1971

SUMMER SESSION

BULLETIN

Lamar State College of Technology

Beaumont, Texas

INDEX

BULLETIN

of

LAMAR STATE COLLEGE OF TECHNOLOGY

VOL. XXI FEBRUARY, 1971 NO. 7

Second class mail privileges authorized at Beaumont, Texas. Published by Lamar State College of Technology semi-monthly in February and May; monthly except in June, July, and August.

Member:

Association of Texas Colleges and Universities
American Council on Education
National Commission on Accreditation
Southern Association of Colleges and Schools
Association of American Colleges
Texas Association of Music Schools
American Society for Engineering Education
American Association of University Women
American Association of Colleges for Teacher Education
Approved by the Texas Education Agency
Approved for the Training of Veterans under all classifications
Departments of Chemical Engineering, Civil Engineering, Electrical Engineering, Industrial Engineering, and Mechanical Engineering accredited by Engineer's Council for Professional Development
Accredited by American Chemical Society
Department of Music accredited by National Association of Schools of Music
Departments of Elementary and Secondary Education accredited by the National Council for Accreditation of Teacher Education

ANNOUNCEMENTS FOR SUMMER SESSIONS, 1971

Summer I--May 31 through July 10, 1971
Summer II--July 12 through August 20, 1971
Summer III--June 21 through July 30, 1971
Summer IV--May 31 through August 20, 1971

The courses, tuition, and fees, and all other conditions and policies set forth in this catalog issue shall be subject to change without notification.

LAMAR STATE COLLEGE OF TECHNOLOGY

BOARD OF REGENTS

J.B. Morris, Chairman Emeritus . . . . . Beaumont, Texas
Otho Plummer, Chairman . . . . . Beaumont, Texas
Garland F. Shepherd, Vice-Chairman . . . . . Beaumont, Texas
A. H. Montagne, Secretary . . . . . Orangefield, Texas
Bryan Beck, Jr. . . . . Beaumont, Texas
Cecil Beeson . . . . . Orange, Texas
W. Samuel Monroe . . . . . Port Arthur, Texas
Pat Peyton, Jr. . . . . Beaumont, Texas
J. L. Smith . . . . . San Augustine, Texas

OFFICERS OF ADMINISTRATION

GENERAL

FRANK A. THOMAS, JR., B.S., M.S., Ph.D., President . . . . .
Administration Building

ANDREW J. JOHNSON, B.A., M.A., Ph.D., Vice-President of Academic Affairs . . . . . .
Administration Building

H.C. GALLOWAY, JR., B.S., M.Ed., Vice-President of Finance . . . . . .
Administration Building

DAVID L. BOST, B.A., M.J., Ph.D., Vice-President of Student Affairs . . . . . .
Student Affairs Building

G. A. WIMBERLY, B.S., Assistant to the President . . . . . .
Administration Building

NORRIS H. KELTON, B.A., M.A., Dean of Admissions and Records . . . . . .
Administration Building

OSCAR K. BAXLEY, B.B.A., Business Manager . . . . . .
Administration Building

GEORGE E. McLAUGHLIN, B.S., Dean of Students . . . . . .
Student Affairs Building

THOMAS T. SALTER, B.S., M.Ed., Ed.D., Vice-President of Extended Services . . . . . .
Administration Building

SCHOOLS

E. B. BLACKBURN, B.S., M.Ed., Ed.D., Dean, The Graduate School . . . . . .
Administration Building

W. BROCK BRENTLINGER, B.A., M.A., Ph.D., Dean, School of Fine and Applied Arts . . .
Music-Speech Building

LLOYD B. CHERRY, B.S., B.A., M.A., E.E., Dean, School of Engineering . . . . . .
Engineering Building No. 3

EDWIN S. HAYES, B.S., Ph.D., Dean, School of Sciences . . . . . .
Biology Building

J. D. LANDES, B.S., M.S., Ph.D., Dean, School of Business . . . . . .
Business Building

M. L. McLAUGHLIN, B.S., M.Ed., Ed.D., Dean, School of Education . . . . . .
Education Building

ELROY OTTE, B.S., M.Ed., Ed.D., Director, School of Technical Arts . . . . . .
Technical Arts Building No. 1

PRESTON B. WILLIAMS, B.A., M.A., Ph.D., Dean, School of Liberal Arts . . . . . .
Liberal Arts Building

LAMAR STATE COLLEGE OF TECHNOLOGY
1971 Summer Session Calendar

SUMMER I (MAY 31-July 10)

MAY			
30	Sunday		Limited operation of dormitories.
31	Monday	7 a.m.	Dining hall opens.
		8 a.m.	Registration.
		6 p.m.	Registration for extended day students.
JUNE			
1	Tuesday	8 a.m.	Classes begin.
Registration after this date limited to available classes.			Late registration (penalty fee is charged). Payment of fees is a part of registration.
2	Wednesday	7 p.m.	Last date for registration or for adding courses.
4	Friday		Fourth class day.
22	Tuesday	7 p.m.	Last date for dropping courses or withdrawing without penalty.
25	Friday		End of counseling period for summer II.
		4 p.m.	Last date for approval for August graduation.
JULY			
2	Friday		Independence Day holiday.
6	Tuesday	7 p.m.	Last date for dropping courses or withdrawing.
9	Friday		Last class day.
10	Saturday	12 noon	Term grades due in admissions and records office.

SUMMER II (JULY 12-AUGUST 20)

JULY			
12	Monday	8 a.m.	Registration.
		6 p.m.	Registration for extended day students.
13	Tuesday	8 a.m.	Classes begin.
Registration after this date limited to available classes			Late registration (penalty fee is charged). Payment of fees is a part of registration.
15	Thursday	7 p.m.	Last date for registration or for adding courses.
16	Friday		Fourth class day.

AUGUST

2	Monday	7 p.m.	Last date for dropping courses or withdrawing without penalty.
6	Friday		End of counseling period for fall.
16	Monday	7 p.m.	Last date for dropping courses or withdrawing.
20	Friday		Last class day.
		12 noon	Final date for submitting term grades for graduating seniors to admissions and records office.
		6 p.m.	Dining hall closes.
		10 p.m.	Dormitories close.
21	Saturday	10 a.m.	Commencement exercises.
		12 noon	Term grades other than graduating seniors due in admissions and records office.

SUMMER III (JUNE 21-JULY 30)

JUNE

21	Monday	8 a.m.	Registration.
		6 p.m.	Registration for extended day students.
22	Tuesday	8 a.m.	Classes begin.
Registration after this date limited to available classes			Late registration (penalty fee is charged). Payment of fees is a part of registration.
23	Wednesday	7 p.m.	Last date for registration or for adding courses.
25	Friday		Fourth class day.
			End of counseling period for summer II.
		4 p.m.	Last date for approval for August graduation.

JULY

2	Friday		Independence Day holiday.
13	Tuesday	7 p.m.	Last date for dropping courses or withdrawing without penalty.
27	Tuesday	7 p.m.	Last date for dropping courses or withdrawing.
30	Friday		Last class day.
31	Saturday	12 noon	Term grades due to admissions and records office.

SUMMER IV (MAY 31-AUGUST 20)

MAY			
31	Monday	8 a.m.	Registration
		6 p.m.	Registration for extended day students.
JUNE			
1	Tuesday	8 a.m.	Classes begin.
Registration after this date limited to available classes			Late registration (penalty fee is charged). Payment of fees is a part of registration.
2	Wednesday	7 p.m.	Last date for registration or for adding courses.
4	Friday		Fourth class day.
25	Friday	4 p.m.	Last date for approval of August graduation.
			End of counseling period for summer II.
JULY			
2	Friday		Independence Day holiday.
AUGUST			
2	Monday	7 p.m.	Last date for dropping courses or withdrawing without penalty.
6	Friday		End of counseling period for fall.
16	Monday	7 p.m.	Last date for dropping courses or withdrawing.
20	Friday		Last class day.
		12 noon	Final date for submitting term grades for graduating seniors to admissions and records office.
21	Saturday	10 a.m.	Commencement exercises.
		12 noon	Term grades other than for graduating seniors due in admissions and records office.

DIRECTORY FOR CORRESPONDENCE

To obtain prompt attention, please write directly to the persons or agencies listed (address mail to: Lamar Tech Station, Beaumont, Texxas 77705):

ADMISSIONS/RECORDS
Norris H. Kelton, Dean
P. O. Box 10009

ATHLETICS
J. B. Higgins,
Director
P. O. Box 10038

HOUSING
John C. Shirley
Director
P. O. Box 10041

STUDENT HEALTH
Mrs. Ola Saunders, R.N.
P. O. Box 10015

FINANCIAL AIDS/AWARDS
Jess R. Davis
Director
P. O. Box 10042

STUDENT ACTIVITIES
Talmadge Armstrong
Director
P. O. Box 10018

INFORMATION/PUBLICATIONS
Russell DeVillier
Director
P. O. Box 10011

BOOKS/SUPPLIES
P. B. Plotts
Bookstore Manager
P. O. Box 10019

SCHOOL OF EDUCATION
Dr. M. L. McLaughlin,
Dean
P. O. Box 10034

SCHOOL OF ENGINEERING
Lloyd B. Cherry
Dean
P. O. Box 10057

SCHOOL OF SCIENCES
Dr. Edwin S. Hayes
Dean
P. O. Box 10037

SCHOOL OF LIBERAL ARTS
Dr. Preston B. Williams
Dean
P. O. Box 10058

SCHOOL OF BUSINESS
Dr. J. D. Landes
Dean
P. O. Box 10059

SCHOOL OF FINE & APPLIED ARTS
Dr. W. Brock Brentlinger
Dean
P. O. Box 10050

THE GRADUATE SCHOOL
Dr. E. B. Blackburn
Dean
P. O. Box 10004

SCHOOL OF TECHNICAL ARTS
Mr. Gus Carlsen,
Acting Dean
P. O. Box 10043

STUDENT GOVERNMENT
Lloyd Longnion
President
P. O. Box 10063

TRAFFIC/SECURITY
Gene Carpenter
Director
P. O. Box 10013

RESEARCH CENTER
Dr. Charles Turco
Director
P. O. Box 10053

VETERANS AFFAIRS
Joe B. Thrash
Director
P. O. Box 10012

ORGANIZATION OF THE COLLEGE
by
Schools and Departments

SCHOOL OF BUSINESS

Accounting
Business Administration
Economics
Secretarial Science

SCHOOL OF EDUCATION

Elementary Education
Secondary Education
Special Education
Health & Physical Education
Home Economics

SCHOOL OF ENGINEERING

Chemical
Civil
Electrical
Industrial
Mechanical
Mathematics

SCHOOL OF FINE AND APPLIED ARTS

Commerical Art
Music
Speech

SCHOOL OF LIBERAL ARTS

(Bible)
English
Government
History
Modern Languages
Sociology

SCHOOL OF SCIENCES

Biology
Chemistry
Geology
Physics
Psychology

SCHOOL OF TECHNICAL ARTS*

Trade Preparatory
- Industrial
- Technical
- Health Services
- Related Arts

Adult Education

GRADUATE SCHOOL*

Biology
Business
Chemistry
Education
Engineering
Engineering Science
English
Government
Health and Physical Education
History
Mathematics
Speech

*Courses offered in the Graduate School and in the School of Technical Arts are described in separate bulletins.

GENERAL INFORMATION

LOCATION

Lamar State College of Technology is a state-supported institution located in the center of industrial Southeast Texas at Beaumont. Principal industries in the area are oil refining, shipping, shipbuilding, rubber manufacturing, and chemical production. Surrounding the urban communities are ranches and rice farms.

The campus faces the Beaumont-Port Arthur Highway in southeastern Beaumont. With a population of approximately 120,000, Beaumont has modern schools, churches, and shopping districts to serve the thriving industrial community.

In the metropolitan Beaumont area are the cities of Port Arthur, Orange, Vidor, Port Neches, Nederland and Groves, all within 25 miles and forming the heart of the Gulf Coast area with an estimated population of more than 350,000.

HISTORY

South Park Junior College was established in 1923. The college was organized and controlled by the South Park Independent School District, and classes were conducted in the South Park High School Building. Enrollment increased from about 125 in 1923 to 300 in 1931.

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

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

A movement to expand Lamar College into a four-year state-supported school culminated in the creation of Lamar State College of Technology on September 1, 1951. Since that time the curriculum has been expanded and liberalized to include many areas of study, and many additional facilities have been provided. Enrollment has increased until there are now over 10,000 students.

The college offered graduate work in specified fields beginning in the academic year of 1960-61 and added a Doctor of Engineering beginning in 1970.

ACCREDITATION

Lamar is accredited by the Association of Texas Colleges and Universities and the Southern Association of Colleges and Schools. It is also approved by the Texas Education Agency.

Several departments have been accredited by professional agencies. In the School of Engineering, the departments of Chemical, Civil, Electrical, Industrial, and Mechanical Engineering are accredited by the Engineers' Council for Professional Development. Other accreditations include the Department of Chemistry, which is accredited by the American Chemical Society; the Department of Music, which is accredited by the National Association of Schools of Music; and the Departments of Elementary and Secondary Education, which are accredited by the National Council for the Accreditation of Teacher Education.

GOVERNMENT

The government of the college is vested in a board of nine regents appointed by the Governor and approved by the Senate for terms of six years. The direction of academic affairs is delegated by the Board of Regents to the President, administrative officers, and faculty.

The general policies of the Graduate School are determined and administered by the Graduate Council.

DEGREE OFFERINGS

BACHELOR OF ARTS in Biology, Chemistry, English, French, Economics, Geology, Government, History, Mathematics, Psychology, Sociology, Spanish and Speech.

BACHELOR OF SCIENCE in Biology, Chemistry, Commercial Art, Education, Environmental Science, Geology, Government, Home Economics, Mathematics, Music, Medical Technology, Oceanographic Technology, Health and Physical Education, Physics, Psychology, Speech, and the following engineering fields: Chemical, Civil, Electrical, Industrial and Mechanical.

BACHELOR OF BUSINESS ADMINISTRATION in Accounting, Economics, General Business, Management, Marketing and Secretarial Science.

MASTER OF ARTS in English, History, and Government.

MASTER OF BUSINESS ADMINISTRATION

MASTER OF EDUCATION in Elementary Education, Secondary Education, Special Education, and Counseling and Guidance.

MASTER OF ENGINEERING SCIENCE in Engineering.

MASTER OF ENGINEERING

MASTER OF SCIENCE in Biology, Chemistry, Mathematics, Speech(Audiology/pathology), and Health and Physical Education.

DOCTOR OF ENGINEERING

EXTENDED DAY CLASSES

For administrative purposes, classes offered after 6:00 p.m. are referred to as Extended Day Classes. With few exceptions the same faculty members teach in both day and extended day classes, and all educational facilities are the same. A person employed during the day hours may attend classes in the evening and work to obtain a degree or to expand his knowledge in a special field of interest.

Courses offered in the evening make possible continual progress toward a degree objective. The program of study outlined in the catalog should be followed and should be approved by the department head concerned with the training objective of the student.

FACILITIES

Located on a campus of approximately 200 acres and valued in excess of $38,000,000, the Lamar plant includes many new and functional buildings of modern design. These structures include: Administration Building, Student Affairs Building, Art Building, Biology Building, Bookstore, Business Building, two Chemistry Buildings, Dining Halls A and B, Education Building, Educational Services Center, Engineering Buildings, Geology Building, Health Center, Home Economics Building, Liberal Arts Building, Library, McDonald Gymnasium, Music-Speech Building, Physics Building, Post Office Building, Science Lecture Auditorium, Richard W. Setzer Student Center, five Technical Arts Buildings, Theatre/Gallery, and Women's Health and Physical Education Building.

On-campus dormitories include Brooks Hall, Gentry Hall and Gray Hall for women; Campbell Hall, Combs Hall, Morris Hall, Plummer Hall, and Shivers Hall for men. Also, three apartment buildings for upper class students and married couples are included in the residence hall system.

The President, Associate Dean of Students, and Director of the Physical Plant have homes on the campus.

A football stadium seating 17,150 and planned eventually to accommodate 38,500; an athletic field house; athletic practice fields; Olympic swimming pool; indoor swimming pool; 14 tennis courts; track and field stadium; and a four-building maintenance complex are also located on campus.

RESEARCH CENTER

The Research Center was formally organized in 1956. It is administered by a director who serves as chairman of the faculty research committee.

The East Texas area is one of the most heavily industrialized sites of the world, and many industrial research problems are referred by industries of the area to the Lamar Research Center. Faculty members and advanced students often cooperate in seeking the solutions to these industrial problems

COMPUTER CENTER

The college operates a computer center as a service to faculty, administration, students, researchers, and others. The computer center, located in Engineering III, has modern, high-speed digital and analog equipment valued in excess of three quarters of a million dollars.

RELIGIOUS CENTERS

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

In addition to credit Bible courses, offered in the long term, the centers offer opportunities for worship, non-credit study and counseling in order to aid the student in developing a meaningful context for his college years.

INSTRUCTIONAL BUILDINGS

Classroom buildings are of modern design and conveniently located a short distance from the dormitories and the dining hall. Classes other than those necessitating special facilities, laboratory facilities, etc., are conducted in air-conditioned classroom buildings.

The student service buildings on the campus, (including the Bookstore, Library, Richard W. Setzer Student Center, Dining Halls, Health Center, etc.) are also air-conditioned.

LIBRARY

In support of expanding academic programs, the Lamar Library has developed a strong collection. Approximately 25,000 volumes are added annually to the present 215,000 volumes, and over 3,000 periodicals are received. Library resources are further enriched by some 25,000 state and federal documents and microform materials.

Library hours for the Summer Session are: 7:30 a.m. to 9:00 p.m., Monday through Thursday; 7:30 a.m. to 5:00 p.m. Friday; 1:00 p.m. to 9:00 p.m., Sunday. The Library is closed on Saturdays and holidays.

SWIMMING POOL

Lamar State College of Technology is one of the few schools that has an Olympic-size 50-meter pool. The depth ranged from 4-1/2 feet to 13 feet. The diving area is shaped like an "L" and there are low and high boards.

This pool is restricted to college students, faculty members, and their guests. Guests must be registered at the pool.

Hours will be from 2:30 p.m. to 8:30 p.m. on Tuesday, Wednesday, Thursday, and Friday; Saturday from 1:00 p.m. to 8:30 p.m.; Sunday from 1:00 p.m. to 6:00 p.m. The pool will be closed Monday.

BOOKSTORE

For the convenience of faculty and students, the college operates its own bookstore where supplies and books, new and used, may be purchased.

Used books which are currently approved may be sold to the bookstore at prices much better than such books would ordinarily bring. Books which must be discontinued are not purchased by the bookstore except at a salvage price.

The bookstore reserves the right to require the seller to prove his ownership.

ADVANTAGES OF SUMMER SESSION

The summer session is an important part of the total education program offered by the college. Classes are taught by regular faculty members and all facilities normally used during the fall and spring semesters are available for summer school.

Academic courses include the same material as those offered during the regular semester.

There are many advantages to attending summer school classes for the high school graduate and the student previously enrolled in college.

1. For Entering Freshman

High school graduates concerned over the difficult transition from high school to college study can use summer school credits to lighten their academic load during their freshman year and eliminate some of the problems concerned with this transition period.

During the summer session, students normally enroll for two academic courses per session. This allows greater concentration on the subject matter areas which are most difficult for the entering student.

Students who have fulfilled the general admission requirements of the college may also use either summer session to make up any unit deficiencies required in certain degree programs. This enables the student to follow the normal curriculum pattern in the fall semester.

Others can make good use of summer school courses to enrich their programs through work which they otherwise might not be able to take.

Some students may wish to accelerate their graduation date through summer work. It is quite possible to shorten the academic period required for graduation by one or more semesters through repeated summer school attendance.

2. For Students Who Work

Students who plan to carry reduced academic loads during the regular sessions so that they may earn part of their expenses through employment can use the summer session to increase the total number of hours taken over a calendar year to what is normally expected of a full-time student.

3. Students Attending Other Colleges

Those who are regularly enrolled in other colleges but who reside in the area can use courses offered by Lamar to enrich their academic programs or to meet requirements at other institutions.

4. Students in Academic Difficulty

For those students who have failed to pass certain courses, who are on probation, or who have been suspended from Lamar State College for one term, the summer session presents an opportunity to repair their academic record. Students who are suspended for one term from Lamar may attend the summer session without penalty. This does not apply to students who have been suspended from other colleges.

ADMISSION REQUIREMENTS

Requirements for admission to the undergraduate program of the college are outlined briefly in the following sections and are given in more detail in Bulletin No. 6, the undergraduate catalog. Students seeking admission should study the requirements carefully. If it appears that the qualifications can be met, the procedure for making application for admission outlined on the inside of the back cover of this catalog should be followed.

Requests for application forms and additional information should be directed to the Dean of Admissions and Records, Lamar State College of Technology, Lamar Tech Station, Box 10009, Beaumont, Texas 77705.

Both the Graduate School and the School of Technical Arts publish separate bulletins and each requires special application forms.

Applicants for admission are required to be of good moral character; to have graduated from an accredited high school with the units of credit specified in the undergraduate catalog; and, unless graduation was prior to 1960, to submit scores on the Scholastic Aptitude Test (SAT) which meet the minimum requirement.

ENTRANCE EXAMINATION REQUIREMENT

Students must submit test scores (verbal and mathematics) from the Scholastic Aptitude Test SAT) of the College Entrance Examination Board to be considered for admission. Residents must have a minimum combined score of 900 and must rank in the upper three-fourths of their graduating class.

The SAT may be taken more than one time, but if repeated, the test must be taken on one of the regular test dates when the SAT is administered nationally.

The CEEB administers the SAT at test centers throughout the United States and in many foreign countries in November, December, January, March, and July. Lamar State College is one of the testing centers. Information on test centers, test dates, fees, application forms, and other data may be found in the CEEB booklet, Bulletin of Information - Scholastic Aptitude Test, which may be obtained without charge from high school counselors, or by writing directly to the CEEB, Box 1025, Berkeley, California, 94701. The booklet should be secured EARLY so that a convenient test date can be selected. Failure to take entrance tests in advance may seriously delay admission and registration. Application to take the test and test fees are sent to CEEB.

PROVISIONAL ADMISSION

Texas residents flling below the required 700 SAT combined score may be admitted on a provisional basis to either the summer session or the spring semester. Eligibility for regular admission may be established by making the proper grades during the trial period.

Summer provisional students must pass nine semester hours and earn 24 grade points. Students enrolling for the spring semester on a provisional basis must pass 12 semester hours and make 24 grade points.

Provisional admission is not open to non-residents or to students transferring from other colleges. The program is not available during the fall semester.

TRANSFERS

To be eligible for unconditional admission, a transfer student must (1) be eligible to re-enter all colleges previously attended, and (2) have an overall grade-point average of C (2.0). The average is computed on all college work the student has undertaken, whether passed, failed or repeated.

The records of transfer applicants who meet requirement (1) above but who are deficient in grade-points are evaluated for admission purposes on the same basis as if the work had been taken at Lamar Tech. A student admitted on probation must remove deficiencies in accordance with the provisions of the policy on academic probation and suspension.

SAT scores must be submitted if less than 18 hours of transferable work has been completed. Former students of the college returning from other institutions are considered transfer students and are required to meet the above requirements to be readmitted.

TRANSIENT STUDENTS (Summer Only)

Students attending another college who wish to enroll for the summer session only may be admitted as transient students. A student accepted under this classification is required to submit the regular Application for Admission form only. Transient students who later apply for regular admission must meet all entrance requirements.

Applicants not in attendance at another college during the spring semester immediately prior to the summer session will not be considered as transients and must apply as regular transfers.

TRANSFER OF CREDIT

Credit earned at another accredited institution is acceptable for transfer. If the courses are applicable to the curriculum in which the student enrolls, the credit will be used to meet degree requirements in essentially the same manner as if the courses had been taken at Lamar State College.

Students transferring from a junior college are limited to the transfer of 66 semester hours or to the number of hours required by this college during the freshman and sophomore years in the curriculum under which the student enrolls. Once this maximum has been earned at any college (junior or senior, no additional hours earned at a junior college will transfer.

Grades from other institutions are recorded as received. No grade is changed.

TEMPORARY ADMISSION

Students entering Lamar in the summer often find that the interval between the completion of high school work and the beginning of a college semester is too short for the transcript to reach the college. In such cases, temporary admission is granted which permits the student to register pending the receipt of the transcript. Students on temporary admission who are subsequently found to be ineligible for admission will be withdrawn.

HEALTH DATA REQUIREMENT

All students entering day classes for the first time at Lamar State College must file a Health Data Form with the Dean of Admissions and Records. This regulation does not apply to transient students.

SOCIAL SECURITY NUMBER REQUIRED

The Application for Admission form calls for the applicant's social security number. The number will be used as a permanent student number in machine processing of student records. Non-holders of social security cards should secure one so that the proper information can be entered on the application form.

REGISTRATION

In order to register in the regular alphabetical order, application for admission or readmission must be filed by 4 p.m. on April 30 for Summer Session I, and by 4 p.m. on June 25 for Summer Session II.

Students who fail to apply for admission by these deadlines will register at a later assigned time.

Two additional summer sessions are scheduled for 1971. Students should consult the 1971 Summer Session calendar at the beginning of this bulletin for information on the dates or registration, class beginnings, and other important dates.

FEES AND EXPENSES

All fees and deposits are payable at the time of registration. The fees are as follows:

Resident Students

Semester Hrs.	Tuition	S. S. Fee	Bldg. Use Fee	Total
8	$35.00	$30.00	$26.00	$ 91.00 + Lab
7	31.00	14.00	13.00	58.00 + Lab
6	27.00	14.00	13.00	54.00 + Lab
5	23.00	14.00	13.00	50.00 + Lab
4	19.00	14.00	13.00	46.00 + Lab
3 or less	15.00	14.00	13.00	42.00 + Lab

Non-Resident Students

8	$133.00	$30.00	$26.00	$189.00 + Lab
7	117.00	14.00	13.00	144.00 + Lab
6	100.00	14.00	13.00	127.00 + Lab
5	83.00	14.00	13.00	110.00 + Lab
4	66.00	14.00	13.00	93.00 + Lab
3 or less	50.00	14.00	13.00	77.00 + Lab

RESIDENCE AND DINING HALL FEES

Brooks Hall (women) and Shivers Hall (men) are utilized by the college for the Summer Session terms. The charge for double occupancy (for each summer session) is $73.50, and the charge for single occupancy (for each summer session) is $108.50. Campus residents must select one of the two meal plans offered. The charge for full board for each six weeks term is $94.43 (plus current sales tax), and the charge for the cash coupon plan is $72.00 (plus current sales tax).

Room and board charges are due and payable on registration day of each summer session.

A limited number of apartments are available in the summer for married students and for qualified single students.

LABORATORY FEES

For all courses in which the combined credit of lecture and laboratory is from 1 to 3 semester hours, a laboratory fee of $2.00 is charged for each term. For such courses in which the credit is 4 semester hours or more, the laboratory fee is $4.00 per term.

PARKING FEES

For students enrolled in either the Fall or Spring semesters and who have paid automobile registration fees, no additional charge is made for the Summer Session. New students will be required to pay parking fees of $4.00 for both Summer Sessions, or $2.00 for the second session only. These fees are paid at the time of registration.

REFUND OF FEES

No refund is made for dropped courses. A refund of 60% of registration, service, and private lessons fees is made if the student withdraws during the first week of classes. No refund is made after that time.

The withdrawing student must request the refund after official withdrawal and before the end of the summer session.

The time required to process refunds is about 30 days.

HOUSING

The student housing program at Lamar is designed to supplement the academic program of instruction by providing opportunities for social and intellectual development and recreation in a pleasant living environment. A professional staff is on hand to work with students in planning and executing residence hall programs and to serve as advisors and counselors to students.

A variety of room accommodations and meal plans are available to meet the needs of the individual student.

> Direct inquiries regarding all housing (accommodations, charges, room reservations, board, etc.) to: Housing Office, Lamar State College of Technology, P.O. Box 10041, Lamar Tech Station, Beaumont, Texas 77705.

RESERVATIONS

To reserve a room in the residence halls, direct a request to the Housing Office, Lamar State College of Technology. A check for $50.00 must accompany the reservation request. Room reservations may be cancelled with full refund until three weeks prior to the first day of classes. No refunds will be made on cancellations received after this date. Dormitory residents will be refunded deposits, less any breakage or cleaning charges, at the end of the semester. The deposit will not be refunded if the student moves from the dormitory before the end of the semester.

All unclaimed rooms will be declared vacant and the deposit forfeited at 6:00 p.m. on the last day of registration unless the student gives the Student Housing Office written instructions to hold the room for a longer period.

SERVICES

ADVISORS AND COUNSELORS

At or soon after registration each student is assigned a faculty advisor who is available for academic guidance. All students are expected to make appointments with advisors during each semester. Such arrangements are the responsibility of the student.

Guidance sessions insure that a program of study is pursued in proper sequence and that academic progress is maintained by the student.

A counseling and guidance center for students is located in Engineering II, Room 211, where services are designed to assist students who may be encountering temporary problems of a personal, social, or vocational nature. The program supplies and maintains an up-to-date occupations section in the college library, available to students undecided about careers.

The Counseling Center is under the supervision of the Vice President of Student Affairs.

TESTING AND PLACEMENT SERVICES

The Testing and Placement Center is located in the Educational Services Center and is open 8:00 a.m. to 5:00 p.m. Monday through Friday.

This center provides testing service for entering students and for others. Non-students wishing to use this service pay a fee depending upon the testing program desired.

Placement service is also provided at this center and is available to all students, faculty, and former students.

HEALTH CENTER

The college maintains a Health Center for the use of students during the long term or summer session.

Two types of service are available: (1) out-patient service for those who have minor ailments but who do not require constant supervision, and (2) infirmary service for those who are in need of the continued attention of the college physician or of nursing care.

VETERAN'S EDUCATION

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

Veterans and their dependents, who want to attend Lamar under federal laws which provide educational assistance, should secure information and aid in planning their college work by counsulting the Office for Veteran's Education, Educational Services Building.

TEACHER CERTIFICATION

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

LOAN FUNDS AND SCHOLARSHIPS

Financial assistance in the form of loans and scholarships is available for a limited number of students. Details may be obtained from the "Bulletin of Financial Aid and Awards" which can be obtained on request to the Director of Student Financial Aid, Lamar State College, Lamar Tech Station, Box 10042, Beaumont, Texas 77705.

ACADEMIC REGULATIONS

STUDENT LOAD

No student will be permitted to register for more than eight semester hours in a given summer term or for more than fourteen semester hours for the complete summer session. Exceptions to this regulation may be made for seniors scheduled to be graduated at the end of the current summer session. Such seniors may enroll for a maximum of fifteen semester hours during the complete summer session preceding their graduation.

ATTENDANCE

Regular and punctual attendance in classes and laboratories is expected of all students. Students who accumulate excessive unexcused absences, as determined by the instructor, may be referred to the Office of the Dean of Students for counseling.

Names of students whose absences result from participation in college-sponsored activities will be published by the Vice-President of Academic Affairs. Such names will be submitted by the staff or faculty sponsor to the Vice-President of Academic Affairs and must be approved by him. However, it is the responsibility of each student involved to notify his instructors of such approved absences.

Inability to attend class for illness or other reasons should be reported to the Office of the Dean of Students immediately. The Dean of Students will notify instructors concerned.

At the discretion of the instructor, students having approved absences may make up examinations, written assignments and reports without penalty. This privilege does not apply to unapproved absences.

MINIMUM CLASS ENROLLMENT

The college reserves the right to cancel any course enrolling an insufficent number of students (usually fewer than 12).

COMMENCEMENT

A student who completes all the requirements for a degree during either of the summer terms will have the degree conferred during the August commencement scheduled for Saturday, August 21 at 10:00 a.m.

GENERAL REGULATIONS

The general regulations of the college apply to the Summer Session. Students should read all regulations regarding academic matters listed in the current Bulletin (No. 6).

Pertinent regulations for the Summer Session student include the following:

OFFICIAL SUMMONS

An official summons from any administrative office takes precedence over all other college activities of the student and should be answered promptly on the day and hour designated. Failure to heed this official summons may subject the student to serious disciplinary action.

PENALTY FOR FALSE STATEMENTS

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

STUDENT DEBTS

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

Students and student organizations are expected to honor contractual obligations promptly, but in case of flagrant disregard of such obligations the Dean of Students will take appropriate action.

Penalty for failure to clear up these obligations may be: a) no readmission; b) withholding of grades and transcript; c) withholding of degree.

TELEPHONE SERVICE

Public telephone pay stations have been installed in the Student Affairs Building, in the Liberal Arts, Engineering, Home Economics, Library, Setzer Student Center and Technical Arts Buildings. Students are expected to use these telephones for personal calls. Office telephones are for the use of faculty and administrative personnel only. Incoming telephone calls for students are transmitted to the students only in emergency cases.

PARKING REGULATIONS

At registration time each student who pays the necessary fee is issued a car decal which permits parking on the campus. This decal is numbered and is to be placed in a specific place on the back window of the car.

SCHOOL OF TECHNICAL ARTS

The School of Technical Arts, formerly the School of Vocations, has a 47-year record of providing vocational-technical education for thousands of Texas men and women. A part of the Lamar State College of Technology, the School is housed in an all-new plant of five buildings which provide modern facilities for instruction.

TRADE PREPARATORY DEPARTMENTS

Industrial
Technical
Health Services
Related Arts

ADULT EDUCATION PROGRAMS

Apprentice Training
Trade Extension
Industrial Supervision
Distributive Education
Conferences and/or Short Courses

THE SCHOOL OF TECHNICAL ARTS BULLETIN

The Technical Arts Bulletin (No. 8) contains a complete listing of courses and other information of value to the student. Requests for copies should be directed to the Office of the Dean of Technical Arts, Lamar Tech Station, P. O. Box 10043, Beaumont, Texas 77705.

THE GRADUATE SCHOOL

THE GRADUATE COUNCIL

The Graduate Program is administered by the Graduate Council. The membership of the Council consists of representatives from each department offering graduate degrees, with the Dean of the Graduate School acting as chairman. The Council determines the academic policies of the Graduate school.

DEGREES OFFERED

Master of Arts

Master of Arts in English
Master of Arts in Government
Master of Arts in History

Master of Business Administration

Master of Science

Master of Science in Biology
Master of Science in Chemistry
Master of Science in Health and Physical Education
Master of Science in Mathematics
Master of Science in Speech (Audiology and Pathology)

Master of Engineering Science

Master of Engineering

Master of Education

Master of Education in Elementary Education
Master of Education in Guidance and Counseling
Master of Education in Secondary Education
Master of Education in Special Education

Doctor of Engineering

THE GRADUATE BULLETIN

The Graduate Bulletin (No. 9) contains a complete listing of courses, admission requirements, and other information of value to graduate students. Requests for copies should be directed to the Office of the Dean of the Graduate School, Lamar Tech Station, Box 10004 Beaumont, Texas 77705.

COURSE DESCRIPTIONS

The session that a course is offered is indicated in the following pages by these abbreviations:

S I	Offered during Summer Session I
S II	Offered during Summer Session II
S III	Offered during Summer Session III
S IV	Offered during Summer Session IV
S I & II	Offered during both summer sessions
S I, S II	First course number offered during Summer Session I; second course number offered during Summer Session II

School of Business

DEPARTMENT OF ACCOUNTING
Accounting (Acc)

231—Principles of Accounting. Procedures and techniques used in recording business transactions and preparing financial statements, Journalization; posting; statement preparation; controlling accounts and subsidiary ledgers; adjusting and closing entries; voucher system. Class: 3 hours. Credit: 3 semester hours. S I & II.

232—Principles of Accounting. Continuation of Acc 231 with special attention given the financial statements; cash and receivables; fixed assets; prepaid expenses; liabilities; capital stock and related owners' equity; manufacturing accounting; installment sales; branch accounts. Class: 3 hours. Credit: 3 semester hours. S II.

331—Intermediate Accounting. Analysis of special problems and theories of current assets and corporation accounting. Capital stock; surplus and dividends; treasury stock; cash; receivables; inventories; net income concepts; corrections of prior year's earnings. Prerequisite: Acc 232. Class: 3 hours. Credit: 3 semester hours. S I.

332—Intermediate Accounting. Continuation of Acc 331 with emphasis on the interpretation of data relative to managerial decisions. Investments; fixed assets; liabilities and reserves; analysis of operations; ratios; statement of application of funds. Class: 3 hours. Credit: 3 semester hours. S II.

334—Cost Accounting. Job order and process cost approach to the control of manufacturing operation. Material; labor; overhead allocation; departmentalization; budgeting; data presentation. Prerequisite: Acc 232. Class: 3 hours. Credit: 3 semester hours. S I.

338—Taxation Accounting. Provisions of the income tax code as applied to individuals. Taxable income; gains and losses; capital gains; dividends; expenses; itemized deductions; depreciation; losses; standard deduction. Prerequisite: Acc 232. Class: 3 hours. Credit: 3 semester hours. S I.

339—Taxation Accounting. Provisions of the income tax code as applied to proprietorships, partnerships, estates, trusts, and corporations. Withholding; inventory; installment sales; reorganizations; filing returns; refunds; social security taxes; estate taxes; gift taxes. Prerequisite: Acc 338. Class: 3 hours. Credit: 3 semester hours. S II.

430—Auditing. Principles and procedures applied by public accountants and auditors in the examination of financial statements and accounts. Verification of data; audit working papers; reports; types of audits; procedures. Prerequisite: Acc 332. Class: 3 hours. Credit: 3 semester hours. S I.

431—Advanced Accounting. Analysis of special problems and theories relative to partnership operations; receivership; compound interest and annuities; estates and trusts; branch operations; consolidated statements. Prerequisite: Acc 332. Class: 3 hours. Credit: 3 semester hours. S II.

DEPARTMENT OF BUSINESS ADMINISTRATION

Business Administration (BA)

120—Introduction to Computer Programming, (COBOL). An introduction to computers and the COBOL language to familiarize the students with computer approaches for various types of statistical and mathematical problems. Each student prepares programs in the COBOL language. Class: 1 hour. Laboratory: 2 hours. Credit: 2 semester hours. S I.

210—Computer Programming (FORTRAN). To familiarize the student with the FORTRAN language application to solving business problems. Problems involve inventory, production, taxes, compund-interest, and stock turnover rates. Class: 1 hour. Credit: 1 semester hour. S I.

331—Business Law. Principles of law which form the legal framework for business activity. Applicable statutes; contracts; agency. Class: 3 hours. Credit: 3 semester hours. S II.

332—Principles of Finance. A survey of the field of business finance. Financial planning; administration and control of financial activities; short-term and long-term financing; advantages and disadvantages of the various business organizations; security markets; commercial banking systems; Federal Reserve System; financial reorganization. Class: 3 hours. Credit: 3 semester hours. S I & II.

333—Insurance. Application of fundamental principles to life, property, and casualty insurance. Contracts; premiums; legal statutes; risk; programming. Class: 3 hours. Credit: 3 semester hours. S I.

334—Marketing. The social and economic aspects of distribution as found in business organizations. Structures; functions; institutions; problems. Class: 3 hours. Credit: 3 semester hours. S I & II.

335—Principles of Management. A general theory of management presented within the framework of the traditional managerial functions. Stress is placed upon the university and practicality of casual propositions in the practice of management in all of business. A basic course for the study of more advanced and specialized aspects of business administration. Prerequisites: Eco 132 and Acc 232. Class: 3 hours. Credit: 3 semester hours. S II.

336—Personnel Management. A behavioral approach to the management of the human resource in business enterprise. The fundamentals of human relations and organizational behavior will be used to structure an understanding of the managerial problems of recruitment, selection, training, promotion, and termination of personnel. Supervision of the work force will be considered as an examination of theories of motivation, communication, and leadership. Prerequisites: BA 335. Class: 3 hours. Credit: 3 semester hours. S I.

339—Sales Promotion. The three basic forms of selling are studied: advertising (paid, nonpersonal presentation of goods, services, or ideas

through print or electronic media); salesmanship (personal selling through oral presentation with one or more prospective purchasers); and sales appeals (activities other than advertising and salesmanship which stimulate consumer purchasing and dealer effectiveness). Class: 3 hours. Credit: 3 semester hours. S I.

3301—Business Statistics. Introduction to the quantitative methods of analysis as applied to business problems. Collection of data; charts and tables; analysis; presentation; frequency distribution; averages; dispersion; index numbers; secular trend; seasonal variation; and cyclical fluctuation. Class: 3 hours. Credit: 3 semester hours. S I.

3302—Business Statistics. Continuation of BA 3301 including the theory and practical application of normal curve, probable error, and sampling. Correlation and regression; probability theory and models; statistical inference, tests of hypotheses; sample survey methods; and statistical quality control. Class: 3 hours. Credit: 3 semester hours. S II.

3311—Labor Law. Historical interpretations and present provisions of regulations governing labor. Common law; state and federal statutes; Fair Labor Standards Act; workmen's compensation; social security; liability; United States Department of Labor; social legislation. Class: 3 hours. Credit: 3 semester hours. S II.

437—Investments. An appraisal of investment, alternatives in financial markets. Markets; securities; methods of analysis; investment programming. Class: 3 hours. Credit: 3 semester hours. S I.

4310—Marketing Management. The planning and execution of various marketing activities from the managerial viewpoint are presented, viz.: determining the basic product (or service) market analysis, price policies, product promotion, management of the sales force, and sales analysis and physical distribution with the logistics system concept. Class: 3 hours. Credit: 3 semester hours. S I.

4314—Administrative Policy. Fundamental considerations and procedures followed in business policy formulation and administration. Managerial structure; company objectives; coordination of departmental policies; organization of personnel; reappraisals. Prerequisites: Senior standing in Business Administration. Class: 3 hours. Credit: 3 semester hours. S II.

4318—Marketing Research. The importance and use of marketing research in U.S. business is stressed. A detailed analysis is made of each marketing research step from the formulation of the problem to the preparation of the research report and follow-up. The basic research methods (survey, observational, and experimental) are presented. Class: 3 hours. Credit: 3 semester hours. S I.

4319—Advanced Marketing Problems. Oral and written cases in the area of marketing management and marketing strategy are utilized (organization, product lines, pricing, channels of distribution, selling, etc.).

Emphasis is placed on simulated problem solving and decision making in the marketing environment. Class: 3 hours. Credit: 3 semester hours. S II.

538—Business Problems and Organization. Managerial decision-making in the areas of marketing, finance, production, and labor-management relations. General management perspectives are stressed in determining objectives, establishing policies, and planning and organizing the use of facilities, materials, and manpower; motivation of individuals and groups. The case-study approach is utilized. Class: 3 hours. Credit: 3 semester hours. S II.

669A-669B—Thesis. Prerequisite: admission to candidacy for the master's degree. Credit: 6 semester hours. S I & II.

DEPARTMENT OF ECONOMICS

Economics (Eco)

131—Principles. Introduction to economic principles. Emphasizes monetary theory; national income analysis; fluctuations and growth; public finance; international trade; and current economic problems. Class: 3 hours. Credit: 3 semester hours. S I.

132—Principles. Continuation of Eco 131. Allocation of resources; determination of output and prices; distribution; and managerial economics. Class: 3 hours. Credit: 3 semester hours. S II.

133—Principles and Policies. Comprehensive introduction to economic principles and problems for non-business students. Resource utilization; price determination; distribution of income; fiscal and monetary problems; economic growth. Class: 3 hours. Credit: 3 semester hours. S II.

237—Intermediate Theory. Economic analysis and methodology. Distribution theory; price theory; pure and imperfect competition. Class: 3 hours. Credit: 3 semester hours. S I.

238—Macro Economics. A descriptive-analytical approach to the dynamic forces that influence the aggregate level of economic activity. Income and employment determinants; levels of income and employment, stabilization theory; investment and income relationship; monetary and fiscal policies. Class: 3 hours. Credit: 3 semester hours. S I.

336—Survey of Labor Economics. Past development and present organizational structure of the labor movement in America and its impact on the industrial society. Labor market; collective bargaining; wages; economic insecurity; labor legislation; governmental policies. Class: 3 hours. Credit: 3 semester hours. S I.

337—Public Finance I. Investigation of the constitutional, administrative, and economic aspects of government fiscal activities, the important trends in intergovernmental fiscal relations, and the nature of government debt. Class: 3 hours. Credit: 3 semester hours. S II.

339—Economics of the Firm. The application of the techniques of economic analysis to the managerial problems of business enterprises utiliz-

ing a problem-solving or case study approach. Goals of the firm; business forecasting; demand analyses; cost analyses; game theory; pricing policies; governmental relations. Class: 3 hours. Credit: 3 semester hours. S II.

4311—Special Problems in Economics. Investigation into special areas in economics under the direction of a faculty member. This course may be repeated for credit when topics of investigation differ. Credit: 3 semester hours. S I & II.

4314—Industrial Organization and Countervailance. A systematic study of industrial organizations; market structures, conduct, and performance; sociopolitical environment and interplay between the firm and society; public policies as social counterpoint. Class: 3 hours. Credit: 3 semester hours. S I.

534—Seminar in Labor Economics. Lectures, readings and research projects on contemporary labor issues and theory: manpower development programs, collective bargaining, productivity, composition of the labor force, and labor legislation. Class: 3 hours. Credit: 3 semester hours. S. I.

DEPARTMENT OF SECRETARIAL SCIENCE

Secretarial Science (SS)

123—Intermediate Typewriting. High standards of speed and accuracy. Specific letter forms; tabulations; rough drafts; financial and legal forms; manuscrips; business forms and reports. Class: 1 hour. Laboratory: 2 hours. Credit: 2 semester hours. S II.

125—Records. Methods and procedures in classifying and storing business records. Filing systems; records management and retention; duplicating equipment; dictating; transcribing, and office machines; evaluation. Class: 1 hour. Laboratory: 2 hours. Credit: 2 semester hours. S II.

332—Dictation and Transcription. Continuation of SS 363 with stress on building shorthand speed and improving transcription skill. Vocabulary development; sustained dictation; volume production. Class: 3 hours. Credit: 3 semester hours. S II.

341—Secretarial Office Procedures. Analysis of responsibilities and duties of the administrative secretary. Procedure; work simplification; supervision; office etiquette and ethics; sources of information. Class: 3 hours. Laboratory: 2 hours. Credit: 4 semester hours. S II.

344—Business Communications. Theories, practice, and problems involved in communications in business and industry with emphasis on use of practical psychology, good judgment. Letters; reports; memoranda. Prerequisite: touch system of typewriting. Class: 3 hours. Laboratory: 2 hours. Credit: 4 semester hours. S I & II.

438—Business Education in the Secondary School. Theories, methods, and materials in business education with emphasis on motor-skill subjects. Practices; procedures; evaluation; facilities; literature; research problems. Class: 3 hours. Credit: 3 semester hours. S II.

School of Education

DEPARTMENT OF EDUCATION

Education (Edu)

330—Teaching Media and Programmed Instruction. Observation, demonstration, and practice in utilizing modern teaching media, including teaching machines and programming. Class: 3 hours. Credit: 3 semester hours. S I.

331—Foundations in Education. History, philosophy, and organization of education with particular emphasis on American education. Class: 3 hours. Credit: 3 semester hours. S I & II.

332—Educational Psychology. Principles and psychological problems involved in education and the practical application of psychological principles to teaching. Class: 3 hours. Credit: 3 semester hours. S I & II.

333—Language Arts in the Elementary School. The study and use of materials and techniques in the teaching of oral and written communication. Prerequisite: Edu 331 and 332. Class: 3 hours. Credit: 3 semester hours. S I & II.

334—Child Development and Evaluation. Principles of growth and development. Measurement and evaluation of learning. Prerequisite: Edu 331. Class: 3 hours. Credit: 3 semester hours. S I & II.

335—Arithmetic in the Elementary School. A study of the content, materials, and methods used in teaching arithmetic. Prerequisite: Edu 331 and 332. Class: 3 hours. Credit: 3 semester hours. S I & II.

338—Curriculum, Materials, and Evaluation in the Secondary School. The structure and organization of the curriculum, materials used, and types of evaluation utilized. Prerequisite: Edu 331. Class: 3 hours. Credit: 3 semester hours. S I & II.

339—Reading in the Elementary School. Methods and materials for teaching reading in the elementary school. Emphasis upon the placement of materials and lesson planning. Prerequisite: Edu 334. Class: 3 hours. Credit: 3 semester hours. S I & II.

3301—Survey in the Education of Exceptional Children. An orientation to characteristics, programs, and problems of children who are exceptional—mentally, physically, or emotionally. Designed as an overview of the field. A first course for those planning to certify in Special Education. Class: 3 hours. Credit: 3 semester hours. S I & II.

3311—Identification and Habilitation of the Mentally Retarded. Nature and causes of mental retardation, physical and mental characteristics; the organization and administration of classes; evaluation, integration, and adaptation of the program to meet socio-economic needs. Includes 24 hours

field experience in observing the behavior of mentally retarded children. Class: 3 hours. Credit: 3 semester hours. S II.

3312—Education of the Physically Handicapped. Description and characteristics of children with physical disabilities. Consideration of etiological factors and limitations in regular and special classes, hospital and homebound instruction. Includes 18-hour field experience in observing the behavior of physically handicapped children. Class: 3 hours. Credit: 3 semester hours. S I.

430—Education of the Mentally Retarded. Problems of the selection, preparation, development, and use of curriculum materials. Use of resources, selection of equipment, employment opportunities, and a review of recent research. Includes 24-hour field experience in observing and modifying the behavior of mentally retarded children. Class: 3 hours. Credit: 3 semester hours. S II.

431—Psychology of Exceptional Children. Social and emotional characteristics and adjustment problems of children and youth who are exceptional. Class: 3 hours. Credit: 3 semester hours. S I & II.

434—Classroom Management—Elementary. A study of problems relating to classroom management and curriculum. Prerequisite: Edu 334 and senior standing. Class: 3 hours. Credit: 3 semester hours. S I & II.

437—Science and Social Studies in the Elementary School. Content, methods, and materials for teaching science and social studies in the elementary school. Prerequisite: Edu 334. Class: 3 hours. Credit: 3 semester hours. S I & II.

438—Classroom Management—Secondary. Organization of subject matter, lesson planning, classroom management, and general methods of teaching. Prerequisite: Edu 338. Class: 3 hours. Credit: 3 semester hours. S I & II.

439—Methods and Materials for Learning Disabilities. Classroom management and teaching procedures for children with learning disabilities due to possible minimal brain injury. Discussion of behavioral characteristics and problems in diagnosis. Includes 18-hour field experience in observing the behavior of children with learning disabilities. Class: 3 hours. Credit: 3 semester hours. S I.

4302—Early Childhood Development. Study of psychological development of children from birth to age six, with recognition given to their basic needs. Includes a study of the appropriate educational experiences needed to meet the basic needs of these early years. Class: 3 hours. Credit: 3 semester hours. S I.

4303—Instruction in Early Childhood. Instructional methods and materials for pre-school and kindergarten age children. Focus on oral language experience, science and mathematics concepts, and creative expression. Class: 3 hours. Credit: 3 semester hours. S I.

4304—Language Arts for Early Childhood. A study of materials and methods for teaching oral language and listening skills to preschool and kindergarten children. Includes a review of research related to preliminary reading and writing experiences and provides some student observation and participation with young children. Class: 3 hours. Credit: 3 semester hours. S II.

4337—Tests and Measurements: Principles of human measurement and evaluation. Familiarity with most-used tests and evaluation procedures in educational settings. Prerequisite: approval of head of department or graduate standing. Class: 3 hours. Credit: 3 semester hours. S I.

530—Structure and Organization of Public Education. Analysis of the operation and functions of public education at the local, state, and national levels. Prerequisite: graduate standing. Class: 3 hours. Credit: 3 semester hours. S II.

531—Research. Familiarity with significant research in education. Emphasis on terminology, methodology, and spirit of systemic research. Prerequisite: graduate standing. Class: 3 hours. Credit: 3 semester hours. S I & II.

534—Advanced Study in Human Development. A study of the development and nature of the human personality, especially as it affects the teaching-learning process. Prerequisite: graduate standing. Class: 3 hours. Credit: 3 semester hours. S I & II.

535—The Learning Process. Dynamics, processes, and systems of learning. Theoretical emphasis. Prerequisite: graduate standing. Class: 3 hours. Credit: 3 semester hours. S I.

536—Problems in Teaching Language Arts and Social Studies. Recent developments and trends with primary consideration given to individual teaching problems and individual research. Prerequisite: graduate standing. Class: 3 hours. Credit: 3 semester hours. S II.

537—The Elemenary School Curriculum. Analysis of the objectives, organization, and content of the different areas of the elementary school curriculum. Prerequisite: graduate standing. Class: 3 hours. Credit: 3 semester hours. S I.

538—Problems in Teaching Arithmetic and Science. Study of current developments and trends with emphasis upon individual teaching programs. Prerequisite: graduate standing: Class: 3 hours. Credit: 3 semester hours. S I.

539—Developmental Reading. Methods for extending and refining fundamental reading habits and attitudes, and for increasing reading efficiency. Prerequisite: graduate standing. Class: 3 hours. Credit: 3 semester hours. S I.

5301—Current Literature for Children and Adolescents. Survey of recent literature for children and adolescents. Emphasis given to non-fiction

in such areas as earth science and social science. Extensive reading of children's literature. Prerequisite: graduate standing. Class: 3 hours. Credit: 2 semester hours. S II.

5312—Learning Potentials in the Neurologically Involved. Determining the degree of modifiability of pupil behavior, identifying functioning levels, and devising appropriate teaching strategies; individual projects. Prerequisite: graduate standing. Class: 3 hours. Credit: 3 semester hours. S II.

5313—Learning Potentials in Mentally Retarded Children. Determining the degree of modifiability of pupil behavior, identifying functioning levels, and devising appropriate teaching strategies; individual projects. Prerequisite: graduate standing. Class: 3 hours. Credit: 3 semester hours. S I.

5317—Secondary School Curriculum. Analysis of the objectives, organization and content of the different areas of the secondary school curriculum. Prerequisite: graduate standing. Class: 3 hours. Credit: 3 semester hours. S I.

5321—Technology. Application of present technology to the production of educational materials and to direct instruction. Simulation, response devices, and filming techniques will be featured. Prerequisite: graduate standing. Class: 3 hours. Credit: 3 semester hours. S I.

5322—Organization and Administration of the Guidance Program. Essential services and management functions of guidance and counseling services for schools. Prerequisite: graduate standing. Class: 3 hours. Credit: 3 semester hours. S I.

5323—Occupational and Vocational Guidance. Survey of occupational fields, requirements, and rewards. Concepts of vocational guidance. Prerequisite: graduate standing. Class: 3 hours. Credit: 3 semester hours. S II.

5324—Individual and Group Counseling. Processes of individual study. Counseling procedures and techniques for individuals and groups. Prerequisite: graduate standing. Class: 3 hours. Credit: 3 semester hours. S I.

5328—Practicum in Guidance and Counseling. Supervised observation and practice of guidance and counseling in a school setting. Prerequisite: approval of department head. Class: the number of hours equivalent to 8 hours per week for 16 weeks. Credit: 3 semester hours. S II.

5332—Guidance and Counseling in the Elementary School. A course designed to provide an understanding of guidance principles and techniques applicable to the elementary school. Prerequisite: graduate standing. Class: 3 hours. Credit: 3 semester hours. S II.

5334—Interpretation and Analysis of Tests and Measurement. 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. Prerequisite: graduate standing. Class: 3 hours. Credit: 3 semester hours. S II.

5335—Individual Testing. Theoretical and practical study emphasizing the administration, scoring, and basic interpretation and practice in the use of individual psychological tests. Students will be trained to administer the Wechsler tests, the Stanford Binet, or other subsequently developed individual intelligence scales. Prerequisite: graduate standing. Class: 3 hours. Credit: 3 semester hours. S I.

5337—Seminar: Supervision and Curriculum Development. Investigation of the role of the supervisor with emphasis on curriculum development. Investigations will center around problems in supervision, curriculum theory, and educational experimentation. Class: 3 hours. Credit: 3 semester hours. S II.

DEPARTMENT OF HEALTH AND PHYSICAL EDUCATION FOR MEN

Physical Education (HPE)

Activity Courses for Men

111M—Activity. First activity course required of all men students seeking a degree at Lamar. A basic physical fitness program designed to bring all male students to a level of physical fitness which will allow them to perform their normal daily tasks with ease and have a comfortable reserve of energy. Class: 3 hours. Credit: 1 semester hour. S I.

211M-212M—Activity. Continuation of required physical education activity. Consists of instruction in fundamentals, rules and participation in selected team, dual and individual sports and activities of the student's choice. Prerequisite: HPE, 111M and 112M. Class: 3 hours. Credit: 1 semester hour. S I, S II.

Professional Courses

227M—Swimming. Demonstrations, lectures, and practice in the basic techniques of swimming and water safety. Class: 2 hours. Credit: 2 semester hours. S I & II.

228—Senior Life Saving. Lectures, demonstrations, and practice in the technique of life saving. Prerequisite: HPE 227 (M). Class: 1 hour. Laboratory: 2 hours. Credit: 2 semester hours. S I & II.

229—Water Safety Instructor Course. Organization, conditioning, and preparation of students in the required swimming and life saving skills. Advanced students may qualify for American Red Cross Water Safety Instructor. Prerequisite: Current Red Cross Senior Life Saving Certificate. Class: 1 hour. Laboratory: 2 hours. Credit: 2 semester hours. S I.

233—Physical Education in the Elementary School. The theory and practice of teaching physical education activities in the elementary grades. Classroom instruction and field laboratory assignments are included for demonstration and practice. Stress is placed on games of low organization. Classified as elementary physical education for purposes of teacher certification. Prerequisite: HPE 132. Class: 3 hours. Credit: 3 semester hours. S I & II.

235—Health Education in the Secondary School. Subject matter and grade placement, teaching methods and practice in preparation of teaching units in Health Education at the secondary school level. A study of source materials, planning and organizing included. Prerequisite: HPE 132. Class: 3 hours. Credit: 3 semester hours. S I.

320—Safety and First Aid. A survey of safety and first aid. Includes traffic safety and safety at home, work, school and play. Includes the scope, needs, and limitations of first aid with laboratory training in the techniques and methods of treatment of injuries. Class: 2 hours. Credit: 2 semester hours. S I.

334—Driver Education. Traffic rules and regulations and the basic facts concerning the cause and prevention of accidents. The course includes behind-the-wheel training in the use of the training automobile while instructing students. For teaching professional students how to teach driver education. Prerequisite: Texas Driver's License. Class: 3 hours. Credit: 3 semester hours. S I.

416—Student Teaching in Driver Education. Supervised observation and teaching of driver education in actual class and behind-the-wheel training. Prerequisite: "B" in HPE 334. Class: 1 hour. Credit: 1 semester hour. S I & II.

430—Problems in Physical and Health Education, Recreation and Safety. Special problems in physical and health education, recreation and safety are assigned to individual students or to groups of students. Assignments are made and consultations are held. Class: by consultation. Credit: 3 semester hours. S I & II.

431—Recreation Leadership. A survey of the field of recreation with stress on playground management, program making, observation and practice in activities and methods, leadership and skills. Includes problems in the promotion of recreation in the community. Offered summer session only. Prerequisite: 15 hours in physical education. Class: 3 hours. Credit: 3 semester hours. S II.

536—Research Methods in Health and Physical Education. The student will be introduced to the types of research in health and physical education with emphasis on tools and techniques of research and research design. Prerequisite: graduate standing. Class: 3 hours. Credit: 3 semester hours. S I.

669A-669B—Thesis. Prerequisite: Admission to candidacy for the Master of Science degree. Credit: 6 semester hours. S I & II.

DEPARTMENT OF HEALTH AND PHYSICAL EDUCATION FOR WOMEN

Health and Physical Education for Women (HPE)

Activity Courses for Women

111, 112—Activity. Required activity for women. Selected body building exercises, and physical activities directed toward increasing the physical fitness of students. Class: 3 hours. Credit: 1 semester hour. S I & II.

120—Swimming. Demonstrations, lectures and practice in the basic techniques of swimming and water safety skills. Class: 3 hours. Credit: 2 semester hours. S I & II.

121—Swimming and Diving. Demonstrations, lectures and practice in the techniques and analysis of selected swimming strokes and dives. Class: 3 hours. Credit: 2 semester hours. S I & II.

212—Activity. Continuation of HPE 111 and 112. Class: 3 hours. Credit: 1 semester hour. S I & II.

225—Lifesaving. Prerequisite: intermediate swimming skills. Development of proficiency in lifesaving and water safety skills and techniques. Completion of course also includes American Red Cross Senior Lifesaving Certificate. Lecture: 1 hour. Laboratory: 2 hours. Credit: 2 semester hours. S I.

226—Water Safety Instruction. Prerequisite: current Red Cross Certificate in Senior Lifesaving. The theory and study for teaching water safety techniques and procedures. Completion of course also includes meeting the proficiency requirements for American Red Cross water safety certification. Lecture: 1 hour. Laboratory: 2 hours. Credit: 2 semester hours. S II.

Professional Courses

335—Physical Education and Recreation for the Atypical Child. The physical, mental, emotional and social traits of atypical children as they relate to motor learning. The effects of traits on motor learning. The objectives, programs, and techniques and activities of instruction. Lectures, laboratory and observation. Class: 3 hours. Credit: 3 semester hours. S II.

338—Health Education in the Elementary School. Includes health problems and interests of elementary school children, the promotion of the healthful school environment, an understanding of health appraisal of school children and curriculum construction. Class: 3 hours. Credit: 3 semester hours. S I.

430—Problems in Physical Education. Biological, physiological, social, psychological, and other purposes and outcomes; selection and distribution of activities; teaching methods; facilities; teacher preparation; literature;

research problems. Prerequisite: Senior standing and consent of department head. Class: By consultation. Credit: 3 semester hours. S I & II.

530—Problems in Health and Physical Education. Biological, physiological, social, psychological, and other purposes and outcomes; selection and distribution of activities; teaching methods; facilities; teacher preparation; literature; research problems. Time Arranged. Credit: 3 semester hours. S I & II.

531—Cultural Foundations of Physical Education. A study of history and cultural foundations of sport and physical education activities, their origin and influence upon modern man. Class: 3 hours. Credit: 3 semester hours. S I.

533—Organization and Administration of the School Health Program. Administrative relationships and procedures in conducting school health programs. Class: 3 hours. Credit: 3 semester hours. S I.

535—Trends and Issues in Health and Physical Education. Designed to assist the student to become knowledgeable on current trends and issues in the areas of health and physical education. Study will include historical, analytical, and projective approaches. Course may be repeated for a maximum of six semester hours as the topic varies. Class: 3 hours. Credit: 3 semester hours. S II.

536—Research Methods in Health and Physical Education. Familiarity with types of research in Health and Physical Education with emphasis on tools and techniques of research and research design. Class: 3 hours. Credit: 3 semester hours. S I.

5301—Institute in Health and Physical Education. This course is designed to advance the professional competence of graduate students in health and physical education. Topic will vary. A description of the particular area of study will be indicated. May be repeated for credit when nature of course differs sufficiently from one previously taken. Class: 3 hours. Credit: 3 semester hours. S II.

669A-669B—Thesis. Prerequisite: admission to candidacy for the Master of Science degree. Credit: 6 semester hours. S I & II.

DEPARTMENT OF HOME ECONOMICS

Home Economics (HEc)

332—Human Nutrition. Nutrition and functions of nutrients related to the chemistry and physiology of the human body throughout the life cycle. Class: 3 hours. Laboratory: 1 hour. Credit: 3 semester hours. S I.

335—Housing and Home Furnishings. A study based on an understanding of historical design in architecture and furniture; application of design principles in choice of home and furnishings and wise acquisition of home and furnishings to meet individual needs. Class: 2 hours. Laboratory: 3 hours. Credit: 3 semester hours. S II.

433—Household Equipment. Selection, arrangement, use, and care of basic equipment. Class: 3 hours. Credit: 3 semester hours. S II.

444—Home Management. Residence in the home management house where information gained from previous courses is put into practice. Housing fee, payable in advance, is determined by Vice-President of Finance. Additional expenses will include cost of food and supplies. Class: 2 hours. Laboratory to be arranged. Credit: 4 semester hours. S I.

School of Engineering

Engineering (Egr)

121—Engineering Graphics. Principles of orthographic projection combined with descriptive geometry to solve space problems graphically. Lettering and drafting technique emphasized. Laboratory: 6 hours. Credit: 2 semester hours. S II.

122—Introduction to Digital Computers. Interpretive routines and compilers are used. Problems are used to illustrate methods. Each student prepares programs for digital computer. Class: 2 hours. Credit: 2 semester hours. S I.

132—Mechanics I. Utilizes vectors in the study of particle mechanics. Energy methods. Prerequisite: Mth 1391 or concurrent. Class: 3 hours. Credit: 3 semester hours. S I & II.

214—Industrial Projects. Special assignments in the major areas of engineering under guidance of a faculty member. Presentation of oral and written reports. May be repeated for credit. Prerequisite: approval of academic dean. Credit: 1 semester hour. S IV.

231—Mechanics II. Kinematics of rigid bodies, kinetics of rigid bodies, work and energy, impulse and momentum. Prerequisite: Egr. 132; Mth 2311 or concurrent. Class: 3 hours. Credit: 3 semester hours. S I & II.

232—Mechanics III. Effect of loads on deformable bodies. Uniaxial and biaxial stress-strain relationships, statically indeterminate systems. Equations developed for torsion, bending and buckling. Prerequisite: Egr 231 and Mth 2321. Class: 3 hours. Credit: 3 semester hours. S II.

233—Electric Circuits and Fields. Electrical and magnetic units; heating effects; basic circuit analysis; electric and magnetic fields; ferromagnetic circuits; inductance and capacitance; principles of energy conversion and measurements. Prerequisite: Phy 241; Mth 2321 or concurrent. Class: 3 hours. Credit: 3 semester hours. S I.

234—Thermodynamics. The fundamental laws of themodynamics, properties of systems, gases, vapors, and thermodynamics tables. Prerequisite: Chm 142 Phy 241; Mth 2321 and Mth 234 or concurrent; Egr 122. Class: 3 hours. Credit: 3 semester hours. S I & II.

331—Momentum Transfer. Fluid-flow concepts are presented through the derivation of the basic equations of continuity, energy, and momentum. Engineering aspects of flow measurement, pressure-drop calculations, and pumping requirements are considered. Prerequisite: Egr 234. Class: 3 hours. Credit: 3 semester hours. S II.

333—Electronics. A study of charged particles; metals and semiconductors; vacuum tube and transistor characteristics; gaseous conduction; rectifiers and power supplies. Prerequisite: Egr 233 and Mth 2321. Class: 3 hours. Credit: 3 semester hours. S II.

339—Materials Science and Manufacturing Processes. Basic principles underlying the behavior of engineering materials and methods of processing these materials. Prerequisite: Chm 141 and Phy 241. Class: 3 hours. Credit: 3 semester hours. S II.

4101, 4201, 4301, 4401—Special Problems. An investigation into specialized areas of engineering under the guidance of a faculty member. This course may be repeated for credit when topics of investigation differ. Credit: 1-4 semester hours. S II & IV.

536—Thermodynamics. Process Industry. Thermodynamic laws are derived and applied to physical and chemical phenomena. Ideal and non-ideal gas, liquid, and solid solution behavior are developed for physical and chemical equilibria. Statistical and irreversible thermodynamics are introduced. Course credit in chemistry is optional. Class: 3 hours. Credit: 3 semester hours. S IV.

5311—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. Class: 3 hours. Credit: 3 semester hours. S IV.

5371—Seminar in Administrative Practices. Study of the interrelationships between the fields of economics, politics, physical science and social science and the effects upon the management of engineering work. Class: 3 hours. Credit: 3 semester hours. S IV.

631—Design Project. Prerequisite: admission to candidacy. Credit: 3 semester hours. S I, II, & IV.

669A-669B—Thesis. Prerequisite: admission to candidacy. Credit: 6 semester hours. S I, II, & IV.

DEPARTMENT OF CHEMICAL ENGINEERING

Chemical Engineering (ChE)

332—Chemical Process Principles III. Generalized approach to heat transfer, conduction, convection, and radiation will be considered. An introduction to mass transfer will be made. Prerequisite: Egr 331. Class: 3 hours. Credit: 3 semester hours. S II.

333—Thermodynamics II. Properties of non-ideal substances. Maxwell relations, vapor pressure, latent heat, enthalpy-concentration diagrams, chemical equilibria, equilibrium constants, fugacity, and activity. Prerequisite: ChE 342. Class: 3 hours. Credit: 3 semester hours. S II.

342—Chemical Process Principles I. The application of mathematics, chemistry, and physics to solution of problems in industrial chemistry. Included are topics on mass and energy balance, phase equilibria, and economic evaluations. Prerequisite: Egr 234. Class: 3 hours. Laboratory: 3 hours. Credit: 4 semester hours. S I.

DEPARTMENT OF ELECTRICAL ENGINEERING

Electrical Engineering (EE)

317—Junior E.E. Laboratory. To be taken in parallel with EE 331. Laboratory: 3 hours per week. Credit: 1 semester hour. S I.

318—Junior E.E. Laboratory. To be taken in parallel with EE 332, and EE 336. Class: 3 hours per week. Credit: 1 semester hour. S II.

331—Circuits I. A study of instantaneous current and voltage, the impedance function, complex algebra in circuit analysis, average power and effective current, equivalent networks, resonance, graphical methods, loop and node network equations, matrix solutions, and network theorems. Prerequisite: Egr 233, Mth 232. Class: 3 hours. Credit: 3 semester hours. S I.

332—Circuits II. Coupled circuits, balanced and unbalanced polyphase circuits, symmetrical components, non-linear elements, Fourier series and integral, transient response, complex frequency plane, Laplace transformation. Prerequisite: EE 331. Class: 3 hours. Credit: 3 semester hours. S II.

336—Energy Conversion II (Electromechanical). A study of electromechanical energy conversion principles. Lagrange's equations; incremental motion transducers; rotating machines. Prerequisite: EE 331. Class: 3 hours. Credit: 3 semester hours. S II.

DEPARTMENT OF INDUSTRIAL ENGINEERING

Industrial Engineering (IE)

3302—Digital Computation II. Machine languages; algebraic structures; systems of computer logic; numerical algorithms; interpolation, errors. Prerequisite: Mth 2311, 233, 234, Egr 235. Class: 3 hours. Credit: 3 semester hours. S I.

430—Statistical Quality Control. The use of statistics in the design, installation and operation of systems for the design of quality, the prevention of defects and the assurance of given quality levels. Prerequisite: Mth 234. Class: 2 hours. Laboratory: 3 hours. Credit: 3 semester hours. S I.

435—Production and Inventory Control. Techniques employed in continuous process and job lot manufacture for planning and controlling production. Procurement, inventory control, scheduling, facilities, loading, routing, dispatching. Prerequisite: Mth 234, IE 330. Class: 3 hours. Credit: 3 semester hours. S I.

DEPARTMENT OF MECHANICAL ENGINEERING

Mechanical Engineering (ME)

435—Turbomachinery. Flow problems encountered in the design of water, gas and steam turbines, centrifugal and axial-flow pumps and com-

pressors. Prerequisites: ME 331 and ME 338. Class: 3 hours. Credit: 3 semester hours. S I.

436—Dynamics of Machinery. Kinematics of mechanisms, gears, and epicyclic gear trains. Synthesis of linkages. Calculation of inertia forces and shaking forces on machines. Multicylinder engine balancing. Graphical and analytical methods are employed. Prerequisite: ME 332. Class: 2 hours. Laboratory: 3 hours. Credit: 3 semester hours. S II.

4313—Transport Theory II. Transport processes in incompressible boundary layers. Transport with change of phase. Compressible flow in nozzles, ducts, and turbomachines. High speed compressible boundary layer flow. Slip and free molecule flow. Prerequisite: ME 331. Class: 3 hours. Credit: 3 semester hours. S II.

4317—Engineering Analysis II. A continuation of ME 334 with some emphasis being placed on analog methods and computer techniques in solving engineering problems. Prerequisite: ME 334. Class: 2 hours. Laboratory: 3 hours. Credit: 3 semester hours. S I.

DEPARTMENT OF MATHEMATICS

Mathematics (Mth)

131—Finite Mathematics I. Linear and guadratic equations, logarithms, inequalities, compound interest, geometric progressions and annuities, and statistics. Prerequisite: 2 units of high school mathematics. Class: 3 hours. Credit: 3 semester hours S I & II.

132—Finite Mathematics II. Selected topics in modern finite mathematics. Class: 3 hours. Credit: 3 semester hours. S I & II.

133—Analytical Trigonometry. Trigonometric functions and their applications, trigonometric identities and equations. Prerequisite: 1½ units of high school algebra and 1 unit in plane geometry. Class: 3 hours. Credit: 3 semester hours. S I & II.

134—College Algebra. Exponential and logarithms functions, matrices, complex numbers and vectors, theory of equations, sequences and series, and probability. Prerequisite: 2 years of high school algebra. Class: 3 hours. Credit: 3 semester hours. S I & II.

1341—Elements of Analysis. Linear programming, differential and integral calculus. Prerequisite: Mth 134. Class: 3 hours. Credit: 3 semester hours. S I & II.

135—Contemporary Mathematics I. Sets, counting numbers, numeration systems, and integers. CUPM for Education majors only. Class: 3 hours. Credit: 3 semester hours. S I.

136—Contemporary Mathematics II. Elementary number theory, rational numbers, decimals, real numbers and finite number systems. CUPM

for Education majors only. Prerequisite: Mth 135. Class: 3 hours. Credit: 3 semester hours. S I & II.

1381—Analytic Geometry. Straight lines, conic sections, transformation of coordinates, polar coordinates, and solid analytic geometry. Prerequisite: Mth 133 or high school trigonometry. Class: 3 hours. Credit: 3 semester hours. S I & II.

1391—Calculus I. Limits, derivatives, applications of derivatives, integration with applications, and transcendental functions. Prerequisite: Mth 1381. Class: 3 hours. Credit: 3 semester hours. S I & II.

2311—Calculus II. Methods of integration, hyperbolic functions, vectors and parametric equations, and solid geometry and vectors. Prerequisite: Mth 1391. Class: 3 hours. Credit: 3 semester hours. S I & II.

2321—Calculus III. Partial differentiation, multiple integrals infinite series, differential equation. Prerequisite: Mth 2311. Class: 3 hours. Credit: 3 semester hours. S I & II.

234—Probability and Statistics. Empirical, frequency distributions, probability theoretical distributions, sampling distributions, and statistical applications. Prerequisite: Mth 1391 or concurrently. Class: 3 hours. Credit: 3 semester hours. S I.

330—Principles of Mathematics. An introduction to some modern topics in mathematics. Symbolic logic, a development of the number system, groups, fields, sets, boolean algebra, function theory, and probability. Prerequisite: Mth 231. Class: 3 hours. Credit: 3 semester hours. S I.

331—Differential Equations. Analytical solution of ordinary differential equations in terms of elementary and classical functions. Application to problems in geometry, engineering, and physics. Introduction to solution by series. Prerequisite: Mth 2321. Class: 3 hours. Credit: 3 semester hours. S I.

334—Higher Geometry. Advanced topics in Euclidean geometry followed by a brief study of satellites. Constructible elements, problem of Apollonius, geometrical transformations. Euler line, Feuerbach Theorem, geometry of the triangle, Dandelin spheres, conic sections. Prerequisite: Mth 2311. Class: 3 hours. Credit: 3 semester hours. S II.

337—Theory of Equations. Complex numbers, general theorems on algebraic equations, solution cubic and quartic equations. Determinants and matrices. Cramer's Rule. Symmetric functions, resultants, discriminants and elimination, the Graeffe method. Prerequisite: Mth 2311. Class: 3 hours. Credit: 3 semester hours. S II.

3311—Set Theory. Set theory. Infinite sets, cardinal and ordinal arithmetic. Axiom of choice. Transfinite induction. Applications in the topology of the real line, complex plane, and simple closed curves. Class: 3 hours. Credit: 3 semester hours. S II.

3313—Modern Elementary Geometry. A study of the structure of geometry with primary emphasis on the needs of the elementary teacher. Prerequisite: Mth 136. Class: 3 hours. Credit: 3 semester hours. S I.

338, 339—Advanced Calculus. The number system, the concept of a function, limits, sequences, continuity, differentiability, the Riemann integral, functions of several variables, differentiable functions of several variables, multiple integrals, improper integrals, infinite series, Taylor's series, and Fourier series. Prerequisite: Mth 2321. Class: 3 hours. Credit: 3 semester hours for each course. S I, S II.

431, 432—Introduction to Functions of a Complex Variable. Review of theorems from analysis and point set theory followed by a study of analytic functions from the Cauchy-Riemann and Weierstrass points of view. Compact acts, uniform convergence, Taylor Expansion Theorem, analytic continuation, Laurent expansions, calculus of residues, conformal mapping. Prerequisite: Mth 3311. Class: 3 hours. Credit: 3 semester hours each course. S I, S II.

537—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: Mth 431. Class: 3 hours. Credit: 3 semester hours. S I.

5301—Operational Mathematics. Ordinary differential equations, the Laplace Transform, elementary properties; Inverse Transforms, applications of the Laplace Transform to ordinary differential equations. Class: 3 hours. Credit: 3 semester hours. S I.

5302—Operational Mathematics. Application of LaPlace Transform to partial differential equations, boundary-value problems and characteristics, function representation. Class: 3 hours. Credit: 3 semester hours. S II.

5315—Probability and Statistics. Permutation and factorials, elementary principles of probability, mathematical expectations, averages, curve fitting, application. Class: 3 hours. Credit: 3 semester hours. S I.

5316—Data Processing. A survey of higher languages and an assembly language with application to advanced programming techniques. Syntax, semantics, and numerical techniques as applied to programming applications. Class: 3 hours. Credit: 3 semester hours. S II.

5331—Special Topics for Graduate Students. Advanced topics in mathematics to suit the needs of individual classes of graduate students. Course may be repeated for a maximum of six semester hours credit when the topic varies. Class: 3 hours. Credit: 3 semester hours. S II.

669A-669B—Thesis. Prerequisite: admission to candidacy for the master's degree. Credit: 6 semester hours. S I & S II.

School of Fine Arts and Applied Arts

DEPARTMENT OF COMMERCIAL ART

Commercial Art (CA)

130—Appreciation of the Fine Arts. (Same as Spc 130 and MLt 130.) A survey course covering the areas of a. art, b. music, c. theatre. To be taught by representatives of the art, music and speech faculties. Class: 3 hours. Credit: 3 semester hours. S I & II.

131, 132—Drawing. Working with pencil, pen, chalk and brush to train the eye and hand in visual recording. Class and laboratory: 6 hours. Credit: 3 semester hours per course. S II.

133, 134—Design and Composition. The organization and arrangement of art elements and principles to express best the artists purpose. Class and laboratory: 6 hours. Credit: 3 semester hours per course. S I.

137—Introduction to Art. An introduction to the visual arts. An analysis of art form: Line, value, texture, volume, color and their application to the production of art. Class: 3 hours. Credit: 3 semester hours. S I.

139—Fundamentals of Photography. A basic course designed to teach students the operation of various types of cameras. Included is a study of the theory and practical application of darkroom laboratory processes. Class: 2 hours. Laboratory: 3 hours. Credit: 3 semester hours. S I.

231, 232—Life Drawing. Drawing the human figure in pencil, pen and ink, charcoal, pastel and watercolor. Class and laboratory: 6 hours. Credit: 3 semester hours per course. S I, S II.

235, 236—Art History. A survey of the art history from prehistoric times to the present, in terms of form, subject matter and ideology. The expression of mankind's varying attitudes in his greatest art. Class: 3 hours. Credit: 3 semester hours. S I, S II.

335, 336—Graphics. Introductory work in the graphic processes of serigraphy, etching, woodcut, engraving and lithography. Prerequisite: CA 231 and 232. Class and laboratory: 6 hours. Credit: 3 semester hours per course. S I.

337—Art in the Elementary School. Teaching devices, techniques and media used in the elementary school are studied and used in the laboratory. Class and laboratory: 6 hours. Credit: 3 semester hours. S I & II.

431, 432—Oil Painting. The planning and producing of original oil paintings either as commercial art subjects or as fine art paintings. Their presentation for publication and exhibition. Class and laboratory: 6 hours. Credit: 3 semester hours per course. S II.

4313—Advanced Life Drawing. Drawing the human figure in various media. Prerequisite: CA 231 and 232. Class and laboratory: 6 hours. Credit: 3 semester hours. Course may be taken twice for credit. S I & II.

4314—Advanced Graphics. A course in intaglio and relief painting. The study and use of all the graphic reproduction processes. Prerequisite: CA 335-336. Class and laboratory: 6 hours. Credit 3 semester hours. Course may be repeated for credit. S I.

4317—Crafts. An introduction to various craft materials and techniques used in the elementary school. Prerequisite: CA 337. Class and laboratory: 6 hours. Credit: 3 semester hours. Course may be taken twice for credit. S I.

4318—Crafts. An introduction to the various craft materials and techniques used in the secondary school. Prerequisite: CA 337. Class and laboratory: 6 hours. Credit: 3 semester hours. Course may be taken twice for credit. S I.

435, 436—Experiments in Form. Creative experimentation with the formal aspect of art. Abstract expression forces in art are analyzed and practiced. Class and laboratory: 6 hours. Credit: 3 semester hours per course. S I.

437, 438—The Psychology of Art. An investigation into the nature of the creative individual and how it is expressed graphically. Class and laboratory: 6 hours. Credit: 3 semester hours per course. S II.

439—Directed Individual Study. An individual student assignment course for juniors and seniors. Time to be arranged. Credit: 3 semester hours. S I & II.

DEPARTMENT OF MUSIC

Applied Music (MA)

1101—Beginning Band or Orchestral Instruments. Basic fundamentals of articulation and tone production. Scales and arpeggios. Elementary methods and easy solo materials. Freshman students must audition before registering for placement in MA. Class: One-half hour lessons per week. Credit: One semester hour per course. S I.

1143—Secondary Piano. Study of scale systems and application, intervals, chord structure, harmonization of melody, and other elements of keyboard harmony. Two octave scales and cadences. Maximum of four students per class. Class: 1 hour. Credit: 1 semester hour. S I & II.

1183, 1184—Secondary Voice. Music majors not majoring in voice will learn to use the singing voice. Study of breathing and vocalization. Songs will be studied. Prerequisite: Ability to read music, and some knowledge of the keyboard. One lesson per week. Credit: One semester hour per course. S I & II.

1203, 1204, 2203, 2204, 3203, 3204, 4203, 4204—Bassoon. Practical studies, Weissenborn, scale studies. Pare; Reveire, Jancourt, Romanze, Klakhardt; The Carnival, Hume. Two one-half hour lessons per week. Credit: 2 semester hours per course. S I.

1215, 1216, 2215, 2216, 3215, 3216, 4215, 4216—Clarinet. Scales and arpeggios from Baermann Langenus Vol. III. Rose Forty Studies Canzonetta, Pierne, Concertino, Tartini-Jacob, Adagio-Tarantella, Cavallini; Fantasy Pieces, Schumann. Last 6 semesters will include Voxman, Polastchek, Perier Etudes; Advanced Solos and Orchestra Studies. Class: Two one-half hour lessons per week. Credit: 2 semester hours per course. S I.

1217, 1218, 2217, 2218, 3217, 3218, 4217, 4218—Cornet-Trumpet. Basic fundamentals of articulation and tone production. Major and minor scales and arpeggios. Transposition. Methods: St. Jacome, Arban, Hering, Sachse, Schlossberg. Representative solos: Ropartz, Andante and Allegro; Balay, Petite Pierce Concertante. Performance on student recitals once a semester. Prerequisite: Audition. Class: Two one-half hour lessons per week. Credit: 2 semester hours per course. S I.

1223, 1224, 2223, 2224, 3223, 3224, 4223, 4224—French Horn. Basic fundamentals of articulation and tone production. Major and minor scales and arpeggios. Transposition. Band and orchestral reportoire. Methods: Alphonse, Koprasch, Sansone. Representative solos. Performance on student recital once a semester. Prerequisite: Audition. Class: Two one-half hour lessons per week. Credit: 2 semester hours per course. S I.

1231, 1232, 2231, 2232, 3231, 3232, 4231, 4232—Oboe. Complete method for oboe, Barrett, scales studies, Pare; three Romanances, Schumann; Niemann; 16 daily exercise, Labate; orchestral studies, reed making; Pastorale, Labate; Niedell's Sonata No. 1. Two one-half hour lessons per week. Credit: 2 semester hours per course. S I .

1233, 1234, 2233, 2234, 3233, 3234, 4233, 4234—Organ. Organ instruction includes a study of the techniques needed to prepare and project publicly the literature of the keyboard representing organ literature of all periods in both small and large forms. Particular emphasis will be placed on manual and pedal technique, analysis of literature, thorough knowledge of registration, ability to adapt piano accompaniments, hymn playing, and proficiency in accompanying, ensemble, chamber music and solo recital playing. Two one-half hour lessons per week. Credit: 2 semester hours per course. S II.

1241, 1242, 2241, 2242, 3241, 3242, 4241, 4242—Piano. To develop musicianship, through technical proficiency and ability to assimilate music without guidance. A study of the various techniques needed to prepare and project publicly the literature of the keyboard representing piano literature of all periods in both small and large forms. Particular emphasis will be placed on scale and arpeggio playing, formal exercises, use of the pedals, analysis of the literature, programming, ability to employ and develop creative techniques for individual requirements, and proficiency in accompanying, ensemble, chamber music and solo recital playing. Two one-half hour lessons per week. Credit: 2 semester hours per course. S I & II.

1251, 1252, 2251, 2252, 3251, 3252, 4251, 4252—Saxaphone. Method for Saxophone by DeVille. Air from Suite in D by Bach-Leeson. Jota by Gure-

wich. Two one-half hour lessons per week. Credit: 2 semester hours per course. S I.

1253, 1254, 2253, 2254, 3253, 3254, 4253, 4254—Percussion. Garner, Goodman, Harr, and Rubank. Methods, standard solos, band and orchestra repertoire. Performance on student recital once a semester. Two half-hour lessons per week. Credit: 2 semester hours. S I.

1257, 1258, 2257, 2258, 3257, 3258, 4257, 4258—String Bass. Through the use of appropriate methods, e.g., Simandl, the technique of the student will be developed. Scales and arpeggios will also form a vital part of the study. Two half-hour lessons per week. Credit: 2 semester hours per course. S I.

1261, 1262, 2261, 2262, 3261, 3262, 4261, 4262—Trombone or Baritone. Basic fundamentals of articulation and tone production. Major and minor scales and arpeggios. Methods: Mueller, Rochut, Clarke, Vobaron, Kopprasch. Representative solos. Performance on student recital once a semester. Prerequisite: Audition. Class: Two one-half hour lessons per week. Credit: 2 semester hours per course. S I & II.

1263, 1264, 2263, 2264, 3263, 3264, 4263, 4264—Tuba. Basic fundamentals of articulation and tone production. Major and minor scales and arpeggios. Band and orchestral repertoire. Methods: Eby, Bell, Slama, solos. Prerequisite: Audition. Class: Two one-half hour lessons per week. Credit: 2 semester hours per course. S I & II.

1271, 1272, 2271, 2272, 3271, 3272, 4271, 4272—Viola. Scales and arpeggios. Studies and exercises selected according to the individual needs of the student. Sonata, concertos and short solo pieces. Minimum practice: two hours daily. Two half-hour lessons per week. Credit: 2 semester hours per course. S I.

1273, 1274, 2273, 2274, 3273, 3274, 4273, 4274—Violin. Scales and arpeggios. Studies and exercises selected according to individual needs of the student. Sonatas and concerts selected for technical and musical advancement. Minimum practice: 2 hours daily. Two half-hour lessons per week. Credit: 2 semester hours per course. S I.

1281, 1282, 2281, 2282, 3281, 3282, 4281, 4282—Voice. Study of breathing and vocalization. A balanced repertoire of songs will be studied each semester. Course offered to both music and non-music majors. Prerequisite: Ability to read music, and some knowledge of the keyboard. Two private half-hour lessons per week. Credit: 2 semester hours per course. S I & II.

3283, 3284, 4283, 4284—Composition. Creative writing ranging from solo and small ensemble works to more extended composition for orchestra, band or chorus. Prerequisite: MTy 233. Two half-hour lessons a week. Credit: 2 semester hours. S I.

Music Education (MEd)

131—Elements of Music. A study of scales, chords and musical terminology, signatures, sight singing, and rhythms. Designed to prepare stu-

dents for advanced study in music theory or to familiarize non-music majors with the meaning of musical notation and the harmonic, melodic, and rhythmic structure of music. Class: 3 hours. Credit: 3 semester hours. S I & II.

331—Elementary Methods and Materials. Techniques and materials in teaching of music in the lower elementary grades. The child's voice, rote singing; rhythmics, introduction of notation; creative music activities. Prerequisite. MTy 131 or equivalent. Class: 3 hours. Credit: 3 semester hours. S 1 & II.

332—Techniques and Materials in Teaching of Music in the Upper Elementary Grades. Creative music, rhythmic activity, rote singing, reading of notation, and effective use of materials. Class: 3 hours. Credit: 3 semester hours. S II.

Music Laboratory (MLb)*

216—Musical Comedy. A laboratory course providing both background study and practical work in the specialized field of musical comedy, including participation in the presentation of a full production. Open to both vocalists and instrumentalists from all departments by audition or by consent of instructor. Laboratory: 3 hours. Credit: 1 semester hour. May be repeated for credit up to 3 hours. S I.

Music Literature (MLt)

130—Appreciation of Fine Arts. (Same as Spc 130 and CA 130.) A survey course covering the areas of a. art, b. music, c. theatre. To be taught by any representative of the art, music, and speech faculties. Class: 3 hours. Credit: 3 semester hours. S I & II.

Music Theory (MTy)

133—Elementary Harmony. Elementary keyboard and written harmony; sight singing; ear training. Prerequisite: MTy 131 or by advanced standing exam. 5 hours. Credit: 3 semester hours. S I.

DEPARTMENT OF SPEECH

Speech (Spc)

130—Appreciation of the Fine Arts. (Same as MLt 130 and Art 130). A survey course covering the areas of a. art, b. music, c. theatre. To be taught by representatives of the art, music, and speech faculties. Class: 3 hours. Credit: 3 semester hours. S I & II.

131—Speech Communication. Instruction in the theory of speech communication as an effective force in human behavior. Emphasis upon the development of the student's skill as an initiator in the communication cycle. Students will participate in informative and persuasive communicative situations by way of public address, group discussion, reading from

manuscript and informal speaking activities. Class: 3 hours. Credit: 3 semester hours. S I & II.

133—Voice and Phonetics. Phonetic transcription, regional and foreign dialects, and application of phonetic study to speech correction. Class: 3 hours. Credit: 3 semester hours. S II.

134—Speech Correction: A Survey. An introduction to the study of speech correction. A survey of the defects of speech with particular emphasis on articulation defects and voice problems. Class: 3 hours. Credit: 3 semester hours. S I.

216—Musical Comedy. A laboratory course providing background study and practical work in the field of music comedy, including participation in the presentation of a full production. Open by audition or by consent of the instructor to students from all departments who are interested in acting or technical work in the theatre, especially as applied to musical comedy. Laboratory: 3 hours. Credit: 1 semester hour. May be repeated for credit up to 3 hours. S I.

231—Audiology. Study of the human ear and its abnormalities. Administration and interpretation of hearing tests; clinical observation. Credit: 3 semester hours. S I.

331—Business and Professional Speech. Application of the fundamentals of speech production to the needs of the professional man or woman. Practice in gathering and organizing material for speeches for special occasions. Emphasis is given to extemporaneous speaking, conferences and discussion group speaking, and report presentations. Class: 3 hours. Credit: 3 semester hours. S II.

333—Interpretation of Children's Literature. Study of materials for different ages of children; study of sources of program material; practice in adapting material into programs; practice in presenting programs in laboratory and in nearby schools, hospitals and homes. Class: 3 hours. Credit: 3 semester hours. S I & II.

336—Creative Dramatics: Instruction in the methods of introducing creative dramatics into the elementary and junior high schools, and the presentation of projects related to the development of creative play-making in the home, community, and school. Class: 3 hours. Credit: 3 semester hours. S II.

337—Advanced Oral Interpretation of Literature. Instruction and practice in the principles of speech applied to performance in the interpretation of dramatic literature. Class: 3 hours. Credit: 3 semester hours. S II.

3391—Speechreading and Auditory Training. Techniques of teaching speech reading to deaf children and deafened persons. Class: 3 hours. Credit: 3 semester hours. S II.

431—Problems and Projects in Theatre. Students will perform activities in one of the following areas: acting, directing, producing, designing, and

constructing costumes and stage settings for the school theatre. Credit: 3 semester hours. Course may be repeated once for credit. S I .

4325—Instrumentation. A study of the behavior of sound waves, basic recording and analysis of sound, use and maintenance of equipment used in speech and hearing clinics or for research projects. Credit: 3 semester hours. S I.

437—Directing Secondary School Theatre Activities. Principles involved in extracurricular theatre activities. Practical experience with workshop students constitutes a part of this course. (Offered in summer terms only.) Credit: 3 semester hours. S I.

438—Directing Secondary School Speech Activities. Principles involved in extracurricular activities such as debate, extemporaneous speaking, radio and television. Practical experience with workshop students constitutes a part of this course. (Offered in summer terms only.) Credit: 3 semester hours. S II.

533—Disorders of Communication: Clinical Management. Study of theory, procedure, and clinical management as they relate to problems in disorders of communication. Credit: 3 semester hours. S I.

5322—Seminar in Disorders of Language. Etiology, diagnosis and clinical management of language disorders, with emphasis on aphasia. Class: 3 hours. Credit: 3 semester hours. S II.

5323—Neurological Speech and Hearing Disorders. Principles of general neurology with special reference to the functions of the central nervous system, as related to speech and hearing disorders. Class: 3 hours. Credit: 3 semester hours. S II.

School of Liberal Arts

DEPARTMENT OF ENGLISH

English (Eng)

131—Rhetoric and Composition. Intelligent and critical reading of mature exposition; correct and effective expository writing. Collateral readings; frequent themes. Class: 3 hours. Credit: 3 semester hours. S I & II.

132—Rhetoric and Composition. A continuation of English 131. The research paper. Introduction to literary genres. Class: 3 hours. Credit. 3 semester hours. S I & II.

231, 232—Survey of British Literature. A critical study of the literature of Great Britain from the Middle Ages to the present. Class: 3 hours. Credit: 3 semester hours. S I & II.

331, 332—Survey of American Literature. A critical study of the literature of the United States from the colonial period to the present. Class: 3 hours. Credit: 3 semester hours. S I, S II.

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

334—Advanced Grammar. Intensive analysis of sentences; the concept of structural meaning. Prerequisite: foreign language through 132. Class: 3 hours. Credit: 3 semester hours. S I.

337—The Drama: The historical development of the drama from Aeschylus to the present. Intensive study of selected plays. Class: 3 hours. Credit: 3 semester hours. S II.

339—American Novel. A study of the history, growth, and technique of the American novel, with emphasis on the novels of the twentieth century. Class: 3 hours. Credit: 3 semester hours. S II.

431—Chaucer. A study of the poetry and language of Chaucer with emphasis on the Canterbury Tales. Class: 3 hours. Credit: 3 semester hours. S II.

432—Studies in Sixteenth Century Literature. Critical studies in the poetry, prose, and drama of the age. May be taken for credit more than once if the topic varies. Class: 3 hours. Credit: 3 semester hours. S III.

4313—The American Literary Renaissance: 1820-1860. An intensive study of the major authors of the period from Poe to Melville. Class: 3 hours. Credit: 3 semester hours. S I.

4318—Contemporary Poetry. A study of poetic developments in England and America with emphasis on representative poets from Hardy to the present. Class: 3 hours. Credit: 3 semester hours. S I.

4321—Selected Problems in Comparative Literature. Intensive study of an author or authors, literary genre, or period selected from the range of world literature. Emphasis upon analysis and literary method. Class: 3 hours. Credit: 3 semester hours. S I.

4325—Language: Sound and Meaning. Theory of language for non-English majors. A study of meaning as related to words and to grammatical features. English phonology as applied to orthography. May not be counted for English major credit. Class: 3 hours. Credit: 3 semester hours. S II.

530—Bibliography and Research Methods. An introduction to graduate research methods and sources. Basic course for all beginning graduate students. Prerequisite: graduate standing. Class: 3 hours. Credit: 3 semester hours. S I.

536—Studies in Restoration and Eighteenth Century English Literature. An intensive study of an author or related authors selected from the period. Course may be repeated for a maximum of six semester hours credit when the topic varies. Prerequisite: graduate standing. Class: 3 hours. Credit: 3 semester hours. S II.

537—Studies in Nineteenth Century English Literature. An intensive study of an author or related authors selected from the period. Course may be repeated for a maximum of six semester hours credit when the topic varies. Prerequisite: graduate standing. Class: 3 hours. Credit 3 semester hours. S II & III.

538—Studies in Twentieth Century Literature. An intensive study of an author or related authors selected from the period. Course may be repeated for a maximum of six semester hours credit when the topic varies. Prerequisite: graduate standing. Class: 3 hours. Credit: 3 semester hours. S I.

669A-669B—Thesis. Prerequisite: admission to candidacy for the master's degree. Credit: 6 semester hours. S I & II.

DEPARTMENT OF GOVERNMENT

Government (Gov)

231—The American Constitutional System, Federal and State. A study of the background and composition of the national and state constitution; local government; the federal and state judiciaries; civil liberties. Prerequisite: sophomore standing. Class: 3 hours. Credit: 3 semester hours. S I & II.

232—American and State Government Organization and Functions. A study of political parties; the legislative and executive branches; functions of both national and state government; foreign policy. Prerequisite: sophomore standing. Class: 3 hours. Credit: 3 semester hours. S I & II.

3318—East Asian Governments and Politics. An introduction to the political ideas, institutions, and processes of China and Japan considered

against their social and economic development with special emphasis on the political problems of the contemporary scene. Class: 3 hours. Credit: 3 semester hours. S II.

335—The American Presidency. The role of the office in political and diplomatic, social and economic terms, as well as in the policy making aspects. Class: 3 hours. Credit: 3 semester hours. S I.

337—The Politics of American Foreign Policy. An analytical and historical view of United States foreign policy; its domestic sources; the instruments of American diplomacy; United States involvement in world politics; and the limitations and potentials of American foreign policy. Class: 3 hours. Credit: 3 semester hours. S II.

433—History of Political Thought III. A continuation of Government 432 from Karl Marx to the present with attention given to modern American thought. Class: 3 hours. Credit: 3 semester hours. S I.

435—The International System. The study of the legal bases of the modern international system and the political and legal characteristics of the developing world order. Class: 3 hours. Credit: 3 semester hours. S I.

534—Seminar in American Government and Politics. A survey of the literature in the field of American government and politics. Classical and contemporary works are examined, with emphasis on the modern approaches to the study of American government and politics. Prerequisite: graduate standing. Class: 3 hours. Credit: 3 semester hours. S I.

DEPARTMENT OF HISTORY

History (His)

131—History of World Civilization. Survey of world history to 1660. Class: 3 hours. Credit: 3 semester hours. S I & II.

132—History of World Civilization. Survey of world history from 1660 to the present. Class: 3 hours. Credit: 3 semester hours. S I & II.

134—History of Texas. Survey of Texas history from the beginning to the present time. Class: 3 hours. Credit: 3 semester hours. S I & II.

231—History of the United States. Survey of United States history to 1865. Prerequisite: sophomore standing. Class: 3 hours. Credit: 3 semester hours. S I & II.

232—History of the United States. Survey of United States history from 1865 to the present. Prerequisite: History 231. Class: 3 hours. Credit: 3 semester hours. S I & II.

334—Military History of the United States. History of American warfare and the development of American military institutions and practices. Class: 3 hours. Credit: 3 semester hours. S I.

430—Era of the Renaissance and Reformation. Western Europe from 1453 to 1610. Class: 3 hours. Credit: 3 semester hours. S II.

434—Nineteenth Century Europe. Europe from 1815 to 1914. Class: 3 hours. Credit: 3 semester hours. S II.

437—The Old South. The American South from colonial times to the Civil War. Class: 3 hours. Credit: 3 semester hours. S II.

439—Honors Program. A tutorial program for honors seniors. Admission by invitation only. Credit: 3 semester hours. S I & II.

4311—Colonial America. Class: 3 hours. Credit: 3 semester hours. S I.

4314—The American Civil War. Class: 3 hours. Credit: 3 semester hours. S I.

4317—New Deal and World Leadership: The United States from 1920 to 1940. Class: 3 hours. Credit: 3 semester hours. S III.

4318—Classical Civilization. Greece and Rome from earliest times to the fall of the Roman Empire in the West. Class: 3 hours. Credit: 3 semester hours. S I.

532—Readings in American History. Course may be repeated for a maximum of six semester hours credit when the topic varies. Prerequisite: graduate standing. Class: 3 hours. Credit: 3 semester hours. S III.

534—Readings in European History Since 1815. Course may be repeated for a maximum of six semester hours credit when the topic varies. Prerequisite: graduate standing. Class: 3 hours. Credit: 3 semester hours. S I.

537—Seminar in United States History. Course may be repeated for a maximum of six semester hours credit when the topic varies. Prerequisite: graduate standing. Class: 3 hours. Credit: 3 semester hours. S II.

669A-669B—Thesis. Prerequisite: admission to candidacy for the master's degree. Credit: 6 semester hours. S I & II.

DEPARTMENT OF MODERN LANGUAGES

French (Fre)

141—Elementary French. Class: 3 hours. Laboratory: 2 hours. Credit: 4 semester hours. S I.

142—Elementary French. Prerequisite: French 141 or equivalent determined by examination. Class: 3 hours. Laboratory: 2 hours. Credit: 4 semester hours. S II.

231, 232—Reading, Composition, Conversation. Prerequisite for French 231: French 132 or equivalent. Class: 3 hours. Credit: 3 semester hours per course. S I, S II.

436—Survey of French Literature Since the 18th Century. Readings from significant works. Lectures, readings, oral and written reports. Prerequisite: 6 hours advanced courses in French. Class: 3 hours. Credit: 3 semester hours. S I.

German (Ger)

141—Elementary German. Class: 3 hours. Laboratory: 2 hours. Credit: 4 semester hours. S I.

142—Elementary German. Prerequisite: German 141 or equivalent determined by examination. Class: 3 hours. Laboratory: 2 hours. Credit: 4 semester hours. SI I.

231, 232—Reading, Composition, Conversation. Prerequisite for German 231: German 142 or equivalent. Class: 3 hours. Credit: 3 semester hours per course. S I, S II.

Spanish (Spa)

141—Elementary Spanish. Class: 3 hours. Laboratory: 2 hours. Credit: 4 semester hours. S I.

142—Elementary Spanish. Prerequisite: Spanish 141 or equivalent determined by examination. Class: 3 hours. Laboratory: 2 hours. Credit: 4 semester hours. S II.

231, 232—Reading, Composition, Conversation. Prerequisite for Spanish 231: Spanish 142 or equivalent. Class: 3 hours. Credit: 3 semester hours per course. S I, S II.

334—Survey of Spanish-American Literature. Study of outstanding writers and their words. Lectures, readings, oral and written reports. Prerequisite: Spanish 232. Class: 3 hours. Credit: 3 semester hours. S II.

DEPARTMENT OF SOCIOLOGY

Philosophy (Phl)

131—Introduction to Philosophy. General characteristics of philosophy as a field of knowledge and as a method of inquiry. Class: 3 hours. Credit: 3 semester hours. S I.

Social Work (Swk)

331—Introduction to Social Work. History and philosophy of social welfare and social work. Class: 3 hours. Credit: 3 semester hours. S I.

332—The Behavioral Sciences. Analysis of human behavior and development as derived from the social processes and institutions of man. Class: 3 hours. Credit: 3 semester hours. S II.

333—The Social Work Profession. Methods of intervention for problem solving as employed by the social work profession. Class: 3 hours. Credit: 3 semester hours. S II.

334—Social Welfare. Program and Process of social welfare within American society. Class: 3 hours. Credit: 3 semester hours. S I.

Sociology (Soc)

131—Introduction to Sociology. Sociology as a field of knowledge. Basic terms, concepts, theories of sociology applied to an explanation of

human behavior, personality, groups, and society. Class: 3 hours. Credit: 3 semester hours. S I & II.

132—Social Problems. Attributes to society and of persons which are subject to disapproval; the causes, extent, and consequences of these problems; programs and prospects of their resolution. Class: 3 hours. Credit: 3 semester hours. S I & II.

230—Urban Problems. The study of contemporary urban problems in America. Attention is given to problems of poverty; transportation, disorganization, and city planning and reconstruction. Class: 3 hours. Credit: 3 semester hours. S I.

233—Marriage and the Family. Characteristics of and problems within courtship, marriage, and family in American society. Class: 3 hours. Credit: 3 semester hours. S I.

332—Social Psychology. Social and cultural influences upon individual behavior and personality; inter-personal and inter-group relations and collective behavior. Class: 3 hours. Credit: 3 semester hours. S II.

333—Urban Sociology. Social and ecological processes in the urbanization movement; characteristics of urban society and culture. Class: 3 hours. Credit: 3 semester hours. S I.

335—The Family. Structural and functional characteristics of the family as a basic institution. Class: 3 hours. Credit: 3 semester hours. S II.

336—Race Relations. Racial and cultural minority groups within society; causes and consequences of prejudice and discrimination and of changes in the relationship between minority and dominant groups. Class: 3 hours. Credit: 3 semester hours. S II.

338—Criminology. Extent of and explanation for crime in American society; agencies dealing with crime and criminals; programs for control and prevention of crime and delinquency. Class: 3 hours. Credit: 3 semester hours. S II.

339—Juvenile Delinquency. The nature, incidence, and explanations for juvenile delinquency in American society; agencies and programs for prevention and control of delinquency. Class: 3 hours. Credit: 3 semester hours. S II.

Social Work (Swk)

331—Introduction to Social Work. History and philosophy of social welfare and social work. Class: 3 hours. Credit: 3 semester hours. S I.

332—The Behavioral Sciences. Analysis of human behavior and development as derived from the social processes and institutions of man. Class: 3 hours. Credit: 3 semester hours. S II.

333—The Social Work Profession. Methods of intervention for problem solving as employed by the social work profession. Class: 3 hours. Credit: 3 semester hours. S II.

334—Social Welfare. Program and process of social welfare within American society. Class: 3 hours. Credit: 3 semester hours. S I.

Sociology (Soc)

131—Introduction to Sociology. Sociology as a field of knowledge. Basic terms, concepts, theories of sociology applied to an explanation of human behavior, personality, groups, and society. Class: 3 hours. Credit 3 semester hours. S I & II.

132—Social Problems. Attributes of society and of persons which are subject to disapproval; the causes, extent, and consequences of these problems; programs and prospects of their resolution. Class: 3 hours. Credit: 3 semester hours. S I & II.

230—Urban Problems. The study of contemporary urban problems in America. Attention is given to problems of poverty, transportation, disorganization, and city planning and reconstruction. Class: 3 hours. Credit: 3 semester hours. S I.

233—Marriage and the Family. Characteristics of and problems within courtship, marriage, and family in American society. Class: 3 hours. Credit: 3 semester hours. S I.

332—Social Psychology. Social and cultural influences upon individual behavior and personality; inter-personal and inter-group relations and collective behavior. Class: 3 hours. Credit: 3 semester hours. S II.

333—Urban Sociology. Social and ecological processes in the urbanization movement; characteristics of urban society and culture. Class: 3 hours. Credit: 3 semester hours. S I.

335—The Family. Structural and fundamental characteristics of the family as a basic institution. Class: 3 hours. Credit: 3 semester hours. S II.

336—Race Relations. Racial and cultural minority groups within society; causes and consequences of prejudice and discrimination and of changes in the relationship between minority and dominant groups. Class: 3 hours. Credit: 3 semester hours. S II.

338—Criminology. Extent of and explanation for crime in American society; agencies dealing with crime and criminals; programs for control and prevention of crime and delinquency. Class: 3 hours. Credit: 3 semester hours. S II.

339—Juvenile Delinquency. The nature, incidence, and explanations for juvenile delinquency in American society; agencies and programs for prevention and control of delinquency. Class: 3 hours. Credit: 3 semester hours. S II.

436—Social Movements. Historical structural, and tactical considerations in the development of major systems of belief and practice within society; political movements in American society. Class: 3 hours. Credit: 3 semester hours. S II.

438—Research Methods. Techniques of scientific research in sociology. Class: 3 hours. Credit: 3 semester hours. S II.

439—Social Theory. A survey of major social and sociological theories. Class: 3 hours. Credit: 3 semester hours. S I.

COURSES IN BIBLE AND RELIGIOUS EDUCATION

Bible (Bib)

132—Survey of the New Testament. A critical study of the New Testament, its historical context, and the beginnings of the Christian Church. Class: 3 hours. Credit: 3 semester hours. S I & II.

133—New Testament: Gospels. A critical study of the Gospels; the person and work of Jesus of Nazareth. Class: 3 hours. Credit: 3 semester hours. S I.

School of Sciences

DEPARTMENT OF BIOLOGY

Biology (Bio)

130—Fundamentals of Modern Biology. Basic biological concepts relevant to human welfare and the quality of life. Emphasis on approach to social problems through environmental and population control, conservation of natural resources, and the genetic basis for human betterment. Class: 3 hours. Credit: 3 semester hours. S I.

141-142—General Biology. A brief survey of living things; a comparison of structural and fundamental adaptations for fundamental life processes; principles of reproduction, inheritance, development and phylogenetic relationships; interactions of organisms with the environment. Credit for first semester prerequisite for enrollment in second. Class: 3 hours. Laboratory: 2 hours. Credit: 4 semester hours per semester. S I, S II.

243-244—Microbiology. Micro-organisms with emphasis on bacteria in soil, water, milk, and sewage. Laboratory includes the isolation, cultivation, and identification of common bacteria. The last half of the second semester is devoted to the study of bacteria, rickettsiae and viruses in relation to disease; theories of antigen-antibody responses; and the immunization of a laboratory animal. Recommended for biology majors, premedical, predental, and medical technology students. Credit for first semester prerequisite for enrollment in second. Prerequisite: Bio. 141-142. Class: 3 hours. Laboratory: 3 hours: Credit: 4 semester hours per semester. S I, S II.

245—Introductory Microbiology. Micro-organisms with emphasis on those of medical significance. Special consideration is given to problems of personal and community health. Laboratory includes the sterilization of culture media and glassware, cultivation and study of common bacteria. Recommended for students in nursing education. Class: 3 hours. Laboratory: 2 hours. Credit 4 semester hours. S I.

341—Histology and Histological Techniques. Study of normal tissues of vertebrates. Technical phase of the course includes fixation and staining of tissues, paraffin sections, conventional mounting. Designed for biology majors, pre-medical, pre-dental, and medical technology students. Prerequisite: Bio 141-142 and 240 or 243-244. Class: 3 hours. Laboratory: 3 hours. Credit: 4 semester hours. S I.

345—General Botany. Introduction to plant structure and functions with emphasis on the seed plants. Prerequisite: Bio 141-142. Class: 3 hours. Laboratory: 3 hours. Credit: 4 semester hours. S II.

347—Genetics. General principles of heredity, including human inheritance. Prerequisite: Bio 141-142. Class: 3 hours. Laboratory: 3 hours. Credit: 4 semester hours. S I.

430—Undergraduate Problems. Designed to afford opportunity for senior students to pursue individual interests in the investigation of prob-

lems in biology. Research to be directed by staff, and approval of department head required. Credit: 3 semester hours. S I.

441—Parasitology. Study of animal parasites including morphology, life history, and host-parasite relationships. Special emphasis on helminthic parasites of man and other vertebrates. Prerequisite: Bio 141-42; Class: 3 hours. Laboratory: 3 hours. Credit: 4 semester hours. S I.

536—Marine Invertebrate Zoology. Field study and identification of area species; current research. Required field trips. Recommended prerequisites: Bio 346 or 445. Class: 2 hours. Laboratory: 3 hours. Credit: 3 semester hours. S II.

537—Advanced Limnology. Analysis of freshwater communities with emphasis on effects of pollution. Prerequisite: Bio 443. Class: 2 hours. Laboratory: 3 hours. Credit: 3 semester hours. S I.

5101, 5201—Special Problems. Research in areas other than thesis. Prerequisite: approval of graduate supervisor. Time arranged. Credit: 1-2 semester hours: maximum of 2 semester hours. S I.

669A-669B—Thesis. Prerequisite: admission to candidacy. Credit: 6 semester hours. S I & II.

DEPARTMENT OF CHEMISTRY

Chemistry (Chm)

130—Introductory Environmental Science. Fundamental concepts of environmental systems as related to urban affairs and man's environment. Air, water, and soil pollution with control methods related to modern technological society. Class: 3 hours. Credit: 3 semester hours. S II.

141—General. General principles, problems, fundamental laws and theories. Class: 3 hours. Laboratory: 3 hours. Credit: 4 semester hours. S I.

142—General. A continuation of Chm 141. Elementary qualitative analysis and theories of solutions and equilibrium. Properties of the elements. Prerequisite: Chm 141. Class: 3 hours. Laboratory: 3 hours. Credit: 4 semester hours. S II.

143—Introductory. For non-science majors. A survey course in elementary chemistry. Lecture and laboratory work in inorganic chemistry. Class: 3 hours. Laboratory' 2 hours. Credit: 4 semester hours. S I.

144—Introductory. For non-science majors. Continuation of Chm. 143. A brief survey of qualitative analysis, elementary organic and physiological chemistry. Prerequisite: Chm 143 or 141. Class: 3 hours. Laboratory: 2 hours. Credit: 4 semester hours. S II.

333—Inorganic. Generalization involving atomic and nuclear theory. Properties of the elements, with emphasis on similarities and differences within and between groups and transitional series. Non-aqueous solvents,

acids, bases, oxidation-reduction, etc. Prerequisite: Chm 142. Class: 3 hours. Credit: 3 semester hours. S II.

341—Organic. Current theories and chemical principles that relate to the field of organic chemistry. Prerequisite: Chm 142. Class: 3 hours. Laboratory: 4 hours. Credit: 4 semester hours. S I.

342—Organic. A continuation of Chm 341. Prerequisite: Chm 341. Class: 3 hours. Laboratory: 4 hours. Credit: 4 semester hours. S II.

343—Quantitative Analysis. Theory and practice of analytical chemistry, utilizing gravimetric and titrimetric techniques. Prerequisite: Chm 142, Mth 133, 134. Class: 3 hours. Laboratory: 5 hours. Credit: 4 semester hours. S I.

427, 437, 447—Introduction to Research. Junior and senior chemistry students. Problems are on the undergraduate level and emphasize research techniques. With approval of the department head, these courses may be repeated for credit. Prerequisite: B average in all previous chemistry courses. Credit: 2, 3, or 4 semester hours. S I & S II.

431—Physical. Thermodynamic principles; modern chemical theory as applied to gases, liquids and solids. Prerequisites: Chm 142, Phy 142 or 241, Mth 232 (or parallel). Class: 3 hours. Credit: 3 semester hours. S I.

432—Physical. A continuation of Chm 431. Prerequisite: Chm 431. Class: 3 hours. Credit: 3 semester hours. S II.

4101, 4201, 4301, 4401—Special Topics in Chemistry. Topics in undergraduate analytical, inorganic, or physical chemistry. Library and/or laboratory work and conferences with a staff member. The description of the particular area of study will appear on the printed semester schedule. A student may repeat the course for credit when the area of study is different. Credit: 1-4 semester hours. S I & II.

5301—Chemistry for Teachers. Designed to advance the professional competence of participants. For each course, a description of the particular area of study will appear in the printed schedule. May be repeated for credit when nature of course differs sufficiently from one previously taken. Class: 3 hours. Credit: 3 semester hours. S I.

669A, 669B—Thesis. Prerequisite: admission to candidacy for the master's degree. Credit: 6 semester hours. S I & II.

DEPARTMENT OF GEOLOGY

Geology (Geo)

141—Physical Geology. Earth materials, structures, land forms, mineral resources, and the processes which have formed them. Class: 3 hours, Laboratory: 2 hours. Credit: 4 semester hours. S I.

152—Historical Geology. History of the earth and its life. Prerequisite: Geo. 141. Class: 3 hours. Laboratory: 2 hours. Credit: 4 semester hours. S II.

237—Physical Geography. The fundamental concepts of local, regional, and global geography. Prerequisite: sophomore standing. Class: 3 hours. Credit: 3 semester hours. S II.

238—Cultural Geography. History and distribution of cultural groups with emphasis upon the interaction between geographic environment and human cultures. Class: 3 hours. Credit: 3 semester hours. S I.

335—Earth Materials. The identification, classification, occurrence, and economic significance of minerals and rocks. Field trip required. A student may not receive credit for both Geo 335 and Geo 241-242. Prerequisite: Geo 141, Geo 237, or Geo 239. Class: 3 hours. Credit: 3 semester hours. S II.

338—Oceanography. The structure, properties, and processes of the hydrosphere. The role of the seas and oceans in the total environment. Prerequisite: 6 hours of elementary science. Class: 3 hours. Credit: 3 semester hours. S I.

360—Summer Field Course. Description of stratigraphic sections, preparation of geologic maps and field reports. Duration: 6 weeks. Total cost: $200-$300. Prerequisite. Geo 342 and Egr 121. Class: 5 hours. Laboratory: 40 hours. Credit: 6 semester hours. S II.

361—Field Courses in Estaurine and Coastal Oceanography. Studies in near shore geological processess. The application of standard sampling devices. Field work along the coast and on shore. Laboratory analysis of samples. Small boat handling. Duration: 6 weeks. Prerequisite: Geo 344. Class: 5 hours. Laboratory: 40 hours. Credit: 6 semester hours. S I.

DEPARTMENT OF PHYSICS

Physics (Phy)

137—Descriptive Astronomy. A survey of facts and an introduction to important astronomical theories. The solar system, stars, nebulae, and star systems. Class: 3 hours. Credit: 3 semester hours. S I.

141—General Physics—Mechanics and Heat. Designed for majors in the physical or natural sciences. Emphasis placed upon understanding and application of basic physical laws. Prerequisite: credit for Mth 133 and 134. Class: 3 hours. Laboratory: 2 hours. Credit: 4 semester hours. S I.

142—General Physics—Sound, Light, Electricity and Magnetism. A continuation of Phy 141. Prerequisite: Phy 141. Class: 3 hours. Laboratory: 2 hours. Credit: 4 semester hours. S II.

241—Introductory Physics—Heat, Electricity and Magnetism. Emphasis is placed on derivations, units, and problem-solving. Prerequisite: Phy 140 or Egr 132 and credit for or registration in Mth 231. Class: 3 hours. Laboratory: 3 hours. Credit: 4 semester hours. S I.

242—Introductory Physics—Sound, Light, and Quanta. Emphsis is placed on derivations, units, and problem-solving. Prerequisite: Phy 241. Class: 3 hours. Laboratory: 3 hours. Credit: 4 semester hours. S II.

335—Modern Physics. Conservation laws; special relativity; quantum effects; atomic structure; X-rays; nuclear and solid state physics. Prerequisites: Phy 241-242 or Phy 141-142 an Mth 231. Class: 3 hours. Credit: 3 semester hours. S II.

414, 415—Experimental Projects. Building of experimental apparatus under the supervision of a faculty member. Prerequisite: 6 hours of physics numbered above 300. Laboratory: 3 hours. Credit: 1 semester hour per course. S I & S II.

5101, 5201, 5301—Institute in Physics. Designed to provide credit for participation in summer, in-service or other institutes. Credit varies with duration. The description of the area of study of each institute will appear, on the printed schedule. May be repeated for credit when nature of institute differs sufficiently from those taken previously. Class: 3 hours. Laboratory: 2-4 hours. Credit: 3 semester hours. S II.

530—Seminar in Physical Science. Designed for non-science majors. Measurement, light, the solar system, and stars; force and motion, work and energy, heat, weather, lightning, electric charge and current, magnetism; batteries, atoms and molecules. Class: 3 hours. Credit: 3 semester hours. S I.

DEPARTMENT OF PSYCHOLOGY

Psychology (Phy)

131—Introduction to Psychology. An introductory survey of the major areas of psychology such as learning personality, social, testing, developmental, and physiological. Emphasis is on psychology as the scientific study of behavior and includes both human and animal behavior. Class: 3 hours. Credit: 3 semester hours. S I & II.

234—Child Psychology. A study of the growth and development of behavior patterns in children. Class: 3 hours. Credit: 3 semester hours. S I & II.

235—Adolescent Psychology. A study of the growth and development of behavior patterns in adolescents. Class: 3 hours. Credit: 3 semester hours. S I.

330—Psychology of Communication. A study of the theory, structure, and function of communication patterns in various group settings. Prerequisite: Psy 231. Class: 3 hours. Credit: 3 semester hours. S II.

335—Motivation. A study of contemporary concepts, theories, and research in motivation. Prerequisite: Psy 231. Class: 3 hours. Credit: 3 semester hours. S II.

337—Psychology of Adjustment. A study of normal adjustment and commonly used defenses against anxieties. Not intended for psychology majors. Class: 3 hours. Credit: 3 semester hours. S I.

410-420-430—Undergraduate Research. Designed to provide an opportunity for advanced psychology students to pursue an individual research project under the direction and supervision of a faculty member. Prerequisite: 9 hours of psychology. Credit: 1, 2, or 3 semester hours. S I & II.

438—Physiological and Psychology. Survey of the physiological bases of behavior with emphasis on the mechanisms in the central nervous system. Prerequisite: 9 hours in Psychology. Class: 3 hours. Credit: 3 semester hours. S I.

HOW TO ENTER LAMAR

If You Have Graduated from High School

1. Submit application for admission on the official form.
2. Submit a completed Health Data Form properly executed by a physician. This requirement applies only to students entering DAY CLASSES for the first time.
3. Request that Lamar Tech be sent a copy of your record as soon as 7 semesters have been completed. Immediately after graduation supply a supplementary transcript covering the last semester of work and certifying your graduation.
4. Take the Scholastic Aptitude Test of the College Entrance Examination Board and have a record of the test scores sent to the Office of Admissions and Records. A minimum combined (verbal and mathematics) score of 700 is required of residents of the State of Texas. Non-residents must total 900 on the SAT and must rank in the upper three-fourths of their graduating class.
5. If you do not plan to live at home send your dormitory deposit ($50.00) with request for space to Housing Office, Lamar State College, Lamar Tech Station, Box 10041, Beaumont, Texas 77705.

If You are Transferring from Another College

1. Submit application on the official form.
2. Submit the Health Data Form properly executed by a physician. This requirement applies to students entering DAY CLASSES for the first time.
3. Submit transcripts from EACH college previously attended. This requirement applies regardless of whether credit was earned or is desired. Make sure transcripts are sent under your present name.
4. Submit SAT scores if less than 18 transferable semester hours have been earned. A total score (verbal and mathematics) of 700 is required of residents of the State of Texas. Non-residents with less than 18 hours of transferable work must meet the same requirements of high school graduates classified as out-of-state students.
5. If you do not plan to live at home send your dormitory deposit ($50.00) with request for space to Housing Office, Lamar State College, Lamar Tech Station, Box 10041, Beaumont, Texas 77705.

If You are Applying as a Transient for Summer Work Only

Submit Application for Admission. Admission as a transient student is limited to students who were enrolled at another college during the spring semester immediately prior to the summer session for which admission is requested.