1	Psy 131 Intro to Psychology 3
HEc 112 Orientation to Home Economics as a Profession 1	HEc 137 Intimate Relationships: Marriage & Family 3
HEc 131 Basic Foods 3	HEc 239 Nutrition 3
HEc 1302 Intro to the Food Service Industry 3	HEc 231 Textiles 3
HEc 1301 Sanitation and Safety in Food Service 3	HEc 1303 Food Purchasing, Handling and Storage 3
HEc 133 Visual Design 3	HEc 1205 Supervised Field Experience I 2
PE Activity (2 semesters) 2	HEc 1304 Food Service Equipment and Layout 3
	PE Activity (2 semesters) 2
36	34

Third Year

Soc 336 Race and Ethnic Relations	3
His Sophomore American History	6
Acc 231-232 Principles of Accounting	6
HEc 330 Consumer Economics	3
HEc 2301 Quantity Foods I	3
HEc 2304 Quantity Foods II	3
Bio 245 Introductory Microbiology	4
BLW 332 Employment Law	3
CS or Equivalent	3
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	34

Fourth Year

Mgt 331 Principles of Mgt	3
Mgt 333 Personnel Management	3
Mkt 331 Principles of Marketing	3
HEc 2302 Food Service Financial Management	3
HEc 430 Therapeutic Nutrition	3
HEc 4367 Internship in Home Economics	6
HEc 411 Senior Seminar	1
HEc Upper Level Electives	3
Electives	6
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	31

Associate of Applied Science Degree in Restaurant/Institutional Food Management

**Advisors: Dr. Lee Thompson
Amy Pemberton**

**119 HE Bldg
123 HE Bldg**

This program is designed to prepare students for entry-level supervisory positions in the various segments of the food service industry. A number of scholarships for students who wish to enroll in this program have been made available by the Texas Restaurant Association and others. The AAS Degree requirements are spaced over a two-year period. Students planning to continue their education with the Bachelor of Science Degree Program in Restaurant/Institutional Food Management should consult an advisor concerning degree requirements.

First Year

Semester 1

HEc 131 Basic Foods	3
HEc 1301 Sanitation & Safety in Food Service	3
HEc 1302 Intro to the Food Service Industry	3
HEc 1303 Food Purchasing, Handling, and Storage	3
HEc 239 Nutrition	3
BC 132 Business Communication or ENG 131 Composition	3
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	18

Semester 2

HEc 1205 Supervised Field Experience I	2
HEc 1304 Food Service Equipment & Layout	3
HEc 137 Intimate Relationships: Marriage & the Family	3
TM 134 Business Mathematics or Mth 1334 College Algebra	3
MM 138 Fundamentals of Supervision & Leadership or Mgt 331 Principles of Management	3
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	14

Second Year

Semester 1

HEc 2103 Food Service Management Seminar	1
HEc 2301 Quantity Foods I	3
HEc 2302 Food Service Financial Management	3
HEc 2305 Supervised Field Experience II or HEc 4367 Internship in Home Ec	3
BDP 133 Intro to Data Processing or CS 1311	3
Spc 131 Public Speaking	3
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	16

Semester 2

HEc 2304 Quantity Foods II	3
HEc 2415 Supervised Field Exp III or HEc 4367 Internship in Home Ec	3
MM 132 Free Enterprise I or Eco 233 Principles & Policies	3
MM 232 Human Resources Mgt or Mgt 333 Personnel Mgt	3
IS 1312 Applied Supervision or Psy 131 Intro to Psy	3
*HEc Elective	3
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	18

*Choose one course from the following: HEc 2310, 2314, 2322, 2323, 2324, 235.

Home Economics Courses (HEc)

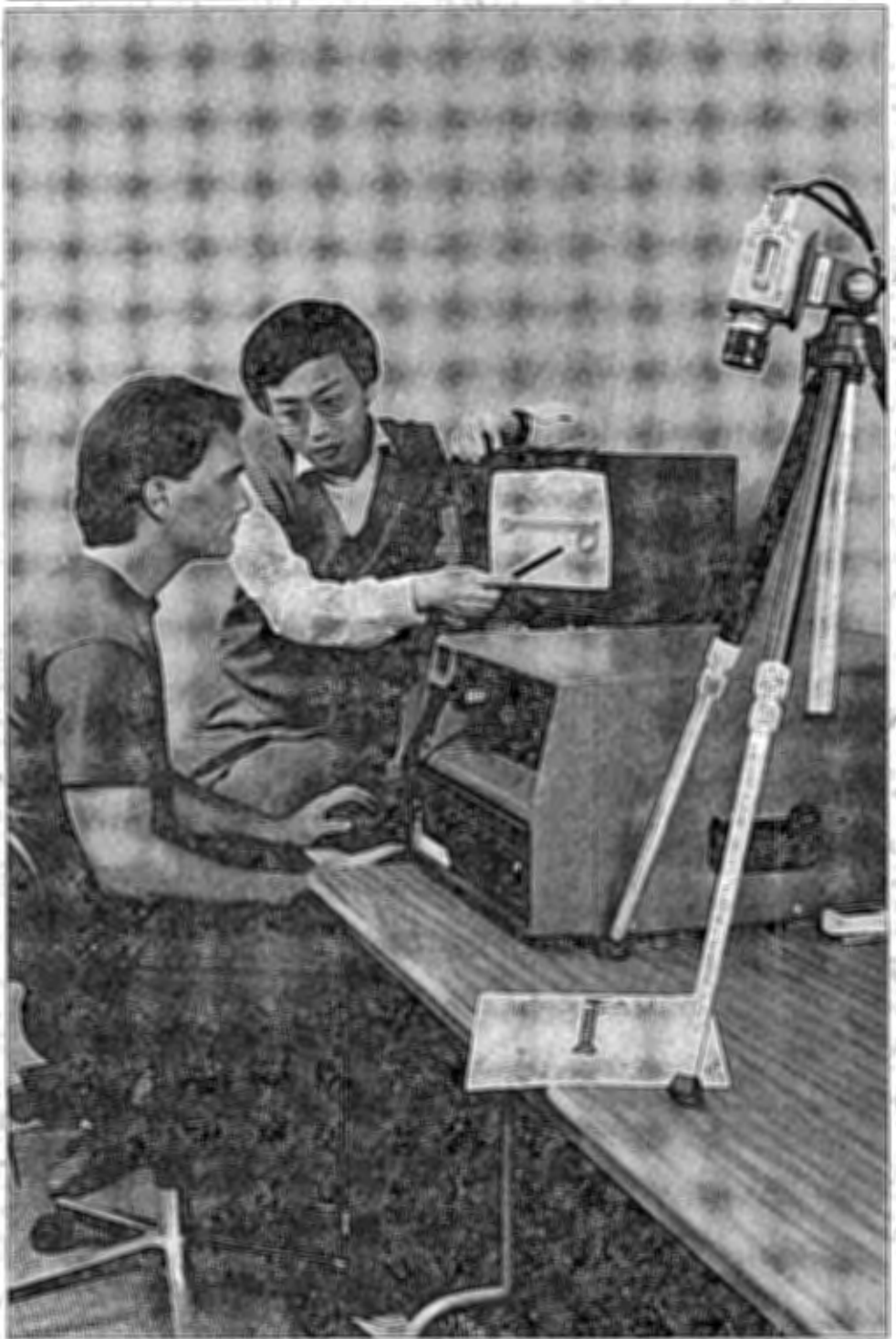
111	Foundations of Home Economics Introduction to Home Economics as a discipline. History, root disciplines and philosophy will be explored. Registration required the first Fall semester of enrollment in a home economics program.	1:1:0
112	Orientation to Home Economics as a Profession An overview of 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.	1:1:0
1303	Food Purchasing, Handling, and Storage Study of procedures for purchasing, handling and storing food in quantity.	3:3:0

1205	Supervised Field Experience I	2:A:0
	Supervised field experience in food service; emphasis on food service organization, equipment, and layout.	
130	Social 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	Intro to the Food Service Industry	3:3:0
	Overview of the food service industry; includes contact with professionals in varied careers.	
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	Basic Foods	3:2:4
	Study of food science principles and their application in the preparation of foods and food products.	
132	Clothing Construction	3:2:4
	A study of basic construction techniques for making garments of professional quality. Students learn to custom fit commercial patterns.	
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.	
2103	Food Service Management Seminar	1:1:0
	Study of current topics of interest in food service. May be repeated for credit.	
230	Computers for Home Economics	3:3:0
	Emphasis given to effect of computers on family, community, school and business community. Designed to introduce students to skills necessary for computer literacy.	
2301	Quantity Foods I	3:2:4
	Study of quantity food preparation techniques: stocks, sauces, soups, meat and poultry.	
2302	Food Service Financial Management	3:3:0
	Study of principles and procedures in the financial management of food service.	
2304	Quantity Foods II	3:2:4
	Study of quantity food preparation techniques: fish, vegetables, salads, sandwiches, baked products.	
2305	Supervised Field Experience II	3:A:0
	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	Food Presentation	3:3:0
	Study of artistic presentation of food items including entrees, side dishes, baked products and desserts.	
2313	Clinical Nutrition	3:3:0
	Study of nutritional needs during illness and for special problems.	
2314	Child Nutrition	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 Management	3:3:0
	Emphasis on basic bar operations. Regulations governing the sale of alcoholic beverages are emphasized.	
2323	Community Nutrition	3:3:0
	Ethnic, cultural, socioeconomic, and psychological aspects of food; the nutritional care systems in the community are emphasized.	
2324	School Food Service	3:3:0
	Administration of school food programs; efficient use of government commodities.	
2327	Contemporary Architecture and Interior Design	3:3:3
	A study of the classical, organic and post modern designs in architecture, interiors, and furnishing from World War II to the present.	

- 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 or satisfactory score on the pre-test for 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 Fashion Retailing** 3:3:0
An introductory study of the contemporary aspects of retailing with application to fashion merchandising & retailing.
- 235 Independent Study in Food Service Management** 3:3:0
Designed to afford independent learning experiences. Under supervision, the student pursues individual interests in the area of food service management.
- 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 Consumer Economics** 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 231, HEC 237, Art 134 or permission of instructor
- 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.
Prerequisite: HEC 3327, Art 3313 or permission of instructor
- 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 Clothing Selection** 3:3:0
Consumer skills in wardrobe planning and apparel purchasing with emphasis on career dressing based on lifestyle, figure and color analysis, personality and image.
- 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 Treatments of Interior Design** 3:3:0
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.
- 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 Adv. Child Development** 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.
- 337 Professional Image** 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 current issues in home economics.
- 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 The World of Work Seminar** 3:2:1
A comprehensive study of competencies related to home economics related occupations and careers. Supervised field experiences of at least 15 hours in selected vocational home economics education settings.
- 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 eight 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 six 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 Parenting** 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.
- 433 Equipment** 3:3:0
Selection, use and care of basic residential and commercial equipment; adapting work centers to individual needs and demonstration techniques.

- 4337 Advanced Textiles** 3:3:0
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 and Business Practices** 3:A:0
Supervised work experience of at least 20 hours a week for eight weeks or its equivalent with interior designer, architect, home or office furnishings firm, speciality shop, research and restoration. Weekly seminar on objectives, practices, procedures and ethics for the professional interior designer.
Prerequisite: Senior standing and consent of the instructor. Advanced registration required. May be repeated with varied experiences for a maximum of six 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 eight 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 six 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 eight 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 six 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 six hours credit.
- 438 Career Development Strategies in Home Economics** 3:3:0
Consideration of effective strategies designed to develop and integrate essential elements for vocational home economics programs.
Prerequisites: HEc 338, HEc 4308 or consent of professor.
- 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 a vocational home economics education classroom.
Prerequisite: HEc 438. Class: six hours in an approved vocational program five days per week for eight weeks. Advanced registration required.



Students in the College of Engineering work with the artificial vision system and other examples of state-of-the-art high technology.

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

**2006 Cherry Engineering Bldg.
Phone 880-8741**

**Annie Sue Green, Engineering
Advisor**

**2608 Cherry Engineering Bldg.
Phone 880-8810**

**Susan Wiemers, Undergraduate Advisor for
Computer Science**

**201B Maes Bldg.
Phone 880-8004**

Degrees

Computer Science

B.S., Bachelor of Science, Computer
Science

M.S., Master of Science, Computer
Science

Engineering

B.S., Bachelor of Science, Chemical
Engineering

B.S., Bachelor of Science, Industrial
Technology

B.S., Bachelor of Science, Civil
Engineering

M.S., Master of Engineering Science

B.S., Bachelor of Science, Electrical
Engineering

M.E., Master of Engineering

B.S., Bachelor of Science, Industrial
Engineering

M.E.M., Master of Engineering
Management

B.S., Bachelor of Science, Mechanical
Engineering

D.E., Doctor of Engineering

Mathematics

B.A., Bachelor of Arts

B.S., Bachelor of Science, Mathematical
Sciences

B.S., Bachelor of Science

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 (Co-op) 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 Co-op 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 Co-op program through the regular Sophomore and Junior years. By participating in the Co-op 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 Co-op program through the Engineering Cooperative Education Office.

Engineering Programs

The five undergraduate curricula in engineering are accredited by the Engineering Accreditation Commission of 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
3. Natural Sciences	
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. 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 enrollment. Students who fail to meet the terms of their contract will be permanently suspended.
3. Engineering students are expected to maintain a minimum GPA of 2.0 in their major courses (Any course with an Engineering prefix.) A performance contract with the student's department head is required for continued enrollment.

4. 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.
5. 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 45 semester hours (at least 25 semester hours in engineering at the 300 and 400 level) be earned after admission to the professional program.
6. 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	
Chm 141 Gen Chm	4
English Composition.....	3
Mth 148 Calc & Anal Geom I.....	4
Egr 111 Introduction to Engineering	1
Egr 114 Egr Graphics I.....	1
Egr 1121 Introduction to Computers I	1
American History	3
*PE	
	17

Second Semester	
Chm 142 Gen Chem	4
English Composition.....	3
Mth 149 Calc & Anal Geom II	4
Egr 1221 Introduction to Computers II	2
Phy 247 Mechanics and Heat	4
*PE	
	17

Second Year

First Semester	
Phy 248 Elec Mag	4
Mth 241 Calc & Anal Geom III	4
Egr 230 Statics.....	3
Egr 234 Thermo.....	3
Egr 215 Egr Graphics II	1
Egr 223 Egr Econ	2
*PE	
	17

Second Semester	
Egr 233 Circuits.....	3
Egr 231 Dynamics.....	3
Egr 210 Introduction to Computer Aided Design ..	1
**Mth 3401 Diff Equ.....	4
*PE	
***Specified by Major (2)	5-7
	16-18

Note:

*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.

**Mth 331 for EE students.

***The following courses are specified for each engineering major:

Chemical Engineering: Chm 241, ChE 334

Civil Engineering: CE 232, American History Elective

Electrical Engineering: His 232, EE 217, Mth 233

Industrial Engineering: IE 330, Mth 3370

Mechanical Engineering: IE 222, CE 232

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 Flow charting, digital computers, FORTRAN, FORTRAN programming. <i>Prerequisite: Egr 1121</i>	2:2:0
135	Architectural Graphics for Interior Design 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.	3:2:2
210	Introduction to Computer Aided Design An introduction to computer aided design, elementary graphics, display, data input and output. <i>Prerequisite: Mth 241 or concurrent, Egr 1121, Egr 230.</i>	1:0:3
215	Engineering Graphics II Descriptive geometry, an introduction to computer graphics, and special problems approved by the instructor. <i>Prerequisite: Egr 114 and Egr 1121</i>	1:0:3
223	Engineering Economics The time value of economic resources, engineering project investment analysis, effect of taxes on engineering project decisions. <i>Prerequisite: Mth 148, Egr 1121 or Egr 1221.</i>	2:3:0
230	Statics Statics of particles and rigid bodies. Use is made of basic physics, calculus and vector algebra. <i>Prerequisite: Physics 247.</i>	3:3:0
231	Dynamics Kinematics of rigid bodies, kinetics of rigid bodies, work and energy, impulse and momentum. <i>Prerequisite: Egr 230 or equivalent, Mth 241 or concurrent.</i>	3:3:0
233	Circuits I Linear network analysis. Fundamental network laws and methods. Transient response. Sinusoidal steady state analysis and response. <i>Prerequisite: Mth 149, Phy 248, Egr 1221, Eng Composition (six hrs).</i>	3:3:0
234	Thermodynamics The fundamental laws of thermodynamics; properties of systems solids, gases and liquids and thermodynamic tables. <i>Prerequisite: Phy 247; Mth 241 or concurrent.</i>	3:3:0
236	Career Development I Comprehensive treatment of career-related special assignments and projects. <i>Prerequisite: Approval of academic dean.</i>	3:3:0
237	Career Development II Comprehensive treatment of career-related special assignments and projects. <i>Prerequisite: Egr 236.</i>	3:3:0
330	Energy and Society 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. <i>Prerequisite: Junior standing.</i>	3:3:0
335	Computer Aided Design 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. <i>Prerequisite: Junior standing (admitted into a professional engineering program).</i>	3:3:0
336	Career Development III Comprehensive treatment of career-related special assignments and projects. <i>Prerequisite: Egr 237.</i>	3:3:0
337	Career Development IV Comprehensive treatment of career-related special assignments and projects. <i>Prerequisite: Egr 336.</i>	3:3:0
4101, 4201, 4301, 4401	Special Topics 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.	1-4:A:0

421	Data Processing 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.	3:1:3
436	Career Development V Comprehensive treatment of career-related special assignments and projects. <i>Prerequisite: Egr 337.</i>	3:3:0

Department of Computer Science

Interim Department Chair: David R. Read 201 Maes Building, Phone 880-8775

Professors: McGuire, Nylin, Read, Waldron

Associate Professors: Harvill, Jordan, Koh

Assistant Professor: Foreman

Instructor: Logan

Lecturer: Wiemers

Laboratory Supervisor: McNeely

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, compiler 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, six hours in business, eight hours in laboratory science, six-to-eight hours in free electives as well as the general University requirements for a bachelor's degree. The student who completes this four-year academic program is awarded a Bachelor of Science degree in Computer Science and is well prepared to pursue a professional career as a Computer Scientist, or to pursue graduate work in computer science or in an area of specialization.

Computer Science Academic Standards

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, except in an unusual case with the approval of the undergraduate advisor or the department head.
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

The computing laboratories of the Department of Computer Science are located on the first and second floors of the west wing of the Maes Building. There are five laboratories, each containing 24 workstations and several special purpose laboratories with specialized workstations for artificial intelligence, computer graphics, and software engineering. The Department also has two lectoriums and three classrooms for instructional purposes. All classrooms, lectoriums, and laboratories are equipped with state-of-the-art computer equipment and state-of-the-art teaching aids such as computer monitors in the ceiling to permit students to see what is displayed on the instructor's microcomputer/terminal located on the teacher's station. These laboratories are open seven days a week for approximately 80 hours to permit students to have free access to

them. When not used as scheduled laboratories, all laboratories are open for use by students in Computer Science.

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 should have a combined score of 850 or greater on the SAT test or equivalent ACT test score, or rank in the upper one third of their graduating class.

Students who have already earned academic credit from another college or university should have a combined score of 850 or greater on the SAT test or rank in the upper one third of their graduating class and 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 Teacher's Certificate in Computer Science

The Computer Science courses required for a teacher's certificate are CS 1411, CS 1413, CS 2313, CS 3301, CS 4305, CS 4321, CS 4306, and CS 4101.

For details concerning requirements for teacher certification and information on professional education courses, consult the College of Education section in this bulletin.

Requirements for a Minor in Computer Science

CS 1411, CS 1413, CS 2313, CS 2411, plus nine additional hours taken from 300/3000 and/or 400/4000 level courses.

Bachelor of Science—Computer Science

Recommended Program of Study

First Year

First Semester		Second Semester	
CS 1411 Principles of Computer Science I	4	CS 1413 Principles of Computer Science II	4
English Composition	3	English Composition	3
Mth 1345	3	Mth 148/236	4-3
His 231	3	His 232	3
Academic Elective	3	Eco 131	3
PE	1	PE	1
	17		18-17

Second Year

First Semester		Second Semester	
CS 2313 Digital Computer Systems	3	CS 2411 COBOL Programming	4
Mth 149/237	4-3	Mth 233	3
Lab Science	4	Lab Science	4
POLS 231	3	English Literature	3
Acc 231	3	PE	1
PE	1		
	18-17		15

Third Year

First Semester		Second Semester	
CS Elective	3	CS Elective	3
CS Elective	3	CS Elective	3
Mth 234/3370	3	Mth 4315/331	3
Specialization	3	Specialization	3
LIT/SPC/TW	3	Specialization	3
	15		15

Fourth Year

First Semester	Second Semester
CS Elective 3	CS Elective 3
CS Elective 3	CS Elective 3
CS 431 3	Specialization 3
Specialization 3	POLS 232 3
Specialization 3	Academic Elective 3-5
15	15-17

Total 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 by the undergraduate advisor.
2. Students whose area of specialization is Math, Engineering, or Physics must take Mth 148 and Mth 149.
3. Students whose area of specialization is Engineering must take Phy 247 and Phy 248 as their lab science.
4. CS electives must be chosen from the following groups with at least six hours taken from each group:
 Group 1: CS 3307, CS 4306, CS 4309, CS 4311, CS 4312, CS 4321
 Group 2: CS 3305, CS 4302, CS 4305, CS 4310
 Group 3: CS 3301, CS 4307, CS 4308
5. No more than four semester hours of PE activities will count toward the degree in Computer Science.
6. CS 1311 is a deficiency course for entering Freshman who are not familiar with computers.
7. Lab Science courses must be chosen from:
 Bio 141 and Bio 142; Chm 141 and Chm 142; Geo 141 and Geo 142; or Phy 141 and Phy 142.

Bachelor of Science - Computer Science with Teacher Certifications in Computer Science and Mathematics

Students who wish to earn a Computer Science degree and to be certified to teach Computer Science and Mathematics at the secondary level in public schools may obtain this goal by completing an additional 15 hours beyond those required for a Bachelor of Science degree in Computer Science.

Students who desire further information on this program should contact the undergraduate advisor in the Computer Science department.

For details concerning requirements for teacher certification and information on professional education courses, consult the College of Education section in this bulletin.

Dual Programs - Bachelor of Science in Computer Science and Bachelor of Science in Electrical Engineering

The departments of Computer Science and Electrical Engineering offer qualified highly motivated students the opportunity to earn both a Bachelor of Science degree in Computer Science and a Bachelor of Science degree in Electrical Engineering in four academic years including six summer sessions. Students may obtain additional information about this intensive program by contacting either the department of Electrical Engineering or the department of Computer Science. This program of study consists of 176 semester credit hours as described in the following outline.

Bachelor of Science in Computer Science and Bachelor of Science in Electrical Engineering

First Year

Fall Semester	
Egr 111	1
Egr 114	1
CS 1411	4
Eng 131	3
Mth 148	4
Mth 1345	3
Egr 1121	1
PE	1
18	

Spring Semester	
CS 1413	4
Egr 1221	2
Eng 132	3
Mth 149	4
Phy 247	4
PE	1
18	

Summer Semester I	
Chm 141	4
Egr 230	3
7	

Summer Semester II	
Chm 142	4
Mth 3370	3
7	

Second Year

Fall Semester	
Egr 234	3
Egr 215	1
Egr 223	2
CS 2411	4
Phy 248	4
Mth 233	3
PE	1
18	

Spring Semester	
Egr 233	3
Egr 210	1
Egr 231	3
EE 217	1
Mth 241	4
Mth 331	3
CS 2313	3
PE	1
19	

Summer Semester I	
CS/EE 3305	3
EE 331	3
6	

Summer Semester II	
Phy 335	3
CS 4305	3
6	

Third Year

Fall Semester	
EE 318	1
EE 333	3
EE 3301	3
CS 4306	3
CS 3307	3
Eng Lit	3
16	

Spring Semester	
EE 319	1
EE 336	3
EE 3201	2
EE 332	3
EE 431	3
CS 4302	3
HIS 231	3
18	

Summer Semester I	
EE 337	3
HUM/COC	3
6	

Summer Semester II	
Spc 131	3
POLS 231	3
6	

Fourth Year

Fall Semester	
EE 411	1
EE 416	1
EE 436	3
EE Elective	3
EE/CS 4310	3
CS 4307	3
His 232	3
17	

Spring Semester	
EE 412	1
EE 417	1
EE Elective	3
EE Elective	3
CS 4317/4319	3
CS 431	3
POLS 232	3
17	

Computer Science Courses (CS)

- 130 Microcomputers and Society** 3:2:3
 Computer literacy development of the hardware and software for microcomputers, microcomputer applications in all phases of society, ethics, software piracy, how to use software packages to enable a more useful utilization of microcomputers. Effects of microcomputers on all phases of society with special emphasis placed on areas such as education, personal use, etc. (A student may not receive credit for both CS 130 and CS 1311.)
- 1311 Micro-Computers I** 3:2:3
 Functional hardware components of micro-computers and networks of micro-computer system software, high level compilers/interpreters, text editors, data base management system, query systems, impact of micro-computers on society, and techniques for applications of micro-computers to appropriate real world problems. (A student may not receive credit for both CS 130 and CS 1311.)
- 1411 Principles of Computer Science I** 4:3:3
 Major hardware components, problem solving and algorithmic development, program structures, data types, method and styles of program development, data structures and solution of significant problems using a block structured language such as ADA and Pascal.
Prerequisite: Mth 1345 or concurrent.
- 1413 Principles of Computer Science II** 4:3:3
 Continuation of CS 1411, algorithm analysis, program verification, advanced data structures and their implementations, run time behavior of programs, program efficiency, data verification and solution of complex real world problems using these concepts.
Prerequisite: CS 1411 and Mth 1345.
- 2313 Digital Computer Systems** 3:2:2
 Basic computer architecture and assembly language programming. System software, including loaders and assemblers. Input-output devices and programming.
Prerequisite: CS 1413.
- 2411 COBOL Programming** 4:3:3
 Extensive coverage of the COBOL language and its variations, flexibility and power of COBOL, emphasis on structured programming, processes for management of secondary storage, large scale computing and access methods.
Prerequisite: CS 1413.
- 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.
- 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 2313.
- 3307 Data Base Systems** 3:3:0
 Introduction to data base systems, includes relational, hierarchical, and network data base models; methods of controlling concurrent accesses, backup and recovery techniques; and distributed data base systems.
Prerequisite: CS 2411.
- 4104, 4201, 4301 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 2313 and CS 4305.

4305	Data Structures and Algorithm Analysis 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. <i>Prerequisite: CS 1413.</i>	3:3:0
4306	Techniques of Information Processing and Retrieval Continuation of CS 4305. Keyword and descriptive indexing, decision tables, real time information processing and total information systems. <i>Prerequisite: CS 4305 and CS 2411.</i>	3:3:0
4307	Organization of Programming Languages 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. <i>Prerequisite: CS 2313 or 4305</i>	3:3:0
4308	Theory of Programming Languages Formal definition of programming languages, including specifications of syntax, semantics, statements and notations used in the construction of compilers, structure of translators and compilers. <i>Prerequisite: CS 4307.</i>	3:3:0
4309	Introduction to Simulation Techniques 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. <i>Prerequisite: Mth 234 or 3370 and CS 1413.</i>	3:3:0
431	Project Laboratory Senior projects with hardware/software implementation and testing. <i>Prerequisite: consent of department head and Senior standing.</i>	3:2:3
4310	Computer Architecture Representation of information, calculators, storage, addressing, input, output, memory and control. Credit will not be given for both CS 4310 and EE 4310. <i>Prerequisite: EE 4303 or CS 3305. Assembly language desirable.</i>	3:3:0
4311	Information Systems I The analysis, design, installation documentation, maintenance, and modifications of information systems including both hardware and software. <i>Prerequisite: 2411.</i>	3:3:0
4312	Information Systems II A continuation of CS 4311 with special emphasis on using state of the art computer technology in maintenance and modification of information systems. <i>Prerequisite: CS 4311.</i>	3:3:0
4321	Micro-Computers Hardware components, languages, operating systems, data file systems, utilities and software development for micro-computers. <i>Prerequisite: Consent of Department Head.</i>	3:3:0

Department of Chemical Engineering

Program accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology.

Department Chair: Jack R. Hopper

100 Lucas Building, Phone 880-8785

Professors: Hopper, Walker, Yaws

Associate Professors: Chen, Ho, Li

Adjunct Professors: Tao, Wei, Wing

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, development, 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	
**ChE 333 Thermodynamics	3
**ChE/ME 3311 Momentum Transfer	3
*ChE 437 Computer Applications	3
POLS 231 American Government I	3
Chm 341 Organic I	4
	16

Second Semester	
**ChE 332 Heat Transfer	3
**ChE 441 Reaction Kinetics	4
POLS 232 American Government II	3
Chm 432 Physical Chm II	3
Chm 342 Organic II	4
	17

Fourth Year

First Semester	
ChE 442 Mass Transfer	4
ChE 431 Laboratory I	3
ChE 436 Plant Design I	3
ChE 414 Seminar	1
Elective	3
English Literature	3
	17

Second Semester	
ChE 433 Process Control	3
American Hist	3
ChE 434 Plant Design II	3
ChE 435 Advanced Analysis	3
***Chm Elective	2
English Lit/Tech Rpt Writ	3
	17

Total Semester Hours 135

*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.	
	<i>Prerequisite: Egr 234, ChE 334</i>	
332	Heat Transfer	3:3:0
	Principles of conduction, convection and radiation, and their application to the design of heat transfer equipment and systems.	
	<i>Prerequisite: ChE 3311, ChE 333.</i>	
333	Thermodynamics	3:3:0
	Application of the First and Second Laws to chemical processes. Thermodynamic properties of pure fluids and mixtures. Physical equilibrium.	
	<i>Prerequisite: ChE 334, Egr 234, Chm 341 or concurrent, Chm 241 or concurrent.</i>	
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.	
	<i>Prerequisite: Egr 234 or concurrent.</i>	
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.	
	<i>Prerequisite: Senior standing in Chemical Engineering.</i>	

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. <i>Prerequisite: ChE 431.</i>	
431	Laboratory I	3:1:6
	Experiments in heat transfer, mass transfer, fluid flow, reaction kinetics and thermodynamics. <i>Prerequisite: ChE 442 or concurrent.</i>	
4316	Stagewise Processes	3:3:0
	Advanced study of absorption, extraction, distillation and diffusion, with emphasis on multicomponent mixtures.	
4318	Advanced Distillation	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. <i>Prerequisite: ChE 437, 441, 442, Mth 3401.</i>	
434	Plant Design II	3:1:6
	A continuation of ChE 436, with emphasis on a major design project. <i>Prerequisite: ChE 436.</i>	
435	Advanced Analysis	3:3:0
	Development of mathematical equations for chemical engineering applications. Solution of ordinary and partial differential equations. <i>Prerequisite: ChE 333, 3311, 332, 437, 441, Mth 3401.</i>	
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. <i>Prerequisite: ChE 441; ChE 442 or concurrent.</i>	
437	Computer Applications	3:3:0
	Use of the digital computer in performing process calculations. Advanced techniques of FORTRAN programming. <i>Prerequisite: Egr 1121, 1221, ChE 334, ChE 333 or concurrent.</i>	
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. <i>Prerequisite: Senior/graduate standing.</i>	
441	Reaction Kinetics	4:3:3
	Chemical equilibrium. Analysis of experimental data to determine reaction rate parameters in homogeneous, heterogeneous, catalytic and non-catalytic reactions. Development of equations for batch, stirred-tank and tubular flow reactors. Application of differential equations to process and reactor design. <i>Prerequisite: Mth 3401, Chm 241, ChE 332 or concurrent, ChE 333 or concurrent, Chm 342 or concurrent, Chm 432 or concurrent.</i>	
442	Mass Transfer	4:3:3
	Principles of diffusion. Simultaneous mass, energy and momentum transfer. Analysis of absorption, extraction and distillation processes. <i>Prerequisite: ChE 333, 332, Chm 241, 341, 342, 432.</i>	

Department of Civil Engineering

Program accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology.

Department Chair: Enno Koehn

2010 Cherry Engineering Building,

Professors: Koehn, Morgan, Rogers

Phone 880-8759

Associate Professors: Daniali, Mantz

Adjunct: Fischer, Mittra

Laboratory Technician: Mohtashami

Civil Engineering is a people serving profession and as such is vital to the world's economic, political, and social well-being. The many areas to which civil engineers make substantial contributions include bridges, dams and levees, harbors, waterways and irrigation facilities, buildings, airports, highways, pipelines, railroads, power lines, water supply systems and waste treatment facilities. Civil engineers engage in a wide range of activities such as research, design, development, management, and the control of engineering systems and their components. With today's fast-paced technological changes, civil engineering provides for unique and unlimited career opportunities that can only be met by professionally trained people.

The civil engineering program is designed with a broad base to prepare men and women for careers in all phases of civil engineering and to enable them to perform other managerial and technical functions which require scientific and engineering backgrounds. The curriculum embraces a sound core of physics, chemistry and mathematics. To this is added a substructure of engineering sciences. Areas of study include geotechnical, structural, hydraulic, environmental, surveying, and construction engineering. Options are provided to fit the individual interest of the civil engineering student.

Because of the wide scope of activities in which the civil engineer is engaged, and because of the broad spectrum of student interest, civil engineering graduates may choose either to enter the profession immediately after receiving their bachelor's degree or go directly to graduate school. No matter what the student chooses, the curriculum provides a firm foundation for today's world.

To encourage and assist scholars in civil engineering, the Katherine E. and William C. Mundt endowment was established in 1983. This fund provides for loans to qualified students. Application forms are available in the civil engineering department office.

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(e)

(See Common Program)

Third Year

First Semester	Second Semester
Elective Statistics	CE 320 Materials Engineering
CE 220 Surveying	CE 336 Hydrology
CE 331 Environmental Science	CE 337 Water Utility Systems
CE 334 Structural Mechanics	CE 339 Geotechnical Engineering I
CE 335 Hydraulics I	Elective Political Science
Elective Political Science	CE Elective(a)
3	3

Fourth Year

First Semester	Second Semester
CE 434 Geotechnical Engineering II. 3	CE 439 Structural Steel Design 3
CE 438 Reinforced Concrete Design. 3	CE 411 Seminar. 1
CE 432 Management, Planning, Scheduling and Estimating. 3	CE 4290 Civil Engr Syst II 2
Elective Literature. 3	CE 431 Hydraulics II 3
CE 4212 Civil Engr Syst Design Project 2	Elective Literature (a, b, c) 3
CE Elective(a). 3	Mth, Science or General Elect (a, c, d) 3
	CE Elective (a) 3

17

18

Total Semester Hours 136

Notes:

- (a) All electives must be approved by the Head of the C.E. Dept.
 (b) Speech or Tech Writing may be substituted if a course in Humanities or Social Studies is taken as a General Elective. See note (d) for General Elective restrictions.
 (c) General Electives include Eco, BLW, Soc, Psych, Humanities and/or Social Studies.
 (d) Must include a Mth, Science (not general) elective if the total Mth Science content on the degree plan does not equal or exceed 32 hours. Must include an acceptable Humanities/Social Studies elective if the total Humanities/Social Studies content on the degree plan does not equal or exceed 16 hours.
 (e) It is vital that CE 232 and Egr 231 be completed before the start of the third year.

Civil Engineering Courses (CE)

220	Surveying		2:1:3
		Introduction to the basic principles of surveying. Use of equipment for measurement of horizontal and vertical distances and angles. Field practice and calculations associated with design and layout of highway curves including vertical and horizontal alignments. Transition spirals. Error Analysis. Computer utilized in calculations.	
		<i>Prerequisite: Egr 1121, 114.</i>	
		<i>Corequisite: Mth 148.</i>	
232	Mechanics of Solids		3:3:0
		Effect of loads on deformable bodies. Uniaxial and biaxial stress-strain relationships. Indeterminate systems. Study of stresses due to axial, torsional and bending effects. Buckling of columns.	
		<i>Prerequisite: Egr 230.</i>	
320	Materials Engineering		2:1:3
		Principles/techniques for investigating properties and behavior of engineering members and materials using experimental methods.	
		<i>Prerequisite: CE 232.</i>	
3290	Civil Engineering Systems I		2:2:0
		Principles of systems analysis utilized for solving civil engineering problems. Application of probability, statistics, and regression analysis to the engineering design process. Specific examples in civil engineering taken under consideration.	
		<i>Prerequisite: Mth 241.</i>	
		<i>Corequisite: CE 232.</i>	
331	Environmental Science		3:2:3
		Introduction to the hydrologic cycle and the chemistry and microbiology of the natural aquatic environment. Emphasis is on the physical, chemical and biological aspects of water and waste water systems in relation to man's environment. Laboratory work is in the physical, chemical and biological analysis of water and waste water.	
		<i>Prerequisite: Chm 142.</i>	
334	Structural Mechanics		3:2:3
		Analysis of loadings for bridges and buildings. Effects of moving loads. Influence lines. Shear and moment diagrams. Analysis of indeterminate structures. Introduction to structural design investigation of frames, girders and bents.	
		<i>Prerequisite: CE 232.</i>	
335	Hydraulics I		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.	
		<i>Prerequisite: Egr 231.</i>	
336	Hydrology		3:3:0
		Precipitation, surface water, infiltration, and sub-surface water. Analysis of rainfall and runoff data. Collection studies. Hydraulics of wells. Net storm rain; peak discharge and flood runoff.	
		<i>Corequisite: Egr 230.</i>	

- 337 Water Utility Systems** 3:3:0
 General survey of environmental engineering covering water supply and sanitary sewerage systems. Design of water distribution and wastewater collection systems.
Prerequisite: CE 331, CE 335.
- 339 Geotechnical Engineering I** 3:2:3
 Basic principles of soil behavior under load. Soil properties and classification. Study of hydraulics as applied to soil mechanics.
Prerequisite: Egr 230.
Corequisite: CE 232.
- 411 Seminar** 1:0:2
 Discussion of professional topics. Study of technical journals and transactions. Presentation of oral and written reports.
Prerequisite: Senior standing.
- 420 Photogrammetry and Mapping** 2:0:6
 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 220
- 4212 Civil Engineering Systems Design Project** 2:0:6
 Planning, design, and analysis of a civil engineering system or project; an integrated and realistic group project is utilized which involves numerous major aspects of the civil engineering profession.
Prerequisite: CE 334.
Corequisites: CE 438, CE 439.
- 4290 Civil Engineering Systems II** 2:2:0
 Principles of system analysis utilized for solving civil engineering problems. Application of probability and statistics, numerical methods, linear programming, dynamic programming, optimization, finite elements and finite differences to the engineering design process.
Prerequisite: CE 3290 or Statistics.
Corequisite: CE 334, CE 337, CE 339.
- 430 Indeterminate Structures** 3:2:3
 Basic principles of structural analysis and design based upon the requirements of equilibrium and continuity. Matrix methods and the application of strain energy, slope deflection and moment distribution procedures for the analysis of frames, trusses and beams. Digital computer methods utilized.
Prerequisite: CE 334.
- 431 Hydraulics II** 3:2:3
 Continuation of CE 335-Hydraulics I 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 substructures, and underground structures. Computer techniques are employed.
Prerequisite: CE 434.
- 432 Management, Planning, Scheduling, and Estimating** 3:2:3
 Principles governing the effective and efficient management of engineering projects including the application of comprehensive planning, scheduling, and cost estimation procedures.
Prerequisite: Senior Standing.
- 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 Geotechnical Engineering II** 3:2:3
 Compressibility and strength characteristics. Stress distribution. Shallow and deep foundations, earth pressure theories, retaining walls, and slope stability.
Prerequisite: CE 339.
Corequisite: CE 335.
- 435 Hydraulic Design of Municipal Utilities** 3:3:0
 Hydraulic design of municipal utilities including storm water and waste water collection systems, water distribution networks, and treatment plant facilities.
Prerequisite: CE 337.

437	Transportation Engineering Study of highway pavements. History and development of transportation facilities. Drainage requirements. Fundamentals of highway location, design, construction and maintenance. <i>Prerequisite: Senior standing.</i>	3:3:0
438	Reinforced Concrete Design The design of structural concrete members based upon working stress and strength design methods. Study of standard specifications. Introduction to prestressed concrete. <i>Prerequisite: CE 334.</i>	3:2:3
439	Structural Steel Design The elastic design of buildings and bridge components according to standard specifications. Application of load and resistance factor design. Introduction to plastic design of steel structures. <i>Prerequisite: CE 334.</i>	3:2:3

Department of Electrical Engineering

Program accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology.

Department Chair: Floyd M. Crum **2006 Cherry Building, Phone 880-8746**

Professors: Bean, Cooke, Crum, Wakeland, Watt

Associate Professors: Carlin

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: microprocessor 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 is available upon request.

In addition to the admission requirements for a major in Electrical Engineering, a student must have a GPA of 2.0 or better in the EE courses, including EGR 233, to graduate. Additionally, there are four sequences of courses that serve as a foundation for advanced electrical engineering courses. No more than one "unimproved D" is allowed in each of the following sequences of courses in order to continue the sequence, 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, 426, 427

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

EE 318 Electronics Laboratory	1
EE 331 Circuits II	3
EE 333 Electronics I	3
EE 3301 Electrical Analysis	3
EE 3305 Logical Design of Switching Systems	3
Phy 335 Modern Physics	3
	16

Second Semester

EE 319 Electric Machinery Laboratory	1
EE 3201 Digital Laboratory	2
EE 332 Circuit Design	3
EE 336 Electrical Machinery/Transformers	3
EE 337 Electromagnetic Fields I	3
EE 431 Electronics II	3
POLS 231 American Government I	3
	18

Fourth Year

First Semester

EE 411 Electrical Engineering Seminar I	1
EE 426 Projects Laboratory	2
EE 436 Control Engineering	3
EE 439 Computer Aided Design	3
****EE Elective (1)	3
**Hum/Soc Elective	3
Spc or Technical Writing	3
	18

Second Semester

EE 412 Electrical Engineering Seminar II	1
EE 427 Projects Laboratory	2
****EE Electives (2)	6
English Literature	3
**Elective	3
POLS 232 American Government II	3
	18

Total Semester Hours 139

Notes:

**Hum/Soc Elective:

(a) Any humanities, philosophy, anthropology, or literature course

(b) History 330, 331, 332, 333, 337, 338, any 400 level course

(c) Sociology 131, 132, 330, 332, 333, 334, 338, 431, 434, 435, 436

***A course, other than engineering, which will broaden a student's education for an electrical engineering career, approved by advisor.

****Total elective design content must be a minimum of three hours.

Electrical Engineering Courses (EE)

217	Circuits Laboratory	1:0:3
	Experience in the use of elementary electrical equipment and elements, including the oscilloscope.	
	<i>Corequisite: Egr 233.</i>	
318	Electronics Laboratory	1:0:3
	Design of power supplies and amplifiers using diodes, transistors, thyristors and linear integrated circuits.	
	<i>Prerequisite: EE 217.</i>	
	<i>Corequisite: EE 333.</i>	
319	Electric Machinery Laboratory	1:0:3
	Three phase circuits, DC and AC motors and generators; transformers.	
	<i>Prerequisite: EE 217.</i>	
	<i>Corequisite: EE 336.</i>	
3201	Digital Laboratory	2:1:3
	Testing and design of digital circuits; introduction to small computer hardware and software.	
	<i>Prerequisite: EE 217 and EE 3305 or CS 3305.</i>	
3301	Electrical Analysis	3:3:0
	Application of the digital computer to analysis and design of electrical systems using numerical methods.	
	<i>Prerequisite: Mth 331, Egr 233, 1221, 1121.</i>	
3305	Logical Design of Switching Systems	3:3:0
	Switching algebra. Formulate and manipulate switching functions. Combinational networks. Flip-flops. Sequential networks.	
	<i>Prerequisite: Junior standing.</i>	

331	Circuits II Power calculations, polyphase circuits. Frequency response, resonance, magnetically coupled circuits, two port networks. Fourier series, Fourier and Laplace transform application. <i>Prerequisite: Egr 233.</i> <i>Corequisite: Mth 331 or 3301.</i>	3:3:0
332	Circuit Design Circuit design concepts using frequency domain. Pole-zero characterization of system response. Synthesis of passive and active networks. <i>Prerequisite: EE 331.</i>	3:3:0
333	Electronics I An analysis of both digital and analog signal processing methods by the use of solid state electronic devices, Bipolar, FET and linear integrated circuits. <i>Prerequisite: Egr 233</i> <i>Corequisite: EE 318 for EE students.</i>	3:3:0
336	Electric Machinery/Transformers A study of transformers and conventional electric machinery, DC motors and generators, synchronous machines and induction motors. <i>Prerequisite: EE 331.</i> <i>Corequisite: EE 319.</i>	3:3:0
337	Electromagnetic Fields I 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. <i>Prerequisite: Mth 331, Phy 248, Egr 233.</i>	3:3:0
4101	Individual Study Independent study under the direction of a faculty member. May be repeated for credit.	1:1:0
411	Electrical Engineering Seminar I A study of the literature of electrical and related engineering fields; preparation and presentation of papers on electrical subjects. <i>Pre or Corequisite: EE 426 or 427.</i>	1:1:0
412	Electrical Engineering Seminar II Preparation, presentation and discussion of material on the engineering profession, the interface between technology and society, and new areas of engineering involvement. <i>Pre or Corequisite: EE 426 or 427.</i>	1:1:0
426	Projects Laboratory Senior design projects with hardware implementation and testing. Preparation of project proposals, formal report and presentation. <i>Prerequisite: EE 217, 318, 319, 3201, 431.</i>	2:1:3
427	Projects Laboratory Senior design projects with hardware implementation and testing. Preparation of project proposals, formal report and presentation. <i>Prerequisite: EE 217, 318, 319, 3201, 431.</i>	2:1:3
4302	Communication Theory Principles of modulation; random signal theory and network analysis; basic information theory; analysis of noise. One hour design content. <i>Prerequisite: EE 332.</i>	3:3:0
4304	Advanced Topics Topics are selected on the basis of the needs of an adequate number of students. May be repeated for credit when topics vary. <i>Prerequisite: EE 331, 431.</i>	3:3:0
4306	Minicomputers Introduction to assembly language programming and small computer organization. 1-1/2 hours design content. <i>Prerequisite: EE/CS 3305.</i>	3:3:0
4307	Microcomputers Microcomputer organization, peripheral devices, systems software for small computers. 1-1/2 hours design content. <i>Prerequisite: EE 4306 or CS 3302.</i>	3:3:0
4309	Electric Power Systems An introduction to electric power system analysis. Transmission line calculations, system operation, short circuit computations. One hour design content. <i>Prerequisite: EE 336, 337.</i>	3:3:0

431	Electronics II Indepth study of semiconductor device characteristics, BJT's, FET's, SSI logic and linear integrated circuits. <i>Prerequisite: EE 333, 3305, 331.</i>	3:3:0
4311	Introduction to Nuclear Power Nuclear reaction mechanics; radioactivity; neutron reactions; fission products, decay; reactor kinetics, systems; radiation, dose limits, shielding. One hour design content. <i>Prerequisite: Egr 234 and Phy 335.</i>	3:3:0
432	Electronics III Analog systems with semiconductor elements. Frequency response, feedback and feed forward amplifier design, power electronic devices with regulated power supplies. Two hours design content. <i>Prerequisite: EE 431.</i>	3:3:0
436	Control Engineering Transfer functions; state variables; time response; frequency response and stability. <i>Prerequisite: EE 332, 3301.</i>	3:3:0
438	Instrumentation 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. Two hours design content. <i>Prerequisite: EE 333, 3305.</i>	3:3:0
439	Computer Aided Design An introduction to computer aided design and experience with design software. A realistic programming project concerning design will be assigned. Intensive programming efforts and fluency in Fortran, C, or Pascal will be required. <i>Prerequisite: Junior standing.</i>	3:3:0

Department Of Industrial Engineering

Program accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology.

Department Chair: Victor Zaloom

2014 Cherry Building, Phone 880-8804

Professors: Brennan, Gates, Zaloom

Associate Professor: 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.

Bachelor of Science - Industrial Engineering

Recommended Program of Study

First and Second Year

(See Common Program)

Third Year

First Semester

IE 222 Introduction to Manufacturing	2
IE 335 Accounting for Engineers	3
IE 311 IE Seminar I	1
Eng 331 Technical Report Writing	3
His 232 American History II	3
POLS 231 American Government I	3
	15

Second Semester

IE 3303 Economic Analysis and Design	3
IE 338 Work Design	3
IE 432 Statistical Decision Making for Engineers	3
English Literature (a)	3
POLS 232 American Government II	3
Hum/Soc Elective (b)	3
	18

Fourth Year

First Semester

IE 435 Production and Inventory Control	3
IE 430 Quality Control	3
IE 434 Materials Science and Manufacturing Processes	3
ME 3311 Momentum Transfer	3
IE 4315 Organization and Management	3
Technical Elective (c)	3
	18

Second Semester

IE 436 Design of Production Facilities	3
IE 437 Operations Research	3
IE 431 Computer Applications in IE	3
IE 4316 Industrial and Product Safety	3
Free Elective (d)	3
	15

Total Semester Hours 135

Notes:

- (a) Any course in Sophomore Literature (Eng 2311–2319) will satisfy this requirement.
- (b) Psychology, Sociology or Economics will be approved.
- (c) An upper level course in Engineering Design.
- (d) Physical Education, Engineering or Mathematics may not be elected. Approval of advisor required.

Industrial Technology

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 Technology

Recommended Program of Study

First Year

First Semester	Second Semester
Technology Courses 12	Technology Courses 12
Eng 131 Composition (a) 3	English Composition (a) 3
PEGA/MLB/MS 1 or 2	PEGA/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
PEGA/MLB /MS 2	PEGA/MS 2
17	17

Third Year

First Semester	Second Semester
Mth 1334 College Algebra 3	Mth 1341 Elements of Analysis 3
CS 1311 Computer Programming I 3	Chm 143 or Phy 143 4
POLS 231 American Government I 3	POLS 232 American Government II 3
IE 3301 Survey of IE 3	English Literature (b) 3
IE 3311 Machining Processes 1	IE 438 Work Measurement 3
Elective I (c) 3	IE 311 Seminar 1
18	17

Fourth Year

First Semester	Second Semester
Mth 234 Elementary Statistics 3	His 232 American History II 3
IE 333 Engineering Economy 3	IE 4301 Survey of Quality Control 3
IE 339 Materials Science and Manufacturing Processes 3	IE 4315 Organization and Management 3
His 231 American History I 3	IE 335 Accounting for Engineers 3
IE 4351 Production and Inventory Systems 3	Eng 331 Technical Report Writing (d) 3
15	15

Total Semester Hours 131-133

Notes:

- (a) Any of Eng 132–Eng 135 will satisfy this requirement.
 (b) Any of Eng 2311–Eng 2316 will satisfy this requirement.
 (c) A 300 or 400 level IE course, from approved list.
 (d) SPC 331 may be substituted with approval of advisor.

Industrial Engineering Courses (IE)

222	Introduction to Manufacturing Production planning, programming and operation of metal cutting machinery.	2:1:3
311	IE Seminar I Identifying and analyzing Industrial Engineering problems. <i>Corequisite: IE 330, admission to IE department.</i>	1:1:0
330	Industrial Engineering Introduction to Industrial Engineering, its tools and techniques.	3:3:0
3301	Survey of Industrial Engineering The origins and evolution of Industrial Engineering. The problem solving techniques available and their applications. <i>Not open to students majoring in engineering.</i>	3:3:0
3303	Economic Analysis and Design Capital budgeting, Depreciation and income taxes. Decisions under uncertainty. <i>Prerequisite: Egr 223, Mth 3370.</i>	3:3:0

332	Industrial Engineering Analysis I Descriptive analysis of Engineering Data, probability distributions applied to engineering design, sampling in an engineering environment, estimation. <i>Prerequisite: Mth 241.</i>	3:3:0
3311	Machining Processes Theory and practice of machine tool applications, safety quality and economics. Introduction to digital programming of machine tools and processes. <i>Not open to students majoring in engineering.</i> <i>Prerequisite: BASIC Programming, Junior standing.</i>	3:1:3
333	Engineering Economy Economics applied to the evaluation of engineering proposals. The effects of depreciation, taxation and interest rates. <i>Not open to students majoring in engineering.</i> <i>Prerequisite: Mth 1341.</i>	3:3:0
335	Accounting for Engineers Introduction to principles of bookkeeping and cost accounting. Use of cost records to help the engineer/executive make decisions.	3:3:0
338	Work Design Determination of work content, layout, methods, and times required for manufacturing tasks. Design of jobs and workplace for productivity and human value content. <i>Prerequisite: Mth 3370 or IE 332.</i>	3:2:3
339	Manufacturing Materials and Process Functional and economic selection of materials and processes in manufacturing. <i>Not open to students majoring in engineering.</i> <i>Prerequisite: Chm 143 or equivalent, IE 3311.</i>	3:3:0
430	Quality Assurance and Control Assurance that products perform as intended. Reducing or eliminating defective output. <i>Prerequisite: Mth 3370 or IE 332.</i>	3:3:0
4301	Quality Control Applications 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. <i>Not open to students majoring in engineering.</i> <i>Prerequisite: Mth 234.</i>	3:3:0
431	Computer Applications in Industrial Engineering Computer Aided Manufacturing—Design problems in the areas of computer numerical control, robotics and computer vision are presented. Manufacturing Control Systems are discussed as they relate to a Computer Integrated Manufacturing (CIM) environment. <i>Prerequisite: BASIC programming, IE 222 or equivalent, and Senior standing.</i>	3:3:0
4315	Organization and Management The theory of organization and management. How the executive functions to achieve the organization's goals. <i>Prerequisite: Junior standing.</i>	3:3:0
4318	Industrial and Product Safety Loss control engineering. Mandatory and voluntary standards. Product liability. <i>Prerequisite: Senior standing.</i>	3:3:0
432	Statistical Decision Making for Engineers Analysis of data to help the engineer/executive make decisions. Evaluation of performance claims. <i>Mth 3370 or IE 332 and Mth 3301. Junior standing in engineering.</i>	3:3:0
434	Materials Science and Manufacturing Processes Basic principles underlying the behavior of engineering materials and methods of processing these materials. <i>Prerequisite: IE 222, Chm 141 or equivalent.</i>	3:3:0
435	Production and Inventory Control Techniques for planning and controlling production and inventories. Modern materials requirements planning. <i>Prerequisite: Mth 3370 or IE 332, IE 330.</i>	3:3:0
4351	Production and Inventory Systems The design and operation of systems for managing production and inventories. <i>Not open to students majoring in engineering.</i> <i>Prerequisite: Mth 234, CS 131.</i>	3:3:0

- 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 222, 330, 3303, 338, 434 and engineering core.
- 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, Egr 223 and IE 3303.
- 436 Work Measurement** 3:2:3
Analysis of layout, methods and motion. Measurement of work content and time manual and machine tasks. Setting time standards.
Not open to students majoring in engineering.

Department of Mechanical Engineering

Program accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology.

Department Chair: Victor Zaloom

2014 Cherry Building, Phone 880-8769

Professors: Martinez, Mei, Young

Associate Professors: Boughton, Corder, Joshi

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
Egr 335 CAD/CAG 3	ME 334 Engineering Analysis I 3
American History 3	EE 333 Electronics I 3
English Literature 3	English Literature 3

Fourth Year

First Semester	
ME 421 Engineering Systems Design	2
ME 4313 Thermal Systems Design	3
ME 4319 Materials Science	3
ME 4323 Elements of Mechanical Design II	3
*Tech Elective	3
POLS 231 American Government I	3
17	

Second Semester	
ME 4316 Engineering Design Project	3
ME 4317 Engineering Analysis II	3
ME Elective	3
POLS 232 American Government II	3
Free Elective	3
ME 411 Seminar	1
16	

Total Semester Hours 135

**At least three 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. <i>Prerequisite: ME 3311 and ME 338 or concurrent with both.</i>	
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. <i>Prerequisite: Egr 231 and CE 232 or concurrent with instructor's approval.</i>	
331	Transport Theory	3:3:0
	Theory of conduction and potential flow, radiation and convection with engineering techniques and applications. <i>Prerequisite: Mth 3401 and ME 3311.</i>	
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. <i>Prerequisite: Egr 231, 234, CE 232 and Mth 3401.</i>	
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. Completion of a design project. <i>Prerequisite: CE 232 and ME 330 or concurrent with instructor's approval.</i>	
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. <i>Prerequisite: ME 3311 or concurrent with instructor's approval.</i>	
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. <i>Prerequisite: Mth 3401 and Egr 234.</i>	
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. <i>Prerequisite: ME 334 and Senior standing.</i>	
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. <i>Prerequisite: ME 331 and ME 334.</i>	
4312	Gas Dynamics	3:3:0
	Fundamentals of one-dimensional compressible flow. An introduction to multidimensional wave phenomena with various applications. <i>Prerequisite: ME 4313 or concurrent.</i>	
4313	Thermal Systems Design	3:3:0
	Heat transfer study with emphasis on heat exchanger design, optimization of energy exchange, economics and design feasibility. <i>Prerequisite: ME 331, 334, 338.</i>	

- 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 concurrent.
- 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 or concurrent.
- 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 or concurrent with either one.
- 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 332, 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 notations are used.
Prerequisite: ME 3311 and ME 331 or concurrent.
- 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-cylinder 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. Application of these principles is made by analyzing the stress and deflection in a beam having a steel-concrete-steel sandwich configuration. Beam theory is extended to improve the comparison of results with that found from non-linear finite element analysis.

Prerequisite: CE 232 and ME 334.

Department of Mathematics

Department Chair: John R. Cannon

205 Lucas Building, Phone 880-8792

Director of Mathematics Instruction: Sam M. Wood, Jr.

Professors: Berzsenyi, Cannon, Crim, Stark

Professor Emeritus: Bell (1979), Latimer (1979)

Associate Professors: Baj, Brenizer, Dingle, Laidacker, Matheson, Price, Wood

Assistant Professors: Baker, Chiou, Green, Harvill, Lauffer, Parrish, Read, 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 provides students with the opportunity to work with fellow mathematics 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 programming 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

Entrance into all mathematics courses is determined by the advisor in the student's major department, consistent with course prerequisites and possible SAT requirements for entry level courses. Students who do not have an adequate SAT score are to initiate their mathematics with MTH 1314.

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 certificate – secondary with a teaching field in Mathematics may choose one of two options: Option 1 provides certification only in Mathematics, Option 2 requires an approved 24-hour second teaching field and provides certification in Mathematics and another approved area.

For details concerning requirements for teacher certification and information on professional education courses, consult the College of Education section in this bulletin.

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 American Government I, II
 - 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 1345, 233, 331, 335, 338, 3370, 4315
 - c. Mth Electives—seven-to-nine semester hours at the 300/3000 level or higher depending on program of study.
 - d. CS—seven semester hours
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

1. Additional General Requirements: 10-12 Hours
Foreign Language
2. Additional Major requirements: Select three courses from the List: Mth 3311, 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

Total Hours 124-126

Bachelor of Science - Mathematics Major

1. Additional general requirements: None
2. Additional major requirements: Seven-to-nine hours
Select three courses from the list: Mth 3311, 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.

Total Hours 124-126

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: Seven-to-nine hours
Select three courses from the list: Mth 4202, 4203, 431, 4316, 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 - Statistics Concentration

(See Description under Bachelor of Science - Mathematics Science - Applied Mathematics Concentration)

1. Additional General Requirements: None
2. Additional Major Requirements: Nine hours
 - a. Select one course from the list: Mth 4321, 4322
 - b. Select one course from the list: Mth 3321, 433, 4316
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

Standard Curriculum-For All Degree Programs

First Year

First Semester		Second Semester	
Eng Composition	3	Eng Composition	3
Mth 148 Calculus and Analytic Geometry I	4	Computer Science	3
Mth 1345 Discrete Mathematics	3	Mth 149 Calculus and Analytic Geometry II	4
Humanities & Social Science Elective	3	Mth 233 Linear Algebra I	3
Science/Lab or Foreign Language	3-4	Science/Lab Elective or Foreign Language	4
PE/MLb/MS	1	PE/MLb/MS	1
	<u>17 or 18</u>		<u>18</u>

Second Year

First Semester		Second Semester	
Mth 241 Calculus and Analytic Geometry III	4	*English Literature	3
English Literature	3	Mth 331 Ordinary Diff Equ	3
His Soph American	3	Mth 3370 Intro to Theory Stat Info	3
POLS 231 American Government I	3	POLS 232 American Government II	3
PE/MLb/MS	1	His Soph American	3
	<u>17</u>	PE/MLb/MS	1
			<u>16</u>

Third Year

First Semester	Second Semester
Mth 335 Modern Algebra 3	Mth 338 Advanced Calculus 3
Computer Science 3	Mth 4315 Numerical Analysis 3
**Professional Elective 3	Mth Sci Elective 3
Mth Sci Electives 6	**Professional Elective 3
15	15

Fourth Year

First Semester	Second Semester
Mth Sci Elective 3-6	Mth Sci Elective 3
**Professional Elective 6	Humanities or Social Science Elective 3
**Elective 3-6	**Professional Elective 3
15-18	12-15

*In place of English literature, the student may choose a course in Speech, Technical Report Writing or Foreign Language.
 **To be selected with the approval of the student's advisor.

Mathematics Courses (Mth)

- 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.
- 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, Mth 1334 or concurrent.
- 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
 Intensive review of algebra, trigonometry and analytic geometry. Prepares students for Mth 148 and 236.
Prerequisite: Two years of high school algebra and trigonometry.
- 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.
- 1345 Discrete Mathematics** 3:3:0
 An introduction to combinatorial and finite mathematics required in the study of computer science. Topics include special functions such as truncation, floor and ceiling, number theory, matrix algebra, summation notation, logic and Boolean algebra, probability, combinatorics, graph theory, difference equations and recurrence relations.
Prerequisite: Mth 1334 or its equivalent.
- 1360 Mathematics I for Elementary School Teachers** 3:3:0
 Sets, the system of whole numbers, the system of integers, elementary number theory, the system of rationals, and the system of real numbers.
Prerequisite: Mth 1314 or its equivalent. For Elementary Education majors only.
- 1362 Mathematics II for Elementary School Teachers** 3:3:0
 Probability and statistics, elementary geometry, congruence and similarity, measurement, coordinate geometry, and an introduction to computers.
Prerequisite: Mth 1360. 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, parametric equations and vectors.
Prerequisite: Mth 148 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
 Sequences, series, functions of several variables, vector analysis, partial derivatives, multiple integrals and differential equations.
Prerequisite: Mth 149 or its 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 or 1362. For Elementary Education majors only.
- 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 237 (Mth 149) and Mth 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 1362, 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 or 1362.
- 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 or 1362.
- 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 1411.
- 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 (or 237).

- 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, Lebesgue integral.
Prerequisite: Mth 241
- 3401 Differential Equations and Linear Algebra** 4:4:0
Classical techniques for ordinary differential equations, linear algebra, linear systems of ordinary differential equations, series solutions and Laplace transforms.
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 or Mth 331, and CS 1411, 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 1411.
- 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 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.
Prerequisite: Mth 241 and 3370.
- 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.



Lamar Communications students get "real world" experience producing live news broadcasts.

College of Fine Arts and Communication

Departments: Art, Communication, Music

W. Brock Brentlinger, Ph.D., Dean

Dishman Art Gallery, Phone 880-8137

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. Teacher Certification, All Levels
4. Bachelor of Science, Speech or Mass Communication Major
 - a. Speech—Public Address Major
 - b. Speech—Speech Pathology and Audiology Major
 - c. Speech—Theatre Major
 - d. Communication

The Bachelor of Arts is offered in all of the above disciplines except Communication.

5. Bachelor of General Studies Fine Arts

Descriptions of graduate programs leading to the Master of Music, Master of Music Education, Master of Science in Speech and Master of Science in 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 elements 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 jazz, 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 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 elements of line, color, space and form common to all visual arts.	3:3:0
231	Studies in Italian Culture 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. <i>Summers only. (LU-Rome only)</i>	3:2:4
331	Experiential Learning in the Arts 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.	3:0:9
439	Seminar in the Fine Arts 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.	3:3:0

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 a personal curricular plan, i.e., to follow a special interest within the arts, or to complement the student's 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/Speech 3
Eng 2311 English Literature 3	POLS 232 American Government II 3
POLS 231 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
Mus 110 Recital Attendance 1	Mus 110 Recital Attendance 1
Elective 4	Elective 3
Elective 4	Elective 4
15	14

Fourth Year

First Semester	
The 436 History of Theater	3
Elective	3
Elective	3
Elective	3
Elective	3
	15

Second Semester	
The 430 Creative Communication	3
Elective	3
Elective	3
Elective	3
Elective	3
	15

Department of Art

Department Chair: James K. Hill

100 Art Building, Phone 880-8141

Professors: Newman, Rogan

Associate Professors: Hill, Madden, O'Neill

Assistant Professors: Fitzpatrick, Jack, Lokensgard

The Department of Art offers undergraduate instruction leading to the Bachelor of Fine Arts Degree in Graphic Design and Studio. Students may elect courses that further professional development in the following areas: Graphic Design, Illustration, Computer Graphics, Photography, Painting, Drawing, Printmaking, Sculpture, and Ceramics. The Bachelor of Science degree is offered in Art Education, Studio Art, and Graphic Design. The following subject areas may be selected for further professional study in the visual arts: Illustration, Graphic Design, and Computer Graphics. Art electives are available for non-majors who desire experiences in the visual arts as part of their general education.

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 Head during the first semester of their Senior year.

During either the Fall or Spring semester prior to graduation, a candidate for a degree in art will be required to take Senior Thesis and prepare an exhibition. 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.

A minor in art is available to students in other programs or departments by earning 18 hours of credit approved by the department head.

Transfer credit of Freshman and Sophomore art courses is in compliance with the Transfer Curriculum for Visual Arts adopted by the Texas Higher Education Coordinating Board.

Recommended Programs of Study

Bachelor of Fine Arts-Graphic Design

Bachelor of Fine Arts in Graphic Design requires 72 hours of academic foundations with 60 credit hours of professional program.

First Year

First Semester	
Art 131 Drawing I	3
Art 133 Design I	3
Art 135 Art Appreciation	3
English Composition	3
PE Activity	1
Mth/Laboratory Science	3-4
	16-17

Second Semester	
Art 132 Drawing II	3
Art 134 Design II	3
Hum 131 Appreciation of Music and Theater	3
English Composition	3
PE Activity	1
Mth/Laboratory Science	3-4
	16-17

Second Year***First Semester**

Art 231 Drawing III	3
Art 233 Design III	3
Art 235 Art History Survey I	3
PE Activity	2
Eng Literature	3
Mth 1334 or above	3
	<hr/>
	17-18

Second Semester

Art 232 Drawing IV	3
Art 236 Art History II	3
Art 237 Graphic Design I	3
PE Activity	2
Eng Literature/Spc/Foreign Language	3
Mth/Laboratory Science	3-4
	<hr/>
	17-18

Third Year**First Semester**

Art 139 Photography I	3
Art 3313 Illustration I	3
Art Elective	3
Sophomore American History	3
POLS 231 American Government I	3
General Elective	3
	<hr/>
	18

Second Semester

Art Elective	3
Art 3343 Graphic Design III	3
Art History Elective	3
Sophomore American History	3
POLS 232 American Government II	3
General Elective	3
	<hr/>
	18

Fourth Year**First Semester**

Art Elective	3
Art 3355 Printmaking I	3
Art 3316 Watercolor I	3
Art History Elective	3
General Elective	3
	<hr/>
	15

Second Semester

Art 4399 Thesis	3
Art Elective	3
Art Elective	3
Art Elective	3
Art History Elective	3
	<hr/>
	15

*Art 235-236 prerequisite to all Art 300-400 level courses for art majors.

Bachelor of Fine Arts - Studio Art

Bachelor of Fine Arts in Studio requires 72 credit hours of academic foundations, 60 credit hours of professional program to include courses in the following areas:

Painting: 3316, 3317, 3326, 3327, 4316, 4326

Printmaking: 3365, 4355, 4399

Drawing: 3325, 4315, 4325

Sculpture: 3375, 4375

Ceramic: 3386, 4376

First Year**First Semester**

Art 131 Drawing I	3
Art 133 Design I	3
Art 135 Art Appreciation	3
English Composition	3
PE Activity	1
Mth 1334 or above	3
	<hr/>
	16

Second Semester

Art 132 Drawing II	3
Art 134 Design II	3
Hum 131 Apprec of Music & Theatre	3
English Composition	3
PE Activity	1
Mth/Laboratory Science	3-4
	<hr/>
	16-17

Second Year***First Semester**

Art 231 Drawing III	3
Art 233 Design III	3
Art 235 Art History Survey I	3
PE Activity	2
Eng Literature	3
Mth/Laboratory Science	3-4
	<hr/>
	17-18

Second Semester

Art 232 Drawing IV	3
Art 234 Sculpture	3
Art 236 Art History II	3
Art 238 Painting I	3
PE Activity	2
Eng Literature/Spc/Foreign Language	3
	<hr/>
	17

Third Year

First Semester	Second Semester
Art 3315 Drawing V 3	Art Elective 3
Art 139 Photography I 3	Art History Elective 3
Art 3355 Printmaking I 3	Sophomore American History 3
Sophomore American History 3	POLS 232 American Government II 3
POLS 231 American Government I 3	Art 3335 or 3376 3
Mth/Lab Science 3-4	
17-18	15

Fourth Year

First Semester	Second Semester
Art Elective 3	Art 4399 Thesis 3
Art Elective 3	Art Elective 3
Art Studio Elective (upper div) 3	Art Studio Elective (upper div) 3
Art History Elective 3	Art History Elective 3
General Elective 3	General Elective 3
General Elective 3	General Elective 3
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 1334 or above	3
Foundation Elective	3	Foundation Elective	3
		C&I 2101	1
	16		17

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	1
English Literature	3	Science (Laboratory)	4
PE Activity	1	Speech 131	3
Science (Laboratory)	4	Art 237 Graphic Design I	3
	17		17

Third Year

First Semester		Second Semester	
Art 3355 Printmaking I	3	C&I 3325 Needs of Special Learner	3
Art 3371 Studies in Visual Art	3	POLS 232 American Government II	3
C&I 331 Introduction to American Public Education	3	Sophomore American History	3
C&I 332 Human Learning	3	CS 130	3
POLS 231 American Government I	3	Art 139 Photography I	3
Sophomore American History	3	Art Electives	3
	18		18

Fourth Year

First Semester		Second Semester	
Art 3376 Ceramics I	3	C&I 463 Student Teaching All Levels/Special	6
C&I 3326 Reading Strategies for Content Areas	2	C&I 434 Elementary Methodology and Classroom Management	3
C&I 338 Secondary Curriculum and Methodology	3	Art Elective	3
Art 3316 Watercolor I	3		
Art Electives	6		
	17		12

*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 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.
2. Professional Development
3. Approved electives to complete a total of 132 semester hours.

For details concerning requirements for teacher certification and information on professional education courses, consult the College of Education section in this bulletin.

Art Courses (Art)

131	Drawing I A beginning course investigating a variety of drawing media, techniques and subjects, exploring perceptual and descriptive possibilities.	3:6:0
132	Drawing II Continuation of Drawing I stressing the expressive and conceptual aspects of drawing. <i>Prerequisite: Art 131.</i>	3:6:0
133	Design I The study of the elements and concepts of two-dimensional design.	3:6:0
134	Design II Continuation of Design I with emphasis upon three-dimensional concept. <i>Prerequisite: Art 133.</i>	3:6:0
135	Art Appreciation An introductory course emphasizing the understanding and appreciation of visual arts (painting, sculpture, architecture) Open to all students.	3:3:0
139	Photography I An introduction to basic photographic processes and techniques used as an art medium.	3:6:0
231	Drawing III A life drawing course emphasizing structure and action of the human figure. <i>Prerequisite: Art 132.</i>	3:6:0
232	Drawing IV A continuation of Drawing III with emphasis on individual expression. <i>Prerequisite: Art 231.</i>	3:6:0
233	Design III An advanced investigation into the problems of two-dimensional form with emphasis on individual expression. <i>Prerequisite: Art 134.</i>	3:6:0
234	Sculpture I An exploration of the various sculptural approaches in a variety of media including additive and subtractive techniques. <i>Prerequisite: Art 132 and 134.</i>	3:6:0
235	Art History Survey I A survey of painting, sculpture, architecture and the minor arts from prehistoric times to the 14th Century.	3:3:0
236	Art History Survey II A survey of painting, sculpture, architecture and the minor arts from the 14th Century to the present.	3:3:0
237	Graphic Design I An introduction to photo-mechanical reproduction, camera ready art for reproduction, typesetting, text design and page layout.	3:6:0
238	Painting I Exploring the potentials of painting media with emphasis on color and composition. <i>Prerequisite: Art 132 and 134.</i>	3:6:0
239	Photography II Advanced study of black and white photography as an art medium. <i>Prerequisite: Art 139</i>	3:6:0
3303	Color Photography An introduction to color printing techniques and the use of color analyzers. <i>Prerequisite: Art 239</i>	3:6:0
3313	Illustration I A media course. The preparation and execution of graphic material for reproduction.	3:6:0
3315	Drawing V Continuation of drawing and experimentation with various media for their adaptability to drawing principles. <i>Prerequisite: Art 232.</i>	3:6:0
3316	Watercolor I Study and practice in the planning and execution of paintings in transparent and opaque watercolor. <i>Prerequisite: Art 233. May be repeated for credit.</i>	3:6:0
3317	Painting II Continuation of Painting I with emphasis on individual expression. <i>Prerequisite: Art 238. May be repeated for credit.</i>	3:6:0
3323	Illustration II Experimentation with various techniques and/or media. Continuation of Art 3313. <i>Prerequisite: Art 3313.</i>	3:6:0

3325	Drawing VI Continuation of Art 3315. May be repeated for credit. <i>Prerequisite: Art 3315.</i>	3:6:0
3326	Watercolor II A continuation of 3316. May be repeated for credit. <i>Prerequisite: Art 3316.</i>	3:6:0
3327	Painting III Continuation of 3317. May be repeated for credit. <i>Prerequisite: Art 3317.</i>	3:6:0
3333	Graphic Design II The study of advanced layout for media advertising, collateral and editorial material and the basic preparation of art for reproduction. <i>Prerequisite: Art 237.</i>	3:6:0
3335	Crafts Basic processes of textile design, weaving and jewelry. May be repeated for credit.	3:6:0
3343	Graphic Design III Advertising layout in color and introductory package design. Hard copy production and use in practical problems of design and reproduction. <i>Prerequisite: Art 139, 3313, 3333</i>	3:6:0
3353	Fashion Layout and Illustration A study of basic layout and illustration for fashion advertising.	3:6:0
3355	Printmaking I An introduction to printmaking with an emphasis on intaglio and relief processes. <i>Prerequisite: Art 233.</i>	3:6:0
3365	Printmaking II A continuation of Art 3355 with emphasis on planographic and serigraphic techniques. May be repeated for credit. <i>Prerequisite: Art 3355.</i>	3:6:0
3371	Studies in Visual Art Applications of essential elements in the visual arts.	3:3:0
3375	Sculpture II Application of the principles of sculpture through experiment in clay, plaster and various materials. May be repeated for credit. <i>Prerequisite: Art 234.</i>	3:6:0
3376	Ceramics I Investigation and practice in ceramic processes: forming and firing techniques. May be repeated for credit. <i>Prerequisite: Art 234 or permission of instructor.</i>	3:6:0
3381	Secondary Art Education Curricula, methods, and materials for the secondary school. <i>Spring semester only.</i>	3:3:0
3386	Ceramics II Opportunities for specialization in ceramic processes. May be repeated for credit. <i>Prerequisite: Art 3376.</i>	3:6:0
3393	Large Format Camera Photography Introduction to the use of the view camera. <i>Prerequisite: Art 139.</i>	3:6:0
4315	Drawing VII Specialized problems in studio area. May be repeated for credit. <i>Prerequisite: Art 232.</i>	3:6:0
4316	Painting IV Specialized problems in studio area. May be repeated for credit.	3:6:0
4325	Drawing VIII A continuation of Drawing VII. May be repeated for credit. <i>Prerequisite: Art 3325.</i>	3:6:0
4326	Painting V A continuation of Painting IV. May be repeated for credit. <i>Prerequisite: Art 4316.</i>	3:6:0
4331	Crafts Elementary Education An introduction to various craft materials and techniques used in the elementary school. Course may be repeated for credit.	3:6:0
4336	Professional Practices A study of the practical aspects of the art profession with emphasis on health hazards, business procedures, and art law.	3:3:0

4338	Renaissance Art Study of 15th and 16th century art in the Western world.	3:3:0
4341	Crafts Secondary Education An introduction to the various craft materials and techniques used in the secondary school. Course may be repeated for credit.	3:6:0
4343	Computers in Art I Introduction to computers as a creative tool. Language and logic. Development of image making techniques, data handling and design.	3:6:0
4348	19th & 20th Century Abstract Art Foundation of Abstraction in European Art from Neo-Classicism through Surrealism.	3:3:0
4353	Computers in Art II Advanced topics in computer image making. Language and logic. Development of animation, sound and visual communications techniques. May be repeated for credit. <i>Prerequisite: Art 4343.</i>	3:6:0
4355	Printmaking III Specialized problems in studio area. May be repeated for credit. <i>Prerequisite: Art 3365.</i>	3:6:0
4358	American Art The development of painting, sculpture and architecture in the United States from Colonial times to the present.	3:3:0
4363	Computers in Art III Advanced topics in computer image making. Student selected problems dealing with specific areas of computer images. Work done on a contract basis with specified objectives and tangible results. May be repeated for credit. <i>Prerequisite: Art 4343.</i>	3:6:0
4368	Contemporary Art A historical and critical analysis of painting from 1900 to the present.	3:3:0
4373	Field Study in Graphic Design Familiarization with the overall commercial art field through actual experience. Time to be arranged. Permission of instructor.	3:6:0
4375	Sculpture III Specialized problems in studio area. May be repeated for credit. <i>Prerequisite: Art 3375.</i>	3:6:0
4376	Ceramics III Specialized problems in studio area. May be repeated for credit. <i>Prerequisite: Art 3376.</i>	3:6:0
4378	Primitive Art A study of the development and nature of primitive art.	3:3:0
4388	Modern Architecture and Sculpture The development and evolution of modern architecture and sculpture from the late 19th century to the present.	3:3:0
4391	Directed Individual Study Study of specialized areas in Art History. May be repeated for credit. <i>Prerequisite: Permission of instructor.</i>	3:A:0
4393	Directed Individual Study Study of specialized area within commercial art field. May be repeated for credit. <i>Prerequisite: Permission of instructor.</i>	3:A:0
4395	Directed Individual Study Study of specialized area within fine arts field. May be repeated for credit. <i>Prerequisite: Permission of instructor.</i>	3:A:0
4398	History of Photography The development and evolution of photography from its invention in 1839 to the present.	3:3:0
4399	Thesis Student-selected problem encompassing an area of emphasis with suitable research, production, written support and oral presentation to a faculty committee. Studio art majors may repeat for credit.	3:6:0

Department of Communication

Department Chair: Olen T. Pederson 201 Communication Building, Phone 880-8153

Professors: Achilles, Brentlinger, Holland, James, Moulton, Pederson

Associate Professors: Andrews, Baker, Bethel, Harrigan, Rehman, Roth, Wilson

Assistant Professors: Gunnarson, Winney

Instructors: Clem, Gale, Gonzales, Mistic, Perkins, Placette

The Department of Communication offers the Bachelor of Science and Bachelor of Arts Degrees in Speech and the Bachelor of Science Degree in Communication. Majors in Public Address, Theatre and Speech Pathology/Audiology are available under the bachelor's degree in speech. Teacher certification plans are offered in the fields of Speech, Theatre, Journalism and Deaf Education. The undergraduate major in Speech Pathology/Audiology is considered to be pre-professional in nature and provides a foundation for graduate study. A master's degree is required for professional employment in these two fields (see Graduate Catalogue).

Students wishing to pursue a major in the Department must meet the following admission requirements: 1) A minimum score of 700 on the SAT or a composite score of 15 on the ACT, and 2) A minimum score of 35 on the Test of Standard Written English. Transfer students and those wishing to enter the Department through a change of major 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. Grades of "D" are not accepted in courses in the major area.

Programs of Study

The academic foundation course work required for all majors in the Department is listed below. The required courses for each major are listed under the major heading.

General Requirements:

English Composition—Six hours

English Literature—Six hours

(Spc 235 may substitute for three hours of English Lit)

Mathematics—Six hours (Must be at the level of 1334 and above)

Lab Science—Eight hours

Political Science 231

Political Science 232

History 231

History 232

Computer Science 130 or 1311

Humanities 130, 131, or 132

Physical Activity—Four Semesters

Foundation Electives (Hour requirement varies with major)

Bachelor's Degree in Speech - Public Address Major

This Program is designed to prepare students for careers in public relations, human resource development, personnel management, teaching at the secondary level and may serve as an appropriate curriculum for those wishing to enter law school or pursue graduate education. Professional elective course work is selected on the basis of the student's career objectives.

Required Courses in Major: Spc 131, 1302, 232, 235, 238, 332, 334, 4324, 433, 434.

Bachelor's Degree in Speech - Theatre Major

This Program provides a well-balanced curriculum which prepares students to assume positions in either professional theatre or as teachers in secondary schools. Students participate in all phases of scheduled theatre productions and through coursework and participation are provided with a background in both performance and technical

theatre. It is recommended that students pursue the Bachelor of Arts Degree which requires the completion of 12 semester hours of a foreign language.

Required courses in major: The 131, 132, 135, 137, 231, 232, 334, 336, 338, 434, 439. The teacher certification requirements differ slightly and interested students should see the section below for specifics.

Bachelor's Degree in Speech - Pathology/Audiology Major

Accredited by the American Speech-Language-Hearing Association, this Program of Study leads to either the Bachelor of Arts or Bachelor of Science Degree in Speech (Pathology and Audiology). The Undergraduate program is considered pre-professional in nature and completion of the Master's Degree is required for professional employment (see the Graduate Catalogue for requirements). Upon completion of the Master's Degree, students are eligible for professional certification and state licensure. Through course work and clinical practice, students are prepared to assume positions as speech pathologists or audiologists in public schools, hospitals, clinics, rehabilitation centers and in private practice.

Required courses in major: Spc 1301, 1302, 1303, 2301, 2302, 2303, 2304, 2305, 3301, 3302, 3306, 4301, 4302 (Note: Spc 1302, 1303 and 2304 are included as academic foundation courses. Psy 131 and 241 are also required foundation courses).

Bachelor of Science Degree in Communication

This Program is designed to prepare students for careers in Radio-TV-Film and Journalism. All students complete a 30 semester hour common core curriculum which insures basic competence in writing and reporting, broadcasting, film, persuasion, advertising and the legal aspects of mass media. An additional 14 semester hours of coursework in Radio-TV-Film and Journalism is selected under the category of "professional electives" to complete the major.

Required courses in major: Spc 131, Com 131, 133, 231, 234, 2384 or 2385, 3383 or 4383, 431, and Spc 332 or 334 or 434. In addition, all students must enroll in Com 3234, Practicum in Communication, at least once.

Teacher Certification Plans

Teacher certification programs are available in Speech, Journalism, Theatre and Deaf Education. With the exception of the 36 semester hour program in Deaf Education, teacher certification plans require the completion of two-24 semester hour teaching fields plus the required professional education course work. In addition to the general academic foundation courses previously listed, students seeking certification must complete Spc 131 or 331 and C&I 2101.

The following professional education courses are required: C&I 331, 332, 3225, 3226, 338, 434, 483.

The following courses are required for certification in the teaching field specified.

Speech-Secondary: Spc 232, 233, 235, 238, 332, 334, 4324, 434.

Journalism-Secondary: Com 133, 231, 232, 333, 335, 3381, 431, 4383.

Theatre (Drama)-Secondary: The 132, 135, 137, 210, 232, 332, 338, 435, 4371.

Deaf Education (Hearing Impaired): Spc 1303, 2302, 2303, 239, 3305, 3392, 4302, 4303, 4305, 4306, 4326, and C&I 2301.

For details concerning requirements for teacher certification and information on professional education courses, consult the College of Education section in this bulletin.

Recommended Course Sequence

Each major in the Department varies in terms of course requirements. Students should seek the guidance of their faculty advisor in planning their individual programs of study. The program listed below is for general reference only.

First Year	Second Year
English Composition 6	English Literature 6
Mathematics 6	POLS 231 and 232 6
Lab Science 8	His 231 and 232 6
Humanities 130, 131, or 132 3	Computer Science 130 or 1311 3
Major core courses 6	Major core courses 9
Physical Activity 2-4	Physical Activity 2-4
32-33	32-34
Third Year	Fourth Year
Major core courses 9	Major core courses 9-12
Foundation Electives 15	Professional Electives 21
Professional Electives 9	
33	30-33

Communication Courses (Com)

131	Introduction to Mass Communication Study of mass communication, analysis of media conglomerates, advertising, popular culture, and media-audience interaction.	3:3:0
133	News Writing A study of the principles of news writing, with emphasis upon concise, accurate, objective writing. Proficiency in typewriting is required.	3:2:3
231	News Reporting 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. <i>Prerequisite: Com 133 with a grade of "C" or higher.</i>	3:2:3
232	Editing and Copyreading The development and use of printing, type recognition, type harmony, preparing editorial material, writing headlines and correcting copy. <i>Prerequisite: Com 231 with a grade of "C" or higher.</i>	3:2:3
234	Introduction to Broadcasting A general introduction to the field of broadcasting, including a study of station and network organization and control by law and societal forces. <i>Prerequisite: COM 131 with a grade of "C" or higher.</i>	
2341	Principles of Broadcast Production 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. <i>Prerequisite: Com 234 with a grade of "C" or higher or consent of instructor.</i>	3:2:3
2384	Evolution of Motion Pictures Development of American film as an art form, industry, mass medium and "language."	3:3:0
2385	Film Genre Familiar entertainment film types: science fiction, horror, gangster, and Westerns are analyzed for formal properties and ideological content. May be repeated when units vary.	3:3:0
3234	Practicum in Communication Laboratory experience in 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 six semester hours. Approval required prior to registration. <i>Prerequisite: Print Journalism—COM 231; Radio—COM 337; TV—COM 338; Advertising—COM 4383 with a grade of "C" or higher.</i>	
333	Advanced Journalism Writing Writing focusing on skills required for sports, human interest, feature, editorial and specific subject area columns. <i>Prerequisite: Com 231 with a grade of "C" or higher.</i>	3:2:3
335	Journalism and Magazine Production Analysis and participation in all phases of magazine production. <i>Prerequisite: Com 231 and 232 with a grade of "C" or higher.</i>	3:2:3
337	Audio Production Principles and practice of introductory professional audio recording and editing. <i>Prerequisite: Com 131 and 234 with a grade of "C" or higher.</i>	3:2:3
338	Television Production Activities in writing, acting, directing, producing, announcing and engineering various types of television productions. <i>Prerequisites: COM 131 and 234 with a grade of "C" or higher.</i>	

3381	Photo Journalism Principles of photography applied to the specific area of photojournalism. Each student must have access to a 35mm adjustable camera. <i>Prerequisites: Art 139 and COM 234 with a grade of "C" or higher.</i>	
3383	Broadcast Advertising Broadcast advertising theory and techniques in the total marketing mix. <i>Prerequisite: Com 131 with a grade of "C" or higher.</i>	3:3:0
339	Television Field Production Principles and practices, editing and post production. <i>Prerequisite: COM 338 with a grade of "C" or higher.</i>	
430	Communication Problems and Projects Problems analyzed and evaluated under individual guidance of faculty. Course may be repeated for credit two times. Consent of faculty member required prior to registration.	3:3:3
431	Laws and Ethics of the Mass Media 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. <i>Prerequisite: Com 131, 231 and 234 with a grade of "C" or higher.</i>	3:3:0
432	History and Principles of American Journalism 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.	3:3:0
433	Mass Communication and Society Analysis of impact of mass communication on society.	3:3:0
438	Broadcast News Study and practice in developing news for broadcasting. Various types of news material, including the documentary, its procurement and presentation. <i>Prerequisite: COM 133, 338, and 339 with a grade of "C" or higher.</i>	
4383	Print Advertising A study of advertising, including copy writing, type selection, layout and design for print media. <i>Prerequisite: Com 131 and 133 with a grade of "C" or higher.</i>	3:2:3
4391	Advanced Television Production Seeks to develop professional competence in television production of news, commercials, documentaries and special programs. <i>Prerequisite: COM 338 and 339 with a grade of "C" or higher.</i>	

Speech Courses (Spc)

1301	Introduction to Speech, Hearing and Language Disorders Overview of the profession of speech pathology, audiology and deaf education.	3:3:0
1302	Phonology Descriptive phonetics, phonetic alphabet systems.	3:3:0
1303	Speech, Hearing and Voice Science Introduction to the scientific variables of speech, hearing, and voice.	3:3:0
131	Public Speaking Principles and practice of public speaking.	3:3:0
211	Parliamentary Procedure Theory and practice in conducting a business meeting through standard parliamentary procedures.	1:1:0
222	Forensic Activity 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. <i>Prerequisite: Permission of instructor required.</i>	2:0:4
230	Articulation Disorders Prevention, assessment, etiology and remediation of articulation disorders.	3:3:0
2301	Introduction to Speech Pathology Etiology and treatment of speech disorders with emphasis on functional disorders.	3:3:0
2302	Introduction to Deaf Studies Historical and current considerations in the deaf education profession.	3:3:0
2303	Introduction to Audiology Anatomy of ear, physics of sound, test modes and procedures.	3:3:0
2304	Anatomy and Physiology of Speech and Hearing Study of the anatomy/physiology of speech and auditory mechanisms.	3:3:0
2305	Introduction to Manual Communication Systems Introduction to finger spelling and the language of signs.	3:3:0
232	Interpersonal Communication Principles and practices of interpersonal communication in various settings.	3:3:0

233	Advanced Public Speaking Principles and practice in special occasion speaking. <i>Prerequisite: Spc 131 or instructor's permission.</i>	3:3:0
235	Oral Interpretation of Literature Instruction and practice in the principles of speech applied to performance in the interpretation of prose and poetry. <i>Prerequisite: Soph Eng Lit or instructor's permission.</i>	3:3:0
238	Argumentation A study of evidence and reasoning and a critique of them as reflected in current public affairs.	3:3:0
239	Language for the Deaf Survey of systems of teaching language development in nursery and preschool age children.	3:3:0
3301	Research in Speech and Hearing Research methods, statistics and experimental design in the speech and hearing sciences.	3:3:0
3302	Language Development and Language Disorders Normal language development, language assessment, and intervention.	3:3:0
3305	Manual Communication II Intermediate skills course in American Sign Language.	3:3:0
331	Business and Professional Speech Application of the fundamentals of speech production to the needs of the professional person.	3:3:0
332	Group Methods and Discussion Communication theory of group processes. Practice in group problem solving. <i>Prerequisite: Spc 232.</i>	3:3:0
333	Interpretation of Children's Literature 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.	3:3:0
334	Interviewing Theory and practice in the several types of interviews current in the United States.	3:3:0
3392	Speech for the Deaf Speech development and teaching strategies in the young deaf child.	3:3:0
430	Problems and Projects in Speech 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.	3:A:0
4301	Advanced Speech Pathology Advanced speech pathology: introduction to specific communication disorders, diagnostic procedures and therapy programs.	3:3:0
4302	Advanced Audiology Hearing evaluation procedures, clinical evaluation techniques and instrumentation.	3:3:0
4303	Clinical Practicum Introduction to clinical practice in speech pathology, audiology and deaf education. This course may be repeated for clinical clock hours accumulation.	3:0:9
4305	Manual Communication III Expanded American Sign Language for the Deaf.	3:3:0
4306	Advanced Language, Reading for the Deaf Methods of teaching language and reading to the hearing impaired.	3:3:0
432	Public Relations Theory, principles, and practice of public relations. <i>Prerequisite: Com 131, 133, 234 and 338 or permission of instructor.</i>	3:3:0
4324	Non Verbal Communication Theory, research, analysis and practice in non verbal communication.	3:3:0
4326	Instructional Methods in Deaf Studies	3:3:0
433	Organizational Communication Theory, principles, and practice of communication within organizations. <i>Prerequisite: Spc 232 and 334 or instructor's permission.</i>	3:3:0
434	Persuasion 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. <i>Prerequisite: Spc 131 and 238 or instructor's permission.</i>	3:3:0
4341	Advanced Interviewing Study of modern communication and related research as applied in business and professional interviews.	3:3:0
4381	Rhetoric of Social Movements Analysis of the rhetoric of selected social movements in American history.	3:3:0

- 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 pronunciation Skills through systematic drills.
- 132 Stagecraft** 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 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.	3:3:0
431	Problems and Projects in Theater Students will perform activities in one of the following areas: acting, directing, producing, designing and constructing costumes and stage settings for the school theater. <i>May be repeated three times for credit.</i>	3:A:0
432	Advanced Scene Design Advanced study of the history and development of scene design. <i>Prerequisite: The 332</i>	3:2:3
4360	Musical Comedy 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.	2:0:6
4371	Directing Secondary School Dramatic Activities Principles involved in directing activities in secondary schools. Practical experience with workshops constitutes part of this course.	3:3:0
433	Theatre Management and Public Relations	3:3:3
434	Contemporary Dramatic Literature Study and analysis of dramatic literature and playwrights from Isben to the present. <i>Prerequisite: The 334</i>	3:3:3
435	Costume Design Advanced study of principles and practices of costume design. Emphasis on drafting and historical accuracy. <i>Prerequisite: The 332</i>	3:2:3
436	History of Theater II A survey of theater from the Restoration to the present day. <i>Prerequisite: The 336</i>	3:3:0
437	Acting IV Detailed study of period styles and techniques for acting. <i>Prerequisite: The 337</i>	3:3:0
438	Advanced Directing Principles and practices of play directing. For upper level theatre majors only.	3:3:3
439	Summer Repetory Theater Participation in a variety of shows during the summer season to enable the student to work in a professional repertory atmosphere. May be repeated two times for credit.	3:2:3

Department of Music

Department Chair: James M. Simmons **106 Music Building, Phone 880-8144**

Professors: Carlucci, LeBlanc, Parks, Truncala

Associate Professors: Collier, Holmes, Ornelas, Simmons

Assistant Professors: Babin, Berthiaume, Culbertson, Dyess, Gilman, Johnson, Pelkey, Thomas

Adjunct Instructors: Baker, Boone, Graham, Hines, Mahady, Shine-Gale, Wadenpfohl

Academic Advisor: Black

The Department of Music is an accredited institutional member of the National Association of Schools of Music. Three undergraduate degrees offered are 1) Bachelor of Music in Performance, 2) Bachelor of Music in Composition, and 3) Bachelor of Music (with Teacher Certification). The Bachelor of Music (with Teacher Certification) offers specialization in either Band, Choir, or Orchestra. Two graduate degrees offered are 1) Master of Music in Performance and 2) Master of Music Education.

Requirements for Music Majors

1. Meet the basic requirements for all degree programs.
2. Complete one of the programs of study listed below.
3. Students will be required to successfully complete seven semesters of Mus 110, Recital Attendance, to be approved for graduation.

4. A music course with a grade of "D" will not apply toward graduation.
5. All students must continue to take secondary piano for as many consecutive semesters as are required for the completion of the piano proficiency exam.
6. Piano majors (certification programs only) will take secondary voice or secondary instruments, whichever applies to their intended course of study (vocal or instrumental) for as many consecutive semesters as are required for the completion of the proficiency exam.

Music Minor

Students who elect music as a minor must complete a minimum of 18 hours in music theory, applied music, or music literature, six of which must be advanced courses. Two semesters of Recital Attendance (Mus 110) will also be required. Music laboratory credit may be used at the discretion of the Department Head. Music Education certification is not available to students who minor in music.

Audition Procedure

To be accepted as a Music Major at Lamar University, students, both new and transfer, must pass an audition in their major performance area (applied music). Auditions may be scheduled by contacting the Lamar University Department of Music, which sets a series of audition dates each year. Special audition dates can be arranged, if necessary.

Theory Placement Examination

All music major applicants will be given a Theory Placement Examination to determine their level of theoretical knowledge. The examination will include: key signatures, triads, treble and bass clefs, musical terms, ear training.

Applied Music Requirements

General Requirements

Music majors must be enrolled in applied music each long semester until the applied music requirement is met.

The required sequence of courses includes a minimum of four semesters of lower level (1200 series) courses in applied music.

Students in the teacher certification program must complete three additional semesters of upper level (3200 series) applied music courses. Students in the performance program must complete four semesters of upper level (3400 series) applied music courses.

Completion of the applied music requirement signifies the attainment of a given level of artistic performance rather than the completion of a specific number of semester hours credit. Students may, at the discretion of the applied music faculty, be required to repeat any course in the applied music sequence; in such a case, the course may be repeated for credit. The applied music requirement is not satisfied until approval of the faculty is obtained.

Any student registered for an applied music course (except 1101, 1143, 1183, or 1201) will be required to perform a jury examination each semester. With the permission of the private instructor, a student may be exempt from the jury examination in the semester of the Senior Recital performance.

Recital Performance Requirements

Bachelor of Music (with Teacher Certification): Each Bachelor of Music (with Teacher Certification) major will perform a Senior Recital 30 minutes in length. This may be performed in a joint recital and will be performed during the senior year. This recital can be scheduled during the regular recital period or as an afternoon recital. The student must be

enrolled in applied music in the semester during which the recital is performed. **Bachelor of Music (in Performance):** 1) Upon completion of four semesters of lower level applied music, the student must pass a performance jury examination to be eligible to advance to upper level (3400 series) applied music courses. 2) During the second semester of upper level instruction, the performance major must play a Junior Audition Recital. This recital must be 30 minutes in length. The recital may be given jointly with another student; however, each performer must complete their portion of the recital in succession. The recital can be given during the regularly scheduled recital period or as an afternoon recital. A satisfactory Junior Audition Recital is a prerequisite for proceeding to a Senior Performance Recital. 3) During the fourth semester of upper level study, a Senior Performance Recital will be given. This recital must be 60 minutes in length and may be scheduled during the regular recital time, at the afternoon recital time, or at an approved evening time. **General Policies for Performance Major auditions and Recitals:** 1) A performance major must make formal application for admission to upper-level applied music, Junior Audition Recital, and Senior Recital at least two weeks prior to the jury or recital. The application forms are available from the Chair of the Music Department and should be turned in to the applied teacher. 2) To advance to upper level applied music, the performance major must have two-thirds approval of the Sophomore jury. 3) Junior Audition Recitals and Senior Recitals will be graded on a pass/fail basis by a faculty panel of three, chosen by the Chair of the Music Department and the private teacher. Two-thirds approval of the faculty panel is necessary to pass.

Ensemble Participation

Participation in a major ensemble is required of full-time music students each long semester, except when student teaching.

Major ensembles are as follows:

For vocal and keyboard (vocal emphasis) students: MLb 1101 (A Cappella Choir) or MLb 1104 (Grand Choir) (Placement by Audition)

For wind, keyboard (instrumental emphasis), and percussion students:

MLb 124 (Marching Band) and MLb 1150 (Symphonic Band)

For string students: MLb 1120 (Orchestra)

Recommended Programs of Study

Bachelor of Music - Composition

First Year	Second Year
AM Major Instrument 4	AM Major Applied 4
MLb Band, Choir, Orchestra 2	MLb Band, Choir, Orchestra 2
MTy 132-133 Elementary Harmony 6	MLt 222 Music Literature 2
MLt 121 Music Literature 2	MTy 232-233 Advanced Harmony 6
English Composition 6	English Literature 3
PE (2 semesters) 2	Sophomore American History 6
AM 1143, Secondary Piano 2	POLS 231, 232 American Government I 6
Elective (Math, Science) 8	PE (2 semesters) 2
MLb 114 Repertoire & Pedagogy 2	MLb 114 Repertoire & Pedagogy 2
34	*Non Music Elective 3
	36
Third Year	Fourth Year
AM Major Applied 8	AM Major Applied 8
MLb Band, Choir, Orchestra 2	MLb Band, Choir, Orchestra 2
MTy 321-322 Counterpoint 4	MLt 421, 422 4
MLt 333-334 Music History 6	MLt 336 or MLt 337 3
MLb 114 Repertoire & Pedagogy 2	MUS 337 or MED 338 3
Elective (Math, Science) 6	MTy 425 Band Arranging 2
Hum 132 Appreciation of Theater and Art 3	Music Elective 4
Non Music Elective 3	MLb 114 Repertoire & Pedagogy 2
34	28

*Must be three semester hours of literature, technical report writing, speech communication or foreign language.

Instrumental (Strings)

First Year	
AM Major Instrument	4
MLb 114 Repertoire & Pedagogy	2
AM 1143, Secondary Piano	2
MTy 132, 133 Elementary Harmony	6
MLb 1120 Orchestra	2
MLt 121 Music Literature	2
English (Composition)	6
PE (2 semesters)	2
Elective (Math, Science)	8

34

Third Year	
AM Major Instrument	8
MLb 114 Repertoire & Pedagogy	2
MLb 1120 Orchestra	2
MLt 333, 334 Music History	6
POLS 231, 232	6
Electives (Mth, Science)	6
MTy 321, 322 Counterpoint	4

34

Second Year	
AM Major Instrument	4
MLb 114 Repertoire & Pedagogy	2
Chamber Music Ensemble	2
MLt 222 Music Literature	2
MTy 232-233 Advanced Harmony	6
MLb 1120 Orchestra	2
Sophomore American History	6
Hum 132	3
Non Music Elective	3
English Literature	3
*Non Music Elective	3
PE (2 semesters)	2

38

Fourth Year	
AM Major Instrument	8
MLb 114 Repertoire & Pedagogy	2
MLb 1120 Orchestra	2
MLt 337 Instrumental Literature	3
MUS 338 Instrumental Conducting	3
MTy 421, 422	4
Chamber Music Electives	2
Non Music Elective	3

27

*Must be three semester hours of literature, technical report writing, speech communication or foreign language.

Instrumental (Wind or Percussion)

First Year	
AM Major Instrument	4
MLb 114 Repertoire & Pedagogy	2
AM 1143, Secondary Piano	2
MTy 132, 133 Elementary Harmony	6
MLb 124 Marching Band-(PE)	2
MLb 1150 Symphonic Band	1
MLt 121 Music Literature	2
Music Electives	2
English Composition	6
Elective (Mth, Science)	8

35

Third Year	
AM Major Instrument	8
MLb 114 Repertoire & Pedagogy	2
MLt 333-334 Music History	6
Chamber Music Ensembles	2
MTy 321, 322 Counterpoint	4
MLb 124 Marching Band (PE)	2
POLS 231, 232 American Government	6
Electives (Mth, Science)	6
MLb 1150 Symphonic Band	1

37

Second Year	
AM Major Instrument	4
MLb 114 Repertoire & Pedagogy	2
MLt 222 Music Literature	2
MTy 232, 233 Advanced Harmony	6
Music Electives	2
MLb 124 Marching Band-(PE)	2
Sophomore American History	6
English Literature	3
*Non Music Elective	3
Non Music Electives	4
MLb 1150 Symphonic Band	1

35

Fourth Year	
AM Major Instrument	8
MLb 114 Repertoire & Pedagogy	2
MLt 337 Instrumental Literature	3
MUS 338 Instrumental Conducting	3
MTy 421, 422	4
MLb 124 Marching Band (PE)	2
MLb 1150 Symphonic Band	1
Non Music Elective	3

26

*Must be three semester hours of literature, technical report writing, speech communication or foreign language.

Keyboard

First Year

AM Major Instrument	4
MLb 114 Repertoire & Pedagogy	2
Major Performing Ensemble	2
AM elective	2
MLt 121 Music Literature	2
MTy 132, 133 Elementary Harmony	6
English Composition	6
PE (2 semesters)	2
Elective (Mth, Science)	8

34

Third Year

AM Major Instrument	8
MLb 114 Repertoire & Pedagogy	2
Major Performing Ensemble	2
Chamber Music Ensemble	2
MTy 321, 322 Counterpoint	4
MLt 333, 334 Music History	6
POLS 231, 232 American Government	6
Elective (Mth, Science)	6

36

Second Year

AM Major Instrument	4
MLb 114 Repertoire & Pedagogy	2
MLt 222 Music Literature	2
Major Performing Ensemble	2
Chamber Music Ensemble	2
MTy 232, 233 Advanced Harmony	6
English Literature	3
*Non Music Elective	3
Sophomore American History	6
Non Music Electives	6
PE (2 semesters)	2

38

Fourth Year

AM Major Instrument	8
MLb 114 Repertoire & Pedagogy	2
Major Performing Ensemble	2
MTy 421, 422	4
MLt 336 or MLT 337	3
MUS 337 or 338	3
Hum 132	3
Non Music Elective	3

28

**Must be three semester hours of literature, technical report writing, speech communication or foreign language.*

Vocal

First Year

AM Major Applied	4
MLb 114 Repertoire & Pedagogy	2
AM 1143, Secondary Piano	2
Choir	2
MTy 132, 133 Elementary Harmony	6
MLt 121 Music Literature	2
English Composition	6
Italian, German	6
PE (2 semesters)	2

32

Third Year

AM Major Applied	8
MLb 114 Repertoire & Pedagogy	2
Choir	2
MLb 210 Opera	2
MTy 321, 322 Counterpoint	4
MLt 336 Choral Literature	3
MUS 337 Choral Conducting	3
MLt 333, 334 Music History	6
Elective (Mth, Science)	8

38

Second Year

AM Major Applied	4
MLb 114 Repertoire & Pedagogy	2
Choir	2
MLt 222 Music Literature	2
MTy 232, 233 Advanced Harmony	6
English Literature	3
Spc 1302 Phonology	3
French	3
Elective (Mth, Science)	3
Sophomore American History	6
PE (2 semesters)	2

36

Fourth Year

AM Major Applied	8
MLb 114 Repertoire & Pedagogy	2
Choir	2
MLb 210 Opera	2
MTy 421, 422	4
POLS 231, 232	6
Hum 132	3
Elective (Mth, Science)	3

30

Bachelor of Music (with Teacher Certification) (Band)+

(Qualifies for teacher certification music, all-levels)

First Year		Second Year	
AM 1143	1	MTy 232, 233 Advanced Harmony	6
MLt 121 Music Literature	2	MLt 222 Music Literature	2
MTy 132, 133 Elementary Harmony	6	AM Major Instrument	4
AM Major Instrument	4	MLb 1150 Symphonic Band	1
MLb 1150 Symphonic Band	1	MUS 335 Choral Music	3
English Composition	6	MUS 331 Elementary Methods	3
Mth	6	MUS 315 Percussion	1
Laboratory Science	8	English Literature	6
Spc 131 or 331	3	POLS 231, 232	6
MLb 124 Marching Band	2	Sophomore American History	6
		MLb 124 Marching Band	2
		C&I 2101	1
	39		41
Third Year		Fourth Year	
AM Major Instrument	4	AM Major Instrument	2
MLb 1150 Symphonic Band	1	MTy 421, 422	4
MUS 311, 312, 313, 314, 411, 412	6	C&I 434	3
MUS 317	1	C&I 463	6
MUS 336, 338	6	CS 130	3
MLt 333, 334 Music History	6	MLb 124 Marching Band	2
C&I 331, 332, 338	9		
C&I 3326	3		
MLb 124 Marching Band	2		
MTy 322 Counterpoint	2		
	40		20

+For details concerning requirements for teacher certification and information on professional education courses, consult the College of Education section in this bulletin.

Bachelor of Music (with Teacher Certification) (Orchestra)+

(Qualifies for teacher certification music, all-levels)

First Year		Second Year	
AM 1143	1	MTy 232, 233 Advanced Harmony	6
MLt 121 Music Literature	2	MLt 222 Music Literature	2
MTy 132, 133 Elementary Harmony	6	AM Major Instrument	4
AM Major Instrument	4	MLb 1120 Orchestra	2
MLb 1120 Orchestra	2	MUS 311, 312, 315, 411, 412	5
English Composition	6	MUS 313 or 314 (Opposite of major)	1
Mth	6	English Literature	6
Laboratory Science	8	Sophomore American History	6
PE (2 semesters)	2	POLS 231, 232	6
		PE (2 semesters)	2
		C&I 2101	1
	37		41
Third Year		Fourth Year	
MTy 322	2	MTy 421, 422	4
AM Major Instrument	4	AM Major Instrument	2
MLb 1120 Orchestra	2	MLb 1120 Orchestra	1
MLt 333, 334 Music History	6	Spc 131 or 331	3
MUS 331, 335	6	CS 130	3
MUS 336, 338	6	C&I 434	3
C&I 331, 332, 338	9	C&I 463	6
C&I 3326	3		
	38		22

+For details concerning requirements for teacher certification and information on professional education courses, consult the College of Education section in this bulletin.

Bachelor of Music (with Teacher Certification) (Vocal/Choir)[†]

(Qualifies for teacher certification music, all-levels)

First Year	Second Year
*AM 1143 1	MTy 232, 233 Advanced Harmony 6
MLt 121 Music Literature 2	MLt 222 Music Literature 2
MTy 132, 133 Elementary Harmony 6	AM Major Applied 4
AM Major Applied 4	Choir 2
Choir 2	MUS 336 Instrumental Music 3
English Composition 6	English Literature 6
Mth 6	Sophomore American History 6
Laboratory Science 8	POLS 231, 232 6
PE (2 semesters) 2	PE (2 semesters) 2
	Opera 1
	C&I 2101 1
37	39
Third Year	Fourth Year
MTy 322 Counterpoint 2	MTy 421 Form & Analysis 2
AM Major Applied 4	AM Major Applied 2
Choir 2	Choir 1
MLt 333, 334 Music History 6	Spc 131 or 331 3
MUS 335, 337 6	CS 130 3
MUS 331, 332 6	C&I 434 3
C&I 331, 332, 338 9	C&I 463 6
C&I 3326 3	MTy 422 Orchestration 2
Opera 1	
39	22

DEGREE REQUIREMENT: A student must participate in two opera productions.

**Piano majors will substitute secondary voice for AM 1143 and must take voice for as many consecutive semesters as necessary to pass the vocal proficiency exam.*

†For details concerning requirements for teacher certification and information on professional education courses, consult the College of Education section in this bulletin.

Applied Music Courses (AM)

(Refer to Applied Music Requirements in preceding Music Department materials for complete explanation and requirements for Applied Music courses)

- 1101 Beginning Band or Orchestral Instruments
- 1143 Secondary Piano
- 1183 Secondary Voice
- 1201 Beginning Band or Orchestral Instruments
- 1203, 3203, 3403 Bassoon
- 1211, 3211, 3411 Cello
- 1215, 3215, 3415 Clarinet
- 1217, 3217, 3417 Trumpet
- 1221, 3221, 3421 Flute
- 1223, 3223, 3423 French Horn
- 1227, 3227, 3427 Guitar
- 1231, 3231, 3431 Oboe
- 1233, 3233, 3433 Organ
- 1241, 3241, 3441 Piano
- 1251, 3251, 3451 Saxophone
- 1253, 3253, 3453 Percussion

- 1257, 3257, 3457 Double Bass
 1261, 3261, 3461 Trombone
 1262, 3262, 3462 Euphonium
 1263, 3263, 3463 Tuba
 1271, 3271, 3471 Viola
 1273, 3273, 3473 Violin
 1281, 3281, 3481 Voice
 1283, 3283, 3483 Composition

*One 30-minute private lesson and one one-hour class per week.

**One hour private lesson and one one-hour class per week.

Music Courses (MUS)

- 110 Recital**
 Attendance at scheduled recitals and concerts as prescribed by the Department of Music. Successful completion of seven semesters required for graduation. Course may be taken seven times for credit and is offered on a pass/fail basis.
- 131 Basics of Music**
 Designed to familiarize non-music majors with basic elementary music fundamentals and skills.
- 311 Brass**
 Music, materials, and basic techniques for trumpet and horn.
- 312 Brass**
 Music, materials, and basic techniques for trombone, baritone and tuba.
- 313 Strings**
 Music, materials, and basic techniques for violin and viola.
- 314 Strings**
 Music, materials, and basic techniques for cello and bass.
- 315 Percussion**
 Music, materials, and basic techniques for percussion instruments.
- 317 Marching Methods**
 Basic marching maneuvers. Charting various types of half-time shows, 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 Kodaly Concepts of Music**
 The study of elementary folk music, materials and techniques using the Kodaly concept.
Prerequisite: MTY 131 (or equivalent).
- 332 Advanced Kodaly Concepts of Music**
 The study of advanced folk music, materials and techniques with the Kodaly concept.
Prerequisite: MUS 331 and MTY 131 (or equivalent).
- 334 Hymnody**
 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**
 A detailed study of music, materials, and administrative techniques for choirs, glee clubs and small choral ensembles.
- 336 Instrumental Music**
 A detailed study of music, materials and administrative techniques for bands, orchestras and other instrumental music ensembles.
- 337 Choral Conducting**
 Basic patterns and rudiments of choral conducting and rehearsal techniques.
Prerequisites: Some vocal study, piano keyboard, one year of vocal laboratory and MTY 232.
- 338 Instrumental Conducting**
 Basic patterns and rudiments of instrumental conducting and rehearsal techniques.
Prerequisites: Applied music, instrumental performing laboratory and MTY 232.
- 410 Seminar**
 A general study of the problems encountered in music.
- 411 Woodwinds**
 Music, materials and basic techniques for flute, clarinet and saxophone.
- 412 Woodwinds**
 Music, materials and basic techniques for oboe and bassoon.

- 430 Problems and Projects in Music Education**
An individual problem or project will be assigned in the music education area as needs arise.
Prerequisite: Consent of the Department Head.
- 431 Problems and Projects in Music Literature**
An individual problem or project will be assigned in the music literature area as needs arise.
Prerequisite: Consent of the Department Head.
- 432 Problems and Projects in Music Theory**
An individual problem or project will be assigned in the music theory area as needs arise.
Prerequisite: Consent of the Department Head.

Music Laboratory (MLb)*

*Courses in Music Laboratory may be repeated for credit. Total credit not to exceed eight semesters for any one course.

- | | | |
|-------------|---|--------------|
| 113 | Jazz Improvisation
Designed to provide background in the art of improvisation. | 1:1:0 |
| 114 | Repertoire and Pedagogy
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. | 1:1:0 |
| 117 | Dance Band
Organized to furnish training in all styles of dance band performance. Open to any student who can qualify. | 1:0:3 |
| 118 | Percussion Ensemble
The study and performance of chamber percussion literature. Designed to provide experience on all of the percussion instruments. | 1:0:1 |
| 119 | Steel Band
A performing ensemble representing the traditional steel band concept. Public concerts given regularly. | 1:0:1 |
| 120 | Orchestra
A performing ensemble open to all University students who can qualify. Required of any student majoring in a string instrument. | 1:0:6 |
| 124 | Marching Band
The study and performance of march music and military drill. Open to any student who can qualify. Four semesters completes PE requirement. | 2:0:6 |
| 1150 | Symphonic Band
Performs symphonic wind ensemble and band repertoire. Tryout required for admittance. | 1:0:6 |
| 1101 | A Cappella Choir
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. | 1:0:6 |
| 1102 | Cardinal Singers
Performing choral ensemble with instrumental combo accompaniment specializing in popular and folk repertoire. Audition required. Open to qualified students from other departments. | 1:0:6 |
| 1104 | Grand Chorus
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. | 1:0:3 |
| 1105 | Cardinal Moods
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 | 1:0:6 |
| 1106 | Cardinal Reflections
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. | 1:0:6 |
| 210 | Opera
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. | 1:0:3 |
| 2260 | Musical Comedy
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. | 2:0:6 |
| 423 | Chamber Music Ensemble
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. | 2:0:5 |

Music Literature Courses (MLt)

- 121 Music Literature**
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.
- 222 Music Literature**
A survey of the literature and advances made in music from the Medieval era to the mid-Renaissance.
- 333 Music History**
A survey of the literature and advances made in music from Mid-Renaissance to the pre-Classic era. Two hours of listening required per week in addition to class lecture.
Prerequisite: MLT 121-122 and MTY 232-233.
- 334 Music History**
A survey of the literature and advances made in music from the Classic period to 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.
- 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.

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.



With a little help from a friend, a psychology student studies animal behavior and records his observations during a lab session.

College of Health and Behavioral Sciences

Departments: Allied Health, Nursing, Psychology
Myrtle L. Bell, Ed.D., Dean

100 Ward Health Sciences Building
Phone 880-8811

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 overall 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.*

**These programs are offered with the approval of the Texas Education Agency.*

Department of Allied Health

Department Chair: William David Short

**254A Ward Health Sciences Building
Phone: 880-8845**

Assistant Professors: Bailey, Ball, Bronson, Fearing-Tornwall, Reynard, Short

Instructors: Young, Hoosier, Huval

Clinical Instructors: Benoit, Gurrieri, Walker

Adjunct Professors: Baxley, Bharathi, Burd, Darnell, Day, Franco, Giglio, Jepson, Maddox, Pinchback, Shaw, Sweet, Troups, Weaver

Part-time Clinical Instructor: Frederick

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 specific programs. 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 some cases, a personal interview.
6. Admission is limited by available space in clinical practice areas.

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 aid is 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.

Dental Hygiene

Program Director: Gail Bailey

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.

While there are no course entry prerequisites, students are encouraged to take the supporting courses prior to applying to the program. Supporting courses include all courses other than those designated with a "DH" preceding the course number. After acceptance, in order to progress in the Dental Hygiene Program, a minimum of "C" is required in all phases (lecture and laboratory/clinical practice) of dental hygiene courses and in Bio 143/144, Bio 245, and HEc 138.

A minimum 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. 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		Summer Session II	
Bio 143 Anatomy and Physiology	4	Bio 144 Anatomy and Physiology	4
DH 131 Orientation to Dental Hygiene	3	DH 127 Morphology and Occlusion	2
HS 121 Health Care Concepts	2		
	9		6
Fall Semester		Spring Semester	
DH 132 Dental Radiology	3	DH 147 Dental Materials	4
DH 134 Head and Neck Anatomy and Physiology	3	DH 148 General and Oral Pathology	4
DH 155 Pre Clinic	5	DH 146 Clinic I	4
Chem 143 Introductory Chemistry	4	HEc 138 Principals of Nutrition	3
	15		15

Second Year

Summer Session I		Summer Session II	
Bio 245 Introductory Microbiology	4	DH 221 Diet Analysis	2
English 131	3	DH 223 Periodontology	2
	7	Mth 1334 or TM 134	3
			7

Fall Semester	Spring Semester
Psy 131 Introduction to Psych. 3	DH 225 Community Dentistry II 2
DH 224 Pharmacology 2	DH 266 Clinic III 6
DH 233 Community Dentistry I 3	English 132 3
DH 265 Clinic II 6	Soc 131 Introduction to Sociology 3
14	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 A detailed anatomical study of human teeth, their eruption, exfoliation and occlusion. <i>Prerequisite: Admission to the program.</i>	2:1:3
131	Orientation to Dental Hygiene Practice Orientation and introduction to the practice of dental hygiene, including his/her role in all phases of dental specialty practice. <i>Prerequisite: Admission to the program.</i>	3:2:3
132	Dental Radiology A detailed study of theories, clinical techniques and principles of dental radiographic practice. Radiation safety, protection, exposure, production, development and interpretation are emphasized. <i>Prerequisite: Admission to the program; Bio 143/144.</i>	3:2:3
134	Head and Neck Anatomy and Physiology A detailed study of the embryology, histology, anatomy and physiology of the head and neck region, including common dysfunctions of the temporomandibular joint. <i>Prerequisite: Admission to the program or permission of program director; Bio 143/144.</i>	3:3:0
147	Dental Materials A study of the sources, properties, uses and techniques of manipulation of the various materials used in dentistry. <i>Prerequisite: Admission to the program.</i>	4:3:3
148	General and Oral Pathology A histopathological study of oral lesions, pathogenic conditions of particular significance to dentistry and principles of general and oral pathology. <i>Prerequisite: Admission to the program or permission of program director.</i>	4:4:0
155	Pre-Clinic Theoretical and clinical instruction in oral prophylaxis and preventive procedures. Transfer to patient simulation completed on manikins and class partners. <i>Prerequisite: Admission to the program.</i>	5:3:6
146	Clinic I Continuation and mastery of basic oral prophylaxis procedures. Advancement of complete patient care conducted in the dental hygiene clinic. <i>Prerequisite: Admission to the program; DH 155.</i>	4:2:8
221	Dietary Analysis Study and application of diet analysis consultation skills in influencing patient behavior change relative to diet and dental disease. <i>Prerequisite: Admission to the program; HEC 138.</i>	2:2:0
223	Periodontology Comparative study of normal and diseased periodontium and the effects of structural, functional and environmental agents. <i>Prerequisite: Admission to the program; Bio 245.</i>	2:2:0
224	Pharmacology Study of the uses and actions of drugs including drug side effects, contra-indications and oral manifestations. <i>Prerequisite: Admission to the program; Chem 143, Bio 245.</i>	2:2:0
225	Community Dentistry II 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. <i>Prerequisite: Admission to the program; DH 233.</i>	2:1:3
233	Community Dentistry I Theory and principles of public health including epidemiology, statistics, preventive medicine, health behavior and program planning related to governmental, sociological, environmental and cultural concerns. <i>Prerequisite: Admission to the program.</i>	3:3:0

- 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 155 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 265.

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.

The program is accredited by the Committee on Allied Health Education and Accreditation in cooperation with the Joint Review Committee on Education in Radiologic Technology, and graduates are eligible to apply for admission to the certification exam administered by the American Registry of Technologists.

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. The number of students is limited to the space available in clinical agencies.

The Radiologic Technology Program encourages students to take supporting courses prior to admission into the program. Supporting courses include all courses other than those designated with a "RA" preceding the course number. Although students are not required to take the supporting courses prior to admission to the program, the successful completion of these courses may enhance the students probability of acceptance into the program.

Radiologic Technology 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 science courses and courses taken within the College of Health & Behavioral Sciences 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

Fall Semester

RA 132 Radiographic Principles	3
RA 143 Radiographic Positioning	4
Math 1334 or TM 134	3
English 131	3
RA 152 Radiographic Practicum I	5
	18

Summer Session II

Bio 144 Anatomy and Physiology	4
RA 131 Orientation to Radiologic Technology	3
	7

Spring Semester

RA 133 Advanced Positioning & Pathology	3
RA 144 Radiographic Physics	4
English 132	3
Psy 131	3
RA 154 Radiographic Practicum II	5
	18

Second Year

Summer Session I	
RA 234 Radiographic Practicum III	3
Fall Semester	
RA 231 Special Procedures	3
RA 242 Advanced Procedures	4
RA 262 Radiographic Practicum V	6

13

Summer Session II	
RA 235 Radiographic Practicum IV	3
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 Introduction to Radiology; including history, organization, production of X-rays, radiation protection, dark-room technique, terminology and examinations performed in radiology department.	3:2:3
132	Radiographic Principles 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.	3:3:0
133	Advanced Positioning & Pathology An intensive study in radiographic positioning to include skulls, trauma, pediatrics and pathology identifications.	3:3:0
143	Radiographic Positioning Procedures in radiology. Basic, advanced contraindications are explored. Topographic anatomy included.	4:3:4
144	Radiographic Physics Intensive study of electromagnetism, electric transformers, electrical rectification, production of X-rays and the preventive maintenance of X-ray machines.	4:3:2
152	Radiographic Practicum I Introduction to the clinical environment in affiliate hospitals. Rotation through different work centers to observe and assist in the operation of the radiology department. <i>Course requires 24 hrs/week of clinical participation.</i>	5:0:24
154	Radiographic Practicum II Students make standard radiographs under close supervision by a qualified radiologic technologist. <i>Course requires 24 hrs/week in clinical participation.</i>	5:0:24
231	Special Procedures Procedures uncommon to the radiology department. Specialized equipment involved. Anatomy, contrast media and radiographic projections used. Analysis of film quality.	3:3:0
233	Radiation Biology Effects of radiation on the human population, methods of protection and dosimetry.	3:3:0
234	Radiographic Practicum III 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.	3:0:40
235	Radiographic Practicum IV A continuation of Ra 234 with increasing emphasis in diagnostic radiology. Course requires 40 hrs/week of clinical participation. <i>Prerequisite: Ra 234.</i>	3:0:40
236	Radiologic Technology Seminar An indepth study of testing methodology. Also covered will be new advances in the field of radiology.	3:3:0
242	Advanced Procedures 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.	4:3:2
262	Radiographic Practicum V Rotation through specialized procedure areas during clinical practice under limited supervision. Course requires 32 hrs/week of clinical participation.	6:0:32
264	Radiographic Practicum VI Rotation through specialized areas in a radiology department. Emphasis on job responsibilities and confidence in skill performance. Course requires 32 hrs/week clinical participation.	6:0:32

Associate of Applied Science - Respiratory Therapy

Program Director: Paul Bronson

The purpose of this program is to prepare students for careers in respiratory care through lectures, laboratories and clinical experience aimed at qualifying the student for certification/registration by the National Board for Respiratory Care. A graduate of this 2-year instructional program is awarded the Associate of Applied Science Degree.

Upon successful completion of 5 semesters of the curriculum the student is eligible to take the Entry Level Certification Examination offered by the national Board for Respiratory Care. After successful completion of the program the graduate is eligible to take the Written Registry Examination and the Clinical Simulation Examinations. A passing score on these two examinations will qualify the individual as a Registered Respiratory Therapist (RRT).

The Respiratory Therapy program encourages students to take supporting courses prior to admission into the program. Supporting courses include all courses other than those designated with an "RT" preceding the course number. Although students are not required to take the courses prior to admission to the program, the successful completion of these courses may enhance the students probability of acceptance into the program.

Completed application forms must be submitted to the director of the respiratory therapy program by May 15 of each year. The program begins the Fall semester of each year. The number of students is limited to the space available in clinical agencies.

A minimum grade of "C" (2.0) must be earned in all science courses and courses taken within the College of Health & Behavioral Sciences for progression in the program. In addition, a grade point average of 2.0 must be maintained in all course work to obtain the Associate of Applied Science Degree.

Associate of Applied Science - Respiratory Therapy

Recommended Program of Study

First Year

Fall Semester	
RT 121 Clinical Medicine I	2
RT 137 RT Procedures I	3
MATH 1334 College Algebra	3
BIO 143 Anatomy & Physiology	4
ENG 131 English Composition	3
HS 121 Health Care Concepts	2

17

Summer Session I	
RT 123 RT Procedures III	2
RT 125 Clinical Practicum II	2

4

Spring Semester	
RT 122 Clinical Medicine	2
RT 138 RT Procedures II	3
RT 131 Clinical Practicum I	3
ENG 132 English Composition	3
BIO 144 Anatomy & Physiology	4

15

Summer Session II	
RT 124 RT Procedures IV	2
RT 126 Clinical Practicum III	2

4

Second Year

Fall Semester	
RT 231 RT Procedures V	3
RT 233 Clinical Practicum IV	3
BIO 245 Microbiology	4
PHY 143 Physics	4

14

Summer Session I	
RT 221 Pulmonary Patho	2
RT 235 Clinical Practicum VI	3

5

Spring Semester	
RT 232 Card/Pul/Renal A&P	3
RT 250 Clinical Practicum V	3
PSY 131 or SOC 131	3
CHEM 143 Chemistry	4

13

Summer Session II	
RT 234 RT Procedures VI	3
RT 236 Clinical Practicum VII	3

6

Respiratory 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.
Prerequisite: Admission into the program.
- 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.
Prerequisite: Completion of Fall Semester requirements.
- 123 Respiratory Care Procedures III** **2:2:1**
 An indepth study of pulmonary function testing.
Prerequisite: Completion of Spring Semester requirements.
- 124 Respiratory Care Procedures IV** **2:2:0**
 An indepth study of EKG and chest x-ray interpretation.
Prerequisite: Completion of SSI requirements.
- 125 Clinical Practicum II** **2:0:16**
 Clinical experience in the hospital under direct supervision stressing pulmonary functions studies, respiratory home care, and bronchoscopy observations.
Prerequisite: Completion of Spring Semester requirements.
- 126 Clinical Practicum III** **2:0:16**
 Clinical experience in the hospital under direct supervision stressing EKG studies, and sleep apnea studies.
Prerequisite: Completion of SSI requirements.
- 131 Clinical Practicum I** **3:0:16**
 Clinical experience in the hospital under direct supervision with the application of medical gas therapy, humidity and aerosol therapy, CPR, and pharmacological agents stressed.
Prerequisite: Completion of Fall Semester requirements.
- 137 Respiratory Care Procedures I** **3:2:3**
 An introduction to Respiratory Care and selected concepts which delineate the role and function of Respiratory Care. Medical Terminology, Medical Gas Therapy, humidity and aerosol therapy, basic C.P.R., chest physical exam, and infection control are emphasized.
Prerequisite: Admission into the program.
- 138 Respiratory Care Procedures II** **3:2:3**
 This course is designed to introduce blood gases, pharmacology, positive pressure breathing, artificial airways, chest physiotherapy, incentive spirometry and basic sciences and pediatric respiratory care.
Prerequisite: Completion of Fall Semester requirements.
- 221 Pulmonary Pathophysiology** **2:2:0**
 An advanced study of disease with emphasis on the diseases which compromise the function of the respiratory apparatus.
Prerequisite: Completion of previous Spring Semester requirements.
- 231 Respiratory Care Procedures V** **3:2:3**
 An introduction to mechanical ventilation (adult, pediatric, and neonatal) cardiopulmonary monitoring.
Prerequisite: Completion of previous SSII requirements.
- 232 Cardiopulmonary/Renal Anatomy & Physiology** **3:3:0**
 Emphasizes the anatomy and physiology of the heart, circulatory system, respiratory system and the excretory system.
Prerequisite: Completion of previous Fall Semester requirements.
- 233 Clinical Practicum IV** **3:0:16**
 Clinical experience in the hospital under direct supervision stressing critical care management in ICU areas.
Prerequisite: Completion of SSII requirements.
- 234 Respiratory Care Procedures VI** **3:2:3**
 An indepth study of advanced cardiac life support and pulmonary rehabilitation.
Prerequisite: Completion of previous SSI requirements.
- 235 Clinical Practicum VI** **3:0:16**
 Clinical experience in the hospital under less direct supervision. The students will be assigned to any and all aspects of respiratory care including emergency room, code team and hyperbaric medicine.
Prerequisite: Completion of previous Spring Semester requirements.
- 236 Clinical Practicum VII** **3:0:16**
 Clinical experience in the hospital under less direct supervision. The students will be assigned to any and all aspects of respiratory care and will conduct teaching rounds.
Prerequisite: Completion of previous SSI requirements.

250 Clinical Practicum V

5:0:24

Clinical experience in the hospital under direct supervision stressing more indepth ICU involvement, intubation rotation through surgery, and rotation through heart cath lab.

Prerequisite: Completion of previous Fall Semester requirements.

Department of Nursing

Department Chair: Eileen Tiedt **233B Ward Health Sciences Building-880-8817**

Professor: Tiedt

Associate Professor: Trussell

Assistant Professors: Boyd, Carroll, Duncan, Esperat, Hall, H. Moss, Price-Nealy, Slaydon, J. Smith, Twiname, Wilsker

Instructors: Bumpus, Creed, Green, Mason, P. Moss, Welch

Clinical Instructors: Galeazzi, Gregory

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 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 the Physical Science courses (minimum grade of "C") and 2.0 (minimum grade of "C") in all other college work for the Baccalaureate Degree is the minimum required for consideration for admission to these programs. Applicants who exceed the minimum requirements and who complete their prerequisites by the end of the Spring semester in which they apply, will receive 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 aid is 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.

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 specialties, 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 grade of "C" with an overall grade point average (GPA) of 2.50 in the Physical Sciences and a minimum grade of "C" in all other prerequisites.
- 2) Have completed all prerequisite courses.
- 3) Submit a complete application and attendant materials to the Admissions Committee by April 15 of the Freshman year.
- 4) See also Admission to Department of Nursing Program criteria on page 261.

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 only 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

*PREREQUISITE

First Semester

Bio 143 Human Anatomy and Physiology	4
Chm 143 Introduction	4
Psy 234 Child Psychology	3
HEc 138 Principles of Nutrition	3
Eng 131 Composition	3
HPE	1
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	18

Second Semester

Bio 144 Human Anatomy and Physiology	4
Chm 144 Introduction	4
Psy 236 Adult Develop. & Aging	3
Soc 131 Introduction to Sociology	3
Eng 132 Composition	3
HPE	1
<hr/>	
	18

Second Year

First Semester

Bio 245 Introductory Microbiology	4
Mth 1334 College Algebra	3
Nur 221 Concepts Basic to Nursing Practice	2
Nur 253 Concepts and Practice of Clinical Nursing	5
Nur 233 Basic Pathophysiology	3
HPE	1
<hr/>	
	18

Second Semester

Nur 284 Nursing Care of the Adult Client I	8
Nur 232 Pharmacologic Basis of Nursing Practice	3
Eng Literature	3
HPE	1
<hr/>	
	15

Third Year

First Semester

Nur 328 Ecology of Nursing	2
Nur 353 Nursing Care of Adult Client II	5
Nur 355 Nursing Care of Adult Client III	5
His 231 American History	3
+Elective (Non Major)	3
<hr/>	
	18

Second Semester

Nur 331 The Community as a Client	3
Nur 382 Nursing the Family I	8
Eng Literature (2)	3
POLS 231 American Government I	3
<hr/>	
	17

Fourth Year

First Semester

Nur 481 Nursing the Family II	8
Nur 430 Research Process in Nursing	3
His 232 American History	3
+Nur Elective	3
<hr/>	
	17

Second Semester

Nur 491 Comprehensive Nursing Practice	9
Nur 433 Senior Seminar	3
POLS 232 American Government II	3
+Elective (non-major)	3
<hr/>	
	18

*Prerequisite courses must be taken prior to admission to the nursing program.
+Students are encouraged to take these courses earlier, if possible.

Bachelor's Degree Nursing Courses (Nur)

221	<p>Concepts Basic to Nursing Practice 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. <i>Prerequisite: Admission to the BSN Program or departmental consent.</i></p>	2:2:0
232	<p>Pharmacologic Basis of Nursing Practice An introduction to pharmacology, principles of therapeutics and clinical applications. <i>Prerequisite: Departmental consent.</i></p>	3:3:0
233	<p>Basic Pathophysiology Study of basic pathophysiology with emphasis on disease processes. Focus on implications for nursing practice. <i>Prerequisite: Admission to the BSN program or department consent.</i></p>	3:3:0
253	<p>Concepts and Practice of Clinical Nursing Beginning application of the nursing process and physical assessment skills. Emphasis on health assessment, maintenance and history taking. <i>Prerequisite: Admission to the BSN Program.</i></p>	5:3:6
284	<p>Nursing Care of the Adult Client I Application of the nursing process and physical assessment skills, emphasizing planning and intervention skills with adult clients experiencing interference in biological health. <i>Prerequisite: Nur 221, 233, 253, admission to BSN Program.</i></p>	8:4:12
328	<p>Ecology of Nursing 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. <i>Prerequisite: Nur 221, 233, 253, 284 or Departmental consent.</i></p>	2:2:0
3305	<p>Directed Study in Nursing 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. <i>Prerequisite: Departmental consent.</i></p>	3:3:0
331	<p>The Community as a Client 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. <i>Prerequisite: Departmental consent.</i></p>	3:3:0
336	<p>Oncology Nursing 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. <i>Prerequisite: Departmental consent.</i></p>	3:3:0
345	<p>Physical Assessment Clinical laboratory and classroom experience in applying physical assessment skills. Appropriate for junior and senior nursing students. <i>Prerequisite: Nur 233 or departmental consent.</i></p>	4:3:3
353	<p>Nursing Care of the Adult Client II A continuation of Nur 284, with emphasis on the adult client experiencing interference with biological health. <i>Prerequisites: Nur 253, 284.</i></p>	5:2:9
355	<p>Nursing Care of the Adult Client III Application of nursing process, emphasizing planning and intervention skills with adult clients experiencing interferences in psychological health. <i>Prerequisites: Nur 253, 284.</i></p>	5:3:6
382	<p>Nursing Care of the Family I Application of nursing process, emphasizing health maintenance of clients and families in community settings. <i>Prerequisite: Nur 253, 284, 353, 355.</i></p>	8:3:15
4301	<p>Special Topics Nursing 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. <i>Prerequisite: Departmental Consent.</i></p>	3:3:0
4305	<p>Directed Study in Nursing 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 be repeated as the content varies. <i>Prerequisite: Departmental consent.</i></p>	3:3:0

- 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.
- 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.
- 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 management 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 to 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.
- 442 Emergency and Disaster Nursing** 4:2:8
A lecture/discussion and clinical practice course designed to provide theory and practice for students interested in emergency and disaster nursing.
Prerequisite: Departmental consent.
- 481 Nursing Care of the Family II** 6:3:15
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 supervised 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 all prerequisite courses 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. See also Admission to Department of Nursing Program Criteria page 261.

Associate of Science - Nursing

Recommended Program of Study

*Prerequisite

Bio 143 Anat & Physiology	4	Bio 144 Anat & Physiology	4
PE Activity	2	Eng 131 Composition	3
	6		7

First Year

Fall Semester		Spring Semester	
Nur 191 Mental & Physical Health	9	Nur 192 Nursing Adult Client I	9
Eng 132 Composition	3	Bio 245 Microbiology	4
Psy 234 Child Psychology	3	PE Activity	2
	15		15

Second Year

Summer Session I		Summer Session II	
His 231 American History	3	Mth 1334 or TM 134	3
PolS 231 American Gov't (Texas)	3	PolS 232 American Gov't	3
	6		6
Fall Semester		Spring Semester	
Nur 261 Maternity Nursing	6	Nur 292 Nursing Adult Client II	9
Nur 262 Nursing Child Client	6	His 232 American History	3
Eng Literature	3		
	15		12

*Prerequisite courses must be taken prior to admission to the nursing program.

Associate Degree Nursing Courses (Nur)

191	Mental and Physical Health I 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. <i>Prerequisite: Admission to ADN Program.</i>	9:5:12
192	Nursing Care of the Adult Client I 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. <i>Prerequisite: Nur 191.</i>	9:5:12
261	Maternity Nursing 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. <i>Prerequisite: Nur 192.</i>	6:4:6
262	Nursing Care of the Child Client Application of concepts basic to the nursing process to the hospitalized child. <i>Prerequisite: Nur 261.</i>	6:4:6
292	Nursing Care of the Adult Client II 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. <i>Prerequisite: Nur 262.</i>	9:4:15

Department of Psychology

Department Chair: Richard G. Marriott	103 Psychology Building
Professors: Barrington, Bell, J. Esser, Marriott, Walker	Phone 880-8285
Assistant Professors: Lindoerfer, Shaheen	
Adjunct Assistant Professor: Duncan	
Adjunct Instructor: P. Esser	

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; select from Mth 1334 or 1335, 1345, 233, 234, 236 or 148, 237 or 149
 - Biology 141-142 General: eight semester hours
 - Foreign Language 12 semester hours completion of the 232 course in a foreign language
 - 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 15 semester hours, a minimum of nine 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 128 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 American Government I, II	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; Select from Mth 1334, 134 or 1335, 1345, 233, 234, 236 or 148, 237 or 149. Six semester hours of computer science or Phy 133, 134 may be used in lieu of mathematics upon completion of six semester hours of mathematics.
 - Biology 141-142 General: eight semester hours
 - Political Science 231, 232 American Government six semester hours
 - Sophomore American History: six semester hours
 - Science: eight semester hours (Geo 141-142; Che 141-142; Che 143-144; or Phy 141-142; Phy 143-144)
 - 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

Third Year	
POLS 231, 232 American Government I, II	6
Psy 342 Methods in Psychology	4
Psy, Advanced	6
Minor	6
Electives and other Psy	9

34

Total 128 hours

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

Fourth Year	
His Sophomore American History	6
Psy 443 Experimental Psychology	4
Psy Advanced	6
Minor	6
Electives and other Psy	9

31

*** 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

Summer	
POLS 231, 232 American Government I, II	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

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 1311	3
***Psy Advanced	3

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)

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.	
234	Child Psychology	3:3:0
	A study of the growth and development of behavior patterns in children.	
236	Adult Development and Aging	3:3:0
	A survey of major issues in adult development and aging including biological, cognitive, personality, social and disease factors.	
	<i>Prerequisite:</i> Psy 131 or 234.	
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.	
330	Psychology of Communication	3:3:0
	A study of the theory, structure and function of communication patterns in various group settings.	
	<i>Prerequisite:</i> Psy 131.	
331	Systems and History of Psychology	3:3:0
	Historical development of psychology. Emphasis on the evolution of major systems of psychology.	
	<i>Prerequisite:</i> Psy 131.	
332	Psychology of Personality	3:3:0
	A study of several of the major theories of personality organization and adjustment processes.	
	<i>Prerequisite:</i> 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.	
	<i>Prerequisite:</i> 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.
- 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.
- 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.
- 4201, 4301 Special Topics in Psychology** 2-3: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.
- 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.



Students are encouraged to enter non-traditional occupational training programs, preparing them for profitable careers.

College of Technical Arts

Departments: Industrial, Related Arts, Technical
Kenneth E. Shipper, Ph.D., Dean

248 Beeson Technical Arts Building
Phone 880-8185

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 MLK Parkway, 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; computer drafting technology; computer electronics and robotics technology; diesel mechanics; fire protection technology; electrical technology; industrial supervision; instrumentation technology; mid-management; machine tools; occupational safety and health; refrigeration and air conditioning technology; real estate and welding.

The appliance repair, child care technology, industrial supervision, machine tools, diesel mechanics, 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 15 degree programs in three departments in the College.

Industrial Department

- Diesel Mechanics
- Electrical Technology
- Fire Protection Technology
- Instrumentation Technology
- Machine Tools
- Occupational Safety and Health
- Refrigeration and Air Conditioning Technology
- Welding

Related Arts Department

- Business Data Processing
- Child Care Technology
- Industrial Technology

Technical Department

- Computer Drafting Technology
- Computer Electronics and Robotics Technology

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.



A student attentively listens to a professor's personal attention by the door from the faculty members of Lamar University Research.

College of Graduate Studies and Research

**Robert D. Moulton, Ph.D., Associate Vice President
for Research and Dean of Graduate Studies**

**103 Wimberly Building
Phone 880-8230**

**Howell H. Gwin, Jr., Ph.D.,
Director of Graduate Studies**

**101 Wimberly Building
Phone 880-8229**

The Graduate College

The Dean of the College of Graduate Studies and Research 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
- Deaf Education
- Health and Physical Education
- Home Economics
- Mathematics
- Psychology
- Speech Communication
- Theater
- Speech Pathology/Audiology

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 College of Graduate Studies and Research, Lamar University, Box 10004, Lamar University Station, Beaumont, Texas 77710.

Admission to a Degree Program

1. Applicants for admission to the Graduate College must submit the following materials to the Graduate Admissions Coordinator at least 30 days before registration.
 - A. An application for admission to the Graduate College.
 - B. An official transcript from each college or university attended.
 - C. Official scores on the aptitude section of the Graduate Record Examination (GRE) sent directly to Lamar University by the Educational Testing Service. (Applicants for the Master of Business Administration degree are not required to take the GRE, but must submit scores on the Graduate Management Admission Test, GMAT. See the College of Business section of the current Graduate Bulletin for specific requirements).

GRE AND GMAT SCORES MORE THAN FIVE YEARS OLD WILL BE ACCEPTED ONLY BY SPECIAL PERMISSION OF THE DEAN/DIRECTOR OF THE GRADUATE COLLEGE.

2. Applicants must meet the following requirements:
 - A. A prospective student must have a bachelor's degree from an institution approved by a recognized accrediting agency.
 - B. All students whose native language is not English must make a minimum score of 500 on the Test of English as a Foreign Language (TOEFL). Individual departments may require higher scores.
 - C. An applicant must meet *ONE* of the following additional criteria.
 1. A minimum combined score of 950 on the Verbal plus Quantitative sections of the Graduate Record Examination.
 2. A minimum combined score of 900 on the Verbal plus Quantitative sections of the GRE *with a minimum of 350 on the Verbal section.*
 3. Minimum scores of 400 on the Verbal section and 400 on the Quantitative section of the GRE with a minimum total of 800 on these two sections.

In academic year 1989-1990 a total of 850 on the Verbal plus Quantitative sections will be required; in academic year 1991-1992 the requirement will increase to 900.

- D. The following departments have established minimum grade point average requirements for admission to their degree programs.
 1. 2.5/4.0 overall *or* on the last 60 hours of undergraduate work:

Biology	Kinesiology
English	Political Science
History	Psychology
Home Economics	Public Administration
 2. 2.0/4.0 overall *or* on the last 60 hours of undergraduate work:

Chemistry

 3. 3.0/4.0 on the last 60 hours of undergraduate work:

Computer Science

3. International students must provide the following additional items.
 - A. Complete official and certified translations of any transcripts which are not written in English.
 - B. A minimum score of 500 on the Test of English as a Foreign Language (TOEFL).
 - C. Proof of sufficient financial resources to meet the cost of attending Lamar University. International students must also present proof of adequate health insurance; those who plan to drive an automobile in the State of Texas must have liability insurance.

All application materials, scores, transcripts, etc., must be on file at Lamar University by June 15 for Fall admission; by November 1 for Spring admission, and by March 15 for Summer admission.

4. International students who are assigned to English as a Second Language must enroll in ESL courses every semester or term such courses are offered until they receive a grade of "S." Students will not be admitted to candidacy or allowed to graduate until this requirement has been completed.
5. Applicants for the Master of Business Administration degree should consult the College of Business section in the current Graduate Bulletin for specific entrance requirements to that program.
6. Prospective Doctor of Engineering students must send a letter to the Dean, College of Engineering (Box 10057) giving information on the applicant's engineering experience, current employment, and major research interests.
7. Students who wish to pursue graduate work in any area for which they have not had the prerequisites will be required to make up deficiencies as required 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.
8. Admission to the College of Graduate Studies does not imply candidacy for a degree.
9. The Dean of Admissions will notify the applicant of admission to the College of Graduate Studies. All transcripts, certificates, etc. become the property of Lamar University and are not returnable.
10. Admission requirements stated above are minimum requirements. The applicant must also have the approval of the departments in which the degree program is offered and must meet the specific requirements of that department.

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 may be admitted as Post Baccalaureate students in one of the undergraduate colleges under the following conditions:
 - A. The applicant must hold a bachelor's degree.
 - B. The applicant must submit an application for admission to the Post Baccalaureate program.
 - C. The applicant must submit an official transcript from each college previously attended.
 - D. 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 six semester hours completed at Lamar before full admission is gained *may* be counted for degree credit with the approval of the department and the Graduate Dean/Director.
4. Post Baccalaureate students who have successfully completed six or more hours of graduate course work and who do not meet the minimum admission requirements for the College of Graduate Studies may petition for admission following the procedure outlined in the Graduate Bulletin under "Admissions Appeals." If admission is then granted by the College of Graduate Studies, the student may receive degree credit for six hours or for the number of hours completed at the end of the semester in which the student exceeds six hours.
5. Post baccalaureate students are not permitted to enroll in Business courses for graduate credit without *prior* consent of the Graduate Coordinator, College of Business.



The Lamar University-Beaumont faculty members are among the finest academicians in the nation.

Directory of Personnel 1989-90

Board of Regents

H. D. Pate, <i>Chairman</i>	Bridge City
Thomas M. Maes II, <i>Vice Chairman</i>	Beaumont
Wayne Reaud, <i>Secretary</i>	Beaumont
Otho Plummer, <i>Chairman Emeritus</i>	Beaumont
Lloyd Hayes, <i>Chairman Emeritus</i>	Port Arthur
Truman Arnold	Texarkana
Ronald G. Steinhart	Dallas
Amelie S. Cobb	Beaumont
Ted E. Moor, Jr.	Beaumont

System Administration

George E. McLaughlin, <i>Ed.D., Chancellor</i>
Oscar K. Baxley, <i>M.B.A., Vice Chancellor for Finance</i>
W. S. Leonard, <i>M.S., Vice Chancellor for Development</i>
Andrew J. Johnson, <i>Ph.D., Assistant to the Chancellor</i>
Billy J. Franklin, <i>Ph.D., President, Lamar University-Beaumont</i>
W. Sam Monroe, <i>L.L.D., President, Lamar University-Port Arthur</i>
Joe Ben Welch, <i>Ph.D., President, Lamar University-Orange</i>
John Calhoun Wells, <i>Ph.D., President, John Gray Institute</i>

General Administration

Lamar University-Beaumont

Billy J. Franklin, <i>Ph.D., President, Lamar University-Beaumont</i>
William C. Nylin, <i>Ph.D., Executive Vice President for Finance and Operations</i>
Edward A. Nicholson, <i>Ph.D., Executive Vice President for Academic and Student Affairs</i>
Joseph D. Deshotel, <i>J.D., Vice President for Administration and Counsel</i>
J. Earl Brickhouse, <i>B.S., Executive Director for Public Affairs</i>
Ralph A. Wooster, <i>Ph.D., Associate Vice President for Academic and Student Affairs; Dean of Faculties</i>
Joseph K. Kavanaugh, <i>Ph.D., Associate Vice President and Dean of Students</i>
Wayne Seelbach, <i>Ph.D., Executive Assistant to the President for Coordination and Planning</i>

Academic Administration

Bell, Myrtle L., <i>Ed.D., Dean, College of Health and Behavioral Sciences</i>
Brentlinger, W. Brock, <i>Ph.D., Dean, College of Fine Arts and Communication</i>
Ensign, Gary C., <i>Ph.D., Director of Public Services</i>
Hawkins, Charles F., <i>Ph.D., Acting Dean, College of Business</i>
Idoux, John P., <i>Ph.D., Dean, College of Arts and Sciences</i>
McAdams, LeBlond, <i>Ph.D., Acting Dean, College of Education</i>
McCord, Joe S., <i>Ph.D., Director of Library Services</i>
Moulton, Robert, <i>Ph.D., Associate Vice President for Research and Dean of Graduate Studies</i>
Rode, Elmer G., Jr., <i>M.Ed., Dean of Records and Registrar</i>
Shipper, Kenneth E., <i>Ph.D., Dean, College of Technical Arts</i>
Young, Fred M., <i>Ph.D., Dean, College of Engineering</i>

Principal Administrative Staff

Alborn, Ray, <i>Head Football Coach</i>
Asteris, Mark, <i>Director of Media Services, Library</i>
Avellar, Allan, <i>Assistant Vice President for Personnel and Staff Development</i>
Baldwin, Jerry, <i>Director of Development</i>
Beadle, Dalton, <i>Purchasing Agent</i>

Branch, Tony, *Head Basketball Coach*
 Carpenter, Eugene W., *Chief of University Police*
 Castete, Jesse, *Director of Housing*
 Castete, Ralynn, *Director of Financial Aid*
 Cherry, Kathryn, *Supervisor of Parking Office*
 Chesser, Melissa, *Admissions Field Representative*
 Collier, Dixie, *Coordinator, Services for Handicapped Students*
 Collins, Barry, *Director of Recreational Sports*
 Conn, Carolyn, *Director of Payroll*
 Cook, Bernie, *Manager, Warehouse and Property Control*
 Cotton, Will, *Director of Energy Management*
 Davis, Nancy, *Coordinator of Special Services, Technical Arts*
 Droddy, Frances, *Director, Early Childhood Development Center*
 Duhon, Patricia, *Director of Systems and Programming*
 Duncan, Gary, *Director, Lamar Police Academy*
 Eldredge, Laura, *Publications Editor*
 Fiorenza, Wanda, *Executive Director, Alumni Association*
 Fondren, Darrell L., *Director of Veterans Affairs/Evening Services*
 Forristall, Dorothy Z., *Director of Learning Skills*
 Francis, Clifton N., *Director of Records and Registration*
 Galloway, Willie M., *Administrative Assistant for University Reception Center*
 Gale, Thomas J., *Technical Director/Theatre*
 Gwin, Howell H., Jr., *Director of Graduate Studies*
 Haggard, Alvin L., *Controller*
 Harwood, Clint, *Director, Computer Center*
 Hayes, Stuart W., *Director of Photographic Services*
 Hunter, Robert, *Assistant Director, Academic Services*
 Hurlbut, Brian, *Director of Accounting*
 Johnson, Barry, *Director of Bands*
 Jolly, Sonny, *Athletic Director and Head Track Coach*
 Juhan, Gerry, *Counselor, Testing and Career Services*
 Ketcham, Bonnie, *Director of Reservations and Operations, Setzer Center*
 Komelasky, Paul, *Director of Food Service*
 Ledet, Les, *Station Manager, KVLU-FM Radio*
 Lee, Robert B., *Director of Special Services*
 Lokensgard, Lynne, *Director, Dishman Art Gallery*
 Martin, Jack T., *Director of Placement*
 McLain, Bob, *Operations Manager, Montagne Center*
 Moye, Gene E., *Director of Student Financial Aid Accounting*
 Neumann, Richard L., *Director of Assessment*
 Noble, Harry P., *Director of Computer Services*
 O'Toole, Jack, *Director of Postal Services*
 Pate, Sharon, *International Student Advisor*
 Pearson, Edwin A., *Director of Internal Services/Printing*
 Perkins, David, *Head Baseball Coach*
 Perkins, Howard, *Director of Student Publications*
 Placette-Chapman, Jacquelynn F., *Director of Setzer Center; Panhellenic Advisor*
 Potts, Joe, *Director of Student Activities*
 Reingardt, Gary, *Manager, Building Maintenance and Operations*
 Rice, Ray E., *Interim Director of Facilities Maintenance and Operations*
 Rogas, Dan W., *Associate Athletic Director for Operations; Executive Director, Cardinal Club*
 Roy, M. Paul, *Coordinator of Technical Arts Placement*
 Rush, James C., *Director of Academic Services*
 Ryan, William, *Library Systems Coordinator*
 Shaw, Ann, *Dean of Student Development/Student Services*

- Smith, LuLu, M.D.**, *Medical Director and University Physician*
Smith, Joe Lee, *Director of Public Information*
Stracener, Bruce E., *Assistant Vice President for Auxiliary Services*
Thomas, Karen, *Building Manager, Setzer Center*
Turco, Charles P., *Assistant to the Executive Vice President for Academic and Student Affairs;*
Director of Federal Programs
Williams, Harry, *Vocational Counselor*
Willcox, Tom, *Director of Telecommunications*
Wood, Rush B., *Director of Sport Information*

Faculty 1989-90

The following list reflects the status of the Lamar University faculty as of Spring 1989. The date after each name is the academic year of first service to the University and does not necessarily imply continuous service.

- Adams, Eugenia C.**, 1984, *Instructor, Reference Librarian*
 B.S., Southwestern University; M.L.S., University of Texas
- Adell, Timothy P.**, 1987, *Lecturer in English*
 B.A., North Park College; M.A., McNeese State University
- Akers, Hugh A.**, 1977, *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
- Aly, Ibrahim M.**, 1986, *Assistant Professor of Accounting*
 B.Com., Cairo University; M.B., Ph.D., North Texas State University
- Aminabhavi, Tejraj M.**, 1988, *Adjunct Research Professor of Chemistry*
 B.S., M.S., Karnatak Science College; Ph.D., University of Texas
- Anderson, Adrian N.**, 1967, *Professor of History; Chair, 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; Certified Family Life Educator
- Andrews, Jean F.**, 1988, *Associate Professor of Deaf Education*
 B.A., Catholic University of America; M.Ed., Western Maryland College; Ph.D., University of Illinois
- Anusorn, Singhapakdi**, 1987, *Assistant Professor of Marketing*
 B.S., University of Wisconsin-Madison; M.B.A., University of Wisconsin-Whitewater
- 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
- Asteris, Mark M.**, 1985, *Instructor of Media Services*
 B.A., King's College; M.L.S., Villanova University
- Babin, L. Randolph**, 1968, *Assistant Professor of Music*
 B.M.Ed., M.M.Ed., Ph.D., Louisiana State University
- Bailey, P. Gail**, 1975, *Assistant Professor of Dental Hygiene; Director, Dental Hygiene Program*
 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**, 1981, *Assistant Professor of Mathematics*
B.A., Lamar University; M.A., Ph.D., University of Texas at Austin
- Baker, Barbara C.**, 1983, *Instructor II 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 Communication*
B.S., M.A., University of Oklahoma; Ph.D., Purdue University
- Ball, John**, 1988, *Assistant Professor of Radiologic Technology*
B.S., Midwestern State University; M.Ed., Sam Houston State University, Registered Radiographer
- Barbre, Al**, 1983, *Lecturer in Health Physical Education and Dance; Women's Head Basketball Coach*; B.S., M.Ed., Stephen F. Austin State 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, *Associate Professor of Office Administration*
B.S. Howard Payne University; MEd., Texas Tech University; Ed.D. North Texas State University.
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B.S., M.A., Ph.D., Sam Houston State University
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B.S., M.S., Lamar University
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B.S., M.S., Cheng Kung University; Ph.D., Mississippi State University; Registered Professional Engineer
- Lihs, Harriett**, 1983, *Instructor of Physical Education*
B.A., M.A., University of Iowa
- Lindoerfer, Joanne S.**, 1980, *Assistant Professor of Psychology*
B.S., Loyola University, Chicago; M.S., Ph.D., University of Texas
- Logan, H. Joyce**, 1984, *Adjunct Instructor of Computer Science*
B.S., Louisiana Tech University; M.S., Lamar University
- Lokensgard, Lynne L.**, 1973, *Assistant Professor of Art*
B.A., M.A., University of Minnesota; Ph.D., University of Kansas
- Love, James J.**, 1976, *Assistant Professor of Criminal Law; Director, Criminal Justice Program*
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- Lowrey, Mildred A.**, 1974, *Professor of Kinesiology; Director, Academic Programs, Health, Physical Education and Dance*; B.S., Howard College; M.S., Alabama College; Ph.D., Florida State University
- Ma, Li-Chen**, 1972, *Professor of Sociology*
B.S., M.S., National Taiwan University; Ph.D., University of Georgia
- Mackey, Howard**, 1963, *Professor of History*
B.A., University of Toledo; M.A., Ph.D., Lehigh University
- Madden, Robert**, 1959, *Associate Professor of Art*
B.A., Centenary College; M.F.A., University of Arkansas
- Mainord, Robert A., Jr.**, 1981, *Instructor I of Computer Electronics and Robotics Technology*
A.A.S., B.A., Lamar University
- Malnassy, Phillip G.**, 1973, *Associate Professor of Biology*
A.B., Hunter College, New York; Ph.D., Rutgers University
- Mantz, Peter A.**, 1982, *Associate Professor in the Department of Civil Engineering*
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- Marble, Ronald I.**, 1967, *Instructor IV of Welding*
A.A.S., Lamar University
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B.S., Weber State College; M.A., Ph.D., University of New Mexico
- Martin, Gabriel A.**, 1989, *Associate Professor of Communications*
B.S., M.S., Ed.D., University of Southern Mississippi
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B.S., Lamar University; M.S., Rice University; Ph.D., University of Houston; Registered Professional Engineer
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A.A.S., Lamar University
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B.S., Lamar University; M.Ed., Sam Houston State University

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- Moss, Patti**, 1986, *Instructor of Nursing*
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- Murray, M. Kathleen**, 1973, *Assistant Professor; Associate Director, Technical Services*
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- Ramsey, Jed J.**, 1965, *Professor of Biology*
B.S., Kansas State University of Agriculture and Applied Science; M.S., Kansas State Teachers College; Ph.D., Oklahoma State University
- Read, Billy D.**, 1965, *Assistant Professor of Mathematics*
B.S., Lamar University; M.S., North Texas State University
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B.S., M.Ed., Lamar University; Registered Dental Hygienist
- Rice, Desmond V.**, 1987, *Associate Professor of Education*
B.A., Avondale College, N.S.W. Australia; M.A., San Francisco State University; Ed.D., University of Southern California
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B.S., University of Louisville; M.S., Ph.D., Northwestern University
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B.S., Tulane University; M.S., Lamar University
- Rogers, Bruce G.**, 1961, *Professor of Civil Engineering*
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- Roth, Lane**, 1978, *Associate Professor of Communication*
B.A., New York University; M.A., Ph.D., Florida State University

- Roy, M. Paul**, 1963, *Instructor IV of Machine Tools; Placement Coordinator*
A.A.S., Lamar University
- Runnels, William C.**, 1965, *Associate Professor of Biology*
B.S., M.S., Texas A&I University; Ph.D., Texas A&M University
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B.S., Northwest Missouri State University; M.L.S., M.A., Ed., Specialist-Instructional Media, University of Missouri
- Sanders, L. Thomas**, 1974, *Associate Professor of Political Science*
B.A., Louisiana State University; M.A., Ph.D., University of Michigan
- Saur, Pamela S.**, 1988, *Lecturer in English and German*
B.A., M.A., Ph.D., University of Iowa; M.Ed., University of Massachusetts
- Saur, Stephen C.**, 1988, *Assistant Professor of Social Work*
B.A., University of Iowa; M.S.W., Florida State University
- Scarce, Michael J.**, 1988, *Lecturer in English*
B.A., M.A., Northeast Missouri State University
- Satterfield, R. Beeler**, 1963, *Professor of History*
B.A., M.A., Vanderbilt University; Ph.D., Johns Hopkins University
- Schroder, John P.**, 1983, *Instructor II of Computer Drafting Technology*
B.S., Southwestern Louisiana Institute
- Seelbach, Wayne C.**, 1976, *Professor of Sociology and Gerontology; Executive Assistant to the President for Coordination and Planning*
B.A., Lamar University; M.A., Stephen F. Austin State University; Ph.D., Pennsylvania State University
- Self, E. Lee**, 1959, *Professor of Education; Director, Field Experiences*
B.S., M.Ed., Northwestern State University of Louisiana; Ph.D., Louisiana State University
- Sellekaerts, Willy**, 1987, *Professor of Economics*
Lic., University of Brussels; M.A., University of Michigan; Ph.D., Michigan State University
- Shaheen, Joyce E.**, 1985, *Assistant Professor of Psychology*
B.S., Emory University; M.S., Ph.D., University of Georgia
- Sheppard, Sallye J.**, 1980, *Associate Professor of English*
B.A., M.A., Texas Christian University; M.R.E., Brite Divinity School; Ph.D., Texas Woman's University
- Shipper, Kenneth E.**, 1971, *Dean, College of Technical Arts: Instructor IV of Related Arts*
B.S., Sam Houston State University; M.A., Ph.D., University of Texas at Austin
- Short, W. David**, 1974, *Assistant Professor of Radiologic Technology; Chair, Department of Allied Health*
B.S., Incarnate Word College; M.Ed., University of Houston; Registered Radiographer
- Shukla, Shyam S.**, 1985, *Assistant Professor of Chemistry; Director, Environmental Science*
B.S., University of Lucknow; M.S., University of Saskatchewan; Ph.D., Clarkson University
- Simmons, James M.**, 1970, *Associate Professor of Music; Chair, Department of Music*
B.S., Memphis State University; M.M., University of Houston; Ed.D. McNeese State University
- Sims, Victor H.**, 1978, *Associate Professor of Criminal Justice*
B.A., University of Mississippi; M.S., Arizona State University; Ph. D., University of Southern Mississippi
- Slaydon, Bessie**, 1980, *Assistant Professor of Nursing*
B.S.N., McNeese State University; M.S.N., University of Texas-Galveston; Registered Nurse
- Smith, Bobby L.**, 1981, *Sergeant Major, Instructor of Military Science*
B.A., Columbia College
- Smith, Frances J.**, 1977, *Assistant Professor of Nursing*
B.S., Northwestern State University; M.S.N., Texas Woman's University; Registered Nurse
- Smith, James O.**, 1986, *Instructor I of Computer Electronics and Robotics Technology*
A.S., B.S., McNeese State University
- Smith, Kevin B.**, 1981, *Associate Professor of Sociology; Chair, Department of Sociology, Social Work and Criminal Justice*
B.S., Texas A&M University; M.A., Ph.D., Louisiana State University

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B.S., Trinity University; M.Ed., Ph.D., University of Texas
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B.A., University of Denver; M.A., Ed.D., Columbia University
- Spradley, Larry W.**, 1972, *Professor of Business Statistics*
B.A., Stephen F. Austin State University; M.Th., Southern Methodist University; M.S., Lamar University; Ph.D., Texas A&M University
- Stahl, Deanna K.**, 1972, *Instructor IV of Technical Mathematics*
B.A., M.S., Lamar University
- Standley, Troy**, 1975, *Instructor III of Fire Protection Technology; Coordinator, Fire Training Program*; LL.B., Baylor University
- Stark, Jeremiah M.**, 1956, *Professor of Mathematics*
B.S., United States Coast Guard Academy; B.S., North Texas State University; S.M., Ph.D., Massachusetts Institute of Technology
- Steiert, Alfred F.**, 1966, *Assistant Professor of Management*
B.S., M.B.A., University of Florida
- Stevens, Eleanor M.**, 1957, *Assistant Professor of Office Administration*
B.B.A., University of Texas; M.B.A. University of Houston
- Stevens, James B.**, 1970, *Professor of Geology*
B.S., M.S., University of Michigan; Ph.D., University of Texas
- Stevens, Rita**, 1985, *Assistant Professor of Professional Development and Graduate Studies*
B.A., Glassboro State College; M.Ed., West Georgia College; Ed.D., Mississippi State University
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B.S., M.A., East Tennessee State University; Ph.D. University of Houston
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B.A., M.A., University of Texas
- Stone, Lorene Hemphill**, 1984, *Associate Professor of Sociology*
B.A., Iowa State University; M.A., Ph.D., Washington State University
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B.A., Lamar University; M.A., Baylor University; Ph.D., University of Kentucky
- Strickland, Arney, L.**, 1969, *Professor of English*
B.A., M.A., Lamar University; Ph.D., Ball State University
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B.S., M.A., Bradley University; Ed.S., Western Illinois University; Ed.D., Loyola University, Chicago
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- Sutton, Walter A.**, 1963, *Professor of History*
B.A., Rice University; M.A., Ph.D., University of Texas
- Swerdlow, Marleen S.**, 1984, *Associate Professor of Business Law*
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- Thomas, Barbara**, 1985, *Assistant Professor of Music*
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- Thompson, Bob**, 1985, *Professor of Graduate Studies in Education and Chair, Department of Professional Development and Graduate Studies*
B.S., Abilene Christian; M.Ed., Ph.D., East Texas State University
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B.S.N., Marquette University; M.S.N., Wayne State University; Ph.D., Ohio State University; Registered Nurse
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B.S., Peru State College; M.L.S., Emporia State University; M.A., Sam Houston State University
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Lamar honors William B. Lamar, second president of the Republic of Texas and Father of Public Education in Texas, whose sculpture adorns the Quadrangle.

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