

BULLETIN
OF THE
TEXAS TECHNOLOGICAL
COLLEGE

PUBLISHED TWELVE TIMES A YEAR

VOL. VI

APRIL, 1930

No. 4



SUMMER SESSION

FIRST TERM, JUNE 2 TO JULY 12
SECOND TERM, JULY 14 TO AUGUST 22

1930

LUBBOCK, TEXAS

Entered as second-class matter December, 1924, at the Postoffice at Lubbock, Texas, under the Act of August 24, 1912.

INSCRIPTIONS ON ADMINISTRATION BUILDING, TEXAS TECHNOLOGICAL COLLEGE

NORTH SIDE

To right of main entrance: "Cultivated mind is the guardian genius of democracy. It is the only dictator that freemen acknowledge, the only security that freemen desire."—*Mirabeau B. Lamar.*

To left of main entrance: "Righteousness exalteth a nation, but sin is a reproach to any people."—*Solomon.*

Above third story window, east end of building, the faces of five outstanding men in American history; namely, Columbus, Washington, Lincoln, Lee, Wilson.

Above third story windows, west end of building, the faces of five outstanding men in Texas history; namely, Houston, Austin, Crockett, Johnston, Hogg.

The great seal of the College.

The great seals of the six nations under the flags of which Texas has been; namely, France, Spain, Mexico, The Republic of Texas, The Confederacy, The United States of America.

The four great institutions of society: Home, State, Church, School.

Seven subjects that the Texas Technological College is designed to teach: namely, Agriculture, Science, Manufacturing, Democracy, Home Marking, Art, Literature.

Seven educational products which the Texas Technological College is specifically designed to bring forth; namely, Patriotism, Religion, Industry, Virtue, Wealth, Enlightenment, Citizenship.

SOUTH SIDE

The names of fifteen people, above the archway, showing those lines of human endeavor considered most worth while:

For philosophy, Plato and Aristotle.

For poetry, Homer and Shakespeare.

For medicine, Hippocrates.

For divinity, Paul.

For architecture, Michael Angelo.

For teaching, Pestalozzi.

For teaching, Pestalozzi.

For statecraft, Gladstone.

For pure science, Newton.

For applied science, Pasteur.

For common sense, Franklin.

For invention, Edison.

For science in the vegetable world, Burbank.

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CALENDAR. 1930

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

MAY							JUNE							JULY							AUGUST							
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	
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4	5	6	7	8	9	10		8	9	10	11	12	13	14	6	7	8	9	10	11	12	3	4	5	6	7	8	9
11	12	13	14	15	16	17	15	16	17	18	19	20	21		13	14	15	16	17	18	19	10	11	12	13	14	15	16
18	19	20	21	22	23	24	22	23	24	25	26	27	28	20	21	22	23	24	25	26		17	18	19	20	21	22	23
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SEPTEMBER							OCTOBER							NOVEMBER							DECEMBER						
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21	22	23	24	25	26	27	19	20	21	22	23	24	25	16	17	18	19	20	21	22	21	22	23	24	25	26	27
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CALENDAR. 1931

JANUARY							FEBRUARY							MARCH							APRIL						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
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25	26	27	28	29	30	31								29	30	31					26	27	28	29	30		

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

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

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COLLEGE CALENDAR

- June 2, Monday. Registration for summer session.
- June 2, 3, 4, Monday, Tuesday, Wednesday. Entrance examinations.
- June 3, Tuesday. Classes begin.
- July 4, 5, Thursday, Friday. A personally conducted trip to Carlsbad
Cave for those who are interested.
- July 4, Friday. A holiday.
- July 12, Saturday. First term closes.
- July 14, Monday. Registration for second term.
- July 15, Tuesday. Classes begin.
- August 22, Friday. Summer school closes.

BOARD OF DIRECTORS

OFFICERS OF THE BOARD

CLIFFORD B. JONES, Chairman	-----	Spur
R. A. UNDERWOOD, Vice-Chairman	-----	Plainview
ROSCOE WILSON, Treasurer	-----	Lubbock
W. T. GASTON, Secretary	-----	Lubbock

MEMBERS OF THE BOARD

Term Expires 1931

CLIFFORD B. JONES	-----	Spur
ROSCOE WILSON	-----	Lubbock
HOUSTON HARTE	-----	San Angelo

Term Expires 1933

R. A. UNDERWOOD	-----	Plainview
RILEY STRICKLAND	-----	Amarillo
THOMAS JOHNSON	-----	McKinney

Term Expires 1935

FRANK E. CLARITY	-----	Fort Worth
MRS. F. N. DRANE	-----	Corsicana
JOHN W. CARPENTER	-----	Dallas

COMMITTEES OF THE BOARD

EXECUTIVE COMMITTEE

R. A. UNDERWOOD, <i>Chairman</i>	
JOHN W. CARPENTER	MRS. F. N. DRANE

BUILDING COMMITTEE

THOMAS JOHNSON, <i>Chairman</i>	
JOHN W. CARPENTER	FRANK E. CLARITY

LOCAL AFFAIRS COMMITTEE

ROSCOE WILSON, <i>Chairman</i>	
R. A. UNDERWOOD	RILEY STRICKLAND

FINANCE COMMITTEE

JOHN W. CARPENTER, <i>Chairman</i>	
HOUSTON HARTE	FRANK E. CLARITY

LEGISLATIVE COMMITTEE

HOUSTON HARTE, <i>Chairman</i>	
THOMAS JOHNSON	RILEY STRICKLAND

OFFICERS OF ADMINISTRATION

PAUL W. HORN, M. A., LL. D., *President.*

Office, 213 Administration Building.

JAMES M. GORDON, M. A., LL. D., *Dean of the School of Liberal Arts.*

Office, 211 Administration Building.

ARTHUR H. LEIDIGH, M. S., *Dean of the School of Agriculture.*

Office, 102 Agriculture Building.

WILLIAM J. MILLER, S. M. in E. E., *Dean of the School of Engineering.*

Office, 202 Engineering Building.

MARGARET W. WEEKS, M. S., *Dean of the School of Home Economics.*

Office, 101 Home Economics Building.

MARY W. DOAK, M. A., *Dean of Women.*

Office, 102 Administration Building.

W. T. GASTON, *Secretary and Business Manager.*

Office, 105 Administration Building.

EBEN L. DOHONEY, M. A., *Registrar and Assistant Dean.*

Office, 106 Administration Building.

SUMMER SCHOOL COMMITTEE

J. M. GORDON, *Dean of the School of Liberal Arts, Chairman.*

A. W. EVANS, *Professor of Education, Head of Department.*

J. C. GRANBERY, *Professor of History, Head of Department.*

OFFICERS OF INSTRUCTION

PAUL WHITFIELD HORN, *President.*

M. A., Central College; LL. D., 1917.

WILLIAM HENRY ABBITT, *Professor of Physics.*

B. A., Virginia, 1919; Ph. D., Chicago, 1926.

OTTO V. ADAMS, *Associate Professor of Civil Engineering.*

B. S. in C. E., Colorado Agricultural College, 1918; M. S. E., Michigan, 1924.

JAMES G. ALLEN, *Instructor in English.*

B. A., Southern Methodist University, 1924; M. A., Harvard, 1927.

GRACE BAKER, *Instructor in Clothing and Textiles.*

B. S., West Virginia; M. A., Iowa State College, 1928.

THOR J. BECK, *Professor of French and German; Head of Department.*

B. A., Soree College; M. A., LL.B.; LL. M., Copenhagen; Ph. D., Columbia, 1929.

SAMUEL J. BOLLER, *Assistant Professor of Engineering Drawing.*

B. E., Iowa, 1922; M. A., 1927.

EDNA WALKER BUSTER, *Assistant Professor in Clothing and Textiles.*

B. S., College of Industrial Arts, 1921; M. A., Columbia, 1929.

BLANCHE CADE, *Instructor in Clothing.*

B. A., Michigan State College; M. S., Iowa State College, 1930.

HORACE BAILEY CARROLL, *Associate Professor of History.*

B. A., Texas Technological College, 1928; M. A., 1928.

ALLAN L. CARTER, *Professor of English; Head of Department.*

B. A., Clark, 1911; M. A., Northwestern, 1913; Ph. D., Pennsylvania, 1919.

WARREN PERRY CLEMENT, *Associate Professor of Education.*

B. A., Baylor, 1919; M. A., 1920.

BENJAMIN F. CONDRAY, *Professor of Economics and Business Administration; Head of Department.*

B. A., Ouachita, 1921; M. A., Chicago, 1923.

WILLIAM MOORE CRAIG, *Professor of Chemistry.*

B. A., Southwestern, 1906; M. A., 1907; M. A., Texas, 1916; Ph. D., Harvard, 1927.

LOY CROSS, *Graduate Assistant in Chemistry.*

B. A., Texas Tech., 1929.

ALBERT BENJAMIN CUNNINGHAM, *Assistant Professor of English.*

B. A., Muskingum College, 1913; M. A., New York University, 1916; Litt. D., Lebanon, 1917; Ph. D., N. Y. University, 1926.

MRS. WILLIAM DINGUS, *Instructor in Latin.*

B. A., Texas, 1910; M. A., Texas Tech., 1929.

MARY WOODWARD DOAK, *Dean of Women and Professor of English.*

B. A., Texas, 1925; M. A., Texas Tech., 1929.

BONNIE K. DYSART, *Associate Professor of Education.*

B. S., Texas; M. A., 1927.

CHARLES DUDLEY EAVES, *Professor of History.*

B. A., Texas, 1916; M. A., Chicago, 1922.

JOHN ORVAL ELLSWORTH, *Professor of Agricultural Economics and Farm Management; Head of Department.*

B. S., Utah A. & M., 1917; M. S., Cornell, 1924; Ph. D., 1926.

MABEL DEAN ERWIN, *Professor of Clothing and Textiles; Head of Department.*

B. S., Purdue, 1913; M. A., Columbia, 1925.

ARTHUR WILSON EVANS, *Professor of Education; Head of Department.*

B. A., Oxford College, 1890; M. A., Texas, 1924; Ph. D., 1928.

MABEL EVANS, *Professor of Clothing.*

M. A., Columbia, 1926.

MARSHALL E. FARRIS, *Assistant Professor of Mechanical Engineering.*

B. S. in M. E., Purdue, 1922; M. S. in M. E., Texas, 1926.

GUS L. FORD, *Professor of History.*

B. A., Southern Methodist University, 1920; M. A., 1921.

RUPERT WINTHROP FOWLER, *Associate Professor of English.*

B. A., Texas, 1908; M. A., Harvard, 1920.

EWING YOUNG FREELAND, *Professor of Physical Education; Head of Department.*

B. A., Vanderbilt, 1912.

CHARLES C. GALBRAITH, *Graduate Assistant in Chemistry.*

B. S., Trinity, 1928.

EUNICE J. GATES, *Instructor in Spanish.*

B. A., Southwestern, 1921; M. A., 1924; M. A., Michigan, 1927.

WILLIAM BRYAN GATES, *Associate Professor of English.*

B. S., Millsaps, 1918; M. A., Vanderbilt, 1921; M. A., Michigan, 1927.

JOHNNYE GILKERSON, *Assistant Professor of Physical Education for Women.*

B. A., Texas, 1924; M. A., U. of Southern California, 1929.

LUCILLE AVO POWELL GILL, *Instructor in English.*

B. A., Texas, 1922; M. A., 1925.

JAMES MARCUS GORDON, *Dean of Liberal Arts and Professor of Latin.*

B. A. Trinity, 1903; M. A., Chicago, 1908; LL. D., Trinity, 1919.

JOHN COWPER GRANBERY, *Professor of History; Head of Department.*

B. A., Randolph-Macon, 1896; M. A., Chicago, 1908; Ph. D., 1909.

JOHN COYNE HARDGRAVE, *Instructor in Mechanical Engineering; Superintendent of Shops.*

ELLIS RICHARD HEINEMAN, *Instructor in Mathematics.*

B. A., Wisconsin, 1925; M. A., 1926.

CARL HENNINGER, *Associate Professor of French and German.*

B. A., Indiana, 1907; M. A., Illinois, 1908.

WILLIAM CURRY HOLDEN, *Professor of History.*

B. A., Texas, 1923; M. A., 1924; Ph. D., 1928.

CECIL HORNE, *Assistant Professor of English and Journalism; Head of Information Bureau.*

B. A., Baylor, 1908; B. A., Yale, 1911.

WILLIAM ALBERT JACKSON, *Professor of Government; Head of Department.*

B. A., Baylor, 1914; M. A., Chicago, 1916; Ph. D., Iowa, 1924.

FLORIAN ARTHUR KLEINSCHMIDT, *Professor of Architectural Engineering; Head of Department.*

B. S. in Arch., Minnesota, 1920; M. in Arch., Harvard, 1922; Diploma d'Architecture, Ecole des Beaux Arts Americaine, Fontainebleau, 1925.

BESSIE BEAKLEY LEAGUE, *Associate Professor of Biology.*

B. A., Texas, 1921; M. A., 1925.

ARTHUR HENRY LEIDIGH, *Dean of Agriculture and Professor of Agronomy.*

B. S., Kansas State Agricultural College, 1902; M. S., Texas A. & M., 1923.

JONNIE HEMPHILL MCCRERY, *Professor of Foods; Head of Department.*

B. S., Columbia, 1920; M. A., 1923.

BERNICE McDONALD, *Instructor in Foods.*

B. S., College of Industrial Arts; M. A., Columbia.

FLORA POWELL MCGEE, *Associate Professor of English.*

B. A., Colorado College; M. A., George Peabody College, 1924.

SETH SHEPARD MCKAY, *Professor of History.*

B. A., Texas, 1912; M. A., 1919; Ph. D., Pennsylvania, 1924.

JAMES NEWTON MICHIE, *Professor of Mathematics; Head of Department.*

B. S. in Engineering, Virginia, 1908; M. A., Michigan, 1919.

WILLIAM JASPER MILLER, *Dean of Engineering and Professor of Electrical Engineering; Head of Department.*

E. E., Texas, 1915; S. M. in E. E., Massachusetts Institute of Technology, 1922.

RUFUS ARTHUR MILLS, *Professor of English.*

B. A., Texas, 1914; M. A., 1923.

DONALD VAN DALE MURPHY, *Assistant Professor of English.*

B. A., Tulsa, 1920; M. A., Columbia, 1926.

MONTPELL E. OGDON, *Associate Professor of Government.*

B. A., Illinois, 1925; M. A., Columbia, 1926.

LERROY THOMPSON PATTON, *Professor of Geology; Head of Department.*

B. A., Muskingum College, 1905; B. S., Chicago, 1913; M. S., Iowa, 1916; Ph. D., Iowa, 1923.

VICTOR D. PAYNE, *Assistant Professor of Physical Training, Coach of Basketball and Track.*

B. A., Simmons University.

MARY RENA PENN, *Instructor in Applied Arts.*

B. S., College of Industrial Arts; M. A., Columbia, 1928.

RUTH PIRTLE, *Professor of Speech; Head of Department.*

B. S. and Diploma as Teacher of Speech Education, Columbia, 1928; Student, Hickman School of Speech Arts; Lyceum Arts Conservatory; Colorado; California; Curry School of Expression, Boston.

CHARLES BLAISE QUALIA, *Professor of Spanish; Head of Department.*

B. A., Texas, 1916; M. A., 1921.

WILLIAM THORNTON READ, *Professor of Chemistry; Head of Department.*

B. A., Austin College, 1905; M. A., 1908; M. S., Texas, 1915; Ph. D., Yale, 1921.

EDWARD LOOMAN REED, *Professor of Botany.*

B. A., Oklahoma Baptist College, 1912; M. S., Chicago, 1922; Ph. D., 1924.

KENNETH MILLER RENNER, *Associate Professor of Dairy Manufactures; Head of Department.*

B. S., Iowa State College, 1921; M. S., Kansas State Agricultural College, 1927.

F. YANTIS ROBNETT, *Associate Professor of English.*

B. A., Baylor, 1921; M. A., 1922.

CLIVE E. RUSSELL, *Associate Professor of Horticulture.*

B. S., Michigan State College, 1926; M. S., Oregon Agricultural College, 1928.

CLARENCE CARL SCHMIDT, *Associate Professor of Physics.*

B. A., Cornell College, 1917; M. A., Illinois, 1921; Ph. D., 1927.

JESSIE Q. SEALEY, *Instructor in Biology.*

B. A., Texas, 1928; M. A., 1928.

JAMES THOMAS SHAVER, *Associate Professor of Education.*

B. S., S. H. T. C., 1926; M. A., Columbia, 1927.

RAYMOND GILBERT SIDWELL, *Assistant Professor of Geology.*
B. A., Iowa, 1921; M. S., 1922; Ph. D., 1928.

WILLIAM M. SLAGLE, *Assistant Professor of Chemistry.*
B. A., Southwestern, 1916; M. A., Texas, 1928.

GEORGE SMALLWOOD, *Professor of English.*
B. A., Southwestern, 1917; M. A., Southern Methodist University, 1925.

WENZEL LOUIS STANGEL, *Professor of Animal Husbandry; Head of Department.*
B. S., Texas A. & M., 1915; M. S., Missouri, 1916.

ALFRED BELL STREHLI, *Assistant Professor of Spanish.*
B. A., Ohio, 1924; M. A., 1926.

ALAN LANG STROUT, *Assistant Professor of English.*
M. A., Chicago, 1920; M. A., Wisconsin, 1925; Ph. D., Yale, 1928.

GUSSIE LEE TEAGUE, *Instructor in English.*
B. A., Oklahoma, 1923; M. A., Colorado, 1926.

EARL L. THOMPSON, *Assistant Professor of Mathematics.*
B. A., Kansas State Teachers College, 1908; M. A., Kansas, 1914; Ph. D., Chicago, 1928.

RALPH S. UNDERWOOD, *Associate Professor of Mathematics.*
B. A., Minnesota, 1916; M. A., 1917.

WILLIAM RICHARD WAGHORNE, *Professor of Music; Head of Department.*
A. A. G. O., New York, 1914; F. A. G. O., 1915.

KITTIE D. WASHINGTON, *Instructor in Foods.*
B. A., College of Industrial Arts; M. S., Columbia University, 1921.

WILLIAM A. WHATLEY, *Associate Professor of Spanish.*
B. A., Texas, 1920; M. A., 1921.

MAMIE WOLFFARTH, *Graduate Assistant in Government.*
B. A., Texas Tech., 1929.

LEE CLARK, M. A., Texas, *Superintendent of Schools, Plainview.*
Lecturer in Education.

M. H. DUNCAN, M. A., Yale, *Superintendent of Schools, Lubbock. Lecturer in Education.*

W. A. McINTOSH, B. A., Alabama Polytechnic, *Superintendent of Schools, Amarillo. Lecturer in Education.*

L. S. TIREMAN, Ph. D., Associate Professor of Education, University of New Mexico, *Lecturer in Education.*

MARY CHUTE, *Primary Teacher, Ft. Worth City Schools, Industrial Arts in the Primary Grades.*

MRS. LELIA HAMMETT, *Specialist, Houston City Schools, Palmer Penmanship and Public School Art.*

T. C. ROOT, B. A. Baylor; M. B. A., Harvard; *Economics and Business Administration.*

INSTRUCTORS IN SPECIAL DEPARTMENTS

MRS. ENOCH FRANKLIN GEORGE, *Piano.*
B. Mus., Cincinnati, 1918.

MARGARET JOHNSTON HUFF, *Piano.*
B. Mus., American Conservatory, 1910.

MRS. VIOLET GRAYUM MCKNIGHT, *Voice.*
B. M., Baylor, 1923; Pupil of Herbert Witherspoon, Chicago Musical College; E. Warren K. Howe, American Conservatory; Fred Eggert; Maude Baird.

MRS. M. A. SCOGGIN, *Voice and Public School Music.*
Graduate of College of Music, Ottawa University.

DEPARTMENT OF EXTENSION

JULIUS F. McDONALD, *Director.*
B. A., Baylor, 1897; B. A., Yale, 1898; M. A., Chicago, 1910.

LIBRARY STAFF

ELIZABETH HOWARD WEST, *Librarian.*

B. A., Texas; M. A., 1901; Texas Library Training Class, 1905-6.

EMMA LILLIAN MAIN, *Assistant Librarian.*

B. A., North Texas State Teachers College, 1924; Texas Library School, 1925-1926.

MADELIN FRANCES CANOVA, *Reference Librarian.*

B. A., Texas, 1927; B. S. in Library Science, Illinois, 1929.

MRS. OLIVE PRICE HOLDEN, *Reference Librarian.*

B. A., Texas, 1923; Texas Library School, 1925-26.

THE SUMMER SESSION

1930

The Summer Session of the Texas Technological College is an integral part of the college year. All courses offered by the Schools of Agriculture, Engineering, Home Economics, and Liberal Arts will have the same credit value as in the other quarters.

The enrollment in the previous summer sessions since the opening of the College has been as follows: 1926, 336; 1927, 677; 1928, 965; 1929, 1298.

For the accommodation of those who cannot devote the entire summer to study but who desire college credit, the Summer Session is divided into two terms of six weeks each. The first term will begin June 2 and will end July 12. The second term will begin July 14 and close August 22. Classes will meet five times a week, from Tuesday to Saturday inclusive. Students may enter for either term or for both terms.

The entire College plant will be available for use, and many of the members of the regular faculty, assisted by visiting specialists of recognized standing, will offer both regular and special courses.

The normal amount of work for college credit which a student may take in the Summer Session is three subjects per term.

In the laboratory sciences, mathematics, observation and practice teaching, etc., certain courses are arranged so that persons desiring to fulfill degree requirements may complete for credit more than the usual amount of work in these subjects. The work is so arranged that by concentrating on a given subject a student may complete a year's work in six weeks.

The Department of Education and Psychology offers a wide variety of courses, all of which lead to elementary, high school, permanent and special certificates.

Courses are offered both terms by which a certificate of any class may be extended for one year provided the certificate expires this year and after the summer session opens. For full details see discussion given under Department of Education.

The four schools of the College offer work in the various departments as follows:

School of Liberal Arts—Biology, including Botany and Zoology, Chemistry, Economics and Business Administration, Education and Psychology, English, French, German, Geology, Government, History, Latin, Mathematics, Music, Philosophy and Sociology, Physical Education, Physics, Spanish, and Speech.

School of Engineering—Civil Engineering, Electrical Engineering, Mechanical Engineering, Engineering Drawing.

School of Agriculture—Agricultural Economics and Farm Management, Agricultural Education, Agronomy, Animal Husbandry, Dairy Manufacturing, Horticulture.

School of Home Economics—Applied Art, Clothing, Foods and Nutrition, General Home Economics, Home Economics Education.

COURSES OFFERED

More than two hundred and fifty courses, one hundred of which are advanced, will be offered during the summer session. These courses are of freshman, sophomore, junior, senior and graduate rank and practically all lead to the appropriate degrees.

GRADUATE STUDENTS

Graduate students will find courses leading to the M. A. degree in the following departments: Economics and Business Administration, Education and Psychology, English, Geology, Government, History, Mathematics, Philosophy and Sociology, and Spanish.

HIGH SCHOOL GRADUATES

High school graduates who are entering college for the first time will find it advantageous to begin their college career during the Summer Session. In fact, high school graduates may enter and pursue college work with the expectation of completing the traditional four college years in three years by attending the present summer session and the two following summers in addition to three regular sessions.

The work offered in the Summer Session is especially planned to meet the needs of the following:

1. Elementary and high school teachers seeking certificate or degree credit.

2. Principals and superintendents desiring to study their special problems such as classification and grading, arranging course of study, and improving the teaching staff.
3. Pre-medical and pre-law students desiring to meet entrance requirements for professional schools.
4. Serious-minded men and women seeking a wider knowledge of some special subject or wishing broader general culture.
5. All students who desire to complete the requirements for graduation within less than four years.

RECREATION

Recreation plans for the Summer Session have been formulated by a special committee of the faculty, and provide for group singing, band concerts, dramatic productions, moving pictures, a watermelon party and the following attractions extraordinary:

Fisk Jubilee Singers: A sextet of negro singers, direct descendants, third generation, of the original Fisk Jubilee Singers of sixty years ago. The members of this group are graduates of Fisk University, Nashville, Tennessee. They have toured Europe four times and have sung by command before Their Britannic Majesties. Their program is an authentic and spontaneous presentation of negro spirituals and slave songs.

Scheduled to appear at Texas Tech. during the week of June 16th, general admission of \$1.50 and \$1.00 will be charged. Students holding Recreation tickets will be admitted free.

Grumpy: The Bennet-Hall Players from Chicago will produce at the gymnasium, the English play "Grumpy," which created such a sensation both in London and New York when presented by Sir Cyril Maude. Mr. Hall, a well known Chicago theatre director, will be in personal charge of the company.

A \$1.00 and 75c attraction, free to students holding Recreation tickets.

The Light Opera Mirror: Will present selections from such favorites as Balfe's "Bohemian Girl," "I Dreamt That I Dwelt"; "Then You'll Remember me"; "Gypsy Chorus," etc. *The Chocolate Soldier*: "Come, I Love You Only," and *The Red Mill*." Four high class singers with a first class accompanist are assured for this production. As they have sung as an ensemble for the past two years a fine performance can be expected.

General admission \$1.00 and 75c. Free to holders of Recreation tickets.

SPECIAL NOTE: When registering see that your Recreation Fee of *One Dollar* is included. This will admit you free to all attractions. The general admission at the door, to students and the general public, will be \$2.50 and \$3.50.

Trips to the Carlsbad Caverns: Each summer the College sponsors a trip to the Carlsbad Caverns in New Mexico, the time being approximately July 4. If a second trip is desired by a sufficient number of students, it can be arranged for at a convenient time during the second term.

GENERAL INFORMATION

LOCATION

The College is situated at Lubbock, in Lubbock County, which is in the western part of the State. The elevation at Lubbock is 3,250 feet above sea level.

Lubbock is located on two railroad systems. Six lines of the Santa Fe serve Lubbock, one of these being the transcontinental line from Houston to Los Angeles. There is one line on the Fort Worth and Denver City, a part of the Burlington System. These transportation lines offer eighteen trains daily, with very good time schedules to most parts of the State. There is an even greater number of regularly scheduled automobile stages.

The city of Lubbock is well fitted to serve the College and its visitors and students, being a small modern city of approximately 20,000 population. There are large modern hotels, modern hospitals well staffed, and excellent churches. The public school system of Lubbock is progressive and has a large staff of capable teachers. These facts are of interest to parents who wish to accompany their children who go to college.

BUILDINGS AND GROUNDS

BUILDINGS AT PRESENT COMPLETED

At the present time there have been completed the following buildings on the college campus, namely:

- Administration Building, first unit.
- Textile Engineering Building, first unit.
- Home Economics Building, first unit.
- President's Home.
- Cafeteria.
- Stock Judging Pavilion.
- Dairy Barn.
- Heating Plant.
- Mechanical Engineering Shop.
- Gymnasium.
- A small class-room for Agriculture.
- Greenhouse, first unit.
- Home Management House.
- Engineering Building, first unit.
- Chemistry Building.

Approximately thirty-five small buildings comprising Agricultural equipment.

Building and Grounds Shop.

Bookstore.

FACILITIES

The College is provided with a system of sewers; a pressure water distributing system supplied from its own well, water tower, and mains; a permanent lighting system; complete gas lines for the distribution of natural gas; and a complete series of electric circuits and telephone circuits. Heating tunnels of permanent construction connect the principal buildings with the power plant and contain the various distributing systems.

CAMPUS GROUNDS

The campus is permanently planned and a definite system of parking developments is being followed, with the result that lawns, shrubbery, flowers, and gardens surround the principal buildings.

FARM

The College property comprises approximately 2,000 acres, of which that part not devoted to the campus is available for the use of the School of Agriculture. There is equipment of barns, silos, out-buildings, fences, and a water system, together with pastures and lands devoted to crops and used for laboratory purposes.

THE LIBRARY

The College Library has at the present time about 57,500 books, maps, manuscripts and pamphlets of which approximately 21,600 have been catalogued. The library is open during the summer session from 8:00 a. m. to 10:00 p. m. except Saturday the hours will be 8 a. m. to 5:00 p. m.

THE COLLEGE BOOKSTORE

The College Bookstore, located in a frame and stucco building on the campus, is owned and operated by the College. The Bookstore carries in stock all required text books, books for extension courses, all supplies and equipment needed in any of the specialized courses, and an assortment of stationery and athletic supplies. Branches of the Bookstore are operated in the corridor of the Administration Building and

in the Engineering Building. At the end of the Spring term the Bookstore makes a practice of purchasing from students books which are to be used in the College the following year.

THE CAFETERIA

The College maintains on the campus a cafeteria operated under the supervision of the School of Home Economics. The Cafeteria dining room is open for breakfast, dinner and supper. In addition to its regular use the Cafeteria dining room may be used for committee meetings, club meetings or discussion groups by students and faculty. After one o'clock in the afternoon and extending through the evening, the cafeteria dining room may also be used for private or club parties, luncheons or dinners. An effort is made to keep the price of food as low as compatible with high standards of service and food.

CO-EDUCATION

The bill by which the Texas Technological College was established provides that the institution shall be co-educational, a policy which the management of the institution is pleased to make its own. Consequently, from the day the doors first opened, young women and young men have been admitted on an equal basis.

DEMOCRACY OF SPIRIT

In a great democracy like our own, it stands to reason that democracy of spirit among our student body makes possible the best preparation for a democratic citizenship.

Class distinction is frowned upon, hazing and secret societies, especially Greek letter social fraternities, are forbidden by the Board of Directors, and every student is encouraged to make a place for himself of real worth to himself and to his community.

ENTRANCE

The Registrar of the Texas Technological College has charge of all matters relating to admission to any school or schools of the College. All communications regarding entrance requirements should be addressed to him.

GENERAL ADMISSION REQUIREMENTS

Admission to the College is open to students of good moral character, both men and women, who can meet the entrance requirements, including the college physical examination, and are able to profit by the work of the College. Applicants should bring with them a certificate of successful vaccination against smallpox or should be vaccinated after coming to Lubbock.

TRANSCRIPT OF HIGH SCHOOL CREDITS

Students proposing to enter the College from high schools should have a transcript of their high school credits sent to the Registrar of the Texas Technological College by September 1st of the year in which they wish to enroll. This transcript should show that the student has been graduated from the high school with not less than fifteen units and should be signed by the superintendent or the high school principal.

TRANSCRIPT OF COLLEGE CREDITS

Students who have attended other colleges and have made good in such colleges will be welcomed in Texas Technological College if they feel that their particular needs can be better met at this institution. In such cases they should have the registrar of the college attended send a transcript of their college credits, including entrance units, to the Registrar of the Texas Technological College. Such transcript should certify honorable dismissal from the last institution attended, and should be forwarded to the College at least five days before the date on which the student expects to enter.

ADMISSION BY HIGH SCHOOL CERTIFICATE

Graduates of accredited high schools presenting a minimum of fifteen units will be admitted to the freshman class of the College without examination. For unconditional admission to a particular school of the College the specific requirements of that school must be met. A list of subjects accepted for admission will be found in the general bulletin.

ADMISSION BY EXAMINATION

In case a student is graduated from a high school which does not offer full fifteen accredited units, he may then enter the freshman class after passing entrance examinations sufficient to bring the total to fifteen units. In the spring each year entrance examinations are held throughout the State under the supervision of the State Department of Education. The examinations held in May are conducted in each county, and the papers are graded by the State Department of Education at Austin. Subjects successfully passed and certified to by the State Department of Education or by the Department of Extension of the Texas Technological College will be accepted for entrance, provided they are subjects that meet our requirements.

At the opening of the fall, winter and summer terms, the College gives entrance examinations to those who need credits for entrance. Students desiring to take entrance examinations on other dates may do so by paying a fee of \$2.50.

SCHEDULE OF ENTRANCE EXAMINATIONS

SUMMER TERM, 1930

June 2

Forenoon		Afternoon	
8:00-10:00	10:00-12:00	1:00-3:00	3:00-5:00
English	Mathematics	History	Science

June 3

Forenoon		Afternoon	
8:00-10:00	10:00-12:00	1:00-3:00	3:00-5:00
For'n Language	Civics	Stenography	Domestic Art
Typewriting	Bookkeeping	Agriculture	Domestic Science
Manual Training	Public Speaking	Commercial Law	Economics
	Drawing	Com. Geography	Bible

The requirements of the State Department of Education hold concerning the submitting of notebooks. Notebooks are required for the following subjects: Agriculture, Biology, Botany, Zoology, Physiology, Chemistry, Physics, General Science and Physiography.

Entrance examinations for the summer term of 1930 will be given May 30, 31.

ADMISSION BY STATE TEACHERS' CERTIFICATE

An applicant holding a State teachers' certificate based on State examination will receive credit in proportion to the number of acceptable subjects taken for the certificate.

Applicants holding teachers' certificates granted by the State Board of Education are requested to submit their reports from the State Board of Examiners and they will be given credit for affiliated subjects on which they have passed the State examinations.

ADMISSION BY INDIVIDUAL APPROVAL

At the discretion of the dean of the particular school, mature students (twenty-one years of age or over) may be admitted to college classes without having met the formal entrance requirements. Admission in this manner is allowed only in the case of applicants who present evidence that they have essentially completed the high school credits required for regular admission and whose records show them to be above the average in ability as students.

Students admitted by individual approval cannot become candidates for degrees until they have satisfied the admission requirements.

Students admitted by individual approval to freshman English will, on completing the year's work in that subject, be given credit also for three admission units in English. Similarly, students admitted to freshman mathematics will, on completing the year's work in that subject, receive credit also for two admission units in algebra and one in plane geometry. Further, students admitted to the College by individual approval and making, during their first long session, at least 45 term hours, with an average grade of C, will, in addition, absolve the admission condition in the five elective units. If this average is not made, the five elective units and the four other prescribed units must be made up by entrance examinations or by extra college subjects within two years from the date of admission.

ADMISSION BY CONDITIONS

To enroll in the College a student must offer a certificate of graduation from an accredited high school with fifteen affiliated high school units. Included in the fifteen units must be three units of English and one each in plane geometry and algebra if the student enters without conditions. However, if he is able to present fifteen accredited units which do not include mathematics, he may be admitted to the freshman class, except in the School of Engineering, provided the conditions are all removed by examination or otherwise before he can be enrolled in

any sophomore courses in the College. These conditions may be removed by work taken under the Department of Extension. The first course in any of the modern foreign language courses (131-2-3 or Latin 191-2-3) may be used to absolve the two entrance units in this language, but of course it cannot at the same time earn college credit.

ADMISSION TO ADVANCED STANDING

Students transferring from other colleges which have four grade letters will be given credit for those courses only that have been passed with a grade which is one letter above the passing grade in the institution from which the student comes; and then only when such courses or their equivalent are given for credit in Texas Technological College. Furthermore, any transfer who expects to be graduated from Texas Technological College must meet the regular requirements for graduation and must complete a minimum of forty-five term hours in this institution. This does not apply to the School of Engineering.

REGULATIONS FOR STUDENTS

ABSENCE FROM CLASSES

1. Students are required to be diligent in the pursuit of their studies and regular in their attendance at classes. Those who fail to meet these requirements will be requested to withdraw from college.

2. Students are required to attend all meetings and examinations of courses for which they are registered. For each twelve absences per term in any or all subjects, the student will be required to complete one extra hour for graduation. The grade point rule is to apply to extra hours thus required.

3. (a) Absence on field trips and with athletic teams, debating teams, judging teams, or other organizations which leave the College on official work, and absences of individuals who are permitted by the President or the Dean to leave the College on official business pertaining to the College or some organization thereof, are counted at half rate, provided the coach, manager or other person in charge filed with the Registrar at least twenty-four hours before the student leaves the College a certificate upon a form prescribed by the College for each student who proposes to make a trip, and provided the same is approved by the dean of the school in which the student is enrolled, before the student leaves the College.

(b) Absences due to sickness of the student count at half rate provided he files in the office of the Registrar within one week after his return to classes an official "Physician's Approval of Absence" card for the period of his illness, signed by the college physician.

(c) Absence due to illness or death in the student's family will count at half rate when approved to the Registrar by the dean of the school in which the student is enrolled.

4. (a) Students for whom absence approval cards are filed in accordance with the regulations stated above under (a), (b), and (c) of paragraph 3, may have the privilege of making up the lost recitations as evidenced by handing in written work or in some other manner satisfactory to the instructor concerned. When such missed recitations have been made up, the remaining absences are removed.

(b) Applications for the privilege of making up absences as in (a) of paragraph 3, must be made in writing to the Registrar and approved by the dean of the respective school within one week from the time of the return of the student to the College. A form prescribed by the College for this purpose will be furnished by the Registrar.

DOUBLE CUTS

Each absence on the two days preceding or on the two days following any holiday counts as two, except as provided in paragraph 3b, 3c and 4a.

ADDING SUBJECTS

If it appears desirable for a student to take up an additional subject, after the regular registration period, the procedure should be as follows:

(1) Permission from the dean of the school in which the student is enrolled should be obtained.

(2) Approval of the instructor of the subject should next be obtained on duplicate add cards supplied by the dean's office.

(3) The dean's approval of the add cards should then be obtained.

(4) The student should present the approved duplicate add cards to the business office and pay a fee of \$1.00.

DROPPING SUBJECTS

If it appears advisable for a student to drop a subject he should first obtain permission from the dean of the school in which he is registered. Students' names will be kept on the rolls and absences reported until the instructor receives notice from the registrar's office that the dean has approved the dropping of the subject.

CHANGE OF SECTION OF SUBJECTS

After completion of his registration a student may change from one section of a subject to another only with the approval of the dean of his school and the instructors concerned. A fee of \$1.00 must be paid for the change.

TERM HOUR

The unit of calculating credit in the College is the "term hour." One hour a week of class work for a term of twelve weeks is counted as one "term hour."

A "term hour" is given in a subject for each three hours of student

time that it requires per week for a term. Each recitation demands two hours of preparation, thus making the number of recitations per week equal to the term hour value of the subject. The term hour value of a laboratory subject is equal to the number of three-hour periods per week where no outside work is necessary. The second digit of any subject number indicates its term hour value.

MAXIMUM NUMBER OF TERM HOURS ALLOWED

A student may not register for more than nine or ten term hours in either term of the Summer School unless he has maintained during the preceding long session an average grade of at least "B" and has carried a normal schedule of work. In no case will a student be permitted to register or secure credit for more than twelve term hours in either term of the Summer School or for more than twenty-one hours in the two terms, including any correspondence work. Students who have not done work previously in the Texas Technological College will not be allowed to register for more than nine term hours in either term of the Summer School.

GRADES

The standing of a student in his work is expressed by grades made up from class work and from examinations. The grades used are: A, excellent; B, good; C, fair; D, passing; E, condition; Inc., incomplete; W, withdrawal from the course; F, failure. A plus grade and a minus grade may be used at the instructor's discretion to make finer distinctions above and below the letter given. Thus, if "A" is 90 to 100, "A" minus is low, and "A" plus is high within that range; likewise, "D" minus is barely passing.

Grades are given by terms, but where the student's curriculum requires the completion of a subject, two-term or three-term courses will not count for a degree until credit has been received for the entire required course.

For a full discussion of the various grades, see the general catalog.

COURSE NUMBERS

The numbers used for designating the courses are uniform. Reckoning from left to right the first digit indicates the College year in which the course is normally offered; the second digit shows the term hour value of the course, while the other digit or digits represent the course number. A course complete in one term is described under one number, joined by a hyphen for each additional term after the first, e. g., Eng-

ish 131-2-3, or Industrial Engineering 4311-12-13, meaning that a subject extends over three terms.

GRADE POINT REQUIREMENTS FOR GRADUATION

To secure any degree in this College, the total number of grade points a student has received must equal or exceed the total sum of the term hours for graduation. For grade A, three grade points are awarded for each term hour; for grade B, two points; for grade C, one point; for grade D, no points.

No grade points are required or allowed for credits accepted from other institutions, for credits made in this College prior to September 1, 1926, or for credits made in the two years of required physical education or physical or military training. A student who has the number of term hours required for graduation, but not the corresponding number of grade points, may satisfy the grade point requirement by taking additional courses until the grade point requirement has been met.

DEFICIENCIES IN ENGLISH

Students in any of the schools of the College who are found to be notably deficient in the fundamentals of English composition will be required, under the direction of the Department of English, to remove such deficiency before graduation.

PHYSICAL TRAINING

Physical training is required of all freshmen and sophomores, both men and women, unless excused upon recommendation of the College physician.

WITHDRAWAL FROM COLLEGE

A student who finds it necessary to withdraw from the College before the close of the term should apply to the dean of the school in which he is registered for permission to withdraw. A student under twenty-one years of age should first consult his parents and should bring with him a written statement showing that he has his parents' permission to withdraw. If the dean is convinced that withdrawal is necessary, the student will be given honorable dismissal from the College.

SUSPENSION FROM COLLEGE

If a student convinces the authorities of the College that he is prov-

ing an unworthy citizen of the College community and fails to react in the right way to the counsel given him, such a student is dropped from the institution's class rolls. Such suspension may be for the remainder of the term or of the school year, or it may be permanent. In no case are fees remitted to a student suspended from school by the College authorities.

HAZING

Hazing is forbidden by the law of the State and by the College regulations.

WARNING ON STUDENT CHECKS

Students are urged to exercise care in paying fees or making campus purchases by checks. A returned check calls for a penalty. Warning will be issued either by telephone or by letter to the student, and if the check is not taken up at once, the matter will be referred to the dean of the proper school as a discipline case. If the check is not redeemed then within seven days, the student may be dropped from the College roll. The College will not accept a check from a student who has once given a bad check.

HOUSING REGULATIONS

The College has a faculty committee on student housing. This committee furnishes a list of approved rooming and boarding houses for men and women.

Board and room may be secured generally at from \$27.50 to \$35.00 per calendar month. The housing committee has always been able to provide ample accommodations for all students. Room and board should be paid for in advance, but the College does not assume any responsibility for the payment or collection of such bills.

Any complaint regarding care of rooms, improper food, disorder, or any other condition which makes a place undesirable for students should be reported to the housing committee.

HOUSING REGULATIONS FOR STUDENTS

(1) Men and women students are not allowed to room at the same place.

(2) Not more than two students are permitted to live in one room.

(3) Special regulations for men students and for women students are stated separately in the pages that follow.

Special Regulations Applying to Men Students

Not Residing With Their Parents

(1) A student may not change his place of residence during any one quarter unless requested to do so by the proprietor or unless given permission to move by the housing committee. Requests to move must be made in writing to Mr. Cecil Horne and permission to move will be granted only in writing. Permission to move will not be withheld where there is a good reason for moving.

(2) Moving from one house to another in violation of paragraph (1), without permission in advance, will subject the student to serious discipline at the hands of the College authorities.

(3) During the usual study hours at night, in order that conditions for study may prevail, quiet is to be maintained and unnecessary visiting is prohibited.

(4) The housing committee does not consider it desirable for students to live in bachelor quarters. Only in special cases will permission be granted to men students to live in garages or apartments where they are not under the direct supervision of some responsible person who has the approval of the committee. In such cases the student must secure the written permission of his dean after securing the approval of the housing committee.

REGULATIONS FOR WOMEN

General Regulations

1. All women students going on out-of-town trips sponsored by the College are required to register in person in the office of the Dean of Women before leaving.

2. Women students going on out-of-town trips sponsored by the College are at all times under the direction of the chaperons sent by the College and are subject, whether they are resident or non-resident students, to the same disciplinary regulations.

3. Before leaving town for any College trip necessitating absences

from class, students must ascertain from the deans of their schools whether or not their scholastic standing will permit such absences.

4. All College social affairs are under the supervision of the Faculty Social Activities Committee. Women students, both resident and non-resident, are subject to the regulations made by this committee.

Special Academic Regulations

Regulations in the School of Liberal Arts.—In certain matters pertaining to academic work, students are responsible to the Dean of Women. These include the following items:

- (1) Absence from classes.
- (2) Honorable dismissal from College.
- (3) Scholarship probation.
- (4) Changes in schedule.

Regulations in the School of Home Economics.—In all matters pertaining to academic work, students are responsible to the Dean of the School of Home Economics. These include the following items:

- (1) Absence from classes.
- (2) Honorable dismissal from College.
- (3) Scholarship requirements.
- (4) Scholarship probation.
- (5) Individual approval.
- (6) Changes in schedule.

Special Regulations Applying to Women Students

Not Residing With Their Parents

1. Women students will not be allowed to live in a house not on the official list except by special permission of the Dean of Women.

2. A student who engages room, or room with board, may not change her place of residence during the term except by request of the proprietor, or by permission given by the Dean of Women, upon the written request of parents or guardians. Students are expected to file with the Dean of Women a written request for change of residence two weeks before such a request would become operative.

3. A student who is sent to the hospital shall continue to pay her room rent in full for the month and shall pay board in full for the first three days.

4. Non-resident students may not leave town without permission

from the Dean of Women. Requests for such permission must come from the parents or guardians of the students.

5. Housemothers are expected to notify the Dean of Women when a student is called home suddenly.

6. No student will be allowed to change room or roommate without permission from the housemother.

7. Quiet hours shall be maintained every night after 7:30 during the long session and after 8:30 during the summer sessions except on Friday and Saturday nights, holidays, and nights preceding holidays. This rule applies to all women's rooming houses and dormitories.

8. All women students residing in rooming houses and dormitories are required to register with the housemother before going out in the evening.

9. Women students may have only three dates a week—two on week nights and one on Sunday night.

10. Except in the case of formal parties and dances, students are expected to be in their rooms by 11 p. m. on date nights. On nights other than date nights students are expected to be at home by 10 p. m.

11. Women students may attend only those dances that are approved by the College. Notice of these dances is given on the College Calendar.

12. All engagements are subject to the approval of the housemother.

13. Women students are not permitted to go to the dormitories and boarding houses of men students except upon special invitation and under proper chaperonage.

14. Women students will not be allowed to spend week-ends in town with friends except by special permission from home.

15. Women students are not allowed to have guests over night except for week-ends. Arrangements for such guests must be made with the housemothers.

16. No telephone calls, except long distance calls, are to be answered by students during quiet hours.

17. Men students are not expected to call at dormitories or board-

ing houses during the day, either by telephone or in person, except during visiting hours.

18. Visiting hours are from 6:30 to 7:30 p. m. in the long session, and from 7:30 to 8:30 p. m. in the summer sessions. No visitors are permitted on Sunday until 4:00 p. m.

19. Students will be permitted to use automobiles when going back and forth from school and attending social affairs. But permission to make out-of-town car trips must be obtained from the Dean of Women.

20. Housemothers are requested to report at once to the Dean of Women all cases of illness. All infractions of rules are to be reported to the Dean of Women. Failure to make such reports will necessitate the removal of the housemother's name from the approved list.

Special Privileges for Seniors and Juniors

Special privileges will be accorded Junior and Senior women students who have met specified requirements. Requests for special privileges must be made by the students themselves to the Dean of Women and notice will be given to the housemothers when such privileges have been granted. Students desiring such privileges must have the dean of their school certify to their satisfactory scholastic standing.

LIGHT HOUSEKEEPING APARTMENTS

For the benefit of families who care to do light housekeeping, some apartments are available, including in many cases the use of a garage. Persons interested should write direct to Mr. Cecil Horne, Chairman of the Bureau of Information.

EXPENSES

FOR SUMMER SESSION

Registration and incidental fee.....	\$10.00
Medical service	1.50
Recreational fee (optional).....	1.00
Library deposit (unused portion returnable at end of quarter or upon the student's withdrawal from College).....	5.00

FOR EITHER TERM

Registration and incidental fee.....	\$ 5.00
Medical service charge.....	1.50
Recreational fee for one term.....	1.00
Library deposit (unused portion returnable at end of term or upon the student's withdrawal from College).....	5.00

The \$1.50 fee for medical service is required of all students whether they reside with their parents or live elsewhere.

In addition to the above, laboratory fees are charged for certain courses where the laboratory work is a part of the course.

The registration and incidental fee is payable upon registration and is not refunded except for urgent cause. In no case will a refund be made after ten days.

APPROXIMATE EXPENSE FOR TWELVE WEEKS

	Low	Average	High
Room and board	\$ 75.00	\$ 85.00	\$100.00
College fees	10.00	11.00	11.00
Medical service	1.50	1.50	1.50
Library deposit (refunded)	5.00	5.00	5.00
Books and supplies	10.00	17.50	25.00
Total	\$101.50	\$120.00	\$142.50

SPECIAL FEES

FEES FOR SPECIAL COURSES

There is no extra charge for the numbered courses in music and

public speaking which are given as regular college courses. For private work the charges are as follows:

Voice, Mrs. Scoggin, 2 lessons per week, per term-----	\$36.00
Voice, Mrs. McKnight, 2 lessons per week, per term-----	30.00
Piano, Miss Huff, 2 lessons per week, per term, and one class lesson in theory -----	30.00
Piano, Mrs. George, 2 lessons per week, per term, and one class lesson in theory -----	30.00

SPECIAL ART COURSE

Private Art classes taught by Mrs. W. B. Owen of Dallas. Includes special training in Freehand Drawing, Charcoal, Pastels, Watercolors, Oil Painting, Tapestry, China Painting, Furniture Decoration, Sketching, etc.

Lessons cover 3-hour period.

18 Lessons per term. Fee: \$20.00.

LABORATORY FEES AND DEPOSITS

Students pursuing laboratory courses are required to pay such laboratory fees and deposits as are specified. The fees are intended to cover a part of the cost of the materials used. In the case of deposits for breakage, there is a refund of all unused deposits. The breakage deposit is made but once, unless the breakage exceeds the deposit.

LATE ENROLLMENT FEE

Any former student registering later than the day or days set apart for registering will be charged a late enrollment fee of \$2.00, as authorized by the Board of Directors, unless such lateness is caused by sickness or other unavoidable reason, and approved by the student's dean.

CHANGE OF SCHEDULE FEE

A student who changes his schedule after his registration is completed will be charged a fee of \$1.00.

EXEMPTION FROM FEES BY REASON OF ENLISTMENT

Men and women enlisted in the service during the World War, who are citizens of Texas, are exempted from all fees. The discharge papers or service record of the student must be presented to the auditor or fee

checker at the beginning of each term. All deposits are required of ex-service students.

MEDICAL SERVICE FOR STUDENTS

The Lubbock Sanitarium, in return for the \$1.50 collected from each student for medical service, agrees to render the following services to any student enrolled in Texas Technological College:

1. Each student will be given a thorough physical examination as soon as possible after his entrance into the school. In case of abnormalities, the student will be given advice, with a recommendation as to treatment.

2. Each student will be allowed free consultation with the school physician at any time that such consultation is desired.

3. The physician will make, without further charge, calls at the student's home, or at the hospital.

4. Each student will, in case of necessity, have free use of the hospital facilities of the Lubbock Sanitarium, including board, lodging and general nursing in the hospital, provided this does not exceed twenty-one days in any one school year. In the event of an epidemic, this limit may be reduced, and in case of necessity, the limit may be extended. Any reduction or extension will be made only upon the recommendation of the President of the College. These provisions apply only to the relief of acute conditions, and do not include special nursing unless authorized by the President of the College in cases where students are financially unable to employ a special nurse.

5. If an ambulance is required to carry the student to the hospital, this will be furnished without additional charge.

6. The student will receive without further cost any pathological or X-ray examination which may be needed.

7. Any minor surgical operations which may be needed by the student, such as for cuts, sprains, simple fractures, and vaccinations, will be performed for him without further cost.

8. The student will receive without further cost examinations and treatments by specialists for eye, ear, nose and throat difficulties. This, however, does not include operations for the removal of tonsils or for chronic nasal diseases or for special operations on the eye or ear.

9. On all operative work not covered by the medical fee, students will receive a discount of 25 per cent from the regular charge.

10. First aid service, consultation with the school physician, can be had at stated hours each day at an office provided by the College on the campus. This does not interfere with the provision in paragraph 3 above.

11. Daily services of a trained nurse can be had at the office on the campus during the school year at hours to be announced.

12. Members of the faculty of Texas Technological College and their families may receive medical and surgical attention at a discount of 25 per cent.

13. Casualty work for employes injured while on duty in their respective services for the College will be cared for by the Staff without charge. This does not include hospitalization, and will apply only to those injured while on duty during working hours.

14. The Lubbock Sanitarium hereby agrees to report promptly to the Dean of Women of the College every case of illness among the women of the College and to report to Dean Gordon every case of illness among the men of the College, with an adequate statement of the nature of the illness.

15. The Lubbock Sanitarium agrees that all case records of students remaining in College after the period covered by this agreement will be available to the College authorities on request.

16. The Lubbock Sanitarium agrees to furnish the College quarterly reports of all services rendered to students under this agreement.

SCHOLARSHIPS

Wyatt C. Hedrick Scholarship of \$250.00 for the student with the highest scholastic standing for the year awarded to Hal B. Lary of Clovis, New Mexico.

John W. Carpenter Scholarship of \$250.000 for the student with the highest excellence in Textile Engineering awarded to Winifred Wardell of Avery, Texas.

Clifford B. Jones Scholarship of \$250.00 for the student of highest excellence of work in Agriculture awarded to James A. Jackson of Pampa, Texas.

Fort Worth Star-Telegram Scholarship of \$250.00 for the best all-

around athlete awarded to J. Clarence Hodges of Tuscola, Texas.

Dr. M. C. Overton Scholarship of \$200.00 for that person who has been of greatest value to the athletic teams in keeping up morale, inculcating principles of fair play and square dealing, and arousing the spirit of honorable fighting on the field, awarded to Leon Fisher of Memphis, Texas.

Faculty Scholarship of \$125.00 for some worthy young man or woman awarded to J. H. Freeland of Lubbock, Texas.

Scholarship of \$100.00 for the best work in English done by any young man in the College awarded to William Lloyd Croslin of Lubbock, Texas.

Scholarship of \$100.00 for the best work in English done by any young woman in the College awarded to Sarah Michie of Lubbock-Texas.

Scholarship of \$100.00 for the best college citizen among the men awarded to Jack Camp of Pecos, Texas.

Scholarship of \$100.00 for the best college citizen among the women awarded to Mary Louise McNeill of Lubbock, Texas.

Scholarship of \$50.00 for the student doing the best work in interpretative reading awarded to Kate Pressley of Lubbock, Texas.

Scholarship of \$50.00 for the student doing the best work in one-act plays awarded to Mrs. Wynona Galbraith of Lubbock, Texas.

Scholarship of \$50.00 for the student making the best oration awarded to Robert A. Taylor of Stratford, Texas.

Scholarship of \$50.00 for the best debater among the men of the College awarded to Wayne Castleberry of Eastland, Texas.

Scholarship of \$50.00 for the best debater among the women of the College awarded to Lizzie Bell Clements of Lubbock, Texas.

PRIZES

Unabridged dictionary awarded by the Southern Scholarship Society to the freshman making the highest average for the year awarded to Donald R. Boggs of Lubbock, Texas.

Cash award of \$25.00 made by the Pan-Hellenic Society of Lub-

bock to the freshman student in the School of Home Economics making the highest grade in all her work, awarded to Hazel Gruver of Lubbock, Texas.

HONORS

At the close of each term there is issued from the Registrar's office an honor roll which includes the names of all students who during the term have passed all subjects taken, aggregating not less than fifteen term hours, with an average grade in all courses of at least "B," without having received any failing, conditional, or incomplete grades.

LOAN FUNDS

There are eleven loan funds available for students of Texas Technological College, the total amounting to about \$27,000.00. More than 100 students have already borrowed from these funds, and reports are to the effect that no student has yet failed to repay a loan.

The George T. Morrow Loan Fund.—This loan fund, which is the largest of the funds, is a permanent bequest created by the will of the donor. The interest only of this amount will be used for loans, the capital sum being invested. Some \$800 interest became subject to loan on September 1, 1929. The terms of the will specified that the President, Business Manager, and Registrar of the College should administer the fund.

The Rotary Loan Fund.—The Rotary Club of Lubbock has a student loan fund which amounts to approximately \$7,000.00. This fund is available in small amounts to students who have attended the College a year or more and demonstrated their worthiness and ability.

The Twentieth Century Club Loan Fund.—This fund was originated in 1925, \$200.00 being raised the first year by an assessment of \$5.00 per member. Six students have borrowed from this fund, which now amounts to \$415.90. The interest rate is four per cent and loans are made to either men or women.

The Home Economics Club Loan Fund.—This fund was established during the first year of the College by the Home Economics Club of the College. This organization holds a sale about Thanksgiving time each year. The first sale netted \$87, and \$80 to \$100 has been similarly raised each year. Money is loaned on the recommendation of the Home Economics Club Council and with the approval of Dean Margaret Weeks. This fund is open to Home Economics students who need the money. Four per cent interest is charged. Often loans are made to

help students at the time of registration, one girl having been assisted twice in this manner.

The Athenean Club Loan Fund.—This fund was started in 1926 and amounts now to \$250. It is available to any worthy woman student. Five students have participated in this loan with two loans of \$100 each now outstanding.

The A. A. U. W. Loan Fund.—The American Association of University Women last year raised \$100 and are planning to secure another \$100 which will provide a rotating fund to be loaned \$100 each year to some girl graduate of the Lubbock High School who wishes to attend Tech. or some other approved institution.

The Business Women's Loan Fund.—This fund amounts to \$200 with most of this now loaned out. It is available to any unmarried girl at 5 per cent interest. The fund was started the year the school opened and is loaned on the basis of scholarship and character, and upon the recommendation of Dean Mary W. Doak. Four students have participated in this fund.

The Engineering Society Loan Fund.—The Engineering Society is raising from its members a loan fund which will be available to advanced engineering students.

The Agricultural Club Loan Fund.—The Agricultural Club has instituted a small loan fund by donations from its members. Loans from this fund at present are limited to use in emergencies among the agricultural students and may not exceed \$25 or extend longer than four months.

Freshman Cap Loan Fund.—There is a small loan fund available for freshmen made up from a portion of the proceeds of the sale of freshman caps each year.

The R. J. Hall Loan Fund.—Dr. R. J. Hall provided in his will that after all debts and taxes of his estate had been paid, one-tenth of the value of his estate should constitute a revolving trust fund to be loaned to deserving poor boys and girls who may be endeavoring to obtain their education at the Texas Technological College. This estate has not yet been settled, but it is expected that a good sized loan fund will be made available as a result of the benefaction of Dr. Hall.

STUDENT EMPLOYMENT

Students desiring assistance in finding employment for themselves while attending college should file applications with the Student Employ-

ment Bureau after they have definitely decided to enter Texas Technological College. It is advisable to present entrance credits to the Registrar for approval before making such application. It will be necessary for every student receiving aid from the Bureau to establish fully the need for such assistance.

The Student Employment Bureau extends every possible aid and guidance to the worthy student, but does not assume responsibility for the success of his efforts. It is not wise for anyone to come to Texas Technological College with the expectation of earning all expenses unless a position has been secured in advance. In those cases where the student must almost wholly pay his way as he goes, it is best to plan on more than four years to complete the required college courses. A good many earn all or a major portion of their expenses, but this is often at a sacrifice of health or creditable class room work, unless a lighter load is carried and hence college authorities may limit a working student. Every student should have some reserve fund to provide for unexpected contingencies. The boy or girl with good health, strong character, and pleasing personality, combined with industry and reliability, will usually succeed.

Worthy students have been materially aided by the various loan funds and by loans from certain other organizations and from individuals who believe that this kind of investment is worth while. Reference to student scholarships and prizes mentioned on the preceding page is suggested.

Students in Texas Tech. are engaged in almost every imaginable kind of legitimate work. Some of the more common forms of employment are listed below:

FOR YOUNG WOMEN

Office work	Laboratory assistant
House work	Library assistant
Telephone operator	Stenographer
Teaching piano	College cafeteria
Clerking	Care of children
Dining room service	Beauty parlor operator

FOR YOUNG MEN

Electrician	Collector
Experiment station	College dairy
Assistant librarian	Waiter
Assistant in Physics	Carpenter work
Department	Garage work
Textile Engineering assistant	Printer

Chemistry assistant	Janitor
Stenographer	Clerk
Office work	Tailor
College cafeteria	Chauffeur
Moving picture operator	Railroad employe
House work	Newspaper work
Photographer	Radio expert
Bakery and confectionery	City employe
Draftsman	Bottling works
Musician	Soda dispenser
Salesman	Telephone exchange
Meat cutter	

TEACHER PLACEMENT BUREAU

A teacher-placement bureau is operated for the benefit of teachers and prospective teachers who desire to secure positions to teach during the coming year.

CORRESPONDENCE COURSES

Those who are interested in meeting the requirements for admission to college, or who desire to do home study toward a degree or a teacher's certificate, may secure this service through the Department of Extension of the Texas Technological College. Two hundred seventeen subjects in twenty-one departments are available by correspondence. The fee for a correspondence subject is \$10.00. An application blank and a list of correspondence courses will be sent, on request, by the Department of Extension.

THE RECITATION PROGRAM

Classes will recite each day from Tuesday to Saturday inclusive except certain courses which require six recitations per week. The daily recitation program will begin at seven o'clock in the forenoon and continue to one o'clock in the afternoon. Certain laboratories, physical education courses, and possibly other courses may use the afternoon periods.

THE MASTER OF ARTS DEGREE

During the College year of 1927-28, plans were perfected whereby the Master of Arts degree would be given in the School of Liberal Arts to students meeting the requirements for that degree. Work leading to the Master's Degree is offered in the following departments.

Economics and Business Administration.

Education and Psychology.
English.
Geology.
Government.
History.
Mathematics.
Philosophy and Sociology.
Spanish.

The requirements for the degree are:

Admission to Candidacy: To be admitted to candidacy for the Master of Arts degree, the student must be a graduate of Texas Technological College, or of another institution whose degree is accepted by a recognized association of colleges and which was so recognized when the degree was conferred. All other requirements as to admission are to be left to the department in which the student's graduate work is to be done. Application for the degree must be submitted not later than three months after enrollment.

Amount of Work: The minimum amount of work beyond the bachelor's degree required for the Master of Arts degree is 45 term hours. A maximum of 9 term hours of graduate work may be accepted from another institution of equal rank. A maximum of 15 term hours of graduate work may be carried in any one term.

Grades: No course may be credited if the grade is lower than 8.

Major and Minor Subjects: The candidates for the Master of Arts degree shall take at least two courses, or 18 term hours, in the minor subject, and in addition shall complete a thesis in the major subject which may count as much as 9 term hours. The remainder of the required 45 hours may be taken in the major subject. The candidate may elect to offer a minor of 9 term hours in one subject, related to the major subject. Minor subjects must be approved by the department in which the major work is done.

Thesis: A thesis dealing with some phase of the major subject must be approved by the head of the department in which the work is given and by the Graduate Committee. A maximum of 9 term hours may be allowed for a thesis.

Residence: A minimum of three terms of residence is required. Teachers in service, doing part time work in the College, or doing class extension work under the direction of the College, may offer a maximum of 15 term hours of such work. In no case will the degree of Master of Arts be conferred for less than two quarters of residence work with full schedule.

Examinations: Written examinations are to be entirely in charge of the departments concerned. In addition there must be an oral examination which shall be conducted by the major department, but at which the minor department or departments shall be present; also representatives of the Graduate Committee shall be present and take part.

Foreign Language: A reading knowledge of at least one foreign language is required. Any student who presents two full college courses of 18 term hours of a foreign language will be presumed to have a reading knowledge of that language. A student unable to offer such college courses will be required to furnish a certificate from the head of the department of the language offered, stating that he has a reading knowledge of such foreign language.

Statistics: When the student is pursuing research that requires the use of statistical method as a tool for such research, he may, upon approval of the Dean and the Graduate Committee, be allowed to substitute 9 hours of advanced work in statistics for the foreign language requirement.

OUTLINE OF COURSES

For a full discussion of the content of courses, special requirements for majoring in the various departments, and other detailed information, the student should consult the Fifth Annual Catalog which is the latest general bulletin of the College.

BIOLOGY

131, 132, 133. *General Botany*. 9 term hours. (First term.)

Open to freshmen students. This is a full year's work offered in six weeks. Laboratory fee, \$4.00; deposit, \$5.00.

131, 132, 133. *General Zoology*. 9 term hours. (First term.)

Open to freshmen students. This is a full year's work offered in six weeks. Laboratory fee, \$4.00; deposit, \$5.00.

134-5-6. *The Human Body*. 9 term hours. (Second term.)

This is a full year's work offered in six weeks. Fee, \$4.00; deposit, \$5.00.

211, 212, 213. *The Teaching of Biology*. 3 term hours. (Second term.)

Prerequisite: 18 term hours in the Biology Department

231. *Heredity*. (Second term.)

Prerequisite: 9 term hours in Botany or Zoology.

232. *Evolution*. (Second term.)

Prerequisite: 9 term hours in Botany or Zoology.

CHEMISTRY

141-2-3. *Elementary General Chemistry*. 9 lecture hours, 9 laboratory hours per week. (Continued throughout both terms.)

Laboratory fee, \$4.00; deposit, \$4.00.

230. *The Teaching of Chemistry*. (Either term.)

Prerequisite: Chemistry 234-5-6 and 9 continuous hours in Education. May be taken parallel with Chemistry 234-5-6.

234-5-6. *The Principles of Chemistry*. (Continued throughout both terms.) 9 lecture hours per week.

Prerequisite: Chemistry 141-2-3 or Chemistry 144-5-6. No laboratory fee.

343-4-5. *Organic Chemistry*. (Continued throughout both terms.) 9 lecture hours per week.

Prerequisite: Chemistry 141-2-3, or Chemistry 144-5-6. Laboratory fee, \$4.00; deposit, \$6.00.

ECONOMICS AND BUSINESS ADMINISTRATION

- 231-2. *Introduction to Economics*. (First term.)
Prerequisite: Sophomore standing.
233. *Introduction to Economics*. (Second term.)
Continuation of Economics 231-2.
234. *Introduction to Accounting*. (First term.)
Prerequisite: Sophomore standing.
- 235-6. *Introduction to Accounting*. (Second term.)
Continuation of Accounting 234.
3314. *Banking*. (First term.)
Prerequisite: Economics 231-2-3.
3315. *Business Cycles*. (Second term.)
- 3340-a. *Shorthand and Typewriting*. (First term.)
- 3341-a. *Shorthand and Typewriting*. (Second term.)
Continuation of 3340-a.
4330. *Insurance*. (Second term.)
Prerequisite: Economics 337-8-9.
- 4332-33. *Auditing and Advanced Problems*. (First term.)
Prerequisite: Economics 3316-17-18.
4334. *Auditing and Advanced Problems*. (Second term.)
Continuation of 4332-33.

EDUCATION AND PSYCHOLOGY

Courses in Education are designed for students who wish to teach for a few years or who plan to make teaching their life work. A further aim is to treat Education from the standpoint of technology in the same manner as Agriculture, Engineering, Chemistry, or Business Administration.

Courses in Psychology are designed to meet the requirement for the degree of Bachelor of Arts, to give further acquaintance with the method and technique of psychology, and to orient the student in some of the applications of psychology, such as educational psychology, business psychology, and social psychology.

Teachers' Certificates valid in Texas and other states may be secured for college courses taken in the Texas Technological College. Students desiring to teach in other states should consult the head of the department concerning certificate requirements in these states.

REGULATIONS GOVERNING STATE TEACHERS' CERTIFICATES

Four-Year Elementary or Two-Year High School Certificate

On completion of five college courses in a first-class college, including 108 hours (9 term hours) in English, and 108 hours (9 term hours) in elementary education, an elementary certificate valid for four years, or a high school certificate valid for two years, may be issued. Any course in education may be used for the two-year high school certificate.

Six-Year Elementary or Four-Year High School Certificate.

On completion of ten college courses in a first-class college, including 216 hours (18 term hours) in Education, a four-year high school certificate, or a six-year elementary certificate, may be issued. Any two courses in Education will be accepted for the elementary certificate valid for six years, but an applicant must have credit for one full year that bears wholly on high school education before the high school certificate may be issued.

Six-Year High School Certificate.

On completion of fifteen college courses, including three courses in Education, a six-year high school certificate may be issued, provided one year bears wholly on high school education, and one term includes a minimum of thirty-six recitation hours in practice teaching.

Permanent High School Certificate

A permanent high school certificate may be issued on a B. A. degree, or its equivalent, and four courses in Education. Two of the courses may be any courses in Education, one of the courses must bear wholly on high school education, and one course must include methods, observation of methods, and practice in teaching.

A permanent high school certificate may be issued on a B. A. degree or its equivalent, two courses in Education, and three years teaching experience. One course in Education must bear wholly on high school education, and the teaching experience must be had after the degree is conferred.

One-Year Extensions of Certificates of Any Grade

Students of Texas Technological College have the privilege of taking advantage of the new certificate law passed by the Legislature of Texas and designed to extend for one year a certificate of any grade. This applies to the completion of nine term hours in the summer school only

for the extension of certificates expiring during the current year after the opening of summer school.

Special Certificates

Certificates authorizing the holders to teach the special subjects of agriculture, home economics, commercial subjects, public school drawing, expression, manual training, physical training, public school music, vocal music, instrumental music, industrial training, or foreign languages, are authorized under certain requirements. Persons interested should consult the head of the department concerning the special requirements for securing these certificates.

Courses in Government Required for a Certificate

On and after September 1, 1930, a teachers' certificate issued by the State Department of Education based on college work will require courses in Government covering the federal and Texas constitutions. Government 131-2-3 will satisfy the requirements for freshmen or sophomores; Government 331-2 will satisfy the requirements for juniors or seniors.

Observation and Practice Teaching

Observation and practice teaching, designed to meet the requirements for a six-year high school certificate or a permanent state certificate will be offered during the first term.

EDUCATION

- 021. *Penmanship.* (First term.)
- 022. *Art.* (First term.)
- 023. *Art.* (First term.)
- 131. *Introduction to Education.* (Both terms.)
- 132. *Classroom Organization and Control.* (Both terms.)
- 133. *Methods of Teaching in the Elementary Grades.* (Second term.)
- 138. *Methods in Elementary English.* (First term.)
- 139. *Manual Arts for Children.* (Second term.)
- 230. *Rural Education.* (First term.)
Same as Ag. Education 331.
- 232. *History of Education.* (First term.)
- 2311. *School of Health and Hygiene.* (First term.)
- 234. *Secondary Education.* (Both terms.)

235. *The High School Curriculum.* (Both terms.)
236. *Methods of Teaching in the High School.* (Both terms.)
237. *Kindergarten-Primary Education* (First Term.)
2371. *The Teaching of Primary Reading.* (First term.)
238. *Literature in the Primary Grades.* (Second term.)
2383. *Methods in the Social Sciences in the Elementary Grades.*
(First term.)
330. *The Principal and His School.* (First term.)
3310. *Mental Tests.* (Second term.)
3311. *Materials and Methods of the Primary Grades.* (First term.)
3312. *The Primary Curriculum.* (Second term.)
3313. *Measurements in Education.* (First term.)
3314. *Rural School Administration.* ~~Ag.~~ (Second term.)
3315. *Principles of Education.* (First term.)
332. *High School Problems.* (Second term.)
333. *Observation and Practice.* (First term.)
335. *The Junior High School.* (First term.)
430. *The Sociological Principles of Education.* (First term.)
434. *Education in the United States.* (First term.)
435. *The Curriculum.* (Second term.)
438. *The Supervision of Instruction.* (First term.)
530. *Research.* (Both terms.)
531. *Public School Business Administration.* (Second term.)
536. *Guidance Problems.* (First term.)

PSYCHOLOGY

230. *Introduction to Psychology.* (Second term.)
231. *Educational Psychology.* (Second term.)
332. *Advanced Educational Psychology.* (Second term.)
335. *The Psychology of Adolescence.* (First term.)
337. *Statistics.* (First term.)
Same as Ag. Eco.-334.

338. *Statistics*. (Second term.)

Same as Ag. Eco. 338.

339. *Statistics*. (Second term.)

Same as Ag. Eco. 339.

ENGLISH

131-2-3. *Composition and Rhetoric*. (Both terms.)

231-2-3. *Introduction to the Study of Literature*. (Both terms.)

332. *History of the English Language*. (First term.)

The development of the English Language from the beginnings, with special reference to the use of English in America.

336. *American Drama: 1900 to the Present*. (First term.)

337. *Grammar for Speech*. (Second Term.)

Accepted usage, and principles useful for English and foreign languages.

3391. *Contemporary English Poetry*. (Second term.)

The verse of Masfield, Ernest Dowson, James Elroy Flecker, Rupert Brooke, and Thomas Hardy.

3310. *Teaching of English in High School*. (First term.)

432. *Shakespeare and the Background*. (First term.)

433. *Shakespeare Criticism*. (Second term.)

An investigation of Shakespeare criticism, together with a reading of six plays.

434. *Milton*. (Second term.)

The major and minor English poems.

435. *English Romanticism*. (First term.)

Selected poems of Burns, Wordsworth, and Coleridge.

436. *English Romanticism*. (Second term.)

Selected Poems of Byron, Shelley, and Keats.

438. *Nineteenth Century English Prose*. (Second term.)

Selections from the writings of Lamb, Hazlitt, DeQuincey, Carlyle.

439. *Contemporary Drama: Ibsen to Shaw*. (Second term.)

The dramatic work of Ibsen, Strindberg, Tolstoy, Chekhov, Hauptmann, Wedekind, Becque, Hervieu, Galsworthy, and Shaw.

530. *The Short Story*. (First term.)

531. *The American Novel: 1870 to the Present*. (First term.)

532. *The English Novels Lyly to Scott*. (First term.)

534. *Old English*. (First term.)

An introduction to the Phonology and Morphology of Old English.

5330. *The Structure of the Novel*. (Second term.)

JOURNALISM

235. *Special Feature Articles*. (First term.)

FRENCH

131. *A Course for Beginners*. (First term.)132-3. *Beginners French*. Second term.)

Continuation of French 131. Two hours a day.

231. *Reading of French Texts*. (First term.)

Prerequisite: French 131-2-3, or two years of high school French.

232-3. *Continuation of French 231*. (Second term.) Two hours a day.

GEOLOGY

131-2-3. *Human Geography*. 5 lectures, 2 laboratory periods weekly.

Continued throughout both terms. Laboratory fee, \$4.00.

141-2-3. *General Geology*. 5 lectures, 3 laboratory periods weekly.

Continued throughout both terms. Laboratory fee, \$4.00.

290. *Field Geology*. (First term.)

Prerequisite: Geology 141-2-3.

An intensive study of the geology of a given region with training in the methods of geologic surveys and field investigation, and a reconnaissance survey of a large region for the purpose of acquainting the student with as many different types of geologic problems as possible. The field for the intensive work for 1930 will be the Grand Canyon of the Colorado, Arizona. For the reconnaissance survey, a trip will be made across the Colorado Plateau, the Great Basin, the Sierra Nevada Mountains, and the Southern Rocky Mountains. The party will leave Lubbock by auto June 2, and will return to Lubbock, July 14. Each student will be required to make a deposit of \$75.00 which will pay for the enrollment fee, transportation, and board for the six weeks.

GERMAN

131. *A Course for Beginners.* (First term.)
- 132-3. *Continuation of German 131.* (Second term.) Two hours a day.
- 231-2. *Reading of German Texts.* (First term.)
Prerequisite: German 131-2-3, or two years of high school German.
233. *Continuation of German 231-2.* (Second term.)

GOVERNMENT

- 131-2. *The United States Constitution.* (Both terms.)
For freshmen and sophomores. Juniors and seniors will take 331.
133. *The Texas Constitution.* (Both terms.)
238. *Contemporary Legislation.* (First term.)
Prerequisite: Government 131-2, 133 or American History.
239. *Contemporary Legislation.* (Second term.)
Continuation of Government 238.
331. *The United States and Texas Constitutions.* (First term.)
For juniors and seniors who have not had Government 131-2-3.
332. *The United States and Texas Constitutions.* (Second term.)
Continuation of Government 331.
400. *Readings in Government.* (Both terms.)
432. *International Law.* (First term.)
Prerequisite: Government 131-2, 133 or 9 consecutive term hours in History.
433. *International Law.* (Second term.)
Continuation of Government 432.
434. *Political Geography.* (First term.)
Prerequisite: Government 131-2, 133, 235-6.
435. *Political Geography.* (Second term.)
Continuation of Government 434.

HISTORY

For all advanced courses in American History there is prerequisite

History 231-2-3 in addition to History 131-2-3. For all other advanced courses 18 term hours in History are prerequisite.

131-2. *History of Civilization.* (Both terms.)
Survey of world-history.

133. *History of Civilization.* (First term.)
Continuation of 131-2, a consideration of modern history.

231. *History of the United States.* (First term.)
Business administration students with sophomore standing may be enrolled without the prerequisite.

232. *History of the United States.* (Second term.)
Continuation of 231, a survey of American History from 1789 to 1865.

233. *History of the United States.* (Second term.)
Continuation of 232, a survey of American History from 1865 to the present. History 232 and 233 may be taken at the same time.

234. *History of England.* (First term.)
Pre-law students, though of the freshman year, will be admitted without the prerequisite.

334. *History of Europe Since the Renaissance.* (First term).

411-2-3. *History of American Diplomacy.* (Second term.)

538. *History of the United States, from 1877 to the Present.* (Second term.)
The most recent phases of American History.

635. *The Spanish Southwest.* (First term.)

531. *Recent European History.* (First term.)

637. *History of the Orient.* (First term.)

638. *History of the Orient.* (Second term.)
Continuation of 637.

LATIN

101-2-3. *Beginning Course.* (First term.)
An intensive study of elementary Latin, including reading. Classes recite twice each day and cover the year's work in six weeks. To absorb entrance credit only, two units.

339. *Teachers' Course in Latin.* (First term.)
Prerequisite: Latin 231-2-3 or the equivalent, and 9 hours in Education.

MATHEMATICS

100. *Solid Geometry*. (Second term.)

Required, as an extra study of freshmen in the School of Engineering who do not have admission credit in Solid Geometry.

131. *College Algebra*. (Both terms.)

Prerequisite: Two years of high school algebra and one year of plane geometry.

132. *Plane Trigonometry*. (Both terms.)

Prerequisite: Two years of high school algebra and one of plane geometry.

133. *Introduction to Analytic Geometry*. (First term.)

Prerequisite: Mathematics 132.

230. *The Teaching of Arithmetic*. (First term.)

Prerequisite: Mathematics 131 or its equivalent. Designed for teachers in the first seven grades.

231. *Analytical Geometry*. (Second term.)

Prerequisite: Mathematics 133.

234. *Differential Calculus*. (First term.)235. *Differential Calculus*. (Second term.)

Prerequisite: Mathematics 234. A continuation of Mathematics

234.

236. *Integral Calculus*. (Second term.)

Prerequisite: Mathematics 234.

330. *Solid Analytic Geometry*. (Second term.)

Prerequisite: Mathematics 231.

334. *The Teaching of Algebra*. (First term.)

Prerequisite: Mathematics 131 or its equivalent.

335. *The Teaching of Geometry*. (First term.)

Prerequisite: Mathematics 131 and an entrance unit in plane geometry.

433. *Elementary Differential Equations*. (Second term.)

Prerequisite: Mathematics 234-5-6.

434. *Modern Higher Algebra*. (First term.)

Prerequisite: Mathematics 237-8-9 or its equivalent.

435. *Modern Higher Algebra*. (Second term.)

A continuation of Mathematics 434. Prerequisite: Mathematics

434.

1311. *College Algebra*. (First term.)

A review of elementary algebra, quadratic equations, progressions.

1312. *College Algebra*. (Second term.)

Elementary theory of equations, complex numbers and determinants.

Prerequisite: Mathematics 1311 or its equivalent.

ENGINEERING MATHEMATICS

Certain courses in Liberal Arts mathematics correspond so closely to those in Engineering mathematics that they are taught in the same classes in the summer session. It will be less confusing, however, if engineering students are registered for the appropriate course in Engineering mathematics.

1311. *First Term College Algebra*. (First term.)

The same as 130.

1310. *Trigonometry*. (First term.)

The same as 132.

1313. *Introduction to Analytic Geometry*. (First term.)

First course. The same as 133.

2321. *Analytic Geometry*. (Second term.)

Mathematics 1313 continued. The same as 231.

2322. *Elementary Differential Calculus*. (First term.)

The same as 234.

2323. *Integral Calculus*. (Second term.)

The same as 236.

3311. *Differential Calculus*. (Second term.)

Mathematics 2322 continued. The same as 235.

3313. *Elementary Differential Equations*. (Second term.)

The same as 433.

MUSIC

130. *Elementary Methods*. (First term.) 3 class hours.

Prerequisite: Music 134.

134-5. *Elementary Music*. (Both terms.)

136. *Elementary Music*. (First term.)

Continuation of Music 134-5.

137. *History and Appreciation of Music*. (First term.)

230. *Intermediate Methods.* (Both terms.)

Prerequisite: Music 135.

PHILOSOPHY

431. *Philosophy of Religion.* (First term.)

SOCIOLOGY

231. *Principles of Sociology.* (First term.)

232. *Principles of Sociology.* (Second term.)

Continuation of 231.

ANTHROPOLOGY

331. *Physical and Cultural Anthropology.* (First term.)

- 434-5-6. *Southwestern Archaeology.* (Second term.)

A field course consisting of lectures, research, and excavation.

PHYSICAL EDUCATION

101. *Physical Training.* (First term.)

Fee, \$1.00.

102. *Physical Training.* (Second term.)

Fee, \$1.00.

201. *Physical Training.* (Second term.)

Fee, \$1.00.

431. *Coaching.* (Both terms.) 2 lecture hours, 3 laboratory hours.

432. *Coaching.* (First term.) 2 lecture hours, 3 laboratory hours.

433. *Coaching.* (First term.) 2 lecture hours, 3 laboratory hours.

PHYSICAL EDUCATION FOR WOMEN

101. *General Physical Education.* (First term.)

Fee, \$1.00.

102. *General Physical Education.* (Second term.)

Fee, \$1.00.

201. *Advanced Physical Education.* (Both terms.)

Fee, \$1.00.

202. *Advanced Physical Education.* (Second term.)
Fee, \$1.00.
231. *Plays and Games.* (Both terms.)

PHYSICS

The Department of Physics recommends that anyone expecting to teach in high school should take at least 24 hours of college physics.

- 141-2-3. *General Physics.* 9 class hours, 3 laboratory periods of three hours each per week. Continued throughout both terms.
Fee, \$4.00.
- 241-2-3. *Sophomore Engineering Physics.* 9 class hours, 3 laboratory periods of three hours each per week. Continued throughout both terms.
Fee, \$4.00.
- 331, 332. *Electrical Engineering.* 4 laboratory periods of three hours per week throughout both terms.
Prerequisites: General Physics and Calculus. Laboratory fee, \$4.00.
Fee, \$1.50 per term.

SPANISH

- 131-2. *A Beginning Course.* (First term.) Two hours a day.
133. *Continuation of Spanish 131-2.* (Second term.)
- 231-2. *Grammar, Reading, Composition, and Conversation.* (First term.) Two hours a day.
Prerequisite: Spanish 131-2-3, or two units of high school Spanish.
233. *Grammar, Composition, Reading, and Conversation.* (Second term.)
- 331-2. *Contemporary Literature.* (First term.)
Prerequisite: Spanish 231-2-3, or three or four units high school Spanish.
333. *Contemporary Literature.* (Second term.)
Continuation of Spanish 331-2.
437. *Teachers' Course in Methods of Teaching Spanish.* (First term.)
(Formerly Spanish 634.) Prerequisite: Spanish 331-2-3 and 1 year in Education. (Given in summer only.)
- 4310-11. *Advanced Grammar, Composition, and Style.* (First term.)
Prerequisite: Spanish 331-2-3. Recommended for those who intend to teach Spanish.

4312. *Advanced Grammar, Composition, and Style.* (Second term.)
Continuation of Spanish 4310-11.

SPEECH

031. *Technique of Dramatic Art.* (First term.)
032. *Technique of Dramatic Art.* (Second term.)
Continuation of Speech 031.
Speech 031 and 032 must be completed before credit for graduation is given.
131. *Principles of Speech.* (First term.)
132. *Principles of Speech.* (Second term.)
334. *Phonetics and Speech Correction.* (First term.)
A course primarily for juniors and seniors. Required of all majors in speech.
335. *Phonetics and Speech Correction.* (Second term.)
A continuation of Speech 334.

HOME ECONOMICS COURSES

The School of Home Economics has been approved by the State Board of Vocational Education. Graduates of the School of Home Economics who satisfactorily complete the work of teacher training major will receive in addition to the B. S. degree the Smith-Hughes Home Economics certificate. This certificate is awarded by the State Department of Education, and entitles the holder to teach Home Economics under the Smith-Hughes plan.

The courses offered in the Summer Session are designed to meet the needs of the following classes of students:

1. Regular college students who wish to complete additional work in the summer to be used towards the B. S. degree and vocational certificate at the Texas Technological College.
2. Advanced students from other institutions who wish specialized work to meet the standards for a vocational certificate.
3. Students who wish to complete a full year of freshman work in foods or clothing.

For full description of courses listed herein see Fifth Annual Catalog.

APPLIED ART

131. *Elementary Design.* (First term.)
Fee, \$1.50.

231. *Costume Design*. (First term.)
Prerequisite: Applied Arts 131. Fee, \$1.50.

CLOTHING AND TEXTILES

131. *Elementary Course in Clothing Construction*. (First term.)
Fee, \$1.50.
132. *Principles of Dress Selection*. (Second term.)
Prerequisite: Clothing 131. Fee, \$1.50.
133. *Elementary Textiles*. (First and Second terms.)
Fee, \$1.00.
135. *Craft Work in Textiles*. (First and Second terms.)
Prerequisite: Clothing 133 and Applied Arts 131. Fee, \$1.50.
231. *Elementary Dress Design*. (First term.)
Prerequisite: Applied Arts 231; Clothing 131-2-3. Fee, \$1.50.
232. *Elementary Dress Design*. (Second term.)
Prerequisite: Applied Arts 231; Clothing 131-2-3. Fee, \$1.50.
331. *Advanced Textiles*. (First term.)
Prerequisite: Clothing 131, 231, 232. Fee, \$1.50.
332. *Children's Clothing*. (First term.)
Prerequisite: Clothing 131-2-3; Applied Arts 131 and 231.
Fee, \$1.00.

FOODS AND NUTRITION

131. *Elementary Food Preparation*. (First term.)
Fee, \$1.50.
132. *Elementary Food Preparation*. (Second term.)
Fee, \$1.50.
133. *Elementary Nutrition*. (First and Second terms.)
Fee, \$1.00.
231. *Meal Planning and Serving*. (First term.)
Prerequisite: Foods 131-2, Foods 133. Fee, \$1.50.
232. *Meal Planning and Serving*. (Second term.)
A continuation of Foods 231. Fee, \$1.50.
432. *Advanced Nutrition*. (First term.)
Prerequisite: Foods 233 or equivalent. Fee, \$1.00.

HOME ECONOMICS EDUCATION

431. *Problems in Home Economics Education*. (First term.)

GENERAL HOME ECONOMICS

333. *Child Care*. (First term.)

Prerequisite: Education 230. Fee, \$.50.

461. *Residence in Home Management House*. (First term.)

Prerequisite: General Home Economics 332, 18 hours of Foods.

Application for this course should be made in advance to the Dean of Home Economics.

COURSES IN AGRICULTURE

The courses offered in the various Departments in Agriculture are those for which it appears that there is a demand. In some cases optional subjects are indicated. In most cases it will be possible to offer a subject for which a greater demand exists. Students desiring to enroll in Agriculture in the summer session should file requests for courses at once so that if any changes are demanded, the Dean may be informed.

For full description of courses listed herein see Fifth Annual Catalog.

AGRICULTURE

AGRICULTURAL ECONOMICS AND FARM MANAGEMENT

333. *Co-operative Marketing*. (First term.) 5 class hours, 3 laboratory hours.

Prerequisite: Agricultural Economics 332 or one year of economics.

334. *Agricultural Statistics*. (First term.) 5 class hours, 3 laboratory hours.

Same as Psychology 337. Prerequisite: Agricultural Economics 332, or one year of economics and one year of mathematics. Fee, \$1.50.

338. *Advanced Statistics*. (Second term.) 5 class hours, 3 laboratory hours.

Same as Psychology 338. Prerequisite: Agricultural Economics 334 or Psychology 337. Fee, \$1.50.

339. *Advanced Statistics*. (Second term.) 5 class hours, 3 laboratory hours.

Same as Psychology 339. Prerequisite: Agricultural Economics 338 or Psychology 338. Fee, \$1.50.

432. *Farm Management*. (First term.) 4 class hours, 6 laboratory hours.

Prerequisite: Senior standing in Agriculture.

AGRONOMY

131. *Fundamentals of Crop Production.* (First term.) 4 class hours, 6 laboratory hours.
Prerequisite: Horticulture 141, Botany 131. Fee, \$1.50.
235. *Soils.* (Second term.) 6 class hours.
Prerequisite: Agronomy 131, one year of chemistry, or registration in Chemistry 143.
331. *Forage Crops.* (Both terms.) 4 class hours, 6 laboratory hours.
Prerequisite: Agronomy 131, one year of Botany. Fee, \$1.50.
439. *Agronomy Problems.* (Second term.) 6 class hours.
Prerequisite: Senior standing in Agronomy. ✓

AGRICULTURAL EDUCATION

331. *Rural Education.* (First term.) 6 class hours.
Same as Education 230.

ANIMAL HUSBANDRY

121. *Types and Breeds of Dairy and Dual-Purpose Cattle.* (Second term.) 4 class hours, 8 laboratory hours.
(See Fourth Annual Catalog.)
Fee, \$1.00.
131. *Types, Market Classes, and Breeds of Beef Cattle and Sheep.*
4 class hours, 8 laboratory hours.
(See Fourth Annual Catalog.)
Fee, \$1.50.
132. *Types, Market Classes, and Breeds of Hogs and Horses.* 4 class hours, 8 laboratory hours.
(See Fourth Annual Catalog.)
Fee, \$1.50.

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Option: Only 131 or 132 will be taught the first term, according to the demand. Only one of the two above courses, 131, 132, will be taught the second term, according to the demand.

* * *

341. *Animal Nutrition.* (Second term.) 6 class hours, 6 laboratory hours.
Prerequisite: Organic Chemistry or registration in the second term of Organic Chemistry. Fee, \$1.50.
431. *Beef Production.* (First term.) 4 class hours, 6 laboratory hours.
Prerequisite: Animal Husbandry 341, Genetics 332. Fee, \$1.50.
433. *Sheep Production.* (First term.) 4 class hours, 6 laboratory hours.
Prerequisite: Animal Husbandry 341, Genetics 332. Fee, \$1.50.

435. *Dairy Production*. (First term.) 4 class hours, 6 laboratory hours.

Prerequisite: Animal Husbandry 341, Genetics 332. Fee, \$1.50.

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Option: Only one of the above courses, 431, 433, 435, will be offered, according to the demand.

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DAIRY MANUFACTURES

131. *Principles of Dairy Manufacturing*. (First term.) 4 class hours, 6 laboratory hours.

Fee, \$1.00.

230. *The Farm Dairy*. (Second term.) 4 class hours, 6 laboratory hours.

Prerequisite: Dairy Manufactures 131. Fee, \$1.50.

331. *Market Milk*. (First term.) 4 class hours, 6 laboratory hours.

Prerequisite: Dairy Manufactures 131 and 230. Fee, \$1.00.

333. *Cheese Making*. (Second term.) 4 class hours, 6 laboratory hours.

Prerequisite: Dairy Manufactures 230, or registration in same. Fee, \$1.50.

339. *Laboratory Control of Dairy Products*. (Second term.) 4 class hours, 6 laboratory hours.

Prerequisite: Organic Chemistry, Dairy Manufactures 230. Fee, \$1.50.

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Either 333 or 339 will be omitted, according to demand.

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HORTICULTURE AND GENETICS

HORTICULTURE

131. *Home Gardening*. (First term.) 4 class hours, 6 laboratory hours. Fee, \$1.50.

For non-agricultural students.

141. *Plant Propagation*. (First term.) 6 class hours, 6 laboratory hours.

Prerequisite: Botany 131. Fee, \$1.50.

239. *Floriculture*. (First term.) 4 class hours, 6 laboratory hours.

For non-agricultural students. Fee, \$1.50.

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131 or 239 will be omitted, according to demand.

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431. *Systematic Olericulture*. (First term.) 4 class hours, 6 laboratory hours.

Prerequisite: Horticulture 141 and 233. Fee, \$3.00.

GENETICS

331. *Principles of Genetics*. 6 class hours.

Prerequisite: One year of Mathematics, one year of Botany, Agricultural Economics 334.

ENGINEERING COURSES

The subjects listed below under the various Engineering Departments are those for which it appears most likely that there will be a sufficient demand to justify their being offered. However, any other engineering subject may be offered provided there is sufficient demand and an instructor available. Any subject listed may not be taught if the demand does not justify it.

Any student desiring to study any engineering subject during the summer sessions should file such information with the dean, in order that the demand for the different courses may be known.

For full description of courses listed herein see Fifth Annual Catalog.

ARCHITECTURAL ENGINEERING

133-4-5. *Elements of Architecture*. (First term.) 18 laboratory hours. Formerly Architecture 231-2-3. Fee, \$4.00.

234. *Architectural Design, Grade I*. (First term.) 18 laboratory hours.

Prerequisite: Architecture 133-4-5. Fee, \$4.00.

330-1. *General Course in the History of Architecture*. (First term.) 6 class hours.

The course is open to all students in the College, but cannot be counted towards graduation in the Department of Agriculture.

For students desiring a more intensive study of the technical and historical development of architecture, courses in Architecture 124-5-6, and 225-6-7 are recommended. Fee, \$3.00.

CIVIL ENGINEERING

230. *Elementary Surveying*. (First term.) 2 class hours, 12 laboratory hours for six weeks.

Prerequisite: Mathematics 1310. Fee, \$1.00; deposit, \$2.00.

312. *Materials Laboratory*. (First term.) 6 laboratory hours.

Prerequisite: Registration in Civil Engineering 332. Fee, \$1.50; deposit, \$2.00.

313. *Concrete Laboratory*. (First term.) 6 laboratory hours.

Prerequisite: Junior Engineering standing. Fee, \$1.50; deposit, \$2.00.

332, 333. *Applied Mechanics*. (First term.) 6 class hours.

Prerequisite: Mathematics 2313.

430. *Materials*. (First term.) 6 class hours.

Prerequisite: Senior Engineer standing.

439. *Hydraulics*. (First term.) 6 class hours.

Prerequisite: Civil Engineering 331.

ELECTRICAL ENGINEERING

231. *Principles of Electrical Engineering*. (First term.) Class 6 hours a week for 6 weeks.

Required of all students of Electrical Engineering.

Prerequisite: Physics 242; Mathematics 2322.

334. *Elements of Electrical Engineering*. (First term.) Class 6 hours.

Prerequisite: Physics 243; Mathematics 2323.

ENGINEERING DRAWING

121, 122, 123. *Engineering Drawing*. (First term.) 12 hours laboratory a week per course for 6 weeks.

Prerequisite: Solid geometry.

Approved drawing equipment required. Cost about \$25.00.

124. *Agricultural Drawing*. (First term.) 12 hours laboratory a week.

Drawing equipment required.

131-2. *Engineering Drawing*. (First term.) 2 lecture hours, 12 laboratory hours a week per course for six weeks.

Same as Engineering Drawing 121-2-3.

MECHANICAL ENGINEERING

211-2. *Pattern Shop*. (First term.) 6 laboratory hours a week in each course for six weeks.

For Electrical Engineers. Fee, \$1.50 a course.

221. *Mechanical Engineering Problems*. (First term.) 4 hours a week.

Prerequisite: Physics 144-5.

225-6-7. *Shop Practice*. (First term.) 12 laboratory hours.

For Mechanical Engineers. Fee, \$4.00.

311-2-3. *Machine Shop*. (First term.) 6 laboratory hours.

Prerequisite: Mechanical Engineering 212.

For Electrical Engineers. Fee, \$1.50 a course.

335-6. *Heat Engineering*. (First term.) 6 class hours.

Prerequisite: Mechanical Engineering 331.

For Electrical Engineers and Textile Engineers.