LAMAR

UNIVERSITY

2000-2002 Graduate Catalog

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LAMAR UNIVERSITY

A Member of The Texas State University System

COLLEGE OF GRADUATE STUDIES 2000-2002 • Catalog • Volume 46 Number 2

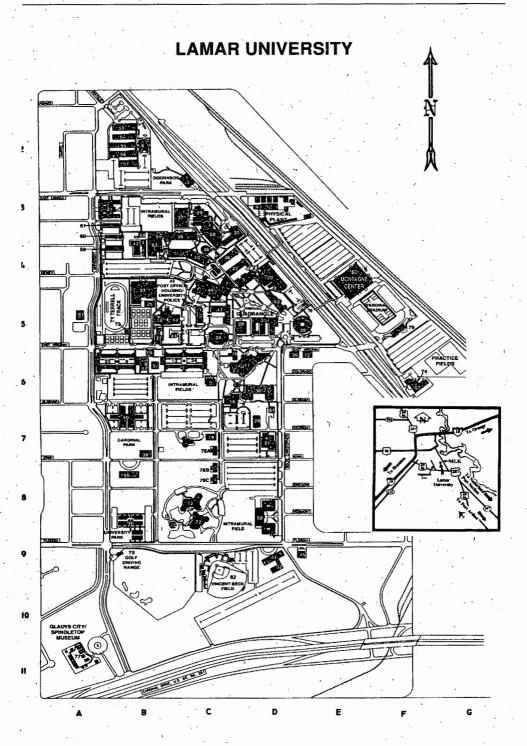
Twenty-sixth catalog issued with announcements for 2000-2002.

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, age, handicap 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 and Counsel.

Catalog of Lamar University. (USPS 074-420). Third class postage paid at Beaumont, Texas 77710.



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2000-2001 Calendar

Fall Semester - 2000

	August 2000	AUGUST
21 .	Residence halls open at 1:00 p.m.	SMTWTFS
	Dining halls open at 4:30 p.m.	1 2 3 4 5
22	Payment Day	6 7 8 9 10 11 12
23	Registration	13 14 15 16 17 18 19
24	Classes Begin	20 21 22 23 24 25 26
25	Schedule revisions – late registration with penalty fee Last day for schedule revisions and/or	27 28 29 30 31
	late registration with penalty fee	
28	Applications for December 2000 graduation begin	
		SEPTEMBER
		SMTWTFS
	September 2000	1 2
	- '	3 4 5 6 7 8 9
4 11	Labor Day – NO CLASSES Twelfth Class Day	10 11 12 13 14 15 16
- 11	I wellul Glass Day	17 18 19 20 21 22 23
,		24 25 26 27 28 29 30
		-
	October 2000	
2	Last day to drop or withdraw without academic penalty	,
2	Last day to drop of withdraw without academic penalty	OCTOBER
	Last day to apply for December graduation	SMTWTFS
	(graduate students only)	1 2 3 4 5 6 7
27	Last day to apply for December graduation (undergraduates)	8 9 10 11 12 13 14
30	Distribution of Spring 2001 class schedule	15 16 17 18 19 20 21
		22 23 24 25 26 27 28
		29 30 31
	November 2000	29 30 31
6	Last day to pay for diploma, cap, and gown	
9	Last day to drop and withdraw	NOVEMBER
13	Registration for Spring semester begins	
22	Thanksgiving recess begins at 10:00 p.m. Dining halls close at 6:00 p.m.	S M T W T F S
	Residence halls close at 6:00 p.m.	
26	Residence halls open at 1:00 p.m.	5 6 7 8 9 10 11
	Dining halls open at 4:30 p.m.	12 13 14 15 16 17 18
27	Classes resume at 7:00 a.m.	19 20 21 22 23 24 25
		26 27 28 29 30
	December 2000	
	December 2000	DECEMBED
5 .	Finals preparation day – no classes prior to 5:00 p.m.	DECEMBER
	Finals begin at 5:00 p.m.	SMTWTFS
6-12	Final examinations	1 2
13 .	Dining halls close at 9:00 a.m.	3 4 5 6 7 8 9
	Residence halls close at 10:00 a.m.	10 11 12 13 14 15 16
	Winter Mini-Session Begins	17 18 19 20 21 22 23
14	Grades for graduating seniors due by 8:30 a.m.	24 25 26 27 28 29 30
10	All other grades due by 4:00 p.m.	31
16	Commencement	,

Spring Semester – 2001

	January 2001	JANUARY
7	Residence halls open at 1: 00 p.m. Dining halls open at 4:30 p.m.	S M T W T F S 1 2 3 4 5 6
8 .	Payment Day	7 8 9 10 11 12 13
9	Registration	14 15 16 17 18 19 20
	Winter Mini-Session Ends	21 22 23 24 25 26 27
10	Spindletop 2001 Celebration	28 29 30 31
11	Classes Begin Schedule revisions – late registration with penalty fee	
12	Last day for schedule revisions and/or	
	late registration with penalty fee	FEBRUARY
15	Martin Luther King, Jr. birthday – NO CLASSES	
16	Applications for May 2001 graduation begin	SMTWTFS 123
29	Twelfth Class Day	4 5 6 7 8 9 10
		11 12 13 14 15 16 17
		18 19 20 21 22 23 24
	February 2001	25 26 27 28
21	Last day to drop or withdraw without academic penalty Last day to petition for no grade	25 26 27 26
:		
		MARCH
<i>'</i> .	March 2001	SMTWTFS
- 5	Last day to apply for May graduation (graduate students only)	1 2 3 4 5 6 7 8 9 10
16 ·	Spring recess begins at 5:00 p.m.	11 12 13 14 15 16 17
	Dining halls and residence halls close at 6:00 p.m.	18 19 20 21 22 23 24
	Residence halls open at 1:00 p.m.	25 26 27 28 29 30 31
25 26	Dining halls open at 4:30 p.m. Classes resume at 7:00 a.m.	
30	Distribution of Summer/Fall 2001 class schedule	
50	Last day to apply for May graduation (undergraduates)	APRIL .
,		SMTWTFS
		1 2 3 4 5 6 7
	April 2001	8 9 10 11 12 13 14
. .	•	15 16 17 18 19 20 21
6	Last day to pay for diploma, cap, and gown Last day to drop or withdraw	22 23 24 25 26 27 28
. 9	Registration for Summer and Fall begins	29 30
13	Good Friday – NO CLASSES	• •
		MAY
	May 2001	SMTWTFS
1 ·	Finals preparation day – no classes prior to 5:00 p.m.	1 2 3 4 5
• .	Finals begin, 5:00 p.m.	6 7 8 9 10 11 12
. 2-8	Final examinations	13 14 15 16 17 18 19
9	Dining halls close at 9:00 a.m.	20 21 22 23 24 25 26
: •	Residence halls close at 10:00 a.m.	27 28 29 30 31
10	Summer Mini-Session Begins Grades for graduating seniors due by 8:30 a.m.	\
10	All other grades due by 4:00 p.m.	
12	Commencement	

17

18

Grades for graduating seniors due by 8:30 a.m.

All other grades due by noon

Commencement

Summer Session – 2001 First Term

	i ii 3t Toriii	
	May 2001	MAY
28	Memorial Day - NO CLASSES	SMTWTFS
31	Registration	1 2 3 4 5
	Summer Mini-Session Ends	6 7 8 9 10 11 12
		13 14 15 16 17 18 19
	June 2001	20 21 22 23 24 25 26
	,	27 28 29 30 31
3	Residence halls open at 1:00 p.m.	
	Dining halls open at 4:30 p.m.	
4	Classes begin – schedule revisions –	11.15.15
	late registration with penalty fee Last day to apply for August graduation	JUNE
	(graduate students only)	SMTWTFS
5	Last day for schedule revisions and/or	1 2
J	late registration with penalty fee	3 4 5 6 7 8 9
	Application for August 2001 graduation begins	10 11 12 13 14 15 16
. 7	Fourth Class Day	17 18 19 20 21 22 23
15	Last day to drop or withdraw without	24 25 26 27 28 29 30
•	academic penalty	
	Last day to petition for no grade	
29	Last day to apply for August graduation	Company of the Compan
	(undergraduates)	JULY
		S'M'TWTFS
	July 2001	1 2 3 4 5 6 7
2	Last day to drop or withdraw	8 9 10 11 12 13 14
4	Independence Day – NO CLASSES	15 16 17 18 19 20 21
6	Last day to pay for diploma, cap, and gown	22 23 24 25 26 27 28
10	Last class day	29 30 31
. 12	All grades due by 4:00 p.m.	
		. `
		1.
	Summer Session – 2001	• . • •
	Second Term	
	Second Term	
	July 2001	
11	in the second	
11 12	Registration Classes begin – schedule revisions and/or	
, 12	late registration with penalty fee	
13 .	Last day for schedule revisions and/or	
10 .	late registration with penalty fee	
17	Fourth Class Day	
25	Last day to drop or withdraw without	
	academic penalty	AUGUST
	Last day to petition for no grade	
		SMTWTFS
	August 2001	1 2 3 4
		5 6 7 8 9 10 11
9	Last day to drop or withdraw	12 13 14 15 16 17 18
16	Last class day	19 20 21 22 23 24 25
	Dining halls and	26 27 28 29 30 31
17	Residence halls close at 6:00 p.m. Grades for graduating seniors due by 8:30 a.m.	•
1,	Oragos for graduating seniors due by 0.50 a.m.	

2001-2002 Calendar Fall Semester – 2001

	I dii Joinestei – Euo i	
1	August 2001	AUGUST
19	Residence halls open at 1:00 p.m. Dining halls open at 4:30 p.m.	S M T W T F S 1 2 3 4
20	Payment Day	5 6 7 8 9 10 11
21	Registration	12 13 14 15 16, 17 18
22	Classes Begin Schedule revisions – late registration with penalty fee	19 20 21 22 23 24 25 26 27 28 29 30 31
23	Last day for schedule revisions and/or	20 27 .20 29 30 31
	late registration with penalty fee	
27	Applications for December 2001 graduation begin	OFFICE
		SEPTEMBER
	September 2001	SMTWTFS
		2 3 4 5 6 7 8
3	Labor Day – NO CLASSES Twelfth Class Day	9 10 11 12 13 14 15
•	THOREI Glade Day	16 17 18 19 20 21 22
		23 24 25 26 27 28 29
	October 2001	30
1	Last day to drop or withdraw without academic penalty	
•	Last day to petition for no grade	
	Last day to apply for December graduation	OCTOBER
29	(graduate students only) Distribution of Spring 2002 class schedule	SMTWTFS
23	Last day to apply for December graduation	1 2 3 4 5 6 7 8 9 10 11 12 13
	(undergraduates)	14 15 16 17 18 19 20
,		21 22 23 24 25 26 27
	Navamban 0004	28 29 30 31
	November 2001	
5	Registration for Spring semester begins	
12	Last day to drop and withdraw Last day to pay for diploma, cap, and gown	NOVEMBER
21	Thanksgiving recess begins at 10:00 p.m.	SMTWTFS
	Dining halls close at 6:00 p.m.	1 2 3
25	Residence halls close at 6:00 p.m. Residence halls open at 1:00 p.m.	4 5 6 7 8 9 10
Ŧ.	Dining halls open at 4:30 p.m.	11 12 13 14 15 16 17 18 19 20 21 22 23 24
26	Classes resume at 7:00 a.m.	25 26 27 28 29 30
	December 2001	
4	Finals preparation day – no classes prior to 5:00 p.m.	DECEMBER
	Finals begin at 5:00 p.m.	SMTWTFS
5-11	Final examinations	1
13	Dining halls close at 9:00 a.m. Residence halls close at 10:00 a.m.	2 3 4 5 6 7 8 9 10 11 12 13 14 15
	Winter Mini-Session Begins	16 17 18 19 20 21 22
14	Grades for graduating seniors due by 8:30 a.m.	23 24 25 26 27 28 29
15 .	All other grades due by 4:00 p.m. Commencement	30 31
10 ,	Commencentent	0

Spring Semester – 2002

		·	
	January 2002	·	JANUARY
. 6	Residence halls open at 1:00 p.m. Dining halls open at 4:30 p.m.	• .	S M T W T F S 1 2 3 4 5
7.	Payment Day	• .	6 7 8 9 10 11 12
8	Registration		13 14 15 16 17 18 19
	Winter Mini-Session ends		20 21 22 23 24 25 26
9	Classes Begin		27 28 29 30 31
	Schedule revisions – late registration with penalty fee		
10	Last day for schedule revisions and/or	·.	
	late registration with penalty fee	·	
21	Martin Luther King, Jr. birthday – NO CLASSES		FEBRUARY
0.5	Applications for May 2002 graduation begin		SMTWTFS
. 25	Twelfth Class Day	•	1 2
			3 4 5 6 7 8 9
			,
	February 2002		10 11 12 13 14 15 16
	Total dans to done or with done with and and love or more law.		17 18 19 20 21 22 23
22	Last day to drop or withdraw without academic penalty Last day to petition for no grade		24 25 26 27 28
		•	MARCH
	March 2002		MARCH
4	Last day to apply for May graduation	٠	SMTWTFS
. *	(graduate students only)		1 2
15	Spring recess begins at 5:00 p.m.		3 4 5 6 7 8 9
. 10	Dining halls and residence halls close at 6:00 p.m.		10 11 12 13 14 15 16
24	Residence halls open at 1:00 p.m.		17 18 19 20 21 22 23
	Dining halls open at 4:30 p.m.	,	24 25 26 27 28 29 30
25	Classes resume at 7:00 a.m.		31
	Last day to apply for May graduation (undergraduates)	,	
	Distribution of Summer/Fall 2002 class schedule		
29	Good Friday — NO CLASSES	•	
, ,			APRIL
	•	. ,	SMTWTFS
	April 2002	,.	1 2 3 4 5 6
			7 8 9 10 11 12 13
12	Last day to pay for diploma, cap, and gown		14 15 16 17 18 19 20
	Last day to drop or withdraw		21 22 23 24 25 26 27
15	Registration for Summer and Fall begins		28 29 30
30	Finals preparation day - no classes prior to 5:00 p.m.		20 29 30
	Finals begin, 5:00 p.m.		
			*.
			MAY
	May 2002	,	
1-7	Final examinations	. '	SMTWTFS
8	Dining halls close at 9:00 a.m.		1 2 3 4
	Residence halls close at 10:00 a.m.		5 6 7 8 9 10 11
	Summer Mini-Session Begins		12 13 14 15 16 17 18
10	Grades for those graduating due by 8:30 a.m.		19 20 21 22 23 24 25
	All other grades due by 4:00 p.m.		26 27 28 29 30 31
11	Commencement		•
27	Memorial Day - NO CLASSES		

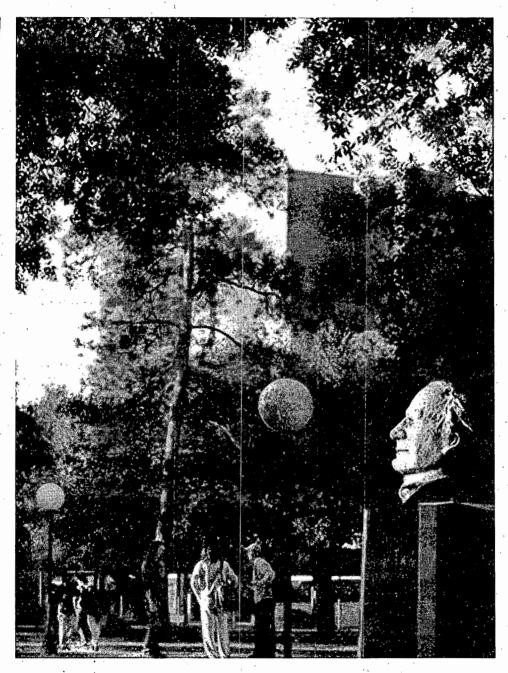
Summer Session – 2002 First Term

	May 2002	MAY
31	Registration Summer Mini-Session Ends	S M T W T F S 1 2 3 4
•	June 2002	5 6 7 8 9 10 11 12 13 14 15 16 17 18
2	Residence halls open at 1:00 p.m. Dining halls open at 4:30 p.m.	19 20 21 22 23 24 25 26 27 28 29 30 31
3	Classes begin – schedule revisions – late registration with penalty fee Last day to apply for August graduation	
	(graduate students only)	JUNE
4	Applications for August 2002 graduation begin	SMTWTFS
	Last day for schedule revisions and/or	` <u>.</u> 1
c	late registration with penalty fee	2 3 4 5 6 7 8
6 14	Fourth Class Day Last day to drop or withdraw without academic penalty	9 10 11 12 13 14 15
.14	Last day to drop or william willout acadeline penalty Last day to petition for no grade	16 17 18 19 20 21 22
28	Last day to pention for his grade Last day to apply for August graduation (undergraduates)	23 24 25 26 27 28 29 30
	July 2002	
2	Last day to drop or withdraw	· ·
4	Independence Day Observed – NO CLASSES	JULY
5	Last day to pay for diploma, cap, and gown	• • • • • • • • • • • • • • • • • • • •
10	Last class day	SMTWTFS
12	All grades due by 4:00 p.m.	1 2 3 4 5 6 7 8 9 10 11 12 13
	Summer Session – 2002	14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
	Second Term	
	July 2002	
	-	en e
11	Registration	<i>,</i>
12	Classes begin – schedule revisions	•
15 .	and/or late registration with penalty fee Last day for schedule revisions	, · · ·
	and/or late registration with penalty fee	
17	Fourth Class Day	AUGUST
26	Last day to drop or withdraw without academic penalty Last day to petition for no grade	SMTWTFS
		1 2 3
	August 2002	4 5 6 7 8 9 10 11 12 13 14 15 16 17
7 .	Last day to drop or withdraw	18 19 20 21 22 23 24
` 14	Last class day	25 26 27 28 29 30 31
15 ·	Dining halls and residence halls close at 6:00 p.m. Grades for graduating seniors due by 8:30 a.m.	
-	All other grades due by noon	
17	Commencement	· · · · · · · · · · · · · · · · · · ·

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Dean of Graduate Studies: Robert D. Moulton, Ph.D. Editor: Cynthia L. Hicks



A likeness of Mirabeau B. Lamar, the father of Texas education, surveys the LU quadrangle shaded by tall pines and leafy oaks.

General Information

Location

The Lamar University campus is located in Beaumont, Texas. With a population of more than 114,000, Beaumont is a diversified city, home not only to the University but also to businesses and industry stemming from a strong petrochemical and agricultural base. World-renowned companies are located in Beaumont to take advantage of the area's resources and its educated workforce.

A host of cultural attractions offer a variety of leisure options from world-class museums and symphony presentations to shopping districts and many spring and fall festivals. 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 lake, river and ocean recreation, located only a few miles from the balmy Gulf Coast and little more than an hour from the Big Thicket National Preserve, large lakes and piney woods.

The campus is home to the stately Mary and John Gray Library, Montagne Center coliseum, Setzer Student Center, Gladys City Boomtown, several residence halls and state-of-the-art computing and engineering facilities, including a leading-edge interactive video laboratory. Lamar University welcomes visitors. Information regarding tours may be obtained from the Office of Admission Services, P.O. Box 10009, Beaumont, Texas 77710, phone (409) 880-8888.

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 fourteen. 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 B. 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 the Honorable Jack Brooks introduced a bill in the House of Representatives to make Lamar University a state-supported senior college. The Legislature approved House Bill-52 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. Lamar continued to grow, building strong programs in engineering, sciences, business, education and the arts.

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 from college 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 two-year Port Arthur College became Lamar University at Port Arthur. The Lamar University System, of which Lamar University-Beaumont was the primary component, was established in the 68th Session of the Texas Legislature with the passage of SB-620, which took effect in August 1983.

In 1990, the Texas Higher Education Coordinating Board recommended that all two-year programs at Lamar University be combined into the Lamar University Institute of Technology. The programs in the former College of Technical Arts, along with Allied Health, Office Technology and Restaurant/Institutional Food Management were placed in the new Institute. The Doctorate of Education in Deaf Education was established in 1993.

Lamar's commitment to quality higher education has been steady and progressive, anticipating the evolving needs of its students. To facilitate this commitment, the Texas Legislature approved House Bill-2313 to merge the Lamar University System with The Texas State University System (TSUS). Effective September 1, 1995, Lamar University joined sister institutions Angelo State University, Sam Houston State University, Southwest Texas State University and Sul Ross State University. On June 19, 1999, the Texas Legislature approved House Bill-1297 to rename Lamar University at Port Arthur, Lamar University at Orange and the Lamar University Institute of Technology. Today, these TSUS institutions are known as Lamar State College at Port Arthur, Lamar State College at Orange and the Lamar Institute of Technology.

As a comprehensive university granting bachelor's, master's and doctoral degrees, Lamar University continues to enhance its instructional, service and research missions. Lamar's growth has produced an economic impact that exceeds \$164 million annually, but even more influential is the impact realized by Lamar graduates, who are more than 65,000 strong.

Government

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

Mission Statement

Lamar University is a comprehensive senior public university dedicated to providing a learning environment of the highest quality. The University is an educational, scientific, engineering, business, and cultural resource center committed to the three-fold mission of teaching, research and service. The University is committed to providing students with a liberal education in the context of a global and multicultural environment, and seeks partnerships with business, governmental, industrial and other educational organizations to more efficiently accomplish its goals.

Instructional Mission

Lamar University emphasizes quality teaching, 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.

With historical commitments to quality educational programs in engineering, business, the arts and sciences, health sciences, education, and the visual and performing arts, the University focuses its unique strengths on significant problems of contemporary interest as evidenced by its recent initiatives in environmental science and engineering, gifted education, and deaf education.

Lamar University is strongly committed to the continual enhancement of teaching/learning methodologies and their systematic assessment.

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

Research Mission

As a comprehensive, regional university with extensive educational programs, Lamar University's academic efforts are directed to both applied and basic research, scholar-ship, and creative activities. Through its emphasis on the teacher-scholar model, the University encourages faculty members to be active in their respective disciplines, to involve both undergraduate and graduate students in research and creative pursuits, and to support the principle that research is inseparable from teaching.

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, Lamar University provides a diverse outreach program including: credit and non-credit continuing education offerings responsive to the personal, career, and professional development needs of individuals in our region; specialized skills training and human resource development for business and industry on the Gulf Coast; and public service activities that respond to unique regional educational needs and cultural interests.

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

Students, faculty, and staff are encouraged to be involved in civic, cultural, service, and professional activities. By such voluntary and consultative activities, members of University demonstrate their citizenship within the larger community.

Accreditation and Approval

Lamar University is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools (1866 Southern Lane, Decatur, Georgia 30033-4097; Telephone number 404-679-4501) to award degrees at the Associate, Baccalaureate and Doctoral levels. In addition, Lamar is approved by the Texas Education Agency: The College of Graduate Studies is a member of the Council of Graduate Schools in the United States, the Conference of Southern Graduate Schools and the Texas Association of Graduate Schools.

Programs in the College of Engineering are accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology. In the College of Business, graduate programs are accredited by the International Association for Management Education.

Other accreditations include Chemistry by the American Chemical Society; Music by the National Association of Schools of Music; the College of Education and Human Development by the Texas Education Agency; programs in Family and Consumer Sciences by the American Dietetic Association; Sociology by the Council on Social Work Education; programs in Speech-Language Pathology and in Audiology by the American Speech-Language-Hearing Association and in Deaf Education by the National Council for Education of the Deaf and the Texas Education Agency. The University is also a member of a number of academic councils, societies, associations and other such organizations.

The Library

The eight-story Mary and John Gray Library dominates the campus from its central location. The Library occupies seven floors with on-line public access catalog to more than 1,000,000 volumes and 3,000 periodicals. 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, the Computer Lab 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 collection of books, electronic information 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 multimedia programs on campus and has a basic collection of equipment and materials for central distribution.

Research Office

The Research Office is administered by the Associate Vice President for Research, who chairs the Research Council. This office promotes and funds internal research; oversees sponsored programs and technology transfer as well as patent, copyright and intellectual property policies; establishes liaison between the university and state and national funding sources; and assures that proposed projects comply with institutional and governmental regulations. This office also provides assistance to faculty in the development and submission of grant/project proposals by locating funding sources and providing editorial assistance in proposal preparation.

Information Systems (Computing Facilities)

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

, The Computer Center, a department of the Information Systems Division, provides for administrative computing with a DEC 7620 computer system. This system is capable of processing 270 million instructions per second (MIPS), has 1.5 billion bytes of working memory and 61 billion bytes of disk storage. The operating system is Open VMS and is capable of handling in excess of 600 simultaneous users. The system supports two 1200 line per minute impact printers, one 600 line per minute impact printer, two laser printers, one reel-to-reel tape unit, and one cartridge tape units.

The Computer Center supports the academic mainframe computer needs with a DEC 2100 Alpha computer running Open VMS and a DEC 2100 Alpha computer running UNIX. Both DEC 2100 computers are capable of processing 70 million instructions per second (MIPS), has 256 million bytes of working memory, 14 billion bytes of disk storage, and a 4mm cartridge tape unit.

The Computer Center operates a DEC 2100 Alpha computer for the John Gray Library. This computer uses Open VMS as an operating system to run the third party library software package DRA. The library DEC 2100 is capable of processing 100 million instructions per second (MIPS), has 256 million bytes of working memory, and 20 billion bytes of disk storage, and one cartridge tape unit.

General use computer labs for students are located at various strategic locations on the campus. These labs utilize personal computers which can be used as terminals or work-

stations. The campus computer systems are connected using a fiber optic backbone which allows high speed data transmissions and connection to the Internet.

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 pre-school, pre-kindergarten, and kindergarten programs. The programs are designed for children from 18 months through six years of age.

The Early Childhood Development Center is home to a special summer program called "Super Kids." Taught in one-week sessions, Super Kids is a science-based, interactive program for first-through third-graders.

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, under the direction of the College of Education and Human Development, provides a site for college students from a number of different disciplines to 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 in the day-care service program. The Center offers a set monthly rate for preschool, pre-kindergarten and kindergarten programs. The Center is open to the public with priority given to faculty, staff and Lamar students' children. To learn more about these programs, call (409) 880-8212.

Career Center

A full range of testing services is provided at 102 Galloway Business Building for aptitude, achievement, and career interests. Professional staff assist students with concerns, questions, problem solving, adjustment, decision making, goal planning, testing and skill development. Staff will refer students to other offices and personnel in accord with the needs and interests of the individual.

Educational counseling is available. In order to best serve as many students as possible, problems of a long-term, therapeutic nature cannot be addressed; however, initial consultation is available and, when feasible, referral to campus and community resources.

Job Fairs are organized annually for the benefit of Lamar University students. The Career Fair is held in February and the Teacher Fair is held in April. These fairs give students the opportunity to make initial contact with recruiting firms, contacts that may result in actual interviews on the Lamar campus during spring (February and March) and fall (October and November) of each year or at the recruiter's headquarters. Employers recruiting with the Career Center generally plan to fill permanent entry-level jobs, part-time jobs, summer jobs, co-ops and internships.

The Career Center's testing facility offers a full range of testing services for aptitude, achievement and career interest. The center also coordinates testing required by the University; provides individual interest, aptitude and personality assessment; and, as a national test center, administers the following:

- SAT (Scholastic Aptitude Test) for undergraduate admissions. The SAT II Subject Area Tests are also given for students who wish to receive college credit.
- ACT (American College Testing Program) may be used instead of the SAT for undergraduate admissions.
- TASP (Texas Academic Skills Program) is required of all students for advisement and registration (unless exempted).

- CLEP (College Level Examination Program) may be used to receive credit by examination. See detailed description of CLEP elsewhere in this catalog.
- GRE (Graduate Record Exam) required for admission to many graduate schools.
- GMAT (Graduate Management Admission Test) is required for admission to graduate Colleges of Business.
- LSAT (Law School Admission Test).
- MCAT (Medical College Admission Test).
- MAT (Miller Analogies Test) required for admission to some graduate programs.
 The Career Center provides five core services:
- Career Assessment, testing, exploration and decision making. This is appropriate
 for all students, and is particularly important for the person who is trying to make
 a decision on a major.
- 2) Training seminars on topics of resume writing, interviewing and the job search are taught many times each semester. Internet possibilities and videotapes are also used in training.
- 3) Part-time job placement, summer jobs and internships.
- Full-time job placement and on-campus recruiting, plus a resume referral system are available to graduating students and alumni.
- 5) The teachers career fair is held in April each year and features sixty school district recruiters to interview teaching candidates.
- 6) The Career Fair for all majors is held in February each year and affords students the opportunity to explore careers and to meet with future employers.
- 7) The Career library has information about employers, and has resources about career planning on video, hard copy and computer formats.

Information and registration forms for tests are available at 102 Galloway Building, phone 409-880-8884. Although the GRE general test and GMAT are administered elsewhere, registration information is available in 102 Galloway.

Health Center

The Student Health Center offers various medical services to students of Lamar University and Lamar Institute of Technology. A physician is available during regular university hours to evaluate and treat minor acute illnesses or injuries not requiring constant supervision. Students are seen on a walk-in basis and charged only for medications or supplies, not for the office visit. Many laboratory tests are also available if ordered by the physician or Health Center director. Gynecological services and family planning are provided by a female nurse practitioner at a reduced charge (appointment only). A health educator is also available, offering formal and informal programs on a variety of subjects. For added convenience, most medications prescribed by our health care providers are available from the pharmacy located within the Health Center. The Health Center also houses a Mental Health Department which offers psychological counseling and mental health workshops by a licensed professional counselor at no charge.

When the University is not in session, health care becomes the individual student's responsibility. Should the need arise, any expenses incurred for ambulance service or off-campus medical services will be the sole responsibility of the student.

Veterans Education

Lamar is approved for educational training under all of the Veterans Educational Assistance programs.

Veterans are encouraged to complete admissions and testing requirements 90 to 120 days prior to the period for which they wish to enroll. Veterans and their dependents who are interested in attending Lamar under federal laws which provide educational assistance are directed to secure information by consulting the Office of Veterans' Affairs, Wimberly Student Affairs Building.

This office advises veterans on program and training opportunities, academic assistance and counseling.

Loan Funds and Scholarships

Financial assistance in the form of loans, grants and scholarships is available for a number of qualified students. Details may be obtained on request from the Director of Financial Aid, P.O. Box 10042, Beaumont, TX 77710.

Graduate Assistantships

Teaching and research assistantships are available in the various graduate departments. Additional information may be obtained either from the department chair or from the Dean of the College of Graduate Studies. Assistantships are awarded *only* to those individuals who meet all requirements for admission to a graduate degree program.

Graduate assistantships at the master's and doctoral levels are available in a number of academic departments. All assistantships are intended to be of direct educational benefit to appointees. In order to be approved by the Graduate Dean, an assistantship appointment must relate to the student's academic objective and be supervised by Lamar University faculty.

Graduate assistants are Lamar University employees who are also graduate students. They are employed by a department or college to instruct in classrooms and labs, advise undergraduate students, proctor exams, supervise practica, assist in research and creative activity, or perform other teaching research and creative duties.

Under specified conditions, Texas law permits the waiver of out-of-state tuition status for some classifications of graduate assistants. When these conditions are met, graduate assistants may be allowed to pay tuition at the less expensive in-state or Texas resident rate. Contract the Graduate Office for a copy of applicable regulations.

Teacher Certification

Lamar University has been approved by the State Board for Education Certification to offer professional certification programs in administration, counseling and guidance, elementary, secondary, special education, reading, and supervision. Specific information concerning certification may be found in the College of Education and Human Development section of this catalog or may be obtained from the Director of the Division of Professional Services in the College of Education and Human Development.

Certification in Special Education and in Composite Science

The College of Education and Human Development has been approved by the State Board for Education Certification to offer an alternative certification program in the areas of Generic Special Education K-12 and Composite Science (Secondary, 6-12) and Elementary Bilingual Education (Grades 1-6). Information concerning either of these programs may be obtained from the Division of Professional Services.

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. By registering for classes at the University, the student agrees to abide by all the policies of the University.

Payment of Fees

A student is not registered until all fees have been paid in full or the student has paid the equivalent of a down payment on the installment plan (if available). Payment may be made by check, MasterCard/Visa/Discover/AMEX, money order, currency or any kind of financial aid (exemptions, loans, grants and scholarships). Checks and money orders should be made payable to Lamar University and will be accepted subject to final payment. The University will not accept counter checks, postdated checks, credit card checks or altered checks. Excess payments will be refunded either in cash or check at the discretion of the University. Students on a "cash only" basis will be restricted to paying by MasterCard/Visa/Discover/AMEX, money orders, currency or financial aid. Payments can be made:

- (1) All forms of payment at the Cashier's office during working hours.
- (2) Credit card payments can be made by phone by calling 839-2000.
- (3) Payments may be made on the Internet at WWW.LAMAR.EDU.
- (4) Drop box at Plummer 116 for check (with social security number and campus) in a sealed envelope. These payments will be considered part of the next business day's activity if paid after 7:00 a.m. No cash will be accepted.
- (5) Drop box at Wimberly 114 for check (with social security number and campus) in a sealed envelope. These payments will be considered part of the next business day's activity if paid after 5:00 p.m. No cash will be accepted.
- (6) Mailed to the Payment Center at P.O. Box 54441, New Orleans, LA 70154-4441.
- (7) At Lamar State College-Port Arthur and Lamar State College-Orange, all payments except credit card can be made during regular hours at the cashier offices.

Students who are delinquent on obligations will be prohibited from registering for class until all obligations are paid in full. Also, holds are placed on academic records so that students cannot obtain transcripts until all obligations are paid in full.

Delinquent obligations to the University will be send to a collection agency (1-800-933-9272) and reported to credit bureaus. All costs of collections are paid by the student which is generally an additional 33.333% of the student's obligations to the University. Delinquent accounts must be paid at the collection agency. Payment cannot be accepted by Lamar if the account has been forwarded to a collection agency.

Installment Payment Program

Students may enter into the installment program of the University upon verbal or written request in a Fall or Spring semester. Students who do not pay in full the tuition and fees will be placed in the installment program if the student has paid at least the amount for the down payment (otherwise classes will be dropped). The installment program generally requires a 50% downpayment with the next 25% due about a month after the semester starts and the final 25% due about two months after the semester starts. A non-refundable service charge of \$20 is assessed for the installment program. A late fee of \$15 will be assessed beginning the first day after an installment due date for each

delinquent installment payment. Reductions of fees for students in the installment program from drops or withdrawals are calculated as a percentage of the total fees assessed, not as a percentage of any partial payments.

Tuition

Tuition has two components to it: the portion set by the State (conventional tuition) and the portion set by the Board of Regents though regulated by State statutes (local tuition). By State statute, both of these items must be billed together and called "tuition."

The State portion (conventional 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. The Admissions Office determines legal residence for tuition purposes on the basis of statutes of the State of Texas. State tuition is remitted to the State by the University. The current state tuition rate is \$38 per hour with a minimum \$120 (\$60 for Summer sessions) moving to \$40 per hour in Fall 2000 and increasing by \$2 per hour every Fall thereafter.

The local tuition portion is assessed to support University debt service and other University functions that are not supported by state funding. Approximately 70% of this fee is used to finance debt service. Other items supported by this fee include the post office, print shop, supply center, cashiering, and other institutional support functions. The current rate is \$24 per hour moving to \$26 per hour in Fall 2000 and increasing by \$2 per hour every Fall thereafter.

Combined, the current rate is \$64 per hour with a minimum \$144 (\$82 for summer sessions) moving to \$66 per hour in Fall 2000 and increasing by \$4 per hour every Fall thereafter.

Student Responsibility for Residence Classification

The responsibility of registering under the proper residence classification is that of the student. If there is any possible question of the student's right to classification as a resident of Texas, it is his/her obligation, prior to or at the time of registration, to raise the question with the Director of Admissions and have his/her status officially determined.

Every student who is classified as a resident student but who becomes a nonresident at any time by virtue of a change of legal residence by his/her own action or by the person controlling the student's domicile, is required to notify the Registrar.

Publication of and Public Access to Thesis/Field Study/ Dissertation Abstracts

The Graduate Council requires that thesis, field study, and dissertation abstracts be published by University Microfilms. Fees for this service are included in the binding fees for the two copies of the thesis, field study, or dissertation that go to the library (one for the stacks and one for archives). Thus, the binding fees are \$40 for the first two copies of a thesis and \$50 for the first two copies of a field study or dissertation. The fee is \$13.65 for each additional bound copy. If copyrighting is desired, another \$35 is charged. All theses, field studies, and dissertations will be placed in the library if permission to do so is granted by the student.

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 Cashiers' Office. Refunds are calculated as a percentage of *total* fees assessed, *not* as a percentage of partial payments on installments. Refunds for dropped classes are generally processed at the end of the second week past the 12th semester day of regular semesters and after the 4th semester day during summer sessions. Refunds for withdrawals are generally processed at the end of the second week following the 12th semester day for regular semesters and two weeks after the 6th semester day for summer sessions.

Dropped Courses

In order to receive a 100% reduction of tuition and fees for dropped courses, a student must drop according to the schedule below, and remain enrolled in some hours with the University. Questions should be directed to the Cashiers' Office.

Fall or Spring Semester

- 1. Through the twelfth semester day, 100 percent.
- After the twelfth semester day, no refund.

Summer Session

- Through the fourth semester day, 100 percent.
- 2. After the fourth semester day, no refund.

Withdrawal from the University

Tuition and fees may be reduced when a student withdraws. Depending on the amount of reduction and what the student has paid, the student may receive a refund or may still owe money to the University. Any student who officially withdraws from the University will receive a reduction on tuition and fees according to the following schedule.

Fall or Spring Semester

- 1. Prior to the first semester day, 100 percent.
- 2. During the first through fifth semester days, 80 percent.
- 3. During the sixth through tenth semester days, 70 percent.
- 4. During the eleventh through fifteenth semester days, 50 percent.
- 5. During the sixteenth through twentieth semester days, 25 percent.
- 6. After the twentieth semester day, none.

Summer Session

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

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

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

No reduction on student services fee or library fee is made unless the I.D. card is returned. No reduction on parking fee is made unless the permit is returned. Photo ID Services will replace the ID card when the student returns to the University and is paid in full for the semester. Questions should be directed to the Cashier's Office.

Summaries of Fees

Following are "Summaries of Fees" in effect at press time which can be used in determining total tuition and fee charges. The total amount of these fees are typical of other state universities in Texas though specific fees will vary from university to university. Note that these do not include course fees and it is assumed the student is enrolled only at Lamar University in Beaumont.

Additional fees and charges which are applied on a selective basis are listed following the Summary of Fees.

Lamar University Summer 2000

No.	Tuiti	on .	Stu.	Setzer		Computer	Library	Health	Tot	tal
Sem. Hours	Texas Resident	Non-Texas Resident	Serv. Fee	Center Fee	Property Deposit		Use Fee	Center Fee	Texas Resident	Non-Texas Resident
1	\$84	\$278	\$15	\$15	\$10	\$3	\$3	\$15	\$143	\$332
. 2	124	556	30	15	10	-6	6	15	198	. 624
3 .	186	834	45	15	10	9 '	9	15	277	916
· 4	248	1112	60	15	10	12	12	15	356	1208
5	- 310	1390	· 75	15	10	15	15	15 .	429	1494
6	372.	1668	90	. 15	10~	. 18	18	15	493	1771
7	434	1946	105	15	10	21	21	15	557	2048
. 8 .	496	2224	120	15	10	24	- 24	15	621	2325
. 9	558	2502	135	15	10	27	27	15	685	2602
10	620	2780	138	15	10	30	30	15	749	2879

Parking: \$12; ID: \$5; Property Deposit is a one-time fee; Other course and materials fees may apply. Note: Fees are subject to change by action of the Board of Regents or the Texas State Legislature.

Lamar University Fall 2000/Spring 2001

No.	lo. Tuition			Stu. Setzer		zer Computer Library		Health	Tot	al
Sem. Hours	Texas Resident	Non-Texas Resident	Serv. Fee	Center Fee	Property Deposit		Use Fee	Center Fee	Texas Resident	Non-Texas Resident
1	* \$146	\$287	\$15	\$30	\$10	. \$3	\$3	\$30	\$235	\$369
2	172	574	- 30	30	10	6	- 6	30	280	668
· 3 :	198	861	.45	30	10	9	9	30	325	967
4	264	1148	60	30	10	12	12	30	402	1266
5 .	330	1435	75	30	·10	. 15	15∖	30	485	1565
. 6	396	1722	90	· 30	10	18	. 18	30	568	1864
· 7	462	2009 .	105	30	10	. 21	21	30	651	2163
8	528	2296	120	30	10	. 24	24	30	734	2462
9	594	2583	135	30	10	27 `	27	30	· 817	2761
10	660	2870	138	30	10	30 :	30°.	30	888	3048
11	726	3157	138	30	10	30	30	30	950	3326
. 12	792	3444	138	. 30	10	. 30	30	30	1012	3604
13	858	. 3731	138	30	-10	. 30	30	30	1074	3882 -
14	924	4018	138	30	10	30	30	30	1136	4160
. 15	990	4305	138	. 30	10	30	30	30.	1198	4438
16	1056	4592	138	30	10	30	30	30	1260	4716
17	. 1122	4879	138	30	10	30	30	30	1322	4994
18	1188	5166	138	- 30	10	30.	30	30 -	1384	5272
19	1254	5453	138	30	10	30	30	30	1446	5550
20	1320	5740	138	30	10	30	30	30	1508	5828

Note: Fees are subject to change by action of the Board of Regents or Texas State Legislature. A resolution before the Board of Regents at catalog presstime may increase the general use fee and other fees if approved.

Parking: Fall-\$32, Spring - \$22; ID: \$5; Property Deposit is a one-time fee; Other course and materials fees may apply.

Lamar University Summer 2001

•	No.	Tuition		ition Stu. Setzer			Computer	Library	Library Tot	
:	Sem. Hours	Texas Resident	Non-Texas Resident			Property Deposit	Use Fee	Use . Fee	Texas Resident	Non-Texas Resident
	1	\$86	\$285	\$15	\$15	\$10	\$3	\$3	\$145	\$339
	· 2	132	570	30	15	10	6	6	206	638
	3	198	855	45	15	10	. 9	9	289	937
	4	264	1140	60	15	10	12	12	372	1236
	5	330	.1425	75	15	10 .	15	15	449	1529
	6	396	1710	90	15-	10	18	18	517	1813
	7	462	1995	105	15	· 10	21	21	585	2097
	8	528	2280	120	15	10	24	24	653	2381
	9	594 .	2565	135	15	10	27	27	721	2665
	10	660	2850	138	· 15	10 .	30 .	30 -	789	2949

Parking: \$12; ID: \$5; Property Deposit is a one-time fee; Other course and materials fees may apply. Note: Fees are subject to change by action of the Board of Regents or the Texas State Legislature.

Student Service Fee

The student service fee supports student activities such as athletics, recreational sports, the University Press, the Health Center and other student services. The current rate is \$15 per hour with a maximum of \$138.

Setzer Student Center Fee

This fee supports the Setzer Student Center and its programs. The current rate is \$30 per long semester and \$15 per summer session.

Course Fees

Various courses have additional fees associated with them. Students should always check with the departments offering the class to see if additional fees will be assessed. What follows is a summary of some fees associated with some classes.

			•	,
ARTS AND SC	IENCES	CNDV 5390	\$85.00	ENGR 5314 \$70.00
BIOL 5101	\$24.00	CNDV 5391	\$85.00	ENGR 5322 \$70.00
BIOL 5402	\$24.00	CNDV 5392	\$85.00	ENGR 5350 \$70.00
BIOL 5405	\$24.00	CNDV 5393	\$85.00	ENGR 5389 \$2.00
BIOL 5406	\$24.00	EDLD 5388	\$50.00	FINE ARTS AND COMM.
BIOL 5410	\$24.00	EDLD 5397	\$85.00	MUAP 5210 \$50.00/hr
BIOL 5430	\$24.00	EDLD 5398	\$85.00	MUAP 5220 \$50.00/hr
BIOL 5440	\$24.00	EDLD 5399	\$85.00	MUAP 5230 \$50.00/hr
BIOL 5450	\$24.00	FCSC 5304	\$75.00	MUAP 5410 \$50.00/hr
BIOL 5455	\$24.00	FCSC 5305	\$75.00	MUAP 5420 \$50.00/hr
BIOL 5460	\$24.00	FCSC 5306	\$75.00	MUAP 5430 \$50.00/hr
BIOL 5470	\$24.00	FCSC 5307	\$75.00	ARTS 5305 \$55.00
CHEM 5301	\$12.00	FCSC 5320	\$2.00	ARTS 5323 \$50.00
CHEM 5411	\$24.00	FCSC 5321	\$20.00	ARTS 5325 \$28.00
CHEM 5412	\$24.00	FCSC 5344	\$20.00	ARTS 5326 \$28.00
COSC 5328.	\$70.00	FCSC 5347	\$20.00	ARTS 5335 \$28.00
COSC 5313	\$70.00	PEDG 5310	\$50.00	ARTS 5365 \$28.00
NURS (all)	\$125.00 sem.	ENGINEERING	! .	ARTS 5385 \$44.00
PSYC 5120	\$24.00	ELEN 2107	\$70.00	ARTS 5386 \$39.00
ED. AND HUM	AN DEV.	ELEN 3108	\$70.00	CMDS 5309 \$25.00
CNDV 5382	\$85.00	ELEN 3108	\$2.00	CMDS 5312 \$25.00
CNDV 5386	\$300.00/mo.	ENGR 5212	\$70.00	
				, ,

Computer Use Fee

This fee primarily supports both the administrative mainframe computer and the academic mainframe computer. The current rate is \$3 per hour with a maximum of \$30.

Library Use Fee

This fee is used to support the library. As every course (including field center courses) are given the mandate to use the library, all students are charged this fee. The current rate is \$3 per hour with a maximum of \$30.

Distance Learning Fee

A charge up to \$50.00 per semester credit hour of instruction will be charged to students enrolled in courses offered by means of distance learning.

Private Lessons in Voice and Instrumental Music

Graduate applied music courses (per semester hour) \$18.00

Late Registration Fee

A charge of \$10 is made for late registration or for paying after the start of the semester (not including the second or third payments under the installment plan).

Parking Fee

Each student who pays the necessary fee is issued a 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 automobiles are registered. Strict observance of traffic and parking regulations is necessary for the safe, orderly flow of vehicles in the campus area.

Charges for parking on campus are made at registration. Automobile registration fees are as follows: Fall Semester, \$32; Spring Semester, \$22; Summer, \$12. 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 request to the Cashiers' Office after the student graduates or withdraws from the University. If a student attends the university for more than four years, this fee will be charged again.

Health and Accident Insurance

Health and accident insurance coverage is available at registration for students carrying nine or more semester hours. This or similar insurance is required of all international students. Additional information may be obtained from the Student Affairs Office.

Miscellaneous Fees

Microfilming of abstract and binding of first two copies
of field study or dissertation
Thesis, field study, or dissertation binding (each copy after the first two) 13.65
Diploma fees (with tax)
Cap, gown and hood (disposable) – Master's (plus tax)
Cap, gown and hood (rental) – Doctor's (plus tax)
Copyrighting
Transcript Fee
Photo Identification

Insufficient Funds Fees

Checks written to the University and returned unpaid for any reason will result in a \$25 charge plus applicable fees for a delinquent account (e.g. \$10 late registration fee, \$15 late installment payment fee, etc.). Students with a returned check will be on "cash only" status for the duration of their enrollment at Lamar, subject to appeal. Students on a "cash only" basis are prohibited from paying with a personal check (all other payment methods are acceptable).

Fine and Breakage Loss

All 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.

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.

Housing

The student housing program at Lamar is designed to supplement the academic program by providing opportunities for social and intellectual development and recreation in a pleasant living environment. The University recently completed a multi-million dollar renovation program, making its residence halls among the most modern in Texas. A variety of living styles is available and includes modern furniture, semi-private rooms, carpet, central heating and air conditioning and various color schemes in the dormitories. Apartment accommodations in newly remodeled buildings also are available.

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

Questions concerning the housing system, its policies, room and board rates, should be directed to the Student Housing Office, Lamar University, Box 10041, Beaumont, Texas 77710.



Following a centuries-old tradition, LU buildings form a quadrangle, the heart of the campus.

Academic Information

Course Numbering

Lamar University converted to the Texas Common Course Number (TCCN) prefixes and numbers in the fall semester of 1998. A crosswalk from previous numbers to the TCCN number is Appendix A. The TCCN is primarily for freshman and sophomore courses; however, the prefix has been continued through all levels.

Each course has an alphanumeric code (e.g., ENGL 1301). The alpha portion is an abbreviation of the subject area, while the numeric portion provides specific information about the course. The first digit of the numeric portion indicates the level of the course (1=freshman level, 2=sophomore level, 3=junior level, 4=senior level, and 5 and 6=graduate level). The second digit indicates the number of semester credit hours earned by satisfactorily completing the course. The third and fourth digits are sequencing numbers. Master's level courses are numbered 5000. Doctoral level courses are numbered 5000 and 6000. Students are responsible for registering in the correct level of courses.

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; and, 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.

Changing Schedules

All section changes, adds and drops must be approved by the department chair of the student's major field. All such changes are initiated by the completion of the proper form available in the department chair's office. Usually, a course may not be added after the first two days of a regular or summer session.

Dropping Courses

After consultation with their advisor and/or department chair, 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 that 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 Records Office or telephone Voice Response Registration System. A student may not drop a course within 15 class days of the beginning of the final examinations or five class days before the end of a summer term.

Students should check published schedules 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 after the official drop date.

Withdrawal from the University

Students wishing to withdraw during a regular semester or summer term should fill out a Withdrawal Petition available in the Records Office. 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 Records Office 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 student and by the department chair must be presented to the Records Office by the student. The student will receive a receipt.

The Finance Office, on application before the end of the regular semester or summer session, will return such fees as are returnable according to the schedule shown under the "Fees" section of this catalog. 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" may be 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 during a regular semester 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 submit a written petition to their Dean.

Enforced Withdrawal Due to Illness

The Director of the Health Center and the Vice President for Student Affairs, on the advice of competent medical personnel, may require withdrawal of or deny admission to a student for health reasons (mental or physical).

Academic Records

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

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 exempted from the provision of the law. The types, locations and names of custodians of educational records maintained by the University are available from the 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 that any or all of this information be withheld from the public by making written request to the Registrar. 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, marital status, country of citizenship, major and minor, semester hours load, class schedule, classification, eligibility for and 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 they are 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 Records Office.

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 or, second, by the parent validating the student's dependency as defined by IRS.

Summons

An official summons takes precedence over other university activities of the student and should be answered promptly on the day and hour designated.

Falsification of Records

A student who makes a false statement to any university official or office or on any official form submitted to the University is subject to immediate dismissal.

Student Debts

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

Students and student organizations are expected to honor contractual obligations promptly.

Penalty for failure to clear up these obligations may be (a) no readmission, (b) withholding of grades and transcripts, (c) withholding of degree.

Parking

At registration, each student who pays the necessary fee is issued a permit which allows parking on the campus. This permit is numbered and is to be attached to the back of the rear-view mirror of the car.

Change of Address or Name

Students are responsible for all communications addressed to them at the address on file in the Office of Student Development, in the Office of the College of Graduate Studies and in the Records Office. Any student who moves during a semester must immediately register the change of address in the above offices. Change of address forms are available in the Records Office.

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.

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 provided the student notifies his/her instructor within 15 days of the beginning of the semester. "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. Upon review of the request, 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 Vice President for Student Affairs. Students may be required to present to the Vice President for Student Affairs a written statement documenting that such absence qualifies under the terms of a religious holy day.

College of Graduate Studies

History

The College of Graduate Studies was instituted in Fall 1960 with the offering of the Master of Arts degree in the fields of history and English.

In 1962, master's degrees were begun in mathematics, engineering and elementary education; in 1965, in business administration, chemistry, special education and secondary education; in 1968, in health and physical education, political science, speech-language pathology, audiology, and guidance and counseling; in 1969, in biology, and in 1970, in educational supervision. Also in 1970, a doctor's degree in engineering was authorized. In 1972, a master's degree in school administration was approved. Master's degrees in public administration and in psychology were authorized in 1974. In 1975, master's degrees in music, music education and home economics were initiated. In 1981 the Master of Science in Deaf Education was approved and the Master of Engineering Management degree was begun in 1983. A Master of Science in Computer Science was added in 1984. Master's degrees in Environmental Science and in Environmental Engineering were added in 1990. A Doctor of Education in Deaf Education was approved beginning in 1993, and a master's degree in nursing was initiated in 2000.

Objectives

The objectives of the College of Graduate Studies are as follows:

Advancement of knowledge through research.

2. Intensification within a student's chosen field of specialization and allied areas.

3. Development of the student's skill in the methodology of research.

- 4. Promotion of the power of independent thought by teaching students to take charge of their own intellectual advancement.
- Introduction to the profession and its organization and protocols.

Degrees Offered

Master of Arts

English, History, Visual Art

Master of Business Administration

Master of Education

Elementary Education, Counseling and Development, Secondary Education, Special Education, Supervision, Administration

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

Applied Criminology, Audiology, Biology, Chemistry, Community Psychology, Computer Science, Deaf Education, Environmental Engineering, Environmental Studies, Family and Consumer Sciences, Industrial and Organizational Psychology, Kinesiology, Mathematics, Nursing, Speech-Language Pathology, Theatre

Doctor of Education in Deaf Education

Doctor of Engineering

Regulations

Student Responsibility

It is the responsibility of each student to know the regulations of the Graduate College and the major department, to enroll in the appropriate course work to complete the degree plan, and to maintain the standards of the University, the College of Graduate Studies, and specific departments and programs.

Enrollment

Admission to Graduate Programs

All students seeking admission to a graduate degree program must first meet the minimum standards of the College of Graduate Studies. Applicants must also have the approval of the department in which the degree program is offered. The admission standards of departments may exceed those of the College of Graduate Studies.

Applications for admission to graduate programs are processed by the Graduate Admissions Coordinator. The Graduate Admissions Coordinator sends to graduate programs only those applications which meet the minimum standards of the College of Graduate Studies. The graduate departments then select those to be recommended to the Graduate Dean for admission. NOTE: Meeting the admission standards of the Graduate College does not imply admission to a particular degree program. The Graduate Dean notifies the Graduate Admissions Coordinator of admission decisions and the Coordinator provides written notification of admission status to the applicants. Statements by other university officers concerning the applicant's admissibility are not valid until confirmed by the Graduate Dean.

Admission to any degree program is valid for one year from the admission date. The applicant who does not enroll during that period will be required to resubmit all application materials and meet the admission standards in force at the time of the second application.

Graduate students wishing to change from one major field to another must make application to the Office of the Graduate Dean and must meet all specific program admission requirements for the new major.

- Application Deadlines: Domestic students (U.S. citizens and permanent residents) must submit all application materials at least 30 days before Fall, Spring, or Summer registration. Deadlines for international students are May 15 for Fall semester, October 1 for Spring, and February 15 for Summer terms.
- 2. Application Submission by Domestic Students (U.S. citizens or permanent residents): Applicants for admission to the College of Graduate Studies must submit the following to the Graduate Admissions Coordinator at least 30 days before registration:

A. Completed Application Form

- B. **Transcripts.** Submit an official transcript from each college or university attended. All transcripts submitted to Lamar University become the property of the University and are not returnable.
- C. GRE and GMAT Test Scores. With two exceptions, all prospective graduate students are required to submit scores on the Graduate Records Examination (GRE). Applicants should have the Educational Testing Service, which administers the GRE, send test scores directly to Lamar University. The two exceptions to the GRE requirement are applicants for the Master of Business Administration (MBA) and deaf applicants. MBA applicants 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 this Bulletin for specific requirements. Deaf applicants may substitute performance intelligence and reading ability test scores for the GRE. GRE and GMAT scores more than five years old will be accepted only with permission of the Graduate Dean.
- 3. Deaf applicants who have a severe or a profound hearing loss acquired congenitally or prelingually will be considered on an individual basis and need not submit GRE or GMAT scores. In lieu of GRE/GMAT scores, deaf applicants must submit above-average performance intelligence scores (preferably the performance scale of the WAIS-R) and above-average university grades, pass an interview with an admission committee comprised of faculty from the receiving department, and demonstrate adequate literacy and communication skills for graduate training. Literacy in this case includes both the reading and writing of English, but not necessarily equivalent to hearing norms. Communication skill may be demonstrated in sign language and/or speech.
- Admission Standards for Domestic Students (U.S. citizens and permanent residents):
 - A. Undergraduate Degree. A prospective student must have a bachelor's degree from an institution approved by a recognized accrediting agency.
 - B. GRE Scores and Grade Point Average (GPA). All applicants for full admission, except for deaf students and those seeking admission to the MBA program, must meet the institutional GRE and GPA standard according to the formula (GPA X 200) + (GRE V+Q) ≥ 1350. The GPA used in the formula may be either the overall or the last 60 semester hours, whichever is higher. The grade point average is calculated by dividing the total number of grade points earned by semester hours considered (either the total number of semester hours attempted or by the last sixty semester hours). For this computation "A" equals 4 grade points, "B" equals 3, "C" equals 2, "D" equals 1, and "F" equals 0. Individual departments may have GRE and GPA standards which exceed the institutional minimum. See the department sections of this catalog for admission standards which vary from the institutional minimum.
 - C. GMAT Scores. Admission to the Master of Business Administration (MBA) program is based in part on a formula which considers both the undergraduate GPA and the GMAT score. See the College of Business section of this catalog for details.
 - D. Undergraduate Grade Point Average. Our admission standard of (GPA X 200) + (GRE V+Q) ≥ 1350 is such that lower GPAs require higher GREs. Similarly, for the College of Business, the admission formula considers the GPA in such

- a way that the GMAT and GPA are interdependent (the GPA minimum "floats" in relationship to the applicant's GMAT score). See the College of Business section of this catalog for details.
- E. **Provisional Admission.** In those departments or programs that have admission standards exceeding the institutional minimum, we allow, at departmental discretion, provisional admission. A student admitted provisionally must complete the first nine semester hours of graduate work with a GPA of at least 3.0. A student who does not meet the 3.0 GPA after nine semester hours is subject to dismissal.
- F. Undergraduate Work in Intended Major Field, Prerequisites and Deficiencies. The applicant for graduate study ordinarily must have completed no fewer than 24 semester hours of undergraduate work in the intended major field, 12 of which must be at the junior and/or senior level. Applicants who do not meet this requirement may be required to make up such deficiencies as prescribed by the graduate major. A GPA of 3.0 for assigned deficiency/leveling courses must be maintained and grades below "C" will not be accepted. Departments which wish to do so may establish more stringent requirements. MBA students with deficiencies will be required to complete first year MBA courses as determined by the College of Business with a grade of "C" or better and an overall GPA of "B" or better in all course work taken.
- 5. Admission Procedures and Standards for International Students. International students are required to follow the procedures and meet the standards for domestic students as stated above. Additional requirements for international students include the following:
 - A. Transcripts. International students must submit official certified transcripts from all colleges and universities attended. If the transcripts are not in English, the student must provide certified translations.
 - B. TOEFL score. Most international students whose first language is not English must take the Test of English as a Foreign Language (TOEFL) and score better than 525. Lamar University must receive the official TOEFL scores before admission can be granted. For information about testing dates and places, write to TOEFL, PO Box 899, Princeton, NJ 08540, USA. The TOEFL is not required of those international students who have received an undergraduate or graduate degree from a university where English is the language of instruction (e.g., universities in the United States, Canada, and England). As part of the orientation process, international students with relatively low but passing TOEFL scores will be required to take one or more additional English as a second language (ESL) proficiency examinations and may be required to participate in ESL coursework as part of their graduation requirements.
 - C. TWE Score. International students who are required to take the TOEFL must also submit scores for the Test of Written English (TWE). The TWE is available at the same test centers that administer the TOEFL. The minimum TWE score required by Lamar University is 5. Those scoring less than 5 may be admitted to Lamar University but will be required to enroll in English as a Second Language Courses.
 - D. Proof of Financial Resources. International students must prove that they have the financial resources to attend Lamar University. As part of the application process, international students must submit an original Confirmation of Financial Resources form which asks for personal, family, and/or sponsor financial information and a bank verification of financial holdings.

All international students are required to have health and accident insurance for themselves and all their dependent family members in the United States. Insurance may be purchased at the University during the registration period.

E. Proficiency in spoken English may be required by some graduate programs.

- 6. Admission Procedures and Standards for Doctoral Degrees. Prospective Doctor of Engineering (D.E.) students must send a letter to the Dean, College of Engineering, Box 10057 Lamar University, Beaumont, TX, 77710. The letter should give information on the applicant's engineering experience, current employment and major research interests. For details on GPA, GRE, TOEFL and background requirements, see the College of Engineering section of this catalog.

 Prospective Doctor of Education in Deaf Education (Ed.D.) students must send a letter to the Chair, Department of Communication Disorders (Speech and Hearing), Box 10076 Lamar University, Beaumont, TX 77710. The letter should give information on the applicant's deaf education experience, training, employment history, current employment, and major research interests. Deaf applicants are encouraged and experience as a teacher of the deaf is required. For details on
 - Fine Arts and Communication section of this catalog.

 Readmission of Former Graduate Students. A former graduate student who has not maintained continuous enrollment for two semesters (summers excluded), but who is academically eligible to continue in the graduate degree program where he or she was most recently enrolled, may be permitted to return, assuming the program is not at capacity. The procedures are dictated by the period of

GPA, GRE, TOEFL and background/experience requirements, see the College of

- 1. Less Than Two Years. The student must notify the Graduate School and the program coordinator or department chair of his/her plans to return. A new application must be submitted, and official transcripts must be provided if the individual has enrolled in another university since leaving Lamar University.
- 2. **Two to Four Years.** A new application must be submitted and endorsed by the department chair or program director and by the Graduate Dean. The application must show any intervening graduate work and he/she must provide official transcripts of such work. The applicable admission standards are those that were in effect when the student originally enrolled.
- 3. Four or More Years. The student is considered a new applicant and new supporting materials are required. The applicable standards are those in effect when the student applies for readmission. Coursework more than six years old may not be counted toward a graduate degree.

Appeal of Admission Denial

absence from enrollment as follows:

Prospective students who have been denied admission to the College of Graduate Studies have the right of appeal through the Graduate Appeals Committee. The Committee meets once each long semester, and once in the summer unless otherwise indicated. The Committee considers appeals on an individual basis and makes recommendations to the graduate dean. Contact the Office of Graduate Studies (219 Wimberly Building) for complete details on the appeals process.

Admission for Nondegree Students Post Baccalaureate (PB)

- 1. **Definition.** The Post Baccalaureate (PB) classification carries undergraduate status, does not culminate in a graduate degree, and should not be considered as a means to enter graduate school. The PB admission category is designed primarily for students who do not intend to earn a graduate degree but wish to enroll in graduate courses. The PB classification may be used by students who are seeking teaching certificates, but it must be understood that PB status does not lead to a master's degree. Except for students classified as Pre Graduate (PG), all students who enroll in graduate courses without meeting admission standards or completing the admission process are given PB status.
- Admission. To receive the PB classification, the applicant must:
 - A. Have received a bachelor's degree
 - B. Submit an application for admission with PB status to the Graduate Admissions Coordinator
 - C. Submit an official transcript from each college previously attended, showing highest degree earned
 - D. Be approved for admission with PB status by the University
- 3. Enrolling in Courses as a PB Student. PB students are not permitted to enroll in graduate courses without the prior consent of the chair of the department offering the course/s desired. PB students are not permitted to enroll in graduate business courses without the prior consent of the Associate Dean of the College of Business. PB students who want to enroll in elective undergraduate courses for personal or professional development are advised through the Center for Adult Studies 106 Montagne Center.
- PB Classification and International Students. International students will not be admitted with PB status.
- -5. Application of PB Credits Toward a Graduate Degree. If a PB student is eventually admitted to the Graduate College, a maximum of six semester hours earned under PB classification may be applied toward a graduate degree if approved by the department and by the Graduate Dean. In addition to these 6 hours, if a student is admitted to the graduate school during a semester in which the student is taking further graduate hours, those further hours will be counted towards the degree.
 - 6. Competitive Graduate Scholarships and Assistantships for PB Students. PB students are not eligible for graduate assistantships and scholarships.

Pre Graduate (PG)

- 1. Definition: The PG admissions category is designed primarily for students who intend to enter a graduate program and earn a graduate degree but have not yet met all admission standards and/or submitted all application materials. The Pre Graduate (PG) classification carries undergraduate status and does not culminate in a graduate degree unless the student is eventually admitted to graduate school. The PG status allows the prospective graduate student to enroll in a limited number of graduate courses while completing the application and acceptance process.
- 2. Admission: To receive the PG classification, the applicant must:
 - A. Have received a bachelor's degree.
 - B. Submit an application for regular admission to the Lamar University College of Graduate Studies and a PG application form to the Graduate Admissions Office.

- C. Be approved for admission with PG status by the University.
- 3. Enrolling in Courses as a PG Student: PG students are not permitted to enroll in graduate courses without the prior consent of the chair of the department offering the course/s desired. PG students are not permitted to enroll in graduate business courses without the prior consent of the Associate Dean of the College of Business.
- 4. **PG Classification and International Students:** International students will not be admitted with PG status.
- 5. Application of PG Credits Toward a Graduate Degree: If a PG student is eventually admitted to the College of Graduate Studies and to a graduate program, a maximum of six semester hours earned under PG classification plus current enrollment may be applied toward a graduate degree if approved by the department and by the Dean of the College of Graduate Studies.
- 6. Competitive Graduate Scholarships and Assistantships for PG Students: PG students are not eligible for graduate assistantships, fellowships, or scholarships.

Academic Policies of the College of Graduate Studies

All graduate students are expected to be familiar with the policies and regulations of the College of Graduate Studies.

- 1. Academic Year. The University divides the academic year into two long semesters (Fall and Spring) and two summer terms of 6 weeks each.
- 2. Time Limit for Degree Completion. All course work applied toward a given degree, except for doctoral degrees, must be completed within a period of six years. This time limit applies to all work at the graduate level, including work transferred from another institution. Time spent in active military service is not included in the six-year limit.
- 3. Maximum Semester Course Load. The maximum course load for graduate students during Spring and Fall semesters is 15 hours per term. The maximum course load for graduate students for any one summer term is 6 semester hours, or 7 hours if a lab is taken. These maximums apply even when the graduate student is enrolled in a combination of graduate and undergraduate courses.
- 4. Definitions of Full and Part-Time. A full-time graduate student is defined as a student taking at least nine semester hours of graduate work during Fall or Spring semesters, or both 5390 and 5391 (thesis) during the same semester, or enrolled in ENGR 6601 or 6602 (doctoral field study). After completing the course work for a graduate degree, students who are enrolled in a thesis, dissertation, or field-study course may be considered full-time even though they are enrolled in as little as three semester hours. This may occur for up to two semesters. Additional semesters of thesis, dissertation, or field-study writing require permission of the department chair and of the dean of the Graduate School. Students taking fewer than 9 semester hours of graduate work during a semester are considered parttime. In the summer, full-time is 6 hours per term and half-time is 3 hours per term. Full-time status is required for fellowships, scholarships, and teaching/research assistantships.
- 5. Permission for an Undergraduate Student to Enroll in Graduate Courses, Reservation of Work by Undergraduates for Graduate Credit. An undergraduate student who is within 12 semester hours of graduation may take a maximum of six semester hours of graduate courses which may be applied toward a master's degree. Both the chair of the intended graduate program and the graduate dean must approve, and the total academic load may not exceed 15 semester hours. The

- G-11 form, available in the Graduate Office (219 Wimberly) and in departmental offices, is used to obtain permission.
- 6. Transfer of Graduate Credits to Lamar University. With the approval of the chair of the major department and the graduate dean, a student may transfer up to six semester hours of graduate work completed at another regionally-accredited institution and these transferred credits may be applied toward a graduate degree at LU. Only courses with grades of "A", "B" or "S" (satisfactory) which were accepted as graduate credit at the institution where the work was taken may be considered for graduate transfer. Transferred credits are not considered in the computation of the graduate grade-point average at Lamar University.
- 7. Application of Institute Hours Toward a Degree. A maximum of six semester hours of work done in institutes may be approved for graduate credit toward a degree. Institutes are defined as graduate courses of less than three weeks duration.
- 8. Application of Credits from One Master's Degree Toward a Second Degree. A maximum of six semester hours taken for one master's degree may be counted toward a second master's degree with the approval of the department in which the second degree is sought.
- Use of Advanced Undergraduate Courses Toward a Graduate Degree. Undergraduate courses, even if senior-level, may not be applied toward a graduate degree.
- 10. Correspondence Credit, Credit by Examination, and Course Work Earned Through Distance Learning. Courses taken by correspondence and credits earned through examination are not accepted toward graduate degrees. Courses completed through Distance Learning may be applied toward a graduate degree if approved by the student's graduate committee.
- 11. Course Duplication, Repeating a Course. With approval of the Chair of the major department, a student may enroll for a course a second or subsequent time and have it counted as part of the semester's load. If a course is repeated, the last grade recorded will be considered the official grade, but the original grade remains on the student's record as a course taken. A repeated course will be included in the student's cumulative record and in the computation of the GPA. Independent study/special topics courses may have the same course number but are not considered to be the same course if the topics differ. If a student earns a D or F in a course required for his/her graduate degree, the course must be repeated and a passing grade of A, B, or C must be earned.
- 12. Change of Major. Except in the College of Business, changes of major must be approved by the chair and/or the graduate advisor in the new graduate program and by the Graduate Dean. In the College of Business, changes must be approved by the Associate Dean and by the Dean of the College of Graduate Studies. New international students may begin the process of changing majors during their first semester but may not actually make the change until their second term. Obtain forms for changing majors (G-16) at the Graduate Office (219 Wimberly). Caution: Financial assistance provided by an academic department is usually not transferable to other departments. Students who change their major and transfer from one department to another may lose their financial assistance.
- 13. Enforced Withdrawal or Course Drop. A graduate student may be required to drop a course or courses or withdraw from the University temporarily or permanently if the student's academic work is below the standards of the College

- of Graduate Studies (see discussion of probation/suspension below), or if the student is found (through due process) to have engaged in academic dishonesty or misconduct. In those programs that provide clinical training or student teaching (e.g., audiology, speech-language pathology, nursing, Education and Human Development), a student can be removed from practicum and/or the program if it is found (through due process), that he/she is a threat to the well-being of patients, students, clients, etc.
- 14. Academic Dishonesty, Misconduct, Discipline Code. Student conduct regulations, as found in the Lamar University. Student Handbook, apply to all graduate students. These regulations include policies relating to academic dishonesty, plagiarism, University disciplinary code, and student rights and responsibilities. It is the responsibility of all graduate students to read the Student Handbook and to abide by all University regulations.
- 15. Grading System. The grading system for graduate students is "A" (superior), "B" (good), "C" (marginal), "D" (poor), "F" (fail), "I" (incomplete), "S" (satisfactory), "U" (unsatisfactory), Drop, and Withdrawal. Credits applicable to graduate degrees are given only for the grades A, B, C, and S. Although C grades earned at Lamar University may be counted toward the requirements for a graduate degree, C grades are not considered acceptable graduate-level performance. Courses in which a student earns only a D or F may not be counted toward a graduate degree, although such grades are calculated in determining the grade-point average. Grades of C, D or F must be compensated for by the necessary hours of A if the student is to have the 3.0 grade-point average required before awarding the degree. In computing grade-point averages, an "A" is valued at four grade points, a "B" three, a "C" two, a "D" one, and an "F" zero. An overall grade point average (GPA) of "B" (3.0) on all graduate work attempted is required for graduation. Thesis grades are not included in the computation of grade point averages. Incomplete work that is not finished during the next long semester (Spring or Fall) will be credited with an "F". With compelling justification, the graduate dean may grant an extension of the time limit for the completion of incomplete work.
- 16. Additional Departmental GPA Requirements. A department or graduate program may impose GPA standards for its majors which exceed those of the Graduate College when approved by the Dean of the academic college.
- 17. Admission of Faculty to Graduate Degree Programs. Lamar University faculty will not be permitted to work toward a graduate degree within their own department. To pursue a graduate degree in another department, faculty must have the approval of the Graduate Dean.
- 18. English Proficiency Required of International Students for Graduation. International students whose first language was not English are required to pass an English proficiency test before they may be admitted to candidacy for a graduate degree. The test is not used as an admissions requirement to the Graduate College and is taken after the student is admitted and arrives on the Beaumont campus. International students who do not pass the test are required to enroll in an English as a Second Language (ESL) course until they pass the test.
- 19. Rule Changes. The University reserves the right to change any of its rules, regulations or course requirements without notice.
- 20. Waiver of Regulations. Graduate students have the right to file a petition for exemption from any academic regulation of the Graduate College. Petitions for exemption are considered by the Graduate Appeals Committee, which makes recommendations to the Graduate Dean. Decisions of the Graduate Dean may be

- appealed through administrative channels (i.e., to the Executive Vice President for Academic Affairs, then to the University President, the Chancellor, and, finally, to the Board of Regents).
- 21. Open Records Policy. Student records, which generally include information concerning the student and the student's individual relationship to the educational institution, are available on request to Lamar University personnel who have an educational interest in the records. Individual records are also accessible to the student in question. Without written consent of the student, records are not released except as noted above.

Quality of Work Required, Probation/Suspension Regulations

The graduate student must maintain a 3.0 grade point average on all courses that receive graduate credit, whether or not they are to be applied toward a graduate degree. Leveling and elective courses taken for graduate credit are included in the computation of the grade point average. A student whose GPA in graduate work falls below 3.0 must make up the deficit, either by repeating courses in which the grades are low, or by completing other graduate courses with grades high enough to bring the GPA up to 3.0.

Graduate students who do not meet the academic standards of the Graduate College will be placed on probation or suspended. Students on probation may enroll in graduate courses but may not apply for graduation. Suspended students may be temporarily or permanently denied permission to enroll in graduate courses. In computing graduate academic status, all graduate work taken during the previous six years except thesis and field study courses apply. Graduate work taken at another institution will be included in the computation of semester hours toward a degree only when that work is applied toward a degree in progress at Lamar University. Transferred credits will not be used in the computation of the graduate grade point average at LU.

- 1. **Minimum Academic Performance**. Graduate students with grade point averages of 3.0 or better are in good standing. Students with GPAs below 3.0 will be placed on probation or suspended.
- 2. **Probation**. Students with full graduate admission status who fail to achieve and maintain an overall grade-point average of 3.0 after the completion of 12 semester hours of graduate enrollment will be placed on academic probation. Students on probation who fail to raise their GPA above 3.0 within 12 semester hours of graduate work will be suspended. Students on probation may enroll in courses but may not apply for admission to candidacy or for graduation. The probationary status applies whether or not the student receives a letter of notification from the Graduate Office.
- 3. Suspension. A graduate student who has been placed on probation and who fails to raise his/her GPA to at least 3.0 within 12 semester hours of graduate enrollment will be suspended. Suspended students may enroll in summer graduate courses and they may enroll in undergraduate courses during spring, fall, or summer semesters. Undergraduate grades earned while on suspension will not be used in the computation of the graduate GPA. Suspension for the fall semester may be removed if the student raises the graduate GPA to at least 3.0 during summer terms. The first academic suspension shall be for one long semester (fall or spring) and the second suspension will be for two long semesters. The third suspension will be permanent.
- 4. Transfers to New Major Departments by Students on Probation/Suspension. Suspended students may be admitted to another department only after they have completed their suspension, provided that they meet the admission standards of the new graduate major. Students on probation may transfer to a different

- graduate program with the approval of the chair of the new program, but will remain on probation until their GPA is 3.0 or better.
- PB and PG Students and Probation/Suspension. Post baccalaureate students taking graduate course work are not subject to probation or suspension until they have been admitted to the graduate college and a graduate degree program.
- Grades Earned in Deficiency, Leveling, or Background Courses. A GPA of 3.0 must be maintained for all undergraduate and graduate courses assigned as deficiency, leveling, or background work by the student's major department. Such courses must be repeated if grades of "D" or less are received.
- Additional Departmental Regulations. A department, with approval from the appropriate academic dean, may require its majors to meet additional standards with regard to probation, suspension, and dismissal. These may be found in the appropriate departmental section of this catalog.

General Degree Requirements

- Students must earn the number of semester hours of graduate credit specified by their major departments. Specific details may be found in the departmental section of this Bulletin.
- Any student who writes a thesis must defend it orally before his/her committee. Students who do not write theses must pass a comprehensive examination, which may be oral, written, or a combination of both. Please consult the departmental section of this catalog for specific details.

The student must meet the specific requirements as set forth in this catalog for a particular degree program.

Master of Arts

1. Meet all general degree requirements.

If writing a thesis, complete 30 semester hours of graduate work: 18 in the major field, six in thesis, six in an approved minor or six additional hours in the major.

If not writing a thesis, complete 36 semester hours of graduate work approved by

the graduate committee.

4. Except for the non-thesis option in history, candidates for the M.A. degree must present evidence of a reading knowledge of at least one foreign language. This requirement may be satisfied by examination or by submitting college credit equivalent to that required for the degree of Bachelor of Arts in this institution.

Master of Business Administration

Meet all general degree requirements.

Complete 30 hours of second year MBA courses specified under College of Business degree requirements if a thesis is written, plus any first year MBA courses required.

If a thesis is not written, complete 36 hours of second year MBA courses as specified under College of Business degree requirements, plus any first year MBA courses required.

Master of Education

Meet all general degree requirements.

Complete 30 semester hours of graduate work if a thesis is written or 36 semester hours if a nonthesis program is selected.

Meet the specific requirements listed in the College of Education section of this catalog for each degree program.

Master of Engineering

Meet all general degree requirements.

Complete 36 semester hours of graduate work or complete 30 hours of graduate work plus a three-hour design project.

Master of Engineering Science

Meet all general degree requirements.

2. Complete 30 semester hours of graduate work, including six semester hours in thesis.

3. Meet the specific requirements listed in the College of Engineering section of this catalog.

Master of Music (Performance)

Meet all general degree requirements.

2. Complete 30 semester hours of graduate work: 12 hours in the Applied Major, six in Music Literature, six in Music Theory and six in Music Education.

3. Special requirements in addition to the above: a formal public recital and a research paper OR a lecture recital.

Master of Music Education

Meet all general degree requirements.

Complete 36 semester hours of graduate work: 18 in Music Education, six in Music Literature, six in Music Theory, and six in Thesis.

 Exceptions: six additional hours in Music Education may be substituted for the Thesis, and six hours in Applied Music may be substituted for Music Education courses.

Master of Science in Nursing

1. Meet all general degree requirements.

- 2. Complete 42 semesters hours of graduate work: 12 hours in the General Nursing Core, 15 hours in the Nursing Major, and 15 hours in the minor field.
- ${\bf 3.}\quad {\bf Complete}\ at\ least\ {\bf 4}\ hours\ of\ Advanced\ Practice\ Practicum\ within\ the\ Nursing\ Major.$
- 4. Meet the specific requirements listed in the College of Arts and Sciences, Department of Nursing section of this catalog.

Master of Public Administration

Meet all general degree requirements.

2. Complete 36 semester hours of graduate work as specified for the degree in the Department of Political Science section of this catalog.

. Pass both oral and written comprehensive final examinations.

Master of Science

1. Meet all general degree requirements.

Complete 30 semester hours of graduate work: 15 to 18 semester hours in the
major field, six in thesis and six to nine semester hours in the minor field. With
the approval of the head of the major department, a student may elect to take all
work in the major field.

3. If a thesis is not required, complete 36 hours of approved course work.

 The graduate degree in psychology requires 36 hours in approved course work and six hours in thesis.

 Students applying to the Computer Science program must satisfy the depth and breadth requirements as defined by the Graduate Faculty of the Computer Science Department.

Doctor of Education in Deaf Education

 Obtain credit for all courses required by the student's doctoral committee. The number of these courses will depend upon the student's pre-doctorate educational preparation, previous experience and specialization emphasis during the program. In general, a 30 semester hour core curriculum and a minimum of 30 semester hours of electives/cognates for a total of 60 semester hours beyond the Master's degree.

Satisfactorily pass preliminary written and oral examinations after the comple-

tion of 18 semester hours.

3. Complete a four semester (1 calendar year) residency requirement.

4. Obtain admission to candidacy by completing all coursework required for the degree, complete 12 hours of dissertation credit following admission to candidacy, and successfully defend the dissertation prior to graduation.

Doctor of Engineering

 Obtain credit for all courses required by the student's doctoral committee. The number and extent of these courses will depend upon the student's diagnostic examination, engineering experience and educational objectives. In general a minimum of 30 semester hours of 5000 and 6000 level course work, excluding ENGR 6601 and ENGR 6602, beyond the equivalent of a master's degree will be required.

The student shall complete a residency of one year.

- Satisfactorily pass candidacy examinations as required by the student's doctoral committee.
- Complete a field study, normally 30 semester hours, involving some technological innovation.

5. Submit and defend a formal engineering report on the field study.

Advisement and Admission to Candidacy

New graduate students do not have an advisory committee and are advised by the chair of the major department or a member of the graduate faculty designated as the initial advisor.

Graduate students are not considered to be candidates for a degree until they have completed a specified set of graduate courses and have proven their academic capability. In some programs, students must pass a qualifying exam before being admitted to candidacy. Students who have been admitted to candidacy are assigned an advisory committee, and the committee establishes a graduation plan.

- Initial Advisement. For the first 12 hours of graduate work, students are advised
 by the chair of the major department or a member of the graduate faculty who has
 been designated by the chair as the initial advisor. In the College of Business, all
 graduate students are advised each semester by the Associate Dean.
- 2. Timing of Admission to Candidacy. Admission to the Graduate School does not imply admission to candidacy for a graduate degree. Students seeking a graduate degree must be admitted to candidacy after completing a minimum of 12 semester hours of graduate study and before their last 9 semester hours.
- 3. **Restrictions and Prohibitions to Admission to Candidacy.** Graduate students may not be admitted to candidacy if they a) are on probation, b) are suspended, c) have not removed all undergraduate deficiencies, and/or d) have not completed at least 12 hours of recommended graduate courses. International students

for more

required to pass the Michigan Test to indicate English proficiency must do so before they can be admitted to candidacy.

- 4. Procedure for Applying for Admission to Candidacy. The student is responsible for initiating the process for admission to candidacy by submitting the "Application for Admission to Candidacy for Master's Degree" form (G2) to the chair of the major department. The form is available in the Graduate Office (219 Wimberly Building) and departmental offices. Students should submit the form after completing 12 graduate hours but before enrolling in their final 9 hours.
- 5. Recommendation of Advisory Committee and Degree Plan. After receiving the "Application for Admission to Candidacy for Master's Degree" form (G2), the departmental chair or the designated graduate advisor submits a recommended degree plan and suggested graduate committee to the Graduate Dean by filing a "Recommendation for Admission to Candidacy for Master's Degree" form (G3). If these recommendations are approved, the student is admitted to candidacy. The graduate dean has the option of appointing additional members to an advisory committee.
- 6. Composition and Roles of the Advisory Committee. The advisory committee will include a member of the graduate faculty designated as the supervising professor along with at least two other members of the graduate faculty. The committee will assist in monitoring/supervising the remainder of the student's program, including revision of the degree plan; supervision of research; writing and approval of the thesis, field study report, or dissertation; and administration and evaluation of the final comprehensive examination.
- 7. **Candidacy Examinations.** Departments may require passing examination scores in the admission to candidacy process.

Summary of Graduate School Master's Degree Requirements

		·
	Language requirement	M.A. only
	Minimum GPA for good standing	
•	Minimum TOEFL (international students)	525
•	Probation	less than a 3.00 GPA
	Suspension	less than a 3.00 GPA
		than 12 hours
	Maximum transfer	
	Maximum PB credits toward degree	6 semester hours
	Minimum thesis credits	6
	Time limit for degree	6 years
	Maximum age of GRE scores	5 years
	Minimum credit hours, most degrees	36 semester hours
	Minimum credit hours, second degree	30 semester hours
	Maximum registration, long semester	
	Maximum registration, summer term	
	File for candidacy	
		before final 9 hours

Doctor of Engineering

A student will be admitted to candidacy for the Doctor of Engineering degree only upon the recommendations of his/her doctoral committee. In general this committee will require the following:

Satisfactory progress in all course work.

Continuous pursuit of the degree by earning at least three semester hours credit in two consecutive semesters. Any student who does not do so must apply to the graduate engineering faculty for permission to continue in the program.

3. Prepare a proposal for a field study involving a technological innovation and defend this proposal to a doctoral committee as part of the candidacy examina-

tions

4. 'Satisfactorily pass other examinations designed to determine whether the student is ready to do the field study.

A student who fails to be admitted to candidacy on the first attempt may take additional courses or otherwise prepare for an additional attempt as may be recommended by the doctoral committee. Any student who does not meet the minimum requirements as established by the student's doctoral committee may be required to withdraw from the doctoral program.

Doctor of Education in Deaf Education

A student will be admitted to candidacy for the Doctor of Education in Deaf Education degree only upon the recommendations of his/her doctoral committee. In general, this committee will require the following:

Satisfactory progress in all course work.

2. Continuous pursuit of the degree by earning at least three semester hours credit in a two consecutive semester period. Any student who does not do so must apply to the graduate faculty in deaf education for permission to continue in the program.

Preparation of a proposal for a research study involving deaf studies/education issues and defense of this proposal to a doctoral-committee as part of the

candidacy examinations.

 Passing satisfactorily other examinations designed to determine whether the student is ready to do the dissertation.

A student who fails to be admitted to candidacy on the first attempt may take additional courses or otherwise prepare for an additional attempt as may be recommended by the doctoral committee. Any student who does not meet the minimum requirements as established by the student's doctoral committee may be required to withdraw from the doctoral program.

Advisory Committees

Members of a student's advisory committee are appointed by the Graduate Dean upon recommendation by the Chair of the student's major department at the time the student is admitted to candidacy. After admission to candidacy, but before the date of the final examination or the oral defense, the student may request a change in the committee composition with the approval of the student's department chair. If the department Chair does not approve a request for a committee change, the student may request the Graduate Dean to appoint a three member Review Committee. In the event the Review Committee fails to effect an agreement between the student and the original committee, a new committee may be selected for the student by the Graduate Dean, the Dean of the

student's academic college and two members of the graduate faculty of the student's academic college chosen by the Graduate Dean. The time period should not exceed 10 class days from the date of receipt by the Graduate Dean of a written request for review and arbitration by the student and the appointment of a new committee, should one be necessary.

Thesis Requirements

A thesis is required for the Master of Science degrees in biology, chemistry, and psychology, and for the Master of Engineering Science degree. It is not available in programs leading to the Master of Public Administration and Master of Music degrees, or the Master of Education degrees in Guidance and Counseling or in School Administration. A thesis is optional in all other degree programs. Students who write theses are expected to follow the procedure below.

1. Register for the departmental thesis course with the approval of the student's graduate advisor. The first registration is for Thesis 5390; all subsequent registrations are for Thesis 5391. All students are expected to register for Thesis 5391 until the thesis has been completed. NOTE: No academic credit is given for thesis courses until the thesis has been approved by the major department and accepted by the College of Graduate Studies. At that time, six semester hours credit will be awarded with a grade.

2. Write a thesis under the direction of the supervising professor. The form and style of the thesis must follow the thesis guidelines which are available from the

College of Graduate Studies.

3. Submit a single, unbound copy of the thesis in final form to the Dean of the College of Graduate Studies at least 10 days before the oral defense and at least

30 days before the date of graduation.

4. Defend the thesis orally at least 10 days before the date of graduation at a time and place specified by the supervising professor. The defense must be scheduled in the Graduate College at least 10 days before the defense is to be held. The supervising professor will report the results of the defense to the College of Graduate Studies within two working days.

5. Submit three official final copies of the thesis on rag content paper to the Graduate College at least 10 days before graduation. Additional copies may be turned in for binding at the same time if desired or if required by the student's major department. All copies must be signed by the student's supervising professor and

committee members, department head, and academic dean.

6. Submit two extra copies of the thesis abstract and a completed University Microfilms form at least 10 days before graduation.

7. Pay all binding and abstract publication fees in the University Bookstore at least 10 days before graduation.

Non-Thesis Requirements

1. Each candidate for a graduate degree who does not write a thesis must pass a comprehensive final examination which must be taken during the last semester of attendance and at least 10 days before the conferral of the degree. The form of this examination is determined by the student's major department, and may be oral, written, or a combination of both. An exception to this rule exists for Audiology/Speech-Language Pathology: those students who pass the ASHA national boards may be exempt from master's oral and/or written comprehensive examinations.

2. A student registers for the comprehensive examination by applying for graduation in the Graduate College. Applications must be filed **before** the deadline established by the Graduate College. Those deadlines are:

For December graduation First Monday in October For May graduation First Monday in March

For August graduation First Monday of Summer Term I

Specific dates will be found in the calendar at the front of this Bulletin.

3. If all requirements for graduation except the comprehensive examination have been completed, the student may take the examination during a later semester without being enrolled in the College of Graduate Studies. NOTE: International students who want to do practical training must be enrolled in at least one class the semester that the comprehensive examination is taken.

4. All oral examinations must be scheduled in the Office of the Graduate Dean at least 10 days prior to the date of the examination. The Dean may attend or may

send a representative to attend.

5. Written comprehensive examinations will be administered in accordance with the following schedule.

Fall Term First Thursday in November

Spring Term First Thursday in April

NOTE: Written comprehensive examinations will be given only once during the summer: on the last Monday of the first summer term. If this date conflicts with the July 4 holiday, the examinations will be given on the last Monday in June. For specific dates, please consult the official calendar in the front of this Bulletin or call the Graduate College for details.

6. Failure to pass a comprehensive examination in three attempts will result in a student being permanently suspended from that degree program. The examination may be taken only once each term. Students suspended under this provision may be admitted to another degree program if they meet the required standards and are accepted by the new degree program.

A department may prescribe additional academic requirements for its majors with the approval of the Dean of the College of Graduate Studies.

Graduation Procedure

Students who intend to graduate at the end of a particular semester must apply for graduation in the office of the Graduate Dean on or before the official deadline for application as established by The College of Graduate Studies.

Participation in commencement exercises is not required for the receipt of a graduate degree, though participation is strongly recommended. Graduating students who elect not to attend graduation exercises should notify the Graduate Dean.

College of Arts and Sciences

The College of Arts and Sciences offers programs of study leading to the Master of Arts degree in the fields of English and history; the Master of Science degree in the fields of applied criminology, biology, chemistry, nursing and psychology; and the Master of Public Administration degree. In addition, graduate study is available in geology and sociology as areas of support or specialization in other advanced degree programs.

Persons seeking admission to these programs must meet the requirements specified by the College of Graduate Studies and the individual department. Admission to a degree program is not an admission to candidacy.

Department of Biology

The Department of Biology offers a program of study leading to the Master of Science in biology degree. It is designed to enhance the professional competence of graduates in biology or closely related disciplines who are presently engaged in or planning to enter secondary school or college teaching, or who expect to be employed by private or governmental agencies in biologically oriented fields.

Applicants must 1) have completed a minimum of 24 semester hours in the biological sciences, 2) have completed a minimum of one semester of organic chemistry and one semester of statistics, 3) remove any deficiencies as provided in the section on admission, 4) score a total of 950 (Verbal plus Quantitative Sections) on the Graduate Record Examination, or if V + Q score falls between the Graduate College minimum score and 949, receive a majority vote of the biology graduate faculty, 5) have an undergraduate grade point average of at least 2.50/4.0 overall or 2.75 on the last 60 hours of undergraduate work.

Degree Requirements

The candidate for the M.S. in biology must meet all the College of Graduate Studies general requirements as listed in this catalog. Additional specific requirements are

- Submit a written proposal for the thesis. After the thesis proposal is written, pass
 an oral examination before the biology graduate faculty on the experimental
 design of the proposed thesis and related disciplines. Note: This requirement is
 a prerequisite to achieving candidacy and should be completed during the first
 year of enrollment and must be completed by the end of the second year of the
 program.
- For their professional development, students will enroll in BIOL 5110 Graduate Seminar each Fall and Spring semester. A maximum of two semesters credit will be counted toward the Master's degree; subsequent enrollments will be for a grade but will not count toward the degree. Exceptions must be approved by the biology graduate faculty.
- Thirty-three hours of graduate credit which may include a maximum of 16 hours in approved 400 level courses with augmented requirements. All course work will be in biology. Exceptions must be approved by major advisor and by the Chair, Department of Biology.

Graduate Faculty

Assistant Professor Ana B. Christensen Physiology, comparative and environmental physiology, respiratory pigments Professor Michael W. Haiduk Genetics, vertebrate systematics Professor Richard C. Harrel

Limnology, ecology, invertebrate

Assistant Professor David W. Hicks
Estuarine ecology, environmental
physiology, biometrics
Professor Madelyn D. Hunt
Medical microbiology, epidemiology
Assistant Professor Paul F. Nicoletto
Biology and zoology
Professor Michael E. Warren

Entomology, mosquito biology

Biology Courses (BIOL)

zoology

5100	Materials and Techniques of Research	1:1:0
_	Survey of laboratory and library research techniques, instrumentation and materials requisite to so	cientific
1,.	investigation. Required of all entering graduate students.	
5110	Graduate Seminar	1:1:0
•	Current topics in biological research. See requirement 3 under Degree Requirements.	
5301,	5401 Special Topics	3-4:A:0
	Research in areas other than thesis.	
	Prerequisite: Approval of graduate advisor. May be repeated when topic changes.	
5305	Systematic and Evolutionary Biology	5:3:0
. •	A survey of evolutionary mechanisms from molecular to population levels. Consideration of spe	ciation,
	adaptation and historical geology.	
5390-5	5391 Thesis	3:A:0
٠.	Prerequisite: Approval of graduate advisor. Must complete both for required 6 credits.	
5405	Immunology	4:3:3
	Organs, tissues, cells, and molecules of the immune response and their interactions.	
	Prerequisite: Microbiology, BIOL 2420.	
5406	Parasitology	4:3:3
	A graduate level study of the morphology, life history and host-parasite relationships of parasites of r	nan and
	other animals.	• •
, .	Prerequisites: General Biology, BIOL 1406 and 1407.	
5410	Animal Behavior	4:3:3
	An analysis of the development and significance of various behavior patterns in animals from an evolu-	itionary
	point of view.	
5430	Limnology	4:3:3
	A graduate level study of fauna, flora, ecology and productivity of fresh water.	
5431	Ichthyology	4:3:3
	Natural history, taxonomy and ecology of freshwater and marine fishes. Required field trip.	
5440	Vertebrate Natural History	4:3:3
	Collection, identification and natural history of area fish, amphibians, reptiles, birds and mammals.	Offered
<u> </u>	Spring semester)	
5445	Herpetology	4:3:3
	Natural history, taxonomy and ecology of amphibians and reptiles. Required field trip.	•
5450	Mammalogy	4:3:3
	Natural history, taxonomy and ecology of mammals. Required field trip.	
5455	Marine Biology	4:3:3
	A graduate level field study and identification of area species; current research.	
	Required field trips.	
	Prerequisite: Invertebrate Zoology, BIOL 3460, or Marine Biology, BIOL 4450.	
5460	Ecology	4:3:3
	A graduate level quantitative approach to both field and experimental studies. Interrelationships of or	ganisms
	and their environment.	
	Prerequisites: General Biology, BIOL 1406 and 1407.	

5470 Ecology of Polluted Waters

4:3:3

Analyses of effects of water pollutants on aquatic ecosystems.

Prerequisite: Bio 443.

5475 Cell Biology/Histology

4:3:3

A graduate level study of structural and physiological functions of cells at the biochemical and molecular level. Laboratory emphasis on structure and function of mammalian cells and tissues.

Prerequisites: Organic Chemistry, CHEM 3411, General Biology II, BIOL 1407;

Recommended: BioChemistry, CHEM 4411.

5480 Aquatic Entomology

4:3:3

Biology morphology, life history and classification of aquatic insects. Field trips and personal collection required.

5485 Epidemiology

4.9.5

A graduate level study of the distribution and determinants of diseases and injuries in human populations. Laboratory utilizes a case history approach.

Prerequisites: Microbiology, BIOL 2420; Statistics, PSYC 2471 recommended.

5490 Comparative Physiology

. 4:3:3

Fundamental physiological processes in animals from the Phylogenetic viewpoint.

Prerequisites: Advanced Physiology, BIOL 3440, or Anatomy and Physiology, 2401-2402, Organic Chemistry, CHEM 3412 and math through Calculus.

5495 Molecular Genetics

4.3.3

Genomic architecture and function, applications of recombinant technology, gene regulation, and genomic evolution. Laboratory includes exposure to basic methods of DNA isolation, purification, use of restriction enzymes, electrophoretic analyses, recombinant methodology, PCR, southern blotting.

Department of Chemistry and Physics

The Department of Chemistry and Physics offers a program of study leading to the Master of Science degree in Chemistry. Those seeking admission to this program must meet the general requirements as set forth in this catalog for admission to the College of Graduate Studies and must have a minimum grade point average of 2.75 on the last 60 hours of undergraduate work or 2.50 on all undergraduate work. In addition, the applicant must offer the substantial equivalent of the course in general chemistry, inorganic chemistry, analytical chemistry, organic chemistry and physical chemistry required of undergraduate students in the chemistry curriculum. The applicant also must have completed one year of college physics and mathematics through integral calculus.

Students working toward the graduate degree in chemistry will take a set of four proficiency examinations, one in each of the fields of chemistry; analytical, inorganic, organic and physical. These examinations are taken on entrance and are offered in the fall and again during the beginning of the Spring semester. The results of these examinations are used for orientation and guidance.

Degree Requirements

The candidate for the M.S. degree in Chemistry must meet all the College of Graduate Studies general degree requirements as listed in the catalog. Additional specific degree requirements are as follows:

- 1. Fifteen to 18 semester hours of course work in Chemistry which must include CHEM 5310, 5330, 5350, 5370 and at least one 5000 level Selected Topics course in Chemistry with a grade point average of "B" (3.0) in these courses.
- 2. Presentation of a thesis.
- Six to nine additional semester hours of 5000 level courses in an approved field of study.
- 4. Competence in computer science.
- 5. Examination results on the chemistry section of the GRE must be submitted before graduation.

Graduate Faculty

Professor Hugh A. Akers Biochemistry Assistant Professor Shawn B. Allin Polymers chemistry, physical chemistry Professor David L. Cocke Analytical chemistry, environmental chemistry

Associate Professor Kenneth Dorris

Assistant Professor Stephen Fearnley Organic chemistry Associate Professor Richard Lumpkin Inorganic chemistry Professor J. Dale Ortego Inorganic chemistry Associate Professor Shyam S. Shukla Analytical chemistry, environmental chemistry

Chemistry Courses (CHEM)

Physical chemistry, environmental

chemistry

5310	Advanced Analytical Prerequisite: Graduate standing or consent of instructor.			3:3:0
5330	Advanced Inorganic Prerequisite: Graduate standing or consent of instructor.			3:3:0
5350	Advanced Organic Prerequisite: Graduate standing or consent of instructor.	,		3:3:0
5370	Advanced Physical Prerequisite: Graduate standing or consent of instructor.			3:3:0
5301	Special Topics The course is designed to meet special needs of students. demand requires. Prerequisite: Departmental approval.	Each topic is of	fered on an irregular scl	1-6:1-6:0-6 nedule as the

5390-5391 Thesis

3:A:0

Prerequisite: Approval of graduate advisor. Must complete both for required 6 credits.

Department of English and Foreign Languages

The graduate program of the Department of English and Foreign Languages offers opportunity for intensive study of language and literature. Scholarly interests of members of the department include old and middle English, the Renaissance, Shakespeare, eighteenth century studies, English and American romanticism, the Victorian age, modern English and American literature, African American and Carribean literatures, and comparative literature. In addition to the study of literature through courses organized by genre, period and individual author, the student may explore the history and structure of language and language acquisition and the crafts of both creative and technical writing.

Degree Requirements

The degree of Master of Arts in English requires the completion of 30 semester hours of graduate work: 24 in English (or 18 with an approved six-hour minor), and six in thesis. In general, students are encouraged to emphasize graduate seminars (courses numbered 5000 or above) in their graduate coursework. In the non-thesis alternative, 12 semester hours of coursework may be substituted for the thesis. The creative thesis, as well as the traditional critical thesis, is an option.

All students must have a minimum undergraduate grade point average of 2.5/4.0 overall or on the last 60 hours of undergraduate courses. In addition, international students must score at least 550 on the TOEFL before admission. Students interested in pursuing an M.A. degree in English whose undergraduate major was not English should consult the English department chair.

Depending on the student's undergraduate course work, the graduate program in English will ordinarily include English 5330, 5385, and two courses from 5350, 5360, 5370, 5380 or 5311.

Graduate Faculty

Professor Lloyd M. Daigrepont American literature before 1900 Assistant Professor Paul A. Griffith African American and Carribean literature Professor R.S. Gwynn Creative writing and post-modernism Assistant Professor Emma Hawkins Old and Middle English language and literature Associate Professor Max Loges Technical Writing

5315

Studies in Women's Literature

if the topic varies. Studies in Victorian Literature

Associate Professor James Sanderson Creative writing, American literature Associate Professor Pamela S. Saur German literature, the drama Professor Sallye J. Sheppeard Medieval and Renaissance literature and rhetoric, women's literature Professor Miriam J. Shillingsburg Southern American literature Associate Professor Stephenie Yearwood Writing, English education, seventeenth century

Mo	odern British Literature essor Dale G. Priest	Britis	sh Romai	nticism, com ritical theory	parative	
En	glish Renaissance, Eighteenth					1
	century					
	z · - y					
						•
Eng	glish Courses (ENGL)		, .			
5110	Composition Practicum			, ,	1:1	:0
	Practicum in the teaching of writing. Involves classrooms Graded on S-U basis.	om experiei	nce, peer dis	cussion and men	or consultation	n.
	Prerequisite: Graduate teaching fellow standing.					
5300	History of the English Language				3:3	:0
	Theory and nature of language. Studies in the growth	of E n glish	and Americ	an forms.		
5310	The Teaching of Writing and Research Techniques		L - 4 1-2	-£	3:3	-
	An introduction to major theories of composition, to re techniques for teaching writing.	esearcn in u	ne teaching o	or composition an	a to beaogogic	ar.
5311	Special Topics in Comparative Literature				3:3	:0
0011	Intensive study of an author or authors, genre or period	d selected fi	om the rang	e of world literatu		
	analysis and literary method. Course may be repeated f varies.					
•	Prerequisite: Graduate standing.			•		
5312	Studies in Language and Linguistics			•	3:3	:0
	Special problems in linguistics, such as the history of		Inglish, regi	onal dialects, new	grammars. Ma	ay
•	be taken for credit more than once if the topic varies.	• •				
5313	Special Topics in English Instruction	,			3:3	:0
	Intensive study of theory and pedagogy of language for	or secondar	y teachers.	, '		
٠,	Prerequisite: Graduate standing.		•			
5314	Special Topics in English Instruction	or seconda	mu taaahara		3:3	:υ
5215	Intensive study of theory and pedagogy of literature f	or seconda	ry reachers.		3:3	٠.0

Poetry, prose, and/or drama by women from classical times to the present. May be taken for credit more than onc

Poetry and prose of the Victorian period. May be taken for credit more than once if the topic varies.

5317	Modern Drama Dramatic trends and representative plays from Ibsen to the present.	:0
5318	Modern Poetry 3:3	:n
3010	Poetic developments in England and America with emphasis on representative poets from Hardy to the presentative	
5319	Modern Fiction 3:3	:0
	Prose fiction representative of modern ideas and trends, with emphasis on English and Continental authors.	
5320	The Teaching of English as a Second Language 3:3	:0
	Techniques for teaching basic English skills and literature to non-native speakers. Socio-cultural aspects	of
	second language learning.	
5321	Cross-Cultural Communication 3:3	:0
:	A study of cross-cultural communication with a focus on non-verbal and cultural differences that may influence communication in a second language.	сө
5322	Psycholinguistics 3:3	۰.
3322	Current research and theory of first and second language acquisition and development as a base for teaching	
	English to non-native speakers.	-Ŗ
5323	Introduction to Linguistics 3:3	۰.
3323	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 contra	
	to features of other languages.	J.
	(Note: Doctoral students in Speech and Hearing may enroll in ENGL 5320, 5321, 5322 and 5323 for doctoral	ı
٠,	credit as ENGL 6320, 6321, 6322 and 6323, provided they complete additional requirements appropriate to	
	the doctoral level of study.)	
5324	Studies in 16th Century Literature 3:3	:0
	Poetry, prose and drama of the age. May be taken for credit more than once if the topic varies.	
5326	Studies in Rhetoric 3:3	:0
• •	Advanced study of the relationship between form and content in various aims/modes of media and discours	e.
	and extensive practice in diverse forms of written expression.	ĺ
5328	Early American Literature 3:3	:0
•	Significant writers from the beginning of Colonial America to 1828.	
5329	Modern American Literature 3:3	:0
٠.	Major American writers of the 20th century.	
5330	Special Topics in Old and Middle English Languages and Literature 3:3	:0
	Intensive study of the languages necessary for reading literature of the period. Course may be repeated for	a
	maximum of six semester hours credit when the topic varies.	
	Prerequisite: Graduate standing.	
5333	Studies in a Particular Author 3:3	
	Major writer such as Chaucer, Milton, Hawthorne, Faulkner. May be taken for credit more than once when the	ıe
	topic varies,	
5334	Critical Studies in Literature 3:3	
	A particular genre or theme in comparative literature or criticism. May be taken more than once for credit whe	;D
	the topic varies.	
5336	Directed Studies 3:3	
	Study in American literature in an area of mutual interest. May be taken for credit more than once if topic varie	s.
	Prerequisite: Junior standing.	
5340	Shakespeare 3:3:	:0
	Selected major plays. May be taken for credit more than once if the topic varies.	
5345	Writing Seminar	
	Intensive study in writing, focusing on specific topics, with either a technical or creative emphasis. May be take	;n
	more than once for credit if the topic varies.	
505 0	Prerequisite: ENGL 3350 or permission of the instructor (for any creative writing seminar).	
5350	Special Topics in Renaissance and Seventeenth Century English Literature 3:3:	
	An intensive study of an author or related authors selected from the period. Course may be repeated for	а
•	maximum of six semester hours credit when the topic varies.	
-054	Prerequisite: Graduate standing.	_
5351	Studies in 17th Century Literature 3:3:	0

5355	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, memory	
	and news releases. Prerequisite: Either ENGL 2301, 3310, 4326, or 4345 (when technically oriented) or permission of the instructor.	
5360	Special Topics in Restoration and Eighteenth Century English Literature	3:3:0
3300	An intensive study of an author or related authors selected from the period. Course may be repeated	
	maximum of six semester hours credit when the topic varies.	
	Prerequisite: Graduate standing.	
5361	Documentation Design	3:3:0
3301	A technical writing course that focuses on preparing, writing and documenting instructional information	
ESCE.		3:3:0
5365 ·	Internship Opportunity to work in 'real world' work setting in activities related to professional communication	
	technical writing.	ı anu
	Prerequisites: At least two courses from ENGL 2301, 3310, 4355.	· .
F050	· · · · · · · · · · · · · · · · · · ·	3:3:0
5370		
	An intensive study of an author or related authors selected from the period. Course may be repeated maximum of six semester hours credit when the topic varies.	101 a
	Prerequisite: Graduate standing	
E200	•	2.2.0
5380	Special Topics in Twentieth Century Literature	3:3:0
	An intensive study of an author or related authors selected from the period. Course may be repeated	IOI a
	maximum of six semester hours credit when the topic varies.	•
	Prerequisite: Graduate standing.	0.0.0
5381	Studies in 18th Century Literature	3:3:0
	Poetry, prose and drama of the period 1660-1800. May be taken for credit more than once if the topic var	
5385	Special Topics in American Literature	3:3:0
	An intensive study of an author or related authors selected from the period. Course may be repeated	ior a
	maximum of six semester hours credit when the topic varies.	
	Prerequisite: Graduate standing.	2. 4.0
5390-5	i 391 Thesis Prerequisite: Approval of graduate advisor. Must complete both for required 6 credits.	3:A:0
		0.0.0
5392	Studies in Romantic Literature Poetry, prose and drama of the Romantic period. May be taken for credit more than once if the topic vari	3:3:0
	Poetry, prose and drama of the comande period. May be taken for credit more than once it the topic vari	
	Department of Geology	
•	Department of Geology	. '
T.	he Department of Geology offers the following graduate courses to be used prima	rily
	support to other advanced degree programs.	-
40,4	support to other duranteed degree programe.	
	Creducte Fogulty	
	Graduate Faculty	
Drof	oggon Iomog W. Woodgato	•
	essor James W. Westgate	
ve	rtebrate paleontology, paleoecology	•
Ge	ology Courses (GEOL)	,
	,	
5101	Institute in Earth Science	1:1:0
	Summer, in-service, or other institutes for earth science teachers. Credit varies with duration.	
	The description of the area of study of each institute will appear on the printed schedule. May be repeate	ed for
	credit when nature of institute differs sufficiently from those taken previously.	
5301	Institute in Earth Science	3:3:0
	Summer, in-service, or other institutes for earth science teachers. Credit varies with duration.	
•	The description of the area of study of each institute will appear on the printed schedule. May be repeated	ed for
	credit when nature of institute differs sufficiently from those taken previously.	
5320	Environmental Geology	3:3:0
	The geological aspects of the environment. The environmental significance of man's use of natural resou	urces.
	Field and laboratory studies of the local environment. Field trip required. Term paper based on labor	atory,
	library, or field studies.	

Department of History

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 for 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 students. Research interests of the Department focus on both American and European history.

Admission Requirements

Applicants for the Master of Arts in History must meet all Graduate College entrance requirements. Their background in history should include two semesters of American History, two semesters of world or western civilization, one advanced course in each area and a course in historical research and writing. Students may be admitted and begin taking graduate courses while completing these requirements.

Degree Requirements

- I. THESIS OPTION. The thesis option is strongly recommended for those who plan to continue graduate study beyond the masters. The thesis program requires completion of 24 semester hours, 18 of which must be in 5000 level courses. Six hours may be taken in a related (minor) filed chosen to support the student's primary interest OR the student may substitute six hours (two courses) in history for the minor. Six additional hours credit will be awarded at the completion of the thesis.
 - Thesis students must also demonstrate a reading knowledge of one classical or modern foreign language. This requirement may be satisfied by completing the 2312 course in a language, OR by passing a nationally recognized standardized language proficiency test, OR by completing a reading project administered jointly by faculty members in the Departments of History and of English and Foreign Languages.
- II. NON-THESIS OPTION. The non-thesis option is intended to provide a strong foundation in a wide range of historical areas and periods. It is designed for those who do not intend to seek a higher degree. Non-thesis students must complete 36 hours in history, of which 21 hours must be 5000 level courses. The student may take six hours in an approved minor field or may take six additional hours in history. After completing their classwork, students must take a comprehensive examination which may be oral, written, or a combination of both. A foreign language is not required for the non-thesis Master of Arts in History.

Graduate Faculty

Professor Adrian N. Anderson
United States history, revolution,
early national
Professor John M. Carroll
United States history, diplomatic, the
South
Professor Ronald H. Fritze
Tudor-Stuart England
Professor Howell H. Gwin, Jr.
European history, ancient, classical,

medieval

United States history, urban, social intellectual
Professor Walter A. Sutton
United States history, diplomatic
Assistant Professor F. Lee Thompson
British Empire, modern Britain, modern
Europe, 19th and 20th century US
Professor Ralph A. Wooster
United States history, Civil War, the South

Professor John W. Storey

History Courses (HIST)

5320	Readings in American History	3:3:0
	Course may be repeated when topic varies.	
	Prerequisite: Graduate standing.	
5340	Readings in European History Since 1815	3:3:0
	Course may be repeated when the topic varies.	
-	Prerequisite: Graduate standing.	
5370	Seminar in United States History	3:3:0
	Course may be repeated when the topic varies.	
	Prerequisite: Graduate standing.	
5311	Seminar in European History	3:3:0
	Course may be repeated when the topic varies.	
	Prerequisite: Graduate standing.	
5312	Directed Readings in History	3:A:0
'	Directed readings to be arranged by student in consultation with faculty member in area of mutual	l interest.
	Course may be applied to 5000 level course requirement for a maximum of 6 hours in the thesis progr	ram and 9
	hours in the non-thesis option.	,
5390-5	5391 Thesis	3:A:0
	Propagainita, Approval of graduate advisor Must complete both for required 6 and its	

Prerequisite: Approval of graduate advisor. Must complete both for required 6 credits.

Department of Nursing

The Department of Nursing offers a program of study leading to the Master of Science in Nursing degree. Persons seeking admission must meet the general requirements for admission as outlined in the graduate catalog and must present an undergraduate grade point average of 3.0/4.0 overall. In addition, the student may substitute an acceptable grade in the Miller Analogies Test for the Graduate Record Examination (GRE) requirement.

Nursing Administration Track

The Nursing Administration track prepares registered nurses for advanced practice in Nursing Administration. Primary focus is placed on advanced knowledge central to organization, management, leadership and health care policy and economics. Research and theory supports the program's core. With a substantive nursing administration and business cognates in finance, economics, and marketing, the program will prepare leaders in a rapidly changing health care system.

Admission Requirements

The Student seeking a MSN degree must fulfill the following admission requirements:

- Bachelor of Science in Nursing degree from a nationally accredited undergraduate program;
- 2. Overall GPA of 3.0 or higher for all undergraduate and graduate coursework;
- Acceptable scores in the Graduate Record Examination (GRE) or Miller Analogies
 Test (MAT) taken within the last five years;
- 4. Current licensure as a Registered Nurse in the State of Texas;
- 5. At least two years' experience as a Registered Nurse;
- 6. College statistics course taken within the last ten years.
- 7. Three letters of recommendation from professional and academic sources.

Degree Requirements

The degree Master of Science in Nursing requires completion of 42 semester hours of graduate work: 12 hours in the General Nursing Core, 15 in the Nursing Major, and 15 hours in the College of Business.

General Nursing Core

MSNA 5300 Nursing Research MSNA 5310 Theoretical Foundations MSNA 5324 Nursing Informatics MSNA 5312 Public Health Policy

Nursing Major Core

MSNA 5320 Nursing Administration I MSNA 5221 Practicum I MSNA 5331 Nursing Administration II MSNA 5232 Practicum II MSNA 5222 Case Management MSNA 5341 Advanced Case Management

Required Courses in the College of Business

ECON 5300 Foundations of Economics MKTG 5300 Marketing Concepts MGMT 5390 Financial Accounting FINC 5300 Foundations of Finance Restricted Business Elective

Academic Standards

- 1. Must have a "B" in all major core courses.
- 2. No nursing course may be repeated more than once. The student will have only one opportunity to repeat any two different nursing courses. A third failure will constitute program failure.
 - a, Students dropping or failing a nursing course need to be aware that future readmission to a clinical course is based on space availability as well as student performance in the current and any previous clinical nursing courses.
 - b. Students are allowed to repeat a course only when space is available and upon recommendation by the Graduate Program Committee to the Graduate Program Director.
- 3. Once admitted into the Department of Nursing Graduate Program, the student will adhere to all applicable policies and procedures as outlined under the Department of Nursing Student Information Guide.

Graduate Faculty

Assistant Professor Anita Carroll Nursing Research Associate Professor Christina Esperat Nursing Research, Theoretical Foundations, Advanced Practice in Nursing

Associate Professor Alexia Green
Public Health Policy
Assistant Professor Jennie Godkin
Nursing Ethics
Assistant Professor Terry Kirk
Advanced Practice in Nursing
Administration

Nursing Administration Courses (MSNA)

5300 Nursing Research and Scientific Inquiry

Lectures are used to present information on research design and analysis, focusing on formulating a practice-related research problem, searching the literature, research design, sampling, and evaluation of research instruments, data collection strategies and analysis of data. Students are expected to analyze and critique research literature for scientific merit, and to discuss the practicums application of scientific findings for practice. Numerous examples of research conducted by nursing scholars, including Lamar nursing faculty, are used to illustrate applied practice principles.

5310 Theoretical Foundations for Advanced Nursing Practice

Theoretical foundations for nursing as an art and a science will be presented. Students will acquire knowledge and skills for understanding the evolution of nursing as a profession, conceptual frameworks underlying advanced practice in nursing, and the dynamic health care environment. A model for advanced practice using recognized as well as created concepts will be developed and articulated by the students as a requirement for course completion. The role of the advanced practice nurse as a leader and motivator of people is highlighted.

5312 Public Health Policy

Using theoretical models, this course explores the continuum of the public health policy process, from the policy analysis, formulation, implementation, evaluation, and advocacy perspectives. Through course and field assignments, the students will be given the opportunity to analyze public health policies that influence a high-risk and /or underserved population that they have chosen, and develop strategies for influencing policy changes at the state level that could affect the financing and delivery of health services to those populations. Activities such as visits to their state representatives, participation in legislative hearings, public forums, and involvement in the political negotiations that occur within the political action committees of organized nursing groups will be highly encouraged.

5320 Leadership and Management in Nursing Administration I

This course provides a foundation for nursing administration by examining motivation, power, change, and other related behavioral theories. Examines and analyzes organizational behavior at the micro- and macro- level to illustrate the effects of environmental, technological, and professional influences on nursing administration. Through selected case studies, leadership behaviors are analyzed, within the context of individual behavior, social interactions and group dynamics, intergroup behavior and the effects of the total institutional system on behavior. Students will develop and articulate their own philosophy of leadership and management. *Pre-requisites: MSNA 5300, 5310, 5222, ECON 5300*

Co-requisite: MSNA 5221

5221 Practicum in Nursing Adminstration I

By practicums experience through an approved preceptorship in a health care organization, the student will submit a completed practice intervention project proposal that will focus on a specified health care administration problem, and duly approved by the student's practicum preceptor and faculty advisor.

Pre-requisites: MSNA 5300, 5310, 5222, ECON 5300

Co-requisites: MSNA 5320

5222 Case Management in Nursing and Health Care

Using conceptual and historical frameworks, this course provides a foundation for the practice of case management in health care. Evolution of the concept is reconstructed, providing as context the forces and conditions that gave rise to the practice. Models of case management are presented, and specific concepts and principles that differentiate these models explored.

Nursing Informatics in Leadership and Management

Applies information technology to health care management, by providing a foundation for information management to support data, information, and knowledge needs in nursing administration, focusing particularly on health care information systems, nursing and health care languages and minimum data sets, and computer-mediated decision support in nursing management, education and research.

Leadership and Management in Nursing Administration II

Organizational structure and administrative process are used as context for discussing the roles and responsibilities of the nurse leader/manager in health care systems. Structures of current health care systems are explored and analyzed within historical and sociological perspectives to understand the forces that are influencing the environment of the nurse leader, and which affect the strategic thinking of health care administrators. The role of top managers in welding functional areas such as marketing, management and finance to fulfill strategic institutional aims will be examined.

Pre-requisites: MSNA 5320, 5221

Co-requisites: MSNA 5232

Practicum in Nursing Administration II

By the end of this course, the student will be ready to present results of the completed practice intervention project, and report to a committee consisting of the student's practicum preceptor, faculty advisor and one other graduate nursing program faculty.

Pre-requisites: MSNA 5320, 5221

Co-requisites: MSNA 5331

Advanced Health Care Case Management 5341

Role of the nurse case manager is explored in detail. Synthesis of concepts and principles to develop a nursing model which purports to effect delivery of quality health care through management of outcomes, rational control of costs, use of evidence based clinical pathways, and effective marketing strategies. Ethical and legal issues relating to case management will be analyzed.

Pre-requisites: MSNA 5331, 5232 or departmental consent

Department of Political Science

The Department of Political Science offers a program of study leading to the Master of Public Administration degree. It is designed to prepare students for administrative positions in local, state, and federal agencies. Persons seeking admission must meet the general requirements for admission as outlined in the graduate catalog and must meet the institutional GRE and GPA standard according to the formula (GPA \times 200) + (GRE V + Q) 1350.

Degree Requirements

The degree of Master of Public Administration requires the completion of 36 semester hours of graduate work: 21 in the core curriculum and 15 from an approved list of elective courses. An internship (POLS 5358) with local agencies is also available. Students will complete the following courses if they have not taken them, or their equivalents, as undergraduates: introduction to public administration (three semester hours); urban politics (three semester hours); and statistics for social scientists (three semester hours). Students must pass both written and oral comprehensive final examinations.

Graduate Faculty

Professor David S. Castle
American politics, methodology
Assistant Professor Terri B. Davis
Judicial process, administrative law
Professor Bruce R. Drury
Comparative politics, Latin American
politics

Associate Professor Elbert T. Dubose Public administration Assistant Professor James L. True Public administration, public policy Professor Glenn H. Utter

Political philosophy, American political thought

Professor James M. Vanderleeuw Urban politics, public policy

Political Science Courses (POLS)

5320 Directed Reading 3:3:0

Graduate students may study individually with an instructor in an area of mutual interest to the student and the instructor.

Prerequisite: Graduate standing and approval of Chair, Department of Political Science.

5350 Administrative Theory

An examination of major theories dealing with organizations and their characteristics, scope and effect on public administration and executive behavior. Emphasis will be placed on the relationships between theories and

supporting empirical research.

Prerequisite: Graduate standing.

Human Resource Management 3:3:0

Personnel theory and practice in the public setting. The basic methods and functions of personnel administration

in the context of public organizations, employee motivation, employee relations and collective bargaining will be emphasized.

Prerequisite: Graduate standing.

5351

5352 Fiscal Administration

The study of formulation and administration of federal, state, and local government budgeting, including the role of the budget in the policy process, approaches to budget formulation and analysis, and other basic concepts and practices in government budget and finance administration.

Prerequisite: Graduate standing.

5353 Public Policy Formulation 3:3:0
The process of policy-making within governmental agencies and within the total political process. Emphasis will be placed on decision-making, public policy analysis and policy implementation.

Prerequisite: Graduate standing.

5354 Special Studies in Public Administration

Special Studies in Public Administration

Analysis of selected problems in public administration: urban and regional planning and management, administrative reorganization, the environment and related problems. Course may be repeated as topics vary.

Prerequisite: Graduate standing.

3:A:0

Practical administrative experience in a local, state, regional or federal office or agency that is the equivalent of one-half time for one semester, full-time in a summer semester. Examinations and reports on practices and problems in agencies are required. This course may be waived for students already employed in an administrative capacity in a government agency if they elect three additional hours from the approved program courses.

Prerequisite: Graduate standing.

Department of Psychology

The Department of Psychology offers a program of study leading to the Master of Science degree in applied psychology. It is designed to prepare professional personnel for employment in business, industry or community mental health. Students may elect to take their primary coursework in industrial/organizational psychology or in community/counseling psychology. Those seeking admission to this program must meet the general requirements as set forth in the catalog for admission to the College of Graduate Studies and must offer the substantial equivalent of a bachelor's degree in psychology (24 semester hours) including courses in statistics and research methods. The department has flexible admission criteria which will allow the faculty to review applicants individually. However, students with GRE scores less than 1000 (V + Q) are not usually accepted. International students must present a minimum TOEFL score of 600. All students must also have a 2.5/4.0 undergraduate grade point average overall or 2.75/4.0 on the last 60 hours of undergraduate course work. Post Baccalaureate students are not permitted to enroll in psychology graduate courses without special permission from the department chair.

Degree Requirements

The candidate for the Master of Science degree in Psychology must meet all of the College of Graduate Studies general degree requirements. Additional specific degree requirements are as follows:

1. Forty-two semester hours of course work in psychology which must include 23 semester hours in Psychology 5300, 5301, 5311, 5302, 5320, 5323, 5350 and two semester hours in Psychology 5120. For the Community Psychology Program, an additional 9 semester hours in Psychology 5310, 5312 and 5313 is required. In the Industrial Psychology Program, an additional 6 semester hours is required in Psychology 5321 and 5322.

2. Candidacy examinations devised by the Psychology Department graduate faculty. A student may petition to be administered the candidacy (qualifying) examination during the semester in which the appropriate course work listed in No.1 above is to be completed provided the student is in good academic standing. Dates to sit for the examination will be announced each year. A student must have satisfactorily passed candidacy examinations prior to enrolling in Psychology 5330, 5390, 5310 or 5313.

One to three additional semester hours of 5000 level courses in an approved field

of study.

4. Practicum: Six semester hours in Psychology 5330 and 5331 for I/O students; three semester hours in Psychology 5330 for community students.

 Thesis: Submission of an acceptable thesis and satisfactory performance on a final oral examination with a minimum of six semester hours in Psychology 5390 and 5391.

Departmental Policies

Special attention is called to the following departmental policies:

 Graduate students are prohibited from providing psychological services except when supervised by a faculty member as part of a course requirement or when regularly employed by a licensed psychologist, an exempt agency as defined by the Psychologist's Licensing Act or a departmental approved nonexempt agency. Students in training are expected to be aware of and abide by the *Psychologist's Licensing Act and the Ethical Principles of Psychologists*. A violation of this policy will result in the student's dismissal from the program.

2. More than six hours of "C" level work will result in the student's dismissal from

the program.

3. Students may not enroll in the same course more than twice.

 Qualifying and/or final examinations may be repeated once if failure occurs. In general, a student repeating any portion of the examinations must do so at the next administration of the examination.

5. After admission to candidacy, a student must be enrolled in a thesis course each regular semester until requirements for the degree are completed. In addition a student must be registered for a thesis course each session of the summer term if the student is to receive the degree in August or is involved in research or writing.

Under unusual circumstances and with the approval of the department chair and the student's supervising professor, a student may postpone registration for the thesis course for one or more semesters. Unless special permission has been granted, a student who is not continuously enrolled in a thesis course must repeat the candidacy examinations and apply for re-admission to candidacy.

Graduate Faculty

Assistant Professor Steven C. Clark Social psychology, personality, methodology

Professor James K. Esser Social, industrial-organizational psychology

Associate Professor Oney D. Fitzpatrick Developmental psychology, health psychology, medical compliance

Associate Professor Joanne S. Lindoerfer Clinical psychology, community psychology Assistant Professor Judith R. Mann
School psychology, psychological
measurement, developmental
psychology, community psychology
Professor Richard G. Marriott
Behavioral neuroscience, learningcognition, methodology
Assistant Professor Martha A. Rinker
Sensation/perception, behavioral
neuroscience, methodology

Psychology Courses (PSYC)

5120 Professional Orientation

1:1:0

An orientation to the discipline and professional activities. Includes ethics, legalities, training standards, and professional roles. Assignments supplement other course work including research, teaching and field projects. Required of all graduate students for two semesters with a maximum of three semester hours allowed. Prerequisite: Consent of instructor.

5140 Special Topics

1:A:0

Course work, library and/or laboratory work, and conferences with faculty member. A description of the particular area of study will be indicated. May be repeated for credit when topic varies.

Prerequisite: Consent of instructor.

5300 Advanced General Psychology I

3:3:0

A comprehensive overview of the history of psychology, systems of psychological thought, and the areas of behavioral neuroscience, sensation and perception, learning, motivation, and cognition. Emphasis will be placed on both background material and current research. May be taken out of sequence.

Prerequisite: Consent of instructor.

5301	Advanced General Psychology II	3:3:0
	A comprehensive overview of the following areas of psychology: personality, developmental, so	cial and
	abnormal. Emphasis will be placed on both background material and current research. In addition, the	nfluence
	of lifestyle on health and wellness and the role of the professional psychologist in the process is conside	red. May
•	be taken out of sequence.	
	Prerequisite: Consent of instructor.	
5302	2 Experimental Design	3:3:0
	A study of the research procedures and statistical techniques commonly used by the applied and th	eoretica
	psychologist in the design, execution, control and evaluation of experiments.	
	Prerequisite: Consent of instructor.	
	T. 12-11-1 Co. 1-1	

3:A:0
Independent study of special topics or problems in industrial/organizational or community psychology. May be

repeated for credit.

Prerequisite: Consent of instructor.

5340 Special Topics in Psychology
3:A:0
Includes coursework, library and/or laboratory work and conferences with a faculty 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.

Prerequisite: Consent of instructor.

5350 Multivariate Research Techniques

Topics include multiple regression, factor analysis and the relationship of multiple regression to analysis of variance and covariance. The linear algebra necessary to deal with these topics is developed. Extensive practice with microcomputers is emphasized.

Prerequisite: Psy 532 or consent of instructor.

53:0 Introduction to Psychological Assessment

An introduction to intellectual assessment. Includes principles of psychological testing, test statistics, and critical evaluation of a variety of intellectual and achievement measures. Practicum in administration, scoring, interpretation, and formal psychological report writing for all Wechsler measures and the Stanford-Binet.

Prerequisite: Admission to candidacy and Psy 5320.

5311 Community Psychology: Introduction to Psychotherapy
Specific psychotherapy skills, therapeutic communication and therapeutic practices are introduced using didactic techniques and role-playing. Includes models of individual, family and multimodal therapy, ethical principles in therapy, DSM-IV and diagnosis of psychopathology, Employee Assistance Programs, consultation and referral to other agencies. Other topics include professional orientation of the therapist, obtaining supervision and continuing education, and evaluating the effectiveness of therapy.

Prerequisite: Consent of instructor.

3:3:0

Advanced Psychological Assessment

An introduction to the broad area of personality assessment including DSM-IV classifications. Practicum in administration, scoring, interpretation, and formal psychological report writing with the MMPI-2, Rorschach, TAT, SCII, KOIS, and other objective and projective assessment devices. Includes coverage of lifestyles and career/vocational choices.

Prerequisite: Psy 5310.
5313 Community Psychology: Advanced Psychotherapy

An in-depth study of psychotherapy theories and intervention strategies for individuals and groups. Distinctions will be made between normal human growth and abnormal human behavior. Includes ethics, legal/cultural considerations, and lifestyles.

Prerequisite: Psy 5311 and admission to candidacy.

5320 Theory and Techniques of Psychological Measurement
A study of procedures used in the development, evaluation, and application of psychological measuring instruments. Topics include bivariate linear correlation, nonlinear correlation, multiple and partial correlation, classical true score theory, validation techniques, and test construction techniques.

Prerequisite: Consent of instructor.

5321 Advanced Industrial Psychology I 3:3:0
Social and organizational factors in the work place. Emphasis on theories of organizational/group dynamics, social foundations of influence, leadership and growth/development.

Prerequisite: Consent of instructor.

5322 Advanced Industrial Psychology II

3:3:0

Psychological principles and techniques applied to human resources management. Techniques include job analysis, personnel selection, placement and training, performance appraisal, compensation and career development.

Prerequisite: Psy 5320 or consent of instructor.

5323 Advanced Experimental Psychology

3 · 3 · 0

Theory and application of experimental design in psychological research. Students will have an opportunity to design and conduct an original research study.

Prerequisite: Psy 532 or consent of instructor.

5330 Practicum I

3:A:0

Supervised training and experience in a local, state or regional agency, institution or employment setting. The specific nature of the practicum depends on the professional background and goals of the candidate and will be determined by the candidate, his/her faculty advisor and a member of the cooperating agency/organization. For Community Psychology students, practicum involves a minimum of 300 hours of work in a mental health setting, including a minimum of 100 hours of direct client contact, and one hour a week of individual supervision from a licensed professional.

5331 Practicum II

3:A:0

Supervised work in an area of interest to the student, Includes supervision by both a faculty member and a member of the cooperating agency/organization.

Prerequisite: Psy 5330.

5390-5391 Thesis

3:A:0

Prerequisite: Admission to candidacy. Must complete both for required 6 credits.

Department of Sociology, Social Work and Criminal Justice

The Master of Science degree in Applied Criminology is designed to prepare students for upper level staff, administrative, management, treatment and planning positions in criminal/juvenile justice agencies. The 36-semester hour program has an applied focus, teaching practical skills as well as theoretical knowledge.

Admission Requirements

- A bachelor's degree from a regionally accredited college or university in criminal
 justice, criminology, sociology, or the equivalent. Students with undergraduate
 degrees in other fields but with substantial work experience in criminal/juvenile
 justice may be admitted with special approval. Those without substantial work
 experience and with undergraduate degrees in other fields may be admitted after
 taking specified undergraduate courses.
- Undergraduate grade point average (GPA) and Graduate Record Examination (GRE) scores according to the formula [GPA X 200] + [GRE V+Q] 1350.
- 3. Proficiency in the use of personal computers, including word processing, spreadsheets, databases and Internet search engines.
- Satisfactory completion of at least one statistics course and one social science research course.

Applicants who do not meet all admission requirements may enter as Pre Graduate, pending full admission. Under Pre Graduate status, the student must make up all deficiencies and earn at least a "B" average. No more than six hours of graduate credit may be earned prior to full admission.

Degree Requirements

Core Courses - 12 hours

CRIJ 5310 - Criminal Justice System and Policy

CRIJ 5320 - Theoretical Foundations of Crime Control

CRIJ 5330 - Planning and Evaluation

CRIJ 5340 - Special Studies in Applied Criminology (this course may be repeated for credit as an elective when the area of study varies)

Elective Courses - 12 hours

Four courses chosen from different CRIJ 5340 topics and/or selected graduate courses in business, counseling, education, political science, public administration, psychology, or other fields related to the student's needs and interests.

Professional Projects - 12 hours

CRIJ 5601 - Applied Project in Criminology I (6 hours)

CRIJ 5602 - Applied Project in Criminology II (6 hours)

Graduate Faculty

Professor J. R. Altemose Conflict management, correctional

counseling, race/gender issues

Professor Robert L. Frazier

Corrections, planning and evaluation, comparative criminal justice systems

Professor Lorene H. Stone

Criminology, juvenile delinquency, youth violence

Professor Stuart A. Wright

Drug policy, militias, hate crimes and domestic terrorism

Criminal Justice Courses (CRIJ)

5310 Criminal Justice System and Policy

3:3:0

A critical review and analysis of the role of governmental and non-governmental organizations in the prevention, control and punishment of crime and delinquency. An emphasis is placed on policy analysis and recommendations for change.

5320 Theoretical Foundations of Crime Control

3:3:0

A comprehensive overview of various theoretical approaches to the understanding of crime and delinquency, including selected biological, psychological, sociological, legal and/or political theories.

5330 Planning and Evaluation

3:3:0

An in-depth examination of information gathering and analysis; planning and evaluation. Emphasis on the analytical tools useful in criminal justice agencies.

Prerequisite: an undergraduate course in research methods, an undergraduate course in statistics, and competence in the use of personal computers.

5340 Special Studies in Applied Criminology

3:3:0

Includes an analysis of contemporary issues in the understanding, prevention, and control of crime and delinquency both domestically and globally. A student may repeat the course for credit as an elective when the area of study varies.

Applied Project in Criminology I - 6 hours
A major practical project integrating the student's course work, previous experience and professional goals. May take the form of a supervised internship, applied research or professional project.

Prerequisite: Approval of graduate advisor

Applied Project in Criminology II - 6 hours
A second major practical project.

Prerequisite: Approval of graduate advisor

College of Business

The College of Business offers a program of study leading to the Master of Business Administration degree (MBA). This program is designed for working professionals. The MBA program is fully accredited by the AACSB - The International Association for Management Education. The objective of the MBA Program at Lamar University is to provide a quality educational experience that will produce managerial professionals with a thorough understanding of functional areas of business in a diverse, global economy. The MBA Program provides instruction in the economic, legal, and ethical environment of public and private sector organizations. The curriculum emphasizes developing competencies applicable to problem solving, decision making, and leadership in a broad range of situations in one or more functional areas.

Students with degrees in **non-business** fields as well as business undergraduates are *encouraged* to earn the Master of Business Administration degree. Students are encouraged to make an appointment with the Associate Dean **60-90** days in advance of the semester in which they wish to enroll, and to take the GMAT in the semester *prior* to the desired date of enrollment.

Admission

Persons seeking admission to this program must meet the general requirements for admission outlined elsewhere in this Bulletin, with the following exceptions:

- The student is required to take the Graduate Management Admission Test, GMAT.
- The applicant's undergraduate grade point average and GMAT scores must equal or exceed the minimum standards. The student must meet at least one of the following standards:
 - A. A total of at least 950 points based on the formula: 200 times the overall undergraduate GPA for the first baccalaureate degree (4.0 system) plus the GMAT score. (See Note below)
 - B. A total of at least 1,000 points based on the formula: 200 times the GPA (4.0 system) of the last 60 hours of undergraduate work for the first baccalaureate degree, plus the GMAT score. (See Note below).
 - Note: Students must make a minimum score of 450 on the GMAT for unconditional acceptance regardless of GPA. Students who make 400-450 and meet either standard "A" or "B" above will be admitted conditionally pending satisfactory completion of nine hours with a "B" (3.0) average. A student who makes less than 400 on the GMAT will **not** be admitted regardless of GPA.
- 3. A student whose native language is not English is expected to score over 525 on the TOEFL.
- 4. Post Baccalaureate or Post Graduate students are not permitted to enroll in Business courses for graduate credit without the *prior* consent of the Associate Dean.

Degree Requirements

First Year Courses (Designed primarily for students whose undergraduate degree is *not* Business).

ECON 5300 Foundations of Economics

BULW 5300 Legal Environment of Business

BUAL 5300 Statistical Analysis for Decision Making

MGMT 5310 Foundations of Organization Behavior

MGMT 5320 Operations Management

ACCT 5300 Financial Accounting Foundations

OFAD 5300 Administrative Communications

MKTG 5300 Marketing Concepts

FINC 5300 Foundations of Finance

Note:

- 1. Please see course descriptions for prerequisites for each course.
- Students with previously approved academic training may have some or all of the first year courses waived. (See the Associate Dean, College of Business, prior to enrollment.)
- 3. Students must have met the entrance requirements for the MBA Program to enroll in first year courses. All exceptions must have the **prior** approval of the Associate Dean, College of Business.
- 4. First year courses may not be taken as second year course electives.
- 5. All students must to be advised by the Associate Dean prior to each semester.

Second Year Courses

Note:

BUSI

- All first year courses must normally be completed before beginning the second year courses.
- 2. The candidate for the MBA degree may follow either of the two plans described below.

Plan I: Thesis Route

ACCT	5370	Managerial Accounting
MGMT	5340	Seminar in Management
ECON	5370	Managerial Economics
FINC	5310	Financial Management
MKTG .		Seminar in Marketing
BUAL	5380	Business Research and Quantitative Analysis
MGMT	5380	Strategic Management
ECON		Environment of Business
Three se	emester	hours of approved electives in the College of Business
BUSI	5390	Thesis

Note: Once enrolled in thesis, a student must be continually enrolled in the thesis course each Fall, Spring, and once in the summer, until the thesis is completed.

Plan II: Non-Thesis Route

5391

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ACCT	5370	Managerial Accounting			
MGMT	5340	Seminar in Management			
ECON	5370	Managerial Economics			
FINC	5310	Financial Management			
MKTG	5310	Seminar in Marketing			
ECON	5380	Environment of Business			
MGMT	5380	Strategic Management			
BUAL	5380	Business Research and Qua			

Thesis

BUAL 5380 Business Research and Quantitative Analysis
Twelve semester hours of approved electives in the College of Business is required.
A written comprehensive exam will follow the completion of course work.

The MBA degree with an accounting emphasis is available for students that have an undergraduate degree in Accounting who wish to meet the requirements for the 150 hour program required to sit for the CPA Examination in Texas. This program requires

the student to follow Plan II (non-thesis route). For those under the accounting emphasis, ACCT 5330 (Advanced Auditing) and ACCT 5340 (Tax Research) are substituted for six of the twelve hours of electives in Plan II.

Graduate Faculty

Assistant Professor Kakoli Bandvopadvav

Management Information Systems

Associate Professor Soumava

Bandyopadhyay

Marketing

Professor Cynthia Barnes Office Administration

Professor Melvin F. Brust

Finance

Assistant Professor Kuo-Lane Chen

Management Information Systems Professor Jai-Young Choi

Economics

Professor Richard A. Drapeau

Business Statistics Professor Lynn Godkin

Management

Professor Charles Hawkins

Economics

Professor Richard W. Jones

Accounting

Professor D. L. Jordan

Management Information Systems

Associate Professor Huei Lee Management

Associate Professor Howell Lynch, Jr.

Accounting

Assistant Professor Bradley Mayer

Management

Professor Carl B. Montano Economics :

Professor Gary A. Moore

Economics

Professor Jimmy D. Moss

Finance

Professor Donald Price

Economics

Associate Professor Kabir C. Sen

Marketing

Professor Larry W. Spradley

Business Statistics

Professor Robert A. Swerdlow

Marketing

Assistant Professor Sean R. Valentine

Management

Assistant Professor Celia B. Varick

Accounting

Business Courses

Accounting (ACCT) and Business Law (BULW) courses must be selected from the following list:

Financial Accounting Foundations

3:3:0

An introduction to financial accounting and reporting for graduate students who do not have a background in accounting. The course concentrates on conceptual financial accounting issues that users of accounting information need to understand. Students learn to access and analyze published financial reports. The course does not focus on computational and mechanical details.

Prerequisite: Graduate standing.

Advanced Auditing

Advanced study of the role of auditors as a profession. In depth discussion of professional ethics and liability to clients and other third parties. Study of audit failures, employing the case method. Also, the use of statistical sampling methods in auditing.

Prerequisite: Graduate standing and ACCT 4300.

5340* Tax Research

An extensive examination of the methods employed to determine defensible solutions to problems in federal taxation. Emphasis is placed upon research methodology, proper documentation of research findings and effective communication of research findings to interested parties. The text is supplemented with outside readings and case studies. Significant oral and written reports are required.

Prerequisite: Graduate standing with a minimum of eighteen semester hours of accounting that include ACCT 3380 and ACCT 3390 or their equivalent and six semester hours of Intermediate.

5370 Managerial Accounting

3:3:0

Application of accounting data in decision making: cost analysis as applied in the development of budgets and standards; accounting as a tool for cost control and pricing; case problems, using the micro-computer as a decision-making tool, which require students to interpret and discuss their analysis in the context of managerial decision-making.

Prerequisite: Graduate standing and ACCT 5300 or equivalent.

*These classes are intended for MBA students pursuing the MBA degree with accounting emphasis.

BULW 5300 The Legal Environment of Business

3:3:0

A survey of the legal environment of business including concepts of legal rules, the legal framework to resolve disputes, a study of the concept of property rights, contracts, commercial paper, agency and employment laws, government regulations of business through administrative agencies, and introduction to international law.

Prerequisite: Graduate standing.

BULW 5350 Estate Planning Fundamentals

. . .

A survey of the federal and state laws dealing with the estates of individuals, including living trusts, estate tax-saving trusts, charitable trusts, spendthrift trusts, providing for children, avoiding probate, minimizing estate taxes, second marriages, protecting businesses at death, gifts, wills, and living wills.

Prerequisite: Graduate standing.

BULW 5390 Special Topics in Business Law

2.2.0

Intensive investigation of topics in business law. Library and/or laboratory work and conferences with supervising faculty member. May be repeated when area of study differs.

Prerequisite: Graduate standing and approval of advisor.

Economics (ECON) courses must be selected from the following list: O Foundations of Economics

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This is a fast-paced course which discusses both macro and micro economic theory and international economic issues. Macroeconomic topics covered include: inflation, unemployment, fiscal and monetary policy. Microeconomic topics include: demand theory, production and cost theory, price and output determination in markets, demand for and pricing of society's scarce resources.

Prerequisite: Graduate standing.

2.2.0

5370 Managerial Economics
A study in the depth of the principles and techniques of economic analysis applicable to the problems of business management.

Prerequisite: Graduate standing, Eco 5300.

5380 The Environment of Business

3:3:0

A study of business, government, and consumer interaction in the economy. Efficiency concepts for both the private and public sectors; government activities in antitrust, traditional regulation, and new wave regulation; issues in business ethics; and international topics are analyzed.

Prerequisite: Graduate standing, Eco 5300.

Finance (FINC) courses must be selected from the following list:

5300 Foundations of Finance

3:3:0

A survey of the financial management function in private business firms, with emphasis on major financial policy decision issues and the analytical techniques used to assist management in making those decisions.

Prerequisite: Acc 5300, Eco 5300.

5310 Financial Management

3:3:0

A study of the financial policy of business firms along with the theory supporting that policy. Topics include capital budgeting, capital structure, cost of capital, dividend policy, and management of working capital, as well as the unique international dimensions of the financial policy of multinational firms.

Prerequisite: Graduate standing, Fin 5300 or equivalent.

5320 Seminar in Finance

3:3:0

Study of selected topics reflecting contemporary trends and problems in the field of Finance. The course may be repeated for a maximum of six semester hours when the topic varies.

Prerequisite: Graduate standing, Fin 5310 or consent of instructor.

5380

Management (MGMT) courses must be selected from the following list:

310 Foundations of Organization Behavior

3:3:0

A study of organizational behavior and management concepts. The course will examine the development of management thought, with special emphasis on motivation, leadership and organizational theories. Topics will include awareness of individual behavior, social interaction, the dynamics of group and intergroup behavior and the effects of the total system of behavior observed with the organization.

Prerequisite: Graduate standing, ECON 5300, ACCT 5300.

5320 Operations Management

3.3.0

This course examines the use of manufacturing and operations as competitive weapons. Production/Operations function and its relationship to marketing, finance, and accounting are described Global operations, forecasting demand, aggregate planning, inventory planning and control, and scheduling provide the basis for linking strategic plans to the production plan.

Prerequisite: Graduate standing, BUAL 5300.

5340 Seminar in Management

3.3.0

A course designed to give students an integrated approach to management through the application of theory to problem solving situations. Students perform in consulting roles applying management as both science and art. Emphasis is placed on national and international problems and a synergistic effect made to provide positive and applied solutions to actual managerial decisions making.

Prerequisite: Graduate standing, MGMT 5310. Strategic Management

3.3.0

The capstone course for the MBA. The course assumes that the company success depends upon formulation of an astute "game plan" and the ability to implement and execute that game plan proficiently. The purpose of the class is to enable students to "think strategically," consider the total enterprise, and to make long-term decisions in a global market environment.

Prerequisite: Must be in last semester of course work and have approval of advisor.

5390 Special Topics in Management

3:3:0

Investigation into special areas in management under the direction of a faculty member.

Prerequisite: Graduate Standing and approval of the instructor, department chair, and Associate Dean.

Marketing (MKTG) courses must be selected from the following list:

5300 Marketing Concepts

3:3:0

Marketing orientation and concepts; marketing programs of domestic and global perspectives in the formulation and development of strategies with regard to price, product, channels of distribution, and promotion of goods and services within an ever-changing environment.

Prerequisite: Graduate standing, ECON 5300, ACCT 5300.

5310 Seminar in Marketing

3:3:0

An intensive study of specific marketing concepts and theories. Marketing strategies for the national and multinational firms are surveyed. Emphasis is placed on reading from current journals and other related publications.

Prerequisite: Graduate standing, MKTG 5300.

5340 International Marketing

3:3:0

Analysis and planning of marketing mix on an international scale. The course focuses on the aspects of international marketing such as the international market, the identification of global opportunities and threats, the formulation of international marketing strategy, and the organizations and control of global marketing. *Prerequisite: Graduate standing, MKTG 5300.*

Information Systems and Analysis courses must be selected from the following list:

BUAL 5300 Statistical Analysis for Decision Making

3;3;

Theory and applications of presenting and utilizing data for decision making in business situations. Topics include methods of gathering, presenting, and analyzing quantitative data; probability theory; probability distributions; sampling theory; estimation and tests of hypotheses; simple linear regression/correlation analysis; classical time series; and other statistical procedures commonly used in business analysis.

Prerequisite: Graduate standing.

BUAL 5380 Business Research and Quantitative Analysis

3:3:0

The course focuses on the application of quantitative techniques to business problems. Topics include problem definition, research design, sampling theory, survey techniques, data collection methods and statistical models. Students are responsible for writing and presenting a report employing statistical software.

Prerequisite: BUAL 5300 and approval of advisor.

MISY 5340 Multimedia Applications

3:3:0

This course covers the use of personal computers to develop multimedia applications. The use of various hardware and software components in the production of multimedia systems is stressed. Working in a workgroup using a Local Area Network with shared resources is emphasized. The most current hardware and software tools for processing text, graphics, sound, video and animation are made available to the student. Class projects require hands-on use of authoring and applications packages. Students develop and present an interactive multimedia system project.

Prerequisite: Graduate standing.

MISY 5360 Seminar in Information Systems Management

3:3:0

This seminar provides a broad overview of the information systems management function. The course emphasizes information systems management with particular attention to planning, organizing, and controlling user services and managing the computer information systems development process.

Prerequisite: Graduate standing.

MISY 5390 Special Topics in Management Information Systems

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Intensive investigation of topics in management information systems. Library and/or laboratory work and conferences with supervising faculty member. May be repeated when area of study differs.

Prerequisite: Graduate standing and approval of instructor, department chair, and Associate Dean.

OFAD 5300 Administrative Communication

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Communication theory and practice with emphasis on variables affecting organizational communication. Intrapersonal, organization, and technological dimensions of communications. Specific areas include cultural and international differences in communication; one-to-one, small group and large group communications; formal and informal networks; electronic transmission; business letters and memoranda; and research papers and formal reports.

Prerequisite: Graduate standing.

OFAD 5390 Special Topics in Office Administration

3:3:0

Intensive investigation of topics in office administration. Library and/or laboratory work and conferences with supervising faculty member. May be repeated when area of study differs.

Prerequisite: Graduate standing and approval of advisor.

Thesis courses necessary for graduation under Plan I.

BUSI 5390-5391 Thesis

Students must be continually enrolled in Thesis each Fall, Spring, and at least once in the Summer, until the thesis is completed.

Prerequisite: Approval of Associate Dean, College of Business. Must complete both for required 6 credits.

College of Education and Human Development

The College of Education and Human Development offers graduate programs of study leading to the Master of Education degree in six different areas and to the Master of Science degree in Kinesiology and in Family and Consumer Sciences.

Persons seeking admission to these programs must meet the general admission requirements of the College of Graduate Studies and of the individual department in which they plan to enroll. Admission to a degree program does not imply admission to candidacy for a degree.

Degrees Offered

Master of Education in Counseling and Development

Master of Education in Educational Administration

Master of Education in Elementary Education

Master of Education in Secondary Education

Master of Education in Special Education Master of Education in Supervision

Master of Science in Kinesiology

Master of Science in Family and Consumer Sciences

Professional Certificates Available

Counselor
Educational Diagnostician
Elementary Education
Mental Retardation
Principal
Reading Specialist
School Superintendent
Secondary Education
Special Education Supervisor
Supervisor
Visiting Teacher

General Information Concerning Professional Certificates

The Professional Certificate is valid for life unless cancelled by lawful authority, and gives the holder legal authority to perform duties in the specialized areas designated on the face of the certificate. Information about requirements for a particular certificate can be obtained from the department offering the certification program. Once all requirements for a certificate are completed it is the responsibility of the student to go to the Office of Professional Services and Admissions in the College of Education and Human Development and make application for the certificate to be awarded by the Texas Education Agency.

Early Childhood Development Center

The Early Childhood Development Center is an educationally oriented model program for children between the ages of 18 months and five years. The Center, under the direction of the Department of Family and Consumer Sciences and The College of Education and Human Development, is an integral part of professional development for graduate students.

The Center is used extensively by the Department of Family and Consumer Sciences, the Department of Professional Pedagogy, the Department of Health, Kinesiology and Dance, and the Department of Educational Leadership. The Center provides opportunities for University students to direct learning of young children who exhibit both typical and atypical development as well as to investigate effective teaching strategies for promoting optimal development among young children. Students have the opportunity to observe and interact with children which enhances understanding of child growth and development. In addition the students are able to relate understanding about the family, nutrition, prenatal care and community interaction to child behavior.

In addition, the Center provides interdisciplinary research opportunities for faculty and graduate students. The laboratory school is also used for strengthening leadership skills in the field of child development through seminars, workshops, and other educational events.

Department of Educational Leadership

Department Chair: Dr. Carolyn Crawford Program Advisors:

204 Education Bldg. Phone: 880-8689

Counseling and Development: Dr. Carolyn Crawford, Dr. William Holmes, Dr. George McLaughlin

Educational Administration: Dr. Bob Thompson, Dr. Dorman Moore, Dr. Elvis Arterbury **Supervision:** Dr. Dorman Moore and Dr. Carolyn Crawford

Educational Technology: Dr. Paula Nichols, Dr. Desmond Rice

The Department of Educational Leadership offers graduate programs leading to the Master of Education (M.Ed.) degree in Educational Administration, Supervision, and Counseling and Development. For students already holding a master's degree and teacher certification, the Department offers course work leading to certification as a Superintendent, Principal, Supervisor, and School Counselor. An Endorsement in Information Processing Technology is also available.

Course prerequisites for the state examination for Licensed Professional Counselor certification are also offered by this department.

Admission

Admission to a master's degree program or a post-master's "certificate only" program is required of all students taking courses in the Educational Leadership Department. A maximum of six semester hours may be taken prior to admission. Non-admitted students wishing to transfer courses to another department or another university must have permission of the department chair before registering.

Admission to a Master's Degree Program

To be admitted to a program leading to a Master's degree in Educational Administration, Counseling and Development, or Supervision, students must fulfill the general requirements for admission to the Graduate College as stated elsewhere in this bulletin plus the departmental requirements. The Educational Leadership Department requires a minimum score of 400 on the Verbal and Quantitative sections of the Graduate Record Exam with a minimum combined Verbal and Quantitative score of 900. Test of English as a Foreign Language (TOEFL) is not accepted as a substitute for minimum scores on the Graduate Record Exam. If a student has applied for admission to a degree program and has not received notification of acceptance (or non-acceptance) within 30 days after application the student should check with the Graduate Admissions Office.

Admission to Candidacy for Master's Degree

After completing at least 12 semester hours of course work on the master's degree with a minimum of 6 semester hours in his/her major field, the student should apply for Admission to Degree Candidacy. Forms for admission to candidacy should be obtained from the Educational Leadership Department Office and returned there upon completion. (NOTE: University regulations require the student be admitted to candidacy prior to beginning the last nine hours of course work). If a student does not have a letter certifying admission to candidacy within 30 days after making application the student should check with the department office.

Step by step procedure for admission to a Master's degree program

- 1. Apply for Admission to the Graduate College of Lamar University.
 - A. Obtain application packet from the Graduate Admissions Office in Room 118 of the Wimberly Building or call (409) 880-8356.
 - B. Successfully complete the Graduate Record Examination and have scores sent to Graduate Admissions, Lamar University, P.O. Box 10078, Beaumont, TX 77710.
 - C. Have all transcripts sent to Graduate Admissions as in B above.
- Meet with program advisor to develop a degree plan. NOTE: No deviations from the degree plan will be permitted without prior written permission of advisor or department head.
- 3. In consultation with graduate advisor, select members of graduate committee. (The program advisor will chair this committee.)
- 4. Complete at least 12 hours of course work from their degree plan (at least six semester hours must be from courses in their major) and apply for Admission to Candidacy. NOTE: A Student must be admitted to candidacy prior to beginning the last nine hours of course work.
- 5. Complete remaining course work.
- 6. Complete requirements for graduation.
 - A. Apply for graduation in the Graduate College office (219 Wimberly).
 - B. Take and pass comprehensive examination during the last semester of attendance. To take the comprehensive examination a student must be in his/her last semester of coursework, have no incompletes ("I" grade) or unsatisfactory ("D" or "F" grades) on their transcripts and have met all other requirements for graduation.
- Graduate.

NOTE: Completion of some Master's programs also includes completion of all course requirements for an additional certification. Student desiring the additional certificate must apply to take the appropriate ExCET Exam at the Office of Professional Services and Admissions. After successfully passing the exam, the student should apply at the Certification Office for the certificate.

Admission to a "Certification Only" (non-degree program)

The Educational Leadership Department offers post master's certification programs leading to certification as a Superintendent, Principal, Supervisor and School Counselor. Students who hold a master's degree and teacher certification and seek an additional certification offered by this department should apply to the Educational Leadership department for admission to the appropriate certification program. Upon completion of the application and receipt of an official transcript, a program advisor will be assigned.

The advisor will develop a certification plan for the student. After completion of the certification plan requirements the student must apply for and pass the ExCET examination and file for the certificate at the Certification Office. Students seeking a program leading to examination for certification as a Licensed Professional Counselor should follow the process designated above and then contact the State Board of Examiners for Professional Counselors in Austin, Texas to apply for licensure and take the licensure exam.

Master's Degree in Counseling and Development

The Master's Degree in Counseling and Development requires the successful completion of a comprehensive 45-semester-hour program of study. Students interested in pursuing a degree in Counseling and Development can secure an up-to-date degree plan from the Department of Educational Leadership, in the Education Building or by writing to the Department of Educational Leadership, P.O. Box 10034, Lamar University, Beaumont, Texas 77710.

Certification In Counseling and Development

Professional School Counselor's Certificate

A student who completes requirements for a Master of Education degree in Counseling and Development plus one additional course for 48 hours will have fulfilled all curriculum requirements for a Professional School Counselor's Certificate.

Students already holding a Master's degree from an accredited university may enter the "Certification Only" program by making application in the office of the Department of Educational Leadership and providing an official transcript of all applicable graduate work. Once admitted, students will be assigned an advisor who will develop a certification plan for the student.

After completion of the certification plan the student must take and pass the ExCET examination and apply for the certificate at the Office of Professional Services and Admissions in the Education Building. Prerequisites for the certificate include Texas teacher certification and three years of acceptable classroom teaching experience. Approval to take the ExCET is normally granted in the last semester of student's course work.

Licensed Professional Counselor's Certificate

The Texas State Board of Examiners of Professional Counselors regulates licensing requirements for counselors to render services in the state of Texas through private practice, group practice, institutions, organizations and similar types of arrangements. Students who need additional information or wish to complete academic work toward licensure as a Licensed Professional Counselor (LPC) should see the Counseling and Development faculty in the Department of Educational Leadership or contact the Texas State Board of Examiners of Professional Counselors in Austin, Texas.

Master's Degree in Educational Administration

The Master's degree in Educational Administration requires successful completion of a 36 semester hour program of study. Certification as a Principal requires the 36 hour masters plus 12 additional semester hours of prescribed course work.

Certification in Educational Administration

Professional Principal Certification

A student who completes requirements for a Master of Education degree in Educational Administration will have fulfilled the first 36 semester hours of the 48 semester hours required for a Principal certificate. An additional twelve semester hours are required. The student's degree plan will include the additional courses required for certification.

Students already holding a Masters Degree from an accredited university may enter the "Certification Only" program for Principal certification by making application in the office of the Department of Educational Leadership and providing an official transcript of all applicable graduate work. Once admitted, students will be assigned an advisor who will develop a certification plan.

To receive the Principal certificate a student must complete all requirements for Master's Degree in Educational Administration, complete the additional twelve semester hours of course work, hold a valid Texas Teacher certificate, have 2 years of classroom teaching experience, take and pass the ExCET examination, and apply for the certificate at the Office of Professional Services and Admissions in the Education Building. Students normally register for the ExCET in their last semester of course work.

Professional Superintendent Certificate

Prerequisites for the Professional Superintendent Certificate include a Master's degree and Professional Mid-Management Administrator or Principal certification. Students who meet these prerequisites and wish to seek certification as a school superintendent should apply to the Department of Educational Leadership. Upon completion of the application and receipt of an official transcript of graduate work an advisor will be assigned to develop a certification plan for the student. Students meeting the prerequisites can usually obtain certification as a superintendent by completing twelve to fifteen additional semester hours plus a year-long internship. After completion of the certification plan the student must take and pass the ExCET examination and apply for the certificate at the Office of Professional Services and Admissions in the Education Building. Students normally register for the ExCET in their last semester of course work.

Master's Degree in Supervision

Students interested in pursuing a master's degree in Supervision can secure an up-todate degree plan from the Department of Educational Leadership in the Education Building or request a copy by writing to the Department of Educational Leadership, P.O. Box 10034, Lamar University, Beaumont, Texas 77710.

Certification in Supervision

A student who completes requirements for a Master's degree in Supervision will have fulfilled all curriculum requirements for a Professional Supervisor Certificate. Students already holding a Master's degree from an accredited university may enter the "Certification Only" program for Supervision certification by making application in the office of the Department of Educational Leadership and providing an official transcript of all applicable graduate work. Once admitted, students will be assigned an advisor who will develop a certification plan.

To receive the certificate a student must complete all requirements for a master's degree in Supervision, hold a valid Texas teacher certificate, have 3 years of acceptable classroom teaching experience, take and pass the ExCET examination, and apply for the certificate at the Office of Professional Services and Admissions in the Educational Building. Students normally register for the ExCET in their last semester of course work.

Endorsements in Technology

A nine semester hour, Level I Endorsement in Information Processing Technology and a 15 semester hour, Level II endorsement in Information Processing Technology are available to educators holding a teaching certificate. Contact the Department of Educational Leadership for a list of requirements and courses.

Graduate Faculty

Professor Elvis Arterbury Educational administration and supervision Associate Professor Carolyn Crawford Counseling and development Associate Professor William R. Holmes Counseling and development Professor George McLaughlin Counseling and development Associate Professor Dorman Moore

Educational administration and

supervision

Professor Bob Thompson Educational administration and supervision Associate Professor Curtis E. Wills Counseling and development Associate Professor Paula Nichols Educational technology Associate Professor Desmond Rice Educational technology and reading

Counseling and Development Courses (CNDV)

Human Growth and Development A study of normal human development and the stages of physical intellectual, social and emotional growth from prenatal origins through old age. Individual and Group Facilitation Skills 5310 An introduction of facilitation skills and theory. Indepth analysis and demonstration of various facilitation techniques for use with both individuals and groups. (This is a pre-practicum course.) Prerequisite: CNDV 5311 or CNDV 5312 or permission of instructor. 5311· Individual Counseling Theories and Techniques 3:3:0 Theories of individual counseling with an emphasis on techniques and applications. 5312 **Group Counseling Theories and Techniques** 3:3:0 An analysis of group counseling theories, processes and techniques. Prerequisite: CNDV 5311 or permission of instructor. 5320 **Cross Cultural Counseling** Studies in human diversity and cultural issues. Identifies the implications for counseling and learning and

strategies for cross cultural effectiveness in various settings. 5321 Test Administration and Interpretation Theoretical and practical study emphasizing the administration, scoring and basic interpretation of individual psychological tests. Students will be trained to administer the Wechsler tests, the Stanford-Binet or other individual assessment instruments. Prerequisites: EDLD 5334 or permission of instructor.

5322 Program Development, Administration, Ethics and the Law Organizing and implementing a counseling program or practice with an emphasis on legal issues, ethical principles and professional standards of conduct.

5323	Career Development 3:3:0
	A focus on theories of vocational choice, vocational assessment, sources of occupational and educational
,	information and the career decision process.
	Prerequisites: CNDV 5322.
5350	Abnormal Human Bebavior 3:3:0
, .	A study of various symptom categories in psychopathology. The course will include an analysis of the diagnostic
	categories as well as the research concerning etiology and treatment.
. *	Prerequisites: Approval of instructor and 18 semester hours of CNDV coursework.
5351 _,	Consultation 3:3:0
	This course has an emphasis on developing consultation skills for the counselor. Methods and techniques to
`	assist the counselor in implementing appropriate consultation skills for problem management, intervention or
	prevention.
	Prerequisite: EDLD 5301.
5380	Seminar in Counseling and Development 3:3:0
	Designed to advance the professional competence of participants. For each seminar, a description of the
J*	particular area of study will be indicated. May be repeated for credit when nature of seminar differs sufficiently
	from one previously taken.
	Prerequisites: CNDV 5311 or approval of instructor.
5381	Advanced Seminar in Social and Family Relations 3:3:0
	An intensive exploration of the dynamics of interpersonal relationships, including family and social issues. A
	critical analysis of various techniques and approaches will be established. Development of personal counseling skills will be of major concern.
	Prerequisites: CNDV 5322, CNDV 5311.
5382	Selected Instruction Topics 3:3:0
5302	Significant topics in Counseling and Development. The description of the particular area of study will appear
	on the printed schedules of Lamar University each semester. With permission of advisor in student's major field,
	course may be repeated when topic varies.
5390/5	i391 School Counseling Practicum 3:3:0
3350/3	A field-based course with supervised observation and practice of guidance and counseling in a school setting
٠.	during the school day.
	Prerequisite: Must be within 6 semester hours (excluding practicum) of completing program requirements
	before beginning internship. A maximum of one additional course may be taken any semester in which a
	student is enrolled in a practicum.
5392/5	333 Community Counseling Practicum 3:3:0
	A field-based course of supervised observation and practice of guidance and counseling in an agency setting.
	Prerequisite: Must be within 6 semester hours (excluding practicum) of completing program requirements
	before beginning internship. A maximum of one additional course may be taken any semester in which a
	student is enrolled in a practicum.
Eal	ucational Leadership Courses (EDLD)
5004	
5301	Research Methods 3:3:0
	Introduction to skills and techniques necessary for descriptive research in education problems. Emphasis on
	planning, designing, and methodology. One-third time in laboratory exercises and writing a research proposal and report.
E200	
5306	Educational Technology Foundations 3:3:0
	Functional knowledge of educational computing and technology with an emphasis on productivity tools for
	professional use.
5311	Fundamentals of Administration 3:3:0
	A study of the relationships between and among human behavior, belief systems and administrative style.
5326	
- •.	Developing personal and mass media communication skills with emphasis on improving school-community
	relationships through effective communication techniques.
	Prerequisites: EDLD 5311, EDLD 5339 and admission to the program.
5332	School Organization and Management Issues 3:3:0
	Study of the administrative proficiencies necessary in the organization and administration of an effective school.
	Should be the last course before or in conjunction with an Internship.

3:3:0

	A study of short and long-range planning and problem solving techniques of effective school leaders. Special emphasis will be given to applications in an individual campus and the relationship to district planning processes.
5334	Tests, Measurement, and Evaluation 3:3:0
	Analysis and evaluation of types of tests and measurement devices will be conducted. Methods of determining the reliability and validity of tests are investigated. Designs for testing programs and selection of appropriate tests
	will be included. Evaluation systems of individuals and programs will be discussed.
5335	Curriculum Management 33:3:0
	Models of curriculum development and evaluation with particular emphasis on the management of these functions.
	Prerequisites: EDLD 5311, EDLD 5352 and admission to the program.
5339	Organizational Behavior 3:3:0
•	Study of school as an organization and how individuals behave in organizations. Students will assess and compare their own personal competencies to the administrative needs of a selected school. Prerequisite: EDLD 5311
5342	School Finance 3:3:0
	Analysis of principles of school finance to include problems of budgeting, accounting, and administration of funds.
	Prerequisites: EDLD 5311, EDLD 5339 and admission to the program.
5343	Educational Facilities Planning 3:3:0
,	Evaluation and administration of school facilities and the relationship of facilities to the achievement of educational objectives.
	Prerequisites: EDLD 5311, EDLD 5339 and admission to the program.
5344	
	Interpretation and implementation of school law including a study of the Texas Education Code and the Handbook for Public School Law.
	Prerequisites: EDLD 5311, EDLD 5339 and admission to the program.
5345	Personnel Administration 3:3:0
	Fundamentals of human relations and organizational behavior in developing programs of recruitment, selection, assignment, evaluation, promotion and termination of personnel. Prerequisites: EDLD 5311, EDLD 5339 and admission to the program.
5352	Instructional Leadership 3:3:0
	Techniques of improving instruction through application of research on effective schools and models of instruction.
5354	Team Facilitation 3:3:0
	Role of peers in school evaluation and improvement initiatives. Emphasis on team approaches, team leadership, and models to improve group processes.
	Prerequisite: Advisor's approval.
5356	Educator Evaluation 3:3:0
•	Study of techniques of effective educator evaluations with emphasis on appraisal as a component of professional development. All requirements for PDAS training are included as are requirements for other administrative assessments. Prerequisites: EDLD 5352 and admission to the program.
E261	Distance Learning/Telecommunications 3:3:0
5361	Study of distance learning methodologies and the implementation and application of current and emerging telecommunications for teaching and learning.
	Prerequisite: EDLD 5306. (approval pending)
F262	
. 5362	Educational Informational Systems 3:3:0 Introduction to the development, utilization, and assessment of technology at both the campus and district
٠.	levels. Topics studied include long range planning, decision-making processes, and use of records management tools.
	Prerequisite: EDLD 5306. (approval pending)
E202	
5363	Multimedia in Education A survey of the principles of multimedia design and production, including hardware and software tools for multimedia presentations of instruction.
	Prerequisite: EDLD 5306. (approval pending)
5364	Teaching with Technology 3:3:0

This course focuses on the design, development, and integration of educational technology for teaching, learning,

and personal productivity, including access networks, intranets/Internet.

Prerequisite: EDLD 5306. (approval pending)

5333 Campus Planning and Problem Solving

5381

5371 The School Superintendent

3:3:0

Role and responsibilities of the superintendent as chief administrative officer of the district.

Prerequisite: Certification in Mid-Management.

Independent Study

2.2.0

Supervised investigation into special areas of education under the direction of a graduate faculty member. May be repeated for credit when topic of investigation varies.

Prerequisite: Consent of department chair.

5387 Seminar in School Administration

0.0.0

Study of concepts and principles of school administration as applied to selected topics. Special attention will be given to new and developing programs and to administrators' roles in these programs.

Prerequisites: Permission of instructor/admission to program.

5388 Selected Instructional Topics

Study of significant topics related to administration and supervision of schools. The description of the particular area of study will appear on the printed schedules of Lamar University each semester. Contact hours are the same as those required by a formal instructional course. With permission of advisor in the student's major field, course may be repeated when topic varies.

Prerequisites: Permission of advisor.

5396 Internship in Administration

Designed to develop administrator proficiencies and skills specific to a job title under the joint supervision of a school administrator and faculty of Lamar University.

5397 Internship for Supervision

2.4.0

Designed to give the prospective supervisor job-related experience under the joint supervision of a school district supervisor and faculty of Lamar University.

Prerequisite: Must have completed all courses in the major and be within 3 semester hours (excluding internship) of completing certification requirements.

5398. Internship for School Principal

3:3:0

Designed to give the prospective principal or middle level administrator job-related experience under the joint supervision of a school administrator and faculty of Lamar University. (Must be taken in 2 consecutive semesters or 1 long term and 1 summer term.) May be repeated once for credit.

Prerequisites: Masters Degree in Educational Administration and within 3 semester hours (excluding internship) of completing mid-management certification.

5399 Internship for School Superintendent

6:A:0

Designed to give the prospective superintendent job-related experience under the joint supervision of a school superintendent and faculty of Lamar University. Must be completed in consecutive semesters (Fall & Spring) in the same academic year.

Prerequisites: Certification in Mid-Management or Principal and within 6 semester hours (excluding internship) of completing superintendency certification. A maximum of one additional course may be taken in any semester in which a student is enrolled in an internship.

Department of Professional Pedagogy

Department Chair: Dr. Ravic Ringlaben

202 Education Building Phone: 880-8673

Graduate Coordinator: Dr. Ravic Ringlaben

The Department of Professional Pedagogy offers programs leading to the Master of Education (M.Ed.) degree in Elementary Education, Secondary Education, and Special Education. In addition, the Department offers course work leading to six different Professional Certificates. It is the goal of the Master of Education and the Professional Certificate programs to provide the academic climate and practical experience necessary to produce teachers and other specialists of superior competence in their chosen areas of specialization.

Students who wish to pursue a Master of Education and/or a Professional Certificate should contact the Graduate Coordinator well before the beginning of the semester in which they plan to enroll.

Master of Education (M.Ed.)

General Requirements

To be accepted into a program leading to a Master's Degree in Education the student must:

- Fulfill the general requirements for admission and the general degree requirements as stated elsewhere in this bulletin.
- Meet the undergraduate prerequisites appropriate to the chosen program of study. These requirements include:
 - A. The applicant in elementary education must have completed 18 semester hours in education, including 6 semester hours in elementary education methods and materials courses.
 - B. The applicant in secondary education must have completed a minimum of 18 semester hours in education. At least 12 of the 18 hours must be at the 300 level or higher.
- 3. The student may elect to write a thesis. If so, the student is required to complete a minimum of 30 hours plus the thesis.
- 4. The student who does not write a thesis must earn a minimum of 36 hours of graduate credit and is required to pass a written comprehensive examination administered during the last semester of attendance.

Step by Step Procedure

- 1. Apply for Admission to the Graduate College of Lamar University.
 - A. Obtain application packet from the Graduate Admissions Office in Room 118 of the Wimberly Building or call (409) 880-8356.
 - B. Take the Graduate Record Examination and have scores sent to: Graduate Admissions, Lamar University, P.O. Box 10078, Beaumont, Texas 77710.
 - C. Have all transcripts sent to Graduate Admissions as in B above.
- Meet with Graduate Coordinator to develop a degree plan. NOTE: No deviations from the degree plan will be permitted without written permission of the Graduate Coordinator.
- 3. In consultation with the Graduate Coordinator, select members of graduate committee. (The program advisor will chair this committee.)
- 4. Complete at least 12 hours of graduate-level course work in the department and apply for Admission to Candidacy. **NOTE:** Students must be admitted to candidacy before beginning their last nine hours of course work.
 - . Complete remaining course work.
- 6. Complete requirements for graduation
 - A. Apply for graduation in the Graduate College office (219 Wimberly).
 - B. Pass comprehensive examination
- Graduate

Degree Plan in Elementary Education

To meet individual needs, considerable flexibility is allowed in planning the student's program; however, the usual pattern of course work is as follows:

 Professional Development. Six semester hours must be selected from the following courses:

PEDG 5310 Research for Teachers (Req)

PEDG 5340 Advanced Study in Human Development

PEDG 5350 Psychology of Pedagogy

PEDG 5370 Public School Curriculum

Resource Area. 12 semester hours must be selected from the following courses (nine semester hours if the student elects to write a thesis):

PEDG 5306 Problems in Teaching Science and Social Studies in the Elementary School

PEDG 5380 Modern Mathematics in the Elementary School

PEDG 5387 Teaching of Reading in the Elementary School PEDG 5389 Diagnostic/Prescriptive Procedures in Reading

- Specialization Area. Six semester hours of courses must be taken for graduate credit from one or a combination of the following disciplines: history, English, foreign languages, mathematics, science, art, music, speech or health and physical education.
- Electives. 12 semester hours (nine semester hours if student elects to write a thesis) from any of courses listed below or in a concentrated area.
 - A. Reading Specialist

PEDG 5387 Teaching of Reading in the Elementary School

PEDG 5385 Literature: Pre K-12

PEDG 5389 Diagnostic/Prescriptive Procedures in Reading

B. Early Childhood Education

PEDG 5351 Advanced Study in Early Childhood Curriculum PEDG 5352 Creative Activities in Early Childhood Education PEDG 5355 Analysis of Program Implementation in Early Education

C. Supervision

PEDG 5334 Tests Measurements & Evaluation

PEDG 5353 Leadership and Evaluation of Instruction

D. Special Education

PEDG 5361 Survey of Learning Potentials of Exceptional Children

PEDG 5364 Behavior Modification and Contingency Management of Disabled Learners

PEDG 5365 Instructional Processes With Exceptional Children

PEDG 5366 Modification of Curriculum and Instruction for the Atypical Learner

E. Gifted/Talented Endorsement

PEDG 5356 The Gifted Learner

PEDG 5357 Creativity and the Gifted Learner

PEDG 5358 Identification and Assessment of Gifted/Talented Learner

PEDG 5359 Gifted/Talented Curriculum

PEDG 5360 Practicum

NOTE: To fulfill requirements concurrently for a Master's degree and for a Professional Certificate, a student may complete 12 additional graduate hours in an area of undergraduate specialization and substitute these hours for 12 hours in the elective area.

Degree Plan in Elementary Education With Professional Certification in Reading

- To fulfill requirements concurrently for a Master's degree and Professional Certification in Reading, the student:
 - A. Must meet general requirements for a Master of Education degree.
 - B. Must hold a valid Texas Provisional Elementary or Secondary Certificate.
 - C. Must have completed a minimum of three years of creditable classroom teaching.
- 2. A. Professional Development Area: Six semester hours.

PEDG 5310 Research for Teachers (Reg)

PEDG 5340 Normal Human Growth and Development

PEDG 5350 Psychology of Pedagogy

PEDG 5370 Public School Curriculum

B. **Resource Area:** Six semester hours. PEDG 5367 Cross Cultural Counseling

C. Reading Specialization Requirements: Eighteen semester hours

PEDG 5387 Teaching of Reading in the Elementary School (Req.)

PEDG 5389 Diagnostic/Prescriptive Procedures in Reading (Req)

PEDG 5385 Literature: Pre K-12 (Req)

PEDG 5306 Problems in Teaching Science and Social Studies in the

Elementary School

PEDG 5380 Modern Mathematics in the Elementary School

D. Professional Secondary: Six semester hours

PEDG 5321 Adolescent Development

Professional Certificates in Elementary Education

The applicant should hold or be eligible for a Provisional Certificate before admission into a professional program and have three years of teaching experience before being recommended for the Professional Certificate.

Requirements for the Professional Certificate follow an outline prescribed by the Texas Education Agency, consequently, the format for the certificate and the format for the degree are not identical. By selecting a program and with careful planning, a student may fulfill concurrently requirements for the Master's degree and requirements for a Professional Certificate in Elementary Education or the Reading Specialist Certificate. Specific information concerning these certificates may be obtained from the College of Education and Human Development Director of Professional Services and Admissions.

Other Certificates

It is possible for students to complete part or all of the requirements for a Provisional Teaching Certificate or an endorsement to such a certificate while working on a Master of Education degree in Elementary Education. Endorsements in areas such as mental retardation, physically handicapped/minimally brain injured, emotionally disturbed, learning disabilities, early childhood/exceptional children, gifted and talented may be adapted to such an arrangement. Specific information concerning these certificates may be obtained from the Graduate Coordinator.

Degree Plan in Secondary Education

To meet individual needs, considerable flexibility is allowed in developing the student's plan for a nonthesis or a thesis program; however, the usual pattern of course work is as follows:

1. Professional Development. 18 semester hours must be taken as follows:

Required: Six semester hours

PEDG 5310 Research for Teachers (Req) PEDG 5321 Adolescent Development

Electives: 12 semester hours should be in one of the following areas:

Classroom Specialist Foundations of Education Reading Specialist Gifted/Talented Supervision

A list of specific courses required or recommended in each of the concentrations is available from the Director of Professional Services and Admissions.

2. Specialization Area. For the nonthesis route to the degree, 12-18 semester hours of graduate work must be completed in one of the approved disciplines. A minimum of 12 hours must be taken at the 5000 level for the 18-hour specialization. If the student elects to write a thesis or chooses the route leading to the Professional Teaching Certificate which requires a six-hour resource area exclusive of professional education and the specialization, the specialization requirement is reduced to 12 semester hours with at least six at the 5000 level.

A plan listing the specific courses required to recommended is available through the Director of Professional Services and Admissions. Specialization areas are available in the following disciplines:

Biology Kinesiology
Chemistry History
Earth Science Mathematics
Physics English
Speech Political Science

Degree in Secondary Education With Professional Certification in Reading

With a valid junior high school or high school teaching certificate and three years of classroom teaching experience, a student, may fulfill requirements for a Professional Reading Specialist Certificate (all levels) by completing the program below in lieu of content specialization.

1. Professional Development: Nine semester hours:

PEDG 5310 Research for Teachers (Req)

PEDG 5350 Psychology of Pedagogy

PEDG 5340 Normal Human Growth and Development

PEDG 5370 Public School Curriculum

- Resource Area: Six semester hours. PEDG 5367 Cross Cultural Counseling
- 3. Reading Specialization Requirements: Eighteen semester hours PEDG 5387 Teaching of Reading in the Elementary School PEDG 5385 Literature: Pre K-12

PEDG 5389 Diagnostic/Prescriptive Procedures in Reading
Professional Secondary: Three semester hours

PEDG 5321 Adolescent Development

Program Leading to Professional Teaching Certificate – Secondary

The Texas Education Agency issues a Professional Teaching Certificate to the candidate recommended by the college when he/she has completed an approved 30 semester hour program of credit beyond the bachelor's degree. This program must include work in professional development, in a teaching specialization area and in a resource area. Requirements also indicate that the candidate must hold a Provisional Teaching Certificate and have three years of teaching experience. Specific requirements for the certificate may be obtained from the Director of Professional Services and Admissions.

Degree Plans in Special Education

To meet individual needs, some flexibility is allowed in planning the student's program; however, the usual pattern of course work is indicated below. If a student desires, he/she may complete requirements for a Provisional Certificate as an Educational Diagnostician or in Mental Retardation or in Supervision. In addition, the student may complete requirements for a Provisional Certificate in Special Education-Generic as part of the degree plan. This degree, if the student is pursuing one of the described certifications, is planned as a 36 semester hour non-thesis program. A student not seeking a certificate within the degree hours may complete a degree with a minimum of 30 semester hours plus a thesis.

To fulfill requirements concurrently for a Master's degree and Professional Certification in Supervision, the student also must have or complete a special education endorsement. The student should secure information concerning requirements for certification from the Graduate Coordinator. General information concerning Professional Certificates is presented in another portion of the College of Education and Human Development section of this bulletin.

A. M.Ed. in Special Education-Generic Certification

1. Professional Development Area: Nine semester hours required

PEDG 5310 Research for Teachers (Req)

PEDG 5340 Normal Human Growth and Development

PEDG 5350 The Learning Process

PEDG 5370 Public School Curriculum

2. Resource Area: (12 hours)

PEDG 5334 Tests, Measurements and Evaluation (required)

PEDG 5361 Survey of Learning Potentials of Exceptional Children (required)

3. Specialization Area: (15 hours)

PEDG 5388 Reading and Language Arts for the Exceptional Child PEDG 5362 Psychoeducational Evaluation of Exceptional Children PEDG 5364 Behavior Modification and Contingency Management of Disabled Learners

PEDG 5365 Instructional Processes with Exceptional Children PEDG 5366 Modifications of Curriculum and Instruction for the Atypical Learner

- B. M.Ed. in Special Education-Mental Retardation Certification
 - 1. Professional Development Area: Nine semester hours required PEDG 5310 Research for Teachers (Reg)

PEDG 5340 Normal Human Growth and Development

PEDG 5350 The Learning Process

PEDG 5370 Public School Curriculum

2. Resource Area. (12 hours)

PEDG 5334 Interpretation and Analysis of Tests and Measurements (required)

Select three courses from those listed below:

PEDG 5341 Microcomputers for Educators

PEDG 5351 Advanced Study in Early Childhood Curriculum

PEDG 5367 Psycho-Social Foundations of Educating the Culturally

Different PEDG 5362 Psychoeducational Evaluation of Exceptional Children

PEDG 5363 Practicum in Psychoeducational Procedures

PEDG 5365 Instructional Processes with Exceptional Children

PEDG 5366 Modifications of Curriculum and Instruction for the Atypical Learner

- * Other selections must be approved by the chairperson of the student's committee and by the Director of Admissions and Advisement
- 3. Specialization Area: (15 hours)

Must be selected from the following courses or in concentrated area when attaining a specific certification.

PEDG 5361 Survey of Learning Potentials of Exceptional Children PEDG 5364 Behavior Modification and Contingency Management of Disabled Learners

4. Student must select six additional hours from courses listed below:

PEDG 5362 Psychoeducational Evaluation of Exceptional Children

PEDG 5363 Practicum in Psychoeducational Procedures

PEDG 5365 Instructional Processes with Exceptional Children PEDG 5366 Modifications of Curriculum and Instruction for the Atypical

Learner

C. M.Ed. in Special Education-Educational Diagnostician Certification

1. Professional Development Area. Nine semester hours required

PEDG 5310 Research for Teachers (Req)

PEDG 5340 Normal Human Growth and Development (Req)

PEDG 5350 The Learning Process

PEDG 5370 Public School Curriculum

2. Resource Area. (12 hours)

PEDG 5334 Interpretation and Analysis of Tests and Measurements (required) Select two courses from those listed below:

PEDG 5341 Microcomputers for Educators

PEDG 5351 Advanced Study in Early Childhood Curriculum

PEDG 5367 Psycho-Social Foundations of Educating the Culturally

Different

* Other selections must be approved by the chairperson of the student's committee and by the Director of Admissions and Advisement

3. Specialization Area (15 hours)

PEDG 5362 Psychoeducational Evaluation of Exceptional Children

PEDG 5363 Practicum in Psychoeducational Procedures

PEDG 5364 Behavior Modification and Contingency Management of Disabled Learners

PEDG 5365 Instructional Processes with Exceptional Children

PEDG 5366 Modification of Curriculum and Instruction for the Atypical

Professional Certification in Special Education

Educational Diagnostician

Learner

Generic Special Education

Specific information concerning these certificates may be obtained from the Director of Professional Services and Admissions.

General Information Concerning Professional Certificates

The Professional Certificate is valid for life unless cancelled by lawful authority, and gives the holder legal authority to perform duties in the public schools of Texas in the specialized areas designated on the face of the certificate. It is the responsibility of the student to initiate the process of applying for certification by contacting the College Director of Professional Services and Admissions.

Requirements

- 1. Have completed the requirements for a Provisional Certificate.
- Have at least three years of teaching experience.
- 3. Have completed an approved teacher education program.
- 4. Be of good moral character.
- Be a citizen, or in the process of becoming a naturalized citizen of the United States.

90

- 6. Believe in and uphold the Constitution of the United States and the State of Texas.
- Have completed, in a Texas institution of higher learning, a course or courses in which the Constitutions of the United States and the State of Texas have been given special emphasis.
- Have completed at least six semester hours of American history or three semester hours in American history plus three semester hours in Texas history.
- 9. Pay an application fee of \$30.

Graduate Faculty

Assistant Professor Vicky Farrow Educational Psychology

Assistant Professor Kimberly Griffith Special Education, Educational Psychology

Professor Andrea Karlin Reading

Professor Ravic Ringlaben Special Education Professor Dorothy Sisk Gifted and Talented

Assistant Professor Linda Weeks Early Childhood and Elementary Education

Assistant Professor Zhigang Zhang Reading

Professional Pedagogy Courses (PEDG)

	Introduction to skills and techniques necessary for descriptive research as ap emphasis on planning, designing and methodology. Research proposal requ		eacher educa	tion, w	ith an
5320	Current Issues in Education	,			3:3:0
	Current controversies and trends in public education.			. '	
5340	Normal Human Growth and Development				3:3:0
	A study of development and nature of the human personality. Emphasis on r	ecent psy	chological ar	nd biol	ogical
	experiments.	• •			
5350	The Learning Process				3:3:0
	History and systems of learning which have application to the classroom	Current	theories and	resea	rch in

pedagogy.

5360 Problems in Teaching Science and Social Studies in the Elementary School

A study of current developments, recent trends and innovative methods of teaching science and social studies

in the elementary school, with emphasis upon individual teaching problems and research.

5370 The Public School Curriculum

Analysis of the objectives, organization and content of the different areas of the public school curriculum in grades K-12. Emphasis is given to models of curriculum development and to techniques for curriculum improvement.

5380 Modern Mathematics in the Elementary School

Problems, research and innovative methods in elementary mathematics. This course is designed for elementary teachers who wish to pursue individual problems. Research and recent methods and trends of teaching elementary mathematics.

Teaching of Reading in the Elementary School
 Overview of reading: techniques, methods, approaches, materials, classroom management and organization.

5388,	5490 Selected Instructional Topics 3-4:3-4:0
	Significant topics in Elementary, Secondary, Special Education, Supervision, Counseling, and Educational
	Administration. The description of the particular area of study will appear on the printed schedules of Lamar
	University each semester. Contact hours must be the same as those required by a formal instructional course. With
	permission of advisor in the student's major field, course may be repeated when topic varies.
5311 -	Individual Study in Education 3:A:0
	Supervised investigation into special areas of education under the direction of a graduate faculty member. May
	be repeated for credit when topic of investigation differs.
	Prerequisite: Consent of department head.
5320	Adolescent Development 3:3:0
	Physical, mental, social and emotional characteristics of the adolescent; interests and problems; family and
	community relationships.
5334	Tests, Measurement and Evaluation 3:3:0
	Analysis and evaluation types of tests and measurement devices will be conducted. Methods of determining the
	reliability and validity of tests are investigated. Designs for testing programs and selection of appropriate test will
	be included. Evaluation systems of individuals and programs will be discussed. Microcomputers for Educators 3:3:0
5341	,
	Designed to give teachers an awareness level of computer literacy and allow them to use the computer as an additional tool in the classroom.
F0F1	
5351	Advanced Study in Early Childhood Curriculum 3:3:0 A comprehensive study of the organization, methods and materials used for instruction in Kindergarten and
	other programs for young children.
5352	Creative Activities in Early Childhood Education 3:3:0
3332	Teaching methods and materials for releasing creative expression with music, art and literature. Workshop
	approach with demonstration of art and music processes.
5355	Analysis of Program Implementation in Early Education 3:3:0
	The inductive analysis and application of specific program and program implementation strategies to the
	development of cognitive, psychomotor and affective behaviors among young children.
5356	The Gifted Learner 3:3:0
0,000	In-depth study of the characteristics and unique needs of gifted/talented students as they relate to both school
	and family settings. Understanding of the educational and psychological demands of giftedness and the role of
	counseling and counselors.
5357	Creativity and the Gifted Learner 3:3:0
	Introduction to theoretical constructs related to creative behavior. Emphasis on the development of competence
	in identifying the student's creative potential through the administration and interpretation of tests of creative
	behaviors and on strategies for enhancing the learner's creative behavior.
5358	Identification and Assessment of Gifted/Talented Students 3:3:0
	Theoretical and practical study emphasizing the selection, administration, and interpretation of tests related to
	identification and curricular planning for gifted and talented students. Attention to state/federal identification
	mandates and the design of an identification matrix and guidelines for its use in specific educational settings.
5359	Gifted and Talented: Curriculum 3:3:0
	Survey of models of gifted/talented education with attention to the development of appropriate goals and
	objectives for curriculum differentiation. Understanding of appropriate evaluation criteria at state/district/
	classroom levels
5360	Practicum in Gifted Education 3:3:0
	Supervised internship in gifted/talented education providing the intern with an opportunity to demonstrate
	competence in program planning and instructional delivery in classroom/district settings. May not be taken until
=004	all four courses (12 semester hours) are completed.
5361	
	General survey of the learning potentials of those children deficient in basic integrities which can be categorized
	into central peripheral nervous system dysfunction and/or behavioral disorder.
5362	Psychoeducational Evaluation of Exceptional Children 3:3:0 Simulated experiences in the use of formula and informal methods of experience and communicating pupils'
-	Simulated experiences in the use of formal and informal methods of appraising and communicating pupils'
F000	educational status and progress.
5363	Practicum in Psychoeducational Procedures 3:3:0 Practicum appropriate of the response of formal and informal instruments in the evaluation of the response durational
	Practicum experience in the use of formal and informal instruments in the evaluation of the psychoeducational and social development of children and the utilization of education and clinical data in individual teaching
	plans.
	Prerequisite: PEDG 5362.

5364	Behavior Modification and Contingency Management of Disabled Learners	3:3:0
	The description of specific types of learning, the sequence in learning school-related task	s and the competencies
	to manipulate events to effect desired learning.	

Instructional Processes with Exceptional Children 5365 Competency in developing educational strategies for the remediation, amelioration or compensation of exceptionality as it interferes with achievement or adjustment in school.

3:3:0 Modification of Curriculum and Instruction for the Atypical Learner Information and familiarity with instructional materials necessary for meeting the special needs of exceptional learners. Utilization of Special Educational Instructional Materials Centers.

5367 **Cross Cultural Counseling** Studies delineating personal psychological characteristics and the affective domain of the culturally different. Identifies educational strategies applicable to the teaching process as well as other supportive pupil service.

Literature: Pre K-12 5385 Emphasis on the selection of literature for children and adolescents, and the development of methods for using literature to develop skills in reading. Provision of experiences which will enable teachers to locate and select age level appropriate literature and to incorporate literacy studies in the curriculum at all grade levels.

Diagnostic/Prescriptive Procedures in Reading 5389 Study of the nature and causes of reading problems including observations, demonstrations, and supervised practice in the techniques of diagnosis; attention is given to interview procedures, standard and informal diagnostic instruments, the interpretation and utilization of standardized test data, and report writing.

Prerequisites: PEDG 5387. 5390-5391 Thesis 6:A:0

Prerequisite: Approval of graduate advisor. Must complete both for required 6 credits.

Graduate Resource Courses

These courses are not offered by the College of Education and Human Development but are required or suggested for certain degree plans.

Department of Health and Kinesiology

The Department of Health and Kinesiology offers a program of study leading to the Master of Science degree in Kinesiology. It is designed to prepare professional personnel for employment in school and community settings and to prepare students for further graduate study at the doctoral level. Candidates seeking admission to the program must meet the general catalog requirements for admission to the College of Graduate Studies. They must also have a 2.5/4.0 overall undergraduate grade point average or, 2.75 grade point average on the last 60 hours of undergraduate course work). They must also satisfy the necessary undergraduate prerequisites as prescribed for a particular area of specialization.

A teaching and research specialization is offered for those graduate students who are interested in advanced preparation for teaching in school and university settings, research opportunities, doctoral-level work and administrative responsibilities.

Degree Requirements

The candidates for the Master of Science degree in Kinesiology must meet all of the College of Graduate Studies general degree requirements as listed in the Graduate catalog. To be sure that requirements are met, students are encouraged to contact the graduate coordinator. Additional specific degree requirements are as follows:

- Nine semester hours to include Kin 534 (Scientific Basis of Exercise), Kin 536 (Research Methods), and Kin 538 (Motor Learning).
- The thesis is optional for specialization areas of teaching and research.

6:A:0

Graduate Faculty

Professor Joel E. Barton III Health Professor E. Harold Blackwell Kinesiology Professor Douglas Boatwright Kinesiology

Independent Study

5390-5391 Thesis

teaching member of the graduate faculty.

Professor Sonny Jolly Kinesiology Associate Professor Carol Plugge-Foust Health Assistant Professor George Strickland Health

Kin	esiology Courses (KINT)
5300	Problems 3:A:0 Biological, physiological, social, psychological and other purposes and outcomes; selection and distribution of activities; facilities; teacher preparation; literature; research problems.
5310	Prerequisite: Permission must be obtained from an active teaching member of the graduate faculty. Sport in Society 3:3:0
	An analysis of sport in American society. The study of the sociological processes that affect the individual as an active participant in sport and physical activity.
5320	Seminar 3:3:0
	Designed to develop abilities in location and evaluating literature and research in Kinesiology and in allied fields. Course may be repeated for a maximum of six semester hours as the topic varies.
5330	Sport Administration 3:3:0
	Developing analytical skills and attitudes of top management in administering the organization as a whole and
٠.	the interrelationships of all problems in the organization. Establishment of strategic objectives, analysis of changing environments, developing strategies, formulating policies, decision making and problem analysis, personnel resource management.
5340	Scientific Basis of Exercise 3:3:0
	A study of professional literature and laboratory experimentation on the role of physical activities and their effects on the human organism.
5350	Trends and Issues 3:3:0
	Designed to assist the student to become knowledgeable on current trends and issues in the area of Kinesiology. Study will include historical, analytical and projective approaches. Course may be repeated for a maximum of six semester hours as the topic varies.
5360	Research Methods 3:3:0
	Familiarity with types of research in Kinesiology with emphasis on tools and techniques of research and research design.
5370	Basis of Sports Medicine 3:3:0
	Human environmental factors and their interrelationship in sports injury and their control; accident prevention and injury control in sports activities; philosophy of sports safety; contributions of sports medicine to safety and current trends and issues in sports medicine.
5380	Motor Learning 3:3:0
	'A formalized and scientific study of learning, performance and related factors as applied to gross motor skills.
5311	Curriculum Development 3:3:0
	Emphasis given to models of curriculum development and to techniques for curriculum improvement. Analysis of objectives, organization and content.

Intensive study in an area of special interest. Course may be repeated for a maximum of six semester hours as the topic varies.

Prerequisite: Demonstrated competence for independent work and research methods, and consent of active

Prerequisite: Approval of Graduate advisor: Must complete both for required 6 hours.

Department of Family and Consumer Sciences

The Master of Science Degree in Family and Consumer Sciences (FCSC) allows students to choose courses in foods and nutrition, family studies, child development and other areas within the field. An Approved Preprofessional Practice Program in Dietetics (AP4) is available at Lamar. Twelve of the eighteen credit hours required in the AP4 may be applied toward the M.S. Degree. Workshops and travel/study tours, along with daytime, evening and weekend classes are offered.

The Department of FCSC has adopted the minimum admission requirements of the Lamar University College of Graduate Studies outlined elsewhere in this catalog.

A limited number of scholarships and graduate assistantships are available. Contact the Department for details.

If a student's undergraduate degree is in a discipline other than FCSC or one of its subject matter areas, the student is required to complete undergraduate course work. The graduate advisor works closely with the student to determine any undergraduate deficiences. No more than 15 undergraduate credit hours will be required.

Degree Requirements

All graduate students in the Department are required to complete FCSC 5300 and FCSC 5314. The remainder of each student's program of study is developed according to the student's professional goals and interests.

Thesis route: This option consists of 30 credit hours. The thesis counts for six hours and the course work comprises 24 hours. Six credit hours may be taken in other departments.

Non-thesis route: A student electing this option will complete 36 hours of course work, 12 of which may be taken in other departments. Non-thesis students are required to pass a comprehensive written and oral exam covering all course work completed during the graduate program.

Graduate Faculty in Family and Consumer Sciences

Associate Professor Amy Pemberton, R.D. Foods, nutrition/dietetics Associate Professor Connie Ruiz, R.D. Foods, nutrition/dietetics Assistant Professor Kim Wallet
Family Studies
Assistant Professor Frances Droddy
Child Development,
FCS Education

Family and Consumer Sciences Courses (FCSC)

Research Methods in Family and Consumer Sciences

 Introduction to skills and techniques necessary for conducting research in family and consumer sciences subject matter areas. Emphasis on research strategies, data preparation and analysis and research reporting. Research proposal required.

 Recent Advances in Foods and Nutrition

 Readings in and discussion of selected studies and recent developments in the field of nutrition and foods. Implications for dietitians, nutritionists, teachers, extension workers and others. May be repeated for credit when topic varies.

 Clothing Design and Merchandising
 3:3:0

5320 Clothing Design and Merchandising
An application of couture costume design principles and techniques related to construction and merchandising.

5330 Heritage of Dress 3:3:0

A survey of costume history and customs which have affected garment styles. An analysis of historic costume and its contribution of civilization.

5340	Problems in Clothing and Textiles 3:3:0
•	Individual and group investigations and discussions of special problems in the various phases of clothing and textiles.
5350	Cultural Foods 3:3:0
	An overview of cultural influences on primitive and modern human dietary practices. Emphasis on how humans
	use culture to adapt to the physical, social and supernatural environments.
E270	Resource Management Across the Lifespan 3:3:0
5370	Socio-economic changes, public policies and programs and management practices related to individual and
	family well-being through the various life cycle stages.
5380	Occupational Family and Consumer Sciences 3:3:0
	Philosophy and development of vocational family and consumer sciences education for secondary schools, colleges or universities with emphasis on occupational family and consumer sciences careers and jobs, curriculum trends and developments. Credit for course applied to six hours required for teaching in occupational family and consumer sciences programs.
	Prerequisite: FCSC 5308.
5101	5201, 5301 Workshop in Family and Consumer Sciences
3101,	Workshops designed to strengthen professional competence needed for addressing societal issues related to
	$family \ and \ consumer \ sciences. \ May \ be \ repeated \ for \ credit \ when \ topic \ of \ interest \ varies. \ Credit: one \ to \ three \ hours.$
5304	Dietetic Seminar 3:3:0
	Study of the delivery of nutritional services and consultation for individuals, families, and institutions. Students-complete projects in menu analysis, client education, clinical nutrition, public health, food service management
	and related activities.
	Prerequisite: Acceptance into Approved Preprofessional Practice Program in Dietetics.
5306	Dietetic Practicum 3:3:0
	Supervised practice which includes an average of 32 hours per week field experience in the areas of clinical
	nutrition, community nutrition, and food service management. Rotations include hospitals and other health care facilities, community nutrition sites, and food service facilities. May not be applied toward a graduate degree.
	Prerequisite: Acceptance into Approved Preprofessional Practice Program in Dietetics.
5308	World of Work in Family and Consumer Sciences 3:3:0
	A study of occupational home economics education within the secondary curriculum focusing on development and supervision of occupational programs. (Credit for course applied to six hours required for teaching in occupational home economics programs.)
5311	Advanced Textiles 3:3:0
,	Analysis and comparison of recent scientific textile trends with reference to fiber content, yarn, fabrication, color and finish.
5312	Resources in Family and Consumer Sciences Education 3:3:0
	Creative development, selection and evaluation of instructional materials including preparation, selection and
	use of visual materials.
5313	Current Topics in Family and Consumer Sciences 3:3:0
0010	Intensive study of a current problem of professional interest in family and consumer sciences. The description
٠.	of the particular area of study will appear on the printed semester schedule. May be repeated for credit when topic of investigation varies.
5314	Statistical Theory and Analysis 3:3:0
3314	A study of statistical theory with application of quantitative techniques commonly used in family and consumer sciences research.
5315	Independent Study 3:3:0
	Independent study in an area of interest; review of current literature and research related to individual problems;
	selection and/or design of instruments used in collecting data. May be repeated for credit when topic of
	investigation varies.
5316	Family Violence and Therapeutic Intervention 3:3:0
	Exploration of interpersonal violence throughout the life cycle from immediate and extended family members.
	Topics will include physical abuse, sexual abuse, and neglect perpetrated against children, spouses, and the
	elderly. The perspectives of law enforcement and treatment strategies will be explored.

Advanced study of human development across the lifespan from the prenatal period through senescence. Social,

Lifespan Human Development

emotional, physical, and cognitive development are addressed.

,0010	I WI COLUMN	0.0
	Contemporary issues facing both parents and professionals who work with them; specific study of	parenting
٦.	skills, parenting in families with special needs and parent-school relationships.	•
5319	Single Parent Families	3:3:0
	Exploration of the formation of single-parent families with their varied memberships. Topics wil	l include
	divorce, widowhood, economics, and support resources. The perspectives of law enforcement, soci	al service
	agencies, and financial experts will be invited.	
5351	Weight Management	3:3:0
	Diagnosis, etiology, classification, and treatment of weight problems.	
5359	Sports Nutrition	3:3:0
	The role of nutrition is discussed as it relates to athletic performance and physical activity.	
5390-5	5391 Thesis	6:A:0

Prerequisite: Approval of graduate advisor. Must complete both for required 6 credits.

College of Engineering

The objectives of the graduate programs in Engineering, Computer Science, Mathematics, Environmental Science and Studies, and Technical Management are to:

- Advance the state of art of the practice of engineering, computer science and mathematics.
- Advance the state of art of the teaching/learning process in engineering, computer science and mathematics.
- 3. Contribute to the economic well being of the residents of Southeast Texas, the entire state and nation.
- 4. Improve the safety, health and environment of Southeast Texas, the entire state and nation.

The requirements of the various graduate programs in the College of Engineering are described below.

The College of Engineering offers graduate degrees at the master's and doctoral levels. At the master's level, both non-thesis and thesis degrees are available from each of five engineering departments. Non-thesis degrees offered are the Master of Engineering (M.E.) and the Master of Engineering Management (M.E.M.). The Master of Engineering Science (M.E.S.) offered by each engineering department requires a thesis as does the Master of Science (M.S.) in Computer Science, the Master of Science in Mathematics, the Master of Science in Environmental Engineering and the Master of Science in Environmental Studies.

The Doctor of Engineering (D.E.) degree is offered through each of the five engineering departments. This degree requires a written field study documenting the findings of an advanced engineering design completed by the degree candidate.

Graduate degree programs are offered as follows:

Master of Engineering Management (M.E.M.)

Master of Engineering Science (M.E.S.)

Master of Engineering (M.E.)

Doctor of Engineering (D.E.)

Master of Science in Computer Science (M.S.)

Master of Science in Environmental Engineering (M.S.)

Master of Science in Environmental Studies (M.S.)

Master of Science in Mathematics (M.S.)

Master of Engineering Management (M.E.M.)

The Master of Engineering Management is a non-thesis degree program with all courses offered after 4 p.m. Course work is designed to build onto the education received while completing an accredited bachelor's degree in engineering and the individual's professional experience. Hence, practicing engineers generally will not require undergraduate prerequisites.

A total of 36 credit hours are required at the graduate level. Included among these 36 credit hours are 15 hours of core courses required of all M.E.M. students. Course work in addition to the required core courses is tailored specifically to the needs of the student, but generally has approximately one-third of the courses in the general area of technical management, one-third in Business Administration, and one-third in the student's technical discipline such as Civil Engineering, Chemical Engineering, Electrical Engineering, Industrial Engineering or Mechanical Engineering.

Admission Requirements

Admission standards are designed to ensure that all enrolled students are qualified professionals serving in a leadership role in their engineering discipline. The four primary requirements are as follows:

1. B.S. in Engineering or Equivalent.

 Graduate Record Examination (GRE) Scores (Verbal + Quantitative) = 1000 or more.

3. Two-to-five years of engineering experience in a leadership role.

4. Letter of recommendation for the program from someone in direct supervision over the applicant in his/her primary employment.

Degree Requirements

1. All of the College of Graduate Studies general degree requirements.

Completion of a core program of 15 semester hours of specified courses.

3. Completion of a minimum of at least 36 semester from an approved list of courses. (See typical programs)

Step by Step Procedure

Obtain a Bachelor of Science Degree in Engineering.

2. Complete two-to-five years of professional practice in a position of leadership.

Apply for Admission to the Graduate College of Lamar University

- a. Complete Graduate application, obtainable by calling (409) 880-8356 or online at http://www.lamar.edu
- b. Take GRE and have scores sent to: Graduate Admissions, Lamar University, P.O. Box 10078, Beaumont, Texas 77710.

c. Have all undergraduate transcripts sent to Graduate Admissions.

- d. Have letter of recommendation from supervisor sent to: Coordinator of Engineering Graduate Programs, P.O. Box 10032, Beaumont, Texas 77710.
- In consultation with Coordinator of Engineering Graduate Programs, select graduate committee.

graduate committee.
5. Complete 12 hours of course work including at least three core courses and apply for admission to candidacy.

6. Complete remaining course work specified in candidacy application

a. Apply for Graduation

Obtain copy of Comprehensive Examination policy from Industrial Engineering Department.

Request and schedule Comprehensive Examination.

d. Pass Comprehensive Examination

Graduate

Core Courses

1.	ENGR 5369	Engineering Management
2.	ENGR 5336	Statistical Decision-Making for Engineers
•		or
• .	ENGR 5372	Operations Research
3.	ENGR 5316	Engineering Organization and Management
		or
	ENGR 6359	Computer Methods in SQC
4.	ENGR 5366	Advanced Engineering Economics
5.	ECON 5300	Foundations of Economics
	:	

Typical Program Options

Each student in consultation with an advisor should design a program tailored to meet his or her own specific educational objectives. The following typical program options are suggested. Substitutions and/or modifications to these programs can be accomplished with the approval of the student's advisor.

I. Manufacturing Management Concentration

Technical Discipline Technical Management ENGR 5372 Operation Research **Engineering Management** ENGR 5369 ENGR 5349 Production and Inventory Advanced Engineering **ENGR 5366** Control Economics ENGR 5322 Computer Aided **ENGR 5336** Statistical Decision Making Manufacturing for Engineers ENGR 6349 A/I Expert Systems ENGR 5316 **Engineering Organization** and Management

Business Administration

ECON 5300 Foundations of Economics ACCT 5300 Financial Accounting ACCT 5370 Managerial Accounting MKTG 5300 Marketing Concepts

II. Quality Management

Technical DisciplineTechnical ManagementENGR 6359Computer Methods in SQCSame as Option IENGR 5303Regression AnalysisBusiness AdministrationENGR 5319Design of ExperimentsSame as Option IENGR 5312Quality Assurance

III. Construction Project Management (CVEN)

Technical Discipline

ENGR 6388 Project Management ENGR 6389 Comp. Aided Software Engineering

ENGR 5308 Cost Optimization &

Scheduling Engineering.
ENGR 5328 Theory of Structures

Technical Management Same as Option I Rusiness Administration

Business Administration Same as Option I

IV. Environment Management (CVEN)

Technical Discipline

ENGR 5331 Biological Waste Water

ENGR 5325 Fundamentals of Air Pollution

ENGR 5329 Water Supply and Treatment

ENGR 6387 Hydraulics of Environmental Systems

Technical Management

Same as Option I

Business Administration

Same as Option I

V. Construction Project Management (CHEN)

Technical Discipline

ENGR 5330 Computer Methods

ENGR 5341 Mass Transfer

ENGR 5344 Process Modeling

ENGR 5360 Thermodynamics

Technical Management

Same as Option I

Business Administration

Same as Option I

VI. Electrical Engineering Management (ELEN)

Technical Discipline

ENGR 5383 Instrumentation

ENGR 5380 Discrete Control Systems

ENGR 5344 Power Systems I

ENGR 5352 Advanced Process Control

Technical Management

Same as Option I

Business Administration

Same as Option I

VII. Construction Project Management (INEN)

Technical Discipline

ENGR 6388 Project Management ENGR 5303 Regression Analysis

ENGR 5389 CAD

ENGR 5305 Reliability

Technical Management

Same as Option I

Business Administration

Same as Option I

VIII. Construction Project Management (MEEN)

Technical Discipline

ENGR 5318 Stress Analysis

ENGR 5311 Heat Transfer

ENGR 5370 Thermodynamics - Energy Conversion

ENGR 5313 Fluid Mechanics

Technical Management Same as Option I

Business Administration

Same as Option I

Master of Engineering Science (M.E.S.), Master of Engineering (M.E.), and **Doctor of Engineering (D.E.)**

The Master of Engineering Science, Master of Engineering and Doctor of Engineering programs are administered by the Graduate Steering Committee. Students entering these programs are responsible to this committee until a permanent graduate committee including a chairman is selected and approved. The student should select an advisor and a permanent graduate committee must be formed before the student has completed 15 semester hours of graduate work. No credit toward a graduate degree will be granted unless approved by either the Graduate Steering Committee or the student's permanent

Core Course Categories for the M.E.S., M.E. and D.E. Programs:

Category	Course Number and Title
1.	ENGR 6314 Computer Control and Instrumentation or
t '	ENGR 6359 Computer Methods in Statistical Quality Control
2.	ENGR 6349 Engineering Application of AI/Expert Systems or ENGR 6389 Computer Aided Software Engineering
3.	ENGR 6388 Computer Methods for Engineering Project Management
4.	ENGR 6369 Computer Methods for Engineering Optimization
5 '	ENCR 6339 Hazardous Waste Management

Master of Engineering Science (M.E.S.)

The Master of Engineering Science Degree requires the completion of 30 semester hours of graduate course work, including thesis.

Admission Requirements

For admission to the program, the student must meet the following requirements:

The general requirements for admission to the College of Graduate Studies.

2. Hold a bachelor's degree in a field of engineering or related discipline with credit substantially equivalent to that required for bachelor's degrees at Lamar University.

These are minimum admission requirements and may be more selective for

individual departments.

Degree Requirements

All of the College of Graduate Studies general degree requirements.

A minimum of 3 semester hours (one course) from those courses listed above as

A minimum of 21 semester hours (seven courses) of electives. Additional core courses may satisfy part of this requirement.

Satisfactory completion and defense of thesis (ENGR 5390 and ENGR 5391).

Master of Engineering (M.E.)

The Master of Engineering Degree is a non-thesis 36 semester hour* program designed to suit the needs of the practicing engineer.

Admission Requirements

For admission to the program, the student must meet the following requirements:

The general requirements for admission to the College of Graduate Studies.

Hold a bachelor's degree in a field of engineering or related discipline with credit substantially equivalent to that required for bachelor's degrees at Lamar University.

These are minimum admission requirements and may be more selective for 3.

individual departments.

Degree Requirements

All of the College of Graduate Studies general degree requirements.

Completion of one course from three of the five categories of core courses for a 2. total of 9 semester hours of core course work. The core course categories and core courses are listed above.

A minimum of 27 semester hours* (nine courses) of electives. Additional core 3.

courses may satisfy part of this requirement.

Satisfactory completion of a final comprehensive examination. 4.

*A graduate student who has passed the Fundamentals of Engineering Examination or a graduate student who is a Professional Engineer registered in the State of Texas (or registered in another state where requirements do not conflict with the provisions of the Texas Engineering Practice Act and are of a standard not lower than those specified in Section 12 of that Act) may satisfy course requirements by completing 24 semester hours of electives toward a total of 33 semester hours provided ENGR 6310 (Design Project) is included.

Master of Science in Environmental Engineering

Until recently, environmental engineers were primarily concerned with municipal water systems and sewage treatment facilities. The bulk of the course work dealt with the application of engineering solutions to human health problems. Today, the field includes the study of water quality, air quality and methods for disposing of toxic/ hazardous wastes. Overall, environmental engineers are engaged in solving the large and complex environmental problems threatening the natural ecosystem.

The Master of Science in Environmental Engineering program is designed to provide engineers with the highly specialized chemical/civil engineering background needed by

industry and by regulatory agencies on the federal, state and municipal levels.

Admission Requirements

For admission to the program, the student must meet the following requirements:

- The general requirements for admission to the College of Graduate Studies.
- Hold a bachelor's degree in a field of engineering which is equivalent to a bachelor's degree at Lamar University.
- Because of the diversity of the scientific disciplines which are admitted to the environmental studies program, some students may be lacking in certain fundamental subject areas, usually undergraduate level courses in engineering, microbiology, basic chemistry, geology, and/or mathematics. These courses must be taken in addition to the curriculum required for the master's degree program.

Degree Requirements

ENCR

5338

1. All of the College of Graduate Studies general degree requirements.

A minimum of 21 semester hours (seven core courses) from those listed below

	ENGR	5331	Biological Waste Water Treatment	
	ENGR	5329	Water Supply and Treatment	
	ENGR	5325	Fundamentals of Air Pollution	
	ENGR	5351	Unit Operations in Environmental Engineering	
٠	ENGR	6387	Hydraulics of Environmental Systems*	٠
	ENGR	5342	Reactor Design for Environmental Systems	
	POLS	5354	Seminar in Special Studies in Public Administration	

^{*}with committee approval, Industrial Waste Treatment (ENGR 5343) may be substituted

Solid Waste Managemen

A minimum of 6 semester hours (2 courses) of designated or other approved electives from the list below.

PIAGIC	3330	Dona waste Management
ENGR	6339	Hazardous Waste Management
ENGR	5343	Industrial Waste Treatment
ENGR	5334	Waste Minimization
ENGR	5337	Incineration
ENGR	5348	Advanced Air Pollution Control
ENGR	6344	Multimedia Transport of Pollutants
BIOL	5301	Special Topics: Microbiology
CHEM	5411	Biochemistry I
BIOL	5430	Limnology
BIOL,	5470	Ecology of Polluted Waters
GEOL	5301	Special Topics: Hydrogeology
CHEM	5341	Inorganic Chemistry
CHEM	5350	Advanced Organic Chemistry
ENGR	6110	Professional Seminar
ENGR	5301	Special Topics: Federal Programs for Environmental
		Management
	-	

Satisfactory completion and defense of thesis*

with committee approval, 12 credit hours of Environmental Electives may be substituted.

Master of Science In Environmental Studies

The environmental studies program is designed for students who wish to continue to work in their scientific specialty but as it relates to environmental affairs. The degree is especially intended for individuals who wish to work in the evaluation, operations and/or regulatory aspects of the field as opposed to the design or engineering areas. Consequently, the program will provide an understanding of environmental problems and processes from the point of view of the chemist, biologist or geologist and provide the interdisciplinary perspective needed to cope with various environmental issues.

Admission Requirements

For admission to the program, the student must meet the following requirements:

1. The general requirements for admission to the College of Graduate Studies.

2. Hold a bachelor's degree in chemistry, biology, geology, the subdivisions of those fields e.g. microbiology, organic chemistry, hydrogeology, etc. or other closely related fields with credit substantially equivalent to that required for bachelors' degrees at Lamar University.

3. Some applicants to this program may be required to take undergraduate level courses in engineering, geology, microbiology, basic chemistry and/or mathematics. These courses must be taken in addition to those required for the masters program and will be selected in consultation with the advisor early in a student's graduate career.

Degree Requirements

1. All of the College of Graduate Studies general degree requirements.

Dielogical Weste Weter Tro

2. A minimum of 6 semester hours (2 graduate courses) in the student's mathematics or science specialty.

3. A minimum of 12 semester hours (four core courses) from those listed below.

FINCK.	533T	biological waste water freatment
ENGR	5329	Water Supply and Treatment
ENGR	5325	Fundamentals of Air Pollution
ENGR	5351	Unit Operations in Environmental Engineering
ENGR	6387	Hydraulics of Environmental Systems*
ENGR	5342	Reactor Design for Environmental Systems
POLS	5354	Seminar in Special Studies in Public Administration
		(required)

with committee approval, Industrial Waste Treatment (ENGR 5343) may be substituted

4. A minimum of 9 semester hours (3 courses) of designated or other approved electives from the list below:

ENGŖ	5338	Solid Waste Management
ENGR	6339	Hazardous Waste Management
ENGR	5343	Industrial Waste Treatment
ENGR	5334 .	Waste Minimization
ENGR	5337	Incineration
ENGR	5348	Advanced Air Pollution Control
ENGR	6344	Multimedia Transport of Pollutants
BIOL	5430	Limnology
BIOL	5470	Ecology of Polluted Waters
BIOL	5301	Special Topics: Microbiology
CHEM	5341	Inorganic Chemistry

CHEM 5411	Biochemistry I
CHEM 5350	Advanced Organic Chemistry
GEOL 5301	Special Topics: Hydrogeology
ENGR 6110	
ENGR 5301	Special Topics: Federal Programs for Environmental
	Management

5. Satisfactory completion and defense of thesis*

*with committee approval, 12 credit hours of Environmental Electives may be substituted

Doctor of Engineering (D.E.)

The Doctor of Engineering Degree is designed to permit the practicing engineer to study practical engineering problems of a complex nature.

Admission Requirements

For admission to the program, the following requirements must be met:

The general requirements of the College of Graduate Studies.

2. The applicant must hold a Bachelor of Science degree in a field of engineering. The applicant must have an overall GPA and quantitative section of the GRE score which meets the following criteria: (50*GPA+GRE) 800. International students must have a minimum TOEFL score of 530.

The applicant must hold a Master's degree or have completed at least 30 semester
hours of course work at the graduate level in a field of engineering or a closely
related discipline.

 These are minimum admission requirements and may be more selective for individual departments.

Degree Requirements

- All of the College of Graduate Studies general degree requirements.
- The student shall complete a residency of one year.
- The student shall register for ENGR 6110, Professional Seminar, each semester in which the student is registered for more than six hours or in which the student is registered for field study. A minimum of 4 hours is required.
- 4. Completion of one course from each of the five categories of core courses for a total of 15 semester hours of core course work. The core course categories and core courses are listed above. Exceptions to this rule must be approved by the Doctoral Committee.
- 5. Completion of the diagnostic examination. This examination has the objectives of determining the student's qualifications for a doctoral program and to provide guidance for the selection of a study program. This examination must be completed before the student has earned 15 semester hours of course credit after admission to the program.

6. Completion of a minimum of 15 credit hours of field study preparatory courses in a concentration designed to form a cohesive degree plan and must be approved by the student's advisory committee. The field study preparation includes completion of one semester of ENGR 6320, Justification of Engineering Project.

 Completion of candidacy examination. The purposes of this examination are to test the ability of the student to comprehensively relate the subjects of the study program and to ascertain the student's qualifications to perform the field study. 8. Completion of the field study. After the student is admitted to candidacy a formal engineering proposal format must be presented to the doctoral committee. Upon committee approval of the proposed field study the work is initiated. Normally, 30 semester hours of field study is required.

 Defense of field study. Upon completion of the field study a formal engineering report with a standard format shall be submitted to the committee and defended

in an oral examination.

Graduate Faculty

Assistant Professor Valentin V. Andreev Complex analysis Professor Wendell C. Bean Control systems, biomedical signal processing Professor Daniel H. Chen Process control, process simulation, air pollution control

Professor Hsing-wei Chu Operations research statistical decision analysis, networks

Professor Paul Chiou

Statistics, reliability theory Professor David L. Cocke Analytical and environmental

chemistry, catalysis Professor Paul Corder

Mechanical systems design; stress analysis; finite element models

Assistant Professor Paul Dawkins Numerical Analysis, approximation theory

Research Professor Richard A. Dobbs Biotechnologies, hazardous waste management

Assistant Professor Peggy Israel Doerschuk

Neural networks, parallel processing, genetic algorithms, optimization

Assistant Professor Xing Fang

Water quality management and modeling, environmental hydraulics, hydrodynamics, water resources engineering

Assistant Professor John L. Gossage Reaction kinetics, reactor design, polymerization

Associate Professor John B. Harvill
Computer architecture,
microcomputer systems, database
systems, programming
languages, computer
science education

Professor Tho-Ching Ho Fluidization, heat transfer, optimization

Professor Jack R. Hopper Reaction kinetics, catalysis, pollution prevention

Assistant Professor Mien Jao Geotechnical Engineering

Professor Enno Koehn

Construction, planning, scheduling
and productivity. Design and analysis

Professor Hikyoo Koh

Artificial intelligence, software testing, language translation, computational complexity, analysis

Professor Ku-Yen'Li

Mass transfer, gas-liquid reactions, unit operations in environmental engineering

Assistant Professor Che-Jen (Jerry) Lin Environmental Engineering

Associate Professor Mohsen Maesumi Numerical analysis, applied

mathematics

Professor Alec L. Matheson Spaces of analytic functions, functional analysis

Professor Bernard J. Maxum Electromagnetics, antennas and propagation, rf, microwave, mm waves, optics

Associate Professor Lawrence Osborne Parallel processing, operating systems, distributive systems, algorithms

Professor David Read

Computer networks, operating systems, natural language processing

Associate Professor G.N. Reddy
Computer engineering, artificial
neural networks & fuzzy logic,
digital signal processing, Industrial
automation, Instrumentation,

Virtual systems, Computer networks

Associate Professor Malur Srinivasan Advanced materials processing, modeling of microstructure evolution in manufactured products, development of new nondestructive evaluation techniques Associate Professor James L. Thomas

Computer-aided manufacturing Computer-aided design Assistant Professor Ryan Underdown

Enterprise Engineering Engineering Management

Assistant Professor Christopher Winfield Partial differential equations, scattering theory

Professor Carl L. Yaws Physical and thermodynamic properties, distillation Professor Fred M. Young Fluid dynamics, heat transfer

Professor Victor Zaloom Engineering economics, manufacturing productivity,

computer applications, statistical quality control

Associate Professor Wen-Ran Zhang Computer engineering, cooperative distributed artificial intelligence, software engineering database

Engineering Courses (ENGR)

5101, 5201, 5301 Special Topics An investigation into specialized study in advanced areas of engineering under guidance of a faculty member. This course may be repeated for credit when topics of investigation differ. Discussion of ethical, professional, and technical topics related to the practice of civil engineering. Presentation

of oral and written reports.

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. Presentation of oral and written design reports.

5290 Civil Engineering Systems II Principles of systems 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.

5300 Structural Analysis/Graphical Design 3:3:0 Basic principles of structural analysis and design based upon the requirements of equilibrium and continuity. A consideration of graphical computer aided techniques to describe various systems or a study of matrix methods and the application of strain energy, slope deflection, and moment distribution procedures for the analysis of frames, trusses, and beams. May be repeated for credit when topics vary.

Regression Analysis Review of regression analysis; theory of least squares; multivariate analysis; theory of the general linear hypothesis model.

Reliability 5305 3:3:0 Statistical theories pertinent to solution of engineering problems in reliability; distribution and failure theory including failure rate and mean time to failure for the exponential, log normal, gamma and Weibull distributions.

Cost Optimization and Scheduling Engineering Includes the mathematics of cost comparisons, profitability, productivity, and optimization with emphasis on engineering project scheduling, cost estimation, and control. May be repeated for credit when the subject matter

5309 Problems in Design and Finite Analysis 3:3:0 Advanced techniques and analysis involving microcomputers, finite elements, finite differences. May be repeated for credit when the subject matter varies.

Advanced Concrete Design Analysis and design of concrete members based upon working stress and strength design methods. Consideration given to pre-stressing or post-stressing of beams and structural components. May be repeated for credit when the subject matter varies.

Heat Transfer Analysis Fundamental principles of heat transfer by conduction, convection and radiation. Emphasis will be given to the analysis of problems combining the various heat transfer mechanisms. Fluid Mechanics Fluid statics, fundamentals of fluid motion, systems and control volumes, basic laws, irrotational flow, similitude and dimensional analysis, incompressible viscous flow, boundary layer theory and an introduction to compressible flow. Vector methods will be employed. Hydraulic Engineering Design considerations of hydraulic systems including closed and open channel flow together with related hydraulic accessories. May be repeated for credit when the subject matter varies. 5315 Theory of Elasticity General analysis of stress and strain, equations of equilibrium and compatibility, stress and strain relations, two dimensional stress problems, elastic energy principles, thermoelastic problems. May be repeated for credit when the subject matter varies. Stress Analysis and Material Systems A study of solid mechanics and/or building/hydraulic systems related to the performance of different materials such as soils, metals, timber, masonry, and composites under various loading conditions. Consideration of construction and environmental effects. Topics may include, if applicable, unsymmetrical sections, shear center, curved beams, torsion of noncircular cross sections, strain energy, virtual work, plasticity, fatigue, and introduction to the theory of elasticity. May be repeated for credit. Design of Experiments 5319 Experimental design and analysis of experiments are developed as tools of the manufacturing and process industries. Exploratory and evolutionary EVOP designs, analysis of variance ANOVA, error and regression are treated in some detail. Prerequisite: Course in statistics or equivalent. 5320 **Engineering Project Management** Principles governing the effective and efficient management of engineering projects including the application of comprehensive planning, scheduling, and cost estimation procedures. Presentation of oral and written design reports. Quality Control Systems Application of statistical methods to industrial problems; regression and correlation theory; analysis of variance; use of control charts for control of manufacturing operations. Computer Aided Manufacturing Design problems in the areas of computer numerical control, robotics and computer vision as presented. Manufacturing Control Systems are discussed as they relate to a Computer Integrated Manufacturing (CIM) environment. Additional project on expert systems applications in manufacturing. Advanced Steel Design Analysis and design of structural members using steel. Consideration is given to elastic and inelastic buckling in beams and columns due to local, flexural, torsional and torsional flexural action. May be repeated for credit when the subject matter varies. Wave Mechanics And/Or Models In Hydrological Systems Introduction to wave mechanics and hydrological transport processes including water quality simulation in hydrodynamic systems (oceans, estuaries, lakes/reservoirs, rivers/streams, stormwater control facilities); flow and treatment of hazardous waste in groundwater and soils; water quality dynamics; advection, turbulent diffusion and dispersion in one- and two-dimensional aquatic systems; analysis of basin hydrology, streamflow frequency, and water surface profiles. May be repeated for credit when subject matter varies. Fundamentals of Air Pollution Pollutant sources, emissions and transport. Air pollution control methods, Particulate collection theory, gaseous pollutant removal theory. Atmospheric sampling and analysis methods. May be repeated for credit when the subject matter varies. Coastal and Hydrodynamic Processes Overview of hydrological models for coastal and hydrodynamic processes in bodies of water (rivers/streams, oceans, estuaries, inland lakes, and reservoirs); energy and momentum transfer through a water surface; standing or progressive waves; salt water and fresh water interaction; wind effects of stratification and circulations; analysis of stratified flow and density currents; selective withdrawal; turbulent wind mixing. Consideration of environmental effects. May be repeated for credit when the subject matter varies. Numerical and Computer Methods In Structures Matrix and computer methods applied to analysis and design of trusses, beams, and frames. Consideration of

CAD techniques. May be repeated for credit when subject matter varies.

5328	Theory of Structures 3:3:0
	Investigation and design of facilities under static, hydraulic, dynamic, and/or hazardous loading conditions.
	Principles of ultimate strength and plastic design theories. Consideration of environmental effects and safety factors
	for various temporary and/or permanent loading situations. May be repeated for credit when the subject matter varies.
5329	Water Supply and Treatment 3:3:0
	An investigation of the chemistry of water treatment processes including the study of treatment process selection
	and associated design parameters.
5330	Computer Methods in Engineering Analysis 3:3:0
	Computer techniques will be introduced and employed. Numerical methods for solving transcendental equa-
	tions, polynomials, simultaneous linear algebraic equations and partial differential equations. Monte Carlo
	method, random numbers and simulation of engineering systems will be introduced.
	May be repeated one time for graduate credit with prior approval where course content varies.
5331	Biological Wastewater Treatment 3:3:0
	Principles of treatment for domestic and industrial wastewaters with emphasis on process kinetics and biological
	action.
5332	Similitude or Model Design 3:3:0
	Dimensional analysis, data processes, prediction equations or model design. Possible models studied include
	structural facilities, fluid flow under ground and/or surface conditions, landfill/building/foundation design/
	construction, and lechate collection/tide gauge systems. Consideration of environmental effects. May be
	repeated for credit when subject matter varies.
5333	Operations Research 3:3:0
	Advanced topics in operations research-linear programming, non-linear programming, advanced topics in
•	queuing and inventory theories, sensitivity analysis and dynamic programming.
	Prerequisite: EGR 5316 or equivalent.
5334	Waste Minimization 3:3:0
	Waste minimization of hazardous waste includes any source reduction or recycling activity that results in volume reduction of hazardous waste or toxicity reduction. Waste minimization practices by major streams are reviewed.
	Technology and concepts that promote strategies by which waste minimization can be increased are identified.
	Mechanical Vibrations 3:3:0
5335	Topics in mechanical vibrations including an introduction to the theory of vibrations, mechanical vibration
	analysis methods using simulation-based design, mechanical vibration measurement and monitoring, interpre-
	tation of vibration measurements data and other mechanical vibration topics as appropriate.
5336	Statistical Decision Making for Engineers 3:3:0
3330	Statistical pecision waking for Engineers

Incineration

5337

An overall view of the incineration principles, equipment and facility design, basic concepts, stoichiometric and thermodynamic considerations for incinerators, air pollution control equipment and economic considerations.

Solid Waste Management 5338 A study of solid waste collection, transfer and disposal systems. Investigation of the reclamation of resources by multiple use, reuse and improvement of existing sources to meet quality requirements.

5340 Foundation Engineering 3:2:3

The practice of geotechnical engineering: subsurface explorations; geotechnical analysis and design of shallow footings, deep foundations, and retaining structures; stability of earth slopes, and soil improvement.

5341 Mass-Transfer Operations The principles of diffusion and mass transfer are considered. The study of gas-liquid operations includes humidification and design of equipment. Solid-fluid studies include absorption, ion exchange, drying and leaching operations. Less conventional mass-transfer operations are also considered.

5342 Reactor Design for Environmental Systems

distributions, hypothesis testing, ANOV, design of experiments.

Development of the fundamentals for the rate of chemical reactions and biological reactions in homogeneous and heterogeneous systems. Analysis of ideal chemical reactors and their design with application to environmental reactions in the air, water and soil. An introduction to the basic concepts of mathematics modeling. The subject matter is directed toward chemical and petroleum engineering design and operation. Development of models which form the framework of a quantitative and scientific approach to technical problems will be followed by analytical and/or numerical solutions to optimize output and profitability.

Industrial Waste Treatment

Procedures for analysis of the industrial waste problem, methods of collecting experimental data and process design for required treatment. Case studies and special laboratory problems for translating experimental data to prototype design. May be repeated for credit when the subject matter varies.

53 44	Electric Power Systems Analysis I 3:3:0 A three-semester sequence, selected from: symmetrical components, impedance and fault-current calculations, load-flow studies, economic operation, stability and control, system modeling, non-fossil fuel energy conversion. Both analytical and digital-computer methods may be employed as appropriate.
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5348	Advanced Air Pollution Control Air pollution control and design principles; VOC incineration; gas absorption; air pollution and atmospheric dispersion modeling; particulate matter; cyclones, electrostatic precipitators; fabric filters and scrubbers; control of nitrogen oxides and sulfur oxides.
5349	Production and Inventory Control 3:3:0
JJ 13	Techniques for planning and controlling production and inventories. Forecasting, aggregate planning, materials requirements planning, scheduling, project management.
5350	Hydraulics II 3:2:3
	Continuation of CVEN 3350-Hydraulics I emphasizing practical design applications of basic fluid mechanics principles in fluid measurement, machinery, closed conduit flow, open channel flow and hydraulic transients. Presentation of oral and written design reports.
5351 5352	Unit Operations of Environmental Engineering Theory of fluid and slurry movement under gravity and pressure systems, mixing processes, coagulation and flocculation of chemical treatment, separatory processes including flotation and sedimentation, and gas transfer and absorption of the biological systems. Selected laboratory assignments for model studies of these unit operations. Advanced Process Control 3:3:0.
0002	
	Modern control theory concerning state-space formulation, multivariable control, optimal control, and discrete control for lumped/distributed parameter systems is addressed. Applications of control theory and the implementation of control strategies for the chemical processing industries are demonstrated.
5355	Environmental Engineering Systems II 3:3:0
	Advanced topics in environmental engineering. Typical topics may include the management of solid waste, flood
	control systems, and the hydraulic or biological design of municipal and/or industrial treatment facilities. The
	effects of safety during construction and operations may also be considered. Presentation of oral and written
	design reports. May be repeated for credit when topics vary.
5360	Thermodynamics-Process Industry 3:3:0
	Thermodynamic laws are derived and applied to physical chemical phenomena. Ideal and non-ideal gas, liquid
	and solid solution behavior are developed for physical and chemical equilibria. Course credit in chemistry is
	optional.
	May be repeated one time for graduate credit; with prior approval, where course content varies.
5366	Advanced Engineering Economy 3:3:0
	Special economic analyses based on risk, uncertainty and other probabilistic considerations. Bayesian attacks,
	influence of perfect information, competitive decisions and decisions under pressure:
5369	Engineering Management 3:3:0
	Transition from engineering to management, decision making responsibilities — a comparison; planning, organizing and staffing in a technical environment, technical project management, team leadership, appraising engineers.
5370	Thermodynamics-Energy Conversion 3:3:0
00.0	The basic laws of thermodynamics are derived and applied in the analysis of power cycles, energy conversion
	and specific processes. Basic principles of irreversible thermodynamics and phenomenological relations are presented. An elementary statistical approach is presented with simple examples of the calculation of the
,	transport properties of gases, liquids and solid.
	May be repeated one time for graduate credit, with prior approval, where course content varies.
5371	Transportation and Urban Engineering 3:3:0
	History and development of transportation and/or urban facilities including, if applicable, the utilization of GIS
	and/or CAD computer systems. Fundamentals of urban systems, including, if applicable, drainage requirements
	and the location, design, construction, and maintenance of highways and pavements. May be repeated for credit
	when subject matter varies.
	Prerequisite: Senior standing.
5372	Operations Research 3:3:0
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	An introduction to the construction of mathematical models for organizational systems to aid executives in making decisions. Linear programming, network flow programming, dynamic programming, queuing theory.
5373	Advanced Electromagnetics 3:3:0
	Graduate-level topics in electromagnetic theory and applications. Assumes a grounding in electromagnetic fields and waves and methods for the solution of boundary value problems.
	Prerequisite: ELEN 3371 or equivalent.

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5381 -

5375 Simulation of Industrial Systems 3:3:0
Introduction to concepts of simulation modeling and analysis, with application to manufacturing and production systems.

Prerequisite: Probability and Statistics course or concurrent enrollment in ENGR 6359.

5380 Discrete Control Systems 3:3:0
Principles of digital and sampled-data control systems. Analysis of response, and stability. Analytical compensation by Z-transform and other methods. Extensive use of computers.

Prerequisite: EGR 5306.

Building Design/Construction

3:3:0

Advanced topics in Building and/or Construction Systems. Topics may include the treatment of contaminated soils, and the effects of various static, dynamic, hydraulic, and wind loads on structural frames and foundations. Environmental, social, and safety requirements may be taken under consideration. Presentation of oral and written design reports. May be repeated for credit when topics vary.

5383 Instrumentation
Unified methods for the design of signal conditioning circuits between sensors and computers. Accepted practice for sensor-based microprocessor and microcomputer data acquisition and processing systems instrumentation amplifier circuits.

5387 Special Topics

The course is designed to meet special needs of students. Each topic is offered on an irregular schedule as the demand requires. Sample topics include: (1) Kinetic theory of gases; (2) Transients in compressible flow; (3) Nonlinear vibrations; (4) Protective construction; (5) Transients in engineering systems; (6) Stagewise mass transfer; (7) Nuclear engineering; (8) Hybrid and analog computers; (9) Adaptive control; (10) Optimization techniques; (11) Sampling techniques.

5388 Special Topics

The course is designed to meet special needs of students. Each topic is offered on an irregular schedule as the demand requires. Sample topics include: (1) Kinetic theory of gases; (2) Transients in compressible flow; (3) Non-linear vibrations; (4) Protective construction; (5) Transients in engineering systems; (6) Stagewise mass transfer; (7) Nuclear engineering; (8) Hybrid and analog computers (9) Adaptive control; (10) Optimization techniques;

(7) Nuclear engineering; (8) Hybrid and analog computers (9) Adaptive control; (10) Optimization techniques; (11) Sampling techniques.

7. Computer Aided Design

Course stresses three-dimensional parametric solids modeling applications. Elementary and advanced solids

modeling techniques, including assembly of multi-component parts, are introduced.

5389 CAD 3:3:0

The analysis and the utilization of state of the art computer hardware and software to solve the problems associated with the utilization of computers in both graphics and engineering design problems.

Prerequisite: Graduate standing in the College of Engineering and consent of the instructor.

5390-5391 Thesis
Prerequisite: Approval of graduate advisor. Must complete both for required 6 credits.

6:A:0

5393 Introduction to VLSI Design 3:3:0
Study of the principles of basic microchip design. Use of several CAD tools, with hands-on experience in implementing Very Large Scale Integration (VLSI) circuits. Detailed study and computer simulation of MOS-capacitance models.

5395 Computer Hardware Description Languages
A CAD method of design of digital hardware using Computer Hardware Description Languages (CHDLs).
Implementation of combinational logic units, microprocessors and microprogrammed processors.

5397 Fault Diagnosis & Fault Tolerant Design
Study of several test generation algorithms for combinational circuits such as Boolean Difference, D, PODEM, and
FAN Algorithms. Test generation techniques for RAMS and microprocessors. Various methods for Design for
testability and Fault Tolerant Design.

5398 Reinforced Concrete Design
The design of structural concrete members based upon working stress and strength design methods. Study of standard specifications. Introduction to pre-stressed concrete.

5399 Structural Steel Design
3:2:3

The design of buildings and bridge components according to standard specifications. Application of load and resistance factor and allowable stress design methods. Introduction to plastic design of steel structures.

6110 Professional Seminar

Advanced topics suitable for research along with research procedures will be discussed. Field study organization and content together with doctoral research problems and progress will be presented. Topics will vary each semester and course may be repeated for credit. Registration and completion for three semesters is required of all doctoral candidates.

6310	Design Projects 3:A:0
	May be repeated for credit when the subject matter varies.
	Prerequisite: Admission to candidacy.
6313	Digital Filters 3:3:0
	Introduction to digital filtering. Recursive, non-recursive filters and their design. Butterworth, chebysbev filters.
	Prerequisite: Proficiency in computer programming.
6244	
6314	Comparer Control and Indiana
	Basic Instrumentation principles. Signal acquisition and conditioning. Computer control using digital signal
	processing techniques in time and frequency domains. Programming project assignments involving implemen-
	tation of basic instrumentation and computer control methods.
6320	Justification of Engineering Projects 3:3:0
	The preparation of proposals for advanced engineering work. The student will be given individual assistance in
	preparing a proposal for his field study.
•	Prerequisite: Approval of advisory committee.
6339	Hazardous Waste Management 3:3:0
6339	industrial and in the second s
	The design, operation and applicability of standard destruction and detoxification technologies will be
	presented. The various types of incineration, thermal, biological, physical and chemical treatment methods will
	be included, as well as the technologies now in the later stages of research and development. Emphasis will be
	on applicability and functional design as opposed to detailed design.
6340	Distillation 3:3:0
	Material and energy-balance relationships are reviewed for multicomponent fractionation equipment and for
	batch stills. Various plate designs are presented from the standpoint of two-phase hydraulics and mass-transfer
	efficiency.
0046	
6343	Reactor Besign
	Emphasis is placed on complex reactor design. Attention is devoted to chemical kinetics and catalysis as well
	as to the engineering aspects of both homogeneous and heterogeneous reactors. Mixing problems are discussed
,	in terms of residence time distribution. The importance of temperature effects is stressed.
6344	Multimedia Transport of Pollutants 3:3:0
	Chemical transfer rates between air and water, water and soil/sediment, as well as air and soil. Intraphase
	pollutant processes in atmosphere, surface water, and ground water. Description of the dispersion model and the
	meterological effects on pollutant transport. Discussion of partition to biomass and exposure pathways.
6349	Engineering Applications of AI/Expert Systems 3:3:0
0343	An in-depth study of the effective utilization of Artificial Intelligence/Expert Systems as applied to engineering
	An industry Designs against will involve the design and development of coffusers exerting to colve discipling
	problems. Projects assigned will involve the design and development of software systems to solve discipline-
	specific problems using available AI languages and expert system shells.
6359	Computer Methods in Statistical Quality Control
	Methods of dealing with Statistical Quality Control problems such as control charts, test, tests of hypothesis,
	analysis of variance, regression analysis and design of experiments will be employed using one or more software
	packages. Emphasis will be placed on problem definition, model selection and interpretation of output for
	decision making and process improvements.
	Prerequisite: A course in probability and statistics
6368	Artificial Neural Networks & Fuzzy Logic 3:3:0
	Study of various Artificial Neural Network architectures for real-world applications. Massive parallel compu-
	tation, fault tolerance and adaptation characteristics. Emphasis on computer simulation of ANN-architectures
	and their applications. Computer Methods of Engineering Ontimization 3:3:0
6369	Computer Methods of Engineering Optimization
	Formulation, solution and implementation of optimization models such as linear programming, dynamic
	programming, integer programming, quadratic programming, convex programming, geometric programming and
, .	unconstrained optimization for analyzing complex systems problems in industry. One or more software packages
,	will be used to execute the algorithms presented throughout the course.
	Prerequisite: A graduate course in operations research.
6387	Hydraulics of Environmental Systems 3:3:0
	Hydraulic design of municipal utilities including storm water and waste water collections systems, water
	distribution networks and treatment plant facilities.
6388	Computer Methods of Engineering Project Management 3:3:0
	Principles governing the effective and efficient management of engineering projects including the application
	of comprehensive planning, scheduling and cost estimation procedures. Utilization of various computer

methods and systems will be emphasized.

6389 Computer-Aided Software Engineering

Analysis and utilization of computer software to solve engineering design problems. Applications on the CAD/ CAG and various other systems will be emphasized.

CAD Tools for VLSI Design 6394

Study of the principles involved in the development of a variety of Computer Aided Tools used in the design of Very Large Scale Integrated circuits. Implementation of the tools with programming assignments.

6601 **Engineering Practice** 6:A:0

An internship period under personal supervision. Approval must be obtained from the student's graduate committee. Usually, a formal proposal will be required. May be taken for either six or 12 hours credit per semester. Must be repeated for credit until field study is completed. Total credit: six semester hours per section.

Engineering Practice

An internship period under personal supervision. Approval must be obtained from the student's graduate committee. Usually, a formal proposal will be required. May be taken for either six or 12 hours credit per semester. Must be repeated for credit until field study is completed. Total credit: six semester hours per section.

Department of Computer Science

The Department of Computer Science offers a program of study leading to the Master of Science degree in Computer Science. Both thesis and non-thesis options are available.

The objective of the master's degree is to produce professional computer scientists capable of contributing technically to the basic core areas of computer science as well as to application areas. A mixture of courses, laboratory, and research work in the program is designed to place graduates at the forefront of technical excellence.

Research

The department has a broad-based research program. Current faculty research interests include parallel and distributed processing, artificial intelligence, data and knowledge bases, computational complexity, image processing, operating systems and graphics.

Computing Laboratories

The Department has six laboratories as well as one room of terminals remotely attached to the campus mainframe computers (two DEC Alpha machines running OPENVMS and UNIX) housed in the Cherry Building. The labs operate on Ethernet networks. Included in the equipment are 90 Pentiums, four multimedia Pentium IIIs, a network of Sun workstations, three Intergraph machines for video editing, and four Silicon Graphics workstations. The Pentiums are attached to two NT servers, and two switches provide 10 Megabit/second transmissions to each desktop and to the server on the campus backbone. Direct access to the Internet and the World Wide Web is available from nearly all of the machines. Equipment and facilities offer students experience using OPENVMS, UNIX, Linux and Windows NT as well as several programming languages. A rich variety of application software packages such as Maple, Matlab, and Oracle are located on our servers for student use in classes and research. The labs are open to all students on campus.

The department enjoys a friendly working relationship with local and national companies. The department's Industrial Advisory Council is composed of representatives from regional/state industries and high-tech firms.

Admission to the Graduate Program

Students seeking admission to this program must meet all general requirements of the College of Graduate Studies as listed in the Bulletin of the College. Additional requirements are as follows:

In most cases, a student must have a minimum combined score of 1000 on the Verbal and Quantitative sections of the GRE and a minimum grade point average of 3.0 on the last 60 hours of undergraduate course work.

A ranking in the 34th percentile of the verbal portion of the GRE; for applicants whose native language is not English, a TOEFL score of at least 550 also is

required:

3. Completion of a sufficient amount of prior work in the field of computer science including courses such as COSC 2371, COSC 3306, ELEN 3331, COSC 4310, COSC 4302, COSC 4307 or COSC 3302 or equivalents; undergraduate and graduate leveling sequences are available (COSC 5341 and COSC 5342 have been designed for students who satisfy conditions 1 and 2 but are deficient in computer science course background);

Students with minor deficiencies may be admitted to the program if these deficiencies can be removed within approximately one long semester. However, major deficiencies must be removed before a student is admitted to the degree

program; and

At least 15 hours of mathematics including differential and integral calculus, 5. discrete mathematics and two other courses selected from statistics, linear algebra, abstract algebra, numerical analysis and differential equations.

Students not satisfying both conditions 1 and 2 will not be admitted to the computer science program. Those students who satisfy both conditions 1 and 2 but who are deficient in other areas may be provisionally admitted to the program and may enroll in graduate-level courses.

Admission to Candidacy

After removal of all deficiencies and upon completion of an additional 12 hours of graduate credit, the student is required to submit a formal degree plan to the Computer Science Graduate Adviser and the Dean of the Graduate School. Every student must submit a G-3 form to the GRADUATE STUDIES office before she/he completes the final nine hours of graduate credit in the degree plan.

Admission to candidacy is granted by the Dean of the Graduate School after the degree plan has been approved.

Degree Requirements

A. Core Course Requirement (6 courses; 16 semester hours)

Students in the master's program in Computer Science are required to establish competence in several areas considered basic to the field of Computer Science. At least 28 hours of graduate work in computer science, and the thesis or project, are required for a master's degree in Computer Science. The degree includes two specialization areas in computing (6 to 9 hours per specialization) chosen by the student together with the academic adviser. (Specialization Areas are listed below). One of these areas of specialization may be an area of computer applications outside of the department. In order to qualify for the master's degree, the student must earn a grade of B or better in each of the core courses. The Core Requirement consists of the indicated number of courses in each field listed below.

Number of Courses	Area of Computer Science	Courses
1	Graduate Seminar	COSC 5100
1	Analysis of Algorithms	COSC 5313
1	Advanced Operating Systems	COSC 5302
1	Computer Networks	COSC 5328
2	Languages & Computation Theory	COSC 5319 or
		COSC 5320 or
		COSC 5330

B. Option I (Thesis)

- Completion of the core requirements.
- 2. Completion of two areas of computer specialization. Specializations outside of the area of computer science are chosen by the student under the guidance of the student adviser from the restricted list of courses at the end of the computer science course listings in the catalog. At least a "B" (3.0) average must be maintained in the specialization areas. One "C" is permitted in these areas combined if it is balanced by an "A" in one other graduate level course.
- 3. Completion of COSC 5390 and 5391 and submission of an acceptable thesis.
- 4. Completion of a total of 34 graduate semester hours.
- Successful oral defense of the thesis. If failure occurs, the defense may be repeated. A second failure will cause the student to be dropped from the degree program in Computer Science.

C. Option II (Non-thesis)

- Completion of the core requirement.
- 2. Completion of two areas of computer specialization. Specializations outside of the area of computer science are chosen by the student under the guidance of the student adviser from the restricted list of courses at the end of the course listings in the catalog. At least a "B" (3.0) average must be maintained in the specialization areas. One "C" is permitted in these areas combined if it is balanced by an "A" in one other graduate level course.
- All non-thesis students must take and satisfactorily complete COSC 5369.
 This course consists primarily of a significant research project and the submission of a written professional report.
- 4. Completion of a total of 37 hours in graduate level courses.
- 5. Successful completion of an eight hour comprehensive examination, which may be written, oral, or a combination of both upon determination of the Computer Science faculty. This comprehensive exam will cover the four core areas and may also include a programming component. Materials to help the student prepare for the comprehensive examination will be posted in the departmental office at least one month prior to the scheduled testing time. Failure to pass this examination in two attempts will result in the student being dropped from the degree program in Computer Science.

COMPUTER SCIENCE SPECIALIZATION AREAS:

Area	Courses
Artificial Intelligence	 CPSC 5370, COSC 5312, COSC 5318
Graphics	COSC 4319, CPSC 4330*, COSC 5321,
•	COSC 5335, COSC 5339
Simulation/Modeling	COSC 5309, COSC 5336, COSC 5402
Software Engineering	CPSC 5360, COSC 5331
Database	CPSC 5340, COSC 5311, COSC 5332,
	COSC 5333
Architecture/Algorithms	 COSC 5308, COSC 5310, COSC 5350
	COSC 5313

^{*}Course numbers beginning with 4 are not graduate courses.

Graduate Record Exam (GRE) - Advanced Computer Science Section:

Students are expected to submit scores from the advanced Computer Science section of the Graduate Record Examination during their last semester of course work toward the degree.

Academic Standards

If a student's GPA on all graduate and/or deficiency courses falls below 3.0, the student will be placed on probation the following semester. Students who cannot raise their GPA above 3.0 during that semester will be dropped from the program.

Alternate Work/Study

An enrolled student may alternate between study and employment as a formal part of her/his training. While working, the student might perform research and collect data for his/her thesis at a facility that offers technology not available at Lamar University. A letter from the student's academic advisor explaining why he or she is unable to conduct research on campus and must go to another research facility is required. Only students doing a thesis are eligible for alternate work/study.

Computer Science Courses (COSC)

Prerequisite: CS 4310 or equivalent.

5311

5100 Graduate Seminar

Topics include the scientific method and research process, library utilization and components and organization of various types of research papers. Writing exercises on the latter topics. Preparation, formal written report and presentation on a research topic.

Prerequisite: Admission to the M.S. program in Computer Science.

3:3:0

Advanced Topics in Operating System

Current research issues and advanced topics involving both the principles and pragmatics of operating systems specification, design and implementation. Study of concurrent processes, support structures for modular programming, resource allocation and protection, telecommunications, networks and distributed processing.

Prerequisite: CS 4302 or equivalent.

5310 Advanced Topics in Computer Architecture

Advanced topics in computer architecture such as RISC vs CISC, pipelined processors, vector processors, HDLs, language directed architectures and neural nets.

Advanced Topics in Database Design

Data models, distributed databases, special databases, statistical databases, database machines, knowledge bases, database design theory and self-documenting databases.

Prerequisite: CS 4304G or equivalent.

5312 Advanced Topics in Artificial Intelligence

Analysis of Algorithms

methodologies.

5319

5336

Prerequisite: CPSC 5370 or equivalent.

Prerequisite: CPSC 2371 or equivalent.

Advanced Topics in Compiler Construction

and algorithms for solid object modeling. Prerequisite: COSC 5321 or equivalent.

Advanced Simulation and Modeling

Prerequisite: COSC 2371 or COSC 4307 or equivalent.

Design and Implementation of Expert Systems

systems and semantic representation in natural language processing.

	are covered as well as finite state methods for lexical analysis, symbol table construction, internal forms for a program, run time storage management for block structured languages and an introduction to code optimization. Prerequisite: COSC 4307 or COSC 3302 or equivalent.
5320	Formal Methods in Programming Languages 3:3:0
	Data and control abstractions are considered. Advanced control constructs including backtracking and non-
	determinism are covered. The affects of formal methods for program description are explained. The major
	methods for proving programs correct are described.
	Prerequisite: COSC 4307 or COSC 3302 or equivalent.
5328	Computer Networks 3:3:0
	A study of networks of interacting computers. The problems, rationales and possible solutions for distributed databases will be examined. Major national and international protocols including SNA, S.21 and X.25 will be
	presented.
	Prerequisite: (CPSC 3310 or ELEN 3331), COSC 5341, and COSC 4302 or equivalent.
5330	Advanced Topics in the Theory of Computation 3:3:0
	A survey of formal models for computation. Includes Turing Machines, partial recursive functions, recursive and
	recursively enumerable sets, and the recursive theorem, abstract complexity theory, program schemes and
	concrete complexity.
	Prerequisite: COSC 3302 or COSC 4307 or equivalent.
5331	Advanced Software Engineering 3:3:0
<i>'</i>	Topics not limited to software development methodology, verification and reliability, software quality assurance and productivity, software engineering economics, models and metrics for software management and engineer-
	ing, human performance engineering and software configuration management and control.
	Prerequisite: Advisor approval.
5332	Object Oriented Database Management Systems 3:3:0
	Introduction to object oriented databases. Topics including introduction to object oriented programming via
	SMALLTALK, the object-oriented data model, interface for defining and manipulating object oriented databases
	and other databases. Semantics and changes to the schema, query model, authorization model, architecture and
	implementation issues. Survey of current object oriented database systems.
	Prerequisite: CPSC 5340.
5333	Distributed Computer Systems 3:3:0
•	The study of the characteristics of a collection of autonomous computers linked by a network, with software
	designed to produce an integrated computing facility that intends to present a transparent virtual machine to application programmers.
	Prerequisite: COSC 5328 and CPSC 5340 or equivalent or advisor approval.
5335	Advanced Topics in Computer Graphics 3:3:0
	The course focuses on topics current to the field and includes, but is not limited to areas such as design and

construction of computer graphics systems, both software and hardware, the theory and use of color and shading,

Current topics in both simulation methodology and applications. Distributed simulation, simulation support

tools, object oriented simulation and artificial intelligence and simulation.

Prerequisite: COSC 5309, (MATH 1342 or MATH 3370), and MATH 2414 or equivalent.

Topics include, but are not limited to, knowledge representation, distributed cooperative AI, intelligent tutoring

Topics on what can and cannot be proven about computational complexity including algorithm design

Problems in knowledge acquisition, knowledge representation issues, representation of meta-knowledge, use of

An introduction to the major methods used in compiler implementation. The parsing methods of LL(k) and LR(k)

statistical measures to limit search of the knowledge base, and knowledge verification.

3:3:0

3:3:3

3:3:0

3:3:0

3:3:0

5339 Visual Languages Languages for indexing and retrieving images such a motion pictures, satellites, video images, etc. Iconic representation, pattern matching algorithms, visualization of images, object oriented databases, semantic data modeling, icon systems query processing, image compression and architecture for query processing. Prerequisite: COSC 5321 or CPSC 4330. 3:3:0 5340 Special Topics Special topics in all areas of Computer Science with emphasis on topics not covered in other courses. May be repeated for credit when topics vary. Prerequisite: consent of department chair. 5341 Problem Solving in High-Level Language Algorithms, pseudocode, structured techniques of problem solving and program design using high-level programming languages. Data sorting and searching techniques. Object-oriented design. Prerequisite: A first programming language, MTH 1345, and MTH 234 or MTH 3370. Leveling course not for graduate credit in MSCS degree. System Design and Programming 3:3:0 5342 Principles of computer systems analysis and design, system hardware and software characteristics. Data representation and programming in assembly language. Computer storage structures, storage allocation and management. Design of typical system programs such as assemblers, compilers and operating systems, addressing techniques and core management, file system design and management. Prerequisite: COSC 5341. Leveling course not for graduate credit in MSCS degree. 3:3:0 Parallel Programming and Algorithms 5350 Taxonomy of parallel computers, shared-memory vs. message-passing architectures, theoretical models, parallel algorithm design strategies, parallel data structures, automatic parallelization of sequential programs, communication, synchronization and granularity. Prerequisite: COSC 5313 or equivalent. 5360 Internship I This course provides practical experience with a company engaged in work related to a career in computer science. The purpose is career development before graduation. The course requires that the student obtain permission for Curricular Practical Training (CPT) from the International Student Office. Prerequisite: Approval of department chair. 3:3:0 5361 Internship II A continuation of COSC 5360 for a second semester. Prerequisite: Approval of department chair. 5369 **Graduate Project** Independent study and research of a specific problem in a field of computer science or its application. A report is required defining the problem and developing a solution. The work may be supervised by any member of the graduate faculty. Prerequisite: 10 hours of graduate computer science credit including COSC 5100 with grades of A or B; prior approval of written plan by the faculty supervisor and by the computer science department chair. May not be repeated for credit. 5402 Pattern Recognition and Image Processing Principles and pragmatics of pattern recognition, digital image processing and analysis. Statistical pattern recognition: complete vs. incomplete approach (via supervised vs. unsupervised learning). Structural pattern recognition. Image processing: image acquisition and digitization, making decisions based upon the available features. Image segmentation (by clustering, textured images, range images and multispectral images) and registration. Prerequisite: COSC 5309 and MATH 1342 or equivalent. 5390-5391 Thesis Independent research of a specific problem in a field of computer science. The work will be supervised by a member of the graduate faculty of the Computer Science Department. To be scheduled only with the consent of

the department. Six hours credit required. No credit assigned until thesis has been completed and filed with the

graduate dean: Continuous enrollment required once work on thesis has begun.

Prerequisite: Consent of Department Chair.

5330

Computer Information Sciences (CPSC)

5320 Communication and Computer Networks

3:3:0

Study of problems and limitations associated with interconnecting computers by communication networks. OSI reference model, architecture of circuits, message and packet switching networks, network topology, routing, flow control, capacity assignment, protocols, coding and multiplexing.

Prerequisite: COSC 5341 and COSC 4302.

Advanced Topics in Multimedia Processing

3:3:0

Television style viewing and sound interfacing to computer systems. Software and architectural interconnection requirements of digital interactive video and audio technology. Graphical user interface (X-Windows). Definition, examples, application, review of major implementations, and architecture of hypertext systems. Voice technology: synthesis, recognition and response. Student projects.

Prerequisite: A high level programming language.

5350 Advanced Topics in Applications of Expert Systems

3 · 3 · 0

Theory and programming of expert systems. Introduction to expert systems. Introduction to a particular expert system, pattern matching, control techniques, efficiency in rule-based language, and expert system examples. A student term project is assigned.

Prerequisite: A high level programming language.

5360 Advanced Topics in Software Engineering

3:3:0

Systems analysis, software requirements analysis and definition, specification techniques, software design methodologies, performance measurement, validation and verification and quality assurance techniques. Programming in an object oriented language.

Prerequisite: A high level programming language.

5370 Introduction to Artificial Intelligence

3:3:0

Introduction to concepts and ideas in artificial intelligence. Topics include search techniques, knowledge representation, control strategies and advanced problem-solving architecture.

Prerequisite: A high level programming language and COSC 2371.

OTHER ACCEPTED GRADUATE COURSES

The following list of graduate level engineering, business, psychology and English courses may be taken for graduate credit, for satisfying the specialization area requirements, subject to the approval by the graduate advisor. Course descriptions may be found in the Catalog of Lamar University, or in this Catalog.

Numerical Analysis Regression Analysis Reliability Design of Experiments Quality Control Systems Operations Research CAD

Operations Management and Information Systems Administrative Communications Foundations of Finance Wireless Communications Cryptography Advanced Statistical Theory and Analysis for Business

Foundations of Economics

Foundations of Organization Behavior

Marketing Concepts

Advanced Industrial Psychology I

Advanced Industrial Psychology II

Optimization

VLSI Design

Fiber Optics

Discrete Structures

Graph Theory

Department of Mathematics

The Department of Mathematics offers a program of study leading to the Master of Science degree in Mathematics. It is designed to train students either for a professionally oriented career in industry or in government, for further graduate work in mathematics or to provide depth and breadth in Mathematics Education.

Opportunities in the areas listed above, for students with a Master of Science in Mathematics, are numerous. Such opportunities exist in all areas of applied mathematics including computer science, statistics, operations research, numerical analysis, mathematical physics, administration/management science, engineering, secondary and elementary school teaching. These supporting areas are just a sample of excellent job opportunities for the graduate.

The department spends considerable time advising students in the Master's program. Once a student is admitted, the student's advisor will individually tailor the student's program to meet the needs of the supporting areas mentioned above or other areas of interest to the student. Consequently, students with a Bachelor's degree in Mathematics, Computer Science, Engineering, any of the sciences or Secondary Education will find appropriate opportunities in this M.S. program. Students will find a wide variety of courses listed in the program to make the above supporting areas available to them.

Those seeking admission to this program must satisfy the requirements as indicated below:

Admission to the Program

In order to be admitted to the Graduate Degree Program, a student must

- Meet the general requirements as set forth in this catalog for admission to the College of Graduate Studies.
- Successfully complete 27 semester hours of undergraduate mathematics including courses equivalent or comparable to the following: linear algebra, differential equations, advanced calculus, modern algebra and statistics.

Final approval as to what course work is acceptable toward admission to the graduate degree program lies with the graduate advisor and the department head. A student may be admitted conditionally to the graduate degree program, but is required to remove any deficiencies in undergraduate mathematics.

Admission to Candidacy

In order to be admitted to candidacy a student must

- Successfully complete 12 semester hours of approved graduate work in mathematics.
- Remove all deficiencies in mathematics designated by the Graduate Advisor and the Department Chair.
- Satisfy the general Admission to Candidacy requirements as set forth in this
 catalog.

Completion of the Program

In order to complete the M.S. program a student must

1. Take the Advanced Mathematics section of the Graduate Record Examination and have the score reported to the Graduate Advisor.

2. Complete one of the two following programs:

a. Complete at least 24 hours of graduate course work, write a thesis acceptable to the student's graduate committee, and satisfactorily defend the thesis orally before the graduate committee.

b. Complete at least 36 hours of graduate course work and satisfactorily complete an examination over the course work before the student's graduate committee.

Include at least three courses from among the following: 3.

> MATH 5310 Theory of Functions of Real Variables

MATH 5320 Modern Algebra

MATH 5340 Topology

Complex Variables or 5350 Complex Variables MATH 5312

Mathematics Courses (MATH)

Theory of Functions of Real Variables

Analytical functions, pathological functions, set functions, Riemann integral, measure theory, Lebesgue integral, Riemann-Stieltjes and Lebesgue-Stieltjes integral.

Prerequisite: Graduate standing and Mathematics 3380.

Numerical Analysis

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: MATH 2415 and COSC 1373, or its equivalent.

Modern Algebra

3:3:0

Groups, rings and the theory of fields. The theory of fields includes the study of subfields, prime fields, algebraic fields extensions and Galois fields.

Prerequisite: Groduate standing and Mathematics 3350 or its equivalent.

3:3:0

5330 Linear Algebra II Vector-spaces, linear transformations, matrices, determinants, Eigenvalues, Eigenvectors, canonical forms, bilinear mappings and quadratic forms:

Prerequisite: MATH 2414 and MATH 2318.

5340 Topology 3:3:0

Topological spaces, metric spaces, compact spaces, embedding, Urysohn's lemma and homotopy. Prerequisite: Graduate standing and Mathematics 3380.

5350 Complex Variables

Complex numbers, analytic functions, complex line integrals, Cauchy integral formula and applications. Prerequisite: MATH 2415.

5370

Methods of Applied Mathematics The Dirichlet problem, solution of boundary value problems, the Bergman Kernel function, method of the minimum integral, applications of conformal mapping.

Prerequisite: Graduate standing and Mathematics 4310 or 5350.

5303

5311

Modeling Theory

3:3:0

Study of techniques of building and applying mathematical models. Applications in biology, ecology, economics and sociology.

Prerequisite: Graduate standing and Mathematics 3401.

5304 **Functional Analysis** 3:3:0

Study of linear topological spaces, convexity, Hilbert spaces, Banach spaces, applications. Prerequisite: Graduate standing and Mathematics 3380.

5308 Fourier Analysis

Expansion of functions in Fourier series, orthogonal sets of functions, orthonormality. Fourier integrals. Approximations.

Prerequisite: 3401.

3:3:0

Numerical Analysis Solutions of ordinary and partial differential equations, approximation of functions, quadrature, and splines. Prerequisite: Graduate standing, Mathematics 4315 or its equivalent, and some knowledge of computer progromming.

5312	Complex Variables	3:3:0
	Conformal mapping and analytic continuation, calculus of residues, and applications.	,
	Prerequisite: Graduate standing and Mathematics 431 or its equivalent.	
5331	Special Topics	3:3:0
	Advanced topics in mathematics to suit the needs of individual students. Course may be repeated for a max	imum
	of six semester hours credit when the topic varies.	
	Prerequisite: Graduate standing and consent of instructor.	
5335 ·	Topics in Mathematics	3:3:0
	Topics include Mathematical Logic, Group Theory, Field Theory, Approximation and Interpolation,	Game
	Theory and Calculus of Variations.	
	Prerequisite: Graduate standing and consent of instructor.	
E200 E	E204 Thoric	6. A . O

Prerequisite: Approval of graduate advisor. Must complete both for required 6 credits.

The following 500 level engineering courses are also applicable to the Master of Science degree in Mathematics when approved by the departmental graduate advisor.

ENGR 5303 Regression Analysis

ENGR 5305 Reliability

ENGR 5319 Design of Experiments

College of Fine Arts and Communication

The College of Fine Arts and Communication offers programs of study leading to the Master of Arts degree in Visual Art, with either a Studio Art or Art History emphasis; a Master of Science Degree in Audiology and in Speech-Language Pathology; a Master of Science Degree in Deaf Studies/Habilitation; a Master of Music Degree; a Master of Music Education Degree; and a Doctor of Education Degree in Deaf Education. The college also supports some Master of Education degrees with courses from the Department of Art. Persons seeking admissions to these programs must meet the requirements specified by the College of Graduate Studies and the individual department. Admission to a degree program is not an admission to candidacy. Each master's degree program is designed to help students deepen and expand their knowledge and provide them with the opportunity to develop skills and concepts which may be applied to the professional objectives associated with their fields of study. The Doctor of Education in Deaf Education degree program is designed to prepare professionals to serve in leadership positions in the administration of schools and service programs for the deaf/hearing impaired and/or as faculty for universities with Deaf Education training programs.

Department of Art

The Department of Art offers a Master of Arts in Visual Art with an emphasis in either Studio Art or Art History. The Studio Art emphasis offers focused study opportunities in one of eight studio areas. Graduate studios are available. Of particular note, the Art History emphasis offers hands-on research opportunities working with the 19th-century academic paintings housed in the Eisenstadt collection. Part of the permanent holdings of the Dishman Art Gallery, the Eisenstadt collection features works by the American landscapist Thomas Moran and the English portraitist Sir Thomas Lawrence. Both study options provide students with the opportunity to focus and develop skills and abilities in a selected area of study.

Students seeking admission to the degree program must meet the general requirements for admission outlined in this bulletin.

Degree Requirements

Studio Art Emphasis

The Master of Arts degree in Visual Art with a studio art emphasis requires 36 semester hours including 15 hours in the area of specialization, 9 hours of core courses, 6 hours of electives, and 6 hours of thesis. Specialization may be in Fibers, Ceramics, Drawing, Painting, Photography, Printmaking, Sculpture, or Visual Design and Electronic Media. The core program for studio art includes 3 hours of Art History, 3 hours of Seminar in Art Criticism and Aesthetics (5318), and 3 hours of Current Issues and Trends (5301).

Applicants to the degree program in studio art must submit a slide portfolio of 15 works, three letters of recommendation from undergraduate professors, and a letter of intent stating professional objectives to the Department of Art. The slide portfolio should demonstrate competency in the medium of specialization they intend to pursue for the degree. A graduate faculty committee will review applications and portfolios. Applicants will be accepted according to the quality and maturity of the submitted work. Undergraduate course work may be required if the applicant has not earned a Bachelor of Fine Arts degree and/or the entrance portfolio does not demonstrate the knowledge, skills and abilities prerequisite to successful graduate study.

Art History Emphasis

The Master of Arts degree in Visual Art with an art history emphasis requires 36 semester hours of graduate study including 15 hours in art history, 9 hours of core courses, 6 hours of electives, and 6 hours for writing and defending a thesis. All graduate study must be within the areas of specialization offered by the program. The core program for art history includes 3 hours of Current Issues and Trends (5301), 3 hours of Seminar in Art Criticism and Aesthetics (5318), and 3 hours of Methodology in Art History (ARTS 5308). Reading competency in an approved foreign language to be determined by examination or course work will be required. Graduate courses in the literature of a foreign language, history, or English can be taken as electives and may be required.

Applicants to the degree program with an art history emphasis must submit undergraduate transcripts, a term paper indicating research and writing skills, and three letters of recommendation from undergraduate professors. A graduate faculty committee will review applications and may require undergraduate foundation courses in art history or research methods before admitting the applicant.

Graduate Faculty

Professor Lynne Lokensgard
Art History
Assistant Professor Kurt Dyrhaug
Visual Media/Studio Art
Associate Professor Donna M. Meeks
Studio Art
Assistant Professor Steve Hodges
Studio Art
Professor Jerry Newman
Studio Art

Associate Professor Meredith Jack Studio Art Associate Professor Keith Carter Walles Chair, Visual and Performing Arts Photography Assistant Professor Prince Thomas Visual Media/Photography Assistant Professor Ann Matlock Art Education/Fibers

Art Courses (ARTS)

be required.

Problems in Fiber Crafts

repeated for credit.

The following graduate courses may also be taken to satisfy the specialization area requirements of some Master of Education degree programs.

requ	irements of some Master of Education degree programs.
5301	Issues and Trends in Contemporary Art A paradigm study of current values, practices and beliefs of the art profession. Exploration of the origins and directions of artistic thought in the 20th century with emphasis on the interaction between the artist and society the effects of that contact on artistic expression and the nature of the imagery that results from that contact.
5305	Problems in Photography 3:3:
	Advanced research in photographic technique and photography as an art medium. May be repeated for credit
5308	Methodology in Art History 3:3:
	Introduction to methods of art historical research. Special research projects will be required.
5318	Seminar in Art Criticism and Aesthetics 3:3:
	An historical survey of significant written works in the areas of aesthetics and art criticism that have reflected and/or shaped artistic practice of a given period.
5323	Problems in Visual Media 3:3:
	Experimental research in the uses of computers as image making tools. Development of personal imagery through electronic media. May be repeated for credit.
5325	Problems in Drawing 3:3:
0020	Independent directed study in drawing. May be repeated for credit.
5326	Problems in Painting 3:3:
	Directed independent research leading to the development of a personal direction and statement within painting
	May be repeated for credit.
5328	Study in 19th Century Symbolist Art 3:3:
	A study of the Symbolist Movement in European art from 1885-1910. A graduate research project or paper wil

Directed independent research and experiment in the area of fiber crafts. Topics vary by semester. May be

research project or paper will be required.

5390-5391 Thesis

5338	Study in Renaissance Art	3:3:0
. 5555	A study of Renaissance art in Europe from the 14th through the 16th centuries. A graduate research p paper will be required.	
5348	Nineteenth Century European Art	3:3:0
	A study of the foundations of abstractionism from Neo-Classicism through Post-Impressionism. A research project or paper will be required.	graduate
5358	Research in Art History	3:3:0
	Directed research in selected topics in Art History. May be repeated for credit.	1.00
5365	Problems in Printmaking	3:3:3
	Directed independent research and experimentation in methods of printmaking. May be repeated for	credit.
5368	Contemporary Art	3:3:0
	A critical and historical analysis of painting from 1900 to the present. A graduate research project or pobe required.	per will
5378	Primitive Art	3:3:0
	A study of pre-historic and contemporary tribal art. A graduate research project or paper will be requ	ired. ·
5385	Problems in Sculpture	3:3:3
	Directed independent research and experimentation towards the development of a personal direct statement in sculpture. May be repeated for credit.	ion and
5386	Problems in Ceramics	3:3:3
	Directed independent research and experimentation with technical and aesthetic issues in ceramics repeated for credit.	May be
5388	Modern Architecture and Sculpture	3:3:0
	A study of the development of modern architecture and sculpture from the late nineteenth century to the	present.
	A graduate research project or paper will be required.	-
5395	Directed Individual Study in Studio Art	3:3:3
	Individual study at the graduate level of a specific area within the visual arts field. May be repeated f when the subject varies.	or credit
	Prerequisite: Permission of instructor.	٠.,
5398	History of Photography	3:3:0
	A study of the development and evolution of photography from its invention in 1839 to the present. A	graduate

 $Course \, requirements \, listed \, under \, Thesis \, Requirements \, in \, this \, catalog. \,\, Must \, complete \, both \, for \, required \, 6 \, credits. \,\, determine the contract of the contract of$

Department of Communication Disorders

The Department of Communication Disorders offers training and Master of Science degrees in three disciplines: audiology, deaf education and speech-language pathology. In addition, a Doctor of Education degree is offered in deaf studies/education.

Master of Science Degree in Audiology and Speech-Language Pathology

Lamar University programs in audiology and in speech-language pathology hold national certification by the American Speech, Language, Hearing Association (ASHA). Students completing master's degrees in audiology or speech-language pathology typically meet the national certification standards of ASHA as well as requirements for state license. Speech-language pathology graduates who meet ASHA and state certification standards are also considered eligible for employment as speech-language pathologists in public schools. Depending on the student's undergraduate program of study, the typical 36-semester-hour master's degree may need to be expanded to accommodate ASHA certification and state licensing requirements. Audiology and speech-language pathology students must complete a minimum of 375 hours of supervised clinical practicum, part of which may be accumulated at the undergraduate level.

Graduates may apply to ASHA for the Certificate of Clinical Competence (CCC) in speech-language pathology or in audiology. These national certifications require the completion of specified course work and clinical practice. Students seeking ASHA certification should obtain a copy of ASHA regulations from a faculty advisor early in their training program.

ASHA standards mandate the passing of national qualifying board examinations for prospective audiologists and speech-language pathologists. Master's students typically take these examinations during their final semester. With the approval of their graduate committee, students who pass the ASHA national boards may be exempt from master's oral and/or written comprehensive examinations.

Master of Science Degree in Deaf Education

Our deaf education program is certified by the national Council on Education of the Deaf (CED) and our graduates are eligible for professional certification through that accrediting agency. In addition, graduates may apply for state license as a teacher of deaf children. The program welcomes deaf graduate students and many of our faculty are themselves deaf. Program graduates are expected to be skilled in sign language and must complete a minimum of 300 hours of supervised practicum with deaf children.

Doctor of Education Degree in Deaf Studies/Education

Lamar University is one of only nine universities in the U.S. offering a doctoral degree in deaf studies/education and addresses a critical national and international shortage of doctoral-trained educators of the deaf. Graduates of the doctoral program will take leadership positions in schools for deaf children or become teacher trainers in university settings. Both deaf and hearing applicants are accepted.

Admission

Applicants for admission to master's degree programs in the Department of Communication Disorders (CMDS), except for students who are deaf (see below), are ranked for admission based on the following criteria.

- A formula established by the Graduate Council. This formula is calculated based on (GPA x 200) + Verbal GRE score + Quantitative GRE score. The formula score must be greater than or equal to 1350
- 2. relevance of the undergraduate training, and
- 3 letters of support

In addition, applicants for the deaf education program must submit an essay which includes their philosophy of education and professional goals. The essay will be used to identify writing ability required for successful completion of their graduate program.

Applicants for the doctoral program in deaf studies/education must have a master's degree in deaf education or a related field and have completed three years of professional experience with deaf or hearing-impaired children and/or adults. Hearing applicants must have a GRE minimum combined (verbal + quantitative) score of 1000 with a 500 minimum score for each section (verbal + quantitative). Applicants must submit an essay including their philosophy of education and professional goals. The essay will be used to identify writing ability required for successful completion of the doctoral program.

Deaf applicants for the master's and doctoral degrees in deaf studies/education who have a severe to profound hearing loss acquired congenitally or prelingually will be considered on an individual basis and need not submit GRE scores. In lieu of the GRE score these deaf applicants must submit above-average performance intelligence scores (preferably the performance scale of the WAIS-R) and university grades, pass an interview with our deaf education faculty, and demonstrate adequate literacy and communication skills for graduate training. Literacy in this case includes both the reading and writing of English, but not necessarily equivalent to hearing norms. Communication skill may be demonstrated in sign and/or speech.

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Graduate Faculty

Professor Jean Andrews	Associate Professor Gabriel A. Mari
Deaf Education	Deaf Education
Assistant Professor Michael Bienenstock	Professor Robert D. Moulton
Deaf Education	Deaf Education, Speech Patholog
Associate Professor Randolph Deal	Instructor Lynn Norwood
Speech-Language Pathology	Audiology
Instructor Tressa Friend	Assistant Professor Angel Ramos
Speech-Language Pathology	Deaf Education
Assistant Professor Scott Lowery	Associate Professor Marshall Smith
Speech-Language Pathology	Audiology
Instructor Kimberly Lunato	Assistant Professor Zanthia Smith
Speech-Language Pathology	Deaf Education
Assistant Professor Sumalai Maroonroge	Instructor Jeri Sullivan
Audiology	Speech-Language Pathology

Communication Disorders Courses (CMDS)

5250	Seminar in Communication Disorders Research	
•	Provides direct contact with research faculty during the research project development.	
5301	Aphasia and Neurogenic Disorders	3:3:0
	Theory and treatment for organic speech disorders of neurologic origin.	4
5302	Stuttering	3:3:0
	Nature, evaluation and treatment of fluency disorders.	•
5304	Language Disorders of Adolescents	3:3:0
-	Assessment and intervention procedures for pre-adolescents and adolescents with language disorders.	
5305	Diagnostics and Counseling	3:3:0
	Evaluation and counseling procedures in communication disorders.	
5306	Language Disorders of Children	3:3:0
. :	Assessment and intervention procedures for preschool and school age children with language disorder	s. .
5307	Articulation Disorders	3:3:0
	Nature, evaluation, and treatment of articulation disorders.	
5308	Neuropathologies II	3:3:0
	The diagnosis and treatment of disarthria, apraxia, and dysphagia.	
5309	Advanced Clinical Practicum	3:3:10
	Advanced classroom practicum, diagnostics and therapy. May be repeated and must be taken each sem	ester.
5310	Multicultural Issues and Deafness	•
	To provide theory and practical techniques for identifying and teaching minority-deaf children and their p	arents.
5312	American Sign Language IV	3:3:0
	Advanced linguistical studies of American Sign Language.	
5313	Speech Development in the Hearing Impaired	`3:3:0
	Speech for the young hearing impaired child, home training and therapy. Development of communication	ı skills.
5316	Language for the Deaf	3:3:0
	Language development theories applied to deaf children.	,
5317	Modern Math and Science Instruction for the Deaf	3:3:0
	Provide current theory and practical techniques for teaching math and science to deaf children.	
5318	Special Audiological Tests	3:3:0
	Test batteries for peripheral vs. Central site of lesion, non-organic, electrophysiological assessment.	
5320	Pediatric Audiology	3:3:0
	Hearing evaluation in the young patient, method and theory.	
5321	Research in Communication Disorders	
	Research design data analysis, and report writing pertinent to basic science and behaviors in commun	ication
	disorders.	
5322	Medical Audiology	3:3:0
	Study of otologic pathology and influence upon auditory/westibular systems	

5323	Electrophysiology I Current electrophysiological auditory assessment: includes theory, instrument, techniques and procedures.
5324	Hearing Aids Pros and cons of amplification theory and practicum.
5325	Audiology and Deafness
J32J	Provides development in anatomy or the ear, sound and its measurement, testing and listening devices for teachers of the deaf in classroom settings.
5326	Psychology of the Deaf 3:3:0
	Psychological, emotional, and social impact of deafness.
5327	Advanced Aural Rehabilitation Speechreading, auditory training, amplification and counseling for the aurally impaired.
5328	The Multidisabled with Hearing Problems 3:3:0
	Prevalence, demographics and etiologies of hearing disorders with other disabilities (blindness, motor, emotional, mental, or orthopedic). Includes methods, curricula, and materials.
5329	Law and the Deaf 3:3:0
5332	Legislative and judicial decisions that influence educational programs for the hearing impaired/deaf. Industrial Audiology
	Interpretation and role of the audiologist in the OSHA Hearing Conservation Act with emphasis on noise level assessment and abatement.
5336	Electrophysiology II
	Clinical assessment and rehabilitation of vestibular disorders including but limited to ENG, rotary chair, dynamic posturography.
5337	Special Audiology Tests II
	Techniques in assessment procedures and data interpretation in the diagnosis of central auditory processing disorders and associated areas to include theory and practice.
5338	Hearing Aids II
	Operation and selection criteria for programmable and digital amplification will be addressed. Practicum in real
	ear measurements and assistive listening devices and cochlear implants is provided.
5350	Individual Study 3:A:0
	Independent study of special problems in communication disorders.
5351	Individual Study
	Independent study of special problems in communication disorders. 3:A:0
5403	Prerequisite: Approval of Graduate Advisor. Must complete both for required 6 credits. Voice Disorders and Cleft Palate
3403	Nature, etiology and treatment of disordered phonation and resonance imbalance secondary to laryngeal malfunction and craniofacial anomaly.
Do	ctoral Core Courses
יטע	ciordi core courses
6301	History & Sociology of Deaf Culture 3:3:0
· ·	Life/culture of deaf people via history, art, literature, mythology, and performance. Using an anthropological definition of "culture", the course examines the linguistic variations and modes of cultural transmission across generations and the demographics and characteristics of the community.
6302	Law and Deafness 3:3:0
	Legislative and judicial decisions that influence educational programs for the hearing-impaired/deaf.
6303	Vocational Rehabilitation and Deafness 3:3:0 The vocational & rehabilitative needs of deaf/hard-of-hearing persons and successful programming models with emphasis on federal & state laws for rights & services for deaf/hard-of-hearing individuals.
6304	Curriculum, Pedagogy, Computers and Deafness 3:3:0 Comparative analysis, design, and implementation of educational curricula for deaf/hard-of-hearing students,
	the curricular relation to current pedagological theories, and the utilization of computer technologies for the deal education classroom.
8205	Psycholinguistics and Deafness 3:3:0
8305	The psycholinguistics and linguistic development of deaf children of various linguistic and cultural back-
	grounds and the effects of communication modality differences upon development. Emphasis upon the bilingual/bicultural nature of these acquisition patterns will be included.
6307	Deaf Education Administration 3:3:0
٠.	Professional placement of the doctoral candidate in educational/administrative locations for field experience and a seminar including problem-project discussion on issues of deaf education program management.

Cognitive, Psycho-social Development and Deafness 3:3:0 6308 Historical review of the way intellectual abilities of the deaf were viewed, current data on cognitive and intellectual abilities, psycho-social development of deaf persons and appropriate assessment tools will be

Aural Rehabilitation & The Deaf 3:3:0 6309 Amplification, acoustics, and habilitative techniques and procedures applicable to deaf educational settings and the deaf/hard-of-hearing.

6350 Special study of a contemporary issue. Complement to Doctoral course requirements.

Individual Study 6351 Independent study of special problems in Deaf Studies/education.

Doctoral Disseration - Deaf Education 6390 Prerequisite: Approval of doctoral advisor. **Doctoral Dissertation - Deaf Education** 6391

Prerequisite: Approval of doctoral advisor.

Additional hours are required in Statistics/Research as well as Cognate areas and Electives to meet full doctoral hour requirements (60 hours total).

Department of Music, Theatre and Dance

The Department of Music, Theatre and Dance offers the following graduate degrees: the Master of Music in Performance, the Master of Music Education, and the Master of Science in Theatre. The Music degrees are designed to help performers and music educators improve skills and develop new concepts which may be applied to their particular fields of endeavor. Persons seeking admission to these degree programs must meet the general requirements for admission which are outlined elsewhere in this catalog. Generally, an applicant must also hold a bachelor's degree in music.

Students who did not graduate from Lamar University must take a music theory placement examination. Applicants for the graduate degree in performance must audition for the major professor.

The Master of Science in Theatre is designed to help performers and technicians increase their skills and study new concepts in their perspective specialization. Persons seeking admission to this degree must meet the general admission requirements as outlined elsewhere in this catalog. It is necessary for an applicant to hold a bachelor's degree in theatre or a compatible field.

Music Degree Requirements

Candidates for master's degrees in music must meet all general degree requirements of the College of Graduate Studies as listed elsewhere in this catalog. The Master of Music in Performance requires 30 semester hours, including 12 hours in the applied major, six in music literature, six in music theory, and six in music education. In addition, a public recital and research paper or lecture recital are required. Voice majors must show proficiency (to be determined by the Department of Music) in German, French and Italian diction prior to entering this degree program.

The Master of Music Education degree requires 36 semester hours, including 18 in music education, six in music literature, six in music theory, and six in thesis. Two additional courses in music education may be substituted for the thesis, and six hours of applied music may replace two music education courses.

All degree candidates must take MUED 5320 (Seminar in Special Problems) and pass a final oral examination before a degree can be granted. The director of graduate music studies will serve as the general advisor of all graduate students in music. A committee of three graduate faculty members will also serve in an advisory capacity and administer the final oral examination.

Theatre Degree Requirements

The Master of Science degree in Theatre is a highly individualized program. Candidates for the degree must meet all general degree requirements in the College of Graduate Studies as listed elsewhere in this catalog. The student must complete a course load of 36 semester hours including 18 hours in a specialized area, 12 hours in practical individual studies, and 6 hours in a related elective (music, dance, art or philosophy). Six hours of thesis or a two-semester major project may be substituted for the 6 semester hours of fine arts or philosophy electives.

The student will choose from the following areas of specialization: technical production (set, costume or lighting design), acting/directing, or theatre management. Courses are selected from a variety of graduate and senior level offerings. Senior level courses used for graduate credit are enhanced with additional research and application work. Matching the student's needs with a practical and viable degree plan is an excellent format for the student seeking a practical or education-oriented degree in theatre.

Graduate Faculty

Professor L. Randolph Babin
Choral music education
Professor Robert Culbertson
Brass and music education
Professor Wayne Dyess
Brass and music education
Associate Professor Kim Ellis
Woodwinds
Associate Professor Kurt Gilman
Graduate Advisor and Strings
Professor Barry W. Johnson
Brass and music education

Professor Barbara Mathis
Voice
Professor Raul S. Ornelas
Brass and music education
Associate Professor Adonia Placette
Theatre
Professor James M. Simmons
Woodwinds and music education
Professor Russ Schultz
Brass and Music History

Applied Music (AM)

5210, 5220, 5230 Graduate Applied Music

2:2:0

For music education majors only. Graduate applied music in any instrument category, including composition. No more than six hours may be applied toward graduation in the music education degree.

5410, 5420, 5430 Graduate Applied Music

4:4:0

Graduate applied music in any instrument category, including composition. No more than 12 hours may be applied toward graduation in the Master of Music degree.

Music Education (MUED)

5310 Microcomputer Applications in Music

3:3:0

A study of microcomputers and music-related software, especially in the area of computer-assisted marching band charting and administrative duties.

5320 Seminar in Special Problems

3:3:0

Research problems of special interest to students whose major emphasis is on the graduate field of music. Research paper required.

Basic Concepts in Music Education
The historical, philosophical and psychological bases of music education.

3:3:0

5340	Supervision of Music Supervision of public school music programs, with emphasis on leadership, instruction, public relation problems in scheduling and finance.	3:3:0 ns and
5370		3:3:0 nd and
٠.	orchestral music.	
5390	Advanced Vocal Methods The principles and techniques of teaching vocal music.	3:3:0
Mi	usic Literature (MULT)	
5360	Survey of the Baroque Era	3:3:0
	Comprehensive study of the period, beginning with the transition to Baroque, c. 1580, and ending c. Emphasis on advances in musical form, stylistic developments and performance practices.	1750.
5370		3:3:0
	Comprehensive study of the period, beginning with the transition to classicism, c. 1730, and ending c Emphasis on advances in the musical form, stylistic developments and performance practices.	
5380	Survey of the Romantic Era Comprehensive study of the period, beginning with the transition to Romanticism, c. 1815, and ending c	3:3:0
	Emphasis on advances in musical form, stylistic developments and performance practices.	1910.
5390		3:3:0
	A survey of major composers and schools of composition from Debussy to the present.	
RA.	icio Theory (MUTV)	
IVIL	ısic Theory (MUTY)	
5350	Twentieth Century Harmony The analysis and writing of music based on twentieth century harmonic techniques and devices.	3:3:0
5360		3:3:0
	The principles and techniques of teaching the various branches of music theory, including principles of least	rni n g,
5370	history of theory, critical study of appropriate texts and supervised teaching of music theory classes. Analytical Techniques Traditional and contemporary approaches to the visual and aural analyses of music from all periods.	3:3:0
Mι	ısic (MUSI)	
		, 2. A . O
5300	Special Projects in Music Education Individual projects for students with specialized needs in the music education area. Prerequisite: Consent of Department Chair.	3:A:0
5310		3:A:0
	Individual projects for students with specialized needs in the music literature area. Prerequisite: Consent of Department Chair.	
5320		3:A:0
	Individual projects for students with specialized needs in the music theory area. Prerequisite: Consent of Department Chair.	
5390	-5391 Thesis	
	Prerequisite: Approval of graduate advisor.	
Th	eatre Courses (The)	
5300	Theatre Management	
	An in-depth study of working on the business side of managing a theatrical house. The course will folloconception of a theatre through all of the development stages of fund raising, grant writing, publici	
	everyday financial workings.	
5310		
	Individualized instruction or supervised projects in the various areas of the theatre. May be performa	uce or
5325	technically oriented. May be repeated for credit. Directed Studies	. '
0040	- 1 00:04 0:E4:00	

Individual instruction in theatre genres, styles and periods through research and performance-oriented projects.

5330 Advanced Scenic Construction

Advanced course in scenic construction techniques and principles. Hands-on experience in University produc-

5340 Media Performance

A split course for those interested in on-camera and off-camera work. Half of the semester will focus on the off-camera technology and the other half on the on-camera performance techniques.

5349 Costume Design

Advanced study of principles and practices of costume design. Emphasis on drafting and historical accuracy.

5350 Theatre Individual Study

Individual study of special problems in theatre under faculty guidance.

Individual study of special page 5370 Acting IV - Acting Theories

Detailed study of period styles and techniques for acting.

5371 Directed Theatre Activities

A "how-to" course on the organization and production of a variety of theatrical activities. Covers the areas of fund raising, publicity, promotion, script and technical requirements. Each student will be required to participate in an internship program at an assigned theatre during the semester or as arranged.

Advanced Directing

5380 Advanced Directing
Application of the principles and practices of play directing for the graduate student. Production work is required outside of class.

5390-5391 Thesis

Prerequisite: Approval of graduate advisor.

399 Summer Repertory Theatre

Participation in a variety of shows during the summer session to enable the student to work in a professional repertory atmosphere.

LAMAR UNIVERSITY

Texas Common Course Number Cross-Reference

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ACC	231	ACCT2301	AM ·	3253	MUAP3257	ART	235	ARTS1303
ACC	232	ACCT2302	AM	3261	MUAP3245	ART	236	ARTS1304
ACC	331	ACCT3310	AM	3262	MUAP3249	ART	237	ARTS2331
ACC	332	ACCT3320	AM	3263	MUAP3253	ART		ARTS2316
ACC	333	ACCT3330	· AM	3271	MUAP3205	ART	239	ARTS2379
ACC	334	ACCT3340	AM	3273	MUAP3201	ART	3199	ARTS3199
ACC	338	ACCT3380	AM	3281	MUAP3281	ART	3303	ARTS3303
ACC	339	ACCT3390	AM	3411	MUAP3409	ART	3313	ARTS3313
ACC	430	ACCT4300	AM	3415	MUAP3429	,	3315 🕝	ARTS3315
ACC	431	ACCT4310	AM	3417	MUAP3438	ART	3316	ARTS3316
ACC	532	ACCT5320	AM	3421	MUAP3417	ART	3317	ARTS3317
ACC	533	ACCT5330	AM	3423	MUAP3441	ART	3323	ARTS3323
ACC	534	ACCT5340	AM .	3431	MUAP3421	ART	3325	ARTS3325
ACC	537	ACCT5370	AM	3441	MUAP3469	ART	3326	ARTS3326
AM	1101	MUAP1101	AM	3451	MUAP3433	ART	3327	ARTS3327
AM	1183	MUAP1181	AM	3453	MUAP3457	ART	3333	ARTS3333
AM ·	1203	MUAP1225	AM	3461	MUAP3445	ART	3335	ARTS3335
AM.	1211	MUAP1209	AM	3473	MUAP3401	ART	3343	ARTS3343
AM	1215	MUAP1229	AM	3481	MUAP3481	ART	3351	ARTS3351
AM	1217	MUAP1237	AM	3483	MUAP3483	ART	3355	ARTS3355
AM	1221	MUAP1217	AM	521	MUAP5210	ART	3365	ARTS3365
AM	1223	MUAP1241	AM	522	MUAP5220	ART	3371·	ARTS3371
AM	1231	MUAP1221	AM	523	MUAP5230	ART	3375	ARTS3375
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AM	1251	MUAP1233	'AM	542	MUAP5420	ART	3386	ARTS3386
AM	1253	MUAP1257	AM	543	MUAP5430	ART	4303	ARTS4303
AM	1257	MUAP1213	ANT	131	ANTH2346	ART	4315	ARTS4315
AM	1261	MUAP1245	ANT	231	ANTH2351	ART	4316	ARTS4316
AM	1262	MUAP1249	ANT	232	ANTH2372	ART	4325	ARTS4325
MM	1263	MUAP1253	ANT	235	ANTH2302	ART	4326	ARTS4326
AM	1271	MUAP1205	ANT	331	ANTH3310	ART	4328	ARTS4328
AM	1273	MUAP1201	ANT	334	ANTH3340	ART	4331	ARTS4331
AM	1281	MUAP1281	ANT	434	ANTH4340	ART	4336	ARTS4336
AM	1283	MUAP1283	ART	131	ARTS1316	ART	4338	ARTS4338
AM.	3203	MUAP3225	ART	132	ARTS1317	ART	4341	ARTS4341
AM	3211	MUAP3209	ART	133	ARTS1311	ART	4343	ARTS4343
AM	3215	MUAP3229	ART	134	ARTS1312	ART	4348	ARTS4348
AM	3217	MUAP3237	ART	135	ARTS1301	ART	4353	ARTS4353
AM	3221	MUAP3217	ART	139	ARTS2356	ART	4355	ARTS4355
AM	3223	MUAP3241	ART	231	ARTS2323	ART	4358	ARTS4358
AM	3231	MUAP3221	ART	232	ARTS2324	ART	4363	ARTS4363
AM	3241	MUAP3269 .	ART	233	ARTS2311	ART	4368	ARTS4368
AM	3251	MUAP3233	ART	234	ARTS2326	ART	4373	ARTS4373

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ART	4391	ARTS4391	BIO 245	BIOL2420	BLW 535	BULW5350
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ART	4399	ARTS4399	BIO 346	BIOL3460	C&D 5310	CNDV5310
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ART	5335	ARTS5335	BIO 4401	BIOL4401	C&D 5381	CNDV5381
ART	5338	ARTS5338	BIO. 4401	BIOL5402	C&D 5382	CNDV5382
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ART	5386	ARTS5386	BIO 443:	BIOL4430	CDC 1302	CMDS1372
ART	5388	ARTS5388	BIO 443	BIOL5430	CDC 1303	CMDS1373
ART	5395	ARTS5395	BIO : 444	BIOL4440	CDC 1304	CMDS1374
ART	15398	ARTS5398	BIO 444	BIOL5440	CDC 1305	CMDS1375
ART	6390	ARTS5390	BIO 445	BIOL4450	CDC 2301	CMDS2371
ART ·	6391	ARTS5391	BIO 445	BIOL5455	CDC 2302	CMDS2372
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AS	530	ADSV5300	BIO 447	BIOL4470	CDC 2305	CMDS2375
AS	539	ADSV5390	BIO 510	BIOL5100	CDC 3301	CMDS3301
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BAC	434	BUAL4340	BIO 545	BIOL5450	CDC 4302	CMDS5342
BAC	439	BUAL4390	BIO 547	BIOL5470	CDC 4302	CMDS4303
BAC	530	BUAL5300 .		BIOL5390		CMDS4304
BAC	531 .	BUAL5310	BIO 669B	BIOL5391	CDC 4305	CMDS4305
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BIO	1401	BIOL1471	BLW 332	BULW3320	CDC 4306	CMDS4306
BIO -	141	BIOL1406	BLW 333	BULW3330	CDC 4306	CMDS5346

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CDC	5332	CMDS5332	CE	432	CVEN4320	CHM	427	CHEM4271	
CDC	5334	CMDS5334	CE	432	CVEN5320	CHM	430	CHEM4351	
CDĊ	5336	CMDS5336	CE.	432	ENGR5308	СНМ	430	CHEM5351	
CDC	5337	CMDS5337	CE	434	CVEN4340	СНМ	4301	CHEM4301	
CDC	5338	CMDS5338	CE	434	ÇVEN5340	CHM	431	CHEM4311	
CDC	5350	CMDS5350	CE	435	CVEN4355	CHM	432	CHEM4312	
CDC	5351	CMDS5351 ·	CE	435	CVEN5355	CHM	436	CHEM4341	
CDC	5390	CMDS5390	CE	435	ENGR5324	СНМ	436	CHEM5341	
CDC -		CMDS5391	CE	435	ENGR5326	CHM	4360	CHEM4360	
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CDC	6304	CMDS6304	CE	438	ENGR5310	CHM	442	CHEM4412	
,CDC	6305	CMDS6305	CE	439	CVEN4390	CHM	442	CHEM5412	
CDC	6307	CMDS6307	CE	439	ENGR5323	CHM	446	CHEM4461	
CDC	6308	CMDS6308	CE	439	CVEN5390	CHM	447	CHEM4471	
CDC	6309	CMDS6309	CHE	3311	CHEN3311	CHM	448	CHEM4481	
, CDC	6350	CMDS6350	CHE	. 332	CHEN3320	CHM	5301	CHEM5301	

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CHM	531	CHEM5310	COM 132	COMM1307	CS 2303	COSC2371
CHM	533	`CHEM5330	COM 133	COMM1373	CS 2313	COSC2372
CHM	535	CHEM5350	COM 1360	COMM1360	CS 2411	COSC2471
CHM	537	CHEM5370 '	COM 141	COMM1471	CS 3301	COSC3301
CHM	669A	CHEM5390	COM 231	COMM2311	CS 3302	COSC3302
CHM	669B	CHEM5391	COM 232	COMM2372	CS 3304	COSC3304
CIS	231	CPSC2371	COM 233	COMM2373	CS 3306	COSC3306
CIS	331	CPSC3310	COM 234	COMM2374	CS 3308	COSC3308
CIS	332	CPSC3320	COM 235	COMM2341	CS 3321	COSC3321
CIS	432	CPSC4320	COM 236	COMM1318 ·	CS 3324	COSC3324
CIS	432	CPSC5320	COM 238	COMM2335	CS 3325	COSC3325
CIS	433	CPSC4330	COM 2385	COMM2375	CS 3340	COSC3340 ^p :
CIS	434	CPSC4340	COM 313	COMM3130	CS 3360	COSC3360
CIS	434	CPSC5340 .	COM 3234	COMM3234	CS 4101	COSC4101
CIS	436	CPSC4360	COM 3301	COMM3301	CS 4201	COSC4201
CIS	437	CPSC4370	COM -331	COMM3310	CS 4301	COSC4301
CIS	437	CPSC5370	COM 332	COMM2303	CS 4302	COSC4302
CIS	533	CPSC5330	COM 333	COMM3330	CS 4307	COSC4307
CIS	535	CPSC5350	COM 334	COMM3340	CS 4309	COSC4309
CIS	536	CPSC5360	COM 336	COMM3360	CS 4309	COSC5309
CJ ·	1302	CRIJ1301	COM 3361	COMM3361	CS 4310	COSC4310
CJ .	1306	CRIJ1306	COM 337	COMM3370	CS 4310	COSC5308
CJ .	231	CRIJ2328	COM 338	COMM3380	CS 4319	COSC4319
CJ	232	CRIJ2314	COM 3381	COMM3381	CS 4319	COSC5321
CJ	235	CRIJ2313	COM 3383	COMM3383	CS 5100	COSC5100
CJ	236	CRIJ2301 .	COM 339	COMM3390	CS 5302	COSC5302
CJ	330	CRIJ3300	COM 430	COMM4300	CS 5310	COSC5310
CJ	331	CRIJ3310	COM 4301	COMM4301	CS 5311	COSC5311
CJ	3310	CRIJ3309	COM 431	COMM4310	CS 5312	COSC5312
CJ :		CRIJ3320	COM 432	COMM4320	CS 5313	COSC5313
CJ	333	CRIJ3330	COM 434	COMM4340	CS 5318	COSC5318
CJ ·	338	CRIJ3380	COM: 4341	COMM4341	CS 5319	COSC5319
CJ	430	CRIJ4300	COM 4342	COMM4342	CS 5320	COSC5320
CJ	431	CRIJ4310	COM 435	COMM4350	CS 5328	COSC5328
CJ	4310	CRIJ4311	COM 436	COMM4360	CS 5330	COSC5330
	4312	CRIJ4313	COM 4361	COMM4361	CS 5331	COSC5331
· CJ ·	432	CRIJ4320	COM 437	COMM4370	CS 5332	COSC5332
CJ .	4321	CRIJ4321	COM 438	COMM4381	CS 5333	COSC5333
CJ	433	CRIJ4330	COM 4380	COMM4380	CS 5335	COSC5335
CJ .	435	CRIJ4350	COM 4383	COMM4383	CS 5336	COSC5336
CJ	437	CRIJ4370	COM 439	COMM4390	CS 5339	COSC5339
CJ	531	CRIJ5310	COM 4395	COMM4395	CS 5340	COSC5340
		CRIJ5310	CS 1311	COSC1371	CS 5341	COSC5341
CJ CJ	532	CRIJ5320 CRIJ5330	CS 1311 CS 1312	COSC1371	CS 5341 CS 5342	COSC5341 COSC5342
	533	CRIJ5330 CRIJ5340		COSC1372	CS 5342 CS 5350	COSC5342
COM	534			COSC1373	CS 5369	COSC5369
COM	130	COMM1370	CS 1323		(
COM	131	COMM1315	CS 2302	COSC2370	CS 5402	COSC5402

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	CS	669A	COSC5390	ECO	3360	ECON3360	EGR 230	ENGR2301
	CS	669B	COSC5391	ECO	337	ECON3370	EGR 231	ENGR2302
	DAN .	1240	DANC1270	ECO	339	ECON3390	EGR 233	ENGR2311
	DAN	1251	DANC1247	ECO	431	ECON4310	EGR 234	ENGR2374
	DAN	1252	DANC1248	ECO	4311	ECON4311	EGR 236	ENGR2376
	DAN	1253	DANC2247	ECO	4315	ECON4315	EGR 237	ENGR2377
	DAN	1261	DANC1241	ECO	433	ECON4330	EGR 335	ENGR3350
	DAN	1262 ·	DANC1242	ECO	434	ECON4340	EGR 336	ENGR3360
	DAN	1263	DANC2241	ECO	435 .	ECON4350	EGR 337	ENGR3370
	DAN	1264	DANC2242	ECO	438	ECON4380	EGR 4101	ENGR4101
	DAN	127	DANC1222	·ECO	530	ECON5300	EGR 4201	ENGR4201
	DAN	128	DANC1233	ECO	535	ECON5350	EGR 4301	ENGR4301
	DAN.	1281	DANC1245	ECO	537	ECON5370	EGR 436	ENGR4360
	DAN .	1282 .	DANC1246	ECO	538	ECON5380	EGR 4361	ENGR4361
	DAN	1283	DANC2245	EE .	217	ELEN2107	EGR 5101	ENGR5101
	DAN	129	DANC1210	EE .	2377	ELEN2300	EGR 5201	ENGR5201
	DAN	132	DANC1370	EE	318	ELEN3108	EGR 5301	ENGR5301
	DAN	2110	DANC2170	EE .	319	ELEN3109	EGR 5303	ENGR5303
	DAN	2221	DANC2270	EE	3201	ELEN3201	EGR 5305	ENGR5305
	DAN	2222	DANC2271	EE .	3305	ELEN3331	EGR 5307	ENGR5373
,	DAN	2250	DANC2272	EE	331	ELEN3312	EGR 5308	ENGR5308
	DAN :		DANC2273	EE .	332	ELEN3313	EGR 5309	
	DAN	2280	DANC2274	EE	333 _:	ELEN3321	EGR 5310	ENGR5310
	DAN	231	DANC2370	EE	3305	ELEN3331	EGR 5311	ENGR5311
	DAN	233	DANC2371	EE	336	ELEN3341	EGR 5313	ENGR5313
	DAN	235	DANC1301	EE	337	ELEN3371	EGR 5314	ENGR5314
	DAN	3301	DANC3301	EE	3301	ELEN3381	EGR 5315	ENGR5315
	DAN	331	DANC3310	EE	411	ELEN4101	EGR 5318	ENGR5318
	DAN	335	DANC3350	EE	412	ELEN4102	EGR 5319	ENGR5319
	DAN	336 .	DANC3360	EE	426	ELEN4206	EGR 532	ENGR5383
	DAN DMTH	438	DANC4380	EE	427	ELEN4207 ELEN4361	EGR 5320 EGR 5321	ENGR5325 ENGR5321
		1301	DMTH0071 DMTH0371	EE EE	4302 4304	ELEN4301 ELEN4304	EGR 5321	ENGR5321
	DMTH		DMTH0371	EE	4306	ELEN4386	EGR 5324	ENGR5324
	DRDG		DRDG0071	EE	4307	ELEN4387	EGR 5324	ENGR5324
	DRDG		DRDG0371	EE	4309	ELEN4342	EGR 5327	ENGR5327
	DWRT		DWRT0071	EE	431	ELEN3322	EGR 5328	ENGR5328
	DWRT		DWRT0371	EE	432	ELEN4323	EGR 5329	ENGR5329
	ECO	131	ECON2302	EE .	436	ELEN4351	EGR 533	ENGR5330
	ECO	132	ECON2301	EE	437	ELEN4372	EGR 5330	ENGR5331
	ECO	233	ECON1301	EE	438	ELEN4381	EGR 5331	ENGR5332
,	ECO ·	331	ECON3310	EE	4391	ELEN4391	EGR 5332	ENGR5332
		332	ECON3310 ECON3320	EE	4392	ELEN4392	EGR 5334	ENGR5334
	ECO	333	ECON3330	EGR	111	ENGR1101	EGR 5337	ENGR5337
	ECO	334	ECON3340	EGR	114	ENGR1174	EGR 5338	ENGR5338
	ECO	335	ECON3350	EGR	130	ENGR1301	EGR 5341	ENGR5336
	ECO	336	ECON3306	EGR	223	ENGR2273	EGR 5342	ENGR5341
	200	555	230110000 ,	LOI	220	L.1011270.	DOI: UUTE	TI 1010042

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	EGR	5343	ENGR5343	ENG	2312	ENGL2326	ENG	4328	ENGL4328	•
	EGR	5348	ENGR5348	ENG	2313	ENGL2322	ENG	4328	ENGL5328	
	EGR	535	ENGR5352	ENG	2314	ENGL2374	ENG	4329	ENGL4329	
	EGR	5350	ENGR5351	ENG	2315	ENGL2375	ENG .	4329	ENGL5329	
	EGŔ	5351	ENGR5344	ENG	2316	ENGL2376	ENG	4333	ENGL4333	
	EGR ·	5353	ENGR5353	ENG	2317	ENGL2377	ENG ·	4333	ENGL5333	•
	EGR	536	ENGR5360	ENG	2360	ENGL2360	EŃG	4334	ENGL4334	
	EGR	5360	ENGR5393	ENG	331	ENGL3310	ENG	4334	ENGL5334	
	EGR	5361	ENGR5395	ENG	3316	ENGL3316	ENG	4336	ENGL4336	
	EGR	5362	ENGR5397	ENG	332	ENGL3320	ENG	4336	ENGL5336	
	EGR	5366	ENGR5366	ENG	3322	ENGL3322	ENG	434	ENGL4340	
	EGR	5369	ENGR5369	ENG	3324	ENGL3324	ENG	434	ENGL5340	
	EGR	537	ENGR5370	ENG	3326	ENGL3326	ENG	4345	ENGL4345	٠,
	EGR .	538	ENGR5380	ENG	3321	ENGL3321	ENG	4345	ENGL5345	
	EGR	5387	ENGR5387	ENG	334	ENGL3340	ENG	435	ENGL4350	
	EGR	539	ENGR5389	ENG	335	ENGL3350	ENG	435	ENGL5351	
	EGR	5390	ENGR5388	ENG	336	ENGL3360	ENG	4355	ENGL3351	
	EGR	611	ENGR6110	ENG	337	ENGL3370	ENG	4355	ENGL4355	
	EGR		ENGR6310	ENG		ENGL3370	ENG	4360	ENGL3333	
		631		i'	338	* 1	ENG			
	EGR EGR	6313	ENGR6313	ENG	339	ENGL3390		4360	ENGL5361 ENGL4365	
		00-1	ENGR6314	ENG	411	ENGL4110	ENG	4365		
	EGR	632 6339	ENGR6320	ENG	430	ENGL4300 ENGL5300	ENG	4365 438	ENGL5365 ENGL4380	
	EGR		ENGR6339	ENG	430		ENG		-	
	EGR	6340	ENGR6340	ENG	4311	ENGL4311 ENGL5316	ENG	438	ENGL5381	
	EGR	6343	ENGR6343	ENG	4311		ENG	439	ENGL4390	
	EGR	6344	ENGR6344	ENG	4312	ENGL4312	ENG	439	ENGL5392	•
	EGR	6349 .	ENGR6349	ENG	4312	ENGL5312	ENG	511	ENGL5110	
	EGR	6359	ENGR6359	ENG	4314	ENGL4314	ENG	5311	ENGL5311	
	EGR	6362	ENGR6394	ENG	4314	ENGL5315	ENG	533	ENGL5330	
	EGR	6368	ENGR6368	ENG	4317	ENGL4317	ENG	535	ENGL5350	
	EGR	6369	ENGR6369	ENG	4317	ENGL5317	ENG	536	ENGL5360	
	EGR	6387	ENGR6387	ENG	4318	ENGL4318	ENG	537	ENGL5370 ENGL5380	
	EGR	6388	ENGR6388	ENG	4318 4319	ENGL5318 / ENGL4319	ENG ENG	538 539	ENGL5385	
	EGR	6389	ENGR6389 ENGR6601	ENG		ENGL5319	ENG	6390	ENGL5385	
	EGR EGR	661	ENGR6602	ENG ENG		ENGL5319 ENGL4324		.6391	ENGL5390 ENGL5391	
			. 1		432		ENG		ENGL5391	
	EGR /		ENGR5390	ENG ENG	432	ENGL5324	ENG	5313A 5313B	ENGL5313	,
	EGR	669B	ENGR5391		4320	ENGL4320			FBED3341	
	ENG	131	ENGL1301	ENG	4320	ENGL5320	FBE	3341		
	ENG	132	ENGL1302	ENG	4321	ENGL4321	FBE	3344	FBED3344	
_	ENG	134	ENGL1374	ENG	4321	ENGL5321	FBE	3347	FBED3347	
′	ENG	1360	ENGL1360	ENG	4322	ENGL4322	FBE	3348	FBED3348	
	ENG	138	ENGL1378	ENG	4322		FBE	3349	FBED3349	
	ENG		ENGL1379	ENG	4323	ENGL4323	FBE	4312	FBED4312	•
	ENG	230	ENGL2370	ENG	4323	ENGL5323	FBE	4313	FBED4313	
	ENG .		ENGL2371	ENG	4326	ENGL4326	FBE .		FBED4326	
	ENG	2311	ENGL2331	ENG	4326	ENGL5326	FBE	4342	FBED4342	

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FBE ·	4343	FBED4343	FCS 334	FCSC3340	FCS		FCSC5367
FBE	4344	FBED4344	FCS 335	FCSC3350	FCS	437	FCSC4370
FBE	4348	FBED4348	FCS 336	FCSC3360.	FCS	438	FCSC4380
FCS	111	FCSC1171	FCS 337	FCSC3370	· FCS	439	FCSC4390
FCS	112	FCSC1172	FCS 338	FCSC3380	FCS	439	FCSC5329
FCS	130	FCSC1370	FCS 339	FCSC3390	FCS	462	FCSC4620
FCS	1301	FCSC1371 .	FCS 411	FCSC4110	FCS	5101	FCSC5101
FCS	1302	FCSC1372	FCS 430	FCSC4300	FCS	5201	FCSC5201
FCS .	1303	FCSC1373	FCS 430	FCSC5321	FCS	530	FCSC5300
FCS.	1304 .	FCSC1374	FCS 4301	FCSC4301	FCS	5301	FCSC5301
FCS	131	FCSC1315	FCS 4305	FCSC4305	FCS	5304	FCSC5304
FCS	132	FCSC1328	FCS 4305	FCSC5322	FCS	5306	FCSC5306
FCS	133	FCSC1375	FCS 4307	FCSC4307	FCS	5308	FCSC5308
FCS	134	FCSC1376	FCS 4307	FCSC5323	FCS	531	FCSC5310
FCS	137	FCSC1377	FCS 4308	FCSC4308	FCS	5311	FCSC5311
FCS	138	FCSC1322	FCS 431	FCSC4310	FCS	5312	FCSC5312
FCS	2103	FCSC2170	FCS 4313	FCSC4313	·FCS	5313	FCSC5313
FCS	2301	FCSC2371	FCS 4313	FCSC5324	FCS.	5314:	FCSC5314
FCS	2302	FCSC2372	FCS 4315	FCSC4315	· FCS	5315 .	FCSC5315
FCS	2304	FCSC2373	FCS 4317	FCSC4317	FCS	5316	FCSC5316
FCS	2305	FCSC2374	FCS 4317	FCSC5325	FCS	5317	FCSC5317
FCS	2307	FCSC2375	FCS 4319	FCSC4319	FCS	5318	FCSC5318
FCS	231	FCSC1320	FCS 432	FCSC4320	FCS.	5319	FCSC5319
FCS	2310	FCSC2376	FCS 432	FCSC5326	, FCS	532	FCSC5320
FCS	2313	FCSC2377	FCS 4326	FCSC4326	FCS	533	FCSC5330
FCS	2314	FCSC2378	FCS 4327	FCSC4327	FCS -	534 . :	ECSC5340
FCS ·	232 .	FCSC2379	FCS 4328	FCSC4328	FCS	535	FCSC5350
FCS .	2322	FCSC2370	FCS 433	FCSC4330	: FCS	5351	FCSC5351
FCS	2323	FCSC2380	FCS 4332	FCSC4332 1.	. FCS	:5359	FCSC5359
FCS	2327	FCSC2381	FCS 4334	FCSC4334	FCS	537 .	FCSC5370
FCS.	233	FCSC2382	FCS 4334	FCSC5334	· FCS	538 A.	FCSC5380
FCS	2332	FCSC2383	FCS. 4337	FCSC4337	FCS	669A	FCSC5390
FCS	2333	FCSC2384	FCS 4337	FCSC5337	FCS .	669B	FCSC5391
FCS	234	FCSC2385	FCS 434	FCSC4340	FIN	331	FINC3310
FCS	235	FCSC2386	FCS 434	FCSC5327	FIN.	332	FINC3320
FCS	237	FCSC2387	FCS 4344	FCSC4344	FIN	336	FINC3306
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FCS.	330	FCSC3300	FCS 4347	FCSC4347	FIN	432	FINC4320
FCS	3302	FCSC3302	FCS 4347	FCSC5347	FIN	433	FINC4330
FCS	3304	FCSC3304	FCS 435	FCSC4350	FIN	436	FINC4306
FCS	3305	FCSC3305	FCS 435	FCSC5328	FIN	439	FINC4390
	3306	FCSC3306	FCS 4357	FCSC4357	FIN	530	FINC5300
FCS	.3307	FCSC3307	FCS 4357	FCSC5357	FIN.	531	FINC5310
FCS	3315	FCSC3315	FCS 4359	FCSC4359	FIN	532	FINC5320
FCS	332	FCSC3320	FCS 4360:	FCSC4360	FRE	131 .	FREN1311
FCS	3327	FCSC3327	FCS 4360	FCSC5360	FRE	132	FREN1312
FCS	333	FCSC3330	FCS 4367	FCSC4367	FRE:		FREN2311

FRE 232	FREN2312	GER 231	GERM2311	HLTH 137	HLTH1370
FRE 330	FREN3300	GER 232	GERM2312	HLTH 234 ·	HLTH2374
FRE 335	FREN3350	HIS 131	HIST2321	HLTH 236	HLTH2376
FRE 336	FREN3360	HIS 132	HIST2322	HLTH 238	HLTH2378
FRE 337	FREN3370	HIS 134	HIST2301	HLTH 336	HLTH3360
FRE 338	FREN3380	HIS 231	HIST1301	HLTH 337	HLTH3370
FRE 339	FREN3390	HIS 232	HIST1302	HLTH 430	HLTH4300
FRE 431	FREN4310	HIS 233	HIST2373	HLTH 436	HLTH4360
FRE 433	FREN4330	HIS ,234	HIST2374	HLTH 437	HLTH4370
FRE 439	FREN4390	HIS 236	0 HIST1361	HLTH 446	HLTH4460
FSC 533	FCSC5330	HIS 236	1 HIST1362	HON 4360	HNRS4360
GEO 141	GEOL1403	HIS 237	HIST2377	HON 4361	HNRS4361.
GEO 142	GEOL1404	HIS 266	0 HIST2660	HUM 130	HUMA1315
GEO 236	GEOL2376	HIS 339	HIST3390	HUM 1360	HUMA1360
GEO 237	GEOL2377	HIS 430	HIST4300	HUM 4361	HUMA4361
GEO 241	GEOL2471	HIS 431	HIST4310	IE 311	INEN3110
GEO 243	GEOL2473	HIS 431	1 HIST4311	IE 330	INEN3300
GEO 3101	GEOL3101	HIS 431	4 HIST4314	IE 3301	INEN3301
GEO 3102	GEOL3102	HIS 431	5. HIST4315	IE 3312	INEN3312
GEO 339	GEOL3390	HIS 431	5 HIST5315	IE 3322	INEN3322
GEO 341	GEOL3410	HIS 431	6 HIST4316	IE 333	INEN3330
GEO 342	GEOL3420	HIS 431	·	IE 336	INEN3360
GEO 345	GEOL3450 .	HIS 431	8 HIST4318	IE 338	INEN3380
GEO 346	GEOL3460	HIS 431		IE 339	INEN3390
GEO 360	GEOL3600	HIS 431		IE 430	INEN4300
GEO 4101	GEOL4101	HIS 431	9 HIST5319	IE 430	INEN5300
GEO 4201	GEOL4201	HIS 432	HIST4324	IE 4301	INEN4301
GEO 427	GEOL4270	HIS 432	5 HIST4325	IE 431	INEN4310
GEO 428	GEOL4280	HIS 432	5 HIST5325	IE 431	INEN5310
GEO 4301	GEOL4301	HIS 433	5 HIST4335	IE 4315	INEN4315
GEO 433	GEOL4330	HIS 433	5 HIST5335	IE 4315	INEN5315
GEO 436	GEOL4361	HIS 434	1 HIST4341	IE 4316	INEN4316
GEO 4360	GEOL4360	HIS 434	1 HIST5341	IE 432	INEN4320
GEO 437	GEOL4371	HIS 434	2 HIST4342	IE 432	INEN5320
GEO 4370	GEOL4370	HIS 434	2 HIST5342	IE 434	INEN4340
GEO 4380	GEOL4380	HIS 435	HIST4350	IE 434	INEN5340
GEO 439	GEOL4391	HIS 439	HIST4390	IE 435	INEN4350
GEO 4390	GEOL4390	HIS 531	1 HIST5311	IE 435	INEN5350
GEO 4401	GEOL4401	HIS 531	2 HIST5312	IE 4351	INEN4351
GEO 441	GEOL4410	HIS 532	HIST5320	IE 437	INEN4370
GEO 442	GEOL4420	HIS 534	HIST5340	IE 437	INEN5370
GEO 445	GEOL4451	HIS 537	•	IE 438	INEN4380
GEO 4450	GEOL4450 /	HIS 669		KIN 132	KINT1301
GEO 5301	GEOL5301	HIS 669		KIN 231	KINT2371
GEO 532	GEOL5320	HLTH 133		KIN 232	KINT2372
GER 131	GERM1311	HLTH 434		KIN 234	KINT2374
GER 132	GERM1312	HLTH 131		KIN 236	KINT2376
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KIN 237 KINT2377	ME 4316	MEEN4316 .	MKT	334	MKTG3340
KIN 238 KINT2378	ME 4317	MEEN4317	MKT	431	MKTG4310
KIN 332 KINT3320	ME 4319	MEEN4319	MKT	432	MKTG4320
KIN 333 KINT3330	ME 432	MEEN4320	MKT	433	MKTG4330
KIN 335 KINT3350	ME 432	MEEN5320	MKT	436	MKTG4360
KIN 336 KINT3360	ME 4323	MEEN4323	MKT	437	MKTG4370
KIN 337 KINT3370	ME 435	MEEN4350	MKT		MKTG4380
KIN 339 KINT3390	ME 435	MEEN5350	MKT	530	MKTG5300
KIN 430 KINT4300	ME 438	MEEN4380 .	MKT	531	MKTG5310
KIN 4301 KINT4301	ME 440	MEEN4400	MKT	533	MKTG5330
KIN 431 KINT4310	ME 540	MEEN5400	MKT	534	MKTG5340
KIN 433 KINT4330	MED 5310	MUED5310	MLB	1101	MULB1170
KIN 436 KINT4360	MED 532	MUED5320	MLB	1102	MULB1171
KIN 438 KINT4380	MED " 533 · ·	MUED5330	MLB	1104	MULB1172
KIN 462 KINT4620	MED 534	MUED5340	MLB	1120	MULB1173
KIN 530 KINT5300	MED 537	MUED5370	MLB	114	MULB1174
KIN 531 KINT5310	MED .539	MUED5390	MLB	1140	MULB1175
KIN 5311 KINT5311	MGT 331	MGMT3310	MLB	1143	MULB1176
KIN 5312 KINT5312	MGT 332	MGMT3320	MLB	1150	MULB1177
KIN 532 KINT5320	MGT 333	MGMT3330	MLB	117	MULB1178
KIN 533 KINT5330	MGT 431	MGMT4310	MLB	118	MULB1179
KIN 534. KINT5340	MGT 432	MGMT4320	MLB	124	MULB1271
KIN 535 KINT5350	MGT 433	MGMT4330	MLB	210 4	MULB1157
KIN 536 KINT5360	MGT 434	MGMT4340	MLB	413	MULB4130
KIN 537 KINT5370	MGT 437	MGMT4370	MLT	121	MULT1208
KIN 538 KINT5380	MGT 439	MGMT4390	MLT	222	MULT1209
KIN 669A KINT5390	MGT 530	MGMT5310	MLT	,	MULT3330
KIN 669B KINT5391	MGT 531	MGMT5320	MLT	334	MULT3340
KINA 129 KINA1270	MGT 532	MGMT5330	MLT	536	MULT5360
KINA 2201 KINA2271	MGT 533	MGMT5340	·MLT	537	MULT5370
KINA 2203 KINA2273	MGT 538	MGMT5380	MLT	538 ⁻	MULT5380
KINA 2205 KINA2275	MGT 539	MGMT5390	MLT	539	MULT5390
KINA 2206 KINA2255	MIS 133	MISY1373	MTH.	, .	MATH1335
KINA 2207 KINA2277	MIS 334	MISY3340	MTH	1334	MATH1314
KINA 2208 KINA2278	MIS 335	MISY3350	MTH	1335	MATH2312
KINA 2209 KINA2279	MIS 337	MISY3370	MTH	1336	MATH1336
ME 321 MEEN3210	MIS 434	MISY4340	MTH	1337	MATH1316
ME 330 MEEN3300	MIS 436	MISY4360	MTH	134	MATH1324
ME 331 MEEN3310	MIS 437	MISY4370	MTH	1341° -	MATH1325
ME 3311 MEEN3311	MIS 438	MISY4380 .	MTH	1345	MATH2305
ME 332 MEEN3320	MIS 439	MISY4390		1460	MATH1460
ME 334 MEEN3340	MIS 534	MISY5340	MTH		MATH2413
ME 335 MEEN3350	MIS 536	MISY5360		149	MATH2414
ME 338 MEEN3380	MIS 539	MISY5390	MTH	233	MATH2318
ME 411 MEEN4110	MKT 331	MKTG3310	MTH		MATH1342
ME 431 MEEN4310	MKT 332	MKTG3320	MTH	236	MATH2376
ME 4313 MEEN4313	MKT 333	MKTG3330	MTH	237	MATH2377
	1				

	MTH 241	MATH2415	MUS. 110	MUSI1170 .	OAS 337	OFAD3370
	MTH , 330	MATH3300	MUS 130	MUSI1306	OAS 338	OFAD3380
	MTH 3313	MATH3313	MUS 131	MUSI1371	OAS 431	OFAD4310
	MTH 3315	MATH3315	MUS 227	MUSI2277	OAS 434	OFAD4340
	MTH 3317	MATH3317	MUS 311	MUSI3110	OAS 439	OFAD4390
	MTH 3321	MATH3321	MUS 312	MUSI3120	OAS 530	OFAD5300
	MTH 333	MATH3330	MUS 313	MUSI3130	OAS 539	OFAD5390
	MTH 3345	MATH3345	MUS 314	MUSI3140	PED 1201	PEDG1271
	MTH 335	MATH3350	MUS : 315	MUSI3150	PED : 2301	PEDG2371
	MTH . 3370	MATH3370	MUS 327	MUSI3270	PED 2302	PEDG2372
	MTH 338	MATH3380 .	MUS. 331	MUSI3310	PED 2310	PEDG2373
	MTH 3401	MATH3401	MUS 332	MUSI3320	PED 232	PEDG2374
	MTH 431	MATH4310	MUS 335	MUSI3350 · · ·	PED 3304	PEDG3304
	MTH 431	MATH5350	MUS 336	MUSI3360	PED 3305	PEDG3305
	MTH 4315	MATH4315	MUS : 337	MUSI3370	PED 331	PEDG3310
	MTH 4315	MATH5315	MUS 338	MUSI3380	PED 332	PEDG3320
	MTH 4316	MATH4316	MUS 411	MUSI4110	PED 3326	PEDG3326
	MTH 4316	MATH5316	MUS: 412.	MUSI4120	PED 334	PEDG3340
	MTH 433	MATH4330	MUS 430	MUSI4300	PED 336	PEDG3360
	MTH 433.	MATH5330	MUS 431	MUSI4310	PED 337	PEDG3370
	MTH 4331	MATH4331	MUS 432	MUSI4320	PED 338	PEDG3380
	MTH 4331	MATH5351	MUS 530	MUSI5300	PED 339	PEDG3390
	MTH 5303	MATH5303	MUS . 531	MUSI5310	PED 4300	PEDG4300
	MTH 5304	MATH5304	MUS 532	MUSI5320	PED 4300	PEDG5300
	MTH 5308	MATH5308	MUS · 669A	MUSI5390	PED 4301	PEDG4301
	MTH 531	MATH5310	MUS 669B	MUSI5391	PED 4301	PEDG5301
	MTH 5310	MATH5311	NUR 221	NURS2271	PED 4302	PEDG4302
	MTH . 5311	MATH5312	NUR 261'	NURS2671	PED 4302	PEDG5302
	MTH 532	MATH5320	NUR 262	NURS2672	PED 4303	PEDG4303
	MTH 5331	MATH5331	NUR 292	NURS2972	PED : 4303	PEDG5303
	MTH . 5335 · ·	MATH5335	NUR 328	NURS3280	PED 4304	PEDG4304
	MTH 534	MATH5340	NUR 331	NURS3310	PED 4304	PEDG5304
	MTH 537	MATH5370	NUR 353	NURS3530	PED 4305	PEDG4305
	MTH 669A	MATH5390	NUR 355	NURS3550	PED 4305	PEDG5305
	MTH: 669B	MATH5391	NUR 382	NURS3820	PED 4306	PEDG4306
	MTY 131	MUTY1370	NUR 430	NURS4300	PED 4306	PEDG5312
٠.	MTY 132	MUTY1311	NUR 433	NURS4330	PED 4307	PEDG4307
	MTY 133	MUTY1312	NUR 481	NURS4810	PED 4307	PEDG5307
	MTY 232	MUTY2311	NUR 491	NURS4910	PED 4308	PEDG4308
	MTY 233	MUTY2312	OAS 132	OFAD1312	PED (4308	PEDG5308
	MTY 321	MUTY3210	OAS 230	OFAD1311	PED 4309	PEDG4309
	MTY 322	MUTY3220	OAS 231	OFAD1301	PED 4309	PEDG5309
	MTY 421 .	MUTY4210	OAS 232	OFAD1302	PED 431	PEDG4310.
		MUTY4220	OAS 233	OFAD2301	PED 431	PEDG5313
	MTY 535	MUTY5350	OAS 331	OFAD3310	PED 4310	PEDG4311
		MUTY5360	OAS 335	OFAD3350	PED 4310	PEDG5314
		MUTY5370	OAS 336	OFAD3360	PED 4331	PEDG4331

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	PED -	4331	PEDG5331	PHY.	4301	PHYS4301	PSY	5311	PSYC5311
	PED	434	PEDG4340	PHY	432	PHYS4320	PSY	5312	PSYC5312
	PED	434	PEDG5315	PHY	448	PHYS4480	PSY	5313	PSYC5313
	PED	4361 •	PEDG4361	POLS	131	POLS2304	PSY	532	PSYC5302
	PED ·	438	PEDG4380	POLS	231	POLS2301	PSY	5320	PSYC5320
	PED	438	PEDG5316	POLS	232	POLS2302	PSY	5321	PSYC5321
	PED	439	PEDG4390	POLS	321	POLS3210	PSY	5322	PSYC5322
	PED	439	PEDG5317	POLS	322	POLS3220	PSY	5323	PSYC5323
	PED	462	PEDG4620	POLS	323	POLS3230	PSY	533	PSYC5303
	PED	463	PEDG4630	POLS.		POLS3310	PSY	5330·	PSYC5330
	PED	465	PEDG4650	POLS	332	POLS3310	PSY	5331	PSYC5331
			PEDG4030 PEDG5310	POLS	334	POLS3340	PSY	534	PSYC5340
	PED	531							
	PED	5311	PEDG5311	POLS	335	POLS3350	PSY	535	PSYC5350
		532	PEDG5320	POLS	337	POLS3370	PSY	669A	PSYC5390
	PED		PEDG5321	POLS	339	POLS3390	PSY	669B	PSYC5391
	PED	5322	PEDG5322	POLS	430	POLS4300	SOC	131	SOCI1301
	PED	5323	PEDG5323	POLS	432	POLS4320	SOC	132	SOCI1306
	PED	5324	PEDG5324	POLS	433	POLS4330	SOC	233	SOCI2301
	PED		PEDG5325	POLS	434	POLS4340	SOC	235	SOCI2375
	PED	5334	PEDG5334	POLS		POLS4350	SOC	331	SOCI3310
	PED	534	PEDG5340	POLS	437	POLS4370	SOC	3311.	SOCI3311
	PED	5340	PEDG5341	POLS	439	POLS4390	SOC	332	SOCI3320
	PED .	535	PEDG5350	POLS	532	POLS5320	SOC	333	SOCI3330
,	PED	5351	PEDG5351	POLS	535	POLS5350	SOC .	335	SOCI3350
	PED ·	5352	PEDG5352	PSY	131	PSYC2301	SOC	336	SOCI3306
	PED	5355	PEDG5355 .*	PSY	234	PSYC2308	SOC	3360	SOCI3360
	PED	5356	PEDG5356	PSY	237 .	PSYC2376	SOC	337	SOCI3370
	PED	5357	PEDG5357	PSY	241	PSYC2471	SOC	338	SOCI3380
	PED ·	5358	PEDG5358	PSY	331	PSYC3310	SOC	339	SOCI3390
	PED	5359	PEDG5359	PSY	332°	PSYC3320	SOC	411	SOCI4110
	PED	536	PEDG5306	PSY	333	PSYC3330	SOC	430	SOCI4300
•	PED	5360	PEDG5360	PSY	334	PSYC3340	SOC	4301	SOCI4301
•	PED	5361	PEDG5361	PSY	336	PSYC3360	SOC .	431	SOCI4310
	PED	5362	PEDG5362	PSY	342	PSYC3420	SOC	432	SOCI4320
	PHY	247	PHYS2425	PSY	410	PSYC4100	SOC	434	SOCI4340
	PHY	248	PHYS2426	PSY ·	430	PSYC4300	SOC :	435	SOCI4350
•	PHY.	331	PHYS3310	PSY:	4301	PSYC4301	SOC	438	SOCI4380
	PHY	335	PHYS3350	PSY	431	PSYC4310	SOC	439	SOCI4390
	PHY	338 -	PHYS3380	PSY	432	PSYC4320	SPA	131	SPAN1313
	PHY	339 .	PHYS3390	PSY	436	PSYC4360	SPA	132	SPAN1314
	PHY	343	PHYS3430	PSY		PSYC4380	SPA	231	SPAN2311
	PHY	345	PHYS3450	PSY	443	PSYC4430	SPA	232	SPAN2312
	PHY	346	PHYS3460	PSY		PSYC5120	SPA	330	SPAN3300.
	PHY	4101	PHYS4101	PSY	514	PSYC5140	SPA	331	SPAN3310
	PHY	4201	PHYS4201	PSY	530	PSYC5300	SPA	332	SPAN3320
						· ·		333	
	PHY	421 .	PHYS4210	PSY	531	PSYC5301	SPA		SPAN3330
	PHY	422	PHYS4220	PSY	5310	PSYC5310	SPA	334	SPAN3340

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SPA	335	SPAN3350	THE	131	THEA1310	THE	431	THEA5310	
SPA	338	SPAN3380	THE	1311	THEA2336	THE	434	THEA4340	
SPA	339	SPAN3390	THE	132	THEA1330	THE	434	THEA5340	
SPA	432	SPAN4320	THE.	135	THEA1341	THE	435	THEA4350	
SPA	433	SPAN4330	THE	137	THEA1351	THE	435	THEA5349	
SPA	436	SPAN4360	THE	230	THEA2370	THE	436	THEA4360	
SPA	438	SPAN4380	THE	231	THEA2371	THE	437	THEA4370	
SWK	131	SOWK2361	THE	232	THEA2372	THE	437	THEA5370	
SWK	231	SOWK2371	THE	235	THEA2375	THE	4371	THEA4371	
SWK	330	SOWK3300	THE	237	THEA1352	THE	4371	THEA5371	
SWK	331	SOWK3310	THE	331	THEA3310	THE	438	THEA4380	
SWK	332	SOWK3320	THE	332	THEA3320	THE	438	THEA5380	
SWK	333	SOWK3330	THE	333	THEA3330	THE	439	THEA4390	
SWK	334	SOWK3340	THE	336	THEA3361	THE"	439	THEA5399	,
SWK	335	SOWK3350	THE	3360	THEA3360	THE	5325	THEA5325	
SWK	430	SOWK4300	THE	337	THEA3370	THE	533	THEA5330	
SWK	432	SOWK4320	THE	338	THEA3380	THE	5350	THEA5350	
SWK	4321	SOWK4321	THE	339	THEA3390	THE	669A	THEA5390	
SWK	4324	SOWK4324	THE	430	THEA4300	THE	669B	THEA5391	
SWK	438	SOWK4380	THE	430	THEA5300			•	

THEA4310

THE 431

THE

130

THEA1370



Graduate students in communication disorders enjoy the benefit of working in clinical settings.

Directory of Personnel 2000-2002

Board of Regents

(year term expires in parentheses)

The Texas State University System

Floyd Nickerson, Chairman (2003)	Dallas	
Nancy R. Neal, Vice Chairman (2003)	Lubbock	
Patricia Diaz Dennis (2005)	San Antonio	
Dionicio "Don" Flores (2005)		
John P. Hageman (2003)		
James A. "Jimmy" Hayley (2005)		
Thomas M. Moeller (2001)		
Pollyanna A. Stephens (2001)	San Angelo	
Macedonio "Massey" Villarreal (2001)	Houston	
Visit C. III.		

Lamar G. Urbanovsky, Chancellor

University Administration

James M. Simmons, Ed.D., President

William G. Cale, Ph.D., Executive Vice President for Academic Affairs Mike Ferguson, B.B.A., C.P.A., Vice President for Finance and Operations

Kurt Czupryn, Ph.D., Vice President for Student Affairs

Kevin B. Smith, Ph.D., Associate Vice President for Academic Affairs

Cliff E. Woodruff, B.B.A., M.S., Assistant Vice President for Information Systems

Camille Mouton, B.S., Interim Executive Director for University Advancement

W. Brock Brentlinger, Ph.D., Assistant to the President

W. Dean Billick, M.S., Director of Athletics

Academic Council of Deans

Avery, Elizabeth Fuseler, M.S., Director of Library Services

Hopper, Jack R., Dean, College of Engineering

Moore, Gary A., Ph.D., Dean, College of Business

Moulton, Robert, Ph.D., Associate Vice President for Research and Dean of Graduate Studies

_____, Dean, College of Arts and Sciences

Schultz, Russ A., D.M.A., Dean, College of Fine Arts and Communication

Westerfield, R. Carl, Ph.D., Dean, College of Education and Human Development

The Graduate Council

Ho, Thomas C., Ph.D., Professor of Chemical Engineering

Lindoerfer, Joanne, Ph.D., Associate Professor of Psychology

Moss, Jimmy D., D.B.A., Professor of Finance

Moulton, Robert D., Regents' Professor of Communication Disorders, Associate Vice President for Research and Dean of Graduate Studies

Ringlaben, Ravic, Ed.D., Professor of Professional Pedagogy, Chair of the Department of Professional Pedagogy

Vanderleeuw, James, Ph.D., Assistant Professor of Political Science

The Graduate Faculty 2000-2002

The following list reflects the status of the graduate faculty of Lamar University as of Fall, 1999. The date following each name is the academic year of first service to the University and does not necessarily imply continuous service since that time.

Akers, Hugh A., 1977, Professor Chemistry.

B.S., University of California at Riverside; Ph.D., University of California at Berkeley

Allin, Shawn, 1996, Assistant Professor of Chemistry.

B.Sc., University of Waterloo; Ph.D., University of Alabama System

Altemose, J.R., 1997, Professor of Sociology, Social Work and Criminal Justice.

B.A., Davidson College; M.Ed., Lamar University; M.A., Ph.D., Sam Houston State University; M.R.E., University of St. Thomas

Andreev, Valentin V., 1990, Assistant Professor of Mathematics. B.M., M.M., University of Sofia; Ph.D., University of Michigan

Andrews, Jean, 1988, Professor Deaf Education.

B.A., Catholic University; M.Ed., Western Maryland College: University of Illinois

Babin, L. Randolph, 1968, Professor of Music. B.M.Ed., Pha. D., Louisiana State University

Bandyopadhyay, Kakoli, 1998, Assistant Professor of Management Information Systems.
B.Eng., Jadavpur University; M.A., University of Alabama; Ph.D., University of Texas at Arlington

Bandyopadhyay, Soumava, 1992, Associate Professor of Marketing. B.S., Jadavpur University, Ph.D., University of Alabama

Barnes, Cynthia, 1982, Professor of Office Administration.

B.S., Howard Payne University; M.Ed., Texas Tech University; Ed.D., North Texas State University

Barton, Joel E. III, 1987, Professor of Health and Kinesiology. B.S., M.Ed., Ph.D., Texas A&M University

Bean, Wendell C., 1968, Professor of Electrical Engineering.

B.A., B.S., Lamar University; M.S., Ph.D., University of Pittsburgh; Registered Professional Engineer

Bienenstock, Michael, 1994, Assistant Professor of Deaf Education.

B.S., Rochester Institute of Technology; M.A., Gallaudet University; Ph.D., University of Maryland at College Park

Birdwell-Sykes, Donna, 1998, Professor of Anthropology. B.A., M.A., Ph.D., Southern Methodist University

Blackwell, E. Harold, 1990, Professor of Kinesiology and Chair, Department of Health and Kinesiology.

B.S.E., Delta State University; M.Ed., Memphis State University; Ed.D., University of Southern Mississippi

Boatwright, Douglas, 1986, Professor of Health and Kinesiology and Director of Graduate Program in Health and Kinesiology.

B.S., University of Alabama at Birmingham; M.S., Ph.D., Louisiana State University

Brust, Melvin V., 1978, Professor of Management and Finance.

B.S.E.E., M.S.E.E., University of Texas; Ph.D., North Texas State University; Registered Professional Engineer

Caroll, John M., 1972, Professor of History.

A.B., Brown University, M.A., Providence College, Ph.D., University of Kentucky

- Carter, Keith D., 1989, Associate Professor of Art. Walles Chair of Art. B.B.A., Lamar University
- Castle, David S., 1985, Associate Professor of Political Science. B.A., M.A., Marshall University; Ph.D., University of Rochester
- Chen, Daniel H., 1982, Professor of Chemical Engineering.
 B.S., National Chen-Kung University; M.S., National Taiwan University; Ph.D., Oklahoma State University; Registered Professional Engineer
- Chen, Kuo-Lane, 1999, Assistant Professor of Management Information Systems.

 B.A., National Cheng-Chi University; M.S., Georgia State University; Ph.D., Illinois Institute of Technology
- Chiou, Paul, 1988 Professor of Mathematics.
 B.S., Natiounal Chung Hsing University; M.A., Ph.D., University of Texas at Arlington
- Cho, Jai-Young, 1982, Professor of Economics.
 B.A., Yonsei University; M.A., University of Kansas; Ph.D., University of Oklahoma
- Christensen, Ana Beardsley, 1999, Assistant Professor of Biology.
 A.S., Richard Bland College, B.S., College of William and Mary; M.A., College of William and Mary; Ph.D., Clemson University
- Chu, Hsing wei, 1979, Professor of Industrial Engineering.
 B.S., Tunghai University; M.S., Asian Institute of Technology; Ph.D., University of Texas; Registered Professional Engineer
- Clark, Steven, 1998, Assistant Professor of Psychology. B.A., Brigham Young University, M.S., Ph.D., University of New Hampshire
- Cocke, David L., 1989, Jack M.Gill Professor of Chemistry. B.S., University of Texas; M.S., Lamar University; Ph.D., Texas A&M University
- Corder, Paul R., 1987, Professor of Mechanical Engineering. B.S., M.S., Ph.D., Texas A&M University; Registered Professional Engineer
- Cox, Carey F., 1998, Assistant Professor of Mechanical Engineering.

 B.S., M.S., Louisiana Tech University; Ph.D., Mississippi State University
- Crawford, Carolyn H., 1994, Associate Professor of Educational Leadership and Chair, Department of Educational Leadership. B.A., M.Ed., Lamar University; Ph.D., Texas A&M University
- Culbertson, Robert, 1974, Associate Professor of Music.
 B.M., M.M., Northern Illinois University; D.M.A., University of Texas at Austin
- Daigrepont, Lloyd M., 1981, Associate Professor of English. B.A., M.A., Ph.D., Louisiana State University
- Daniel, Bobby Dale, 1998, Assistant Professor of Mathematics. B.S., M.S., Stephen F. Austin State University; Ph.D., Texas A&M University
- Davis, Terri B., 1998, Assistant Professor of Political Science.
 B.S., M.A., University of Texas at Tyler; Ph.D., University of Texas at Austin
- Dawkins, Paul, 1997, Assistant Professor of Mathematics. B.S., M.S., Ph.D., University of Nebraska
- Deal, Randolph E., 1990, Associate Professor of Communication. Director of Speech and Hearing Center.
 - B.A., Oklahoma State University; M.C.D., Ph.D., University of Oklahoma; Certified Speech-Language Pathologist
- **Dobbs, Richard,** 1994, Adjunct Professor of Chemical Engineering and Assistant Director of Research-GCHSRC.
 - B.A., M.A., Miami University Ohio, Ph.D., University of Cincinnati

- Doerschuk, Peggy Israel, 1993, Assistant Professor of Computer Science. B.S., University of Southwestern Louisiana; Ph.D., Tulane University
- Dorris, Kenneth, 1965, Associate Professor of Chemestry. B.S., Ph.D., University of Texas
- Drapeau, Richard A., 1983, Professor of Business Statistics.
 - B.S., Arizona State University; M.B.A., Lamar University; Ph.D., Texas A&M University
- Drury, Bruce R., 1971, Professor of Political Science.
 - B.A., M.A., University of Nebraska; Ph.D., University of Florida
- DuBose, Elbert T., Jr., 1974, Associate Professor of Political Science.
 - B.A., Southwest Texas State University; M.A., Texas Tech University; Ph.D., University of Oklahoma
- Dyess, Wayne, 1977, Associate Professor Music.
 - B.M., Stephen F. Austin University, M.M., Catholic University of America; Ed.D., University of Houston
- Eliff, Connie, 1976, Associate Professor Family and Consumer Sciences.
 - B.S., Southwest Texas State University; M.S., Kansas State University; Ph.D., Texas A&M University; Registered Dietitian
- Ellis, Kim, 1990, Assistant Professor of Music.
 - B.M.E., Illinois Wesleyan University; M.M., Bowling Green State University; D.M.A., Ohio State University
- Esperat, Christina, 1998, Associate Professor of Nursing.
 - B.S.N., M.A.N., Silliman University; Ph.D., University of Texas at Austin
- Esser, James K., 1976, Professor of Psychology.
 - B.S., University of Iowa; Ph.D., Indiana University
- Fang, Xing, 1995, Assistant Professor of Civil Engineering.
 - B.S.C.E., Tsinghua University, M.S.C.E., Ph.D., University of Minnesota, Registered Professional Engineer
- Fearnley, Stephen P., 1999, Assistant Professor of Chemistry.
- B.S., Sheffield City Polytechnic, UK; Ph.D., University of Salford, UK
- Fitzpatrick, Oney D. Jr., 1991, Associate Professor of Psychology.
- B.A., College of Wooster; M.A., University of Dayton; Ph.D. University of Houston
- Friend, Tressa J., 1998, Instructor of Communication Disorders. B.S., M.A., Brigham Young University
- Frazier, Robert L., 1974, Professor of Criminal Justice.
- B.S., M.A., and Ph.D., Sam Houston State University
- Fritze, Ronald H., 1984, Professor of History.
 - B.A., Concordia College; M.A., M.L.S., Louisiana State University; Ph.D., University of Cambridge
- Gilman, Kurt A., 1986, Assistant Professor of Music.
- B.M., Eastman School of Music, M.M., Texas Tech University; D.M.A., University of Texas at Austin
- Giordano, James, 1996, Assistant Professor of Nursing.
 - B.S., St. Peter's College; M.A., Norwich University; M.Phil., M.S., Ph.D., City University of New York
- Godkin, Roy Lynn, 1981, Professor of Management. Chair, Department of Management and Marketing.
 - A.B., Bethany Nazarene College, M.R.B.E., Nazarene Theological Seminary, M.A., The University of Illinois at Springfield; Ph.D., University of North Texas

Gonthier, Keith A., 1998, Assistant Professor in Mechanical Engineering.

B.S., Louisiana State University, M.S., Auburn University; Ph.D., University of Notre

Gossage, John L., 1998, Professor of Chemical Engineering. B.S., M.S., Ph.D., Illinois Institute of Technology, Chicago, IL

Green, Alexia, 1998, Associate Professor of Nursing.

A.D.N., Alvin Community College; B.S.N., University of Texas Medical Branch; M.S.N., University of Texas Health Science Center; Ph.D., Texas Women's University

Griffith, Paul, 1997, Assistant Professor of English and Foreign Languages.
B.A., M.Phil., University of the West Indies; Ph.D., Pennsylvania State University

Gwin Howell H., Jr., 1962, Professor of History. B.A., M.A., Ph.D., Mississippi State University

Gwynn, Robert S., 1976, Professor of English.

A.B., Davidson College; M.A., M.F.A., University of Kansas

Haiduk, Michael W., 1983, Professor of Biology. B.S., M.S., Texas A&M University; Ph.D., Texas Tech University

Harrel, Richard C., 1966, Professor of Biology.

B.S., East Central State College; M.S.Ed., University of Georgia; Ph.D., Oklahoma State University

Hawkins, Charles, 1966, Regents' Professor of Economics; Chair, Department of Economics and Finance.

B.A., Lamar University; M.A., Ph.D., Louisiana State University

Hawkins, Emma, 1996, Assistant Professor of English.

B.A., Oklahoma Baptist University; M.Div., Southwestern Baptist Theological Seminary; M.A., Ph.D., University of North Texas

Hicks, David Wayne, 1999, Assistant Professor of Biology.

B.S., Texas A&M University; M.S., Texas A&M-Corpus Christi; Ph.D., The University of Texas at Arlington

Ho, Tho-Ching, 1982, Professor of Chemical Engineering.

B.S., National Taiwan University; M.S., Ph.D., Kansas State University, Registered Professional Engineer

Hodges, Steve, 1990, Associate Professor of Art.

M.F.A., University of Arkansas; B.S., Lamar University

Holmes, William R., 1990, Associate Professor of Educational Leadership.

B.A., Oklahoma Baptist University; Th.M., New Orleans Baptist Theological Seminary; M.S., Ph.D., University of Southern Mississippi

Hopper, Jack R., 1969, Professor of Chemical Engineering and Dean, College of Engineering. B.S., Texas A&M University; M.Ch.E., University of Delaware; Ph.D., Louisiana State University; Registered Professional Engineer

Hunt, Madelyn D., 1984, Professor of Biology.

B.S., Lamar University; M.P.H., Dr.P.H., University of Texas School of Pubic Health, Registered Medical Technologist (A.S.C.P.)

Jack, Meredith M., 1977, Associate Professor of Art. B.F.A., University of Kansas; M.F.S., Temple University

Jao, Mien, 1998, Assistant Professor of Civil Engineering.

B.S., Chung-Yuan University; M.Eng., Ph.D., Pennsylvania State University; Registered Professional Engineer Johnson, Barry W., 1983, Professor of Music, Interim Chair of the Department of Music, Theatre, and Dance.

C.B.M.E., M.A., Sam Houston State University; Ed.D., University of Houston

Jolly, Sonny, 1971, Professor of Health and Kinesiology.

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