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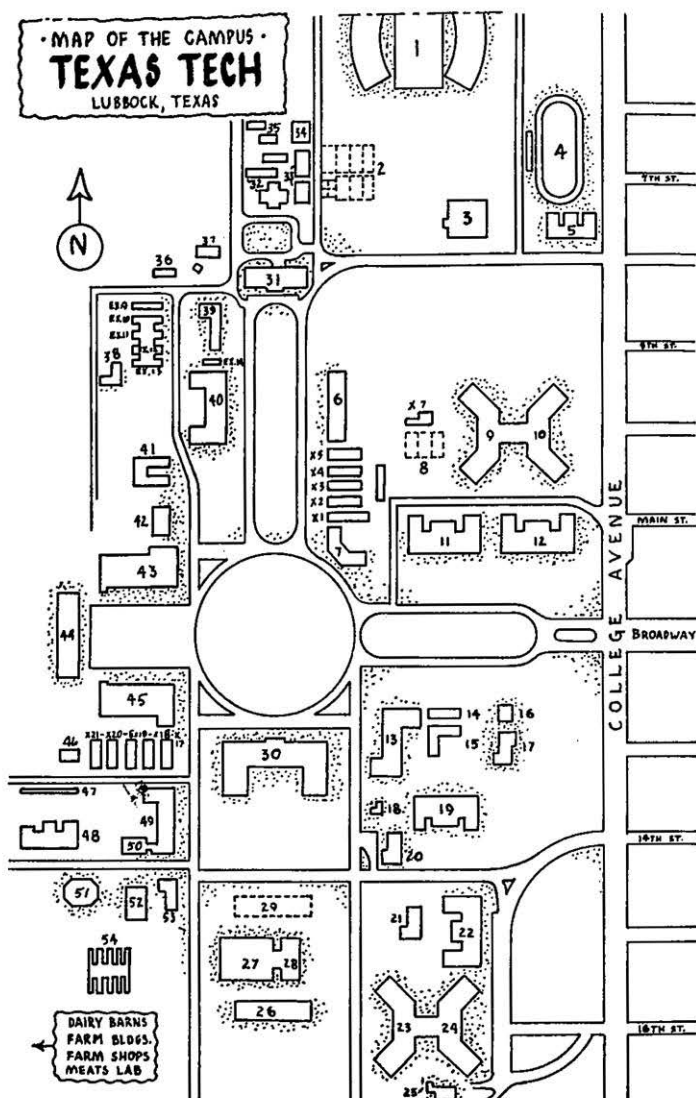
SUMMER SESSION
1953



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MAP OF THE CAMPUS TEXAS TECH LUBBOCK, TEXAS



LEGEND

Ad. Bldg.....	30	Extension Bldg.....	53	Psychology Bldg.....	14
Ag. Bldg.....	49	Farm Shops.....	47	Practice Stadium.....	4
Air and Military		Garage.....	34	President's Home.....	75
Sc. Bldg.....	39, X9, X10	Gordon Hall.....	9	Journalism Bldg.....	42
Arch. Lab.....	X1, X2	Greenhouse.....	46	Rec. Hall.....	27
Bledsoe Hall.....	10	Greenhouses.....	54	Science Bldg.....	44
Bookstore.....	20	Gym.....	3	Science Labs.....	X18, X19
Cafeteria.....	28	Home Ec. Bldg.....	13	Sneed Hall.....	12
Casa Linda.....	18	Home Management		Speech Bldg.....	52
Chem. Bldg.....	45	House.....	17	Stock Judging Pavilion.....	51
Chem. Labs. X17, X20, X21		Horn Hall.....	21	Storage Bldgs.....	35
Classroom Annex.....	X3	Jones Stadium.....	1	Student Union Bldg.	
Clay Research.....	36	Knapp Hall.....	22	(New).....	29
Dairy Manufacturers		Library.....	43	Tennis Courts.....	2
Bldg.....	50	Mech. Engr. Shops.....	32	Test. and Counsel.	
Doak Hall.....	19	Museum.....	7	Center.....	15
Drane Hall.....	22	Naval Reserve Center.....	5	Textile Engr. Bldg.....	31
Music Bldg.....	26	Nursery.....	18	Textile Engr. Lab.....	37
Dorm Office.....	21	Pet. Engr. Bldg.....	38	Veterinary Science Bldg.....	48
East Engr. Bldg.....	6	Power Plant.....	32	West Engr. Bldg.....	40
				West Hall.....	11

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ORGANIZATION OF THE COLLEGE

Divisions and Departments

Agriculture

Agricultural Economics
Agricultural Education
Agriculture Engineering
Agronomy (Crops, Range Management, Soils)
Animal Husbandry (Animal Industry, Poultry Husbandry, Dairy Husbandry, Range Management)

Dairy Manufactures

Horticulture and Park Management (General Horticulture, Park Management and Floriculture, Pomology)

Arts and Sciences

Biology (Bacteriology, Botany, Zoology)
Chemistry
Education and Philosophy
English
Foreign Languages, (French, German, Latin, Spanish)
Geology (Geography)
Government
Health and Physical Education and Recreation
History, Anthropology, Sociology
Journalism
Mathematics (Astronomy)
Music
Physics
Preprofessional courses in Medicine, Dentistry, Law
Psychology
Speech
Courses in Biblical Literature

Business Administration

Accounting and Finance
Business Education and Secretarial Administration
Economics
Management
Marketing

Engineering

Architecture and Allied Arts
Chemical Engineering
Civil Engineering

Electrical Engineering
Engineering Orientation
Industrial Engineering and Engineering Drawing
Mechanical Engineering
Petroleum Engineering
Textile Engineering

Home Economics

Applied Arts
Child Development and Family Relations
Clothing and Textiles
Foods, Nutrition and Institutional Management
Home Economics Education
Home Management

Graduate (Degrees Offered)

Master of Arts
Master of Business Administration
Master of Education
Master of Science
Master of Science in Agriculture
Master of Science in Chemical Engineering
Master of Science in Electrical Engineering
Master of Science in Home Economics
Doctor of Education
Doctor of Philosophy

Air and Military Science and Tactics (ROTC)

Basic and Advanced
Air Force
Engineering
Infantry
Signal Corps

Extension

Correspondence Courses
Extension Classes

Interdepartmental Programs

Adult Education Program
Audio-Visual Services
Evening Program
Institute of Americanism

CALENDAR

SUMMER SESSION

1953

First Term

- June 2. Tuesday. Dormitories open for room occupancy at 12 noon.
- June 3. Wednesday. Summer Session begins. Registration for first term. Breakfast served as first meal in dormitories.
- June 4. Thursday. Classes begin 7:40 A. M.
- June 8. Monday. Last day to register for first term.
Last day to add a course for the first term.
- June 12. Friday. Last day on which student may drop, without grade penalty, a course in which he is failing.
- July 4. Saturday. Classes and offices closed for American Independence Day.
- July 6. Monday. Classes resume, 7:40 A. M.
Last day to file Personnel Information Forms and photographs at the Placement Office for students enrolled in first term of Summer Session. (For students enrolled in second term only, see entry for Aug. 6)
Last day to pay \$5 graduation fee at the Business Office. Students who pay the fee after this date will not receive an actual diploma at Commencement.
Last day to secure refund of \$5 graduation fee if plans for graduation have to be changed.
Last day to file with the Dean the Statement of Intention to Graduate on Aug. 26, 1953.
- July 9. Thursday. Deans will submit tentative lists of degree candidates to the Registrar. (See entry for Aug. 15.)
- July 13-14. Monday-Tuesday. Final examinations for the first term.
- July 14. Tuesday. First term ends.

Second Term

- July 16. Thursday. Registration for the second term.
5 P. M. Last day to order senior invitations at College Bookstore.
- July 17. Friday. Classes begin 7:40 A. M.
- July 20. Monday. Last day to register for the second term.
Last day to add a course for second term.
- July 23. Thursday. Last day to order academic regalia at College Bookstore.
- July 25. Saturday. Last day on which a student may drop, without grade penalty, a course in which he is failing.
Last day to file with the Dean the Statement of Intention to Graduate in Aug. 26, 1953 for students enrolled in second term only.

(1952 CALENDAR Continued)

Last day to accept graduation fee of \$5 for students enrolled in second term only.

- Aug. 6. Thursday. Last day to submit to the Graduate Dean the first draft of thesis and dissertations, bearing the written approval of the committee.
Last day to complete correspondence courses.
Instructors are to file grades for correspondence work not later than Aug. 12.
Last day to remove grades of "Inc." and "Pr." for degree candidates. Instructors are to send the Change-of-Grade card to the Dean's Office as soon as the work has been completed.
Last day to submit to the Dean a request to graduate *in absentia*.
Students enrolled in the second term only have until this day to file Personnel Information Forms and photographs at the Placement Office.
- Aug. 15. Saturday. Each Dean will post on his divisional bulletin board the tentative list of degree candidates who are exempt from final examinations. Each Dean will forward a copy of this list to the Registrar. A degree candidate will be excused from final examinations only in those courses applicable to his degree.
- Aug. 18. Tuesday. Registrar will send to each member of the Faculty official lists of degree candidates in his classes who are exempt from final examinations.
- Aug. 21. Friday. 8:30 A.M. Grades and reports of absences to this date for degree candidates due at the Registrar's Office.
- Aug. 22. Saturday. Last day to submit to the Graduate Dean the final draft of thesis and dissertations and to pay the binding fee.
All degree candidates approved for graduation are to attend classes through this date.
- Aug. 24-25. Monday-Tuesday. Final examinations for the second term.
- Aug. 25. Tuesday. 4 P. M. Meetings of divisional faculties to approve candidates for degrees.
Degree candidates pick up academic regalia at College Bookstore.
- Aug. 26. Wednesday. 8:30 A. M. Rehearsal for Commencement. All August graduates are to be present.
4-5:30 P. M. President's Reception for graduates.
7:15 P. M. Commencement. Second term ends. Summer Session closes.
- Aug. 29. Saturday. 8:30 A. M. Grades and absence reports on all students due at the Registrar's Office.

BOARD OF DIRECTORS

1952-53

OFFICERS

Charles C. Thompson, *Chairman*

W. T. Gaston, *Secretary*

J. Roy Wells, *Assistant Secretary*

MEMBERS

Term Expires 1955

C. T. McLAUGHLIN.....	Snyder
RAYMOND PFLUGER.....	Eden
ROBERT B. PRICE.....	El Paso

Term Expires 1957

THOMAS F. ABBOTT, JR.....	Fort Worth
GEORGE E. BENSON.....	Lubbock
CHARLES C. THOMPSON.....	Colorado City

Term Expires 1959

WILLIAM H. FRANCIS, JR.	Houston
FRED H. MOORE	Dallas
WINFIELD D. WATKINS	Abilene

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WILLIAM THOMAS GASTON, Business Manager and Secretary of Board of Directors
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SHIRLEY FRANCES SCHULZ, B.S., Director of Food Service
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Science and Tactics
OLLEN TURNER, COLONEL, U. S. Air Force, Professor of Air Science and Tactics

* * *

FLORENCE EVELYN CLEWELL, B.A., Assistant Registrar
JEAN KATHRYN EWING, M.A., Assistant Dean of Women
NEIL CASEY FINE, Ph.D., Assistant Dean of Agriculture
WARREN GAMALIEL HARDING, M.Ed., Assistant Registrar
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JOHN GATES TAYLOR, Assistant Auditor
ERNEST WALLACE, Ph.D., Assistant Dean of Arts and Sciences

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- DONALD ASHDOWN, Ph.D., Professor of Agriculture and Director of Greenbug Control Research
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 PER GUSTAF STENSLAND, Ph.D., Professor of Education and Head of Adult Education Program
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 ELO JOE URBANOVSKY, B.S., Professor and Head Department of Horticulture and Park Management and Landscape Architect
 MARY JEANNE vanAPPLEDORN, M.Mus., Instructor in Music
 ERNEST WALLACE, Ph.D., Professor of History and Assistant Dean of Arts and Sciences
 COLEMAN YOUNGER WARD, B.S., Instructor in Agronomy
 GEORGE FREDERICK WARN, M.S., Assistant Professor of Geology
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 GRACE PLEASANT WELLBORN, M.A., Instructor in English
 LONDON NEAL WESTBROOK, M.Ed., Instructor in Health and Physical Education and Recreation and Assistant in Athletics
 OLIVE WHEELER, M.A., Elementary School Supervisor, El Paso City Schools, Visiting Lecturer in Education
 GEORGE ARTHUR WHETSTONE, Ph.D., Associate Professor of Civil Engineering

DEWEY O. WILEY, B.Mus., Professor of Music and Director of Bands

IRA LAWSON WILLIAMS, M.S., Professor of Agricultural Engineering

JUDDIE JOHNSON WILLINGHAM, Ph.D., Professor and Head Department of Dairy
Manufactures

RUTH DONALD WILSON, M.A., Instructor in English

HORACE EUGENE WOODWARD, M.A., Assistant Professor of Mathematics

GEORGIA ELLEN WRIGHT, M.S., Assistant Professor of Clothing and Textiles

ARTHUR WESLEY YOUNG, Ph.D., Professor of Agronomy and Head Departments
of Agronomy and Agricultural Engineering

WARREN WATSON YOCUM, Ph.D., Professor of Horticulture

EDWARD WILLIAM ZUKAUCKAS, JR., M.S., Instructor in Horticulture and Park
Management and Greenhouse Manager

GENERAL INFORMATION

The College

Location

Texas Technological College is a state-supported coeducational college. It is located at Lubbock, approximately 200 miles from the northern line of the Panhandle of Texas and 400 miles northwest of the state capital at Austin. Lubbock is in the South Plains area with an elevation of 3,200 feet above sea level.

The city and suburbs have a permanent population of approximately 102,000. Excellent churches, schools, hotels, and shopping centers are available. Two railway systems, an interstate bus line, an excellent highway system, and three air lines operate through the city.

History

Texas Technological College was established by an act of the Thirty-Eight Legislature of the State of Texas, passed in 1923. This act authorized establishment of a college west of the Ninety-Eighth Meridian and north of the Twenty-Ninth Parallel. The act authorized the establishment of a coeducational college of a senior class.

The first buildings were erected and opened to students Sept. 30, 1925. The physical plant is now valued at over \$18,000,000.

The first president was Paul Whitfield Horn (1925-32). He was followed by Bradford Knapp (1932-38), Clifford B. Jones (1938-44, President Emeritus, 1944-), William Marvin Whyburn (1944-48), Dossie M. Wiggins (1948-52), and Edward N. Jones (1952-).

Government

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

The Library

The library of Texas Technological College, consisting of 100,976 cataloged volumes, 23,939 periodicals and 282,567 documents, is housed in a separate building near the center of the campus. Among the facilities for student services are the reserve reading room, a general reading room, and an area devoted to the use of periodicals and documents. Individual study space is available for graduate students engaged in research. The library also provides readers for microfilm and microcard publications.

The library staff is made up of 11 professionally trained librarians and 13 sub-professionals, providing service all hours the library is open.

SPECIAL COLLECTIONS

A small but growing collection of carefully selected material is available on open shelves for recreational reading.

The Southwest Collection, which is housed in a separate room on the second floor, was established for the acquisition and preservation of materials of particular interest in this region. It includes documents and manuscripts, cataloged volumes, many not obtainable in other Texas libraries, and a large collection of early Texas newspapers on microfilm, a gift of Lewis W. McNaughton of Dallas, Texas. The archive material includes a group of papers connected with the estate of James Bowie, given to the library by the late Sen. Arthur P. Duggan of Littlefield, Texas; a collection of records of the Matador Land and Cattle Company, a gift of Maurice Reilly; and a collection of records of the Spur Ranch, given by President Emeritus Clifford B. Jones. With the aid of several residents of Spur, a file of the Texas Spur from 1909-40 has been secured for the collection.

The library offers its service to the students and faculty of the college, to citizens of the State of Texas, and to other friends of the college.

Hours of service: 8 A.M. to 10 P.M., Monday through Friday; 8 A.M. to 5 P.M. Saturday. Closed Sunday and holidays. Summer term: 7:30 A.M. to 9:30 P.M., Monday through Friday; 7:30 A.M. to 4:30 P.M. Saturday. Closed Sunday and holidays.

THE SUMMER SESSION

The summer session is an integral part of the year-round program at Texas Technological College. The summer session is designed for particular groups of students, and the facilities of the entire college are available. The faculty of regular staff members is augmented by visiting lecturers and professors. All classrooms, laboratories, and the college library are at the disposal of the summer school.

The 1953 Summer Session is planned especially for the following groups:

1. *Entering Freshmen.* High school graduates who wish to accelerate their college programs may do so by entering college at the beginning of the summer session rather than waiting for the fall semester. All required courses for freshmen in the various departments are offered, and the importance of obtaining the maximum amount of education before being called by the military cannot be overemphasized. High school graduates who plan to study engineering are encouraged to attend summer school to remove conditions in entrance units (see *Admission to the Division of Engineering With Conditions*). Entrance conditions not removed in summer school will delay the student's ultimate graduation.
2. *Students of the Regular Session.* Students of the long session will find the summer school profitable for making up courses or speeding up their education.
3. *Teachers in the Public Schools.* The shortage of teachers in the elementary schools has caused many persons to enter or re-enter the profession to help in the emergency. Many have felt the need for further education to continue teaching. The summer school offers opportunity to meet those needs, both at the undergraduate and graduate levels.
4. *Graduate Students.* Full graduate work will be offered in the summer session leading to the degrees indicated under *Graduate Degrees*.

Admission

The Registrar is the Director of Admissions and has charge of all matters pertaining to admission to any division of the college. Each new student is required to file an application on a blank which may be secured from the admission office. In addition, regular students must submit a complete transcript from the high school or the college previously attended. The new student is urged to send in credentials well in advance of registration date.

Admission by High School Certificate. For entering freshman, the first requirement for admission is graduation from an accredited high

school. The following units are the uniform requirements for admission to any division of the college:

1. English3
2. Mathematics2
algebra, geometry, trigonometry*
3. Two units each from two of the following:4
laboratory sciences
foreign languages
vocational home economics
vocational agriculture
4. Electives6

Admission by High School Certificate with Condition. The study of engineering requires a thorough background of high school preparation in mathematics and physics. A prospective engineering student is strongly urged therefore to present two units in algebra and one in plane geometry. Likewise, one unit in physics should be included in the two units required in science. Any student lacking one of the suggested units in algebra, geometry, or physics is strongly urged to attend summer school to remove this deficiency, rather than wait for the fall semester. Opportunity has been provided for the removal of these deficiencies both in the summer school and in the fall semester.

Admission from Other Colleges and Universities. Undergraduate students who have attended another college, who have the usual honorable dismissal, may be admitted on presentation of an official transcript which will meet the following admission requirements *in each of the last two semesters of attendance* or on the total attendance if less than two semesters. Grade points are computed as follows: for each hour of A-3; B-2; C-1; D, E, and F-none.

A student taking 12 or more semester hours must, if a first-year student, pass in at least 9 semester hours and make 3 or more grade points; if a second-year student, at least 9 semester hours with 6 or more grade points. A third-year student, or above, taking 12 or more semester hours must pass in a minimum of 12 semester hours with at least 12 grade points.

Any student taking less than 12 semester hours must pass in approximately three-fourths of the courses undertaken and make 3 or more grade points if a first-year student, or as many grade points as hours undertaken if a second, third, or fourth-year student.

Admission to the Graduate Division. The applicant with a bachelors degree from Texas Technological College or other recognized college or university may be admitted to the graduate division on the basis of a complete transcript from each college attended. For complete informa-

*One unit in general mathematics may be accepted for admission to the Division of Agriculture, Business Administration, Home Economics, and non-scientific majors in Arts and Sciences.

tion regarding candidacy for graduate degrees, see the bulletin of the *Division of Graduate Studies*.

Transient Students. Students enrolled in other colleges who plan to attend the *summer session only* may be admitted without the necessity of formal transcript of record from the former college. Such students, however, should furnish a letter from the Registrar of the previous college indicating classification and present scholastic standing. Admission as a transient student, however, does not guarantee admission as a regular student in the following fall semester. Such students must present transcripts and meet regular admission requirements before being admitted.

Fees and Deposits

Payment. All fees and deposits are payable in full at the time of registration. During the summer session, tuition and fees are paid after a student's schedule is approved by his dean. No refund will be made for courses dropped. All checks, money orders, and drafts are accepted subject to final collection.

Registration Fee for Resident Students. For legal resident students of the State of Texas, registration fee for a six-week term is \$17.50. For resident students who enroll for less than 4 semester hours in any six-week term, the registration fee is \$12.50 per term.

Registration Fee for Non-Resident Students. For non-resident students, the registration fee for a six-week term is \$50. For non-resident students who enroll for less than 4 semester hours in any six-week term, the registration fee is \$12.50 per semester hour.

A non-resident student is defined on pages 38 and 39 in the General Catalog, 1952-53.

Any student who wrongfully pays the Texas rather than the non-resident fee may be assessed a penalty not to exceed \$5.

Student Health and Activity Fee. This fee is \$5.00 per six-week term of the summer session. It covers recreational activities, health and infirmity service and student publications.

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 is charged for each term. For courses in which the semester credit is 4 semester hours or more, the laboratory fee is \$4 per term. A laboratory fee of \$2 is charged for each freshman student participating in the early registration counseling and testing program to cover laboratory materials and supplies.

General Property Deposit. A breakage deposit of \$7 is required from each student to cover breakage, library fines, or damage to college property or equipment while in the student's possession or use. The deposit, less charges, will be returned to the student at the termination of his tenure here as a student.

Graduation Fee. Graduating students will be charged a Graduation Fee of \$5 for each degree granted. The Graduation Fee will be refunded to the student provided he cancels graduation intentions before

the diploma has been printed and other details covering his graduation completed. If this cancellation is not made by the student in sufficient time, he will have to pay the graduation fee again when he next becomes a candidate for the degree.

Graduate Fees. The cost of such research items as questionnaires, charts, maps, slides, microfilm, photostats, postage, and so on, required by a graduate student for the completion of a thesis or research problem forming part of a graduate program for an advanced degree, will be borne by the student.

Special Report Fee in Education 5311, Research Problems. The research reports prepared by students in this course are compiled into a volume for publication following the conclusion of the course. Each student must pay a fee of \$20 at the time of registration. The fee will be refunded to those students whose reports are not approved for inclusion in the published volume.

Miscellaneous Fees

Ceramics Fee for Arch. 239, 2310, 3216, 3217, 4311, 4312	\$5
Model Fee for Arch. 426, 427	\$5
Course Fee for Education 3315	\$3
Testing Material and Test Scoring, Education 131	\$2

A Service Fee of \$4 will be charged for those courses in the Division of Business Administration using IBM or office machines.

Refund of Fees. Any student withdrawing officially during the first week of either summer term will receive a refund of 60 per cent of any registration, health and activity fees paid, and during the second week 20 per cent. A student who withdraws during the third week and thereafter of either summer term will receive no refund.

Once a student has registered for a laboratory class and attended the class, no refund of the laboratory fee will be made unless the college is at fault.

No refund on unused balance of deposits will be made until at least 10 days after the student terminates his residence here as a student.

In no case will fees be refunded to a student suspended from college by college authorities.

Music Fees for Class and Private Instruction

Class and individual instruction in voice, piano, organ, strings, or wind instruments is offered by the Department of Music. The following costs are not covered by the college registration. They are payable in full at the time of registration.

For each one of the following courses in applied music:

Private Instruction. 115, 116, 215, 216, 315, 316	\$6
125, 126, 135, 136, 225, 226, 235, 236, 325, 326, 345,	
346, 425, 426, 435, 436, 445, 446, 4215, 4216, 4415, 4416	\$12
Practice room and piano rental payable at the Business Office	
One hour per day per six-week term	\$4
Each additional hour	\$2

Summary of Expenses

For Six-Week Term:

Fees, Books and Supplies

Registration Fee (legal resident of Texas)	\$17.50
General Property Deposit (refundable)	7.00
Student Health and Activity Fee	5.00
Laboratory Fees (approximate average)	4.00
Books and Supplies (approximate average)	15.00

<i>Total for six-week term</i>	\$48.50
Board and Room in College Dormitory	97.50

Estimated grand total for six-week term \$146.00

Engineering students are required to purchase their own drawing equipment, slide rule, and other specialized items which cost approximately \$55. These items, which entail extra expense at first, are utilized throughout the students' four years of study. Not all of this equipment need be purchased during the summer session, depending on the type of engineering courses taken.

Housing Facilities

All prices indicated below are subject to change without notice prior to registration date and with 10 days notice thereafter.

The cost of regular room and board in the college dormitories, two per room, will be \$97.50 per term of six weeks, payable in advance. Corner rooms will be \$99.75 for six weeks. There are a few single rooms with bath which may be had at a cost, including board, of \$108.75 for six weeks. Room and meals in the dormitories will be available for married couples without children.

Dormitory Reservations. Applications for dormitory reservations will be made to the Office of Dormitory Reservations. A check for \$10 should accompany the request. This will serve as a reservation fee, and will be held as a dormitory property deposit. It will be refunded, less any breakage charges, at the end of the term. If a student moves from the dormitory during the term, the \$10 deposit will not be refunded.

Should a student find it impossible to enroll in the college he may apply for a refund of his reservation fee not later than May 15 for the first term of Summer Session, and June 30 for the second term of Summer Session.

Occupants of the dormitories are expected to furnish pillows, towels, bed linens, blankets, spreads and other personal articles needed. There will be no dormitory linens available for rental.

Casa Linda, the college cooperative house for women, will be open during the first term of the 1953 summer session, provided there is sufficient demand.

For information on off-campus living accommodations, inquiries should be directed to the office of the Dean of Student Life, where arrangements for non-dormitory housing will be considered.

Division of Agriculture

The summer session for the Division of Agriculture will include undergraduate courses in agricultural economics, agricultural engineering, agronomy, animal husbandry, dairy husbandry, dairy manufactures, horticulture, and poultry husbandry.

Complete curricula in all phases of technical agriculture will not be available. The curricula, however, are planned to provide instruction for new students, for those desiring to make up back work, for students wishing to accelerate their course of study or to complete requirements for a degree.

Graduate courses in agricultural economics, agricultural education, agronomy, animal husbandry, dairy manufactures, and horticulture are provided for those students desiring to earn a Master of Science Degree.

Division of Arts and Sciences

The course offerings of the departments within the Division of Arts and Sciences have been selected with a two-fold purpose in mind. Inasmuch as the summer session is an integral part of the college year, courses are offered to enable the regular student to continue his program of studies. The entering student can also begin his college work in an orderly manner; hence, courses of all levels from freshman to graduate are included in the summer offerings.

A continuing function of the summer school is to provide work for those who do not attend the regular session. Such work is particularly appropriate for teachers in service. Course offerings are designed at all levels to prepare teachers for the elementary or the secondary schools. Those interested in administrative or supervisory or counseling work will find an ample selection of courses.

Division of Business Administration

The 1953 summer session makes available courses in all departments in the Division of Business Administration. Programs of study are offered for students at all levels from freshman through graduate standing.

The entering freshman may to his advantage begin his degree program during the summer, and the advanced student will find opportunity to accelerate the completion of his degree requirements.

Attention is given to the needs of all graduate students in business administration and in particular to business teachers. The 1953 summer session provides the graduate business teacher a full program of courses leading toward the Master of Business Administration Degree with a major in business education or, in cooperation with the Department of Education, the Master of Education Degree with a major in business education.

Division of Engineering

The Division of Engineering will offer sophomore and upper-level work in architecture, civil, electrical, mechanical, and petroleum engi-

neering, as well as freshman and sophomore work in engineering drawing provided the demand for such courses is sufficient.

All the work of the freshman year in the Division of Engineering will be available if the demand for these courses is sufficient. Entering freshmen will devote their time to first-semester courses. Any high school graduate who desires to study engineering, but who is deficient in high school algebra, plane geometry, or physics could, with profit, attend the summer session in order to remove these deficiencies.

Students intending to transfer to this college to study engineering may find the summer session of value in order to regularize their schedules for next fall or to take prerequisite subjects. Any freshman or transfer student who desires information not contained in this bulletin should consult our Twenty-Seventh Catalog, or write to the Registrar for information on entrance, or to the Dean of Engineering in regard to his course of study.

Any freshman who has attended during the 1951-52 long session, and who has not completed the work of the freshman year, should plan to take courses which he lacks in the summer session, and thus become a regular sophomore next fall.

Division of Home Economics

The Division of Home Economics will offer a number of special three-week courses and one-week workshops designed for advanced undergraduate and graduate credit. In addition to the regular faculty, there will be specialists in several fields, who will present the latest developments in the various areas of home economics. Teachers, home demonstration agents, and other community workers may enroll for one-week workshops or two or three-week workshops and secure credit toward an advanced degree.

During the first term, the Home Management Department will offer three workshops in Household Equipment: June 3-16, June 17-27, and June 30-July 10. Each will give one semester hour graduate or advanced undergraduate credit.

The Applied Arts Department will offer three workshops in elementary design. Each will give one semester hour credit. A workshop for graduates will also be offered at the same time.

A workshop, "Home Care of the Sick," will be offered June 23-28 in cooperation with the American Red Cross. The course prepares teachers to teach Red Cross Home Nursing classes.

During the second term, the Department of Clothing and Textiles will offer three workshops, each giving one semester hour graduate credit. The workshops (July 20-25) will feature the Bishop Method of Clothing

Construction. One of them, Clothing 512, is designed for persons who have never had Mrs. Bishop's course; the other, Clothing 513, is an advanced tailoring course. Both courses will be taught by Mrs. Edna Bryte Bishop. Advanced registration for either course is desirable, as classes will be limited. A third workshop, Clothing 511, (July 27-31), will stress evaluation of sewing and pattern techniques.

During the second term there will be offered a three-week's course, "Problems of the School Lunch Program", giving three semester hours of advanced undergraduate or graduate credit. A workshop for school lunch room workers will be held (July 27-Aug.1), directed by a visiting staff from the Texas Education Agency and U. S. Department of Agriculture.

In addition to the workshops, regular six-week courses will be offered in all departments.

Division of Graduate Studies

Texas Technological College is a member of the regional organization known as the Conference of Deans of Southern Graduate Schools and adheres to the standards established by that organization in regard to the preparation of the faculty and the requirements for degrees.

Many of the offerings of the summer session have been selected with special regard to the needs of public school teachers. A wide variety of courses is available in the various subject matter fields as well as in professional education.

Regulations concerning all aspects of graduate work are set forth in the Graduate Bulletin, a copy of which may be secured from the Registrar. Application for admission to the Division of Graduate Studies should be made well in advance of registration. The Registrar is Director of Admissions, and all correspondence regarding admission should be addressed to him.

Division of Extension

Approximately 250 college courses and 40 high school courses, including both credit and no-credit courses, are offered by correspondence and extension class work for those who are unable to secure classes in residence. Credit courses may count on degrees and teachers' certificates. A list of available courses may be secured upon request.

Department of Military Science and Tactics

The United States Army maintains a senior division of ROTC at Texas Technological College. Three branches of the service, Infantry, Signal Corps and Corps of Engineers are represented. The mission of the army ROTC is to select and prepare students to serve as Officers in the Regular and Reserve components of the U.S. Army. Commissions are offered in the three branches listed above, and in certain circumstances, where a student is particularly well qualified, in other branches of the Army.

The Army ROTC curriculum is divided into the basic course covering the first two years and the advanced course covering the junior year, summer camp and senior year in that order. The first year basic course is general and is identical to all branches of the Army ROTC. Commencing with the second year basic, and continuing throughout the remaining three years of ROTC, instruction is by branch of the ROTC in which the student is enrolled.

Instruction in all three branches of the Army ROTC emphasizes leadership, and the ability to command and control men.

Requirements for enrollment in the Army ROTC are: to be a citizen of the United States, be physically qualified, be acceptable to the college as a regularly enrolled student, be not less than 14 years of age and not over 23 years of age, veterans excepted, at the time of initial enrollment.

All physically fit male students of the freshman and sophomore years, except veterans, are required to elect either band, physical education, air science, or military science. Should the student elect participation in the ROTC, he agrees to continue the basic course for two academic years or complete it as a prerequisite to graduation unless released for reasons beyond his control.

A Federal draft deferment is provided each Army ROTC student who maintains academic requirements and who otherwise remains in good standing.

Veteran students may apply for advanced standing in ROTC dependent upon their length of service and their college class standing (sophomore, junior, senior, etc.).

No Army ROTC courses will be offered during the summer of 1953.

Department of Air Science and Tactics

The United States Air Force maintains a senior division of AFROTC at Texas Technological. The mission of the AFROTC is to select and prepare students to serve as Officers in the Regular and Reserve Components of the United States Air Force.

The AFROTC curriculum is divided into basic course covering first two years and advanced course covering the junior year, summer camp and senior year in that order.

The AFROTC curriculum is general in nature and offers subjects nowhere else available in the college curriculum. The basic course is designed specifically to give the student desirable citizenship training in an air age equally appropriate to the student, whether he continues in civilian status or joins the military. The advanced course is designed

primarily to develop an Air Force Commissioned Officer with high growth potential and secondarily, to produce a second lieutenant to enter immediately either into the flying training, or specialized and technical training programs, or on-the-job training positions in fields closely allied to their major field of academic study.

Requirements for enrollment in AFROTC are: be a citizen of the United States, be physically qualified, be accepted by the college as a regularly enrolled full-time student, be not less than 14 years of age, and not over 23 years of age, veterans excepted, at the time of initial enrollment.

All physically fit male students of freshman and sophomore years, except veterans, are required to elect either band, physical education, air or military science. Should the student elect air science, he agrees to complete the basic course unless released for reasons beyond his control.

A Federal draft deferment is provided each AFROTC student who maintains academic requirements and otherwise remains in good standing.

No AFROTC courses will be offered during the summer of 1953.

Undergraduate Degrees

The following undergraduate degrees are available: Bachelor of Arts, Bachelor of Music, Bachelor of Business Administration, Bachelor of Science with certain majors in business administration, Bachelor of Science in Agriculture with majors in the various departments, Bachelor of Science in the various fields of engineering, and Bachelor of Science in the various departments of home economics, Bachelor of Architecture, Bachelor of Commercial Art, Bachelor of Science in various sciences, and Bachelor of Science in Education. Although all these degrees are standard, the number of semester hours required varies according to the curriculum followed.

Graduate Degrees

Texas Technological College offers the following Master's Degrees: Master of Arts, Master of Business Administration, Master of Education, Master of Science, Master of Science in Agriculture, Master of Science in Chemical Engineering, Master of Science in Electrical Engineering, and Master of Science in Home Economics.

Work leading to the appropriate Master's Degree is available in the following departments and divisions: Agriculture, Biology, Business Administration, Chemistry, Education and Philosophy, Engineering, English and Journalism, Foreign Languages, Geology, Government, Health and Physical Education and Recreation, History (including Anthropology and Sociology), Home Economics, Mathematics, Music, Physics, Psychology, and Speech.

The college offers also the Degree of Doctor of Philosophy. For the last named degree, majors are available in American Civilization, Chemistry, Education, English, Geology, and History.

Class Work and Routine

Student Load. The normal load for a six-week term is 6 semester hours. A student will not be permitted to register for, or secure credit in, more than 14 semester hours in the two terms, including any correspondence work. Students who have not done work previously in Texas Technological College will regularly enroll for a maximum of 6 semester hours, exclusive of 1-hour physical education courses and 1-hour credit in orientation. Graduate students are limited to 6 hours in either term or a total of 12 hours for the summer session. A senior of superior ability and performance may, with the approval of his dean, enroll for 15 semester hours in the 12-week session if this arrangement will enable him to be graduated at the close of the current summer session. Three of these 15 semester hours may be taken by correspondence, provided registration for same is done at the beginning of the summer session. Not more than 8 semester hours may be taken in residence during any one term.

Auditing Classes. The provision which permits students to audit classes during the long session is not in effect during the summer session. Only regular enrollments requiring payment of the regular summer session fee are permitted.

Class Attendance and Absence. Regular and punctual attendance upon classes, laboratories and other exercises at which the student is due, is required.

Absences are counted from the first meeting of the class regardless of the time when the student enrolls.

Recreation and Health Service

As has been its policy in the past, Texas Technological College has provided a recreation program adequate to the needs of those who are enrolled for courses for the summer session during 1953. For the summer session the Recreation Committee has planned a well-balanced combination of musical numbers, motion pictures, and dances. The objective of this program is to provide adequate and wholesome diversion for enrolled students and the wives and children of married students, with the hope that our summer school will be both constructive and recreational. The complete recreation program is open to all summer school students who pay the student activity fee.

Both for organizations and for individuals, facilities for swimming, golf, tennis, and picnics are available either at Mackenzie State Park or Buffalo Lakes.

Health service benefits are available to students enrolled in summer school who pay the activity fee. The college infirmary, a 20-bed unit, provides an accommodation for those regularly enrolled students ill enough to require constant supervision, and not in such physical condition as to require surgery or the services of specialists. Students judged to be in need of infirmary care by the college physician may be admitted to the infirmary where they are under the constant supervision of the physician and a registered nurse. Neither the out-patient clinic nor the infirmary is financially able to give students unlimited medical service. The cost of special expensive medication, examinations, treatments, special

X-ray examinations, and special laboratory tests must be paid by the student. Except for the above services, no charge is made for infirmary care up to a maximum of three and one-half days each six-week term; a minimum fee to cover the cost of food, drugs, supplies, and any special services is charged the student for each additional day in the infirmary. In case the infirmary is filled to capacity, the college is not under obligation to provide students with hospital service elsewhere.

The dispensary will be open to all students for consultation with the staff at regular, announced hours. Emergency cases will be treated at any hour, day or night.

The college requires that students with communicable diseases be isolated until, in the judgment of the college, danger of transmission has passed.

Special Scholarships

The Texas Society for Crippled Children will offer five summer scholarships for special study in the education of exceptional children. For further information, write Dr. P. Merville Larson, Speech Department, Texas Technological College.

Counseling and Guidance Conference

The third annual conference on counseling and guidance is scheduled to meet on the campus June 10, 11, and 12; and will feature elementary-grade, high-school, and college levels. Dr. Fred McKinney, a nationally recognized authority from the University of Missouri, will be the principal resource person. Other well-known leaders are also being invited to participate. This conference is open to all interested people, especially school administrators, counselors, teachers, and students preparing for personnel work. A registration fee will be charged of all except students.

For further information, write either the head of the Department of Education or Psychology.

School Administrator's Conference

The tenth annual School Administrator's Conference will be held on the Texas Technological College campus July 10 for public school superintendents, principals, boards of education, audio-visual directors, supervisors and others interested in school administration.

Summer Workshop Courses

A series of workshops have been scheduled in School Administration primarily in the first summer term.

Students may take these workshops for credit by enrolling in Ed. 5339 or Ed. 5139, Advanced Administration Workshops. Each of these courses may be repeated for credit. These are the Administrative Workshops in (1) Guidance and Counseling, (2) Adult Education, (3) Business Services, (4) Maintenance and Operation of School Plants, (5) Schoolhouse Planning and Construction, and (6) Audio-Visual Edu-

cation. Each of these workshops is for one week and carries one semester hour credit. Students may enroll, at regular registration time—June 3, for 2, 3, 4, 5, or 6 semester hours of credit in these workshops.

The Evening Program

During the fall and spring semester the college makes available usually about seventy different classes in the evenings and on Saturday mornings.

Students living within driving distance of the campus may accelerate their degree programs through a combination of these Evening Program classes with their summer session attendance.

Field School in North Mexican Archaeology

A field school investigating an archaeological problem extending from southern New Mexico into Chihuahua will be conducted during the second term of summer school, 1953, under the direction of Dr. W. C. Holden. The base camp will be in southern New Mexico, but reconnaissance will be made into Chihuahua. Transportation and maintenance will be approximately \$60, not including registration and personal expenses. The course is Anthropology 336-37.

Field Trip to Mexico City

A group study course, Spanish 4310-11, is offered in alternate years in Mexico City during the second term of the summer session. The main purpose of the course is to give to students and teachers of Spanish and to those going into foreign service some experience in international living and a better grasp of the language and civilization of Spanish America. *This course will be offered in the summer of 1954.*

Cotton Classing Short Course

The annual Cotton Classing Short Course will be held June 15 to 26 inclusive. Given in cooperation with the USDA local cotton classing office, this course is designed primarily for ginnermen and buyers, but is open to anyone interested in learning the fundamentals of grading and stapling cotton.

The course carries no special entrance requirements other than specific interest in the subject matter, and no college credit is given. Sections are provided for both beginners and experienced classers.

Special inquiries should be addressed to: Head, Department of Textile Engineering, Texas Technological College, Lubbock, Texas.

Music

Summer Music School for Precollege Students (Band, Chorus, Orchestra). Texas Technological College has maintained a large summer band program since the summer of 1934. This feature is concurrent with the first summer session of the college. In 1952 an expansion will include a strong choral and orchestral program. A wide range of courses is offered during this period. A large staff of instructors augments the regular college staff in making these offerings possible.

Guest conductors and instructors include Dr. A. A. Harding of the University of Illinois, and Don Craig, formerly choral director of Fred Waring and at present director of television and radio shows, and Dr. Herbert M. Preston, Director of Hardin-Simmons Orchestra.

Band. Three or more bands are open to accommodate students at various levels of advancement. Special instructors on all wind instruments offer this phase of instruction. Percussion and baton twirling instructions are available to those interested and precollege theory and arranging classes are open to all precollege students.

Chorus. A strong program for high school students is offered in the field of choral music stressing repertoire, tone production, rhythmic precision, small group lessons in voice, and classes in theory.

Orchestra. Small group instruction is offered on violin, viola, and cello at the intermediate and advanced levels.

For complete information regarding the summer music school for precollege students write to the Department of Music, Texas Technological College, Lubbock, Texas.

Placement Service

The Placement Service is a central agency which brings together employers, students, and faculty. Its facilities are at the disposal of all students regardless of major field of study or professional interest. The college offers placement service to alumni and ex-students.

For those students who find it necessary to earn a portion of their expenses while attending college, The Placement Service is able to assist in finding part-time positions with Lubbock business firms and on the campus. Employers representing the public schools or business and industry should file requests for personnel with the Placement Office. Correspondence relative to employment of students and graduates should be addressed to that office.

Details and coverage offered may be received from the Director, The Placement Service, Room 150, Administration Building.

The College Bookstore

The College Bookstore, situated on the campus, is a self-supporting enterprise owned and operated by the college. It is maintained to enable students to purchase textbooks, books for extension courses, supplies, and other equipment needed for laboratory and class work. The Bookstore handles secondhand books, purchasing them at the end of the year from students who desire to dispose of such books.

Field Trip to Europe in Summer of 1954

Tentative plans are being made for a group study travel course in European History for the second term of summer school, 1954. The course would carry six hours of advanced and graduate credit, and would be under the direction of Dr. and Mrs. C. D. Eaves. Full details will be given in the 1954 Summer School Catalog.

Summer Session in Local Schools

The summer session of the Lubbock Public Schools will begin June 1 and continue through July 24. In grades one through eight, work in the fundamental subjects will be offered for review only. Credit work of not more than two half-units per student will be offered in grades nine through twelve. Courses in English, social studies, mathematics and some electives may be taken.

Tuition will vary according to grade level and will be announced later. Any further information may be obtained by writing the Office of the Assistant Superintendent, Senior High School Building, Lubbock, Texas.

Summer School Commencement

A student who completes all work for any degree at the end of either term will have the degree conferred during the commencement program to be held the last day of the summer session. Summer Commencement is scheduled to be held on Wednesday, August 26.

Admission to Candidacy for Graduation

Any student who enters the semester or summer session at the end of which all work for the degree will be completed with less than the entire number of grade points required for the degree for which he is a candidate shall be admitted to *qualified candidacy only*. Since under these conditions failure to graduate may result, ordering the diploma and making other plans for graduation may be done by the student entirely on his own responsibility.

A formal notice will be sent to each student who is admitted to qualified candidacy only, and to his parents, by the dean of his division.

Other Academic Regulations

For regulations covering probation, withdrawing from college, dropping courses, grades, and other matters, see the Twenty-Seventh General Catalog.

Further Information

For more detailed information regarding the summer session, as well as for other information pertaining to the college and its program of work, those interested are invited to write to the Registrar, Texas Technological College, Lubbock, Texas.

OUTLINE OF COURSES

Explanation of Course Numbers. The numbers used for designating course are uniform. From left to right, the first digit indicates the college year in which the course is normally taken; the second digit shows the semester-hour value of the course; the last digit (or digits) is the departmental course number. To illustrate: English 131 is a freshman course with a credit value of 3 semester hours. See the regular current catalog for further explanation.

A course which extends over two semesters carries a course number joined by a hyphen for each additional semester after the first; for example, English 131-2, or Industrial Engineering 432-3, means that the course extends through two semesters. It is necessary that the second semester be completed in order to receive credit for the first semester.

In the enrollment for a course or section of a course is not large enough, or some unforeseen event makes it not feasible to offer any of the courses listed in this bulletin, the college reserves the right to cancel that course.

The student should consult the Twenty-Seventh Catalog for course descriptions and prerequisites.

ACCOUNTING and FINANCE

Reginald Rushing, Head

First Term

ACCOUNTING

For Undergraduates

- 231. Industrial Accounting for Engineers. Cr. 3. Mr. Taylor
- 244. Elementary Accounting I. Cr. 4. 9 lec. hrs., 9 lab. hrs.
Mr. Taylor
- 245. Elementary Accounting II. Cr. 4. 9 lec. hrs., 9 lab. hrs.
Mr. Gibson

For Undergraduates and Graduates

- 322. Payroll Accounting. Cr. 2. Mrs. Eaves
- 334. Intermediate Accounting I. Cr. 3. Mr. Norwood
- 336. Principles of Cost Accounting. Cr. 3. Mr. Norwood
- 434. Advanced Accounting I. Cr. 3. Mr. Rushing
- 437. Principles of Auditing. Cr. 3. Mr. Gibson
- 441. Machine Accounting I. Cr. 4. 9 lec. hrs., 9 lab. hrs.
Mrs. Eaves

For Graduates

- 532. C.P.A. Problems II. Cr. 3. Mr. Rushing
- 631-2. Thesis. Cr. 6. Staff

FINANCE

For Undergraduates

- 331. Corporation Finance. Cr. 3. Mr. Hooper
- 336. Life Insurance. Cr. 3. Mr. Hooper
- 338. Business Law I. Cr. 3. Staff
- 3310. Oil and Gas Law. Cr. 3. Staff

Second Term

ACCOUNTING

For Undergraduates

245. Elementary Accounting II. Cr. 4. 9 lec. hrs., 9 lab. hrs.
Mr. Taylor

For Undergraduates and Graduates

335. Intermediate Accounting II. Cr. 3. Mr. Taylor
435. Advanced Accounting II. Cr. 3. Mr. Rushing

For Graduates

531. C.P.A. Problems I. Cr. 3. Mr. Rushing
631-2. Thesis. Cr. 6. Staff.

FINANCE

For Undergraduates and Graduates

331. Corporation Finance. Cr. 3. Mr. Hooper
339. Business Law II. Cr. 3. Staff
334. Credits and Collections. Cr. 3. Mr. Hooper
631-2. Thesis. Cr. 6. Staff

AGRICULTURAL ECONOMICS

E. L. McBride, Head

*First Term***For Undergraduates**

235. Fundamentals of Economics. Cr. 3. Mr. McBride
331. Statistical Problems. Cr. 3. 6 lec. hrs., 9 lab. hrs.
Mr. Ashworth

For Undergraduates and Graduates

422. Agricultural Prices and Forecasting. Cr. 2. Mr. Ashworth

For Graduates

511. Agricultural Outlook. Cr. 1. Mr. Ashworth
534. Research in Agricultural Economics. Cr. 3. Staff

RURAL SOCIOLOGY

For Undergraduates and Graduates

432. Rural Sociology. Cr. 3. Mr. McBride

For Graduates

532. Current Problems in Rural Sociology. Cr. 3. Mr. McBride
631-2. Thesis. Cr. 6. Staff

Second Term

A. L. Leonard, Acting Head

For Undergraduates

236. Principles of Agricultural Marketing. Cr. 3. Mr. Pinson

For Undergraduates and Graduates

437. Farm Appraisal and Finance. Cr. 3. 6 lec. hrs., 9 lab. hrs.
Mr. Leonard

For Graduates

531. Problems in Land Use. Cr. 3. Mr. Leonard
 533. Marketing Problems. Cr. 3. Mr. Pinson
 535. Research in Agricultural Economics. Cr. 3. Staff
 631-2. Thesis. Cr. 6. Staff

AGRICULTURAL EDUCATION

Ray L. Chappelle, Head

*First Term***For Graduates**

511. Problems. Cr. 1. Mr. Cappelle
 522. Advanced Methods, I. Cr. 2. Mr. Chappelle
 523. Advanced Methods, II. Cr. 2. Mr. Leach
 524. Advanced Methods, III. Cr. 2. Mr. Hargrave
 531. Investigations in the Field of Agricultural Education. Cr. 3.
 Mr. Leach
 532. Investigations in the Field of Agricultural Education. Cr. 3.
 Mr. Hargrave
 631-2. Thesis. Mr. Chappelle

*Second Term***For Graduates**

511. Problems. Cr. 1. Mr. Chappelle
 531. Investigations in the Field of Agricultural Education. Cr. 3.
 Mr. Leach
 532. Investigations in the Field of Agricultural Education. Cr. 3.
 Mr. Hargrave
 631-2. Thesis. Mr. Chappelle

AGRICULTURAL ENGINEERING

A. W. Young, Head

*First Term***For Undergraduates**

321. Farm Shop. Cr. 2. 3 lec. hrs., 9 lab. hrs. Mr. Jordan
 322. Farm Shop. Cr. 2. 3 lec. hrs., 9 lab. hrs. Mr. Jordan
 421. Terracing. Cr. 3. 3 lec. hrs., 9 lab. hrs. Mr. Jordan

*Second Term***For Undergraduates**

333. Farm Machinery. Cr. 3. 6 lec. hrs., 9 lab. hrs. Mr. Williams
 431. Farm Buildings. Cr. 3. 6 lec. hrs., 9 lab. hrs. Mr. Williams

AGRONOMY

A. W. Young, Head

*First Term***For Undergraduates**

131. The Fundamentals of Crop Production. Cr. 3. 6 lec. hrs.,
6 lab. hrs. Mr. Peterson and Mr. Ward
241. Soils. Cr. 4. 9 lec. hrs., 9 lab. hrs. Mr. Peterson
341. Principles of Genetics. Cr. 4. 9 lec. hrs., 9 lab. hrs.
Mr. Ayers

For Undergraduates and Graduates

422. Soil Management. Cr. 2. 6 lec. hrs. Mr. Young
441. Plant Production. Cr. 4. 9 lec. hrs., 9 lab. hrs. Mr. Ward

For Graduates

514. Agronomy Seminar. Cr. 1. Mr. Ayers
532. Agronomy Problems. Cr. 3. Mr. Young
535. Research Methods. Cr. 3. Mr. Young
631-2. Thesis. Cr. 6. Staff.

*Second Term***For Undergraduates**

331. Forage and Pasture Crops. Cr. 3. 6 lec. hrs., 9 lab. hrs.
Mr. Gatherum.
333. Range Plants. Cr. 3. 6 lec. hrs., 9 lab. hrs. Mr. Gatherum

For Graduates

514. Agronomy Seminar. Cr. 1. Mr. Gatherum
533. Agronomy Problems. Cr. 3. Mr. Gatherum
631-2. Thesis. Cr. 6. Staff

ANIMAL HUSBANDRY

R. C. Mowery, Head

First Term

ANIMAL HUSBANDRY

For Undergraduates

431. Beef Cattle Production. Cr. 3. Mr. Stangel
433. Sheep and Wool Production. Cr. 3. Mr. Mowery
436. Advanced Animal Nutrition. Cr. 3. Mr. Turner

For Graduates

531. Advanced Animal Husbandry. Cr. 3. Staff
631-2. Thesis. Cr. 6. Staff

POULTRY HUSBANDRY

For Undergraduates

231. Farm Poultry. Cr. 3. 6 lec. hrs., 6 lab. hrs. Mr. Turner

ANIMAL HUSBANDRY

*Second Term***For Undergraduates**

131. General Animal Husbandry. Cr. 3. 6 lec. hrs., 6 lab. hrs.
Mr. Anderson
322. Farm Meats. Cr. 2. 3 lec. hrs., 9 lab. hrs. Mr. Boren
331. Animal Nutrition and Principles of Feeding. Cr. 3. Mr. Boren

For Undergraduates and Graduates

427. Swine Production. Cr. 2. Mr. Anderson
432. Animal Breeding. Cr. 3. Mr. Fine

For Graduates

532. Advanced Animal Husbandry. Cr. 3. Mr. Fine
- 631-2. Thesis. Cr. 6. Staff

VETERINARY SCIENCE

For Undergraduates

330. General Veterinary Science. Cr. 3. Mr. Harbaugh

APPLIED ARTS

Martye Poindexter, Head

*First Term***For Undergraduates**

111. Design. Cr. 1. (July 6-10) Mrs. Beitler
112. Design. Cr. 1. (July 6-10) Miss Poindexter
113. Design. Cr. 1. (July 6-10) Miss Poindexter
331. Interior Design. Cr. 3. Miss Rogers

For Graduates

4335. Theory and Practice of Art for Elementary Teachers. Cr. 3.
Miss Rogers
513. Workshop in Crafts. Cr. 1. Mrs. McPharlin

*Second Term***For Undergraduates and Graduates**

437. Craft Design. Cr. 3. Miss Poindexter

For Undergraduates

131. Design. Cr. 3. Miss Poindexter

ARCHITECTURE and ALLIED ARTS

First Term

Robert I. Lockard, Acting Head

ARCHITECTURE

For Undergraduates

- 121 or 122. Freehand Drawing I and II. Cr. 2. 18 lab. hrs. each
Mr. Parkinson.
131. Introduction to Design. Cr. 3. 27 lab. hrs. Mr. Lockard

135. Shades, Shadows, and Perspective. Cr. 3. 27 lab. hrs.
Mr. Lockard
224. Freehand Drawing III. Cr. 2. 18 lab. hrs. Mr. Parkinson
225. Freehand Drawing IV. (Beginning Water Color) Cr. 2.
18 lab. hrs. Mr. Parkinson
351. Architectural Design, Grade II. Cr. 5. 45 lab. hrs.
Mr. Lockard

ALLIED ARTS

For Undergraduates and Graduates

210. Introduction to the Arts. Cr. 1. Mr. Lockard
341. Art Workshop. Cr. 4. 36 lab. hrs. Staff
- 426 or 427. Oil Painting or Advanced Water Color. Cr. 2.
18 lab. hrs. Mr. Parkinson

PUBLIC SCHOOL ART

337. Art in Elementary Education I. Cr. 3. 3 lec. hrs.,
18 lab. hrs. Mr. Sasser
439. Methods of Teaching Art Integrated for the Elementary School.
Cr. 3. 3 lec. hrs., 18 lab. hrs. Mr. Sasser
4313. Methods of Teaching Art Integrated for the High School.
Cr. 3. 3 Lec. hrs., 18 lab. hrs. Mr. Sasser

ARCHITECTURE

*Second Term***For Undergraduates**

- 121 or 122. Freehand Drawing I and II. Cr. 2. 18 lab. hrs. each.
Mr. Tracy
132. Introduction to Design. Cr. 3. 3 lec. hrs., 18 lab. hrs.
Mr. Kleinschmidt
352. Architectural Design, Grade II. Cr. 5. 45 lab hrs.
Mr. Kleinschmidt

ALLIED ARTS

For Undergraduates and Graduates

210. Introduction to the Arts. Cr. 1. Mr. Tracy
- 239 or 2310. Pottery. Cr. 3. 3 lec. hrs., 18 lab. hrs. each.
Mr. Tracy
341. Art Workshop. Cr. 4. 36 lab. hrs. Staff
- 426 or 427. Oil Painting or Advanced Water Color. Cr. 2.
18 lab. hrs. each. Staff
- 4311 or 4312. Ceramics. Cr. 3. 3 lec. hrs., 18 lab. hrs. each.
Mr. Tracy

PUBLIC SCHOOL ART

For Undergraduates and Graduates

338. Art in Elementary Education I. Cr. 3. 3 lec. hrs.,
18 lab. hrs. Mr. Sasser
4310. Methods of Teaching Art Integrated for the Elementary School.
Cr. 3. 3 lec. hrs., 18 lab. hrs. Mr. Sasser
4313. Methods of Teaching Art Integrated for the High School.
Cr. 3. 3 lec. hrs., 18 lab. hrs. Mr. Sasser

For Graduates

4335. Art in Elementary Education II. Cr. 3. 3 lec. hrs.,
18 lab. hrs. Mr. Sasser

BIOLOGY

J. C. Cross, Head

*First Term***BACTERIOLOGY****For Undergraduates**

231. Bacteriology. Cr. 3. 6 lec. hrs., 9 lab hrs. Mr. Camp

For Undergraduates and Graduates

- 331-2 Principles of Bacteriology. Cr. 6. 12 lec. hrs., 18 lab. hrs.
Mr. Sealey

BIOLOGY**For Undergraduates**

134. Zoology. Cr. 3. 6 lec. hrs., 9 lab. hrs. Mr. Landwer

For Undergraduates and Graduates

331. Heredity. Cr. 3. 9 lec. hrs. Mr. Cross
332. Teaching of Biology. Cr. 3. 9 lec. hrs. Mr. Cross

ZOOLOGY

135. Anatomy and Physiology. Cr. 3. 6 lec. hrs., 9 lab. hrs.
Miss Holman
331. Histology. Cr. 3. 6 lec. hrs., 9 lab. hrs. Mr. Landwer
531. Research. Cr. 3. Arranged. Mr. Cross

Second Term

R. W. Strandtmann, Acting Head

BIOLOGY**For Undergraduates**

133. Botany. Cr. 3. 6 lec. hrs., 9 lab. hrs. Mr. Camp

BOTANY

531. Problems. Cr. 3. Arranged. Mr. Camp

ZOOLOGY

136. Anatomy and Physiology. Cr. 3. 6 lec. hrs., 9 lab. hrs.
Miss Holman
234. Invertebrate Morphology. Cr. 3. 6 lec. hrs., 9 lab. hrs.
Mr. Strandtmann
334. Entomology. Cr. 3. 6 lec. hrs., 9 lab. hrs. Mr. Strandtmann
535. Research. Cr. 3. Arranged. Mr. Strandtmann

BUSINESS EDUCATION and SECRETARIAL ADMINISTRATION

Donald J. Tate, Head

First Term

BUSINESS EDUCATION

For Graduates

534. Research Seminar in Business Education. Cr. 3. Mr. Tate
 538.* Workshop in Secretarial Subjects. Cr. 3. Mr. Tate
 631-2. Thesis. Cr. 6. Mr. Tate

SECRETARIAL ADMINISTRATION

For Undergraduates

235. Intermediate Shorthand. Cr. 3. 9 lec. hrs., 3 lab. hrs.
 Miss Snow

For Undergraduates and Graduates

333. Business Correspondence. Cr. 3. Mrs. Williams
 421. Voice-writing and Duplicating Machines. Cr. 2. 5 lec. hrs.,
 12 lab. hrs. Miss Snow

Second Term

BUSINESS EDUCATION

For Graduates

530. Objectives and Principles of Business Education. Cr. 3.
 Mr. Tate
 539.** Workshop in Bookkeeping and General Business Subjects. Cr. 3.
 Mr. Tate

SECRETARIAL ADMINISTRATION

For Undergraduates

236. Advanced Shorthand. Cr. 3. 9 lec. hrs., 3 lab. hrs.
 Miss Snow

For Undergraduates and Graduates

321. Calculating Machines. Cr. 2. 5 lec. hrs., 12 lab. hrs.
 Miss Snow

*Offered last three weeks of First Term.

**Offered first three weeks of Second Term.

CHEMISTRY and CHEMICAL ENGINEERING

First Term

W. M. Slagle, Acting Head

CHEMISTRY

For Undergraduates

133. General Chemistry for Nurses. Cr. 3. 6 lec. hrs., 9 lab. hrs.
Miss Stuart
141. General Chemistry. Cr. 4. 9 lec. hrs., 9 lab. hrs.
Mr. Slagle
331. Quantitative Analysis. Cr. 3. 22½ lab. hrs. Mr. Oberg
341. Organic Chemistry. Cr. 4. 9 sem. hrs., 9 lab. hrs. Mr. Lee
353. Organic Chemistry. Cr. 5. 9 lec. hrs., 18 lab. hrs.
Mr. Goodwin, Miss Stuart

For Undergraduates and Graduates

439. Instrumental Methods of Analysis. Cr. 3. 22½ lab. hrs.
Mr. Oberg

CHEMISTRY

Second Term

Joe Dennis, Head

For Undergraduates

134. General Chemistry for Nurses. Cr. 3. 6 lec. hrs., 9 lab. hrs.
Miss Brock
142. General Chemistry. Cr. 4. 9 lec. hrs., 9 lab. hrs.
Mr. Renard
332. Quantitative Analysis. Cr. 3. 22½ lab. hrs. Mr. Craig
354. Organic Chemistry. 5 sem. hrs., 9 lec. hrs., 18 lab. hrs.
Mr. Dennis

For Undergraduates and Graduates

434. Organic Preparations. Cr. 3. 22½ lab. hrs. Mr. Dennis

CHILD DEVELOPMENT
AND FAMILY RELATIONS*First Term*

Sannie Callan, Head

FAMILY RELATIONS

For Undergraduates

433. Family Relations. Cr. 3. Miss Callan

For Graduates

5336. Family Life Conference. Cr. 3. Miss Callan

CIVIL ENGINEERING

James H. Murdough, Head

*First Term***For Undergraduates**

231. Plane Surveying. Cr. 3. 6 lec. hrs., 9 lab. hrs. Mr. Overby
 331. Statics. Cr. 3. Mr. Overby
 332. Kinematics and Kinetics. Cr. 3. Mr. Murdough
 333. Strength of Materials. Cr. 3. Mr. Murdough
 339. Fluid Mechanics. Cr. 3. Mr. McRee

For Undergraduates and Graduates

439. Law and Ethics. Cr. 3. Mr. McRee

Second Term

G. A. Whetstone, Acting Head

For Undergraduates

231. Plane Surveying. Cr. 3. 6 lec. hrs., 9 lab. hrs. Mr. Overby
 331. Statics. Cr. 3. Mr. Whetstone
 332. Kinematics and Kinetics. Cr. 3. Mr. Overby
 333. Strength of Materials. Cr. 3. Mr. Whetstone

CLOTHING and TEXTILES

Mabel D. Erwin, Head

*First Term***For Undergraduates**

231. Basic Textiles. (formerly 131) Cr. 3. Miss Wright

For Undergraduates and Graduates

334. Family Clothing Problems. Cr. 3. Miss Wright

*Second Term***For Graduates**

4335. Textile Trends and Resources for Elementary Teachers. Cr. 3.
 Mrs. Buster
 512. Introduction to the Bishop Method. (July 20-25) Cr. 1.
 Mrs. Bishop, Mrs. Kinchen
 513. Tailoring by the Bishop Method. (July 20-25) Cr. 1.
 Miss Erwin, Mrs. Bishop, Mrs. Kinchen
 511. Evaluation of Sewing and Pattern. Techniques.
 (July 27-31) Cr. 1. Mrs. Kinchen

DAIRY MANUFACTURES

J. J. Willingham, Head

*First Term***For Undergraduates**

131. Principles of Dairying. Cr. 3. 6 lec. hrs., 6 lab. hrs.
 Mr. Harmon
 335. Dairy Bacteriology. Cr. 3. 6 lec. hrs., 9 lab. hrs.
 Mr. Harmon

For Graduates

531. Dairy Manufacturing Problems. Cr. 3. Mr. Willingham
 535. Dairy Bacteriology Research. Cr. 3. Mr. Harmon
 631-3. Thesis. Cr. 6. Staff

*Second Term***For Undergraduates**

222. The Dairy Industries. Cr. 2. 6 lec. hrs. Mr. Willingham

For Graduates

532. Dairy Manufacturing Problems. Cr. 3. Mr. Willingham
 536. Dairy Bacteriology Research. Cr. 3. Mr. Willingham
 631-2. Thesis. Cr. 6. Mr. Willingham

ECONOMICS

Vernon T. Clover, Acting Head

*First Term***For Undergraduates**

231. Principles of Economics I. Cr. 3. Mr. Anderson
 232. Principles of Economics II. Cr. 3. Mr. Rouse
 233. Economic Development of Europe. Cr. 3. Mr. Rouse
 235. Principles of Economics. Cr. 3. Mr. Anderson

For Undergraduates and Graduates

3312. Economics of Labor. Cr. 3. Mr. Clover
 438. Research in Economics and Business. Cr. 3. Mr. Clover

For Graduates

531. Economic Research. Cr. 3. Mr. Rouse
 532. Seminar in Current Economic Trends. Cr. 3. Mr. Rouse

*Second Term***For Undergraduates**

232. Principles of Economics II. Cr. 3. Mr. Golden

For Undergraduates and Graduates

335. Transportation Principles and Practices. Cr. 3. Mr. Moore
 3313. Consumer Economics. Cr. 3. Mr. Clover
 437. Current Economic Problems. Cr. 3. Mr. Clover

EDUCATION AND PHILOSOPHY

John S. Carroll, Head

*First Term***EDUCATION****For Undergraduates**

230. Educational Psychology. 3 sem. hrs. Mr. Barnett
 431. Student Observation and Teaching in the Elementary School.
 3 sem. hrs. Miss Bettencourt
 432. Student Observation and Teaching in the Secondary School.
 3 sem. hrs. Mr. Edwards

For Undergraduates and Graduates

333. Curriculum Development in Elementary Education. 3 sem. hrs.
Staff
334. Curriculum Development in Secondary Education. 3 sem hrs.
Mr. Davidson
335. Elementary Education Methods. 3 sem. hrs. Mr. McDonald
336. Secondary Education Methods. 3 sem. hrs. Mr. Garlin
3310. Children's Literature. 3 sem. hrs. Mr. McDonald
3311. Reading Development in the Elementary School. 3 sem. hrs.
Mr. Livingston
3315. Audio-Visual Education. 3 sem. hrs. Mr. Hartsell
430. History and Philosophy of Education. 3 sem. hrs. Mr. Jackson
437. Public School Relations. 3 sem. hrs. Staff

For Graduates

531. Education Research. 3 sem. hrs. Mr. Cooper
538. Advanced Audio-Visual Education. 3 sem hrs. Mr. Davidson
5311. Applied Educational Research. 3 sem. hrs. Mr. Cooper
5314. Advanced Curriculum Workshop. 3 sem. hrs. Mr. Mecham
5318. Audio-Visual Education Practicum. 3 sem. hrs. Mr. Edwards
5331. Human Development in Education. 3 sem. hrs. Miss Evans
5336. Family Life Conference. 3 sem. hrs. Staff
5339. Advanced Administration Workshops. 2-6 sem. hrs.
Mr. Carroll
5341. Developing Arithmetic Programs in Elementary Education.
3 sem. hrs. Mr. Livingston
5351. General Education Seminar. 3 sem. hrs. Mr. Garlin
5352. Seminar in History and Philosophy of Education. 3 sem. hrs.
Mr. Jackson
5355. Seminar in Elementary Education. 3 sem. hrs. Mr. Mecham
5358. Seminar in Educational Administration. 3 sem. hrs. Staff
5339. Seminar in Supervision and Curriculum Development.
3 sem. hrs. Miss Evans
5360. Seminar in Audio-Visual Education. 3 sem. hrs. Mr. Hartsell
- 631-32. Thesis Seminar. 3 sem. hrs. each. Staff
- 731-32. Education Dissertation Seminar. 3 sem. hrs. each. Staff
- 831-32. Doctor's Dissertation. 6 sem. hrs. Staff.

EDUCATION*Second Term***For Undergraduates**

230. Educational Psychology. 3 sem. hrs. Mr. Barnett
231. Educational Sociology. 3 sem. hrs. Mr. Little

For Undergraduates and Graduates

330. Principles of Modern Education. 3 sem. hrs. Mr. Garlin
333. Curriculum Development in Elementary Education. 3 sem. hrs.
Miss Evans
334. Curriculum Development in Secondary Education. 3 sem. hrs.
Mr. Jackson

335. Elementary Education Methods. 3 sem. hrs. Mr. McDonald
 336. Secondary Education Methods. 3 sem. hrs. Mr. Cooper
 3310. Children's Literature. 3 sem. hrs. Mr. McDonald
 3311. Reading Development in the Elementary School. 3 sem. hrs.
 Mr. Livingston
 3314. Secondary School Organization and Administration. 3 sem. hrs.
 Mr. Cooper
 3315. Audio-Visual Education. 3 sem. hrs. Mr. Davidson
 435. Education Evaluation. 3 sem. hrs. Mr. Livingston
 436. Public School Administration. 3 sem. hrs. Mr. Edwards

For Graduates

536. Elementary School Administration. 3 sem. hrs. Mr. Mecham
 539. Administration of Business Services. 3 sem. hrs. Mr. Carroll
 5310. Audio-Visual Workshop. 3 sem. hrs. Mr. Hartsell
 5314. Advanced Curriculum Workshop. 3 sem. hrs. Mr. Davidson
 5318. Audio-Visual Education Practicum. 3 sem. hrs. Mr. Davidson
 5340. Developing Social Studies Programs in Elementary Education.
 3 sem. hrs. Miss Evans
 5342. Developing Reading Programs in Elementary Education.
 3 sem. hrs. Mr. Mecham
 5354. Seminar in Education Sociology. 3 sem. hrs. Mr. Jackson
 5356. Seminar in Secondary Education. 3 sem. hrs. Mr. Garlin
 631-32. Thesis seminar. 3 sem. hrs. each. Staff
 731-32. Education Dissertation Seminar. 3 sem. hrs. each. Staff
 831-32. Doctor's Dissertation. 6 sem. hrs. Staff.

PHILOSOPHY

For Undergraduates and Graduates

4350. Structure and Dynamics of Philosophical Thought. 3 sem. hrs.
 Mr. Little

EDUCATIONAL PSYCHOLOGY

First Term

For Undergraduates and Graduates

331. Child Psychology. Cr. 3. Miss True
 433. Mental Hygiene. Cr. 3. Miss True

For Graduates

539. Vocational Information. Cr. 3. Mr. Kuntz
 5315. Seminar in Counseling and Guidance. Cr. 3. Mr. Barnett

Second Term

For Undergraduates and Graduates

335. Adolescent Psychology. Cr. 3. Mr. Hutchins
 431. Tests and Measurements. Cr. 3. Mr. Barnett

For Graduates

530. Advanced Educational Psychology. Cr. 3. Mr. Hutchins

ELECTRICAL ENGINEERING

Charles V. Bullen, Head

*First Term***For Undergraduates**

221. Electrical Engineering Laboratory. Cr. 2. 18 lab. hrs.
Mr. Bullen
231. Principles of Electrical Engineering. Cr. 3. Mr. Bullen
412. Electrical Engineering Laboratory. Cr. 1. 9 lab. hrs. Staff
426. Elements of Electrical Engineering. Cr. 2. Mr. Stenis
438. Elements of Electrical Engineering. Cr. 3. Mr. Bullen

For Undergraduates and Graduates

322. Alternating Current Curcuits Laboratory. Cr. 2. 18 lab. hrs.
Mr. Houston
- 323.* Electronics Laboratory. Cr. 2. 18 lab. hrs. Mr. Stenis
- 325.* Electronics. Cr. 2. Mr. Stenis
332. Alternating Current Circuits. Cr. 3. Mr. Houston
4112. Electrical Machinery Laboratory. Cr. 2. 9 lab. hrs.
Mr. Blackwell
4212. Electrical Machinery Laboratory. Cr. 2. 18 lab. hrs.
Mr. Blackwell
4312. Electrical Machinery. Cr. 3. Mr. Blackwell

*Second Term***For Undergraduates**

222. Electrical Engineering Laboratory. Cr. 2. 18 lab. hrs.
Mr. Bullen
232. Principles of Electrical Engineering. Cr. 3. Mr. Bullen
413. Electrical Engineering laboratory. Cr. 1. 9 lab. hrs. Staff
427. Elements of Electrical Engineering. Cr. 2. Mr. Stenis
439. Elements of Electrical Engineering. Cr. 3. Staff

For Undergraduates and Graduates

- 323.* Electronics Laboratory. Cr. 2. 18 lab. hrs. Mr. Stenis
324. Communication Circuits Laboratory. Cr. 2. 18 lab. hrs.
- 325.* Electronics. Cr. 2. Mr. Stenis
Mr. Houston
334. Communications Circuits. Cr. 3. Mr. Houston
4113. Electrical Machinery Laboratory. Cr. 1. 9 lab. hrs.
Mr. Blackwell
4213. Electrical Machinery Laboratory. Cr. 2. 18 lab. hrs.
Mr. Blackwell
4313. Electrical Machinery. Cr. 3. Mr. Blackwell

*One-half of course completed each term.

ENGLISH

First Term

Mr. Gillis, Acting Head

For Undergraduates

- 131. English Composition. Cr. 3. Staff
- 132. English Composition. Cr. 3. Staff
- 233. Technical Writing for Engineers. Cr. 3. Miss Lewis
- 234. Technical Writing for Students in Agriculture. Cr. 3.
Mrs. Russell
- 237. Masterpieces of Literature. Cr. 3. Staff
- 238. Masterpieces of Literature. Cr. 3. Staff
- 337. Major Victorian Poets. Cr. 3. Miss Teague

For Undergraduates and Graduates

- 435. English Romanticism. Cr. 3. Mr. Strout
- 438. History of the English Language. Cr. 3. Mr. Gunn
- 4321. American Literature and Its Backgrounds. Cr. 3. Mr. Gillis
- 4330. Modern British and American Poetry. Cr. 3. Mr. Gillis
- 4350. Appreciation of the Literature of Western Civilization. Cr. 3.
Mr. Murphy

For Graduates

- 536. Studies in American Literature. Cr. 3. Mr. Gillis
- 538. Studies in Romantic Literature. Cr. 3. Mr. Strout
- 631-2. Thesis. Cr. 3. Staff
- 731-2. Research. Cr. 3. Staff
- 831-2. Doctor's Dissertation. Cr. 3. Staff

Second Term

Mr. Camp, Head

For Undergraduates

- 131. English Composition. Cr. 3. Staff
- 132. English Composition. Cr. 3. Staff
- 233. Technical Writing for Engineers. Cr. 3. Miss Lewis
- 237. Masterpieces of Literature. Cr. 3. Staff
- 238. Masterpieces of Literature. Cr. 3. Staff
- 3315. Short Story. Cr. 3. Mr. Nall
- 432. Shakespeare. Cr. 3. Mr. Camp
- 4312. Age of Johnson. Cr. 3. Mr. Camp
- 4320. American Literature and Its Background. Cr. 3. Mr. Male
- 4325. The American Novel of the Late 19th and 20th Centuries.
Mr. Male

For Graduates

- 536. Studies in American Literature. Cr. 3. Mr. Male
- 5319. Studies in Shakespeare. Cr. 3. Mr. Camp
- 539. Studies in Eighteenth Century Literature. Cr. 3. Mr. Camp
- 631-2. Thesis. Cr. 3. Staff
- 731-2. Research. Cr. 3. Staff
- 831-2. Doctor's Dissertation. Cr. 3. Staff

FOODS and NUTRITION

Mrs. Jonnie Michie, Head

*First Term***For Undergraduates**

333. Elementary Nutrition and Food Selection. Cr. 3. Miss Weeks
 334. Nutrition. Cr. 3. Miss Weeks

For Undergraduates and Graduates

332. Food Purchasing. Cr. 3. Mrs. Michie

For Graduates

4335. Nutrition Trends and Resources for Elementary Teachers.
 Cr. 3. Mrs. Lamb
 533. Readings in Nutrition. Cr. 3. Mrs. Michie

*Second Term***For Undergraduates and Graduates**

431. Problems of the School Lunch Program. (July 16-August 7).
 Cr. 3. Mrs. Lamb

FOREIGN LANGUAGES

First Term

Mrs. Eunice J. Gates, Acting Head

For Undergraduates

FRENCH

131. A Beginning Course in French. Cr. 3. Mrs. Alexander
 231. A Reading Course in French. Cr. 3. Mrs. Alexander

GERMAN

131. A Beginning Course in German. Cr. 3. Mr. Alexander
 231. A Reading Course in Literary German. Cr. 3. Mr. Alexander
 233. Scientific German. Cr. 3. Mr. Alexander

SPANISH

131. A Beginning Course in Spanish. Cr. 3. Mr. Hamilton
 231. Grammar, Reading, Composition, and Conversation. Cr. 3.
 Mr. Sadler
 333. Introduction to Latin-American Life and Literature. Cr. 3.
 Mrs. Gates

For Undergraduates and Graduates

436. Advanced Grammar, Composition, and Style. Cr. 3.
 Mr. Hamilton
 4325. Readings in Latin-American Literature. Cr. 3. Mrs. Gates

For Graduates

5312. Studies in Spanish and Spanish-American Literature. Cr. 3.
 Staff
 631. Thesis. Cr. 3. Staff

Second Term

Mr. Alfred B. Strehli, Acting Head

For Undergraduates**FRENCH**

132. A Beginning Course in French. Cr. 3. Mrs. Alexander
 232. A Reading Course in French. Cr. 3. Mrs. Alexander

GERMAN

132. A Beginning Course in German. Cr. 3. Mr. Henninger
 232. A Reading Course in Literary German. Cr. 3. Mr. Henninger
 234. Scientific German. Cr. 3. Mr. Henninger

SPANISH

132. A Beginning Course in Spanish. Cr. 3. Mrs. Tucker
 232. Grammar, Reading, Composition, and Conversation. Cr. 3.
 Mr. Strehli
 334. A Reading Course for Third-Year Students. Cr. 3.
 Mr. Strehli

For Undergraduates and Graduates

435. Teachers' Course in Methods of Teaching Spanish. Cr. 3.
 Mrs. Tucker

For Graduates

5313. Studies in Spanish and Spanish American Literature. Cr. 3.
 Staff
 632. Thesis. Cr. 3. Staff

GEOLOGY

R. G. Sidwell, Head

*First Term***For Undergraduates**

- 131-2 General Geology. Cr. 6. 18 lec. hrs., 12 lab. hrs.
 Mr. Brand

For Undergraduates and Graduates

363. Field Geology. Cr. 6. Given in the Field. Mr. Cline, Mr. Bond
 433-4. Structural Geology, Petroleum Geology. Cr. 6. Mr. Warn

For Graduates

- 535-6. Advanced Work in Geology. Cr. 6. Staff
 631-2. Thesis. Cr. 6. Staff

*Second Term***For Undergraduates and Graduates**

336. Field Geology. Cr. 6. Given in the Field. Mr. Warn,
 Mr. Bond
 437-8. Sedimentation. Cr. 6. Mr. Sidwell

For Graduates

- 535-6. Advanced Work in Geology. Cr. 6. Staff
 631-2. Thesis. Cr. 6. Staff

GOVERNMENT

First Term

J. W. Jackson, Acting Head

For Undergraduates

230. American Government, Organization. 3 sem. hrs.

Mr. Jackson, Mr. Kennedy, Mr. Oden

231. American Government, Functions. 3 sem. hrs.

Mr. Mack, Mr. Adams

For Undergraduates and Graduates

334. American Political Parties. 3 sem. hrs. Mr. Oden

335. American Foreign Relations. 3 sem. hrs. Mr. Mack

337. Public Administration, Organization. 3 sem. hrs. Mr. Jackson

435. International Organization. 3 sem. hrs. Mr. Adams

4350. Political Ideologies and Issues in the Modern World. 3 sem. hrs.

Mr. Kennedy

Second Term

J. W. Davis, Head

For Undergraduates

230. American Government, Organization. 3 sem. hrs.

Mr. Davis, Mr. Abernethy

231. American Government, Functions. 3 sem. hrs.

Mr. Fuller, Mr. Dauley

For Undergraduates and Graduates

331. Local Government. 3 sem. hrs. Mr. Dauley

3311. Political Institutions. 3 sem. hrs. Mr. Abernethy

438. World Politics. 3 sem. hrs. Mr. Fuller

531. Seminar in American Government and Politics. 3 sem. hrs.

Staff

532. Seminar in Political Theory. 3 sem. hrs. Mr. Davis

- 631-2 Thesis. 6 sem. hrs. Staff

HEALTH AND PHYSICAL EDUCATION
AND RECREATION

R. W. Kireilis, Head

*First Term***For Undergraduates****For Men**

011. Adapted Sports. Cr. 1. Mr. Kireilis

For Women

233. Methods in Physical Education for the Elementary School.

Cr. 3. Miss Rainey

For Men and Women

017. Golf. Cr. 1. Mr. Jennings

0120. Tennis. Cr. 1. Mr. Jennings

212. Tennis. Cr. 1. Miss Rainey

2110. Archery. Cr. 1. Miss Rainey

For Undergraduates and Graduates**For Men**

4322. Organization and Administration of Interscholastic and Inter-collegiate Athletic Programs. Cr. 3. Mr. Jennings

For Men and Woman

437. Measurement in Physical Education. Cr. 3. Mr. Kireilis
531. Administration of Physical Education. Cr. 3. Mr. Kireilis

Second Term**For Undergraduates****For Men**

011. Adapted Sports. Cr. 1. Mr. Kireilis
012 and 013. Beginning and Advanced Swimming. Cr. 1.
Mr. Philbrick

For Women

230. Methods in Physical Education for Elementary and Secondary Schools. Cr. 3. Miss Hoyle

For Men and Women

0120. Tennis. Cr. 1. Mr. Philbrick
212. Tennis. Cr. 1. Miss Hoyle
2111. Golf. Cr. 1. Miss Hoyle

For Undergraduates and Graduates**For Men**

4324. Organization and Administration of Intramural Sports. Cr. 3.
Mr. Philbrick

For Men and Women

4321. Methods and Techniques of Driver Instruction. Cr. 3.
Mr. Jennings
436. Physical Examinations and Corrective Physical Education. Cr. 3.
Mr. Kireilis
533. Facilities for Physical Education. Cr. 3. Mr. Kireilis

HISTORY, ANTHROPOLOGY, AND SOCIOLOGY**HISTORY****First Term****W. C. Holden, Head**

131. History of Civilization. Cr. 3. Mr. Pearce
333. Renaissance and Reformation. Cr. 3. Mr. Pearce
335. Geopolitics of World War II. Cr. 3. Mr. Eaves
4322. Life and Literature of the Southwest. Cr. 3. Mr. Rister
4328. The Trans Mississippi West, 1803 to the Present. Cr. 3.
Mr. Rister
536. Seminar in European History. Cr. 3. Mr. Eaves
631. Master's Thesis. Cr. 3. Mr. Holden

SOCIOLOGY

233. Current Social Problems. Cr. 3. Mr. Moore
439. Contemporary Sociological Theory. Cr. 3. Mr. Moore

Second Term

S. S. McKay, Acting Head

HISTORY

- 132. History of Civilization. Cr. 3. Mr. Kinchen
- 3311. The Canadian Dominion. Cr. 3. Mr. Kinchen
- 435. Anglo-American Diplomacy. Cr. 3. Mr. McKay
- 450. Patterns of World History. Cr. 3. Mr. Wallace.
- 532. Seminar in American History. Cr. 3. Mr. McKay
- 632. Master's Thesis. Cr. 3. Staff

ANTHROPOLOGY

- 336-7. Mexican Archaeology. Cr. 3. A field course in the archaeology of Northern Mexico. Mr. Holden

SOCIOLOGY

- 230. Introduction to Sociology. Cr. 3. Miss Smith
- 431. Patterns of Rural Life in the United States. Cr. 3. Mr. Wallace

HOME ECONOMICS EDUCATION

Geraldine Clewell, Acting Head

*First Term***For Undergraduates**

- 431. Methods of Teaching Home Economics. Cr. 3. Miss Nesbitt

For Undergraduates and Graduates

- 413. Home Care of the Sick. (June 23 to June 28) Cr. 1.

Miss Clewell

Designed to give special training in effective methods of teaching Home Care of the Sick. Prepares teachers to teach Red Cross Home Nursing classes, thereby assisting in the civil defense programs of their communities. Representatives from the American Red Cross will assist with the course.

- 435. Methods for Adult Leadership. Cr. 3. Miss Clewell

For Graduates

- 543. Techniques of Research. Cr. 3. Miss Clewell

*Second Term***For Undergraduates**

- 331. Principles of Teaching Home Economics. Cr. 3. Miss Nesbitt

For Graduates

- 536. Problems. Cr. 3. Miss Nesbitt

HOME MANAGEMENT

Margaret W. Weeks, Head

*First Term***For Undergraduates**

432. Residence in Home Management House. Cr. 3. Miss Drew

For Undergraduates and Graduates

411. Household Equipment Workshop. (June 3-16). Cr. 1.
Miss Drew
Demonstration on Techniques; Laundry equipment and kitchen utensils.
412. Household Equipment Workshop. (June 17-27). Cr. 1.
Miss Drew
Electric and Gas Ranges; Refrigerators and Food Freezers
413. Household Equipment Workshop. (June 30-July 10). Cr. 1.
Miss Drew
Cleaning Equipment; Small Electric Appliances; Kitchen and Laundry Planning and Lighting.
433. Household Equipment. Cr. 3. Miss Drew

HORTICULTURE and PARK MANAGEMENT

E. J. Urbanovsky, Head

*First Term***For Undergraduates**

321. Apiculture. Cr. 3. 2 lec. hrs., 3 lab. hrs. Mr. Elle
339. Plant Insects and Diseases and Their Control. Cr. 3. 6 lec. hrs.
Mr. Elle

For Graduates

- 631-2. Thesis. Cr. 6. Mr. Urbanovsky

*Second Term***For Undergraduates**

131. Principles of Horticulture. Cr. 3. 6 lec. hrs., 9 lab. hrs.
Mr. Yocum

For Graduates

430. Problems. Cr. 3. Mr. Yocum
- 631-2. Thesis. Cr. 6. Mr. Urbanovsky

INDUSTRIAL ENGINEERING and ENGINEERING
DRAWING

Horace J. MacKenzie, Acting Head

First Term

ENGINEERING DRAWING

For Undergraduates

111. Engineering Drawing. Cr. 1. 9 lab. hrs. Mr. MacKenzie
121. Engineering Drawing. Cr. 2. 18 lab. hrs. Mr. MacKenzie
131. Engineering Drawing. Cr. 3. 3 lec. hrs., 18 lab. hrs.
Mr. MacKenzie
221. Machine Drawing. Cr. 2. 18 lab. hrs. Mr. MacKenzie

MANAGEMENT

C. B. Hubbard, Acting Head

*First Term***For Undergraduates**

331. Industrial Management. Cr. 3. Mr. Hubbard
For Undergraduates and Graduates
 431. Office Management. Cr. 3. Mr. Hubbard

*Second Term***For Undergraduates**

331. Industrial Management. Cr. 3. Mr. Moore

MARKETING

George Heather, Acting Head

*First Term***For Undergraduates and Graduates**

321. Public Relations. Cr. 2. Mr. Shaw
 335. Principles of Retailing. Cr. 3. Mr. Shaw
 336. Introduction to Business Statistics. Cr. 3. Mr. Golden
 431. Commodity Marketing. Cr. 3. Mr. Golden

*Second Term***For Graduates**

339. Principles of Salesmanship. Cr. 3. Mr. Shaw

For Undergraduates and Graduates

332. Principles of Marketing. Cr. 3. Mr. Shaw
 333. Marketing Problems. Cr. 3. Mr. Golden

MATHEMATICS and ASTRONOMY

Emmett Hazlewood, Head

*First Term***For Undergraduates**

121. Algebra. 2 sem. hrs. Mr. Fuller
 122. Algebra. 2 sem. hrs. Mr. Underwood
 130. Algebra. 3 sem. hrs. Mrs. Rowland
 131. Trigonometry. 3 sem. hrs. Mr. Roberts
 132. Analytic Geometry. 3 sem. hrs. Mr. Thomas
 135. Mathematics in General Education. 3 sem. hrs. Mrs. Rowland
 137. Commercial Algebra. 3 sem. hrs. Mrs. Holland
 138. Mathematics of Finance. 3 sem. hrs. Miss May
 231. Differential Calculus. 3 sem. hrs. Mr. Hazlewood
 232. Integral Calculus. 3 sem. hrs. Mrs. Roberts
 238. Statistics. 3 sem. hrs. Mrs. May
 321. Differential Equations. 2 sem. hrs. Mr. Thomas

For Undergraduates and Graduates

332. Differential Equations. 3 sem. hrs. Mr. Thomas
 431. Teaching of Secondary Mathematics. 3 sem. hrs. Mrs. Holland
 434. Advanced Calculus. 3 sem. hrs. Mr. Hazlewood
 437. Theory of Numbers. 3 sem. hrs. Mr. Underwood

For Graduates

533. Advanced Topics in Analysis. 3 sem. hrs. Mr. Fuller
 631-2. Thesis. 6 sem. hrs. Staff

Second Term

R. M. Parker, Acting Head

121. Algebra. 2 sem. hrs. Miss McGlothlin
 122. Algebra. 2 sem. hrs. Mr. Parker
 130. Algebra. 3 sem. hrs. Miss McGlothlin
 131. Trigonometry. 3 sem. hrs. Mr. Woodward
 132. Analytical Geometry. 3 sem. hrs. Mr. Sparks
 138. Mathematics of Finance. 3 sem. hrs. Miss McGlothlin
 232. Integral Calculus. 3 sem. hrs. Mr. Heineman

For Undergraduates and Graduates

331. Applications of Calculus. 3 sem. hrs. Mr. Woodward
 433. Theory of Equations. 3 sem. hrs. Mr. Heineman
 435. Advanced Calculus. 3 sem. hrs. Mr. Sparks

For Graduates

535. Analytic Projective Geometry. 3 sem. hrs. Mr. Parker
 631-2. Thesis. 6 sem. hrs. Staff

MECHANICAL ENGINEERING*First Term*

D. J. Helmers, Acting Head

For Undergraduates

313. Machine Shop. Cr. 1. 6 lec. hrs., 12 lab. hrs.
 (First three weeks) Mr. Hardgrave
 314. Machine Shop. Cr. 1. 6 lec. hrs., 12 lab. hrs.
 (Second three weeks) Mr. Hardgrave
 317. Power Laboratory. Cr. 1. 9 lab. hrs. Mr. Helmers
 330. Thermodynamics. Cr. 3. Mr. Godeke
 334. Thermodynamics. Cr. 3. Mr. Helmers
 337. Metallurgy. Cr. 3. Mr. Hardgrave

Second Term

R. L. Mason, Acting Head

For Undergraduates

221. Engineering Problems. Cr. 2. Mr. Helmers
 318. Power Laboratory. Cr. 1. 9 lab. hrs. Mr. Helmers
 331. Thermodynamics. Cr. 3. Mr. Monasch
 333. Fluid Dynamics. Cr. 3. Mr. Helmers
 335. Heat Engines. Cr. 3. Mr. Monasch
 336. Steam Power Plant Engineering. Cr. 3. Mr. Mason
 433. Internal Combustion Engines. Cr. 3. Mr. Mason

MUSIC

First Term

Raymond Elliott, Acting Head

APPLIED MUSIC

For Undergraduates*Class Instruction*

117-2. Piano. 1 sem. hr., 2 lec. hrs., 7 prac. hrs.

Miss vanAppledorn

217-2. Piano. 1 sem. hr., 2 lec. hrs., 7 prac. hrs.

Miss vanAppledorn

Private or Small Group (For assignment to instructor, see Acting Head, Department of Music)

115, 116, 215, 216. Applied Music. Voice or piano. 1 sem. hr. each, $\frac{1}{2}$ to 1 lec. hr. each, $7\frac{1}{2}$ prac. hrs. each. Staff

125, 126. Applied Music. Voice or piano. 2 to 4 sem. hrs. each, 1 lec. hr. each. 15 to 21 prac. hrs. each. (Sophomore and junior courses offered in sequence.) Staff

For Undergraduates and Graduates315, 316, 425, 426, 4215, 4216, 435, 436, 445, 446. Applied Music. Voice and Piano. 1 to 4 sem. hrs. each, $7\frac{1}{2}$ to 21 prac. hrs. each. Staff

MUSIC EDUCATION

For Undergraduates

231. Fundamentals of Music for Elementary Classroom Teachers. 3 sem. hrs. Mr. Elliott

327. Choral Methods and Techniques. 2 sem. hrs. Mr. Elliott

328. Instrumental Conducting. 2 sem. hrs. Mr. Wiley

421, 422. Band Conducting and Methods. 2 sem. hrs. Mr. Wiley

For Undergraduates and Graduates

4317. Choral Conducting. 3 sem. hrs. Mr. Elliott

4318. Instrumental Conducting. 3 sem. hrs. Mr. Wiley

For Graduates

530. Seminar in Music Education. 3 sem. hrs. Staff

532. Choral Music Workshop. 3 sem. hrs. Staff

533. Instrumental Music Workshop. 3 sem. hrs. Staff

THEORY

For Undergraduates

147. Elementary Theory. 4 sem. hrs. Miss vanAppledorn

For Graduates

427. Instrumentation. 2 sem. hrs. Staff

ENSEMBLE

For Undergraduates

013. Band. 1 sem. hr., 5 lab. hrs. Mr. Wiley

*Second Term***APPLIED MUSIC****For Undergraduates**

- 115, 116, 215, 216. Applied Music. Voice or Piano, 1 sem. hr. each, $\frac{1}{2}$ to 1 lec. hr. each, $7\frac{1}{2}$ prac. hrs. each. Staff
- 125, 126. Applied Music. Voice or Piano. 2 to 4 sem. hrs. each, 1 lec. hr. each, 15 to 21 prac. hrs. each. (Sophomore and Junior courses offered in sequence.)

For Undergraduates and Graduates

- 315, 316, 425, 4215, 4216, 435, 436, 445, 446. Applied Music. Voice or Piano. 1 to 4 sem. hrs. each, $7\frac{1}{2}$ to 21 prac. hrs. each. Staff

MUSIC EDUCATION**For Undergraduates**

232. Elementary Music Principles, Practices and Materials. 3 sem. hrs. Mr. Elliott

For Graduates

531. Seminar in Music Education. 3 sem. hrs. Mr. Elliott

THEORY**For Undergraduates**

148. Elementary Theory. 4 sem. hrs. Miss vanAppledorn

PETROLEUM ENGINEERING*First Term*

W. L. Ducker, Head

For Undergraduates and Graduates

411. Engineering Seminar. Cr. 1. Mr. Ducker
420. Petroleum Engineering Problems. Cr. 3. Mr. Ducker
430. Natural Gas Problems. Cr. 3. Mr. Ducker

*Second Term***For Undergraduates and Graduates**

411. Engineering Seminar. Cr. 1. Mr. Ducker
420. Petroleum Engineering Problems. Cr. 2. Mr. Ducker
430. Natural Gas Problems. Cr. 3. Mr. Ducker

PHYSICS*First Term*

J. W. Day, Acting Head

141. General Physics. Cr. 4. Mr. Gott
215. Physical Measurements. Cr. 1. Mr. Gott
216. Physical Measurements. Cr. 1. Mr. Day
235. Engineering Physics. Cr. 3. Mr. Day
236. Engineering Physics. Cr. 3. Mr. Day

For Undergraduates and Graduates

337. Introduction to Modern Physics. Cr. 3. Mr. Gott

Second Term

W. W. Merrymon, Acting Head

- 142. General Physics. Cr. 4. Mr. Gott
- 216. Physical Measurements. Cr. 1. Mr. Merrymon
- 236. Engineering Physics. Cr. 4. Mr. Merrymon
- For Undergraduates and Graduates**
- 338. Introduction to Modern Physics. Cr. 3. Mr. Gott

PSYCHOLOGY

Lehman C. Hutchins, Head

*First Term***For Undergraduates**

- 230. Introduction to Psychology. Cr. 3. Mr. Bess, Mr. Kuntz

For Undergraduates and Graduates

- 331. Child Psychology. Cr. 3. Miss True
- 433. Mental Hygiene. Cr. 3. Miss True
- 436. Personality Development. Cr. 3. Mr. Hutchins
- 4310. Methods in Clinical Psychology. Cr. 3. Mr. Hutchins

For Graduates

- 532. Problems in Psychology. Cr. 3. Staff
- 539. Vocational Information. Cr. 3. Mr. Kuntz
- 5315. Seminar in Counseling and Guidance. Cr. 3. Mr. Barnett
- 5336. Family Life Conference. Cr. 3. Staff
- 631-2. Master's Thesis. Cr. 3 each. Staff

*Second Term***For Undergraduates and Graduates**

- 335. Adolescent Psychology. Cr. 3. Mr. Hutchins
- 431. Tests and Measurements. Cr. 3. Mr. Barnett

For Graduates

- 530. Advanced Educational Psychology. Cr. 3. Mr. Hutchins
- 631-2. Master's Thesis. Cr. 3 each. Staff

SPEECH

P. Merville Larson, Head

*First Term***For Undergraduates**

- 318. Forensic Activities. Cr. 1. Mr. Larson
- 319. Theatre Activities. Cr. 1. Mr. Schulz
- 338. Business and Professional Speech. Cr. 3. Mr. Larson and Mr. Schulz

For Undergraduates and Graduates

4318. Speech Correction Methods. Cr. 3. Miss Lindell
4320. Supervised Clinical Practice in Speech Correction. Cr. 3.
Miss Lindell
4325. Directing School Speech Activities. Cr. 3. Mr. Larson and
Mr. Schulz
4350. History of Speech and the Theatre. Cr. 3. Mr. Larson and
Mr. Schulz

For Graduates

531. Studies in the Field of Speech Therapy. Cr. 3. Staff
533. Problems in Research. Cr. 3. Staff
631. Thesis. Cr. 3. Staff

*Second Term***For Undergraduates**

233. Voice and Diction. Cr. 3. Staff
338. Business and Professional Speech. Cr. 3. Mr. Larson and
Miss Pendleton

For Undergraduates and Graduates

4319. Speech Correction Methods. Cr. 3. Staff
4321. Supervised Clinical Practice in Speech Correction. Cr. 3. Staff
4335. Basic Speech for Elementary Teachers. Cr. 3. Mr. Larson

For Graduates

532. Studies in the Field of Speech Therapy. Cr. 3. Staff
534. Problems in Research. Cr. 3. Staff
632. Thesis. Cr. 3. Staff

TEXTILE ENGINEERING

L. E. Parsons, Head

First Term

- 234.* Cotton Classing and Marketing. Cr. 3. 6 lec. hrs., 9 lab. hrs.
Mr. Parsons

*Offered if sufficient demand.

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