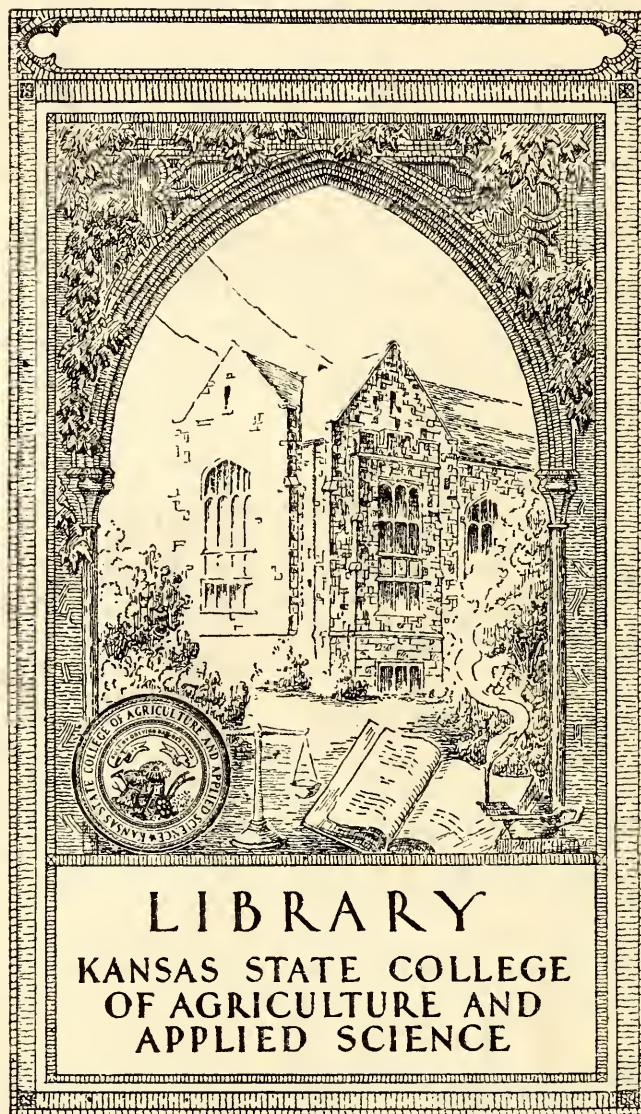
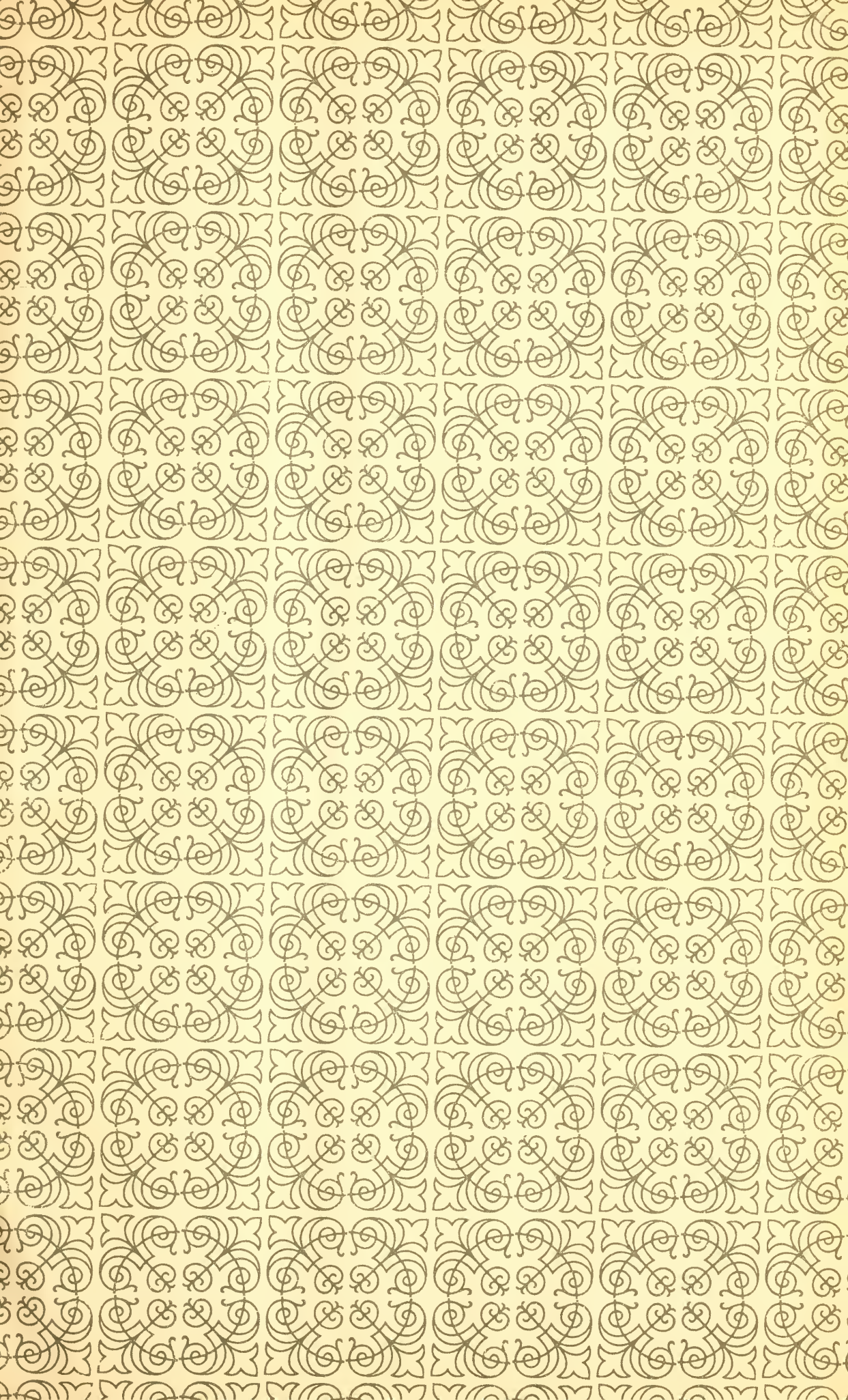


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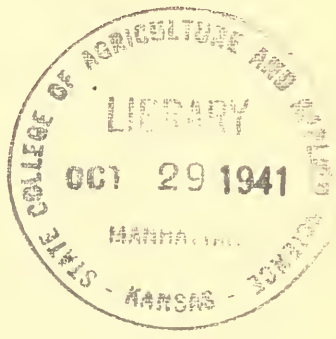
KANSAS STATE COLLEGE BULLETIN

VOLUME XXV JUNE 1, 1941 NUMBER 4

COMPLETE CATALOGUE NUMBER

SEVENTY-EIGHTH SESSION, 1940-1941

ANNOUNCEMENTS FOR THE SESSION OF 1941-1942



KANSAS STATE COLLEGE
OF AGRICULTURE AND APPLIED SCIENCE

MANHATTAN, KANSAS
Published by the College

PRINTED BY KANSAS STATE PRINTING PLANT
W. C. AUSTIN, STATE PRINTER
TOPEKA 1941
18-9043

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CALENDAR

1941														1942															
JANUARY							JULY							JANUARY							JULY								
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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19	20	21	22	23	24	25	20	21	22	23	24	25	26	18	19	20	21	22	23	24	19	20	21	22	23	24	25		
26	27	28	29	30	31	..	27	28	29	30	31	..	..	25	26	27	28	29	30	31	26	27	28	29	30	31	..		
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FEBRUARY							AUGUST							FEBRUARY							AUGUST								
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9	10	11	12	13	14	15	10	11	12	13	14	15	16	15	16	17	18	19	20	21	9	10	11	12	13	14	15		
16	17	18	19	20	21	22	17	18	19	20	21	22	23	22	23	24	25	26	27	28	16	17	18	19	20	21	22		
23	24	25	26	27	28	..	24	25	26	27	28	29	30	..	..	..	..	..	..	..	23	24	25	26	27	28	29		
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MARCH							SEPTEMBER							MARCH							SEPTEMBER								
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2	3	4	5	6	7	8	7	8	9	10	11	12	13	8	9	10	11	12	13	14	6	7	8	9	10	11	12		
9	10	11	12	13	14	15	14	15	16	17	18	19	20	15	16	17	18	19	20	21	13	14	15	16	17	18	19		
16	17	18	19	20	21	22	21	22	23	24	25	26	27	22	23	24	25	26	27	28	20	21	22	23	24	25	26		
23	24	25	26	27	28	29	28	29	30	..	..	..	..	29	30	31	..	..	..	..	27	28	29	30	..	..	..		
30	31	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		
APRIL							OCTOBER							APRIL							OCTOBER								
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6	7	8	9	10	11	12	5	6	7	8	9	10	11	5	6	7	8	9	10	11	4	5	6	7	8	9	10		
13	14	15	16	17	18	19	12	13	14	15	16	17	18	12	13	14	15	16	17	18	11	12	13	14	15	16	17		
20	21	22	23	24	25	26	19	20	21	22	23	24	25	19	20	21	22	23	24	25	18	19	20	21	22	23	24		
27	28	29	30	..	..	..	26	27	28	29	30	31	..	26	27	28	29	30	..	..	25	26	27	28	29	30	31		
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MAY							NOVEMBER							MAY							NOVEMBER								
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4	5	6	7	8	9	10	2	3	4	5	6	7	8	3	4	5	6	7	8	9	8	9	10	11	12	13	14		
11	12	13	14	15	16	17	9	10	11	12	13	14	15	10	11	12	13	14	15	16	15	16	17	18	19	20	21		
18	19	20	21	22	23	24	16	17	18	19	20	21	22	17	18	19	20	21	22	23	22	23	24	25	26	27	28		
25	26	27	28	29	30	31	23	24	25	26	27	28	29	24	25	26	27	28	29	30	29	30	..	..	..	..	..		
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JUNE							DECEMBER							JUNE							DECEMBER								
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8	9	10	11	12	13	14	7	8	9	10	11	12	13	7	8	9	10	11	12	13	6	7	8	9	10	11	12		
15	16	17	18	19	20	21	14	15	16	17	18	19	20	14	15	16	17	18	19	20	13	14	15	16	17	18	19		
22	23	24	25	26	27	28	21	22	23	24	25	26	27	21	22	23	24	25	26	27	20	21	22	23	24	25	26		
29	30	..	..	..	..	..	28	29	30	31	..	..	..	28	29	30	..	..	..	..	27	28	29	30	31	..	..		
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THE COLLEGE CALENDAR

SUMMER SCHOOL, 1941

May 28, Wednesday.—Registration of students for nine-week Summer School begins at 8 a. m.
May 28, Wednesday.—Examination for students deficient in entrance subjects, 8 a. m. to 5 p. m.
May 28 to July 26, Wednesday to Saturday.—Nine-week Summer School in session.
May 30, Friday.—Memorial Day, holiday.
June 2 to 7, Monday to Saturday.—4-H Club Round-up.
June 26, Thursday.—Scholarship deficiency reports to students and deans are due.
June 30 to July 26, Monday to Saturday.—Four-week Summer School in session.
July 4, Friday.—Independence Day, holiday.
July 25, Friday.—Graduation exercises at 7:30 p. m. for those receiving degrees at end of Summer School.
July 26, Saturday.—Summer School closes at 5 p. m.
August 2, Saturday.—Reports of all grades for Summer School are due in registrar's office.

FIRST SEMESTER, 1941-1942

August 16, Saturday.—All preparatory school credentials and college credentials should be filed with the vice-president of the College not later than this date.
Sept. 4, Thursday.—Assigners meet with committee on schedule at 2 p. m. in W 115, and with deans at 3 p. m.
Sept. 5, Friday.—Examinations for students deficient in entrance subjects, 8 a. m. to 5 p. m.
Sept. 5, Friday.—Registration and assignment of freshmen.
Sept. 6, Saturday.—Induction exercises for freshmen.
Sept. 8 and 9, Monday and Tuesday.—Induction exercises for freshmen. ✓
Sept. 8, 9, and 10, Monday, Tuesday, and Wednesday.—Registration and assignment of all other students.
Sept. 10, Wednesday.—Opening convocation at 11 a. m.
Sept. 10, Wednesday.—Classes meet according to schedule beginning at 1 p. m.
Sept. 26, Friday.—Annual all-college mixer at 8 p. m.
Oct. 4, Saturday.—Examinations to remove conditions.
Oct. 11, Saturday.—Scholarship deficiency reports to students and deans are due.
Nov. 8, Saturday.—Mid-semester scholarship deficiency reports to students and deans are due.
Nov. 11, Tuesday.—Armistice Day, holiday.
Nov. 26, Wednesday.—Thanksgiving vacation begins at 12 m.
Nov. 29, Saturday.—Thanksgiving vacation closes at 6 p. m.
Dec. 20, Saturday.—Christmas vacation begins at 6 p. m.
Jan. 3, 1942, Saturday.—Christmas vacation closes at 6 p. m.
Jan. 5 to 30, Monday to Friday.—Four-week short course in agriculture. (Open to scholarship winners.)
Jan. 20 to 24, Tuesday 1 p. m. to Saturday 12 m.—Examinations at close of semester.
Jan. 24, Saturday.—First semester closes at 12 m.
Jan. 24, Saturday.—Semester scholarship deficiency reports to students and deans are due not later than 6 p. m.

SECOND SEMESTER, 1941-1942

Jan. 26, Monday.—Assigners meet with committee on schedule at 2 p. m. in W 115.
Jan. 26, Monday.—Examinations for students deficient in entrance subjects, 8 a. m. to 5 p. m.
Jan. 27, 28, and 29, Tuesday, Wednesday, and Thursday.—Registration and assignment of all students.
Jan. 29, Thursday.—Classes meet according to schedule beginning at 1 p. m.
Jan. 31, Saturday.—Reports of all grades for first semester are due in registrar's office.
Feb. 3 to 6, Tuesday to Friday.—Farm and Home Week.
Feb. 16, Monday.—Founders' Day. The College was located at Manhattan on February 16, 1863.
Feb. 21, Saturday.—Examinations to remove conditions.
Feb. 23, Monday.—Holiday. (Washington's Birthday.)
Feb. 28, Saturday.—Scholarship deficiency reports to students and deans are due.
Mar. 28, Saturday.—Midsemester scholarship deficiency reports to students and deans are due.
April 2, Thursday.—Easter vacation begins at 6 p. m.
April 6, Monday.—Easter vacation closes at 6 p. m.
May 13 to 19, Wednesday to Tuesday.—Examinations for seniors graduating May 25.
May 21 to 25, Thursday to Monday.—Examinations at close of semester.
May 23, Saturday.—Alumni Day. Business meeting at 2 p. m.; banquet at 6 p. m.
May 24, Sunday.—Baccalaureate services at 7:30 p. m.
May 25, Monday.—Seventy-ninth annual Commencement at 7:30 p. m.
May 26, Tuesday.—Semester scholarship deficiency reports to students and deans are due not later than 6 p. m.
June 1, Monday.—Reports of all grades for second semester are due in registrar's office.



SUMMER SCHOOL, 1942

May 27, Wednesday.—Registration of students for nine-week Summer School begins at 8 a. m.
May 27, Wednesday.—Examinations for students deficient in entrance subjects, 8 a. m. to 5 p. m.
May 27 to July 25, Wednesday to Saturday.—Nine-week Summer School in session.
May 30, Saturday.—Memorial Day, holiday.
June 1 to 6, Monday to Saturday.—4-H Club Round-up.
June 25, Thursday.—Scholarship deficiency reports to students and deans are due.
June 29 to July 25, Monday to Saturday.—Four-week Summer School in session.
July 4, Saturday.—Independence Day, holiday.
July 24, Friday.—Graduation exercises at 7:30 p. m. for those receiving degrees at end of Summer School.
July 25, Saturday.—Summer School closes at 5 p. m.
August 1, Saturday.—Reports of all grades for Summer School are due in registrar's office.

FIRST SEMESTER, 1942-1943

Aug. 15, Saturday.—All preparatory school credentials and college credentials should be filed with the vice-president of the College not later than this date.
Sept. 10, Thursday.—Assigners meet with committee on schedule at 2 p. m. in W 115, and with deans at 3 p. m.
Sept. 11, Friday.—Examinations for students deficient in entrance subjects, 8 a. m. to 5 p. m.
Sept. 11, Friday.—Registration and assignment of freshmen.
Sept. 12, Saturday.—Induction exercises for freshmen.
Sept. 14 and 15, Monday and Tuesday.—Induction exercises for freshmen.
Sept. 14, 15, and 16, Monday, Tuesday, and Wednesday.—Registration and assignment of all other students.

REGISTRATION AND ASSIGNMENT SCHEDULES

NICHOLS GYMNASIUM

The following tabulation shows the schedule of hours for registration and assignment of students for the college year 1941-1942, arranged according to the initial letters of their last names:

FIRST SEMESTER

SCHEDULE FOR FRESHMEN STUDENTS

FRIDAY, SEPTEMBER 5, 1941

College Auditorium, 7:30 a. m.

General Meeting for All Freshmen

<i>Hours</i>	<i>Initial letters</i>
8:00 to 8:45 a. m.	J, N, W
8:45 to 9:30 a. m.	D, O, S, U
9:30 to 10:15 a. m.	I, K, M, V, Y
10:15 to 11:00 a. m.	H, R, X, Z
12:15 to 1:00 p. m.	A, F, P, T
1:00 to 1:45 p. m.	C, E, G, Q
1:45 to 3:00 p. m.	B, L, and any freshmen students who failed to report during the period provided for their group.

SCHEDULE FOR ALL OTHER STUDENTS

MONDAY, SEPTEMBER 8, 1941

<i>Hours</i>	<i>Initial letters</i>
7:45 to 8:30 a. m.	J, N, Wj-Wy
8:30 to 9:15 a. m.	Wa-Wi
9:15 to 10:00 a. m.	S
10:00 to 10:45 a. m.	D, O, U
12:00 to 12:45 p. m.	M
12:45 to 1:30 p. m.	I, K, V, Y
1:30 to 2:15 p. m.	Ha-Hol
2:15 to 2:45 p. m.	Any students who failed to report during the period provided for their group.

TUESDAY, SEPTEMBER 9, 1941

<i>Hours</i>	<i>Initial letters</i>
7:45 to 8:30 a. m.	Hom-Hy, R, X, Z
8:30 to 9:15 a. m.	A, F
9:15 to 10:00 a. m.	P, T
10:00 to 10:45 a. m.	C
12:00 to 12:45 p. m.	E, G, Q
12:45 to 1:30 p. m.	Ba-Bra
1:30 to 2:00 p. m.	Any students who failed to report during the period provided for their group.

WEDNESDAY, SEPTEMBER 10, 1941

8:00 to 8:45 a. m.	Bre-By, L
8:45 to 10:00 a. m.	Special students and any students who failed to report during the period provided for their group.

Kansas State College

SECOND SEMESTER
SCHEDULE FOR ALL STUDENTS

Hours		TUESDAY, JANUARY 27, 1942		Initial letters
7:45	to 8:30 a. m.	.....	C	
8:30	to 9:15 a. m.	.....	E, G, Q	
9:15	to 10:00 a. m.	.....	A, F	
10:00	to 10:45 a. m.	.....	P, T	
12:00	to 12:45 p. m.	.....	Ba-Bra	
12:45	to 1:30 p. m.	.....	Bre-By, L	
1:30	to 2:15 p. m.	.....	M	
2:15	to 2:45 p. m.	.....	Any students who failed to re- port during the period pro- vided for their group.	

		WEDNESDAY, JANUARY 28, 1942		
7:45	to 8:30 a. m.	.....	I, K, V, Y	
8:30	to 9:15 a. m.	.....	S	
9:15	to 10:00 a. m.	.....	D, O, U	
10:00	to 10:45 a. m.	.....	Ha-Hol	
12:00	to 12:45 p. m.	.....	Hom-Hy, R, X, Z	
12:45	to 1:30 p. m.	.....	Wa-Wi	
1:30	to 2:00 p. m.	.....	Any students who failed to re- port during the period pro- vided for their group.	

		THURSDAY, JANUARY 29, 1942		
8:00	to 8:45 a. m.	.....	Wj-Wy, J, N	
8:45	to 10:00 a. m.	.....	Special students and any stu- dents who failed to report during the period provided for their group.	

The State Board of Regents

Name and address	Term expires December 31
FRED M. HARRIS, <i>Chairman</i> , Ottawa.....	1944
W. T. MARKHAM, Topeka.....	1941
MRS. DONALD MUIR, <i>Anthony</i>	1941
OSCAR S. STAUFFER, Topeka.....	1941
DREW McLAUGHLIN, Paola.....	1942
GROVER POOLE, Manhattan.....	1942
MRS. ELIZABETH REIGART, Baxter Springs.....	1942
WILLIS N. KELLY, Hutchinson.....	1943
LESTER McCoy, Garden City.....	1944

HUBERT BRIGHTON, Topeka, *Secretary of the Board of Regents*
B. H. JOHNSON, Topeka, *Business Manager*

Administrative Officers* of the College

President	F. D. FARRELL
College Historian	J. T. WILLARD
Dean of the Division of Agriculture, and Director of the Agricultural Experiment Station.....	L. E. CALL
Dean of the Division of Engineering and Architecture, and Director of the Engineering Experiment Sta- tion	R. A. SEATON
Dean of the Division of General Science.....	R. W. BABCOCK
Dean of the Division of Home Economics, and Direc- tor of the Bureau of Research in Home Econom- ics	MARGARET M. JUSTIN
Dean of the Division of Veterinary Medicine.....	R. R. DYKSTRA
Dean of the Division of College Extension.....	H. J. UMBERGER
Dean of the Division of Graduate Study.....	J. E. ACKERT
Dean of Women.....	HELEN MOORE
Dean of the Summer School.....	E. L. HOLTON
Vice-President	S. A. NOCK
Registrar	JESSIE McD. MACHIR
Librarian	ARTHUR B. SMITH
Superintendent of Maintenance.....	G. R. PAULING

* Also included in the general alphabetical list.



Officers of Administration, Instruction and Research*

On October 1, 1940

NELLIE ABERLE, Assistant Professor of English (1921, 1935).‡

B. S., K. S. C., 1912; M. S., *ibid.*, 1914.

†A 204.

ERWIN ABMEYER, Assistant Professor of Horticulture in Charge of Northeastern Kansas Experiment Fields (1934, 1936).

B. S., K. S. C., 1923.

Atchison, Kan.

JAMES EDWARD ACKERT, Dean of Division of Graduate Study (1931); Professor of Zoölogy (1913, 1918); Parasitologist, Agricultural Experiment Station (1913).

A. B., University of Illinois, 1909; A. M., *ibid.*, 1911; Ph. D., *ibid.*, 1918.

F 101.

JOHN HAROLD ADAMS, Professor of Physical Education (July 1, 1940).

B. S., University of Southern California, 1926.

Stadium.

ANNA TESSIE AGAN, Assistant Professor of Household Economics (1930, 1938).

B. S., University of Nebraska, 1927; M. S., K. S. C., 1930.

T 203.

MICHAEL FRANCIS AHEARN, Professor and Head of Department of Physical Education, and Director of Athletics (1904, 1920).

B. S., Massachusetts Agricultural College, 1904; M. S., K. S. C., 1913.

N 110C.

LOUIS C. AICHER, Superintendent, Fort Hays Branch Agricultural Experiment Station (1921).

B. S., K. S. C., 1910.

Hays, Kan.

HARRY WORKMAN AIMAN, Assistant Professor of Woodwork (1918, 1925).

A. B., Oskaloosa College, 1921.

S 102A.

CORAL KERR ALDOUS, Instructor in Child Welfare and Euthenics (Feb. 1, 1940).

B. S., Utah State Agricultural College, 1912; M. A., Columbia University, 1940.

C 214.

HARRY STARKEY ALDRICH, Capt., C. A. C., U. S. A.; Assistant Professor of Military Science and Tactics (1937); resigned, May 31, 1940.

B. S., Michigan College of Mines, 1917; E. M., *ibid.*, 1917; Graduate, Battery Officers Course, Coast Artillery School, 1925.

N 102.

* The staff of a department is listed under the department heading in the body of the Catalogue. See Table of Contents, page 3, *ante*, or Index at end of volume.

† The College buildings are designated by letters, as follows:

A—Anderson Hall (Administration)

Bks—Barracks

C—Calvin Hall (Home Ec.)

CH—College Hospital

D—Dickens Hall (Hort., Botany)

E—Engineering Hall

EA—Extension Annex

E. Ag—Waters Hall (Agriculture)

F—Fairchild Hall (Hist., Zoöl., Ent.)

G—Education Hall (Educ., Publ. Spkg.)

I—Illustrations Hall

K—Kedzie Hall (Journalism, English)

L—Library

M—Auditorium (Music)

N—Nichols Gymnasium

(Phys. Ed., Mil. Sci., Music)

P—Stock Judging Pavilion

PP—Power, Heat, and Service Building

R—Farm Machinery Hall

S—Engineering Shops

T—Thompson Hall (Cafeteria)

V—Veterinary Hall (Vet. Med., Bact.)

VH—Veterinary Hospital

VRL—Veterinary Research Laboratory

VZ—Van Zile Hall (Girls' Dormitory)

W—Physical Science Building (Chem., Physics)

W. Ag—Waters Hall (Agriculture)

X—Mathematics Hall

XX—Chemical Engineering Hall

‡ One date standing after the title shows when the office was assumed. In the case of two dates separated by a comma or semicolon, the first date indicates when services with the College began, the second when present office was assumed. Dates separated by a dash indicate time of assumption and termination, respectively, of the duties indicated in the title

GERTRUDE EDNA ALLEN, Assistant Professor of Foods and Nutrition, Division of College Extension (1929, 1936).

B. S., University of Minnesota, 1923; M. S., K. S. C., 1936.

EA 101B.

JAMES SIRCOM ALLEN, Associate Professor of Physics (1939).

B. A., University of Cincinnati, 1933; Ph. D., University of Chicago, 1937.

W 204.

OSCAR WILLIAM ALM, Professor of Psychology (1929, 1933).

A. B., University of Nebraska, 1917; A. M., Columbia University, 1918; Ph. D., University of Minnesota, 1929.

G 104A.

INEZ GERTRUDE ALSOP, Assistant Professor of History and Government (1923, 1927).

B. S., Kansas State Teachers College, Emporia, 1916; M. S., University of Kansas, 1920.

F 213.

DONALD JULES AMEEL, Instructor in Zoölogy (1937).

A. B., Wayne University, 1928; M. A., University of Michigan, 1930; Sc. D., *ibid.*, 1933.

F 303.

EDGAR McCALL AMOS, Associate Professor of Industrial Journalism and Printing (1920, 1936).

B. S., K. S. C., 1902.

K 104.

WILLIAM GERALD AMSTEIN, Associate Professor of Horticulture, Division of College Extension (1927, 1939).

B. S., Massachusetts Agricultural College, 1927; M. S., K. S. C., 1928.

EA 202.

JOHN EDMOND ANDERSON, Instructor in Milling Industry (1932, 1933).

B. S., K. S. C., 1932; M. S., *ibid.*, 1933.

E. Ag 101A.

KLING LeROY ANDERSON, Assistant Professor of Pasture Improvement (1936, 1938).

B. S., University of California, 1936; M. S., K. S. C., 1938.

E. Ag 206A.

ARTHUR CLINTON ANDREWS, Assistant Professor of Chemistry (1926, 1938).

B. S., University of Wisconsin, 1924; M. S., K. S. C., 1929; Ph. D., University of Wisconsin, 1938.

W 20.

FLOYD WARNICK ATKESON, Professor and Head of Department of Dairy Husbandry (1935); Dairy Husbandman, Agricultural Experiment Station (1935).

B. S., University of Missouri, 1918; M. S., K. S. C., 1929.

W. Ag 108B.

CLIFF ERRETT AUBEL, Professor of Animal Husbandry (1919, 1938).

B. S., Pennsylvania State College, 1915; M. S., K. S. C., 1917; Ph. D., University of Minnesota, 1935.

E. Ag 12A.

MADALYN AVERY, Assistant Professor of Physics (1928).

B. S., K. S. C., 1924; M. S., *ibid.*, 1932.

W 201A.

RODNEY WHITTEMORE BABCOCK, Dean of Division of General Science (1930).

A. B., University of Missouri, 1912; A. M., University of Wisconsin, 1915; Ph. D., *ibid.*, 1924.

A 122B.

EDGAR SYDNEY BAGLEY, Instructor in Economics (Sept. 1, 1940).

B. A., University of Southern California, 1935; M. A., *ibid.*, 1937.

W. Ag 308.

HARRY CHARLES BAIRD, Assistant Professor of Agricultural Extension; District Supervisor, Division of College Extension (1920, 1934).

B. S., K. S. C., 1914.

EA 101.

CLARENCE POTTER BAKER, Instructor in English (1937; Sept. 1, 1940).

B. S., Haverford College, 1933; A. M., Harvard University, 1936.

A 223.

GLADYS BAKER, Head Cataloguer, College Library (1935, 1938).

B. L. S., University of Illinois, 1924.

L 202.

MONTEE ROBERT BAKER, Graduate Research Assistant in Animal Husbandry (Sept. 1, 1940).

B. S., University of Nebraska, 1940.

E. Ag 15.

NORA ELIZABETH BARE,⁴ Instructor in Home Economics Education (1927, 1937).

B. S., K. S. C., 1925; M. S., *ibid.*, 1939.

G 107.

DOROTHY BARFOOT, Professor and Head of Department of Art (1930, 1935).

A. B., State University of Iowa, 1922; A. M., Columbia University, 1928.

E 221A.

EDGAR LEE BARGER, Associate Professor of Agricultural Engineering (1930, 1938).

B. S., K. S. C., 1929; M. S., *ibid.*, 1934.

E 216.

HAROLD NATHAN BARHAM, Associate Professor of Organic Chemistry (1929, 1932).

A. B., Bethany College, 1921; M. S., Ohio State University, 1922; Ph. D., University of Kansas, 1928.

W 23.

MARK ALFRED BARMORE,¹ Agent, Bureau of Plant Industry, U. S. D. A.; Cereal Chemist, Agricultural Experiment Station (1938).

A. B., Whittier College, 1927; M. A., Stanford University, 1929; Ph. D., *ibid.*, 1931.

E. Ag 102.

JANE WILSON BARNES, Assistant to the Dean, Division of Home Economics; Instructor in Household Economics (1928, 1939).

B. S., K. S. C., 1912; M. S., *ibid.*, 1932.

C 216.

ROBERT JOHN BARNETT, Professor of Horticulture (1907-1911; 1920); Head of Department of Horticulture, 1930-1938.

B. S., K. S. C., 1895; M. S., *ibid.*, 1911.

D 104.

HARLE VIRGLE BARRETT, Graduate Assistant in Bacteriology (Sept. 1, 1940).

B. S., Oklahoma Agricultural and Mechanical College, 1940.

V 204.

ELLEN MARGARET BATCHELOR, Assistant Professor and District Home Demonstration Agent Leader, Division of College Extension (1917, 1938); on leave.

B. S., K. S. C., 1911.

EA 105.

JAMES CHARLES BATES, Instructor in Botany (1935).

A. B., University of Kansas, 1927; A. M., *ibid.*, 1934; Ph. D., *ibid.*, 1935.

D 204.

LAURA FALKENRICH BAXTER, Assistant Professor of Home Economics Education (1927, 1934).

B. S., K. S. C., 1915; M. S., *ibid.*, 1930.

G 103A.

MABEL GERTRUDE BAXTER, Assistant, College Library (1916, 1918).

L 101.

EDWARD GEOFFREY BAYFIELD, Professor and Head of Department of Milling Industry (1939).

B. S. A., University of Alberta, 1923; M. S., McGill University, 1924; Ph. D., Ohio State University, 1931.

E. Ag 110.

BUELL WESLEY BEADLE, Assistant Chemist, Agricultural Experiment Station (1935); on leave, Feb. 14, 1940 to Feb. 14, 1941.

B. S., K. S. C., 1935; M. S., *ibid.*, 1938.

W 31.

H. ERNEST BECHTEL, Associate Professor of Dairy Husbandry (1939).

B. S., Pennsylvania State College, 1931; M. S., Michigan State College, 1933; Ph. D., *ibid.*, 1935.

W. Ag 106.

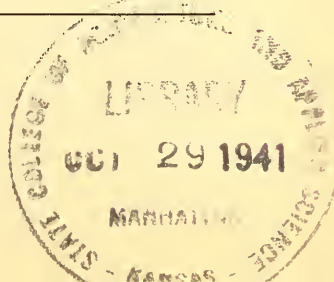
GLENN HANSE BECK, Instructor in Dairy Husbandry (1936, 1937).

B. S., University of Idaho, 1936; M. S., K. S. C., 1938.

W. Ag 106.

1. In coöperation with the U. S. Department of Agriculture.

4. In coöperation with the State Board for Vocational Education.



RUSSELL JAMES BEERS, Instructor in Chemistry (1935); on leave, Sept. 1, 1940 to May 31, 1941.

B. S., University of Nebraska, 1933; M. S., *ibid.*, 1935.

W 310.

FLOYD WAYNE BELL, Professor of Animal Husbandry (1918, 1921).

B. S., Cornell University, 1911.

E. Ag 12B.

JOHN GREGORY BELL, Assistant Professor of Farm Crops, Division of College Extension (1933, 1937); on leave, Feb. 6, 1940.

B. S., K. S. C., 1932.

EA 202B.

BALLARD KELLER BENNETT, Herdsman, Department of Dairy Husbandry (July 1, 1940).

B. S., Oklahoma Agricultural and Mechanical College, 1938.

Dairy Barn.

ADA GRACE BILLINGS, Associate Professor of History and Government, Department of Home Study, Division of College Extension (1921, 1927).

B. S., K. S. C., 1916; M. S., *ibid.*, 1927.

A 5A.

CHESTER BERT BILLINGS, Instructor in Agriculture, Department of Home Study, Division of College Extension (1936).

B. S., Fort Hays Kansas State College, 1930; M. S., K. S. C., 1936.

A 5C.

CHARLES JOHN BIRKELAND, Graduate Research Assistant in Horticulture (1939).

B. S., Michigan State College, 1939.

D 110A.

HERMAN ALBERT BISKIE, Instructor in Agricultural Economics, Division of College Extension; Fieldman, Farm Management Association No. 2 (March 1, 1940).

B. S., University of Nebraska, 1917.

Wichita, Kan.

FRANK OTTO BLECHA, Assistant Professor of Agricultural Extension; District Agricultural Agent, Division of College Extension (1919, 1923).

B. S., K. S. C., 1918; M. S., *ibid.*, 1926.

EA 101.

ROBERT EDMUND BOCK, Custodian (1936, 1937).

PP 110.

BERNARD BENJAMIN BOHREN, Assistant in Poultry Husbandry (1939).

B. S., University of Illinois, 1937.

W. Ag 210.

MARY ELSIE BORDER, Assistant Professor in Junior Extension; Assistant State Club Leader, Division of College Extension (1929; July 1, 1940).

B. S., Ohio State University, 1926; M. A., Columbia University, 1939.

A 111A.

MARION LOUISE BOZENHARD, Instructor in Physical Education for Women (1939); resigned, May 31, 1940.

B. S., Alabama College, 1935; M. S., University of Wisconsin, 1939.

N 3.

WILLIAM RAYMOND BRACKETT, Associate Professor of Physics (1919, 1923).

A. B., University of Colorado, 1905.

W 318.

JULIA STOREY BRADLEY, Assistant in Animal Husbandry (1939).

E. Ag 8.

BOYD BERTRAND BRAINARD, Professor of Mechanical Engineering (1923, 1938).

B. S. in M. E., University of Colorado, 1922; S. M., Massachusetts Institute of Technology, 1931.

E 109.

GEORGE FRANCIS BRANIGAN, Assistant Professor of Engineering Drawing and Descriptive Geometry (1927, 1936).

B. S. in C. E., University of Nebraska, 1927; M. S., K. S. C., 1933.

E 209.

ROBERT WOODBURY BRAY, Graduate Research Assistant in Animal Husbandry (July 1, 1940).

B. S., Oklahoma Agricultural and Mechanical College, 1938.

Dairy Barn.

- AUGUSTIN WILBER BREEDEN, Associate Professor of English (1926).
Ph. B., University of Chicago, 1924; A. M., *ibid.*, 1925. A 222.
- JESSE LAMAR BRENNEMAN, Professor of Electrical Engineering (1920, 1928).
B. S., University of Chicago, 1908; E. E., University of Wisconsin, 1913. E 121.
- EVERETT ERNEST BROWN, Maj., Inf., U.S.A.; Associate Professor of Military Science and Tactics (1938); resigned, May 31, 1940.
Graduate, Infantry School, 1926; Graduate, Command and General Staff School, 1938. N 102.
- GERALD JAMES BROWN,¹ Instructor in Agricultural Economics, Division of College Extension (1936, 1939).
B. S., K. S. C., 1936. EA 301.
- HALE H. BROWN,⁴ Instructor in Vocational Education (1937).
B. S., K. S. C., 1928; M. S., *ibid.*, 1937. G 103B.
- MARY VIOLA BROWN, Laboratory Technician, Department of Student Health (1936).
B. S., Baldwin-Wallace College, 1934. A 218.
- NINA MYRTLE BROWNING, Assistant Professor of Food Economics and Nutrition (1930, 1937).
B. S., K. S. C., 1923; M. S., *ibid.*, 1927. C 118.
- HOWARD W. BRUBAKER, Professor of Analytical Chemistry (1913, 1922).
B. S., Carleton College, 1899; Ph. D., University of Pennsylvania, 1904. W 107.
- HARRY RAY BRYSON, Assistant Professor of Entomology (1924-1929); Assistant Entomologist, Agricultural Experiment Station (1924).
B. S., K. S. C., 1917; M. S., *ibid.*, 1924. F 204.
- DOROTHY G. BUECHEL, Head Dispensary Nurse, Department of Student Health (Sept. 1, 1940).
R. N., Wesley Hospital, 1936. A 217.
- BURNILL HOWARD BUIKSTRA, (Temporary) Instructor in Mathematics (Sept. 1, 1940).
B. S., K. S. C., 1933. X 104.
- FRANK SHERMAN BURSON, Instructor in Agricultural Economics, Division of College Extension (1935, 1939).
B. S., K. S. C., 1934. EA 201.
- JAMES HENRY BURT, Professor and Head of Department of Anatomy and Physiology (1909, 1919).
V. S., Ontario Veterinary College, 1895; D. V. M., Ohio State University, 1905. V 107.
- MARJORIE BURTON, Instructor in Child Welfare and Euthenics (1938; Sept. 1, 1940).
B. S., Iowa State College, 1933. 311 N. 14th.
- LELAND DAVID BUSHNELL, Professor and Head of Department of Bacteriology (1908, 1912); Bacteriologist, Agricultural Experiment Station (1908, 1912).
B. S., Michigan Agricultural College, 1905; M. S., University of Kansas, 1915; Ph. D., Harvard University, 1921. V 205.
- FRANK BYRNE, Assistant Professor of Geology and Paleontology (1930, 1939).
B. S., University of Chicago, 1927; Ph. D., *ibid.*, 1940. F 1A.
- MARION JOHN CALDWELL, Instructor in Chemistry (1932, 1934).
B. S., K. S. C., 1931; M. S., *ibid.*, 1933. W 212.

1. In coöperation with the U. S. Department of Agriculture.

4. In coöperation with the State Board for Vocational Education.

LELAND EVERETT CALL, Dean of Division of Agriculture (1907, 1925); Director of Agricultural Experiment Station (1907, 1925).

B. S. in Agr., Ohio State University, 1906; M. S., *ibid.*, 1912.

E. Ag 106.

JAMES PHILLIP CALLAHAN, Associate Professor of English (1924, 1930).

B. S., Kansas State Teachers College, Hays, 1919; A. M., University of Kansas, 1926.
K 201.

MILDRED CAMP, Head of Circulation Department, College Library (1927).

A. B., Eureka College, 1912; B. L. S., University of Illinois, 1924.

L.

JAMES KIRKER CAMPBELL, Lt.-Col., Inf., U. S. A.; Associate Professor of Military Science and Tactics (1937).

Graduate, Culver Military Academy, 1905; Graduate, Infantry School, 1926.

N 102.

ALVIN BOYD CARDWELL, Professor and Head of Department of Physics (1936, 1937).

B. S., University of Chattanooga, 1925; M. S., University of Wisconsin, 1927; Ph. D., *ibid.*, 1930.

W 103.

WALTER MONROE CARLETON, (Temporary) Instructor in Agricultural Engineering, Division of College Extension (Oct. 1, 1940).

B. S., K. S. C., 1938.

E 131.

IDA ALFREDA CARLSON, (Temporary) Instructor in Mathematics (1939).

B. S., K. S. C., 1913; M. S. in Eng., *ibid.*, 1927; M. S. in Math., *ibid.*, 1929.

X 102.

WALTER WILLIAM CARLSON, Professor and Head of Department of Shop Practice (1910, 1917); Superintendent of Shops (1910, 1912); Industrial Engineer, Engineering Experiment Station (1913).

B. S., K. S. C., 1908; M. E., *ibid.*, 1916.

S 211.

RALPH BOYD CATHCART, Assistant Professor of Animal Husbandry (1935, 1937).

B. S., K. S. C., 1933; M. S., University of Nebraska, 1934.

E. Ag 6A.

WILBER JOHN CAULFIELD, Associate Professor of Dairy Husbandry (1927; July 1, 1940).

B. S., University of Minnesota, 1924; M. S., Pennsylvania State College, 1926.

W. Ag 107.

DENA C. CEDERQUIST, Technician in Food Economics and Nutrition (1937).

B. S., Iowa State College, 1931; M. S., *ibid.*, 1937.

C 107B.

ERNEST KNIGHT CHAPIN, Associate Professor of Physics (1923, 1932).

A. B., University of Michigan, 1918; M. S., *ibid.*, 1923.

W 321.

JAMES PERCY CHAPMAN, Assistant Extension Editor (1936).

B. S., K. S. C., 1932.

EA 306B.

JOSEPH RUDOLPH CHELIKOWSKY, Instructor in Geology (1937).

B. A., Cornell University, 1931; M. A., *ibid.*, 1932; Ph. D., *ibid.*, 1935.

F 1A.

ROBERT FREDERICK CHILDS,² Road Materials, Engineering Experiment Station (1931).

B. S., K. S. C., 1929.

E 230.

ALFRED LESTER CLAPP, Professor of Agronomy (1920, 1939).

B. S., K. S. C., 1914; M. S., *ibid.*, 1934.

E. Ag 201A.

FRANCIS EUGENE CLARK,¹ Associate Bacteriologist, U. S. D. A.; Soil Microbiology Investigations, Agricultural Experiment Station (1937).

B. A., University of Colorado, 1932; B. D. E., *ibid.*, 1933; M. A., *ibid.*, 1933; Ph. D., *ibid.*, 1936.

V 101.

1. In coöperation with the U. S. Department of Agriculture.

2. In coöperation with the Kansas State Highway Department.

- JOHN R. CLARK, Capt., C. A. C., Retired, U. S. A., Assistant Professor of Military Science and Tactics (Sept. 1, 1940). N 103.
- PEARL JEANNETTE CLARK, Assistant Postmistress (July 1, 1940). A 120.
- EUGENE ARTHUR CLEAVINGER, Assistant Professor of Farm Crops, Division of College Extension (1926, 1931).
B. S., K. S. C., 1925. EA 202B.
- OWEN LOVEJOY COCHRANE, Assistant Professor of Physical Education (1939; Sept. 1, 1940).
B. S., K. S. C., 1931. Stadium.
- MAYNARD HENRY COE, Professor and State Club Leader, Division of College Extension (1922, 1927).
B. S., University of Minnesota, 1917. A 111B.
- ALICE COLE, Nurse, Department of Student Health (1938); resigned, May 31, 1940.
R. N., Bethany Methodist Hospital School of Nursing, 1937. CH.
- EMBERT HARVEY COLES,¹ Associate Agronomist, Bureau of Plant Industry, U. S. D. A.; Superintendent, Colby Branch Agricultural Experiment Station (1922, 1929).
B. S., K. S. C., 1922. Colby, Kan.
- CHARLES WILLIAM COLVER, Professor of Organic Chemistry (1919, 1925).
B. S., University of Idaho, 1909; M. S., *ibid.*, 1911; Ph. D., University of Illinois, 1919. W 211.
- LAURENCE LARUE COMPTON, Assistant Professor of Soils, Division of College Extension (1930, 1935).
B. S., K. S. C., 1930; M. S., *ibid.*, 1940. EA 202B.
- INEZ MARIE CONLEY, (Temporary) Instructor in Accounting (Sept. 1, 1940).
B. S., Oklahoma Agricultural and Mechanical College, 1935; M. S., *ibid.*, 1939. W. Ag 206.
- ROBERT WARREN CONOVER, Professor of English (1915, 1920).
A. B., Wesleyan University, 1911; A. M., *ibid.*, 1914. K 203.
- WILLIAM JOSEPH CONOVER, Assistant Professor of Agricultural Economics, Division of College Extension (1934, 1937).
B. S., K. S. C., 1932. Clay Center, Kan.
- LOWELL EDWIN CONRAD, Professor and Head of Department of Civil Engineering (1908, 1909); Civil Engineer, Engineering Experiment Station (1913).
B. S., Cornell College, 1904; C. E., *ibid.*, 1906; M. S., Lehigh University, 1908. E 124.
- RALPH MARTIN CONRAD, Assistant Professor of Poultry Chemistry (1936).
B. S., K. S. C., 1933; M. S., State University of Iowa, 1934; Ph. D., *ibid.*, 1936. W 37.
- JOHN HERBERT COOLIDGE, Assistant Professor of Agricultural Economics, Division of College Extension (1926, March 1, 1940).
B. S., K. S. C., 1925; M. S., *ibid.*, 1932. EA 201.
- LLOYD MARION COPENHAFFER, Assistant Professor of Landscape Gardening, Division of College Extension (1938, July 1, 1940).
B. S., K. S. C., 1933; M. S., *ibid.*, 1936. EA 202.
- ESTHER MARGARET CORMANY, Assistant Professor of Clothing and Textiles (1936).
B. S., K. S. C., 1926; M. S., *ibid.*, 1932. C 219.

1. In coöperation with the U. S. Department of Agriculture.

CHARLES MECLAIN CORRELL, Professor of History and Government (1922, 1934); Assistant Dean, Division of General Science (1927).

B. S., K. S. C., 1900; Ph. B., University of Chicago, 1907; Ph. M., *ibid.*, 1908.

A 122A.

RICHARD THOMAS COTTON,³ Senior Entomologist, Bureau of Entomology and Plant Quarantine, U. S. D. A.; Investigator of Stored Grain and Flour-mill Insects; in charge of U. S. Entomological Laboratory (1934).

B. S., Cornell University, 1914; M. S., *ibid.*, 1918; Ph. D., George Washington University, 1924. U. S. Lab., 1204 Fremont.

MORRIS S. COVER, Instructor in Veterinary Anatomy and Physiology (Feb. 1, 1940).

V. M. D., University of Pennsylvania, 1938.

V 108.

INA FOOTE COWLES, Associate Professor of Clothing and Textiles (1902, 1918).

B. S., K. S. C., 1901; M. S., University of Wisconsin, 1931.

C 219.

RUFUS FRANCIS COX, Associate Professor of Animal Husbandry (1930, 1935); on sabbatical leave, Oct. 1, 1940, to June 30, 1941.

B. S., Oklahoma Agricultural and Mechanical College, 1923; M. S., Iowa State College, 1925. E. Ag 8A.

WILLIAM WESLEY CRAWFORD, Assistant Professor of Civil Engineering (1923, 1934).

A. B., State University of Iowa, 1912; B. S. in C. E., Iowa State College, 1917; M. Di., Iowa State Teachers College, 1908. E 220.

CORNELIA WILLIAMS CRITTENDEN, Associate Professor of Modern Languages (1926, 1929).

A. B., University of Nebraska, 1918; A. M., *ibid.*, 1926.

A 224.

MINERVA MARIE CRON, Graduate Assistant in Chemistry (1939).

B. A., Mary Hardin-Baylor College, 1939.

W 213.

JOHN CLAYTON CRUPPER, JR., Forest Nurseryman, Fort Hays Branch Agricultural Experiment Station (July 5, 1940).

B. S., Colorado State College, 1939.

Hays, Kan.

MARTHA REBECCA CULLIPHER, Assistant Loan Librarian, College Library (1928).

A. B., Indiana University, 1926; B. S. in L. S., University of Illinois, 1928; M. S., Columbia University, 1939. L.

MERRITT IRA DARROW, Graduate Assistant in Poultry Husbandry (Sept. 1, 1940).

B. S., Michigan State College, 1940.

W. Ag 209.

ROSE MARIE DARST, Assistant Professor of Art (1933, 1938).

B. S., Ohio State University, 1926; A. M., Columbia University, 1927.

A 221B.

ROBERT DODDS DAUGHERTY, Assistant Professor of Mathematics (1930, 1932).

Ph. B., Iowa Wesleyan College, 1910; M. S., State University of Iowa, 1930.

X 103.

MARGARET S. DAUM, Assistant to the Dean, Division of Veterinary Medicine (July 1, 1940).

B. S., K. S. C., 1938.

V 104.

ALLAN PARK DAVIDSON, Professor of Vocational Education (1919, 1930).

B. S., K. S. C., 1914; M. S., *ibid.*, 1925.

G 103C.

FLOYD EWING DAVIDSON, Assistant in Agronomy, Southeastern Kansas Experiment Fields (1934).

B. S., K. S. C., 1933.

R. F. D. 3, Parsons, Kan.

3. In coöperation with the Kansas Agricultural Experiment Station.

- CHARLES DEFORREST DAVIS, Associate Professor of Farm Crops (1921, 1939).
B. S., K. S. C., 1921; M. S., *ibid.*, 1926. E. Ag 305A.
- ELIZABETH HAMILTON DAVIS, Reference Librarian, College Library (1920).
A. B., MacMurray College for Women, 1909; B. L. S., University of Illinois, 1914. L 201.
- HALLAM WALKER DAVIS, Professor of English (1913, 1918); Head of Department of English (1913, 1921).
A. B., Indiana University, 1909; A. M., Columbia University, 1913. K 204A.
- WILMER ELSA DAVIS, Professor of Plant Physiology (1909, 1927).
Graduate, Ohio Normal University, 1894; A. B., University of Illinois, 1903. D 303A.
- EARLE REED DAWLEY,² Professor of Engineering Materials (1920, 1933); Assistant Materials Testing Engineer, Engineering Experiment Station (1920, 1939).
B. S., University of Illinois, 1919; M. S., K. S. C., 1927. E 135.
- GEORGE ADAM DEAN, Professor and Head of Department of Entomology (1902, 1913); Entomologist, Agricultural Experiment Station (1902, 1913).
B. S., K. S. C., 1895; M. S., *ibid.*, 1905. F 201.
- GEORGE THOMAS DEAN, (Temporary) Graduate Assistant in Civil Engineering (Sept. 1, 1940).
B. S., K. S. C., 1940. E 122.
- THOMAS DEAN, Herdsman, Department of Animal Husbandry (1931).
- SAMUEL WESLEY DECKER, Associate Professor of Horticulture (1937).
B. S., K. S. C., 1924; M. S., University of Illinois, 1927. D 12.
- JOHN WESLEY DEMAND, (Temporary) Instructor in Education (Sept. 1, 1940).
A. B., University of Kansas, 1937; M. S., K. S. C., 1940. G 102A.
- GRACE EMILY DERBY, Associate Librarian, College Library (1911, 1918).
A. B., Western College for Women, 1905. L 205.
- ARTHUR DEVOR, Graduate Assistant in Chemistry (1936).
B. S., McPherson College, 1935; M. S., K. S. C., 1937. W 121.
- ROSE GERALDINE DILLER, Class Reserves Assistant in Library (1938). L 1.
- PAUL LAWRENCE DITTEMORE, Editorial Assistant in the Agricultural Experiment Station (1939); Assistant Instructor in Journalism (1939).
B. S., K. S. C., 1932. E. Ag 105.
- RAYMOND JOSEPH DOLL, Instructor in Agricultural Economics (1935, 1936); on leave, Sept. 1, 1940 to June 30, 1941.
B. S., K. S. C., 1935; M. S., *ibid.*, 1938. W. Ag 309.
- CHARLES EDWARD DOMINY, Assistant Professor of Agricultural Economics, Division of College Extension (1936).
B. S., K. S. C., 1926; Graduate, Institute of Meat Packing, 1927. EA 201.
- CARL ALFRED DORF, Instructor in Chemistry (1931, 1935).
A. B., Bethany College, 1920; M. S., K. S. C., 1932. W 207.
- LYLE WAYNE DOWNEY, Associate Professor of Music and Director of the College Band and the College Orchestra (1928, 1935).
A. B., James Millikin University, 1923; B. Mus., American Conservatory, 1928; M. S., K. S. C., 1932. M 105.
- LESTER HENRY DRAYER, Chief Engineer, Heat and Power Department (1916, 1927). PP 105.

2. In coöperation with the Kansas State Highway Department.

- LILLIAN STRNAD DUNCAN, Head Hospital Nurse (1937,1938); resigned, Dec. 31, 1939.
R. N., Halstead Hospital, 1934. CH.
- MERRILL AUGUSTUS DURLAND, Professor of Machine Design (1919, 1928); Assistant Dean, Division of Engineering and Architecture (1926).
B. S., K. S. C., 1918; M. E., *ibid.*, 1922; M. S., *ibid.*, 1923. E 115.
- RALPH R. DYKSTRA, Dean of Division of Veterinary Medicine (1919); Professor of Surgery (1911, 1913).
D. V. M., Iowa State College, 1905. V 105.
- GENEVIEVE ELIZABETH DZIEGIEL, Graduate Assistant in Institutional Management (Sept. 1, 1940).
B. S., Cornell University, 1938. T 103.
- NINA EDELBLUTE, (Temporary) Assistant in Food Economics and Nutrition (Sept. 1, 1940).
B. S., K. S. C., 1931; M. S., *ibid.*, 1940. C 109B.
- DONALD JOHN EDGAR, Graduate Assistant in Chemistry (Sept. 1, 1940).
A. B., Sterling College, 1937. W 121.
- SAMUEL ALLEN EDGAR, Technician and Instructor in Zoölogy (1937, 1938).
A. B., Sterling College, 1937; M. S., K. S. C., 1939. F 105.
- ROBERT JOHN EGGERT, Assistant Professor of Agricultural Economics (1938).
B. S., University of Illinois, 1935; M. S., *ibid.*, 1936. W. Ag 301A.
- HAL FIELD EIER, Instructor in Agricultural Engineering, Division of College Extension (1934, 1935).
B. S., K. S. C., 1936. E 131.
- HELEN ELIZABETH ELCOCK, Associate Professor of English (1920, 1926).
A. B., College of Emporia, 1907; A. M., University of Chicago, 1921. A 202.
- CARL G. ELLING, Associate Professor of Animal Husbandry, Division of College Extension (1918, 1921).
B. S., K. S. C., 1904. EA 202C.
- MARY MYERS ELLIOTT, Instructor in Public Speaking (1929; Sept. 1, 1940).
A. B., University of Kansas, 1926; M. S., K. S. C., 1934. G 205A.
- VERA MAY ELLITHORPE, Instructor in Home Management, Division of College Extension (1939, Sept. 21, 1940).
B. S., K. S. C., 1935; M. S., *ibid.*, 1939. EA 101B.
- OTTO HERMAN ELMER, Associate Professor of Botany (1927, 1937).
B. S., Oregon Agricultural College, 1911; M. S., *ibid.*, 1916; Ph. D., Iowa State College, 1924. D 207.
- WALTER TITUS EMERY,³ Assistant Entomologist, Bureau of Entomology and Plant Quarantine, U.S.D.A.; Investigator of Staple Crop Insects (1934).
A. B., University of Kansas, 1911; A. M., *ibid.*, 1913. U. S. Lab., 1204 Fremont.
- JOHN FREDERICK EPPLER, Instructor in Applied Mechanics (Mar. 1, 1940).
B. S. in C. E., University of Wisconsin, 1937. E 135.
- ANDREW BRIAN ERHART, Assistant in Agronomy in charge of the Southwest Kansas Experiment Fields (1934, 1936).
B. S., K. S. C., 1933. Meade, Kan.
- FRED PAGE ESHBAUGH, Forest Nurseryman, Fort Hays Branch Agricultural Experiment Station (1934); resigned, May 20, 1940.
B. S., K. S. C., 1926; M. S., Purdue University, 1928. Hays, Kan.

3. In coöperation with the Kansas Agricultural Experiment Station.

LOUISE HELEN EVERHARDY, Associate Professor of Art (1919, 1920).

Graduate, New York School of Fine and Applied Art, 1916; B. S., Columbia University, 1925; A. M., *ibid.*, 1926. A 206A.

WILLIAM LAWRENCE FAITH, Professor and Head of Department of Chemical Engineering (1933, 1939).

B. S., University of Maryland, 1928; M. S., University of Illinois, 1929; Ph. D., *ibid.*, 1932. XX 105A.

HERMAN FARLEY, Associate Professor of Pathology (1929, 1938).

D. V. M., K. S. C., 1926; M. S., *ibid.*, 1934. V 211.

LUCY EMSLIE FARMAN, Housekeeper, College Hospital, Department of Student Health (1937).

B. S., K. S. C., 1912. CH.

FRANCIS DAVID FARRELL, President of the College (1918, 1925).

B. S., Utah Agricultural College, 1907; Agr. D., University of Nebraska, 1925. A 106.

MAE FARRIS, Instructor in Home Furnishings, Division of College Extension (1939).

B. S., Oklahoma Agricultural and Mechanical College, 1933; M. S., *ibid.*, 1936. EA 101B.

FRANK DAVID FAULKNER, (Temporary) Instructor in Mathematics (Sept. 1, 1940).

B. S., Kansas State Teachers College, Emporia, 1940. X 103.

JACOB OLIN FAULKNER, Professor of English (1922, 1927).

A. B., Washington and Lee University, 1907; A. M., Pennsylvania State College, 1920. K 212.

RALPH FREDERICK FEARN, Graduate Assistant in Mechanical Engineering (1939); on leave, Feb. 1, 1940 to May 31, 1940.

B. S., University of Illinois, 1938. E 104.

WALTER T. FEDERER,¹ Research Assistant in Agronomy, Agricultural Experiment Station (1939).

B. S., Colorado State College, 1939. E. Ag 302.

HURLEY FELLOWS,¹ Associate Pathologist, U.S.D.A.; Cereal Investigations, Agricultural Experiment Station (1925).

B. S., Oregon State College, 1920; M. S., University of Wisconsin, 1921; Ph. D., *ibid.*, 1923. D 2.

FREDERICK CHARLES FENTON, Professor and Head of Department of Agricultural Engineering (1928).

B. S., Iowa State College, 1914; M. S., *ibid.*, 1930. E 214.

JOHN MOSES FERGUSON, Instructor in Agricultural Engineering, Division of College Extension (1937).

B. S., K. S. C., 1934. E 131.

CHRIS HENRY FICKE,¹ Junior Pathologist, U.S.D.A.; Cereal Investigations, Agricultural Experiment Station (1930); resigned, Aug. 31, 1940.

B. S., Iowa State College, 1925; M. S., K. S. C., 1927. D 2.

GEORGE ALBERT FILINGER, Associate Professor of Pomology (1931, 1937); Assistant Pomologist, Agricultural Experiment Station (1931).

B. S., K. S. C., 1924; M. S., *ibid.*, 1925; Ph. D., Ohio State University, 1931. D 107.

KARL FREDERICK FINNEY,¹ Agent, Bureau of Plant Industry, U.S.D.A.; Baking Technologist, Agricultural Experiment Station (1938).

A. B., Kansas Wesleyan, 1935; B. S., K. S. C., 1936; M. S., *ibid.*, 1937. E. Ag 102.

1. In coöperation with the U. S. Department of Agriculture.

EMORY D. FISHER, Instructor in Chemistry (1935).

B. S., Dakota Wesleyan University, 1931; Ph. D., University of Wisconsin, 1935. W 309.

ESTHER MARGARET FLAGG, Graduate Assistant in Child Welfare and Euthenics (Sept. 1, 1940).

B. A., State College of Washington, 1940.

311 N. 14th.

BEATTY HOPE FLEENOR, Professor of Education, Department of Home Study, Division of College Extension (1923, 1927).

B. S., K. S. C., 1919; M. S., *ibid.*, 1923; Ph. D., University of Missouri, 1931. A 5A.

HAZEL MARIE FLETCHER, Assistant Professor of Clothing and Textiles (1937).

A. B., Indiana University, 1922; A. M., *ibid.*, 1927; Ph. D., *ibid.*, 1929.

C 203.

MARY GENEVIEVE FLETCHER, Assistant Professor of Foods and Nutrition, Division of College Extension (1936, 1939).

B. S., K. S. C., 1928; M. S., *ibid.*, 1934.

EA 101B.

ARTHUR ORAN FLINNER, Assistant Professor of Mechanical Engineering (1929, 1934).

B. S. in M. E., K. S. C., 1929; M. S., *ibid.*, 1933; S. M., Massachusetts Institute of Technology, 1937.

E 109.

EUSTACE VIVIAN FLOYD, Professor of Physics (1911, 1921).

B. S., Earlham College, 1903.

W 320A.

VERNON DANIEL FOLTZ, Assistant Professor of Bacteriology (1927, 1932); Food Bacteriologist, Agricultural Experiment Station (1937).

B. S., K. S. C., 1927; M. S., *ibid.*, 1929.

V 202.

KENNEY LEE FORD, Alumni Secretary (1928).

B. S., K. S. C., 1924; M. S., *ibid.*, 1932.

A 116.

HELEN GERTRUDE FORNEY, Instructor in Food Economics and Nutrition (1937)

A. B., Manchester College, 1927; A. M., Columbia University, 1936.

C 103.

SINA FAYE FOWLER, Instructor in Institutional Management (1935); resigned, June 30, 1940.

B. S., Northeast Missouri State Teachers College, 1927; M. S., K. S. C., 1933.

T 103.

DONALD B. FRANE, Assistant College Physician (1938); resigned, Aug. 31, 1940.

B. S., University of Minnesota, 1935; M. B., *ibid.*, 1937; M. D., *ibid.*, 1938.

A 209.

EDWARD RAYMOND FRANK, Professor of Surgery (1926, 1935).

B. S., K. S. C., 1918; D. V. M., *ibid.*, 1924; M. S., *ibid.*, 1929.

VH 202.

KARL C. FRANK, Capt., C. A. C., U. S. A.; Assistant Professor of Military Science and Tactics (1935); resigned, May 31, 1940.

Graduate, Battery Officers Course, Coast Artillery School, 1930.

N 102.

JUSTUS CARL FRANKENFELD,¹ Associate Entomologist, Agricultural Experiment Station (1939)

B. S., University of Illinois, 1925; M. S., *ibid.*, 1927.

U. S. Lab., 1204 Fremont.

FORREST FAYE FRAZIER, Professor of Civil Engineering (1911, 1922).

C. E., Ohio State University, 1910.

E 124.

JOHN CARROLL FRAZIER, Assistant Professor of Botany (1936, 1939).

A. B., DePauw University, 1925; A. M., University of Nebraska, 1926; Ph. D., University of Chicago, 1939.

D 103.

EDWIN JACOB FRICK, Professor of Medicine (1919, 1926); Head of Department of Surgery and Medicine (1935).

D. V. M., Cornell University, 1918.

VH 203.

1. In coöperation with the U. S. Department of Agriculture.

LYMAN FRICK, Graduate Research Assistant in Zoölogy, Agricultural Experiment Station (1938).

A. B., University of Kansas City, 1937.

F 112.

CHARLES ROBISON FRIED, Graduate Assistant in Chemistry (Sept. 1, 1940).

A. B., Hope College, 1940.

W 121.

ROY FRED FRITZ, Assistant Entomologist, Agricultural Experiment Station (1939).

B. S., K. S. C., 1937; M. S., *ibid.*, 1939.

Garden City, Kan.

HAROLD FRY, Instructor in Machine Design (Sept. 1, 1940).

B. S. in E. E., Colorado State College, 1937.

S 201A.

WESLEY LEONARD FRY, Professor of Physical Education (1934, 1935); resigned, June 30, 1940.

LL. B., State University of Iowa, 1926.

Stadium.

HOLLY CLAIR FRYER, Assistant Professor of Mathematics (Sept. 1, 1940).

B. S., University of Oregon, 1931; M. S., Oregon State College, 1933; Ph. D., Iowa State College, 1940.

X 118.

MANFORD W. FURR, Professor of Civil Engineering (1917, 1927).

B. S., Purdue University, 1913; C. E., *ibid.*, 1925; M. S., K. S. C., 1926.

E 122.

PERCY LEIGH GAINNEY, Professor of Bacteriology (1914, 1922); Soil Bacteriologist, Agricultural Experiment Station (1914).

B. Agr., North Carolina Agricultural and Mechanical College, 1908; M. S., *ibid.*, 1910; A. M., Washington University, 1911; Ph. D., *ibid.*, 1927.

V 101.

JACK JAMES HAMLIN GARDNER, Assistant Professor of Physical Education (1939).

B. S., University of Southern California, 1932.

N 109A.

ANNABEL ALEXANDER GARVEY, Assistant Professor of English (1920, 1927); on leave.

A. B., Wellesley College, 1912; A. M., University of Kansas, 1914.

FRANK CALEB GATES, Professor of Plant Taxonomy and Ecology (1919, 1928).

A. B., University of Illinois, 1910; Ph. D., University of Michigan, 1912.

D 301A.

STEPHEN ARNOLD GEAUQUE, Custodian Emeritus (1918, 1939).

OSCAR STRAND GELLEIN, Instructor in Economics (1939; July 1, 1940).

B. S., Southeastern Teachers College, 1932; M. S., Oklahoma Agricultural and Mechanical College, 1939.

W. Ag 206.

GEORGE ALBERT GEMMELL, Professor of Education, in charge of Department of Home Study, Division of College Extension (1918, 1922).

B. S., Kansas State Teachers College, Pittsburg, 1917; B. S., K. S. C., 1920; M. S., *ibid.*, 1922; Ph. D., University of Missouri, 1930.

A 5B.

KATHERINE GEYER, Assistant Professor of Physical Education for Women (1927, 1935).

Diploma, Sargent School of Boston University, 1925; B. S., Ohio State University, 1927; A. M., Columbia University, 1934.

N 3.

WILLIAM EVERETT GIBSON,² Engineer of Tests, Kansas State Highway Commission; Road Materials, Engineering Experiment Station (1930).

B. S., K. S. C., 1927; M. S., *ibid.*, 1933; C. E., *ibid.*, 1933.

E 17.

DORA LOIS GILMORE, Instructor in Clothing and Textiles (1939).

B. S., Kansas State Teachers College, Pittsburg, 1926; M. S., K. S. C., 1939.

C 201A.

2. In coöperation with the Kansas State Highway Department.

LESTER ODELL GILMORE, Associate Professor of Dairy Husbandry, Division of College Extension (1939).

B. S., University of Minnesota, 1932; M. S., K. S. C., 1933; Ph. D., University of Minnesota, 1939. EA 202C.

RANDOLPH FORNEY GINGRICH, Associate Professor of Engineering Drawing and Descriptive Geometry (1923, 1931); Assistant Superintendent of Maintenance (1933).

B. S. in C. E., University of Nebraska, 1923; M. S., K. S. C., 1929. S 203.

CLARENCE LEE GISH, Superintendent of Poultry Farm (1934).

B. S., K. S. C., 1934; M. S., *ibid.*, 1939. Poultry Farm, R. F. D. 1.

OTIS BENTON GLOVER, Assistant Professor of Agricultural Extension; District Supervisor, Division of College Extension (1929, 1934).

B. S., K. S. C., 1915. EA 101.

CHARLES M. GOOD, JR., Graduate Research Assistant in Zoölogy, Agricultural Experiment Station (1939).

B. S., K. S. C., 1939. Insectary.

GEORGE VERNON GOODING,¹ Graduate Research Assistant in Agronomy, Agricultural Experiment Station (June 1, 1940).

B. S., University of Nebraska, 1940. Plant Research Lab.

ARTHUR LEONARD GOODRICH, JR., Assistant Professor of Zoölogy (1929, 1938).

B. S., College of Idaho, 1928; M. S., University of Idaho, 1929; Ph. D., Cornell University, 1938. F 303.

FREDERICK JOHN GRADISHAR, Industrial Research Fellowship, Graduate Research Assistant in Chemical Engineering (Sept. 1, 1940).

B. Ch. E., University of Minnesota, 1940. XX 102.

STANLEY DOUGLAS GRALAK, JR., Instructor in Machine Design (1937); resigned, May 31, 1940.

B. S., University of Illinois, 1936; M. S., *ibid.*, 1937. S 201A.

CLARENCE OWEN GRANDFIELD,¹ Assistant Agronomist, U. S. D. A.; Forage Crops, Agricultural Experiment Station (1927, 1929).

B. S., K. S. C., 1917; M. S., *ibid.*, 1929. E. Ag 206B.

EDWARD GRANT, Instructor in Foundry (1913); Foreman of Foundry (1913).

S 115.

JOHN WILLARD GREENE, Assistant Professor of Chemical Engineering (1937).

B. S., University of Washington, 1926; M. S., Carnegie Institute of Technology, 1927; Ph. D., University of Pittsburg, 1930. XX 105B.

TOM GREER, Herdsman, Department of Animal Husbandry (1917).

WALDO ERNEST GRIMES, Professor and Head of Department of Economics and Sociology (1913, 1936).

B. S., K. S. C., 1913; Ph. D., University of Wisconsin, 1923. W. Ag 311A.

HAROLD T. GROSS, Assistant Physician, Department of Student Health (1939); resigned, May 31, 1940.

B. S., Northwestern University, 1934; M. B., *ibid.*, 1938; M. D., *ibid.*, 1939. A 215.

HILDA ROSE GROSSMANN, Assistant Professor of Voice (1927, 1932).

B. Mus., Chicago Musical College, 1925; B. S. in Music Ed., K. S. C., 1932; A. M., Stanford University, 1938. N 301B.

ALBERT WENDELL GRUNDMANN, Research Assistant in Entomology (1939).

B. A., University of Utah, 1937; M. A., *ibid.*, 1939. Vet. Research Lab.

1. In coöperation with the U. S. Department of Agriculture.

MYRTLE ANNICE GUNSELMAN, Associate Professor of Household Economics (1926, 1937).

B. S., K. S. C., 1919; A. M., University of Chicago, 1926. T 204.

PAUL N. GUSTAFSON, (Temporary) Instructor in Applied Mechanics (Sept. 1, 1940).

B. C. E., Ohio State University, 1940. E 14.

HERBERT FRANK HAAS, Graduate Assistant in Bacteriology (1939).

B. S., K. S. C., 1938. V 204.

EVERETT RAYMOND HALBROOK, Assistant Professor of Poultry Husbandry, Division of College Extension (1934).

B. S. in Agr., University of Missouri, 1930; M. S., University of California, 1936. EA 205.

JOSEPH LOWE HALL, Assistant Professor of Chemistry (1922, 1923); Meat Investigations, Agricultural Experiment Station (1937).

B. S., University of Illinois, 1919; M. S., *ibid.*, 1921; Ph. D., *ibid.*, 1922. W 205.

LAWRENCE FENER HALL,⁴ Assistant Professor of Vocational Education (1929, 1931).

B. S., K. S. C., 1923; M. S., *ibid.*, 1927. G 103B.

ALANSON LOLA HALLSTED,¹ Associate Agronomist, Division of Dry-land Agriculture, U.S.D.A.; in charge of Dry-land Agriculture Investigations, Fort Hays Branch Agricultural Experiment Station (1909).

B. S., K. S. C., 1903. Hays, Kan.

ALBERT R. HANKE, (Temporary) Assistant Chemist (1939; Feb. 1, 1940).

B. S., University of Illinois, 1933; M. S., *ibid.*, 1936; Ph. D., *ibid.*, 1939. W 31.

FLOYD JOSEPH HANNA, College Photographer (1922, 1930).

I.

EARL DAHL HANSING, Instructor in Botany (Feb. 1, 1940).

B. S., University of Minnesota, 1933; M. S., K. S. C., 1937. D 205.

JOHN WILLARD HANSON, Assistant Physician, Department of Student Health (Sept. 1, 1940).

B. A., University of Minnesota, 1930; M. D., *ibid.*, 1933. A 209.

MURVILLE JENNINGS HARBAUGH, Assistant Professor of Zoölogy (1929, 1930); on sabbatical leave, Sept. 1, 1940, to May 31, 1941.

A. B., University of Montana, 1926; A. M., *ibid.*, 1930. F 113.

LEONARD BEATH HARDEN, Instructor in Agricultural Economics, Division of College Extension (1928, 1939).

B. S., K. S. C., 1926. Holton, Kan.

MARY THERESA HARMAN, Professor of Zoölogy (1912, 1921).

A. B., Indiana University, 1907; A. M., *ibid.*, 1909; Ph. D., *ibid.*, 1912. F 115.

VIDA AGNES HARRIS, Assistant Professor of Art (1927, 1931).

B. S., K. S. C., 1914; A. M., University of Chicago, 1927. A 206A.

STELLA MAUDE HARRISS, Assistant Professor of Chemistry (1917, 1927).

Graduate, State Normal School, Peru, Neb., 1908; B. S., K. S. C., 1917; M. S., *ibid.*, 1919. W 213.

LAWRENCE WILLIAM HARTEL, Assistant Professor of Physics (1920).

A. B., Central Wesleyan College, 1911; B. S., *ibid.*, 1912; B. S. in Ed., University of Missouri, 1915; M. S., K. S. C., 1924. W 320.

1. In coöperation with the U. S. Department of Agriculture.

4. In coöperation with the State Board for Vocational Education.

RUTH HARTMAN, Assistant Professor of Music (1924).

Graduate in Public School Music, Iowa State Teachers College, 1912; Two-year Certificate, Northwestern University, 1923; B. S. in Mus. Ed., Teachers College, Columbia University, 1940. M 206.

E. LoVISA HASTINGS, Second Assistant to the Registrar (1927, 1928). A 105.

ALBERT WILLIAM HAWKINS, Instructor in Chemical Engineering (Sept. 28, 1940).

B. S. in Ch. E., University of Washington, 1935. XX 105B.

WARD HILLMAN HAYLETT, Associate Professor of Physical Education (1928, 1939).

A. B., Doane College, 1926. Stadium.

HERBERT HENLEY HAYMAKER, Professor of Plant Pathology (1917, 1927).

B. S., K. S. C., 1915; M. S., University of Wisconsin, 1916; Ph. D., *ibid.*, 1927. D 205.

HENRY MILES HEBERER, Associate Professor of Public Speaking (1925, 1930).

A. B., University of Illinois, 1922; A. M., Stanford University, 1938. G 201A.

J. ELDRED HEDRICK, Instructor in Chemical Engineering (1936).

B. A., Illinois College, 1931; M. S., State University of Iowa, 1932; Ph. D., *ibid.*, 1934. XX 105B.

LINN HELANDER, Professor and Head of Department of Mechanical Engineering (1935); Mechanical Engineer, Engineering Experiment Station (1935).

B. S. in M. E., University of Illinois, 1915. E 108.

JOHN FREDERICK HELM, JR., Professor of Freehand Drawing and Painting (1924, 1938).

B. D., Syracuse University, 1924. E 305.

JOHN VERN HEPLER,¹ Assistant Professor of Agricultural Extension; District Agricultural Agent, Division of College Extension (1921, 1930).

B. S., K. S. C., 1915. EA 101.

AGATHA HERMON, Nurse, Department of Student Health (Sept. 1, 1940).

R. N., Halstead Hospital, 1939. CH.

EARL HOWARD HERRICK, Associate Professor of Zoölogy (1935); Mammalogist, Agricultural Experiment Station (1935).

B. S., K. S. C., 1926; M. S., *ibid.*, 1927; Ph. D., Harvard University, 1929. F 5.

KATHERINE JANE HESS, Associate Professor of Clothing and Textiles (1925, 1931).

B. S., K. S. C., 1900; M. S., *ibid.*, 1926. C 203.

ELMER GEORGE HEYNE,¹ Junior Agronomist, U.S.D.A.; Plant Breeder, Agricultural Experiment Station (1936, 1938).

B. S., University of Nebraska, 1935; M. S., K. S. C., 1938. E. Ag 303.

ELIZABETH H. HICKMAN, Nurse, Department of Student Health (Sept. 1, 1940).

R. N., Christ's Hospital, 1938. CH.

JOHN CLIFFORD HIDE, Assistant Professor of Soils (1935, 1937).

B. Sc., University of Alberta, 1930; M. S., University of Minnesota, 1932; Ph. D., *ibid.*, 1935. E. Ag 207A.

HOWARD TEMPLETON HILL, Professor and Head of Department of Public Speaking (1920, 1922).

B. S., Iowa State College, 1910; J. D., University of Chicago, 1917. G 205B.

1. In coöperation with the U. S. Department of Agriculture.

RANDALL CONRAD HILL, Professor of Sociology (1929, 1935).

B. S., K. S. C., 1924; M. S., *ibid.*, 1927; Ph. D., University of Missouri, 1929.
W. Ag 307B.

RAYMONA MAYME HILTON, Assistant in Institutional Economics (1939).

B. S., University of Nebraska, 1937. T 201A.

LORA VALENTINE HILYARD, Instructor in Clothing and Textiles, Division of College Extension (1930, 1936).

B. S., K. S. C., 1930. EA 101B.

JULIAN ADAIR HODGES, Associate Professor of Agricultural Economics (1923, 1936).

B. S. in Agr., University of Kentucky, 1917; M. S., *ibid.*, 1923; Ph. D., Harvard University, 1938. W. Ag 309.

MARY ELIZABETH HOFF, Head of Documents Department, College Library (1928).

A. B., Friends University, 1925; B. S. in L. S., University of Illinois, 1928. L 101.

ALBERT SIDNEY HOLBERT, Graduate Research Assistant in Zoölogy (Sept. 1, 1940).

B. S., K. S. C., 1940. F 5.

MARY ECK HOLLAND, Instructor in Art (1938).

B. F. A., Ohio State University, 1937; M. A., *ibid.*, 1938. A 221B.

HILTON DELOS HOLLEMBEAK, Assistant in Coöperative Experiments (1936, 1937).

B. S., K. S. C., 1937. E. Ag 202A.

FLOYD ARTHUR HOLMES, Graduate Research Assistant in Entomology (June 1, 1940).

B. S., K. S. C., 1940. F 201.

THOMAS R. HOLMES, Maj., Inf., U. S. A.; Associate Professor of Military Science and Tactics (1938).

B. S., St. John's College, Annapolis, Md., 1917; Graduate, Infantry School, 1927. N 102.

INA EMMA HOLROYD, Assistant Professor of Mathematics (1900, 1929).

B. S., K. S. C., 1915; B. S., Kansas State Teachers College, Emporia, 1916; A. M., Columbia University, 1929. X 102.

EDWIN LEE HOLTON, Professor and Head of Department of Education (1910, 1913); Dean of Summer School (1910, 1918).

A. B., Indiana University, 1904; Ph. D., Columbia University, 1927. G 102B.

ADRIAN AUGUSTUS HOLTZ, Men's Adviser and Secretary of Young Men's Christian Association (1919); Associate Professor of Sociology (1929, 1935).

A. B., Colgate University, 1909; Ph. M., University of Chicago, 1910; B. D., *ibid.*, 1911; Ph. D., *ibid.*, 1914. A 118D.

ROBERT J. M. HORTON, Assistant Physician, Department of Student Health (Sept. 1, 1940).

A. B., Princeton University, 1934; M. D., Western Reserve University, 1938. A 216A.

ABRAM ELDRED HOSTETTER, Instructor in Chemistry (1930, 1934).

B. S., McPherson College, 1925; M. S., K. S. C., 1932; Ph. D., *ibid.*, 1938. W 304.

HELEN PANSY HOSTETTER, Associate Professor of Industrial Journalism (1932, 1937); on sabbatical leave, Sept. 11, 1940, to May 31, 1941.

A. B., University of Nebraska, 1917; M. S., Northwestern University, 1926; B. S., K. S. C., 1940. K 103B.

HAROLD HOWE, Professor of Agricultural Economics (1925, 1934).

B. S., K. S. C., 1922; M. S., University of Maryland, 1923; Ph. D., University of Wisconsin, 1937. W. Ag 307A.

HAZEL DELL HOWE, Instructor in Clothing and Textiles (1936).

B. S., K. S. C., 1921; M. S., *ibid.*, 1935.

C 201B.

LEO EVERETT HUDIBURG, Assistant Professor of Physics (1930).

B. S., Kansas State Teachers College, Pittsburg, 1923; M. S., K. S. C., 1930. W 38.

EUGENE HARVEY HUFFMAN, (Temporary) Instructor in Chemistry (Sept. 1, 1940).

A. B., University of Colorado, 1927; M. S., University of Washington, 1929; Ph. D., University of Illinois, 1937. W 310.

JOSIAH SIMSON HUGHES, Professor of Biochemistry (1910, 1920); in charge of Animal Nutrition, Agricultural Experiment Station (1937).

B. S., Ohio Wesleyan University, 1908; M. S., *ibid.*, 1909; A. M., Ohio State University, 1910; Ph. D., *ibid.*, 1917. W 106.

ORVILLE DON HUNT, Associate Professor of Electrical Engineering (1923, 1935).

B. S. in E. E., State College of Washington, 1923; M. S., K. S. C., 1930.

E 127.

MYRON WILLIAMS HUSBAND, College Physician and Head of Department of Student Health (1935).

A. B., University of Kansas, 1921; B. S., University of Minnesota, 1925; M. D., *ibid.*, 1928. A 208.

EMMA HYDE, Associate Professor of Mathematics (1920, 1926).

A. B., University of Kansas, 1912; A. M., University of Chicago, 1916.

X 108.

HEMAN LAURITZ IBSEN, Professor of Genetics (1919, 1924).

B. S., University of Wisconsin, 1912; M. S., *ibid.*, 1913; Ph. D., *ibid.*, 1916. E. Ag 15.

IVOR VICTOR ILES, Professor of History and Government (1911, 1920).

A. B., University of Kansas, 1905; A. M., *ibid.*, 1905.

F 207.

CLARENCE ROY JACCARD,¹ Assistant Professor of Agricultural Economics, Division of College Extension (1922, 1936).

B. S., K. S. C., 1926.

EA 301.

ELDEN VALORIUS JAMES, Professor of History and Government (1912, 1924).

A. B., Marietta College, 1901; A. B., University of Michigan, 1905; A. M., Marietta College, 1908. F 214.

WILLIAM CHARLES JANES, Assistant Professor of Mathematics (1922, 1926).

B. S., Northwestern University, 1919; A. M., University of Nebraska, 1922.

X 103.

ALICE CLAYPOOL JEFFERSON, Assistant Professor of Piano (1925, 1927).

Graduate, American Conservatory of Music, 1921; B. Mus., *ibid.*, 1929.

N 301D.

DOLF JESSE JENNINGS, (Temporary) Instructor in Zoölogy (1940; Sept. 1, 1940).

B. S., Ottawa University, 1932; B. A., *ibid.*, 1933; M. S., K. S. C., 1939.

F 113.

RICHARD ROSLYN JESSON, Assistant Professor of Music (1929, 1931).

B. Mus., Oberlin College, 1929.

M 204.

ERNEST D. JESSUP, 1st Lt., Inf. Res., U. S. A., Assistant Professor of Military Science and Tactics (Sept. 1, 1940).

B. S., K. S. C., 1937.

N 102.

EDGAR ABNER JOHNSON, Graduate Assistant in Horticulture (1939).

B. S., Colorado State College, 1939.

D 110A.

1. In coöperation with the U. S. Department of Agriculture.

- JOHN ALEXANDER JOHNSON, JR.,¹ Graduate Research Assistant in Milling Industry, Agricultural Experiment Station (Sept. 1, 1940).
B. S., North Dakota Agricultural College, 1940. E. Ag 101A.
- J. HAROLD JOHNSON, Instructor in Junior Extension; Assistant State Club Leader, Division of College Extension (1927, 1935).
B. S., K. S. C., 1927. A 111A.
- RICHARD CHARLES JOHNSON, Instructor in Forestry, Department of Horticulture (July 1, 1940); State Forester (July 23, 1940).
B. S., Michigan State College, 1937. D 110A.
- CHARLES OTIS JOHNSTON,¹ Associate Pathologist, U. S. D. A.; Cereal Investigations, Agricultural Experiment Station (1919).
B. S., K. S. C., 1918; M. S., *ibid.*, 1924. D 204.
- EDWARD C. JONES, Assistant Professor of Machine Tool Work (1916, 1920).
B. M. E., Iowa State College, 1905; M. E., *ibid.*, 1922; M. S., K. S. C., 1934. S 106.
- ELMER THOMAS JONES,¹ Assistant Entomologist, Bureau of Entomology and Plant Quarantine, U. S. D. A.; Investigator of Staple Crop Insects (1934).
B. S., University of Missouri, 1924; A. M., *ibid.*, 1925. U. S. Lab., 1204 Fremont.
- LOUIS MARK JORGENSEN, Associate Professor of Electrical Engineering (1925, 1935).
B. S., K. S. C., 1907; M. S., *ibid.*, 1930. E 127.
- ROBERT WILLIAM JUGENHEIMER,¹ Associate Agronomist, U. S. D. A.; in Charge of Corn Investigations, Agricultural Experiment Station (1938).
B. S., Iowa State College, 1934; M. S., *ibid.*, 1936; Ph. D., *ibid.*, 1940. E. Ag 301A.
- MARGARET M. JUSTIN, Dean of Division of Home Economics (1923).
B. S., K. S. C., 1909; B. S. in Educ., Teachers College, Columbia University, 1915; Ph. D., Yale University, 1923. C 104.
- ROSAMOND KEDZIE, Instructor in Art (1938).
B. S., Michigan State College, 1906; M. A., University of California, 1937. A 205.
- VIRGINIA VOIGT KEIM, Instructor in Child Welfare and Euthenics (1937, 1939); resigned, May 31, 1940.
B. S., University of Nebraska, 1937. 311 N. 14th.
- EDGAR TALBERT KEITH, Professor of Industrial Journalism and Printing (1912, 1925).
B. S., K. S. C., 1912. K 101.
- ERNEST BAKER KEITH, Professor of Chemistry (1918, 1938).
B. S., K. S. C., 1913; Ph. D., University of Chicago, 1924. W 308.
- LEONE BOWER KELL, Associate Professor of Child Welfare and Euthenics (1927, 1938).
B. S., K. S. C., 1923; M. S., *ibid.*, 1928. 311 N. 14th.
- EDWARD GUERRANT KELLY, Professor of Entomology, Division of College Extension (1918, 1922).
B. S., University of Kentucky, 1903; M. S., *ibid.*, 1904; Ph. D., Iowa State College, 1927. EA 202B.
- LENORE KENT, Instructor in Child Welfare and Euthenics (Sept. 1, 1940).
B. S., Oregon State College, 1926; M. S., Ohio University, 1940. 311 N. 14th.
- RUSSELL MARION KERCHNER, Professor of Electrical Engineering (1922, 1934).
B. S., University of Illinois, 1922; M. S., K. S. C., 1927. E 121.

1. In coöperation with the U. S. Department of Agriculture.

- ALICE DAY KIMBALL, Technician in Veterinary Pathology (1935).
B. S., K. S. C., 1935. V 209.
- MARY KIMBALL, First Assistant to the Registrar (1918).
B. S., K. S. C., 1907. A 105.
- HERBERT HIRAM KING, Professor and Head of Department of Chemistry (1906, 1918); Chemist, Agricultural Experiment Station (1918); Chemist, Engineering Experiment Station (1909, 1918).
A. B., Ewing College, 1904; A. M., *ibid.*, 1906; M. S., K. S. C., 1915; Ph. D., University of Chicago, 1918. W 112.
- EUNICE LEOLA KINGSLEY, Instructor in Botany (1929, 1935).
B. S., North Dakota Agricultural College, 1926; M. S., K. S. C., 1931. D 202.
- CHARLES HOWARD KITSELMAN, Professor of Pathology (1919, 1933).
V. M. D., University of Pennsylvania, 1918; M. S., K. S. C., 1927. V 211.
- ROYCE GERALD KLOEFFLER, Professor and Head of Department of Electrical Engineering (1916, 1927).
B. S. in E. E., University of Michigan, 1913; S. M., Massachusetts Institute of Technology, 1930. E 119.
- KATHLEEN KNITTLE, Assistant to the Dean of Women (1931).
B. S., K. S. C., 1923; M. A., Columbia University, 1938. A 118B.
- LESTER HENRY KOENITZER, Assistant Professor of Applied Mechanics (1929, 1934).
B. S., Iowa State College, 1926; M. S., *ibid.*, 1929; C. E., *ibid.*, 1930. E 14.
- JAMES MICHAEL KOEPPER, Graduate Assistant in Botany (1939).
B. A., DePauw University, 1939. D 207.
- HILLIER KRIEGHBAUM, Assistant Professor of Industrial Journalism (1938).
B. A., University of Wisconsin, 1926; M. S., Northwestern University, 1939. K 103C.
- BERNICE LYDIA KUNERTH, Assistant Professor of Food Economics and Nutrition (1932, 1939).
B. S., Iowa State College, 1932; M. S., K. S. C., 1933; Ph. D., Columbia University, 1940. C 107A.
- JOSEPH BENJAMIN KUSKA,¹ Associate Agronomist, Division of Dry-land Agriculture, U. S. D. A.; in charge of Dry-land Agriculture Investigations, Colby Branch Agricultural Experiment Station (1914).
B. S., University of Nebraska, 1913. Colby Branch Station, Colby, Kan.
- RAYMOND JOHN LADD, Instructor in Shop Practice (1938).
B. S., Iowa State College, 1933. S 209.
- RUSSELL LAMAN, Instructor in English (1935).
B. S., K. S. C., 1931; M. A., State University of Iowa, 1932. A 223.
- PAUL GRIFFITH LAMERSON, Assistant Entomologist, Agricultural Experiment Station (1932, 1936).
B. S., K. S. C., 1927; M. S., *ibid.*, 1931. Wathena, Kan.
- ROY CLINTON LANGFORD, Associate Professor of Psychology (1925, 1937).
B. S., K. S. C., 1925; M. S., *ibid.*, 1926; Ph. D., Stanford University, 1934. G 108.
- ELMER LARSON, Staff Sergt., D. E. M. L., U. S. A.; Instructor in Military Science and Tactics (1933). Stadium.
- MENDEL ELMER LASH, Assistant Professor of Chemistry (1929).
A. B., Ohio State University, 1920; M. S., *ibid.*, 1922; Ph. D., *ibid.*, 1928. W 308.

1. In coöperation with the U. S. Department of Agriculture.

- RALPH RICHARD LASHBROOK, Associate Professor of Industrial Journalism (1934, 1938).
B. S., K. S. C., 1929. K 206.
- EDNA A. LATSCHAR, Nurse, Department of Student Health (Jan. 1, 1940); resigned, July 5, 1940.
R. N., Hertzler Hospital, 1936. CH.
- ALPHA CORINNE LATZKE, Professor and Head of Department of Clothing and Textiles (1929, 1935).
B. S., K. S. C., 1919; M. S., *ibid.*, 1928. C 205.
- HILMER HENRY LAUDE,¹ Professor of Farm Crops (1920, 1931).
B. S., K. S. C., 1911; M. S., Texas Agricultural and Mechanical College, 1918; Ph. D., University of Chicago, 1936. E. Ag 208.
- ELDEN EMANUEL LEASURE, Professor of Physiology (1926, 1935).
D. V. M., K. S. C., 1923; M. S., *ibid.*, 1930. V 109.
- THOMAS DOYLE LETBETTER, Instructor in Accounting (1938).
B. B. A., University of Texas, 1933. W. Ag 206.
- CLARENCE FLAVIUS LEWIS, Associate Professor of Mathematics (1920, 1926).
A. B., University of Denver, 1913; M. S., K. S. C., 1925. X 104.
- LOUIS HENRY LIMPER, Professor of Modern Languages (1914, 1926).
A. B., Baldwin-Wallace College, 1907; A. M., University of Wisconsin, 1914; Ph. D., State University of Iowa, 1931. A 224.
- RUTH LINDQUIST, Professor and Head of Department of Household Economics (1938).
B. S., University of Minnesota, 1916; M. A., University of Chicago, 1922; Ph. D., University of North Carolina, 1931. C 216.
- WILLIAM LINDQUIST, Professor and Head of Department of Music (1925, 1927).
B. Mus., Cosmopolitan School of Music and Dramatic Art, Chicago, 1925. M 108.
- ELLEN LINDSTROM, Assistant Professor of Home Management, Division of College Extension (1937, 1939); resigned, Sept. 2, 1940.
B. S., University of Nebraska, 1928; M. S., K. S. C., 1937. EA 104.
- ROGER P. LINK, Instructor in Veterinary Physiology (1935).
D. V. M., Iowa State College, 1934; M. S., K. S. C., 1938. V 109.
- JAMES WALTON LINN, Associate Professor of Dairy Husbandry, Division of College Extension (1923, 1927).
B. S., K. S. C., 1915. EA 202C.
- SARAH JOSEPHINE LISTER, Instructor in Child Welfare and Euthenics (1937, 1938); resigned, May 31, 1940.
A. B., University of Kansas, 1937. 311 N. 14th.
- CHARLES HOWARD LOCKHART, (Temporary) Instructor in Zoölogy (Feb. 1, 1940).
B. S., K. S. C., 1934; M. S., *ibid.*, 1938. F 113.
- GLENN WESLEY LONG, (Temporary) Instructor in Economics and Sociology (1938).
A. B., Baker University, 1926; M. S., K. S. C., 1940. W. Ag 308.
- LISLE LESLIE LONGSDORF, Extension Editor and Radio Program Director, Division of College Extension (1927).
B. S., University of Wisconsin, 1925; M. S., *ibid.*, 1926. EA 306A.

1. In coöperation with the U. S. Department of Agriculture.

JOHN HALL LONNQUIST,¹ Graduate Research Assistant in Agronomy, Agricultural Experiment Station (July 1, 1940).

B. S., University of Nebraska, 1940.

E. Ag 302.

ALVIN ERNEST LOWE, Assistant in Agronomy, Garden City Branch Agricultural Experiment Station (1937).

B. S., K. S. C., 1933; M. S., *ibid.*, 1935.

Garden City, Kan.

JOHN WALLACE LUMB, Professor of Veterinary Medicine, Division of College Extension (1924, 1937).

D. V. M., K. S. C., 1910; M. S., *ibid.*, 1930.

EA 205.

GENEVIEVE LUNDVICK, Instructor in Clothing and Textiles (Sept. 1, 1940).

B. A., University of Iowa, 1936; M. A., University of Washington, 1940.

C 201A.

WILLIAM ALAN LUNSFORD,³ Graduate Research Assistant in Botany (July 1, 1935).

A. B., Miami University, 1940.

D 103.

DANIEL EMMETT LYNCH, Assistant Professor of Forging (1914, 1920); Foreman of Blacksmith Shop (1914).

S 111B.

ERIC ROSS LYON, Associate Professor of Physics (1921, 1928).

A. B., Phillips University, 1911; M. S., *ibid.*, 1923.

W 203.

JESSIE McDOWELL MACHIR, Registrar (1913).

A 105.

ALBERT JOHN MACK, Professor of Mechanical Engineering (1917, 1928).

B. S., K. S. C., 1912; M. E., *ibid.*, 1921.

E 109.

EUGENE JOSEPH MACKEY, Assistant Professor of Architecture (1937; Sept. 1, 1940).

B. Arch., Carnegie Institute of Technology, 1936; M. Arch., Massachusetts Institute of Technology, 1939.

E 223.

DAVID LESLIE MACKINTOSH, Associate Professor of Animal Husbandry (1921, 1935).

B. S., University of Minnesota, 1920; M. S., K. S. C., 1926.

E. Ag 1.

HOWARD SPENCER MACKIRDY, Lt.-Col., C. A. C., U. S. A.; Associate Professor of Military Science and Tactics (1939).

B. A., Wesleyan University, 1914.

N 102.

MELVIN MAGILOW, Industrial Research Fellowship, Graduate Research Assistant in Chemical Engineering (Sept. 1, 1940).

B. S., University of Illinois, 1940.

XX 3C.

RACHEL MARKWELL, Instructor and District Home Demonstration Agent Leader (1929, 1937); resigned, July 17, 1940.

B. S., Oklahoma Agricultural and Mechanical College, 1926; M. A., Columbia Teachers College, 1939.

EA 105.

HUBERT WHATLEY MARLOW, Assistant Professor of Chemistry (1925, 1932).

B. S., North Texas Teachers College, 1925; M. S., University of Chicago, 1928; Ph. D., *ibid.*, 1931.

W 207.

ALFRED MARSH, Instructor in Shop Practice (Sept. 30, 1940).

B. A., Maryville College, 1928; M. A., University of Alabama, 1929; Ph. D., University of Indiana, 1934.

S 105.

RACHEL MARTENS, Instructor in Home Furnishings, Division of College Extension (1936; Aug. 1, 1940).

B. S., K. S. C., 1936; M. S., *ibid.*, 1940.

EA 101B.

3. In coöperation with the Kansas Agricultural Experiment Station.

EDGAR MARTIN, (Temporary) Assistant Professor of Animal Husbandry (1939).
B. S., K. S. C., 1919; M. S., University of Wisconsin, 1925. E. Ag 15.

JAMES WILLIAM MARTIN, Instructor in Agricultural Engineering (Oct. 1, 1940).
B. S. in E. E., K. S. C., 1933; B. S. in Ag. E., *ibid.*, 1938; M. S., Iowa State College, 1939.
E 216.

MARLIN CLACK MARTIN, Maj., Inf., U. S. A.; Associate Professor of Military Science and Tactics (1939); resigned, May 31, 1940.
A. B., Henderson-Brown, 1913; Graduate, Infantry School, 1926; Graduate, Command and General Staff School, 1939. N 102.

MAX RULE MARTIN, Assistant Professor of Violin, Viola, and Reed Instruments (1929).
Graduate in Violin, William A. Bunzen; Graduate in Orchestra, Sander Harmati; Graduate in Musical Composition, R. Cuscaden; Advanced Study, Michael Press. N 301A.

WILLARD HUNGATE MARTIN, Professor of Dairy Husbandry (1925, 1928).
B. S., Purdue University, 1918; M. S., Pennsylvania State College, 1922. W. Ag 108D.

WILLMIMA PEARL MARTIN, Instructor in Home Health and Sanitation, Division of College Extension (1919).
R. N., Christ's Hospital, Topeka. EA 101B.

JAMES WARREN MATHER, Assistant Professor of Agricultural Economics, Division of College Extension (1936, 1939).
B. S., K. S. C., 1934; M. S., *ibid.*, 1936. EA 201.

CHARLES WALTON MATTHEWS, Professor of English (1920, 1925).
B. S., Kansas State Teachers College, Pittsburg, 1918; A. M., University of Chicago, 1923. K 204.

FRED WALTER MATTING, Instructor in Mechanical Engineering (1938).
B. S., University of California, 1937. E 104.

GEORGE WILLARD MAXWELL, Assistant Professor of Physics (1927, 1928).
A. M., University of Michigan, 1920. W 321.

NELLIE MAY, Postmistress (1911). A 120.

LORRAINE MAYTUM, Assistant Professor of Physical Education for Women (1931, 1935).
B. S., University of Wisconsin, 1926; M. S., *ibid.*, 1939. N 1.

MARJORIE SELLERS McCALL, Graduate Assistant in Institutional Management (1939); resigned, July 31, 1940.
B. S., K. S. C., 1937. T 201A.

THOMAS MARK McCALLA, Instructor in Bacteriology (1937).
B. S., Mississippi State College, 1934; M. A., University of Missouri, 1935; Ph. D., *ibid.*, 1937. V 103.

CHARLES WILBUR McCAMPBELL, Professor and Head of Department of Animal Husbandry (1910, 1918); Animal Husbandman, Agricultural Experiment Station (1910, 1918).
B. S., K. S. C., 1906; D. V. M., *ibid.*, 1910; B. S. in Agr., *ibid.*, 1918. E. Ag 8C.

GEORGE REEVES McCaulley, Assistant Professor of Structural Design (1937).
B. S. in Arch. E., Massachusetts Institute of Technology, 1934; M. S., *ibid.*, 1936. E 223.

MAX ELTON McCluggage,¹ Agent, Bureau of Plant Industry, U. S. D. A.; Milling Technologist, Agricultural Experiment Station (1937).
B. S., K. S. C., 1935; M. S., *ibid.*, 1940. E. Ag 102.

1. In coöperation with the U. S. Department of Agriculture.

- STERLING McCOLLUM, Instructor in Shop Practice (1930). S 106.
- FRANK JAMES McCORMICK, Assistant Professor of Applied Mechanics (1939; Sept. 1, 1940).
B. S., Iowa State College, 1927; M. S., *ibid.*, 1931. E 135.
- JOHN HENRY McCoy, Instructor in Agricultural Economics (July 1, 1940).
B. S., K. S. C., 1940. W. Ag 310.
- ELIZABETH McCracken, Instructor in Botany (1938, 1939).
B. A., Wellesley College, 1929; M. A., *ibid.*, 1932; Ph. D., University of California, 1937 D 202.
- CLIFFORD DALE McDONALD, Sergt., D. E. M. L., U. S. A.; Instructor in Military Science and Tactics (1933). N 102.
- MAYNARD LEE McDOWELL, Instructor in Chemistry (1926).
A. B., Central College, 1924; A. M., University of Missouri, 1926; Ph. D., State University of Iowa, 1934. W 309.
- CARL FISH McKINNEY, Col., Inf., U. S. A.; Professor and Head of Department of Military Science and Tactics (1939).
B. S., U. S. M. A., 1911; Graduate, Infantry School, 1921; Graduate, Command and General Staff School, 1923; Graduate, Army War College, 1926. N 102.
- FLORENCE ELIZABETH McKINNEY, Assistant Professor of Household Economics (1937).
B. S., K. S. C., 1934; M. S., Iowa State College, 1937. C 216.
- WILLIAM MAX McLEOD, Professor of Anatomy and Physiology (1919, 1933).
D. V. M., Iowa State College, 1917. V 108.
- EVA MYRTLE McMILLAN, Associate Professor of Food Economics and Nutrition (1930, 1939); Assistant Dean of Division of Home Economics (1937).
Ph. B., University of Chicago, 1918; M. S., *ibid.*, 1929. C 113.
- JAMES HOWARD McMILLEN, Professor of Physics (1937, 1939).
A. B., Oberlin College, 1926; M. S., Washington University, 1928; Ph. D., *ibid.*, 1930. W 224.
- JOHN D. McNEAL, Graduate Assistant in Geology (Sept. 1, 1940).
B. S., K. S. C., 1940. F 3.
- HENRY JOHN MEENEN, Instructor in Agricultural Economics (Sept. 1, 1940).
B. S., K. S. C., 1940. W. Ag 309.
- ELLA JANE MEILLER, Instructor in Food Economics and Nutrition (1937).
B. S., K. S. C., 1932; M. S., University of Wisconsin, 1937. C 103.
- RAYMOND LAMAR MEISENHEIMER, Radio Operator, Division of College Extension (1937). EA 306B.
- LEO EDWARD MELCHERS, Professor and Head of Department of Botany and Plant Pathology (1913, 1919); Plant Pathologist, Agricultural Experiment Station (1913).
B. S., Ohio State University, 1912; M. S., *ibid.*, 1913. D 208.
- ALICE MAUDE MELTON, Assistant to the Dean, Division of General Science (1900, 1919).
B. S., K. S. C., 1898. A 122.
- JOSEPH FARRINGTON MERRILL, Assistant Chemist, Agricultural Experiment Station (1921).
B. S., University of Maine, 1907. W 31.
- DARREL SEYMOUR METCALFE, Graduate Research Assistant in Agronomy (July 1, 1940).
B. S., University of Wisconsin, 1940. Plant Research Lab.

- WILLIAM HAROLD METZGER, Associate Professor of Soils (1932, 1935).
B. S., Purdue University, 1922; M. S., K. S. C., 1927; Ph. D., Ohio State University, 1931. E. Ag 207A.
- BERNADINE HELEN MEYER, Instructor in Food Economics and Nutrition (1936).
B. S. in Ed., University of Illinois, 1933; M. S., *ibid.*, 1936. C 107B.
- EDWIN CYRUS MILLER, Professor of Plant Physiology (1910, 1919).
A. B., Lebanon College, 1906; A. B., Yale University, 1907; Ph. D., *ibid.*, 1910. D 102.
- JOHN ORVILLE MILLER, Instructor in Plant Pathology, Division of College Extension (1935, 1936).
B. S., K. S. C., 1934. EA 202B.
- KENNETH WILLIAM MILLER,¹ Research Assistant in Agricultural Economics, Agricultural Experiment Station (1936, 1937).
B. S., K. S. C., 1936; M. S., *ibid.*, 1940. W. Ag 308.
- LEONARD FRED MILLER, Instructor in Agricultural Economics (1936); resigned, June 30, 1940.
B. S., K. S. C., 1936; M. S., *ibid.*, 1938.
- MERNA BEATRICE MILLER,³ Instructor in Institutional Management (1939; Sept. 1, 1940).
B. S., K. S. C., 1932. T 102.
- PHAYEE MIZELL,⁴ Assistant in Education (Sept. 1, 1940).
B. S., Oklahoma Agricultural and Mechanical College, 1930. T 201.
- CLIFFORD MERRILL MOELLER, Instructor in Civil Engineering (1939).
B. S., University of Nebraska, 1936. E 220.
- MAURICE CHARLES MOGGIE, Assistant Professor of Education (1933, 1937); on sabbatical leave, Sept. 1, 1940, to May 31, 1941.
B. S., K. S. C., 1929; M. S., *ibid.*, 1931. G 102A.
- CONRAD STEPHEN MOLL, Assistant Professor of Physical Education for Men (1929, 1937).
Graduate, Concordia College, Fort Wayne, Ind., 1918; B. P. E., George Williams College, 1925; M. S., K. S. C., 1933. N 107.
- GEORGE MONTGOMERY, Associate Professor of Agricultural Economics (1925, 1938).
B. S., K. S. C., 1925; M. S., *ibid.*, 1927. W. Ag 301C.
- RUTH MONTGOMERY-SHORT, Assistant College Physician (1938).
B. S., Washburn College, 1932; M. D., University of Kansas, 1937. A 210.
- FRITZ MOORE, Professor and Head of Department of Modern Languages (1934).
B. A., University of Akron, 1927; M. A., University of Illinois, 1930; Ph. D., *ibid.*, 1932. A 225.
- GEORGE RUSSELL MOORE, Instructor in Surgery and Medicine (1938).
A. B., Central Michigan State Teachers College, 1928; D. V. M., Michigan State College, 1938. VH 203.
- HELEN MOORE, Dean of Women (July 1, 1940).
A. B., University of Kansas, 1917; M. A., Columbia University, 1928. A 118B.
- LEO ALBERT MOORE, Instructor in Shop Practice (1935, 1937).
B. S., K. S. C., 1925; M. S., *ibid.*, 1940. S 101A.

1. In coöperation with the U. S. Department of Agriculture.

3. In coöperation with the Kansas Agricultural Experiment Station.

4. In coöperation with the State Board for Vocational Education.

MARIA MORRIS, Assistant Professor of Art (1925, 1932).

B. S., K. S. C., 1911; Graduate, New York School of Fine and Applied Art, 1924; M. S., K. S. C., 1927. A 205.

RAYMOND WILLIAM MORRISON, Graduate Assistant in Dairy Husbandry (Sept. 1, 1940).

B. S., Iowa State College, 1940.

W. Ag 106.

REED FRANKLIN MORSE, Assistant Professor of Civil Engineering (1929, 1934); on leave 1940-1941.

A. B., Cornell College, 1921; B. S., Iowa State College, 1923; M. S., K. S. C., 1933. E 220.

THIRZA ADALINE MOSSMAN, Assistant Professor of Mathematics (1922, 1926).

A. B., University of Nebraska, 1916; A. M., University of Chicago, 1922. X 102.

BETH LOUISE MOTTER, Secretary to Dean of Agriculture (1923). E. Ag 106.

JEPHTHA JERRY MOXLEY, Assistant Professor of Animal Husbandry, Division of College Extension (1925, 1927).

B. S., K. S. C., 1922.

EA 202C.

CLYDE WILLIAM MULLEN, Associate Professor of Agronomy; Assistant to the Dean, Division of Agriculture; Assistant to the Director, Agricultural Experiment Station (1937).

B. S., Oklahoma Agricultural and Mechanical College, 1915; M. S., K. S. C., 1917. E. Ag 105.

IVA MANILLA MULLEN, Instructor in Food Economics and Nutrition (1936, 1937).

B. S., K. S. C., 1925; M. S., Iowa State College, 1928.

C 7.

ANNA NEAL MULLER, Assistant Cataloguer, College Library (1929, 1938).

B. S., K. S. C., 1921; B. S. in L. S., University of Illinois, 1937.

L 202.

HAROLD HAWLEY MUNGER, Industrial Research Fellowship, Research Assistant in Applied Mechanics, Engineering Experiment Station (1939; July 1, 1940).

B. S., K. S. C., 1939.

E 112.

DONALD FARNHAM MUNRO, Associate Professor of Modern Languages (Sept. 1, 1940).

B. S., Acadia University, 1926; M. A., *ibid.*, 1927; Ph. D., University of Illinois, 1933. A 225.

GEORGE COLIN MUNRO, Associate Professor of Mathematics (1937; Sept. 1, 1940).

B. S., Acadia University, 1927; Ph. D., University of Michigan, 1930.

X 104.

ERMA MARTZ MURRAY, Secretary of the Young Women's Christian Association (1939).

A. B., Washburn College, 1937.

A 112.

FRANK LEWIS MYERS, Assistant to the Director of Athletics (1926).

B. Mus., K. S. C., 1925.

N 110.

GLADYS MYERS, Instructor in Home Management, Division of College Extension (1930, 1939).

B. S., K. S. C., 1929; M. S., Cornell University, 1939.

EA 101B.

HAROLD EDWIN MYERS, Associate Professor of Soils (1929, 1937).

B. S., K. S. C., 1928; M. S., University of Illinois, 1929; Ph. D., University of Missouri, 1937. E. Ag 207A.

ROBERT KIRKLAND NABOURS, Professor and Head of Department of Zoölogy (1910, 1913); Zoölogist, Agricultural Experiment Station (1910, 1913); Curator of Natural History Museum (1910).

Ed. B., University of Chicago, 1905; Ph. D., *ibid.*, 1911.

F 104.

ARTHUR LESLIE NEAL, Instructor in Chemistry (1937); on leave, Sept. 1, 1940, to Jan. 31, 1941.

B. S., Monmouth College, 1934; M. S., University of Illinois, 1935. W 212.

LEONARD FAY NEFF, District Supervisor, Division of College Extension (1939).

B. S., Purdue University, 1922. EA 101.

CARL LEROY NELSON, Assistant Professor of Economics (1935); resigned, Aug. 31, 1940.

B. B. A., University of Minnesota, 1931. W. Ag 307B.

FRANK EUGENE NELSON, Assistant Professor of Bacteriology (1937); Dairy Bacteriologist, Agricultural Experiment Station (1937).

B. S., University of Minnesota, 1932; M. S., *ibid.*, 1934; Ph. D., Iowa State College, 1936. V 103A.

MARGARET ALICE NEWCOMB, Assistant Professor of Botany (1925, 1935).

B. S., K. S. C., 1925; M. S., *ibid.*, 1927. D 202.

SAMUEL ALBERT NOCK, Vice-President of the College (1936).

B. A., Haverford College, 1921; M. A., Carleton College, 1927; Ph. D., University of Tartu (Estonia), 1929. A 121.

ELVA LAVINA NORRIS,⁵ Seed Analyst, Department of Agronomy (1938).

A. B., Nebraska Wesleyan University, 1915; A. M., University of Wisconsin, 1924; Ph. D., University of Nebraska, 1938. E. Ag 307A.

PAULINE NUTTER, Assistant Professor of Food Economics and Nutrition (1938).

B. S., Nebraska State Teachers College, 1932; M. S., University of Arizona, 1934; Ph. D., University of Rochester, 1938. C 108A.

EUGENE F. OAKBERG, Graduate Assistant in Zoölogy (Sept. 1, 1940).

B. S., Monmouth College, 1940. F 112.

FLORENCE JAMES OFELT, Assistant Professor of Institutional Management; Director of Food Services (1934, 1939); resigned, Aug. 31, 1940.

B. S., K. S. C., 1931; M. A., Mills College, 1932. T 102.

ALLEN LESLIE OLSEN, Instructor in Chemistry (1935).

B. A., St. Olaf College, 1929; M. S., University of Nebraska, 1931; Ph. D., *ibid.*, 1934. W 310.

RAYMOND AUGUST OLSON, Graduate Assistant in Chemistry (Sept. 1, 1940).

B. S., Bethany College, 1940. W 121.

CHARLES K. OTIS, Instructor in Agricultural Engineering (1936).

B. S. in Agr., University of Wisconsin, 1932; B. S. in M. E., *ibid.*, 1933. E 217.

MERTON LOUIS OTTO, Instructor in Agricultural Economics, Agricultural Experiment Station (1934, 1939).

B. S., K. S. C., 1921. W. Ag 310.

CLARICE MARIE PAINTER, Assistant Professor of Piano (1924).

Diploma in Piano, Hardin College, 1919; Diploma, New England Conservatory of Music, 1932. M 201.

REGINALD HENRY PAINTER, Associate Professor of Entomology, Associate Entomologist, Agricultural Experiment Station (1926, 1930).

A. B., University of Texas, 1922; A. M., *ibid.*, 1924; Ph. D., Ohio State University, 1926. F 302.

EUNICE ANDERSON PARDEE, Assistant Professor and District Home Demonstration Agent Leader, Division of College Extension (1937, 1939); resigned, Aug. 17, 1940.

B. S., Michigan State College, 1929; M. S., *ibid.*, 1936. EA 105.

5. In coöperation with the Kansas State Board of Agriculture.

HARRIET SHIPLEY PARKER, Assistant Professor of English (1924, 1927).

A. B., University of Kansas, 1909; A. M., Washington University, 1912.

A 203.

RALPH LANGLEY PARKER, Professor of Apiculture and Entomology (1925, 1930); State Apiarist (1925); Associate Entomologist, Agricultural Experiment Station (1925, 1930).

B. S., Rhode Island State College, 1915; Sc. M., Brown University, 1917; M. S., Iowa State College, 1922; Ph. D., Cornell University, 1925.

F 304C.

FRED LOUIS PARRISH, Professor of History and Government (1927, 1935).

A. B., Northwestern University, 1917; B. D., Garrett Biblical Institute, 1920; A. M., Northwestern University, 1922; Ph. D., Yale University, 1938.

F 211.

FRANKLIN LEONARD PARSONS, Assistant Professor of Agricultural Economics (1935).

B. S., K. S. C., 1932; M. S., *ibid.*, 1934.

W. Ag 301B.

BUEL ROREX PATTERSON, Instructor in Physical Education (1933, 1937).

B. S., Oklahoma Agricultural and Mechanical College, 1934.

N 109A.

JOHN KENNETH PATTERSON,¹ Graduate Research Assistant in Agronomy, Agricultural Experiment Station (June 1, 1940).

B. S., University of Nebraska, 1940.

W 121.

FLOYD PATTISON, Professor of Mechanical Engineering, Department of Home Study, Division of College Extension (1919, 1927).

B. S., K. S. C., 1912; M. S., Massachusetts Institute of Technology, 1929.

A 5C.

GEORGE RICHARD PAULING, Superintendent of Maintenance (1913, 1925).

PP 103.

LOYAL FREDERICK PAYNE, Professor and Head of Department of Poultry Husbandry (1921, 1922); Poultry Husbandman, Agricultural Experiment Station (1921, 1922).

B. S., Oklahoma Agricultural and Mechanical College, 1912; M. S., K. S. C., 1925.

W. Ag 207.

CLINTON ELLICOTT PEARCE, Professor and Head of Department of Machine Design (1917, 1922); Director of Civilian Pilot Training (1939).

S. B., Massachusetts Institute of Technology, 1913; M. S., Cornell University, 1937.

E 208.

FREDERICK ADAMS PEERY, Instructor in English (1935).

B. S., K. S. C., 1933; M. S., *ibid.*, 1936.

A 223.

THERESA PELTIER, Nurse, Department of Student Health (1938).

R. N., Kansas City General Hospital, Kansas City, Missouri, 1937.

CH.

MARION HERFORT PELTON, Assistant Professor of Piano (1928, 1931).

B. Mus., University of Wisconsin, 1927; B. S., K. S. C., 1932; Graduate Study, Brussels Conservatory of Music, 1935.

N 301E.

ROYCE OWEN PENCE, Associate Professor of Milling Industry (1927, 1939).

B. S. in F. M. E., K. S. C., 1924; M. S., *ibid.*, 1930; F. M. E., *ibid.*, 1935.

E. Ag 101.

HENRY JAMES PEPPLER, Instructor in Bacteriology (1939).

B. S., University of Wisconsin, 1936; M. S., *ibid.*, 1937; Ph. D., *ibid.*, 1939.

V 103.

ALFRED THOMAS PERKINS, Professor of Chemistry (1925, 1938); Soil Chemist, Agricultural Experiment Station (1937).

B. S., Pennsylvania State College, 1920; M. S., Rutgers College, 1922; Ph. D., *ibid.*, 1923.

W 11.

1. In coöperation with the U. S. Department of Agriculture.

MILFRED JOHN PETERS, 1st Lieut. Inf., Res., U. S. A.; Assistant Professor of Military Science and Tactics (1935; Sept. 1, 1940).

B. S., K. S. C., 1934.

N 102.

EARL HERMAN PETERSON, Associate Professor of English (1939; Sept. 1, 1940).

A. B., University of Colorado, 1923; M. A., State College of Washington, 1928; Ph. D., University of Illinois, 1940.

S 205.

JOHN CHRISTIAN PETERSON, Professor of Psychology (1917, 1926).

A. B., University of Utah, 1913; Ph. D., University of Chicago, 1917.

G 104.

WALTER JOHN PETERSON, Assistant Professor of Chemistry (1935, 1939). Assistant Chemist in Animal Nutrition, Agricultural Experiment Station (1936).

B. S., Michigan State College, 1930; M. S., *ibid.*, 1933; Ph. D., State University of Iowa, 1935.

W 33.

DOROTHY BRADFORD PETTIS, Associate Professor of Modern Languages (1927, 1938).

A. B., University of Nebraska, 1919; A. M., *ibid.*, 1924; Diploma, Sorbonne of University of Paris, 1930; Diploma, Institut de Phonétique of University of Paris, 1939.

A 229.

HAZEL ELIZABETH TAYLOR PFUETZE, Secretary, Department of Education (1925).

G 102.

LUCILE PHILLIPS, Head Nurse, Department of Student Health (1938; Jan. 1, 1940).

R. N., Kansas City General Hospital, Kansas City, Missouri, 1938.

CH.

GERALD PICKETT, Associate Professor of Applied Mechanics (1929, 1938); resigned, Feb. 29, 1940.

B. S., Oklahoma Agricultural and Mechanical College, 1927; M. S., K. S. C., 1931; Ph. D., University of Michigan, 1938.

E 113.

WILLIAM FRANCIS PICKETT, Professor and Head of Department of Horticulture (1917, 1938); Horticulturist, Agricultural Experiment Station (1938).

B. S., K. S. C., 1917; M. S., *ibid.*, 1923; Ph. D., Michigan State College, 1935.

D 109.

WILFRED HAROLD PINE, Assistant Professor of Agricultural Economics (1934, 1938).

B. S., K. S. C., 1934; M. S., *ibid.*, 1938.

W. Ag 309.

CLARENCE ANDREW PIPPIN, Instructor in Mechanical Engineering (1937).

B. S., University of Illinois, 1936.

E 105.

MARTHA S. PITTMAN, Professor and Head of Department of Food Economics and Nutrition (1919, 1922).

B. S., K. S. C., 1906; B. S., Columbia University, 1916; A. M., *ibid.*, 1918; Ph. D., University of Chicago, 1930.

C 114.

CLARE ROBERT PORTER, Assistant in Agronomy, South Central Kansas Experiment Fields (1937, 1938).

B. S., K. S. C., 1937.

Goddard, Kan.

CLARENCE OSBORN PRICE, Assistant to the President (1920).

A 106.

RALPH RAY PRICE, Professor and Head of Department of History and Government (1903).

A. B., Baker University, 1896; A. M., University of Kansas, 1898.

F 206.

WILLIAM JOSEPH PROMERSBERGER, Graduate Research Assistant in Agricultural Engineering (Sept. 1, 1940).

B. Ag. E., University of Minnesota, 1935.

E 217.

LEON REED QUINLAN, Professor of Horticulture (1927, 1931).

B. S., Colorado Agricultural College, 1920; M. L. A., Harvard University, 1925.

D 8.

- GEORGE ELLSWORTH RABURN, Professor of Physics, Emeritus (1910; Sept. 1, 1940).
A. B., University of Michigan, 1907; M. S., *ibid.*, 1913. W 103.
- MARGARET ELIZABETH RAFFINGTON, Assistant Professor of Child Welfare and Euthenics (1938); Assistant to the Dean of the Division of Home Economics (1939).
B. S., K. S. C., 1924; M. S., *ibid.*, 1928. C 112.
- GEORGE NATHAN REED, Instructor in Chemistry (1929).
B. S., Oklahoma Agricultural and Mechanical College, 1922; M. S., University of Oklahoma, 1924; Ph. D., K. S. C., 1938. W 211.
- LAWRENCE REED, Assistant to the Superintendent, Fort Hays Branch Agricultural Experiment Station (1934).
B. S., K. S. C., 1933. Hays, Kan.
- ROGER ELI REGNIER, Instructor in Junior Extension; Assistant State Club Leader, Division of College Extension (1934, 1937).
B. S., K. S. C., 1924; M. S., *ibid.*, 1932. A 111A.
- WILLARD MALCOLM REID, Graduate Research Assistant in Zoölogy (July 1, 1940).
B. S., Monmouth College, 1932; M. S., K. S. C., 1937. F 112.
- LOUIS POWERS REITZ, Associate Professor of Agronomy (1939).
B. S., K. S. C., 1930; M. S., University of Nebraska, 1937. E. Ag 304C.
- BENJAMIN LUCE REMICK, Professor of Mathematics (1900); Head of Department of Mathematics, 1900-1937.
Ph. B., Cornell College, 1889; Ph. M., *ibid.*, 1892. X 108.
- NINA MARY RHOADES, Social Director, Van Zile Hall (1926). VZ.
- ADA RICE, Professor of English (1899, 1927).
B. S., K. S. C., 1895; M. S., *ibid.*, 1912. A 202.
- JULES HENRY ROBERT, Professor of Applied Mechanics and Hydraulics (1916, 1925).
B. S., University of Illinois, 1914. E 112.
- JUNE ROBERTS, Instructor in Agricultural Engineering (1934, 1935); resigned, Sept. 30, 1940.
B. S., K. S. C., 1933; M. S., *ibid.*, 1934. E 216.
- MARY EILLEN ROBERTS, Documents Cataloguer, College Library (1938).
B. S., K. S. C., 1930; B. S. in L. S., University of Illinois, 1938. L 101.
- STEPHEN J. ROBERTS, Instructor in Surgery and Medicine (1938).
D. V. M., Cornell University, 1938. VH 202.
- VIRGINIA M. ROBERTSON, Secretary, Department of Student Health (1937).
A 216.
- MOTT LUTHER ROBINSON,¹ Assistant Professor of Agricultural Economics, Division of College Extension (1923, 1939).
B. S., K. S. C., 1923; M. S., *ibid.*, 1938. EA 301.
- NOBLE WARREN ROCKEY, Professor of English (1921).
A. B., Ohio State University, 1905; A. M., *ibid.*, 1916. K 202.
- JANE ROCKWELL, (Temporary) Instructor in Industrial Journalism (Sept. 11, 1940).
A. B., Florida State College for Women, 1930. K 103B.

1. In coöperation with the U. S. Department of Agriculture.

LEE MILES RODERICK, Professor and Head of Department of Pathology (1938).
D. V. M., Ohio State University, 1915; M. S., North Dakota State College, 1922; Ph. D., University of Chicago, 1926. V 210.

ALBERT G. ROODE, Assistant Physician, Department of Student Health (Sept. 1, 1940).
B. S., Muskingum College, 1935; M. D., Western Reserve University, 1939. A 215.

GERTRUDE ROSKIE, Instructor in Vocational Homemaking (1939).
B. S., South Dakota State College of Agriculture and Mechanic Arts, 1929; M. S., Colorado State College of Agriculture and Mechanic Arts, 1938. G 106.

KATHARINE ROY, Professor and Head of Department of Child Welfare and Euthenics (1939).
B. S., Columbia Teachers College, 1927; M. S., *ibid.*, 1932; Ph. D., Cornell University, 1939. C 213.

LUCILE OSBORN RUST, Professor of Home Economics Education (1924, 1929).
B. S., Kansas State Teachers College, Pittsburg, 1921; M. S., K. S. C., 1925. G 103A.

ADELBERT BOWER SAGESER, Associate Professor of History and Government (1938, 1939).
A. B., State Teachers College, Wayne, Neb., 1925; M. A., University of Nebraska, 1930; Ph. D., *ibid.*, 1934. F 209.

HELEN G. SAUM, Professor of Physical Education for Women (1928, 1931).
Diploma, Battle Creek School for Physical Education, 1919; B. S. in Ed., Ohio State University, 1927; M. A., Columbia University, 1935. N 3.

EDWIN EUGENE SAUNDERS, Graduate Assistant in Horticulture (1939).
B. S., University of Missouri, 1939. D 10.

EDWIN DONALD SAYRE, Associate Professor of Voice (1925, 1934).
A. B., DePauw University, 1923; B. Mus., School of Music, *ibid.*, 1925; A. M., Columbia University, 1931. N 301C.

JESSE MCKINLEY SCHALL, Associate Professor of English, Department of Home Study, Division of College Extension (1930, 1937).
A. B., Southeast Missouri State Teachers College, 1927; A. M., University of Missouri, 1930. A 5A.

JEAN WILLARD SCHEEL, Extension Editor, Division of College Extension (1934, 1939).
B. S., K. S. C., 1934. EA 306B.

CHARLES HENRY SCHOLER,² Professor and Head of Department of Applied Mechanics (1920, 1922); Materials Testing Engineer, Engineering Experiment Station (1920).
B. S., K. S. C., 1914. E 111.

WILLIAM GEORGE SCHRENK, Instructor in Chemistry (1938).
A. B., Western Union College, 1932; M. S., K. S. C., 1936. W 20.

LUKE M. SCHRUBEN, Assistant Professor of Agricultural Economics, Division of College Extension (1933; July 1, 1940).
B. S., K. S. C., 1933; M. S., *ibid.*, 1939. EA 201.

WILLIAM HENRY SCHUTTE, Instructor in Physical Education (Sept. 1, 1940).
B. S., University of Idaho, 1933. Stadium.

LOUISE SCHWENSEN, Secretary to the Dean, Division of Engineering and Architecture (1915, 1918). E 115.

RICHARD BLAINE SCHWITZGEBEL, Graduate Assistant in Entomology (Sept. 1, 1940).
B. S., K. S. C., 1939. F 304B.

2. In coöperation with the Kansas State Highway Department.

HAROLD MARTIN SCOTT, Associate Professor of Poultry Husbandry (1928, 1931).

B. S., Oregon Agricultural College, 1924; M. S., K. S. C., 1927; Ph. D., University of Illinois, 1938. W. Ag 210.

MYRA EDNA SCOTT, Assistant Professor of English (1928, 1937).

B. S., K. S. C., 1921; A. M., Stanford University, 1928.

A 204.

MARTINE A. SEATON, Assistant Professor of Poultry Husbandry, Division of College Extension (1928).

B. S. in Agr., University of Missouri, 1924.

EA 205.

ROY ANDREW SEATON, Dean of Division of Engineering and Architecture (1904, 1920); Director of the Engineering Experiment Station (1904, 1920).

B. S., K. S. C., 1904; M. S., *ibid.*, 1910; S. B., Massachusetts Institute of Technology, 1911. E 115.

VIRGIL FRANKLIN SECREST, (Temporary) Military Property Custodian (Sept. 1, 1940).

N 104.

GABE ALFRED SELLERS, Professor of Metallurgy and Metallography (1919, 1928).

B. S., K. S. C., 1917; M. S., *ibid.*, 1929.

S 105.

RAYMOND EUGENE SELTZER, Industrial Research Fellowship, Graduate Research Assistant in Agricultural Economics (Sept. 1, 1940).

B. S., University of Illinois, 1940.

W. Ag 308.

HARNER SELVIDGE, Assistant Professor of Electrical Engineering (1938).

S. B., Massachusetts Institute of Technology, 1932; S. M., *ibid.*, 1933; M. S., Harvard University, 1934; D. Sc., *ibid.*, 1937. E 22.

ALFRED O. SHAW, Associate Professor of Dairy Husbandry (1939; July 1, 1940).

B. S., University of Idaho, 1932; M. S., *ibid.*, 1932; Ph. D., Pennsylvania State College, 1935. W. Ag 108A.

JOHN HENRY SHENK, Assistant Professor of Chemistry (1929, 1936).

B. S., K. S. C., 1929; M. S., *ibid.*, 1931; Ph. D., University of Illinois, 1936. W 205.

CHRISTIANA MARIE SHIELDS,⁴ Assistant in Education (1931, 1937).

B. S., K. S. C., 1928; M. S., *ibid.*, 1940.

Capitol, Topeka, Kan.

KARL GARDNER SHOEMAKER,¹ Instructor in Agricultural Economics, Division of College Extension (1936, 1939).

B. S., K. S. C., 1936.

EA 301.

CLARA MAGDALENE SIEM, Financial Secretary, Division of College Extension (1920, 1924).

A 109B.

DANIEL TELL SICLEY, Associate Professor of Mathematics (1938; Sept. 1, 1940).

A. B., University of Kansas, 1927; A. M., *ibid.*, 1928; Ph. D., University of Illinois, 1932. X 118.

FREDERICK GRAY SINGLETON, (Temporary) Instructor in Chemistry (Sept. 1, 1940).

B. S., University of Florida, 1935; Ph. D., *ibid.*, 1940.

W 212.

EARL LEROY SITZ, Assistant Professor of Electrical Engineering (1927, 1935); on sabbatical leave, Sept. 1, 1940, to May 31, 1941.

B. S. in E. E., Iowa State College, 1927; M. S., K. S. C., 1932.

E 24.

LELAND MILTON SLOAN, Superintendent, Garden City Branch Agricultural Experiment Station (1938).

B. S., K. S. C., 1932.

Garden City, Kan.

ROBERT FRED SLOAN, Assistant in Pasture Improvement (1938).

B. S., K. S. C., 1938.

E. Ag 202A.

1. In coöperation with the U. S. Department of Agriculture.

4. In coöperation with the State Board for Vocational Education.

- JACOB J. SMALTZ, Instructor in Shop Practice (Jan. 1, 1940).
B. S., Bradley Polytechnic Institute, 1939. S 106.
- ARTHUR BOURNE SMITH, College Librarian (1911).
Ph. B., Wesleyan University, 1900; B. L. S., University of Illinois, 1902. L 106.
- LLOYD FRANCIS SMITH, Associate Professor of Forestry (1935); State Forester (1936); resigned, June 30, 1940.
A. B., University of Kansas, 1930; M. F., Yale University, 1932; Ph. D., *ibid.*, 1938. D 110A.
- MABEL RACHEL SMITH, Instructor in Junior Extension; Assistant State Club Leader, Division of College Extension (1929, 1931).
B. S., K. S. C., 1926. A 111A.
- ROGER CLETUS SMITH, Professor of Entomology (1920, 1926); Associate Entomologist, Agricultural Experiment Station (1926).
A. B., Miami University, 1911; A. M., Ohio State University, 1915; Ph. D., Cornell University, 1917. F 204.
- BENJAMIN LEVI SMITS, Assistant Professor of Chemistry and Associate Food Chemist (1926, 1932).
B. S., Michigan State College, 1924; M. S., *ibid.*, 1925; Ph. D., *ibid.*, 1926. W 36.
- MARY L. SMULL, Instructor in Institutional Management; Manager of Cafeteria (1939; Sept. 1, 1940).
B. A., University of Southern California, 1925; M. S., *ibid.*, 1932. T 102.
- GEORGIANA H. SMURTHWAITE, Professor and State Home Demonstration Leader, Division of College Extension (1924, 1937).
B. S., Utah Agricultural College, 1911; M. S., K. S. C., 1931. EA 102.
- FLOYD ALONZO SMUTZ, Professor of Engineering Drawing and Descriptive Geometry (1918, 1934).
B. S. in Arch., K. S. C., 1914. S 203.
- ARTHUR BRADLEY SPERRY, Professor of Geology (1921, 1927).
B. S., University of Chicago, 1920. F 3A.
- MARY ASHMAN STALDER, Instructor in Art (1936).
A. B., Ohio University, 1929; M. A., *ibid.*, 1931. A 221B.
- FLORENCE MARGARET STEBBINS, Assistant in Genetics, Department of Zoölogy (1931).
B. S., K. S. C., 1923; M. S., *ibid.*, 1928. Insectary.
- JAMES EDWARD STEVENS, (Temporary) Graduate Assistant in Civil Engineering (Sept. 1, 1940).
B. S. in C. E., South Dakota School of Mines, 1940. E 220.
- ELIZABETH A. STEWART, Instructor in Food Economics and Nutrition (1937, 1938).
A. B., Southwestern College, 1922; M. A., Columbia University, 1924. C 7.
- HARRY MARTIN STEWART, Associate Professor of Accounting (1926, 1934); on sabbatical leave, Sept. 1, 1940, to May 31, 1941.
A. B., University of Kansas, 1920; M. B. A., *ibid.*, 1926. W. Ag 206.
- THOMAS BRUCE STINSON, Superintendent, Tribune Branch Agricultural Experiment Station (1924).
B. S., K. S. C., 1924. Tribune, Kan.
- HAROLD EARL STOVER, Capt. C. A. C., Res., U. S. A., Instructor in Agricultural Engineering, Division of College Extension. On leave, Sept. 1, 1940, to Aug. 31, 1941. Assistant Professor of Military Science and Tactics (1936; Sept. 1, 1940).
B. S., K. S. C., 1929. N 102.

- CHARLES WILLIAM STRATTON, Assistant Professor of Piano (1927, 1930).
B. Mus., K. S. C., 1926; M. S., *ibid.*, 1933. N 205.
- WILLIAM TIMOTHY STRATTON, Professor and Head of Department of Mathematics (1910, 1937).
A. B., Indiana University, 1906; A. M., *ibid.*, 1913; Ph. D., University of Washington, 1931. X 105.
- VIVAN LEWIS STRICKLAND, Professor of Education (1917, 1922).
A. B., University of Nebraska, 1906; A. M., *ibid.*, 1915; Ph. D., *ibid.*, 1925. G 102C.
- CHARLES RAYMOND STUMBO,¹ Agent, U. S. D. A., Soil Microbiology Investigations, Agricultural Experiment Station (1939).
B. S., K. S. C., 1936; M. S., *ibid.*, 1937. V 101.
- ANNA MARIE STURMER, Associate Professor of English (1920, 1926).
A. B., University of Nebraska, 1917; A. M., *ibid.*, 1920. A 203.
- MILO J. STUTZMAN, Assistant Professor of Metallurgy and Metallography (1934, 1936); resigned, July 19, 1940.
A. B., McPherson College, 1920; M. S., University of Nebraska, 1922; Ph. D., Iowa State College, 1927. S 105.
- FRANCIS JOSEPH SULLIVAN, Instructor in Machine Design (1938).
B. S. in M. E., Harvard University, 1936. S 201A.
- HARRISON BOYD SUMMERS, Professor of Public Speaking (1923, 1930).
A. B., Fairmount College, Wichita University, 1917; A. M., University of Oklahoma, 1921; Ph. D., University of Missouri, 1931. N 303.
- HUGH M. SWANEY, Assistant Physician, Department of Student Health (1939); resigned, Aug. 31, 1940.
A. B., University of Kansas, 1933; M. D., St. Louis University, 1938. A 216A.
- ARTHUR FRITHIOF SWANSON,¹ Associate Agronomist, Division of Cereal Crops and Diseases, U. S. D. A.; in charge of Cereal Investigations, Fort Hays Branch Agricultural Experiment Station (1919).
B. S., K. S. C., 1919; M. S., University of Minnesota, 1923. Hays, Kan.
- CHARLES OSCAR SWANSON, Professor of Milling Industry (1906, 1923); Head of Department of Milling Industry, 1923-1939.
A. B., Carleton College, 1899; M. Agr., University of Minnesota, 1905; Ph. D., Cornell University, 1922; Sc. D., Carleton College, 1940. W. Ag 9.
- SARAH AMELIA SWEET, Instructor in Clothing and Textiles (1939); resigned, May 31, 1940.
Graduate, Mechanics Institute, 1918; B. S., Columbia University, 1938; M. A., *ibid.*, 1938. C 201A.
- LILLIAN JULIETTE SWENSON, Assistant Reference Librarian, College Library (1927).
A. B., Colorado College, 1924; S. B., Simmons College, 1927; A. M. L. S., University of Michigan, 1939. L 201.
- MARY B. SWYERS, Stenographer, Office of the Vice-President (1920).
A 121.
- DELOS CLIFTON TAYLOR, Capt. C. A. C., Res., U. S. A., Assistant Professor of Applied Mechanics. On leave, Sept. 1, 1940, to Aug. 31, 1941. Assistant Professor of Military Science and Tactics (1931; Sept. 1, 1940).
B. S., K. S. C., 1925; M. S., *ibid.*, 1937. N 102.
- EARL HICKS TEAGARDEN, Assistant Professor of Agricultural Extension, District Agent, Division of College Extension (1929, 1934).
B. S., K. S. C., 1920. EA 105.

1. In coöperation with the U. S. Department of Agriculture.

RUSSELL I. THACKREY, Professor and Head of Department of Industrial Journalism and Printing (July 1, 1940).
B. S., K. S. C., 1927; M. S., *ibid.*, 1932. K 102.

CHARLES RAY THOMPSON, Associate Professor of Economics (1929, 1937).
A. B., University of Kansas, 1927; A. M., *ibid.*, 1928. W. Ag 308.

FRANK JAMES THOMPSON, Instructor in Physical Education (1937).
B. Ed., Minnesota State Teachers College, Mankato, 1934; B. S., Springfield College, 1935; M. Ed., *ibid.*, 1936. N 107.

WALTER W. THOMPSON, Assistant Professor of Pathology (1936, 1937).
D. V. M., Michigan State College, 1929. VH 201.

WILLIAM T. THOMSON, Assistant Professor of Applied Mechanics (1937; Sept. 1, 1940).
B. S., University of California, 1933; M. S., *ibid.*, 1934; Ph. D., *ibid.*, 1938. E 113.

RAY IAMS THROCKMORTON, Professor and Head of Department of Agronomy (1911, 1925); Agronomist, Agricultural Experiment Station (1911, 1925).
B. S. in Agr., Pennsylvania State College, 1911; M. S., K. S. C., 1922. E. Ag 206B.

ELEANOR TIBBETTS, Assistant to the Vice-President (1939).
B. S., K. S. C., 1938. A 121.

GALEN M. TICE, Consulting Radiologist, Department of Student Health (1939).
A. B., McPherson College, 1922; M. D., University of Kansas, 1929.
University of Kansas Hospital, Kansas City, Kan.

FRANCIS LEONARD TIMMONS,¹ Agent, Bureau of Plant Industry, U. S. D. A.; in charge of Bindweed Control Investigations, Fort Hays Branch Agricultural Experiment Station (1928, 1935).
B. S., K. S. C., 1928; M. S., *ibid.*, 1932. Hays, Kan.

SUE TOWNSEND, Assistant Professor of Modern Languages (1934, 1938); resigned, May 31, 1940.
B. S., Kansas State Teachers College, Emporia, 1923; M. A., University of Colorado, 1927. A 225.

HORACE CARL TRAULSEN, Graduate Assistant in Agronomy (Oct. 1, 1940).
B. S., University of Nebraska, 1931. E. Ag 305A.

ANGUS CAMPBELL TREGIDGA, Instructor in Electrical Engineering (1939).
B. A., University of British Columbia, 1932; B. A. Sc., *ibid.*, 1933; M. A., *ibid.*, 1935; Ph. D., California Institute of Technology, 1939. E 19.

WILSON TRIPP, Assistant Professor of Mechanical Engineering (1936, 1938).
B. S., University of California, 1930; M. S., *ibid.*, 1933. E 105.

WILLIAM CHILTON TROUTMAN, Associate Professor of Public Speaking (1937, 1939).
A. B., University of Illinois, 1917; M. A., *ibid.*, 1918. G 205C.

ALONZO FRANKLIN TURNER,¹ Associate Professor, Field Agent, Division of College Extension (1917, 1920).
B. S., K. S. C., 1905. EA 101.

MARVIN JOHN TWIEHAUS, Instructor in Bacteriology (1937).
D. V. M., K. S. C., 1936. V 203.

GRACE ELLEN UMBERGER, Head Nurse, Department of Student Health (1919); resigned, July 31, 1940.
B. S., K. S. C., 1905; R. N., Illinois Training School for Nurses, 1909. A 217.

1. In coöperation with the U. S. Department of Agriculture.

- HARRY JOHN CHARLES UMBERGER, Dean and Director, Division of College Extension (1911, 1919).
B. S., K. S. C., 1905. A 109A.
- GLADYS ELLEN VAIL, Associate Professor of Food Economics and Nutrition (1927, 1938).
A. B., Southwestern College, 1924; M. S., University of Chicago, 1927; Ph. D., University of Minnesota, 1939. C 118.
- WILLIAM ALEXANDER VAN WINKLE, Associate Professor of Chemistry (1922, 1931).
B. S., University of Michigan, 1911; M. S., University of Illinois, 1917; Ph. D., *ibid.*, 1920. W 304.
- MARY PIERCE VAN ZILE, Dean of Women Emeritus (1908; July 1, 1940).
Diploma, Iowa State College, 1904; B. S., K. S. C., 1929.
- ROBERT PHILLIP WAGERS, Assistant Professor of Pathology (1937, 1939).
D. V. M., Ohio State University, 1936; M. S., *ibid.*, 1937. V 207A.
- GEORGE B. WAGNER,¹ Assistant Entomologist, Bureau of Entomology and Plant Quarantine, U. S. D. A.; Investigator of Stored Grain and Flour Mill Insects (1934).
B. S., K. S. C., 1928; M. S., *ibid.*, 1929. U. S. Lab., 1204 Fremont.
- JESSIE MAY WAGNER, Assistant Postmistress (1920).
B. S., K. S. C., 1900. A 120.
- KAROLYN MARGARET WAGNER, Assistant in Art (1939; Sept. 1, 1940).
B. A., State College of Washington, 1936. A 307.
- JOHN A. WAGONER, Industrial Research Fellowship, Graduate Research Assistant in Chemistry (Sept. 1, 1940).
B. S., Kansas State Teachers College, Pittsburg, 1939. W 23.
- HERBERT HALDEN WALKDEN,¹ Assistant Entomologist, Bureau of Entomology and Plant Quarantine, U. S. D. A.; Investigator of Staple Crop Insects (1934); resigned, July 25, 1940.
B. S., Massachusetts Agricultural College, 1916. U. S. Lab., 1204 Fremont.
- CARROL KRAMER WARD, Associate Professor of Economics and Sociology (1935; Sept. 1, 1940).
B. S., University of Kansas, 1930; M. B. A., *ibid.*, 1937. W. Ag 307.
- JOSEPH EVANS WARD, JR., (Temporary) Instructor in Electrical Engineering (Sept. 1, 1940).
B. S. in E. E., University of Texas, 1937; M. S., University of Illinois, 1940. E 24.
- WALTER GILLING WARD, Professor of Architecture, in Charge of Engineering Extension, Division of College Extension (1920, 1925).
B. S. in Arch., K. S. C., 1912; Architect, *ibid.*, 1922; M. S., Iowa State College, 1931. E 130.
- JOSEPH THOMAS WARE, Assistant Professor of Architecture (1929, 1935); resigned, Aug. 7, 1940.
B. S., Georgia School of Technology, 1929. E 223.
- EUGENE D. WARNER, Instructor in Architecture, Division of College Extension (1935, 1937).
B. S. in Arch., K. S. C., 1934. E 130.
- DON CAMERON WARREN, Professor of Poultry Husbandry (1923, 1929).
A. B., Indiana University, 1914; A. M., *ibid.*, 1917; Ph. D., Columbia University, 1923. W. Ag 209.

1. In coöperation with the U. S. Department of Agriculture.

- ELLEN GRACE WARREN, Assistant Extension Editor, Division of College Extension (1936); resigned, Sept. 30, 1940.
B. S., K. S. C., 1933. EA 306.
- LOUIS PIERCE WASHBURN, Professor of Physical Education for Men (1926, 1931).
B. S., Carleton College, 1907; B. P. E., Springfield Y. M. C. A. College, 1911; M. P. E., ibid., 1926. N 107A.
- EUGENE WASSERMAN, (Temporary) Instructor in Architecture (1939; Sept. 1, 1940).
B. S., University of Illinois, 1937; M. S., ibid., 1939; Architect, State of Illinois, 1938. E 223.
- IRENE MARGARET WASSMER, Graduate Assistant in Zoölogy (Sept. 1, 1940).
B. S., K. S. C., 1938. F 5.
- ARLENE LOIS WATERSON, Graduate Assistant in Child Welfare and Euthenics (1940; Sept. 1, 1940).
B. S., K. S. C., 1939. 311 N. 14th.
- ARTHUR D. WEBER, Professor of Animal Husbandry (1931).
B. S., K. S. C., 1922; M. S., ibid., 1926; Ph. D., Purdue University, 1940. E. Ag 13.
- NORMAN COATES WEBSTER, Instructor in Public Speaking (1937).
B. O., Geneva College, 1927; A. B., ibid., 1928; M. S., K. S. C., 1940. G 205A.
- PAUL WEIGEL, Professor and Head of Department of Architecture (1921, 1924).
B. Arch., Cornell University, 1912; Architect, University of State of New York, 1920; Graduate, Buffalo Normal School, 1921. E 305.
- THOMAS A. WELDON,¹ Graduate Research Assistant in Agronomy, Agricultural Experiment Station (July 1, 1940).
B. S. A., Purdue University, 1940. E. Ag 207A.
- LEON ELBERT WENGER,¹ Agent, Bureau of Plant Industry, U. S. D. A.; Forage Crops Specialist, Fort Hays Branch Agricultural Experiment Station (1936, 1937).
B. S., K. S. C., 1936. Hays, Kan.
- BESSIE BROOKS WEST, Professor and Head of Department of Institutional Management (1928).
A. B., University of California, 1924; A. M., ibid., 1928. T 202.
- GLENN ARNOLD WEST, Research Fellow in Milling Industry (Sept. 1, 1940).
B. S., K. S. C., 1940. E. Ag 111.
- GERTRUDE ALICE WHEELER, Secretary to Assistant Dean of Agriculture (1925).
E. Ag 105.
- ALFRED EVERETT WHITE, Professor of Mathematics (1909, 1918).
B. S., Purdue University, 1904; M. S., ibid., 1909. X 107.
- HATTIE HELEN WHITE, Secretary and Treasurer, Business Office (1912, 1925).
A 102.
- LEON VINCENT WHITE, Associate Professor of Civil Engineering (1918, 1927).
B. S., K. S. C., 1903; C. E., ibid., 1918; M. S., ibid., 1927. E 122.
- JOHN HENDRICK WHITLOCK, Assistant Professor of Pathology (1934, 1938).
D. V. M., Iowa State College, 1934; M. S., K. S. C., 1935. V 111.
- CARRELL HENRY WHITNAH, Assistant Professor of Chemistry (1929); Dairy Chemist, Agricultural Experiment Station (1929, 1937).
A. B., University of Nebraska, 1913; M. S., University of Chicago, 1917; Ph. D., University of Nebraska, 1925. W 21.

1. In coöperation with the U. S. Department of Agriculture.

- HENRY EVERT WICHES, Associate Professor of Rural Architecture (1924, 1934).
B. S. in Arch., K. S. C., 1924; M. S., *ibid.*, 1925; Architect, *ibid.*, 1930. E 224.
- MARY CHRISTINE WIGGINS, Assistant Professor of Clothing and Textiles, Division of College Extension (1931; July 1, 1940).
B. S., K. S. C., 1929; M. A., Columbia University, 1938. EA 101B.
- DONALD ALDEN WILBUR, Assistant Professor of Entomology (1928); Assistant Entomologist, Agricultural Experiment Station (1928).
B. S., Oregon State College, 1925; A. M., Ohio State University, 1927. F 304D.
- JULIUS TERRASS WILLARD, College Historian (1883, 1936); Vice-President, 1918-1935; Dean, Division of General Science, 1909-1930; Professor of Chemistry, 1901-1918.
B. S., K. S. C., 1883; M. S., *ibid.*, 1886; Sc. D., *ibid.*, 1908. A 108.
- CLEO ELIZABETH WILLEY, Graduate Assistant in Institutional Management (Sept. 1, 1940).
B. S., Iowa State College, 1938. Van Zile Hall.
- CYRUS VANCE WILLIAMS, Professor of Vocational Education (1920).
B. Ed., State Teachers College, Peru, Neb., 1909; A. M., University of Nebraska, 1910; B. S. in Agr., *ibid.*, 1919; Ph. D., *ibid.*, 1925. G 103B.
- DWIGHT WILLIAMS, Professor of History and Government (1926, 1939).
A. B., University of Minnesota, 1916; LL. B., *ibid.*, 1918; A. M., *ibid.*, 1926. F 210.
- HARVEY O. WILLIAMS, Staff Sergt., D. E. M. L., U. S. A.; Instructor in Military Science and Tactics (1932). N 102.
- IRMEL LOUISE WILLIAMS, Instructor in Physical Education (Sept. 1, 1940).
B. S., University of Nebraska, 1935. N 3.
- JENNIE WILLIAMS, Associate Professor of Child Welfare and Euthenics; Director of Nursing Education (1932, 1939); on sabbatical leave, Feb. 1, 1941 to May 31, 1941.
B. S., K. S. C., 1910; R. N., University of Michigan Hospital, 1924; M. S., K. S. C., 1933. C 214.
- LOUIS COLEMAN WILLIAMS, Professor of Horticulture (1915, 1926); Assistant Dean and Assistant Director, Division of College Extension (1937).
B. S., K. S. C., 1912; B. S., *ibid.*, 1922. EA 202A.
- STANLEY L. WILLIAMSON, Associate Professor of Physical Education (1935, 1938); resigned, March 22, 1940.
B. S. in Ed., University of Southern California, 1932. Stadium.
- LUTHER EARLE WILLOUGHBY,¹ Associate Professor of Farm Crops, Division of College Extension (1917, 1926).
B. S., K. S. C., 1912; B. S. in Agr., *ibid.*, 1916. EA 202.
- CHARLES PEAIRS WILSON, Instructor in Agricultural Economics (1938).
B. S., K. S. C., 1938; M. S., *ibid.*, 1940. W. Ag 301C.
- MANNIE RAY WILSON, Associate Professor of Shop Practice (1936).
B. S. in E. E., K. S. C., 1925. S 110A.
- ROY ELMER WILSON, Staff Sergt., D. E. M. L., U. S. A.; Instructor in Military Science and Tactics (1921). N 104.
- EDWARD JOSEPH WIMMER, Associate Professor of Zoölogy (1928, 1937).
A. B., University of Wisconsin, 1925; A. M., *ibid.*, 1927; Ph. D., *ibid.*, 1928. F 114.

1. In coöperation with the U. S. Department of Agriculture.

TEMPLE FAY WINBURN,¹ Junior Entomologist, Bureau of Entomology and Plant Quarantine, U. S. D. A.; Investigator of Stored Grain and Flour-mill Insects (1938); resigned, July 15, 1940.

B. S., K. S. C., 1929; M. S., *ibid.*, 1931.

U. S. Lab., 1204 Fremont.

LAURA I. WINTER, (Temporary) Assistant Professor and District Home Demonstration Agent Leader, Division of College Extension (1925, 1939).

Cornell University, 1916.

EA 101.

JOE NATE WOOD, Instructor in Machine Design (1936).

B. S. in E. E., State University of Iowa, 1936.

E 209.

LEVELLE WOOD, Associate Professor of Institutional Management (1928, 1939).

B. S., Oregon State College, 1921; M. S., Columbia University, 1928.

VZ.

EARL BOOTH WORKING, Professor of Milling Industry (1923, 1939).

A. B., University of Denver, 1917; A. M., *ibid.*, 1919; Ph. D., University of Arizona, 1922.

E. Ag 111.

GLADYS WYCKOFF,⁴ Instructor in Education (1935); resigned, Jan. 31, 1940.

B. S., Central Missouri State Teachers College, 1920; M. A., University of Missouri, 1928.

Capitol, Topeka, Kan.

JAMES WALTER ZAHNLEY,⁵ Associate Professor of Farm Crops (1915, 1921).

B. S., K. S. C., 1909; M. S., *ibid.*, 1926.

E. Ag 308.

COUNTY AGRICULTURAL AGENTS

Division of College Extension

HENRY JOSEPH ADAMS, Republic county (1934). Belleville.

B. S., K. S. C., 1917.

SAMUEL EDWARD ALSOP, Haskell county (1937, 1938). Sublette.

B. S., K. S. C., 1935.

MILBURNE CLINTON AXELTON, Jackson county (1929, 1935). Holton.

B. S., K. S. C., 1928.

KIMBALL LINCOLN BACKUS, Wyandotte county (1932). Kansas City.

B. S., K. S. C., 1931.

CLARENCE E. BARTLETT, Jewell county (1937). Mankato.

B. S., University of Nebraska, 1929.

HAROLD ANDREW BORGELT, Edwards county (1937). Kinsley.

B. S., K. S. C., 1937.

LEE JUSTIN BREWER, Greeley county (1935, 1936). Tribune.

B. S., K. S. C., 1935.

RICHARD HENRY CAMPBELL, Jefferson county (1935, 1939); resigned, Nov. 21, 1939. Oskaloosa.

B. S., K. S. C., 1935.

SYLVESTER ULRIC CASE, Crawford county (1934). Girard.

B. S., K. S. C., 1923.

FRANCIS WILLARD CASTELLO, Ellsworth county (1935). Ellsworth.

B. S., K. S. C., 1933.

FREDERICK M. COLEMAN, Allen county (1939; Sept. 28, 1940). Iola.

B. S., K. S. C., 1937.

CARL CLARENCE CONGER, Pawnee county (1934, 1938). Larned.

B. S., K. S. C., 1933.

4. In coöperation with the State Board for Vocational Education.

5. In coöperation with the Kansas State Board of Agriculture.

- LAWRENCE EDWARD CRAWFORD, Pratt county (1937). Pratt.
B. S., K. S. C., 1928.
- FRED B. CROMER, Kingman county (1936). Kingman.
B. S., K. S. C., 1916.
- WILBUR R. CROWLEY, Morton county (1938, 1939). Elkhart
B. S., K. S. C., 1938.
- HAROLD AMOS DAILY, Stafford county (1935, 1938). St. John.
B. S., K. S. C., 1933.
- WALTER JONES DALY, Cowley county (1925, 1937); resigned, Nov. 24, 1939.
Winfield.
B. S., K. S. C., 1925.
- LAURENCE ROBERT DANIELS, Rooks county (1934). Stockton.
B. S., K. S. C., 1933.
- ELMER A. DAWDY, Saline county (1938, 1939). Salina.
B. S., K. S. C., 1938.
- JOHN WILLIAM DECKER, Wabaunsee county (1935, 1937). Alma.
B. S., K. S. C., 1930.
- MARION MAXWELL DICKERSON, Leavenworth county (1937, 1939). Leavenworth.
B. S., K. S. C., 1937.
- CARL EMMERT ELLING, Scott county (1934). Scott City.
B. S., K. S. C., 1932.
- CARL MUDGE ELLING, Hodgeman county (1938). Jetmore.
B. S., K. S. C., 1937.
- ROLAND BAKER ELLING, Franklin county (1938). Ottawa.
B. S., K. S. C., 1938.
- KERMIT VERNON ENGLE, Kearny county (1936). Lakin.
B. S., K. S. C., 1931.
- RALEIGH BORDNER FLANDERS, Rawlins county (1936). Atwood.
B. S., Colorado Agricultural College, 1928.
- GEORGE WILLIS GERBER, Osage county (1936, 1937). Lyndon.
B. S., K. S. C., 1936.
- RALPH FRIEDLY GERMANN, Russell county (1935, 1937). Russell.
B. S., K. S. C., 1931.
- JOE MYRON GOODWIN, Linn county (1919, 1937). Mound City.
B. S., K. S. C., 1914.
- ELMER OSCAR GRAPER, Thomas county (1929, 1938). Colby.
B. S., K. S. C., 1913.
- WILLIAM ELLSWORTH GREGORY, Harper county (1934, 1936). Anthony.
B. S., K. S. C., 1929.
- PAUL WILSON GRIFFITH, Decatur county (1935, 1937). Oberlin.
B. S., K. S. C., 1934.
- PAUL BERNARD GWIN, Geary county (1921, 1925). Junction City.
B. S., K. S. C., 1916.
- ROY ELMER GWIN, Wichita county (1921, 1934); resigned, April 30, 1940.
Leoti.
B. S., K. S. C., 1914.

- FRANK ALEXANDER HAGANS, Marion county (1930). Marion.
B. S., K. S. C., 1925.
- CHARLES ADRIAN HAGEMAN, Wilson county (1936, 1939). Fredonia.
B. S., K. S. C., 1936.
- PRESTON ORIN HALE, Shawnee county (1929, 1934). Topeka.
B. S., K. S. C., 1916.
- CHARLES TOMAS HALL, Johnson county (1934, 1939). Olathe.
B. S., K. S. C., 1932.
- HAROLD BYRON HARPER, Harvey county (1932, 1933). Newton.
B. S., K. S. C., 1933.
- A. EUGENE HARRIS, Seward county (1938). Liberal.
B. S., K. S. C., 1938.
- EDWIN HEDSTROM, Clay county (1935). Clay Center.
B. S., K. S. C., 1924.
- JOHN ALBERT HENDRICKS, Anderson county (1920, 1924). Garnett.
B. S. A., Iowa State College, 1916.
- HARVEY J. HENSLEY, Cloud county (1936, 1937). Concordia.
B. S., K. S. C., 1936.
- SHERMAN STANLEY HOAR, Barton county (1929); resigned, Nov. 30, 1939.
Great Bend.
B. S., K. S. C., 1928.
- ROLLA B. HOLLAND, Chautauqua county (1939). Sedan.
B. S., K. S. C., 1937.
- CLARENCE ATHEL HOLLINGSWORTH, Bourbon county (1937, 1939). Fort Scott.
B. S., K. S. C., 1931.
- RAY MITCHELL HOSS, Woodson county (1935). Yates Center.
B. S., K. S. C., 1930.
- DONALD WALTER INGLE, Reno county (1930, 1934). Hutchinson.
B. S., University of Missouri, 1929.
- ZARA W. JOHNSON, Stevens county (1938, 1939). Hugoton.
B. S., K. S. C., 1938.
- OLIVER WILLARD KERSHAW, Smith county (1935, 1939). Smith Center.
B. S., K. S. C., 1935.
- ARTHUR WILLIAM KNOTT, Montgomery county (1927). Independence.
B. S., University of Wisconsin, 1917.
- ARTHUR F. LEONHARD, Coffey county (1939; March 25, 1940). Burlington.
B. S., K. S. C., 1939.
- REUBEN CARL LIND, Marshall county (1933, 1939). Marysville.
B. S., K. S. C., 1923.
- PHILIP WARNER LJUNGDAHL, Chase county (1936, 1939). Cottonwood Falls.
B. S., K. S. C., 1936.
- CHARLES ENOCH LYNESS, Doniphan county (1923). Troy.
B. S., K. S. C., 1912.
- VERL EPHRAIM McADAMS, Barton County (1934; Dec. 1, 1939). Great Bend.
B. S., K. S. C., 1928.
- RALPH WALDO McBURNEY, Mitchell county (1930). Beloit.
B. S., K. S. C., 1927.

FRANCES DEAN McCAMMON, Ford county (1934, 1936). Dodge City.
B. S., K. S. C., 1932.

EVERETT LYNN McCLELLAND, Sheridan county (1936, 1937). Hoxie.
B. S., K. S. C., 1928.

JOHN EDWIN McCOLM, Meade county (1936, 1938). Meade.
B. S., K. S. C., 1936.

DEWEY ZOLLIE McCORMICK, Morris county (1925); resigned, Aug. 31, 1940.
Council Grove.
B. S., K. S. C., 1921.

ERNEST LEE McINTOSH, Lyon county (1920, 1937). Emporia.
B. S., K. S. C., 1920.

M. NEAL McVAY, Lane county (1939; Dec. 12, 1939). Dighton.
B. S., K. S. C., 1939.

EARL THOMAS MEANS, Cowley county (1935, Dec. 28, 1939). Winfield.
B. S., K. S. C., 1922.

WILMER ABELE MEYLE, Atchison county (1934). Effingham.
B. S., K. S. C., 1931.

JOHN DELMONT MONTAGUE, Sedgwick county (1926, 1930); deceased, Sept. 14,
1940. Wichita.
B. S., K. S. C., 1920.

LAWRENCE DALE MORGAN, Sherman county (1933). Goodland.
B. S., K. S. C., 1935.

HAROLD LEWIS MURPHEY, Comanche county (1930, 1936). Coldwater.
B. S., K. S. C., 1928.

GRAYSON E. MURPHY, Wallace county (1940; July 1, 1940). Sharon Springs.
B. S., K. S. C., 1940.

HOWARD CECIL MYERS, Elk county (1938, 1939). Howard.
B. S., K. S. C., 1938.

PAUL HAROLD NELSON, Phillips county (1936, 1937). Phillipsburg.
B. S., K. S. C., 1936.

CHARLES HERMAN OLSON, Pottawatomie county (1938, 1939). Westmoreland.
B. S., K. S. C., 1938.

ROBERT THOMAS PATTERSON, Cherokee county (1928). Columbus.
B. S., K. S. C., 1924.

LEONARD WILLIAM PATTON, Graham county (1933, 1937). Hill City.
B. S., K. S. C., 1933.

JOHN P. PERRIER, Ellis county (1939, 1939). Hays.
B. S., K. S. C., 1939.

ALLISON GLEN PICKETT, Kiowa county (1935). Greensburg.
B. S., K. S. C., 1935.

ROBERT LOUIS RAWLINS, Nemaha county (1931). Seneca.
B. S., K. S. C., 1929.

LEONARD ABBOTT REES, Riley county (1936, 1937). Manhattan.
B. S., K. S. C., 1932.

OREN J. REUSSER, Finney county (1938, 1939) Garden City.
B. S., K. S. C., 1937.

VERLIN F. ROSENKRANZ, Hamilton county (1939, 1939). Syracuse.
B. S., K. S. C., 1939.

ARTHUR EUGENE SCHAFER, Norton county (1937). Norton.
B. S., K. S. C., 1937.

LESTER SHEPARD, Neosho county (1928). Erie.
A. B., University of Iowa, 1913; B. S., Iowa State College, 1916.

HAROLD D. SHULL, Washington county (1939; Nov. 15, 1939). Washington.
B. S., K. S. C., 1939.

GEORGE W. SIDWELL, Rice county (1913, 1937). Lyons.
A. B., Fairmount College, 1915.

DEAL D. SIX, Douglas county (1935). Lawrence.
B. S., K. S. C., 1922.

JOSEPH DANIEL SMERCHEK, Sumner county (1933, 1937). Wellington.
B. S., K. S. C., 1932.

ORIN GROVER STEELE, Lincoln county (1938, 1939). Lincoln.
B. S., K. S. C., 1935.

ALVIN HOWARD STEPHENSON, Dickinson county (1935, 1936). Abilene.
B. S., K. S. C., 1932.

HARVEY J. STEWART, Cheyenne county (1929). St. Francis.
B. S., K. S. C., 1928.

RAYMOND LUTHER STOVER, Brown county (1927, 1930). Hiawatha.
B. S., K. S. C., 1924; M. S., Oregon Agricultural College, 1927.

VICTOR FRED STUEWE, Ottawa county (1934, 1937). Minneapolis.
B. S., K. S. C., 1915.

BYRON J. TAYLOR, Logan county (1937, 1938). Page City.
B. S., K. S. C., 1916.

JOHN EDWARD TAYLOR, Grant county (1930). Ulysses.
B. S., K. S. C., 1930.

LOT FORMAN TAYLOR, Butler county (1935, 1939). El Dorado.
B. S., K. S. C., 1931.

WARREN C. TEEL, Jefferson county (1939; Nov. 22, 1939). Oskaloosa.
B. S., K. S. C., 1939.

OBED LEE TOADVINE, JR., Ness county (1934). Ness City.
B. S., K. S. C., 1932.

DWIGHT S. TOLLE, Osborne county (1939, 1939). Osborne.
B. S., K. S. C., 1939.

JAMES FREDERICK TRUE, JR., Coffey county (1935); resigned, March 15, 1940.
Burlington.
B. S., K. S. C., 1929.

HAROLD OSMOND WALES, Stanton county (1936, 1937). Johnson.
B. S., North Dakota Agricultural College, 1934; M. S., K. S. C., 1936.

WILLIS R. WENRICH, Gray county (1939, 1939). Cimarron.
B. S., K. S. C., 1939.

HERMAN W. WESTMEYER, Barber county (1936; Dec. 6, 1939). Medicine
Lodge.
B. S., University of Missouri, 1936.

EARL LAVERNE WIER, McPherson county (1934). McPherson.
B. S., K. S. C., 1931.

CARL WILLIAMS, Clark county (1935). Ashland.
B. S., K. S. C., 1932.

RICHARD GORDON WILTSE, Miami county (1938). Paola.
B. S., K. S. C., 1938.

WILLIAM ALEXANDER WISHART, Greenwood county (1935, 1938). Eureka.
B. S., K. S. C., 1935.

MAURICE IVAN WYCKOFF, Labette county (1935). Altamont.
B. S., K. S. C., 1935.

FRANK ZITNIK, Rush county (1931, 1934). LaCrosse.
B. S., K. S. C., 1931.

JOSEPH ZITNIK, Wichita county (1936, May 20, 1940). Leoti.
B. S., K. S. C., 1936.

ASSISTANT COUNTY AGRICULTURAL AGENTS

Division of College Extension

DALE ALLEN, (1935). Seneca.
B. S., K. S. C., 1922.

J. DEWEY AXTELL, (1938; June 1, 1940).
B. S., K. S. C., 1939; M. S., *ibid.*, 1940.

EVANS E. BANBURY, (July 29, 1940).
B. S., K. S. C., 1940.

ROLLA E. BAUSMAN, (1935). Parsons.

H. A. BISKIE, (1928, 1939); resigned, April 30, 1940.
B. S., University of Nebraska, 1917.

JOHN R. BRAINARD, JR., (1939); resigned, Sept. 24, 1940. Dodge City.
B. S., K. S. C., 1939.

EARL C. COULTER, (1939). Marion.
B. S., K. S. C., 1933.

RALPH L. GROSS, (June 1, 1940).
B. S., K. S. C., 1940.

DALE E. HALBERT, (1936). Hutchinson.
B. S., K. S. C., 1933.

KENNETH E. JOHNSON, (1939); resigned, Jan. 1, 1940.
B. S., K. S. C., 1939.

CHARLES C. JONES, (1939). Hiawatha.

EUGENE F. KEAS, (1938). McPherson.

RALPH E. KRENZIN, (1939). Wellington.
B. S., K. S. C., 1939.

KENNETH E. KRUSE, (1939); resigned, Jan. 11, 1940.
B. S., K. S. C., 1939.

LEWIS F. MADISON, (Jan. 4, 1940). Anthony.
B. S., K. S. C., 1939.

- E. CLIFFORD MANRY, (Oct. 1, 1940). Larned.
B. S., Oklahoma Agricultural and Mechanical College, 1940.
- ROBERT F. McNITT, (1934, 1939). Marysville.
B. S., K. S. C., 1933.
- EDWARD F. MOODY, (Temporary), (1939; Aug. 5, 1940).
B. S., K. S. C., 1939.
- EMORY L. MORGAN, (1939). Hiawatha.
B. S., K. S. C., 1936.
- SHERYL A. NICHOLAS, (July 15, 1940).
B. S., K. S. C., 1940.
- VICTOR E. PAYER, (1939). Effingham.
B. S., K. S. C., 1939.
- EDWARD W. PITMAN, (1938). Kingman.
B. S., K. S. C., 1938.
- KENNETH B. PORTER, (July 19, 1940).
B. S., K. S. C., 1940.
- DONALD R. RICE, (1939). Iola.
- CECIL E. RICHARDS, (1935). Iola.
- C. ALLAN RISINGER, (1939); resigned, Dec. 31, 1939.
B. S., K. S. C., 1939.
- WALTER O. SCOTT, (1939). Council Grove.
B. S., K. S. C., 1939.
- DEANE R. SEATON, (1939). Abilene.
B. S., K. S. C., 1938.
- BEVERLY D. STAGG, (July 29, 1940).
B. S., K. S. C., 1940.
- HAROLD C. STEVENS, (1936; Nov. 15, 1939). Concordia.
B. S., K. S. C., 1930.
- FRANK B. STUCKEY, (1936, 1939). Leavenworth.
- MERLE B. THOMSON, (1937). Topeka.
- ABRAM B. THUT, (1936). Harper.
- FRANCIS J. TURNER, (1936). Manhattan.
- RAY H. WHITENACK, (1937). Olathe.
B. S., K. S. C., 1916.
- WAYNE C. WHITNEY, (Feb. 1, 1940). Kansas City.
B. S., K. S. C., 1937.
- LOYD E. WILDMAN, (Feb. 26, 1940). Burlington
B. S., K. S. C., 1939.
- ROBERT L. ZILLIOX, (1939). Hays.

COUNTY CLUB AGENTS
Division of College Extension

- WILLIAM G. ALSOP, Rice county (1939). Lyons.
B. S., K. S. C., 1939.
- IVOR HAROLD DAVIES, Wyandotte county (1937, 1938). Kansas City.
B. S., K. S. C., 1937.
- WAYNE EWING, Sedgwick county (1936, 1937). Wichita.
B. S., K. S. C., 1932.
- JOHN BONAR HANNA, Butler county (1935, 1939). El Dorado.
B. S., K. S. C., 1933.
- KENNETH E. JOHNSON, Labette county (1939; Jan. 2, 1940). Altamont.
B. S., K. S. C., 1939.
- CLAUDE LEWIS KING, Shawnee county (1934, 1936). Topeka.
B. S., K. S. C., 1932.
- RICHARD FRANKLIN KING, JR., Crawford county (1938, 1939). Girard.
B. S., K. S. C., 1938.

HOME DEMONSTRATION AGENTS
Division of College Extension

- RUTH AVERY, Cowley county (1939; Jan. 1, 1940). Winfield.
B. S., K. S. C., 1939.
- HELEN M. BLYTHE, Cloud county (1939). Concordia.
B. S., K. S. C., 1937.
- GRACE DOROTHY BRILL, Labette county (1936, 1939). Altamont.
B. S., K. S. C., 1931; M. S., *ibid.*, 1932.
- ELLEN BROWNLEE, Bourbon county (1939). Fort Scott.
B. S., K. S. C., 1937.
- PAULINE CRAWFORD, Stafford county (1938, 1939). St. John.
B. S., K. S. C., 1935.
- ELEANOR DALES, Wabaunsee county (1938, 1939). Alma.
B. S., K. S. C., 1938.
- PAULINE DRYSDALE, Smith county (1938, 1939). Smith Center.
B. S., K. S. C., 1938.
- VERA MAY ELLITHORPE, Cherokee county (1938, 1939); resigned, Sept. 20, 1940.
Columbus.
B. S., K. S. C., 1935; M. S., *ibid.*, 1939.
- VERNETTA FAIRBAIRN, Butler county (1928, 1939). El Dorado.
A. B., University of Kansas, 1927.
- ERMINA J. FISHER, Barton county (1938). Great Bend.
B. S., K. S. C., 1938.
- MARJORIE FORBES, Barber county (1938, 1939). Medicine Lodge.
B. S., K. S. C., 1938.
- EMMA FREEHLING, Miami county (1937; May 6, 1940). Paola.
B. S., University of Nebraska, 1933.

- ISABEL GALLEMORE, Franklin county (1937). Ottawa.
B. S., K. S. C., 1928; M. S., *ibid.*, 1932.
- MAE GORDON, McPherson county (1935, 1936). McPherson.
B. S., K. S. C., 1934.
- GERTRUDE GREENWOOD, Atchison county (1936, 1937); resigned, May 31, 1940.
Effingham.
B. S., K. S. C., 1936.
- ALICE RUTH GULICK, Atchison county (1940; June 24, 1940). Effingham.
B. S., K. S. C., 1940.
- GERSILDA GUTHRIE, Lyon county (1937, 1939). Emporia.
B. S., K. S. C., 1936.
- AVIS HALL, Harper county (1938; May 3, 1940). Anthony.
B. S., K. S. C., 1938.
- MAXINE HOFMANN, Saline county (1936, 1939). Salina.
B. S., K. S. C., 1936.
- MILDRED I. HOFMANN, Marion county (1938, 1939). Marion.
B. S., K. S. C., 1936.
- RUTH HOFSESS, Montgomery county (1938). Independence.
B. S., K. S. C., 1938.
- IVA LUELLA HOLLADAY, Leavenworth county (1929). Leavenworth.
B. S., K. S. C., 1929.
- RUTH KATHRINA HUFF, Doniphan county (1931, 1939). Troy.
B. S., K. S. C., 1924.
- VELMA GOOD HUSTON, Harvey county (1935, 1937). Newton.
B. S., K. S. C., 1931.
- AGNES JENKINS, Comanche county (1938). Coldwater.
B. S., K. S. C., 1938.
- ALICE JENNINGS, Greenwood county (1937). Eureka.
B. S., K. S. C., 1923; M. S., *ibid.*, 1936.
- NAOMI JOHNSON, Neosho county (1938). Erie.
B. S., K. S. C., 1932.
- EDITH KELLEY, Cheyenne county (1938, 1939). St. Francis.
B. S., Baker University, 1937.
- FLORENCE LOVEJOY, Ellsworth county (1939). Ellsworth.
B. S., K. S. C., 1939.
- HELEN MACAN, Osborne county (1940; June 15, 1940). Osborne.
B. S., K. S. C., 1939.
- MARY McCROSKEY, Miami county (1937, 1938); resigned, May 4, 1940. Paola.
B. S., K. S. C., 1931.
- ELLA MABEL MEYER, Rice county (1932). Lyons.
B. S., K. S. C., 1907.
- ESTHER I. MILLER, Pratt county (1939). Pratt.
B. S., K. S. C., 1939.
- MURIEL MORGAN, Pawnee county (1938). Larned.
B. S., K. S. C., 1934.

- IRENE MORRIS, Morris county (1937, 1938). Council Grove.
B. S., K. S. C., 1934.
- EDYTHE LAVERNE PARROTT, Crawford county (1936, 1937). Girard.
B. S., K. S. C., 1929.
- MINNIE BELLE PEEBLER, Sumner county (1932, 1937). Wellington.
B. S., University of Oklahoma, 1924; M. S., University of Colorado, 1929.
- KATHRYN PETERMAN, Ford county (1937). Dodge City.
B. S., K. S. C., 1936.
- FLORENCE PHILLIPS, Rawlins county (1936, 1937). Atwood.
B. S., K. S. C., 1936.
- MARY AGNES RADELL, Wyandotte county (1939). Kansas City.
B. S., Kansas State Teachers College, Pittsburg, 1937.
- EVELYN E. REBER, Wilson county (1939). Fredonia.
B. S., K. S. C., 1934.
- JUANITA LOUISE RILEY, Chase county (1939). Cottonwood Falls.
B. S., K. S. C., 1939.
- CHRISTINE E. ROBINSON, Edwards county (1940; July 15, 1940). Kinsley.
B. S., K. S. C., 1938.
- ELIZABETH RONIGER, Allen county (1936). Iola.
B. S., K. S. C., 1933.
- ANNA RUESCHHOFF, Dickinson county (1936, 1937). Abilene.
B. S., K. S. C., 1936.
- BERNIECE E. SLOAN, Johnson county (1935, 1939). Olathe.
B. S., K. S. C., 1928; M. S., *ibid.*, 1939.
- EDNA SMITH, Kiowa county (1940; June 24, 1940). Greensburg.
B. S., K. S. C., 1928.
- MARY ETHEL STEWART, Finney county (1938, 1939). Garden City.
B. S., K. S. C., 1938.
- LEONA ZOE TIBBETTS, Douglas county (1938; Jan. 1, 1940). Lawrence.
B. S., K. S. C., 1938.
- MARGUERITE WHITTEN, Reno county (1938) Hutchinson.
B. S., K. S. C., 1936.
- LAURA B. WILLISON, Sedgwick county (1937, 1939). Wichita.
B. S., K. S. C., 1911.
- ABBIE D. WRIGHT, Harper county (1939). Anthony.
B. S., K. S. C., 1936.
- MARY DUNLAP ZIEGLER, Shawnee county (1928, 1930). Topeka.
B. S., K. S. C., 1916.

ASSISTANT HOME DEMONSTRATION AGENTS

Division of College Extension

ETHEL AVERY, (July 1, 1940).

B. S., K. S. C., 1940.

ANNABELLE J. DICKINSON, (July 1, 1940).

B. S., Fort Hays Kansas State College, 1933.

IDA HILDIBRAND, (Aug. 15, 1940).

B. A., Friends University, 1930.

GRACE KELLOGG, (July 1, 1940).

B. S., K. S. C., 1940.

ALICE L. LANZ, (Aug. 19, 1940).

B. S., University of Missouri, 1940.

VERA L. MORGAN, (June 1, 1940).

B. S., K. S. C., 1940.

ANNA SCHOLZ, (July 15, 1940).

B. S., K. S. C., 1940.



Standing Committees of the Faculty

ADMISSION: Jessie McD. Machir, E. L. Barger, Ina Holroyd, A. B. Cardwell, H. L. Ibsen, George A. Dean, W. T. Stratton, S. A. Nock.

ADVANCED CREDIT: S. A. Nock, L. D. Bushnell, W. L. Faith, H. H. King, H. W. Davis, R. R. Dykstra, L. F. Payne, M. A. Durland, Myrtle Gunselman.

ASSEMBLY: S. A. Nock, H. W. Davis, E. L. Holton, William Lindquist, V. D. Foltz, C. H. Scholer.

ASSIGNMENT: Jessie McD. Machir, A. E. White, C. H. Scholer, W. E. Grimes, J. H. Robert, C. V. Williams, S. A. Nock, Eva McMillan.

ATHLETIC COUNCIL: H. H. King, F. D. Farrell, M. F. Ahearn, E. L. Holton, R. A. Seaton, R. I. Throckmorton, G. A. Dean, R. W. Babcock.

CALENDAR: Helen Moore, J. C. Peterson, M. F. Ahearn, H. T. Hill, S. A. Nock, William Lindquist, R. R. Lashbrook.

CATALOGUE: S. A. Nock, I. V. Iles, J. O. Faulkner, E. T. Keith, Fritz Moore.

COMMUNITY CHEST EXECUTIVE: F. L. Parrish, H. T. Hill, Helen Moore, F. D. Farrell, A. A. Holtz, Jessie McD. Machir, Erma Murray.

CONTROL: I. V. Iles, Margaret M. Justin, R. A. Seaton, R. R. Dykstra, Helen Moore, R. J. Barnett.

EXAMINATIONS: A. E. White, C. W. Colver, B. B. Brainard.

FACULTY COUNCIL ON STUDENT AFFAIRS: Helen Moore, A. A. Holtz, L. E. Conrad, L. P. Reitz, Grace E. Derby, Harold Howe, Helen Saum, Jack Gardner.

FACULTY LOAN FUND: R. R. Dykstra, Helen Moore, L. E. Call, R. A. Seaton, Jessie McD. Machir.

FRESHMAN INDUCTION: S. A. Nock, C. H. Scholer, C. V. Williams, Harold Howe, W. M. McLeod, Margaret Raffington.

GRADUATE COUNCIL: J. E. Ackert, L. E. Conrad, L. E. Call, H. H. King, L. D. Bushnell, J. H. Burt, Margaret M. Justin, R. C. Langford.

HONORARY DEGREES: R. W. Babcock, Margaret M. Justin, L. E. Call.

MAJOR ENTERTAINMENTS: S. A. Nock, William Lindquist, H. T. Hill, H. W. Bouck, R. H. Brown, W. E. Sheffer, Mrs. R. W. Conover.

REINSTATEMENT: R. I. Throckmorton, W. M. McLeod, J. H. Robert, E. C. Miller, Bernice Kunerth.

RELATIONS WITH JUNIOR COLLEGES AND ARTS COLLEGES: George Gemmell, R. R. Dykstra, M. A. Durland, F. L. Parrish, G. A. Filinger, Eva McMillan.

RESIDENCE STATUS: S. A. Nock, W. F. Pickett, R. M. Kerchner, Martha S. Pittman, R. R. Dykstra, A. B. Sperry.

SCHEDULE OF CLASSES: A. E. White, W. T. Stratton, L. E. Conrad, W. E. Grimes, Martha S. Pittman, R. W. Babcock.

SCHOLASTIC ELIGIBILITY: Helen Moore, Emma Hyde, R. M. Kerchner, Gladys E. Vail, W. M. McLeod, F. W. Atkeson.

SELECTION OF VETERINARY STUDENTS: R. R. Dykstra, S. A. Nock, J. H. Burt, E. J. Frick, L. M. Roderick.

STUDENT HEALTH: L. E. Conrad, L. D. Bushnell, Helen Moore, M. F. Ahearn, M. W. Husband, Bessie Brooks West.

STUDENT HONORS: M. W. Furr, R. W. Conover, B. L. Remick, R. F. Morse, A. B. Cardwell, W. F. Pickett.

USE OF ROOMS: R. A. Seaton, R. I. Throckmorton, Margaret M. Justin, A. E. White, S. A. Nock.

VOCATIONAL GUIDANCE: Helen Moore, R. A. Seaton, R. R. Dykstra, E. L. Holton, Margaret M. Justin, L. E. Call, R. W. Babcock.

Kansas State College of Agriculture and Applied Science

History and Location

Kansas State Agricultural College was established under the authorization of an act of congress, approved by Abraham Lincoln, July 2, 1862, the provisions of which were accepted by the state February 3, 1863. By act of the legislature, effective March 9, 1931, the name was changed to Kansas State College of Agriculture and Applied Science.

Under the enabling act the College received an endowment of 90,000 acres of land, and its leading object as stated by law is—

“Without excluding other scientific and classical studies and including military tactics, to teach such branches of learning as are related to agriculture and the mechanic arts, in such manner as the legislatures of the states may respectively prescribe, in order to promote the liberal and practical education of the industrial classes in the several pursuits and professions in life.”

The College was located at Manhattan February 16, 1863, partly in order to receive as a gift the land, building, library, and equipment of Bluemont Central College, an institution chartered by a group of pioneers on February 9, 1858. The Bluemont College building was erected in 1859.

The Agricultural College opened September 1, 1863, in the Bluemont College building. Most of the work of the College was moved to the present site in 1875.

Manhattan is on the Union Pacific and Rock Island railways, U. S. highways 40 and 24, and state highways 13 and 29.

PURPOSES

Kansas State College has three purposes, of which the first is to give to the young men and women of Kansas undergraduate and graduate instruction in agriculture, engineering and architecture, home economics, general science, and veterinary medicine, and to encourage sound thinking and good citizenship.

The second purpose of Kansas State College is to investigate scientifically the state's problems in agriculture and the industries. This work is done through the agricultural and engineering experiment stations, and is directly connected with the educational work of the College, so that the students are benefited directly by scientific investigation. Opportunities in the United States Department of Agriculture and in the various experiment stations of the country are open to such students as show interest and skill in investigational work.

In addition to the regular instructional work conducted on the campus, the College serves, through the Division of College Extension, a highly organized system of agricultural education carried directly to the homes of the farmers. The work has been so well developed that the College has come to look upon the whole state as its campus. In addition to the regular staff of the Division of College Extension, many members of the College faculty and the staff of the experiment stations give several weeks of each year to this work.

Buildings and Grounds

The College campus adjoins the western limits of the city of Manhattan. The grounds, laid out by a landscape architect, are planted with a variety of trees and shrubbery, interspersed with lawns and gardens.

Including the campus of 155 acres, the College owns 1,428.7 acres of land at Manhattan, valued at \$415,093. Outside the campus proper, all the land is devoted to educational and experimental work in agriculture.

The College buildings are constructed of native limestone obtained in part from the College quarries. These buildings are listed below.

Anderson Hall. Named in honor of John Alexander Anderson (1834-1891), second president of the College, 1873-1879. Erected, 1879, 1882, and 1884. Administration, College post office, student health, alumni office, 4-H office, Division of General Science, and Division of College Extension.

Animal Husbandry Barn. Erected, 1914.

Auditorium. Erected, 1904.

Calvin Hall. Named in honor of Frances Henrietta Willard Calvin (1865—), librarian of the College, 1901-1903; professor of domestic science, 1903-1908. Erected, 1908. Division of Home Economics.

Chemical Engineering Hall. Erected, 1904.

Dairy Barn. Erected, 1933.

Dickens Hall. Named in honor of Albert Dickens (1867-1930), assistant in horticulture, 1899-1901; professor of horticulture, 1901-1930. Erected, 1907.

Education Hall. Erected, 1900.

Engineering Hall. Erected, 1909, 1921. Division of Engineering.

Engineering Shops. Erected, 1875, 1890, 1900, and 1905.

Fairchild Hall. Named in honor of George Thompson Fairchild (1838-1901), third president of the College, 1879-1897. Erected, 1894, 1903, and 1927. Division of Graduate Study.

Farm Machinery Hall. Erected, 1873.

Heat, Power, and Service Building. Erected, 1928.

Horticulture Barn. Erected, 1917.

Illustrations Hall. Erected, 1876.

Infirmery. Erected, 1866; enlarged, 1919.

Kedzie Hall. Named in honor of Nellie Sawyer Kedzie Jones (1858—), teacher of household economy and hygiene, superintendent of sewing, 1882-1884; teacher of household economy and hygiene, 1884-1885; instructor in household economy and hygiene, 1885-1887; professor of household economy and hygiene, 1887-1897. Erected, 1898.

Library. Erected, 1927.

Mathematics Hall. Erected, 1876.

Memorial Stadium. Erected, 1922, 1924.

Nichols Gymnasium. Named in honor of Ernest Reuben Nichols (1858-1938), instructor in physics, 1890-1891; professor of physics, 1891-1900; acting president, 1899-1900; fifth president of the College, 1900-1909. Erected, 1911.

Nurses' Quarters. Erected, 1888.

Physical Science Building. To be named Willard Hall in honor of Julius Terrass Willard (1862—), assistant in chemistry, 1883-1887; assistant chemist, or chemist, agricultural experiment station, 1888-1918, director, 1900-1906; professorial rank in chemistry staff, 1891-1935; dean, Division of General Science, 1909-1930; vice-president, 1918-1935; college historian, 1936—. Completed, 1939.

President's House. Erected, 1923.

Thompson Hall. Named in honor of Helen Bishop Thompson (1875—), assistant in preparatory department, 1903-1907; professor of nutritions and dietetics, 1918-1922; professor of food economics and nutrition, 1922-1923; dean of the Division of Home Economics, 1918-1923. Erected, 1922.

Van Zile Hall. Named in honor of Mary Pierce Van Zile (1874—), professor of domestic science, 1908-1918; dean of the Division of Home Economics, 1912-1918; dean of women, 1908-1940. Erected, 1926.

Veterinary Hall. Erected, 1908. Division of Veterinary Medicine.

Veterinary Hospital. Erected, 1923.

Waters Hall. Named in honor of Henry Jackson Waters (1865-1925), sixth president of the College, 1909-1917. Erected: East wing, 1913; West wing, 1923. Division of Agriculture.

Experiment Station Building. Erected, 1918.

General-Purpose Building. Erected, 1918.

Greenhouses. Erected, 1910, 1927.

Plant Museum. Erected, 1907.

Pump House. Erected, 1924.

Sheep Barn. Erected, 1927.

Shop Warehouse. Erected, 1918.

Tractor Laboratories. Erected, 1918.

Veterinary Research Laboratory Buildings. Erected, 1914.



Admission

Correspondence about the admission of undergraduate students should be addressed to the vice-president of the College.

REQUIREMENTS FOR ADMISSION

The entrance requirements of the College are broad and flexible; only fundamental subjects are required. The requirements are made on the supposition that high schools are institutions in which the courses should be adapted to the needs of individual localities.

Any person who has completed a four-year course of study in any high school or academy accredited by the State Board of Education will be admitted to the freshman class. Admission to certain curriculums is conditioned as noted in the paragraphs following the tabulated statement of required high-school units.

As enrollment in the curriculums in Milling Industry and Veterinary Medicine is limited, students who wish to be admitted to those curriculums should read the statements entitled "Milling Enrollment Limited" and "Veterinary Enrollment Limited," under the divisions of Agriculture and Veterinary Medicine.

In order to carry one of the several curriculums, a student must have completed the following subjects:

ENGLISH, 3 UNITS; ALGEBRA, 1 UNIT; GEOMETRY, 1 UNIT; SCIENCE, PHYSICAL OR BIOLOGICAL, 1 UNIT, FOR

- Agriculture (4 years)
- Agricultural Administration (4 years)
- Applied Music (4 years)
- Business Administration (4 years)
- Business Administration with special training in Accounting (4 years)
- Home Economics (4 years)
- Home Economics with special training in Art (4 years)
- Home Economics with special training in Institutional Management and Dietetics (4 years)
- Home Economics and Nursing (5½ years)
- Industrial Journalism (4 years)
- Music Education (4 years)
- Physical Education for Men (4 years)
- Physical Education for Women (4 years)
- Pre-veterinary (1 year)

ENGLISH, 3 UNITS; ALGEBRA, 1½ UNITS; GEOMETRY, 1 UNIT; SCIENCE, PHYSICAL OR BIOLOGICAL, 1 UNIT, FOR

- General Science (4 years)
- Milling Industry (4 years)
- Specialized Horticulture (4 years)

ENGLISH, 3 UNITS; ALGEBRA, 1½ UNITS; GEOMETRY, 1½ UNITS; SCIENCE, PHYSICAL OR BIOLOGICAL, 1 UNIT, FOR

- Agricultural Engineering (4 years)
- Architecture (4 years)
- Architectural Engineering (4 years)
- Chemical Engineering (4 years)
- Civil Engineering (4 years)
- Electrical Engineering (4 years)
- Industrial Arts (4 years)
- Industrial Chemistry (4 years)
- Mechanical Engineering (4 years)

The above curriculums were formulated on the assumption that high-school subjects named will be offered for admission. A graduate of an accredited high school who in accordance with a state law is admitted as a freshman without all the high-school subjects that are prerequisite to the curriculum chosen, will be assigned, if necessary, to a five-hour course in college algebra instead of the regular three-hour course, and to a two-hour course in solid geometry. He may be allowed college credit toward graduation for the extra hours, except in

the curriculums in the Division of Engineering and Architecture. A student lacking the required unit of high-school science is held for four hours of college physical or biological science in addition to any science required by his college curriculum, but may be allowed elective credit toward graduation on such science, except in the Division of Engineering and Architecture.

A student without high-school credit in one unit of algebra and one unit of geometry is not permitted to register for an engineering curriculum, the Curriculum in Industrial Chemistry, or the Curriculum in Milling Industry, until those fixed requirements are completed. Geometry, one unit, is offered each semester in classes provided by the Department of Home Study. A student without high-school credit in one unit of algebra must, during his first semester of attendance, enroll in algebra by correspondence study. A student with one unit of algebra, but without one unit of geometry, should enroll in the geometry class during his first semester of attendance; such a student must complete this requirement in geometry by the close of his third semester of attendance. A student will not be advanced in classification until these required units are completed.

A person who is not a graduate of an accredited high school or academy will be admitted to the freshman class if he has completed fifteen acceptable units of high-school work, including the fixed requirements. (A unit is defined as the work in an accredited high school or academy in five recitation periods a week for one school year.) One who offers fourteen such units will be admitted as a freshman, but will be conditioned in one unit. Such deficiency (whether fixed or optional requirement) must be made up during the first year that the student is in attendance. If the optional requirement is not made up within that time, College credits are taken in its place.

Subjects acceptable for entrance, arranged in eight groups, together with the number of units that may be offered, are shown as follows:

GROUP I	English, three to four units
ENGLISH	Journalism, one-half or one unit
	Public speaking, one-half or one unit
GROUP II	French, one to four units
FOREIGN	German, one to four units
LANGUAGES	Greek, one to four units
	Latin, one to four units
	Spanish, one to four units
GROUP III	Elementary algebra, one or one and one-half units
MATHEMATICS	Plane geometry, one unit
	Advanced algebra, one-half unit
	Solid geometry, one-half unit
	Plane trigonometry, one-half unit
GROUP IV	*Botany, one-half or one unit
NATURAL	*Chemistry, one unit
SCIENCE	*General biology, one-half or one unit
	*General science, one-half or one unit
	Physical geography, one-half or one unit
	*Physics, one unit
	*Physiology, one-half or one unit
	*Zoölogy, one-half or one unit
GROUP V	American history, one unit
HISTORY AND	Civics, one-half or one unit
SOCIAL SCIENCES	Constitution, one-half unit
	Economics, one-half or one unit
	English history, one unit
	Greek and Roman history, one unit
	Medieval and modern history, one unit
	Sociology, one-half unit
	International relations, one-half unit
GROUP VI	Higher arithmetic, one-half unit
NORMAL TRAINING	Methods and management, one-half unit
SUBJECTS	*Music, one unit
	Psychology, one-half unit
	Reviews
	Grammar, geography, and reading
	twelve weeks each, or
	two of these, eighteen weeks each
	1 unit

GROUP VII	*Agriculture, one-half to four units
INDUSTRIAL	*Drawing, one-half or one unit
SUBJECTS	*Forging, one-half or one unit
	*Home Economics, one to four units
	*Printing, one-half, one, or two units
	*Woodwork, one-half, one, or two units
GROUP VIII	Bookkeeping, one-half or one unit
COMMERCIAL	Commercial geography, one-half unit
SUBJECTS	Commercial law, one-half unit
	Salesmanship, one-half unit
	*Shorthand and typewriting, one-half or one unit each

Every undergraduate student must have a complete physical examination, given by the Department of Student Health at a specified time. No new registration is complete without this physical examination: students who do not meet the requirements will be dropped from the College rolls.

METHODS OF ADMISSION

ADMISSION BY CERTIFICATE. The applicant must ask the vice-president of the College for an information blank, to be properly filled in and returned; on it he must specify the curriculum in which he wishes to enroll. The vice-president will then ask the applicant's high-school principal for an official transcript of record. Shortly before the opening of the semester the registrar will send the student a permit to register, but not unless the student has chosen a curriculum. Students who present such permits at the registration room in Nichols Gymnasium will not have to meet the Committee on Admission, as must others. High-school transcripts received later than one week before the date of enrollment cannot be evaluated before the opening of College. An applicant from another state may be accepted on certificate, provided—

1. He is a graduate of a high school accredited by the recognized accrediting agency of that state; or
2. He has completed the subjects required for graduation from an accredited Kansas high school; and
3. He has been recommended by the principal of the preparatory school where the majority of his work was taken as fully qualified to pursue the course for which he is applying.

ADMISSION BY EXAMINATION. Examinations for admission will be held at the College on the dates stated in the College calendar (see page 7 of this catalogue). These examinations are given for the benefit of students who need some additional high-school units to qualify them for admission to the freshman class. Applications for these examinations should be made in advance to the registrar.

ADMISSION AS SPECIAL STUDENTS. Because experience and maturity often compensate for lack of scholastic attainment, the College admits as special students persons over twenty-one years of age who cannot meet the regular entrance requirements. The age limit does not apply to special students in music.

Students who meet the regular entrance requirements may also register as special students for specific work not provided for in the regular curriculums. This classification does not, however, include students who merely fulfill curricular requirements irregularly or who take approved courses in addition to those provided for in their curriculums.

An applicant for admission as a special student must secure a permit from the dean of the division in which his major work is to be done, and the dean must approve each assignment. Such a permit is good for one semester only, but may be renewed in succeeding semesters.

Special students must present certificates of their preliminary training, and must give evidence of satisfactory preparation for the courses they wish to pursue. They are subject to all the general regulations and requirements of

* In courses consisting of laboratory work, wholly or in part, two periods of laboratory work are to be considered the equivalent of one recitation period.

regular students, such as assignment to physical education and military training, payment of fees, regular attendance at classes, and maintenance of satisfactory scholastic standing.

ADMISSION WITH ADVANCED CREDIT. The applicant must ask the vice-president of the College for an information blank, to be properly filled in and returned; on it he must designate all other institutions in which he has been enrolled, and specify the curriculum in which he wishes to enroll in the College. The vice-president will then get proper transcripts of record from the student's former institutions. Any fees charged for such transcripts must, of course, be paid by the student, who should at the time of application make the necessary arrangements with his former institutions. College catalogues covering the periods of attendance at other institutions should be sent with the information blank. Students whose transcripts show credits for college work done in other acceptable institutions are allowed hour-for-hour credit on courses in this College insofar as the credits may be directly applied or can be accepted as substitutes or electives. A student who cannot furnish an acceptable certificate of work for which he wishes advanced credit, may be examined in subjects studied under competent instructors.

In order that credentials may be properly evaluated, all transcripts must be in the office of the vice-president at least three weeks before the date of enrollment.

In general, no student will be admitted to the College unless he is eligible to return to the institution last attended.

SUMMARY

The following credentials must be in the hands of the Committee on Advanced Credit at least three weeks before enrollment:

1. An official transcript of high-school work;
2. An original complete transcript of the work done at each college or university attended;
3. An official statement that the student is eligible to return to the college or university last attended;
4. A properly completed information blank, on which the curriculum chosen is specified.

NOTE: Transcripts of credits must come to the Committee on Advanced Credit directly from the institutions issuing them. Others will not be accepted.

Matriculated students may secure advanced credit in certain subjects of freshman rank by examination, on account of surplus high-school units over and above the fifteen acceptable units required for admission. On request, the registrar will furnish to the Committee on Advanced Credit a statement of such surplus units, and that committee will conduct the examination within the first thirty days of the semester or summer school. Examinations, however, which affect the assignment of a semester or summer school will be given on the first Saturday of that semester or summer school. After the expiration of the thirty-day period such examinations may be authorized by the student's dean.

If the work of the student shows that advanced credits have been wrongly allowed, such credits will be revoked.

FRESHMAN INDUCTION

Freshmen enrolling for the first time in Kansas State College must meet in the Auditorium at 7:30 a. m. on the Friday before the Monday on which upper class registration begins. Because these freshmen are separately assigned before the other classes, they have the entire attention of the assigners, and opportunity to get desirable class schedules. Their deans and faculty advisers meet them in small groups to discuss their work and plans, to take them on tours of the campus, and to introduce them to other members of the faculty. During the week-end, the freshmen may meet the clergymen of the

Manhattan churches and get acquainted with the officials of the Y. M. C. A. and the Y. W. C. A., the Student Governing Association, and the Collegiate 4-H Club. Before the first classes meet on the following Wednesday, the freshmen will have had their physical examinations and their personality and aptitude tests, and the benefit of other induction activities. They will be ready to begin their classwork with some understanding of the College and its methods, and some acquaintance with faculty, students, and townspeople.

JUNIOR COLLEGES

Every junior college student who expects to continue his education in this College should arrange his course in junior college to meet the requirements of the curriculum which he expects to pursue here. Different curriculums have different prerequisites; but admission to advanced standing in the College is reasonably flexible, hour-for-hour credit being given for two years' work wherever the work done in an accredited junior college can be directly applied or can be accepted as substitutes or electives in the curriculum chosen. If his course in junior college has been arranged to meet the requirements of the curriculum to be pursued here, a junior college graduate carrying the maximum assignment can usually complete the requirements for the degree of Bachelor of Science in two years.

Detailed statements as to the requirements for graduation in each of the several curriculums at the College are printed in other sections of this catalogue.

KANSAS JUNIOR COLLEGES IN FULLY ACCREDITED RELATIONS WITH THE COLLEGE

PUBLIC

Municipal Junior College, Arkansas City
Chanute Junior College, Chanute
Coffeyville Junior College, Coffeyville
Dodge City Junior College, Dodge City
El Dorado Junior College, El Dorado
Fort Scott Junior College, Fort Scott
Garden City Junior College, Garden City
Hesston College, Hesston
Highland Junior College, Highland
Hutchinson Junior College, Hutchinson
Independence Junior College, Independence
Iola Junior College, Iola
Kansas City Junior College, Kansas City
Parsons Junior College, Parsons
Pratt Junior College, Pratt

PRIVATE

Central Academy and College, McPherson
College of Paola, Paola
Sacred Heart, Wichita
Saint John's College, Winfield
Tabor Academy and College, Hillsboro

LATE ADMISSION

A student is not admitted to the College later than ten days after the opening of a semester, except by special permission of his dean. Except in summer school, a fee of \$2.50 is charged anyone assigned after the time set for the close of registration (see the College calendar).

Undergraduate Degrees

To be graduated, a student must complete a prescribed curriculum. Under special conditions such substitutions are allowed as the interests of the student demand. The total requirement, including military science or physical training, or both, is about 120 to 140 semester hours, according to the curriculum taken. (A semester hour is one hour of recitation or lecture work, or three hours of laboratory a week, for one semester of eighteen weeks. When no ambiguity is involved, the term "hour" is used for "semester hour" in this catalogue.)

To be considered as a candidate for an undergraduate degree, a student must have completed in residence twenty of his last thirty undergraduate hours, with not fewer than thirty hours of undergraduate work at this institution. Resident work includes all regularly scheduled class or laboratory instruction given by the regular College faculty, exclusive of extension courses and courses completed by special examination. In special cases candidates will be considered who have completed three full years of work in this institution and have taken their last year of work in an institution approved by the faculty.

Seniors meeting the graduation requirement in hours but failing to meet it in points must take additional courses designated by the dean of the division in which their major work lies, until the requirement in points is met.

No student is considered a candidate for graduation in the spring who, at the beginning of the first semester, is deficient more than nine hours in addition to his regular assignment for the year. Candidates desiring to be graduated must make application to the registrar at least thirty days before the date of graduation. The candidate is responsible for complying with all requirements.

A candidate for graduation must be present in person, unless he has arranged in advance to receive his degree *in absentia*. The candidate must apply for this privilege to his dean. Degrees are conferred in the spring and in the summer. Candidates must be present at the Baccalaureate Exercises, unless excused by the Council of Deans.

DEGREES

The following degrees are conferred on completion of four-year curriculums:

- Bachelor of Science
- Bachelor of Science in Agriculture (Agriculture; Agricultural Administration; Specialized Horticulture)
- Bachelor of Science in Agricultural Engineering
- Bachelor of Science in Architecture
- Bachelor of Science in Architectural Engineering
- Bachelor of Science in Business Administration (Business Administration; Business Administration and Accounting)
- Bachelor of Science in Chemical Engineering
- Bachelor of Science in Civil Engineering
- Bachelor of Science in Electrical Engineering
- Bachelor of Science in Home Economics (Home Economics; Home Economics and Art; Home Economics and Institutional Management and Dietetics)
- Bachelor of Science in Industrial Arts
- Bachelor of Science in Industrial Chemistry
- Bachelor of Science in Industrial Journalism
- Bachelor of Science in Mechanical Engineering
- Bachelor of Science in Milling Industry
- Bachelor of Music

Bachelor of Science in Music Education
Bachelor of Science in Physical Education
Doctor of Veterinary Medicine

The degree of Bachelor of Science in Home Economics and Nursing is conferred upon those who complete the five-and-one-half-year curriculum in Home Economics and Nursing.

For a second bachelor's degree an additional year of not fewer than thirty semester hours is required. This work is in charge of the dean who administers the curriculum chosen.



General Information

BUSINESS DIRECTIONS

General information concerning the College may be obtained from the president or the vice-president. Financial matters are handled through the office of the business manager, State Board of Regents, Topeka, Kan.

Prospective students who desire information or catalogues should communicate with the vice-president.

Scientific and practical questions and requests for special advice in subjects in which the College and the experiment stations are prepared to give information, should be addressed to the heads of the departments concerned with the work regarding which information is sought.

Applications for farmers' institutes should be made as early in the season as possible, to the Division of College Extension. Requests for the publications of the Agricultural Experiment Station or of the Engineering Experiment Station should be made to the director of the station concerned.

Donations to the library should be addressed to the librarian, and donations to the museum to the curator of the museum.

DUTIES AND PRIVILEGES

In the informal and democratic life of the College, every student is very largely his own preceptor. He is a part of the community life, and as such a responsible member of College society.

College discipline is usually limited to dismissing from College those whose further attendance is unprofitable or inadvisable.

A student must account to the instructor concerned for absences from class. Only the dean of the division in which the student is enrolled can give permission for an absence from College of one or more days. Except by previous arrangement with his dean, a student must not leave College before the close of a semester.

Various societies and clubs give opportunities, in addition to College courses, for literary, scientific, musical, and forensic activity. At various times during the year students present dramatic and musical entertainments under the direction of the Manhattan Theater and the Department of Music.

FEES

FEES SUBJECT TO CHANGE. All fees are subject to change at any time by the State Board of Regents.

PAYMENT OF FEES. The matriculation fee is paid upon admission to the College. The incidental fee, the student-health fee, the student-activity fee, and laboratory fees are payable at the beginning of each semester.

Students must be prepared to pay these fees in full at the time of registration; assignments cannot be completed without the payment. Checks on out-of-town banks or on local banks are accepted to the amount of the fees.

TUITION. There is no charge for tuition. Class instruction in music is free, but fees are charged for individual instruction. (See Department of Music for statement of fees for music.)

MATRICULATION FEE. A matriculation or entrance fee of \$10 for residents of Kansas, or \$20 for nonresidents, is charged all students in College curriculums, but it is not paid by students who enroll in the summer school only, unless they are candidates for a degree at the end of the session. Special students must pay this fee.

INCIDENTAL FEE. An incidental fee of \$25 a semester, or \$20 for the nine-week summer school, is charged residents of Kansas; nonresidents pay \$75 a semester, or \$50 for the nine-week summer school. The incidental fee for the four-week summer school is \$10 for residents of Kansas, or \$20 for nonresidents.

STUDENT-HEALTH FEE. Undergraduate students pay a student-health fee of \$5 a semester, or \$2 for the nine-week summer school, for which they get the services of the Department of Student Health. Graduate students may pay the fee and get the same services.

STUDENT-ACTIVITY FEE. In accordance with a vote by the student body, each undergraduate student pays a student-activity fee of \$7.50 a semester, plus tax, collected by the College with the fees levied by the state. Payment of the student-activity fee gives admission to athletic contests and to plays presented by the Manhattan Theater, membership in the Student Governing Association, and subscriptions to the student newspaper and the College yearbook. Members of the faculty, employees of the College, and graduate students have the privilege of paying the fee and enjoying its benefits. In the nine-week summer school, every student pays a student-activity fee of \$1, plus taxes.

RECAPITULATION. To make clear the amount of fees due at the opening of each semester of the College year, exclusive of laboratory charges and deposits, the following tabular statement is given:

FOR RESIDENTS OF KANSAS

	<i>New Students</i>	<i>Old Students</i>
Matriculation (paid only once).....	\$10.00	None
Incidental (one semester).....	25.00	\$25.00
Student-health (one semester).....	5.00	5.00
Student-activity (one semester).....	7.50*	7.50*
Totals	\$47.50	\$37.50

FOR NONRESIDENTS OF KANSAS

	<i>New Students</i>	<i>Old Students</i>
Matriculation (paid only once).....	\$20.00	None
Incidental (one semester).....	75.00	\$75.00
Student-health (one semester).....	5.00	5.00
Student-activity (one semester).....	7.50*	7.50*
Totals	\$107.50	\$87.50

DEFINITION OF RESIDENCE. The residence of students entering Kansas State College is determined by an act of the legislature (L. 1938, Special Session, ch. 70, sec. 1), which reads as follows:

Persons entering the state educational institutions who if adults have not been, or, if minors, whose parents have not been residents of the state of Kansas for six months prior to matriculation in the state educational institutions, are nonresidents for the purpose of the payment of matriculation and incidental fees: *Provided further*, That no person shall be deemed to have gained a residence in this state for the aforesaid purpose while or during the elapse of time attending such institution as a student, nor while a student of any seminary of learning, unless, in the case of a minor, his parents shall have become actual residents in good faith of the state of Kansas during such period, or unless, in the case of a minor, he has neither lived with nor been supported by his parents or either of them for three years or more prior to enrollment and during said years has been a resident in good faith of the state of Kansas.

LABORATORY CHARGES AND DEPOSITS. In all laboratories students pay for supplies used and for apparatus broken or lost. Changes are noted under the descriptions of the several courses; changes in charges are effective June 1. The following tabulation shows the laboratory charges for each semester of the freshman year in the several curriculums and in the first of the four professional years of the curriculum in Veterinary Medicine. In a few instances these are approximate, since options exist in some curriculums and charges are affected by the subjects chosen.

* Plus tax.

<i>Curriculum</i>	<i>First semester</i>	<i>Second semester</i>
Agricultural Administration	\$20.00	\$11.00
Agricultural Engineering	14.50	15.00
Agriculture	20.00	11.00
Applied Music (not incl. sheet music and private lessons)	5.75	5.75
Architectural Engineering	12.00	13.50
Architecture	5.50	7.00
Business Administration	3.75	3.75
Business Administration and Accounting.....	3.75	3.75
Chemical Engineering	14.50	15.50
Civil Engineering	13.00	12.00
Electrical Engineering	14.50	17.50
General Science	17.25	17.25
General Science Preveterinary.....	14.75	16.75
Home Economics	16.35	9.60
Home Economics and Art.....	16.35	9.60
Home Economics and Institutional Management and Dietetics	16.35	9.60
Home Economics and Nursing.....	15.85	6.60
Industrial Arts	17.00	16.50
Industrial Chemistry	13.75	13.75
Industrial Journalism	15.50	6.75
Mechanical Engineering	14.50	14.50
Milling Industry	16.50	6.50
Music Education (not incl. sheet music and private lessons)	6.00	5.75
Physical Education for Men.....	14.75	6.75
Physical Education for Women.....	12.75	6.75
Specialized Horticulture	18.00	9.50
Veterinary Medicine	20.25	22.75

MILITARY UNIFORM. Every student who takes military training must have a uniform. For the basic courses the uniform, except shoes, is furnished by the War Department. To insure the return of this uniform, a \$5 deposit is required of each basic course student, the deposit to be refunded to the student when the complete uniform is returned to the military department in good condition. The money value of any missing articles will be deducted before the refund is made. The War Department makes an allowance toward the cost of the uniform used in advanced courses.

LATE ASSIGNMENT FEE. Except in summer school, the fee for assignment after the close of the regular registration period is \$2.50.

AUDITION FEE. To persons not enrolled in or employed by the College, the fee for auditing classes is one dollar the semester hour of the course audited.

COMMENCEMENT FEE. On graduation and on receiving advanced degrees, students pay a commencement fee of \$7.50 to cover the cost of the diploma and commencement activities.

TRANSCRIPT FEE. Rules governing issuance of transcripts of record:

1. Students may have one transcript in duplicate without charge.
2. Each additional transcript in duplicate costs 25¢ for each year's record.

No student may get his degree or transcripts of record if he is financially indebted to the College or any of its departments or subsidiaries.

REFUND OF FEES. No refund is made on the matriculation fee. Certain refunds are made on other fees, as shown below. No exceptions are made to these rules.

Refunds are given only on the presentation of the fee receipts for various fees paid. Refunds are authorized at the office of the registrar. The student must keep fee receipts. To be accepted, claims for fee refunds must be presented at the office of the registrar not later than the end of the semester or summer school for which the fees were paid.

A student permitted to withdraw before the end of the first week of the semester or summer school may receive a refund of all the fees paid for that semester or summer school. The first week ends at 5 p. m., Saturday, following the first day of enrollment.

A student permitted to withdraw after remaining the first week and less than one-third of a semester or summer school may receive a refund of one-half of the fees paid for that semester or summer school.

The unused portion of laboratory fees is refunded. All claims for refunds on laboratory deposits must be made within fifteen days of the close of the semester or summer school.

A student dropping music before the end of a semester or summer school may receive a refund of fees paid, proportional to the remainder of the first three-fourths of the semester or summer school; the fees for at least the last fourth of a semester or summer school are retained.

OTHER EXPENSES

TEXTBOOKS. The cost of textbooks varies considerably from semester to semester and according to the curriculum chosen. A freshman may reckon with an expenditure of about \$20 for new textbooks during his first semester, and of about \$15 during his second semester. Certain curriculums require books costing slightly more than these figures; most curriculums require books costing slightly less. For many courses secondhand books are satisfactory.

DRAWING INSTRUMENTS. In several curriculums, especially in architecture and engineering, drawing instruments are necessary. These range in price from \$7.50 to \$25 a set.

GYMNASIUM SUITS. Every woman taking physical education must have an approved gymnasium suit costing about \$2.75. In the major course the suit costs \$6.75.

The gymnasium suit for a man costs about \$3.50. In the major course the suit costs \$9.

ROOMS. Van Zile Hall is a residence for 130 women. Other rooms are not furnished by the College, but many are available in the city. A room for two persons costs each occupant from \$7 to \$9 a month.

BOARD. In clubs and private boarding houses the cost of board is \$4 a week and upward, but students may board themselves for less. The College operates a cafeteria where all meals may be obtained, except on Saturday evenings and on Sundays, at moderate prices. Food is furnished at cost. The expense to the student depends upon his judgment. A limited number of students may exchange services for a portion of their board.

Board and room may be obtained at a minimum cost of about \$5.50 a week.

LAUNDRY. The expense for laundry may be estimated at 40 cents to 70 cents a week.

APTITUDE TESTS FOR FRESHMEN

Aptitude tests are designed to ascertain what features of the students' mental endowment and attainment are strongest. The results are helpful to deans and advisers in judging the intellectual progress of students, and in giving counsel concerning occupational aptitudes, as well as in placing students or graduates in positions.

ASSIGNMENTS

The student is responsible for seeing that he conforms to the requirements of the curriculum in which he is enrolled. His assigner and his dean will assist him in planning his work, but are not responsible for his errors. As the catalogue is the authentic source of information, the student should read all catalogue statements concerning assignments and curriculum.

No student may be enrolled in classes or for private lessons in music or other subjects before receiving an assignment, and no assignment is completed until after the incidental fee and any special fees or charges are paid.

Assignments on the dates shown in the College calendar are made in

Nichols Gymnasium, where detailed directions are announced by placards. Later assignments are made by the student's assigner during regular office hours, but are subject to checking by the registrar in respect to availability of classes. Classes are closed when the limits as to numbers are reached. A student is not admitted later than ten days after the opening of the semester except by special permission of his dean. An extra fee of \$2.50 is charged for assignments secured after the last period provided for assignment of students at the opening of each semester as announced in the College calendar.

A student desiring to take work at any other than the regular time must obtain the written consent of his dean, the head of the department in which the work is to be done, and the dean of the division to which the department belongs.

Each student must take full work unless excused by his dean. No student may take more than regular work except by permission of his dean, if the average of his grades the preceding semester was below B, and under no circumstances if he was deficient in any subject.

A student must not carry work by correspondence while enrolled here, except by permission of his dean.

Special requests concerning assignments, and permission to make up deficiencies by outside study under an approved tutor, are acted upon by the student's dean in conference with the heads of the departments involved.

CHANGES IN ASSIGNMENTS

Deans do not drop subjects from assignments within two weeks of the end of a period covered by midsemester or final scholarship-deficiency reports.

No student may drop a study or modify his assignment except by a re-assignment; any student desiring a change in his assignment must apply to his dean, who is the only person who can make such change. Instructors desiring changes of assignment send requests to the proper dean. Notices of changes are sent to the registrar, the student, and the student's assigner. The registrar, through the heads of departments, sends notices or enrollment cards to the instructors concerned. Changes are effective immediately.

A student receiving a notice of reassignment must at once report to classes in accordance therewith. If not content with the revised assignment, he may confer with his dean about it. The instructor reports as unexcused absences all those caused by a student's dropping out of class without a proper re-assignment.

WITHDRAWAL FROM COLLEGE

A student who withdraws from college must secure an official withdrawal permit from his dean. Withdrawals become effective on the dates the permits are issued. In no case will they be antedated. Grades below passing of students withdrawing from college during the eighth and ninth weeks or the seventeenth and eighteenth weeks of a semester are recorded as midsemester or semester grades. To find rules concerning refund of fees, see Index.

AUDITING CLASSES

Auditing a class consists in attending it regularly without other participation, and without credit. Only persons having written permits may audit classes. Permission to audit is issued to (a) any person who is enrolled for credit, by the dean in charge of his assignment; (b) any employee of the College not enrolled for credit, by the dean of the division in which the person is employed, with approval of the head of the department in which the course is offered; (c) any other person, on payment of a fee of one dollar a credit hour, by the dean of the division in which the courses are offered, with the approval of the head of the department. Laboratory courses may not be audited.

SCHOLARSHIP DEFICIENCIES**Probation**

Any student in his first year of enrollment in this institution, who receives at the end of a semester deficiencies (grades of F or Con) in one-third of the work to which he is assigned, or any other student who receives at the end of a semester deficiencies in one-fourth of his work, is automatically placed on probation for one semester, and his parent or guardian is informed of the fact. A third such probation automatically involves dismissal from College.

Dismissal

Any student in his first year of enrollment in this institution, who receives at the end of a semester deficiencies in one-half of his work, or any other student who receives at the end of a semester deficiencies in two-fifths of his work is automatically dismissed from the College. After two automatic probations, or one probation and one dismissal, or two dismissals, any subsequent probation will result in automatic dismissal. The deans notify parents and guardians when students are dismissed.

Reinstatement

Students dismissed at the end of the first semester are excluded until the beginning of the next summer session. Those dismissed at the end of the second semester are excluded until the end of the next fall semester. During this period of dismissal the student must not habitually appear upon the campus or enter any classes. Any student dismissed for scholarship deficiencies may petition in writing, on a form provided by the College, for immediate reinstatement. The Committee on Reinstatement considers such petitions, granting reinstatement in exceptional cases only.

ABSENCE

Every student must appear at the first meetings of his classes after he is assigned. Students must be present on the first day of each semester or render a reasonable excuse. All absences are reported from the first day of the semester, even though the student enrolls late. Failure to take out an assignment is not accepted as an excuse for absence from classes. A student is not admitted later than ten days after the opening of the semester except by special permission of his dean.

Each undergraduate, except seniors, must attend every exercise of a class to which he is assigned, unless exempted under the provision that a junior student has the privileges of optional attendance if, during the last two semesters he attended this College, he made not fewer than thirty points each semester, with an average record of not fewer than two points a credit hour each semester, and no grades below passing.

All absences must be promptly reported on absence blanks. Permission for necessary absences from College for a day or more must, in all cases, be previously obtained from the dean. Any student desiring to be excused for the day from certain classes must apply in advance to the instructors in those subjects.

At the beginning of each class period the instructor takes the attendance. A late-comer may, at the discretion of the instructor, have his record of absence changed if at the end of the class he gives the instructor, on an absence blank, a written statement of his presence.

Any class is excused if for any reason the instructor fails to report at the end of ten minutes after the beginning of the recitation period, unless the instructor sends word that he will be there later.

Before 5 p. m., instructors send signed reports of absences for the day to the deans. Excuses submitted by students are transmitted with a recommendation concerning the absence, which only the dean can excuse. Excuse for an absence

does not relieve the student of responsibility for lecture, recitation, or laboratory work lost by absence.

If, after due warning, a student is persistently inattentive to his work, his dean will report him to the president for suspension.

EXAMINATIONS

Final examinations are held during the last four days of each semester, according to a schedule; students who are to be graduated at the close of the semester take their examinations earlier, usually at the regular hours for the respective courses.

No examination is given earlier than scheduled, except that, at the discretion of the head of the department, a student may take his examination with another class in the same subject instead of with his own class. In cases of extreme importance the student's dean may authorize an earlier examination.

Any student who receives a grade of A for the semester, in any subject, and whose absences for all causes from the class in that subject do not exceed one-tenth of the number of times the class is scheduled to meet during the semester, may be excused from the final examination in that subject, at the discretion of the instructor; provided, however, that instructors are to announce such exemption lists in their respective subjects not earlier than the last session of the class preceding the final examination.

Examinations to remove conditions are held on the fourth Saturday of each semester. A student who has received the grade of Con may take such conditional examination, if he applies for permission to his instructor or department head not later than the Tuesday evening preceding the Saturday set for the examination. Unless he has reënrolled in the course, if a student does not at the first opportunity pass an examination in a subject in which he is conditioned, his grade is changed from Con to F, except that in individual instances the student's dean may authorize such examination at a special date. (See College Calendar for dates.)

Permission for special examination in subjects not taken in class, or to make up failures, must be obtained, on recommendation of the head of the department in which the course is given, from the dean of the division in which the student is assigned. Such permission is granted only if the student has prepared for the examination under an approved tutor. The examination must be taken under the immediate supervision of the head of the department in which the course is given. A special examination may be given only to a matriculated student.

Examinations in high-school subjects for admission to the College are held at the beginning of each semester and of the summer school. (See College Calendar.) Students desiring such examinations should consult the registrar in advance.

REQUIRED PHYSICAL EXAMINATIONS

There is a prospective intimate relationship between human health and students in education, home economics, and veterinary medicine. For this reason all students who wish to enroll in teaching participation must pass a physical examination before they are permitted to do so; and all seniors in home economics and all fourth-year veterinary students must take a physical examination before they may be graduated. These examinations are given by the Department of Student Health, and the records of them become part of the permanent college records of the students. Under no circumstances will a student be deprived of his degree because of the results of a physical examination. Such physical examinations are optional for all other seniors, to whom they are recommended.

GRADES

Grades are A, B, C, D, Con, and F, having the following significance:

A, distinguished achievement; only five to ten percent of the students in a course are apt to get A.

B, superior achievement; about twenty-five percent of the students in a course are apt to get A or B.

C, average achievement; about half the students in a course are apt to get C.

D, passed; below average; about twenty-five percent of the students in a course are apt to get D, Con, or F.

Con, conditioned, for unsatisfactory work. The result of examinations to remove conditions is reported simply as D (passed) or F (failed). If such examinations are not taken at the first opportunity, the grade Con automatically becomes F, unless in the meantime the student has reënrolled in the course; then Con shall not become F if the student completes the course satisfactorily.

F, failed; the work must be repeated in class or under an approved tutor.

Inc, meaning incomplete, is reported when, in the judgment of the instructor, the student deserves further time to complete work which has been excusably interfered with. This is only a temporary report and in no way prejudices the student's final grade in a course. Students in laboratory and industrial work must put in at least four-fifths of the required time in order to get a passing grade in the subject. Should the required time minimum not be reached, a mark of Inc is reported if the quality of the work done is satisfactory, and F if it is unsatisfactory. Incomplete work for which a mark of Inc has been reported, if not made up within the first subsequent semester the student is in attendance, automatically becomes an F. The dean concerned may, however, extend the time in meritorious cases, if he sends the registrar notice of such extension within the "first semester" time limit.

REPORT OF GRADES

(1) On the fifth and the ninth Saturday of each semester; (2) not later than 6 p.m. on the last day of the first semester; (3) and not later than 6 p.m. on the day after the close of the second semester, reports of all grades of F, Con, and Inc, on those dates are sent to the students concerned and the deans. The dates appear in the College calendar; these reports are an imperative duty of all instructors. The first two reports are made in percentages on a scale of seventy for passing. The reports at the end of the semester are on the letter system.

Students desiring reports of intrasemester grades must supply their instructors with properly filled official cards after the fifth or the ninth Saturday of the semester. Instructors will make reports so requested to the students or send them to the student organizations.

The instructor prepares for each student a semester grade based on the examination and classwork, and must report this to the registrar for record within one week after the close of the semester. Passing grades are not sent to students or parents unless a self-addressed, stamped envelope is left with the registrar with a request for grades.

If a student drops a subject before midsemester, a mark of Wd (withdrawn) is reported. Subjects may not be dropped from assignments within the last two weeks of a period covered by midsemester or final scholarship-deficiency reports.

If a student withdraws from College before midsemester, a mark of Wd is reported for each subject, irrespective of the standing of the student in the subject. Regardless of the time of withdrawal, however, a final grade shall be reported, if all the required work of a course has been completed. If a student goes through the first half of the semester, but not the second half, a half-semester grade is reported for record, and designated as such; but a subject dropped at any time after midsemester on account of failure is given a semester grade of F.

In case of absence from a final examination, no semester grade is reported until the reason for such absence has been learned; within the week after the end of the semester, however, the instructor reports to the registrar a mark of Inc. If the student's absence is inexcusable, a semester grade is reported on the basis of zero for the final examination; but if the absence is excused or excusable, a reasonable time, usually not over one month, is allowed within which the examination may be taken.

The result of an examination to remove a condition is reported in quadruplicate to the dean of the student, who transmits copies to the registrar, the student, and the student's assigner. A special procedure is followed in reporting a grade to replace Inc and in reporting corrections of grades.

Instructors are to leave all class books on file in the proper department or with the president of the College when severing their connection with the institution.

THE POINT SYSTEM

For each hour of work assigned, the student receives points, according to the grade attained, as follows: Grade A, 3 points; B, 2 points; C, 1 point; and D (or lower), no points. For graduation the total requirement in points is the same as in hours. Above the freshman year classification is based on the same requirement in points as in hours.

Seniors meeting the graduation requirement in hours but failing to meet it in points must take further courses designated by the dean of the division in which their major work lies, until the requirement in points is met.

HONORS

In each division of the College *sophomore honors* are awarded to not more than five percent of the members of the sophomore class having the highest standing. Such honors are to be reckoned only on courses completed at this institution, combining the work of the freshman and sophomore years.

Similarly, at both commencement programs *senior honors* are awarded to not more than ten percent of the members of the senior class having the highest standing. Such honors are to be determined only on courses completed at this institution, combining the work of the junior and senior years.

For honors, the grades for each semester hour have the following values: A, 3; B, 2; C, 1; D, 0; Con, minus 1; and F, minus 2. The honor grade is found by dividing the sum of the honor points by the number of semester hours of work taken. To receive honors, the student must have an average of B or higher.

The diplomas of the highest three percent of the senior class are inscribed "with high honor" and of the remainder of the highest ten percent "with honor."

CLASSIFICATION OF STUDENTS

The Committee on Admission classifies new students. To be classified as a freshman on entrance, a student must be a graduate of an accredited high school, or offer fifteen units of acceptable high-school work. A student offering fourteen acceptable high-school units is classified as a conditioned freshman. A student is not advanced in classification until the required entrance units are completed. A student is classified as a sophomore, junior, or senior when he has credit in a number of hours and also of points nine less than the full number of hours required in one, two, or three years, respectively, of the curriculum in which he is enrolled. The registrar reclassifies students each academic year before the opening of the first semester.



CREDITS FOR EXTRACURRICULAR WORK

Students may earn credit toward graduation by satisfactorily participating in certain extracurricular activities. These activities, and the maximum of semester hours of credit allowed, are as follows:

<i>Subject</i>	<i>A semester</i>	<i>Total</i>
Orchestra	$\frac{1}{2}$	4
Band	$\frac{1}{2}$	4
Choral Ensemble	$\frac{1}{2}$	4
Debate	2	4
Oratorical Contest	2	4
<i>Kansas State Collegian</i> journalism.....	1	4
<i>Agricultural Student</i> journalism.....	1	4
<i>Kansas State Engineer</i> journalism.....	1	4

To obtain credit in one of these subjects, the student must be regularly assigned to it in accordance with the general rules governing assignments, but may be assigned only upon the written recommendation of the instructor in charge of the work. This recommendation is filed in the office of the student's dean, and is effective until revoked.

Credits obtained in the above-named subjects may be counted as electives in the student's curriculum, or may be formally substituted for required subjects if the curriculum does not offer sufficient elective opportunity. Approval as electives or substitutions is obtained only through the regular procedures. A total of not more than eight semester hours may be allowed a student for these subjects, and not more than two of these may be obtained in any one semester.

CIVIL PILOT TRAINING PROGRAM

The college coöperates with the Civil Aeronautics Administration in offering the ground-school work and supervising the general operations of both primary and advanced Civil Pilot Training Programs. The flight training for these programs is carried on at the Manhattan Municipal Airport, five miles southwest of the city on U. S. highway 40.

Students are chosen for this training largely upon a basis of college classification and scholastic record, in accordance with quotas set by the Civil Aeronautics Administration.

Professor C. E. Pearce, Head of the Department of Machine Design, is Coördinator of Civil Pilot Training at the college and should be consulted for detailed information.

BIBLE STUDY

Bible study is an elective. Two semester hours are granted for each completed one-year course. A student may get credit for not more than two courses. Instructors must have College approval as tutors; the Department of Education supervises the work and conducts the examination for credit.

COURSE NUMBERS

Each course offered bears a number indicating in a general way the classification of students for whom it is given. Courses for undergraduates bear numbers 101 to 199, courses for undergraduates and graduates bear numbers 201 to 299, and courses for graduates only bear numbers 301 to 399. Each department numbers its courses independently.

CLASSES

The minimum numbers for which classes are organized are as follows:

Freshmen	15
Sophomores, juniors, or seniors.....	7

This rule is varied only by special permission of the Board of Regents.

COLLEGE ASSEMBLY

The College Assembly is held one hour fortnightly. Students and faculty gather in the College auditorium for the exercises, which consist of devotional services, usually conducted by a Manhattan minister; music by soloists, ensembles, or the College orchestra; and an address by a prominent visitor or a member of the College faculty.

COLLEGE PUBLICATIONS

The official organ of the College is *The Kansas Industrialist*, published weekly and printed at the College by the Department of Industrial Journalism and Printing. It discusses the work of the College, investigations of the Experiment Stations, and local and alumni news. *The Kansas Industrialist* will be sent to any address for \$3 a year. Alumni having active membership in the Alumni Association receive *The Kansas Industrialist* free of charge.

The Kansas State Collegian, a semiweekly newspaper, and *Royal Purple*, the College yearbook, are published by the Board of Student Publications.

The Kansas Agricultural Student is issued quarterly by the Agricultural Association of the Division of Agriculture, and *The Kansas State Engineer* is published by students in the Division of Engineering and Architecture.

COLLEGE POST OFFICE

The College operates an office for the reception and delivery of mail. This is not a part of the United States postal service, but students and College officers may have their mail delivered there. Mail arrives from the Manhattan post office twice a day. The College post office sells stamps, but not money orders, and insures and registers mail. Its chief purpose, however, is to facilitate intercommunication of College departments and communication of faculty with students. All students should call for their mail at least once every two days, and preferably every day.

PARKING REGULATIONS

PUBLIC PARKS. There are two public automobile parks for general use by students, faculty members, employees, and visitors. One of these is northwest of Engineering Hall and the other is north of Waters Hall. No permits are required for the use of these parks.

RESTRICTED PARKS. To accommodate crippled students and others having special need for parking spaces, a few small parks have been provided; permits for the exclusive use of these parks are issued when necessary. Each stall is assigned to a certain car and may be used by that car only.

PARKING ON DRIVEWAYS. No parking is permitted on driveways except during public exercises, and for a short time before and after them.

BOARDING AND ROOMING HOUSES

Students who are not residents of Manhattan live in rooming houses approved by the College administration. The Department of Student Health inspects the rooms and the Faculty Council on Student Affairs issues certificates of approval for those that are satisfactory. Women should address correspondence about rooms and board to the dean of women, and upon arriving in Manhattan should visit her office or that of the secretary of the Y. W. C. A. Men should address such correspondence to the adviser to men, and visit his office upon arriving in Manhattan.

Van Zile Hall, a residence hall which accommodates 130 women students, is located on the campus. It is a suitably furnished, well-equipped fireproof building of stone. Applications for rooms are considered in the order in which they are received. Applications for the fall semester, 1942-1943, will not be accepted before January 1, 1942. After that date no applications will be ac-

cepted before January 1 of the year in which admission to the dormitory is desired. A deposit of \$10 is required to validate an application for residence in the hall; it will be refunded in case of a change of plans, if request is made to the dean of women by August 25. The contract for room and board in Van Zile Hall is for a full semester (eighteen weeks), and the obligation is canceled only for reasons satisfactory to the dean of women. All correspondence about the residence hall should be addressed to the dean of women.

SELF-SUPPORT

Students of limited means are encouraged as much as possible; but if they have to give much time to self-support they should take lighter assignments of college work and extend their courses. A student ought to have money for the first semester, as he will need some time to make acquaintances and find suitable work.

The College employs student labor to the extent of about \$6,000 a month, at rates varying from 25 to 40 cents an hour, according to the nature of the employment and the experience of the employee. Most of this labor is on the College farm, in the orchards and gardens, in the shops and the printing office, and for the custodian. Students of exceptional ability are sometimes employed in special duties about the College. Many students get employment in town; and there is some opportunity for obtaining board in exchange for work with families, either in town or in the neighboring country.

The College does not guarantee student employment. The Y. M. C. A., however, has an employment bureau for men students; and the Y. W. C. A., in coöperation with the office of the dean of women, has an employment bureau for women students.

The National Youth Administration makes available each year an allotment of federal funds to enable the College to employ, part time, a limited number of students who cannot attend college without this aid. Undergraduate students on this program can earn not to exceed \$20 a month; graduate students can earn not to exceed \$30 a month. While the qualifications for appointment to this work vary somewhat from year to year, need for the assistance and high scholarship records are always essential requirements. Requests for NYA application blanks should be addressed to the College NYA committee before August 1 preceding the academic year in which the appointment is desired.

College Organizations

THE STUDENT GOVERNING ASSOCIATION

The governing association of the student body was organized in the spring of 1919, as the Student Self-governing Association, and reorganized in the spring of 1926 as the Student Governing Association.

The executive council of the association consists of seven members, elected by the student body each spring for the following school year. The council discharges all executive functions of the association, and sits as a court in disciplinary cases. Actions of the council are subject to approval by the faculty council. In cases of disagreement which are not compromised successfully, the decision of the president of the College is final.

Officers of the association are president, vice-president, secretary, and treasurer, elected by the council. Though the council sits as a committee of the whole in all its affairs, certain members are put in charge of certain activities, such as discipline, social affairs, etc. Membership in the student association follows payment of the student activity fee.

THE CHRISTIAN ASSOCIATIONS

THE YOUNG MEN'S CHRISTIAN ASSOCIATION

All men students are welcome as members of the College Y. M. C. A. The work of the organization is carried on by a student cabinet, composed of the officers and the chairmen of the standing committees. Each year a freshman commission is organized for the benefit of the new men, especially those who have had Hi-Y experience. The Y. M. C. A. maintains an employment bureau for men students, and has a complete list of rooms and boarding places for men. The permanent secretary is glad to correspond with prospective students and to receive them for interviews.

THE YOUNG WOMEN'S CHRISTIAN ASSOCIATION

The College Y. W. C. A. maintains an office and a reading room. The full-time secretary has the assistance of the student leaders of the association and of a group of local women. Through its college sister work the association endeavors to reach every new woman student. Any young woman who expects to enter College may write to the secretary of the association for assignment to a college sister who will help her to make campus adjustments during the opening weeks of the College year. Coöperating with the dean of women, the association helps women students to find satisfactory rooms and boarding places, and maintains an employment bureau for them.

THE NEWMAN CLUB

The national organization of Newman Clubs for secular colleges and universities is represented by a local unit of the Catholic students in Kansas State College. The organization has as its purpose the fostering of religious and social activities among its members, and carries on study-club work in religious and social subjects under the direction of the campus adviser, the assistant pastor of Seven Dolors Parish, Manhattan. There are also regular monthly educational meetings, including a communion breakfast and a social program.

HONOR SOCIETIES

ALL-COLLEGE

Phi Kappa Phi. A national fraternity. Membership is open to honor students in all departments, on the basis of scholarship. The Kansas State chapter was installed in 1915.

Sigma Xi. A national fraternity. Members of the faculty and graduate students are eligible for election to active membership on the basis of achievement in original scientific investigation; seniors who have shown excellence in two departments of science are eligible for election to associate membership. The Kansas State chapter was installed in 1928.

DIVISIONAL

Alpha Zeta. A national fraternity. Students in agriculture with outstanding records in extracurricular activities who rank scholastically in the upper two-fifths of their class are eligible for election to membership. The Kansas State chapter was installed in 1909.

Gamma Sigma Delta. A national fraternity. Seniors in agriculture and agricultural engineering, and fourth year veterinarians are eligible for election by the faculty members of the local chapter on the basis of scholarship. The Kansas State chapter was installed in 1914.

Omicron Nu. A national sorority. A percentage of seniors and juniors in home economics are eligible for election to membership by the active faculty and student members of the local chapter on the basis of scholarship, leadership, and research in home economics. The Kansas State chapter was installed in 1915.

Sigma Tau. A national fraternity. Juniors and seniors in engineering and architecture are eligible for election to membership on the basis of scholarship, sociability, and practicality. The Kansas State chapter was installed in 1912.

PROFESSIONAL ORGANIZATIONS

Election to membership is based on unusual achievement.

Alpha Kappa Psi.....	Business Administration
Alpha Mu	Milling
Eta Kappa Nu.....	Electrical Engineering
K Fraternity	Athletics
Mortar and Ball.....	Military
Mu Phi Epsilon.....	Music
Phi Alpha Mu.....	General Science, Women
Phi Delta Kappa.....	Education
Phi Epsilon Kappa.....	Physical Education
Phi Lambda Upsilon.....	Chemistry
Pi Kappa Delta.....	Debating
Pi Mu Epsilon.....	Mathematics
Pi Tau Sigma.....	Mechanical Engineering
Quill Club	Writing
Scabbard and Blade.....	Military
Sigma Delta Chi.....	Journalism, Men
Steel Ring	Engineering
Tau Epsilon Kappa.....	Architecture
Theta Sigma Phi.....	Journalism, Women

HONORARY ORGANIZATIONS

Election to membership is based on leadership in student affairs.

Blue Key	Senior Men
Mortar Board	Senior Women

AMERICAN CHEMICAL SOCIETY

The Kansas State College section of the American Chemical Society arranges during the school year for monthly meetings which are usually addressed by eminent chemists from out of town.

SCIENCE CLUB

The Science Club, meeting monthly, is an organization of instructors, students, and others interested in science. Its programs include popular lectures by prominent men of science, papers giving the results of research work at the College, and discussions.

THE GRADUATE CLUB

— The Graduate Club is an organization composed of graduate students and members of the graduate faculty. Its purpose is to promote sociability and wide acquaintance among its members.

AGRICULTURAL SOCIETIES

The Agricultural Association meets regularly once a month. All students enrolled in the Division of Agriculture are members. The objectives of the association are to encourage and support divisional activities; to correlate the work of various clubs and other organizations of students within the division; and, in general, to have leaders elected and authorized to speak for the student body of the division at all times.

Departmental clubs of the division are the Agricultural Economics Club, Block and Bridle Club (animal husbandry), Dairy Club, Horticultural Club, Klod and Kernel Klub (agronomy), and the Poultry Club. Membership in these clubs is open to students and faculty of the division who are specially interested in the fields represented by the respective clubs.

The object of the clubs is to expand the interest and familiarity of the students in the fields and industries most closely related to the department in which they are majoring. Meetings and social affairs further the acquaintance of faculty and students. Student officers preside at the meetings and plan the programs, many of which are presented by students, though frequently faculty members or other speakers participate. Usually a student belongs to the club representing the department in which he is majoring, while many belong to more than one.

ENGINEERING SOCIETIES

All students enrolled in the Division of Engineering and Architecture are members of the Engineering Association, which usually meets once each month. The students in agricultural, chemical, civil, electrical, and mechanical engineering are organized as student branches of the American Society of Agricultural Engineers, the American Institute of Chemical Engineers, the American Society of Civil Engineers, the American Institute of Electrical Engineers, and the American Society of Mechanical Engineers, respectively. Students in architecture are organized as a student branch of the American Institute of Architecture. The Kansas State Glider Club is an organization open to all students interested in glider flying; meetings are held weekly, and flying operations are supervised by experienced glider pilots.

The purpose of these various societies is to acquaint the students with the latest developments in engineering and architecture, to give them more definite ideas as to the opportunities and the requirements for success in their professions, to promote acquaintance and fellowship among the students, and to further the interests of the Division of Engineering and Architecture in the College and in the state.

THE FLYING WILDCATS

The Flying Wildcats is the organization of students enrolled in the Civilian Pilot Training Program.

POPENOE CLUB

The Popenoe Entomological Club meets twice a month. The object of the club is to promote interest in entomological work at the College. Membership is open to students and faculty members interested in insects. Entomological topics are discussed by members of the club and outside speakers. The club sponsors occasional field trips.

HOME ECONOMICS CLUB

The Margaret Justin Home Economics Club includes all students in the Division of Home Economics. Its purpose is to promote professional interest by means of social contacts and talks by leaders in home economics. It is affiliated with the American Home Economics Association and leads to continued membership in that organization after graduation.

VETERINARY MEDICAL ASSOCIATION

The Junior Chapter of the American Veterinary Medical Association is a student organization in affiliation with the American Veterinary Medical Association. The object of the chapter is to promote interest and knowledge in veterinary science. The organization meets on the second and fourth Tuesdays of each month; students present papers, and members of the faculty and outside speakers also appear on the program.

COLLEGIATE 4-H CLUB

The Collegiate 4-H Club is composed of former 4-H Club members among the College students. Its purpose is to maintain the interest of its members in extension and 4-H Club work, to develop more effective leadership in such work, to maintain and increase a loan fund for 4-H Club members in college, and in general to aid and promote the well-being of former 4-H Club members at Kansas State College. It participates actively in many campus activities and lends its aid to the various extension activities conducted on the campus or in connection with the College. The club publishes each year the yearbook of 4-H Club work in Kansas known as the "Who's Whoot." Outside speakers are frequently secured, and the organization sends representatives to various national or interstate student conventions or meetings.

THE COLLEGE BANDS

The three college bands, the Concert Band, the Varsity Band, and the Military Band, are student organizations, membership in which is voluntary. The Concert Band is limited in membership to men only, meets for rehearsal or drill three times a week, plays a number of concerts, and performs for various functions on and off the campus.

The Varsity Band is in part a training unit for the Concert Band. It is open to the entire student body, women being admitted after December 1, when the outdoor drill season closes. It meets three times a week for drill or rehearsal, plays several concerts, and performs for various functions on the campus.

From the opening of school in the fall until December 1 the two bands are drilled together to form a marching band, which plays for football games and other outdoor spectacles.

The Military Band is a strictly military organization, made up of Basic Course R. O. T. C. members who are assigned to Military Band duties in lieu of drill and technical military instruction. It is limited in its membership, and attendance of the members upon its exercises is obligatory.

Membership in all band units is determined by competitive tryouts. Regular assignment to Concert Band or Varsity Band may carry one-half hour of credit a semester.

Men pay a membership fee of 50¢ for the Concert and Varsity bands and a deposit of \$2.

THE COLLEGE ORCHESTRA

The Orchestra is a student organization connected with the Department of Music, membership in which is voluntary. Its daily training under competent leadership results in the acquisition of a considerable repertory.

ATHLETIC ORGANIZATIONS

Kansas State College gives complete physical training. In addition to gymnasium classes and the physical training of the military corps of cadets, there are intramural sports and varsity games. Every encouragement is given to a man who wishes to play football, basketball, baseball, or tennis, or to take part in track athletics. Only the most proficient enter intercollegiate contests, but others receive sound instruction and get considerable enjoyment from their athletics. All professionalism is strictly repressed and the athletic rules adopted by the faculty prevent students deficient in their studies from participating in intercollegiate games. Kansas State College is a member in good standing of the Big Six Conference.

Women as well as men have opportunity to develop themselves physically. In the part of the gymnasium reserved for their use they not only carry out a program of physical education, but likewise enjoy many intramural sports, such as basketball, tennequoit, dancing, and swimming. Orchesis, a national interpretive dancing organization, the swimmers' Frog Club, and other athletic groups are active at the College. All the work of the Women's Athletic Association, as well as in the required courses, is under the supervision of the professor of physical education for women.

LITERARY SOCIETIES

The literary societies of the College, four in number, are wholly student organizations, holding weekly meetings in the College buildings. The Ionian and Browning societies admit only women to membership; the Hamilton and the Athenian societies admit only men. These societies jointly maintain an oratorical board which arranges for the intersociety oratorical contest.

COSMOPOLITAN CLUB

There is in the College a chapter of the Association of Cosmopolitan Clubs in Universities and Colleges of America. The active membership consists of foreign and American students, both men and women. The objective of the club is to promote international understanding through friendship among students of various nationalities.



Loan Funds

All student loan activities are coördinated in the office of the executive secretary of the Alumni Association of Kansas State College, Anderson Hall. A student wishing to apply for a loan from any fund listed below should address his request to Kenney L. Ford, secretary, Alumni Association, K. S. C.

The State Board of Regents has established rules governing the administration of student loan funds. These rules include the following:

1. A student loan is made only when a note is signed by the borrower and one other responsible person, preferably the borrower's parents or guardian. This endorser must be recommended by his bank as of good financial standing and otherwise satisfactory as an endorser.

2. In general, loans will be made only to juniors, seniors, and graduate students who have attended Kansas State College for at least one semester, and preferably for one year, and who have a scholarship average of at least C.

3. The maximum total amount loaned from all loan funds to one individual usually shall not exceed \$250.

ALUMNI LOAN FUND

THE ALUMNI LOAN FUND. The Alumni Association of Kansas State College has created a loan fund, chiefly from payments for life memberships in the association. Members pay the association \$3 a year; but on payment of \$50 in one sum they are relieved from further dues. If husband and wife are both eligible for membership, they may obtain joint membership by paying \$75. The fund so created, about \$76,000, is administered by a committee appointed by the directors of the Alumni Association. The committee announces no specific rules governing the granting of loans, but in general gives preference to junior and senior students, and to loans of smaller amounts on short time over larger amounts which cannot be paid for several years. Interest is charged at the rate of six percent a year. Alumni are urged to take life memberships and thus add to the funds available to worthy students.

Acknowledgment of additions to the life membership fund is made in this place from year to year. Since the last report, up to and including September 20, 1940, the following alumni have completed payments for life membership: Tessie Agan, Merle Grinstead Barnard, Louis B. Bender, W. N. Birch, Max Burk, Earl J. Cook, Anna Laura Cornick, Forrest O. Cox, Herman and Gertrude Stump Cudney, W. LeRoy Culbertson, Eleanor Dales, Laurence Daniels, Eugene P. Davies, John W. Decker, Oliver Dilsaver, Charles G. Dobrovolsky, Clarence J. Dreier, Miriam G. Eads, Carl M. Elling, Kermit V. Engle, W. W. Fechner, Earle W. Frost, Raymond G. Frye, Russell H. Gripp, Avis C. Hall, Thelma Harman, Mildred Hearting, Fred Henderson, Geraldine Jones Hurd, Edith Jones Iles, Mary Kirkpatrick, Philip O. Lautz, Abe Litvien, Edward A. Logan, May Umberger Long, Herbert M. Low, Carolyn Brandesky Massey, William A. Mayfield, Iola Meier, M. C. Moggie, Ernest L. Nicolay, Kenneth Nordstrom, Charles W. Pence, John W. Pennington, Oren R. Peterson, Wendell J. Pfeffer, Irene Piper, Louis P. Reitz, T. Russell Reitz, Laurel Kingsley Sabrosky, S. C. Salmon, Henry Schmitz, Marguerite Morrison Schultz, L. Henry Schweiter, Lester W. Servis, Sylvia F. Smith, Arthur R. Stark, Fred Sykes, J. Edward Taylor, Henry Thomas, Dwight Tolle, Leon Wenger, Robert G. and Marguerite Stoops White, A. Ross Wilcox, and Elmer W. Young. This list brings the total of paid-up life members to 1,003.

GIFTS, MEMORIALS, AND BEQUESTS

The Alumni Association of Kansas State College is incorporated under the laws of Kansas to administer gifts and bequests to the college. Any person wishing information about making such gifts or bequests may communicate with Kenney L. Ford, secretary of the Alumni Association. The following gifts and bequests are now administered by the Alumni Association as units in the Alumni Loan Fund:

ALBERT DICKENS, '93, MEMORIAL. \$1,922.70, contributed by friends, alumni, and faculty members.

J. M. WESTGATE, '97, MEMORIAL. \$1,250. \$1,000 a bequest of J. M. Westgate; \$250 given in memory by Mark W. and Philip J. Westgate.

J. CHESTER ALLEN, '82, MEMORIAL. \$1,000, given by E. A. Allen, '87, in memory of his brother.

FRANCES M. ALLEN MEMORIAL. \$1,000, given by E. A. Allen, '87, in memory of his wife.

WILLIAM VOLKER FUND. \$1,000. \$500 given by Mr. Volker and \$500 by Mr. H. W. Luhnnow, '17.

J. U. HIGINBOTHAM, '86, and MRS. HIGINBOTHAM. \$1,000.

VILONA CUTLER, '17, ENDOWMENT MEMBERSHIP. \$1,000, a loan to relatives of the donor and, upon repayment, to other students.

NELLIE SAWYER KEDZIE, '76, UNIT. \$801.60, contributed by friends and former students.

SAMUEL AND ELEANOR THACKREY MEMORIAL. \$731.75, given by their descendants.

KARY C. DAVIS, '91, MEMORIAL. \$500, given by his widow, Fanny Waugh Davis, '91.

RUTH STOKES SEARS, '92, MEMORIAL. \$500, given by her husband, Fred C. Sears, '92.

LYDIA GARDINER WILLARD FUND. \$500, given by her husband, J. T. Willard, '83.

VENUS KIMBLE WILSON, '08, MEMORIAL. \$400, given by her husband, Bruce Wilson, '08.

ALBERT DEITZ, '85, \$128.91.

E. A. ALLEN, '87, \$100, on the fiftieth anniversary of his graduation.

CLARA F. CASTLE, '94, MEMORIAL. \$100.

JACOB LUND, '83, MEMORIAL. \$70.

C. H. STILES, f. s. '81, MEMORIAL. \$50, given by his widow, Nellie Cottrell Stiles, '87.

E. C. TREMBLY, '95, MEMORIAL. \$50.

ETHEL ARNOLD, '18, MEMORIAL. \$26, contributed by her students.

OTHER UNITS IN THE ALUMNI LOAN FUND

MANHATTAN CHAMBER OF COMMERCE. \$3,023.72.

4-H CLUB. Approximately, \$1,500, loaned in units of \$50 to former successful 4-H Club members. Created by the Collegiate 4-H Club by publishing "Who's Whoot," annual 4-H Club Book of Kansas.

AG FAIR UNIT. \$850, a temporary loan from the Ag Fair Board for aid to students in the Division of Agriculture.

COSMOPOLITAN CLUB. \$700, for foreign members of the Cosmopolitan Club.

KANSAS STATE HORTICULTURAL SOCIETY. \$500, for students in the Department of Horticulture.

KLOD AND KERNEL KLUB UNIT. \$450, for students in the Department of Agronomy.

K FRATERNITY UNIT. \$400, for any student of junior or senior classification.

KANSAS CONGRESS OF PARENTS AND TEACHERS, INC., UNIT. \$200, for students preparing to be teachers.

FUTURE FARMERS UNIT. \$180, from high-school vocational agriculture students and teachers.

PHI KAPPA PHI. \$150, for members or pledges of Phi Kappa Phi.

SIGMA DELTA CHI. \$150, for students in Industrial Journalism.

CLASSES:

Class of 1916, \$100.

Class of 1926, \$9.13.

Class of 1923, \$76.16.

Class of 1927, \$3.10.

Contributions to the Chimes Fund, at present used in the Alumni Loan Fund:

Class of 1919, \$680.18.

Class of 1935, \$57.50.

Class of 1922, \$106.39.

Class of 1936, \$111.50.

Class of 1929, \$736.63.

Class of 1938, \$131.12.

Class of 1930, \$707.32.

Class of 1939, \$45.26.

Class of 1931, \$647.30.

Architectural Unit, \$20.

Class of 1932, \$736.90.

LOAN FUNDS ADMINISTERED BY THE COLLEGE

LOCKHART STUDENT LOAN SCHOLARSHIPS. The Lockhart Loan Fund is derived from a bequest to the college by the late George N. Lockhart, and was devised as "a fund to assist male students through college by means of loans, at a reasonable rate of interest . . ."

1. Seven loan scholarships are available each year to male graduates of Kansas high schools entering the freshman class in Kansas State College, one scholarship to be awarded each year in each of the seven congressional districts of the state if such distribution is practicable.

2. Ten loan scholarships are available each year to male students transferring with advanced credit from other Kansas colleges.

3. The fund is administered by the Lockhart Student Loan Fund Committee, W. E. Grimes, chairman, to whom correspondence may be addressed.

FANNIE J. HAMILTON. \$6,000, bequeathed by John O. Hamilton, in memory of his wife.

HENRY JACKSON WATERS. Royalties received from sales in Kansas during the first five years after publication of *The Essentials of Agriculture*, by former President Waters; augmented by gifts from Senator Arthur Capper and L. R. Eakin, and others. More than \$5,000 available for emergency loans of \$50 to \$150.

EFFIE C. HARBORD. \$5,000, given by James G. Harbord, '86, as a memorial to his mother.

SOCIAL CLUB. \$3,000, loaned by the Kansas State College Social Club.

BELLE SELBY CURTICE, '82. \$1,000, available to women in the curriculum in Home Economics.

D. A. R. \$750, available to men and women students.

STUDENT EMERGENCY. \$540, available for short-term loans not in excess of \$15.

FRANKLIN LITERARY SOCIETY. More than \$300.

WOMAN'S CLUB OF MANHATTAN. Available to both men and women.

HOUSEMOTHER'S CLUB. Available to undergraduates.

LOAN FUNDS NOT ADMINISTERED BY THE COLLEGE

AMERICAN ASSOCIATION OF UNIVERSITY WOMEN. Maintained by the Manhattan branch of the Association and available to a graduate woman student.

STATE FEDERATION OF WOMEN'S CLUBS. For women students.

WOMEN'S PAN-HELLENIC. For women students.

P. E. O. For women students.

MASONIC. Established by the Knights Templar Commandery, available to junior and senior men and women. Applicants should seek recommendations from the commandery with whose members they may be acquainted.

ORDER OF THE EASTERN STAR. For members and sons and daughters of members, if juniors or seniors. Applications are passed on in August for the first semester and in January for the second, but should be filed considerably earlier. For information address the Grand Secretary, The Order of the Eastern Star, National Reserve Building, Topeka.

REBECCA DUBBS, '28, MEMORIAL. Established by members of her family to assist students in any college in Kansas who are graduates of any high school in Ness, Lane, Scott, Wichita, Greeley, or Gove counties. For information address Mr. C. G. Hays, Ransom, Kan.

Scholarships and Assistantships

SCHOLARSHIPS

CAPPER. \$300. The annual gift of Senator Arthur Capper, divided equally between the boy and the girl standing highest in the 4-H leadership project in Kansas.

CARL RAYMOND GRAY. Formerly the "Union Pacific" scholarships, the name was changed in the fall of 1939, in honor of the late president of the Union Pacific Railroad, who initiated the award in 1921.

Scholarships of \$100, awarded each year by the Union Pacific Railroad Company to one student in vocational agriculture and one member of a 4-H Club in each of the thirty-six counties in Kansas served by the railroad. Awards are made by a local committee in each county, and are based on quality and quantity of project work, records kept, character, interest, and scholastic standing. The scholarships may be used to enroll for a full-year course in agriculture or home economics at Kansas State College, but not for other courses.

SEARS, ROEBUCK. Fifteen scholarships of \$150, the annual gift of Sears, Roebuck and Company to leading high-school graduates who have distinguished themselves in 4-H Clubs or in vocational agriculture, and whose attendance at college is dependent on such an award. From the holders of these scholarships a student is selected at the end of the freshman year to receive an additional award of \$200, to apply on the expenses of his sophomore year.

LAVERNE NOYES. About twenty scholarships annually of \$50 each from funds from the estate of LaVerne Noyes, to deserving and necessitous students who served in the army or the navy of the United States between April 6, 1917, and September 11, 1918; or are descended by blood from some one who so served. Enlistments must have been previous to May 11, 1918, unless active overseas, prearmistice service was rendered. The student's dean must have all applications for these scholarships by August 1 preceding the academic year in which the scholarship is desired.

EASTERN STAR. The Grand Chapter of Kansas, Order of the Eastern Star, has made available a scholarship of \$100, to be given on merit only to a junior for use in the senior year. The winner is selected by the college and approved by the Scholarship Board of the Grand Chapter. Those eligible are Masons, members of the Order of the Eastern Star, children of Masons of Kansas, and children of members of the Order of the Eastern Star of Kansas.

GRADUATE ASSISTANTSHIPS

Graduate assistantships and graduate research assistantships have been established for some years by action of the Board of Regents, and are available in several departments of the College. See Division of Graduate Study.

Prizes and Medals

PRIZES

KLOD AND KERNEL KLUB. Cash prizes, trophies, merchandise, and subscriptions to farm papers; for grain judging.

DEPARTMENT OF POULTRY HUSBANDRY. Prizes to the value of \$100; for poultry judging.

DEPARTMENT OF ARCHITECTURE. Books to leading freshmen, sophomores, and juniors in architecture.

AMERICAN INSTITUTE OF CHEMICAL ENGINEERS. A certificate of merit to the sophomore in chemical engineering ranking highest in his freshman year.

AMERICAN SOCIETY OF CIVIL ENGINEERS. Payment of the initiation fee into the American Society of Civil Engineers; to the civil engineer ranking highest during his senior year.

CAPPER. The leading student in agricultural journalism each year has his name engraved upon one of the several small shields surrounding a larger shield bearing the words: "Recognition for superior attainments in Agricultural Journalism. Presented by Arthur Capper to students in the Department of Industrial Journalism and Printing, Kansas State College."

CHI OMEGA. By the Kappa Alpha Chapter; \$25 to the woman ranking highest in sociology at the end of the first semester.

MARGARET RUSSEL SCHOLARSHIP AWARD. By Phi Alpha Mu; \$25 to the junior woman enrolled in the Division of General Science ranking highest at the close of the second semester of her sophomore year. To be eligible a student must have done her sophomore work in the Division of General Science in Kansas State College.

PHI BETA KAPPA. \$10; to the highest ranking eight-semester senior in the curriculum in general science.

QUILL CLUB. \$10; for the best short story in the annual contest.

OMICRON NU SCHOLARSHIP AWARD. \$10; to the highest ranking freshman in the Division of Home Economics.

PRIZES IN VETERINARY MEDICINE

Dr. Benjamin F. Pfister, '21, and Dr. Earl F. Hoover, '24. \$15 and \$10; as alumni prizes in general efficiency; to seniors.

Dr. C. W. Bower, '18. \$10 and \$5; to seniors leading in work in the small-animal clinic.

Dr. O. M. Franklin, '12. \$10 and \$5; to seniors ranking highest in pathology.

Dr. N. D. Harwood, '18. \$10 and \$5; to sophomores ranking highest in physiology.

Alumni of the suspended Kansas City Veterinary College. \$10 and \$5; to juniors ranking highest in therapeutics.

MEDALS

BLOCK AND BRIDLE CLUB. Gold, silver, and two bronze; for stock judging.

STUDENT DAIRY CLUB. Gold, silver, and bronze; for dairy judging.

ALPHA RHO CHI. To the graduating senior in the Department of Architecture selected for leadership and professional merit.

AMERICAN INSTITUTE OF ARCHITECTS. To the leading senior architect.

ELECTRICAL ENGINEERING. Gold and silver; to seniors who have made the best records in twenty semester hours of required subjects in electrical engineering. Gold and silver; to the highest ranking juniors who have completed at least eighty semester hours of the required curriculum in electrical engineering.

SIGMA TAU SCHOLARSHIP AWARD. To three sophomore engineering students ranking highest in their freshman year.

ALPHA KAPPA PSI. By the Alpha Omega Chapter; a scholarship medallion to the highest ranking junior man enrolled in the Curriculum in Business Administration.

ORATORY. By the literary societies through the Inter-Society Council; three cash and medal prizes in the Inter-Society Oratorical Contest.

By the Missouri Valley Oratorical Association; cash and medal awards in its annual contest.

Student Health

Head Physician HUSBAND
Assistant Physician HANSON
Assistant Physician MONTGOMERY-SHORT
Assistant Physician HORTON
Assistant Physician ROODE
Consulting Radiologist G. M. TICE

Head Dispensary Nurse BUECHEL
Head Hospital Nurse PHILLIPS
Nurse PELTIER
Nurse HICKMAN
Nurse HERMON
Technician BROWN

The Department of Student Health is supported by the student-health fee fund. There are five full-time physicians, five nurses, and a technician in the department. The College Hospital has a capacity of fifty beds.

The offices of the department are in Anderson Hall and are open to students each school day from 7:45 a.m. to 5 p.m. Students have the privilege of consulting any of the College physicians on any question of personal hygiene. Students who need medical service and are able to walk should go to the department offices, unless there is a possibility that they have a contagious disease. Those who are unable to walk, or who suspect that they have some contagion, should go to the hospital at once. The College maintains no ambulance service. The health department observes the same holidays and vacations as other departments of the College.

The College hospital is ready to receive students at any hour of the day or night, but patients are admitted only on the recommendation of staff physicians. Hospital service does not include major surgical cases, such as appendicitis, hernia, etc. If such a case develops while the student is in the hospital, he will be transferred, at his own expense, to a hospital of his choice. The College physicians are not required to treat chronic diseases, but, if practicable, may handle them as they do acute cases. They do not treat fractures and dislocations of a serious nature, but may handle minor cases at the option of the head physician. Students with fractures are admitted to the hospital.

During a regular semester not to exceed three days, and during the nine-week summer school, not to exceed two days of hospitalization may be provided for each student without charge; for additional hospitalization, a charge of \$1 a day is made. Students admitted to the hospital or remaining in the hospital at a time for which the student-health fee has not been paid, or during Christmas holidays, will be charged \$2 a day for hospitalization.

The following charges are made for special services, which are optional: (1) for X rays: \$1 for large-sized films, 50 cents for medium-sized films, 25 cents for small-sized films, and 10 cents for single dental films; (2) for each basal metabolism test, 75 cents. All ordinary medicines and dressings are furnished free, both at the hospital and at the dispensary. The services of the college physicians and standard hospital nursing service are free; but a student may employ, at his own expense, any physician or private nurse he may desire.



The College Library

Librarian SMITH
Associate Librarian DERBY
Loan Librarian CAMP
Reference Librarian DAVIS
Documents Librarian HOFF
Assistant Reference Librarian SWENSON

Assistant Loan Librarian CULLIPHER
Head Cataloguer BAKER
Assistant Cataloguer MULLER
Documents Cataloguer ROBERTS
Continuations Assistant BAXTER
Class Reserves Assistant DILLER

The general College Library consists of all books belonging to the College, including the library of the Agricultural Experiment Station, which is incorporated with it. On June 30, 1940, the Library contained 125,723 bound volumes, besides much unbound material. It receives currently about 1,300 serial publications. As a depository the Library receives the documents and other publications of the United States government. The books are classified according to the Dewey system and are indexed in a dictionary card catalogue. The Library is primarily for free reference, but the privilege of drawing books is accorded to all of those connected with the College as registered students or as members of the faculty. Books not specially reserved may be drawn for home use for two weeks. All books are subject to recall at any time.

General reference books, books reserved for classes, general periodicals, and certain other groups of books are to be consulted only in the reading rooms. They may not be loaned from the Library except when the reading rooms are closed. They must be returned to the Library by the time it next reopens. Any violation of the regulations of the Library subjects the offender to a fine or to a withdrawal of library privileges, or to both, according to the gravity of the offense. More serious offenses, such as mutilation or theft of books or periodicals, are considered just causes for suspension or expulsion of the offender, who is also required to make good the loss incurred.

READING ROOMS. Three reading rooms are maintained in connection with the Library: the general reference room, containing encyclopedias, dictionaries, atlases, bibliographies, and general reference books; the special reference room, containing books reserved for classes; and the periodical room, containing current magazines and the important daily and weekly Kansas newspapers. These rooms are freely open to the student and to the public for purposes of reading and study.

DIVISIONAL LIBRARIES. Divisional and departmental collections are deposited in certain College buildings apart from the main Library. These collections are for the special convenience of the instructors and students of the departments concerned. They are under the direction of the librarian and are accessible to all students at regular hours.

The Division of Graduate Study

JAMES EDWARD ACKERT, *Dean*

ADMISSION

Correspondence regarding admission to graduate study should be addressed to the dean of the Division of Graduate Study, who will on request supply the required application blanks. Each applicant who is not a graduate of this College must submit with his application an official transcript of his college record.

Admission to graduate study is granted to graduates of institutions whose requirements for the bachelor's degree are substantially equivalent to those of Kansas State College. Admission to graduate study, however, may not be construed to imply admission to candidacy for an advanced degree. Such candidacy is determined after the student has demonstrated by his work for a period of two months or longer (M.S.), or approximately two years (Ph.D.), that he has the ability to do graduate work of major rank.

REGISTRATION

Students who have been admitted to graduate study register, obtain their assignments from the dean of the division, and pay their fees during the regular registration periods.

FEES*

Graduate students are subject to the same fees as other students, except that (1) they pay the student-activity fee in summer school only;† (2) graduate students enrolled for 10 or more semester hours of college work during the regular academic year or for 6 or more semester hours of college work during the summer session may elect to pay the regular student-health fee and to receive the regular student-health service provided that the election is made and the fee paid at the time of enrollment; and (3) the fee for problem or research work pursued *in absentia* or for vacation credit is \$2.50 a semester hour; (4) graduate assistants may pay incidental fees on a pro rata basis, provided that they do not enroll for more than ten hours during a semester, nor more than six hours during a nine-week summer school.

ASSIGNMENTS

Not more than sixteen hours, including research, may be assigned in a single semester, nor more than eight hours during the nine-week summer school, nor more than four hours during the four-week summer school. Students holding graduate assistantships may not be assigned to more than twelve hours, including thesis, in one semester.

* See section headed Fees, under General Information.

† Graduate students may have the student-activity benefits by paying the regular student-activity fee.

GRADES‡

A candidate for an advanced degree must make a grade of B or higher in three-fourths of the hours taken for the degree, including research. A failure or absence from examination in any course may prevent the conferring of the degree, and failure in any course in the major field precludes conferring the degree in the same year.

DEGREES

Of the advanced academic degrees, the College confers the degrees Master of Science and Doctor of Philosophy. Degrees are conferred at the end of the second semester and of the summer school. Candidates for advanced academic degrees are required to be present at commencement exercises in the academic costume and hood appropriate for the degree, unless arrangements have been made in advance for the conferring of the degree *in absentia*. Application for this privilege should be made to the Dean of the Division of Graduate Study. Candidates for degrees at the end of the second semester are required to be present at the exercises of Baccalaureate Sunday also, unless excused by the Council of Deans.

GENERAL REQUIREMENTS FOR THE DEGREES MASTER OF SCIENCE AND DOCTOR OF PHILOSOPHY

Candidates for the degrees of Master of Science and Doctor of Philosophy are expected to assume the initiative and the responsibility. It is important to recognize that graduate work does not consist in the fulfillment of routine requirements alone. The various courses, as well as the assistance and advice of the instructors, are to be regarded simply as aids in acquiring the methods, discipline, and spirit of independent research.

Each candidate for a degree is expected to have a wide knowledge of his subject and of related lines of work, which usually is obtained only by a wide range of private reading and study outside of the immediate field covered by the formal courses to which he may be assigned.

The branch of knowledge to which the student expects to devote the larger part of his time is termed his major subject. The other fields of study selected, which necessarily are more restricted in scope, are termed minor subjects. The latter should be so chosen as to make the candidate proficient in a second field.

Approximately two-thirds of the student's time is devoted to his major subject and one-third to one or more minor subjects. The word subject is used to designate a recognized field of study, and is not defined by the limits of a department. The nature and distribution of the majors and minors (program of study) are approved by the Graduate Council, upon the recommendation of the major instructor and the head of the department (M.S.), or of the supervisory committee (Ph.D.).

The approved program of study is the basis of the formal assignment to courses at the beginning of each semester and of the summer school.

Courses numbered in the two hundreds are open to both graduate and undergraduate students. For graduate credit in such courses, the student must do extra work, the nature and amount of which is determined by the instructor.

‡ See section headed Grades, under general information.

REQUIREMENTS FOR THE DEGREE MASTER OF SCIENCE

Major work leading to the degree Master of Science is offered in the following departments or major fields:

DIVISION OF AGRICULTURE:

Agricultural Economics
Agronomy
Animal Husbandry
Dairy Husbandry
Horticulture
Milling Industry
Poultry Husbandry

DIVISION OF ENGINEERING:

Agricultural Engineering
Applied Mechanics
Architecture
Chemical Engineering
Civil Engineering
Electrical Engineering
Machine Design
Mechanical Engineering
Shop Practice and Industrial Arts

DIVISION OF GENERAL SCIENCE:

Bacteriology
Botany and Plant Pathology
Chemistry
Economics and Sociology
Education*
English
Entomology
Geology
History and Government
Industrial Journalism
Mathematics
Physics
Psychology
Public Speaking
Zoölogy

DIVISION OF HOME ECONOMICS:

Art
Child Welfare and Euthenics
Clothing and Textiles
Food Economics and Nutrition
General Home Economics
Household Economics
Institutional Management

DIVISION OF VETERINARY MEDICINE:

Anatomy and Physiology
Pathology

Minor graduate work is offered in each of the above departments and in the departments of Modern Languages, Physical Education, and Surgery and Medicine.

RESIDENCE REQUIREMENTS. Candidates for the degree Master of Science (M.S.) are required to spend one academic year in residence, except under certain special conditions when the residence may be reduced to one and one-half semesters, or three nine-week summer schools, or four four-week and one nine-week summer schools. Thirty semester hours of work, including a thesis, must be satisfactorily completed.

LANGUAGE REQUIREMENTS. A reading knowledge of two modern foreign languages is desirable.

MASTER'S THESIS. Each candidate for a master's degree is required to present a thesis on some subject approved by the major instructor, the head of the department, and the Graduate Council. (See general requirements for the master's and doctor's degrees.)

The thesis ordinarily demands one-fourth of the student's time and may not exceed one-third of it. The thesis and special reports upon it must be prepared in accordance with specifications to be obtained from the office of the Dean of the Division of Graduate Study. On completion, the thesis must be approved by the major instructor, the head of the department, and the Graduate Council.

A candidate for the master's degree is subject to an oral examination covering the major and minor subjects and thesis by a committee consisting of instructors with whom the major and minor work was taken, the head of the major department, and a member of the Graduate Council as chairman. The dean of the division in which the major work is offered is a member *ex officio*.

* In graduate work in education, major emphasis is placed upon rural and vocational education.

REQUIREMENTS FOR THE DEGREE DOCTOR OF PHILOSOPHY

DEPARTMENTS OFFERING MAJOR WORK. Major work leading to the degree Doctor of Philosophy is offered in the following fields: Bacteriology, Chemistry, Entomology, Plant Genetics, Poultry Genetics, Genetics, Milling Industry, and Parasitology. Minor work for this degree may be chosen in the departments offering major work for the degree and in supporting fields in other departments offering graduate work.

RESIDENCE AND CREDIT REQUIREMENTS. At least three years (of nine months each) of graduate study beyond the bachelor's degree, equivalent to 90 semester hours, including a thesis, are required of candidates for the degree Doctor of Philosophy. At least one year of this time must be spent in residence at this College.

LANGUAGE REQUIREMENTS. Each candidate for the degree Doctor of Philosophy must demonstrate to the head of the Department of Modern Languages, or to members of his staff designated by him, ability to read the literature of the major field in two modern foreign languages, to be designated by the supervisory committee. The language requirements shall be fulfilled before the preliminary examinations are taken.

SUPERVISORY COMMITTEE. For each student who contemplates working for the degree Doctor of Philosophy, a supervisory committee is chosen by the Dean of the Division of Graduate Study. This committee, consisting of not fewer than five members representing the major and minor fields, aids the student in the preparation of the program of study, which must be approved by the Graduate Council, and has charge of all examinations except the language examinations. The chairman of the preliminary and final examinations is a member of the Graduate Council.

MAJORS AND MINORS. Approximately two-thirds of the graduate work (program of study) shall be in a major field and the remainder devoted to one or two minors. In exceptional cases, all the graduate work may be chosen in one field. The work in the major field may be taken wholly within a department or it may include closely related courses and problems in other departments or divisions of the College. The same principle applies to the minor or minors. (See general requirements for the degrees Master of Science and Doctor of Philosophy.)

PROGRAM OF STUDY AND EXAMINATIONS. Students enrolling in graduate study leading to the degree Doctor of Philosophy work on a tentative program of study until approximately two-thirds of the program, including a substantial portion of the thesis, has been completed. Ordinarily at the close of the second year of graduate study, and not later than the beginning of the year in which the student contemplates receiving the degree, the candidate must pass written and oral preliminary examinations over the entire field of study. When the student has passed the language examinations and the preliminary ones, he is recommended by the supervisory committee to the Graduate Council for admission to candidacy for the degree Doctor of Philosophy. The program of study leading to the degree accompanies the recommendation.

On completion of three years of graduate study as prescribed in the program of study and on submission of a thesis satisfactory to the supervisory committee, at least one month before commencement, the candidate is given the final examination.

DOCTOR'S THESIS. Early in the graduate work a thesis subject is chosen in the major field and approved by the supervisory committee. The finished thesis must constitute a contribution to knowledge, either presenting conclusions from new material, or reinterpreting previous knowledge. Three complete typewritten copies of the thesis approved by the supervisory committee shall be submitted to the Dean of the Division of Graduate Study at least one month before commencement. On the completion of all requirements for the

degree, two copies shall be placed in the College library and the other filed with the head of the department in which the major work is taken.

Before the degree is conferred the candidate shall guarantee the printing of the doctor's thesis (wholly or in part as determined by the supervisory committee) within three years after the date of the conferring of the degree. This guarantee shall be either a statement from the editor of an appropriate technical serial or publishing company that the thesis has been accepted for publication or shall be in the form of a cash deposit of \$100 or a bond acceptable to the Graduate Council. If the thesis is not published in acceptable form within three years, the deposit or the bond shall be forfeited unless an extension of time is granted by the Graduate Council for delayed publication after acceptance. When the thesis has been published, 125 copies shall be consigned to the College library. If publication of the thesis, entire or in part, is desired before the degree is conferred, permission must be obtained from the Graduate Council.

VACATION CREDIT

Two semester hours of graduate credit in problem or research work may be earned between the close of the summer school and the beginning of the first semester, provided that permission to do so is secured in advance from the major instructor and from the Dean of the Division of Graduate Study.

On completion, this credit, which is assessed on a pro rata basis, will be included on the student's next assignment, marked "vacation credit," and will be in addition to the regularly allowed number of hours assigned. Such credits will be forwarded to the registrar by the instructor as soon as the latter receives the class cards.

GRADUATE WORK *IN ABSENTIA*

Graduates may be enrolled, on a pro rata basis, for a limited amount of research or problem work *in absentia* on the recommendation of the head of the department and with the approval of the Dean of the Division of Graduate Study.

GRADUATE ASSISTANTS

To facilitate research work, laboratory teaching and the acquisition of advanced degrees, the College has established graduate assistantships in several departments. Part-time positions with the United States Department of Agriculture, and industrial fellowships are sometimes available. The assistantships, which may be graduate assistantships, or graduate research assistantships, are part-time appointments which demand approximately one-half of the time of the student for laboratory or research assistance in the field of his major work during the regular collegiate year. The remainder of his time is given to advanced study. No graduate assistant or graduate research assistant may receive more than twelve hours of credit per semester nor satisfy the residence requirements for the master's degree in less than two semesters and one nine-week summer school.

Graduate assistantships, paying a salary fixed each year by the State Board of Regents, have been established as follows:

<i>Subject</i>	<i>Number</i>
Agronomy	1
Bacteriology	2
Botany	1
Chemistry	5
Child Welfare	2
Civil Engineering	2
Dairy Husbandry	1
Entomology	1
Geology	1
Horticulture	2
Institutional Management	2
Machine Design	1
Mechanical Engineering	1
Milling Industry	1
Poultry Husbandry	1
Zoölogy	2

Graduate research assistantships, as listed below, usually are maintained in the departments named. Holders of these positions assist in conducting the regular research work in the institution.

<i>Subject</i>	<i>Number</i>
Agricultural Engineering	1
Agronomy	1
Animal Husbandry	2
Applied Mechanics	1
Botany	1
Clothing and Textiles.....	1
Horticulture	1
Shop Practice	1
Zoölogy	4

Industrial assistantships and fellowships:

<i>Subject</i>	<i>Number</i>
Agricultural Economics	1
Agronomy	5
Applied Mechanics	1
Chemical Engineering	2
Chemistry	1
Entomology	2
Milling Industry	1

Applications for all assistantships should be made annually by April 1 for the following academic year. Students desiring such appointments may obtain application blanks from the Dean of the Division of Graduate Study.

GRADUATE LOAN

The Manhattan Branch of the American Association of University Women maintains a loan fund which is available to graduate women students enrolled in any department of Kansas State College that offers graduate work. Application for this loan shall be made to the chairman of the Graduate Loan Fund Committee of the Manhattan Branch of the American Association of University Women.

SENIORS AND GRADUATE STUDY

A senior who has completed so much of his work for the bachelor's degree that his program for the year is not full may, with the consent of his dean and of the Dean of the Division of Graduate Study, be assigned to one or more courses for graduate credit. In no case shall such combination of courses exceed seventeen hours.

GRADUATE WORK IN THE SUMMER SCHOOL

All divisions of the College offer graduate work in the summer school. Only under special conditions, however, can a student complete requirements for the master's degree without spending an academic year in residence. For information about exceptions to the rule, one should address the Dean of the Division of Graduate Study.

Full information concerning the courses offered is contained in the Summer School number of the Kansas State College *Bulletin*, which may be obtained upon application to the vice-president of the College.

GRADUATE CALENDAR**SUMMER SCHOOL, 1941**

May 28, Wednesday.—Registration of students for nine-week Summer School begins at 8 a. m.*
June 7, Saturday.—Preliminary reports on Masters' theses are due.
June 10, Tuesday.—Lecture on thesis preparation. 4:00 p. m. W 101.
June 25, Wednesday.—Doctors' theses are due.
June 27, Friday.—Masters' examinations may begin. Abstracts of theses due one week before examination.
July 12, Saturday.—Masters' theses approvals are due.
July 19, Saturday.—Final copies of Masters' theses are due.
July 22, Tuesday.—Last day for Masters' examinations.
July 25, Friday.—Graduation exercises at 7:30 p. m. for those receiving degrees at end of Summer School.

FIRST SEMESTER, 1941-1942

Sept. 8 and 9, Monday and Tuesday.—Registration and assignment of graduate students.*
Dec. 6, Saturday.—Programs of study are due from candidates for the Master's degree in 1941.

SECOND SEMESTER, 1941-1942

Jan. 27 and 28, Tuesday and Wednesday.—Registration and assignment of graduate students.*
Feb. 17, Tuesday.—Lecture on thesis preparation. 4:00 p. m. W 101.
March 13, Friday.—Preliminary reports on Masters' theses are due.
April 13, Monday.—Masters' examinations may begin. Abstracts of theses due one week before examination.
April 25, Saturday.—Doctors' theses are due.
May 9, Saturday.—Masters' theses approvals are due.
May 16, Saturday.—Final copies of Masters' theses are due.
May 19, Tuesday.—Last day for Masters' examinations.
May 24, Sunday.—Baccalaureate services at 7:30 p. m.
May 25, Monday.—Seventy-ninth annual Commencement at 7:30 p. m.

SUMMER SCHOOL, 1942

May 27, Wednesday.—Registration of students for nine-week Summer School begins at 8 a. m.*
June 6, Saturday.—Preliminary reports on Masters' theses are due.
June 9, Tuesday.—Lecture on thesis preparation. 4:00 p. m. W 101.
June 24, Wednesday.—Doctors' theses are due.
June 26, Friday.—Masters' examinations may begin. Abstracts of theses due one week before examination.
July 11, Saturday.—Masters' theses approvals are due.
July 18, Saturday.—Final copies of Masters' theses are due.
July 21, Tuesday.—Last day for Masters' examinations.
July 24, Friday.—Graduation exercises at 7:30 p. m. for those receiving degrees at end of Summer School.

* See general calendar for vacation, holiday, and other special dates.

The Division of Agriculture

LELAND EVERETT CALL, *Dean*

The successful farmer must have scientific and economic knowledge and training. They are quite as essential as practical knowledge of agriculture in the development of an agricultural state such as Kansas. Soil is most effectively utilized by those who have knowledge of how soils have been formed, how fertility has been stored in them, and how the resources of the soil can be maintained.

The successful farmer also knows what kind of plants to grow and how to improve them. He understands the principles of selection, breeding, and feeding of livestock. He knows how to maintain orchards, gardens, and attractive surroundings. He has an appreciation for good and adequate farm buildings and a farm home equipped with modern conveniences. He is familiar with the best methods of marketing the products of the farm.

Kansas State College gives systematic training in agriculture which fits young men for the farm.

The College also prepares students for the scientific investigation of agricultural problems in state and national institutions, for agricultural extension work, for the teaching of agriculture, for service in industries closely related to agriculture, and for a variety of other public and private services of an agricultural nature.

The College owns 1,428 acres of land, which are used for experimental work and instruction, and maintains large and well-equipped laboratories for soil and crop work. There is ample greenhouse space for problems and research work in crops and soils.

The College herds and flocks contain high-class representatives of the important breeds of dairy and beef cattle, poultry, hogs, horses, and sheep. The student becomes familiar with types and breeds by actual work with the stock.

Three of the four-year curriculums offered in this division lead to the degree of Bachelor of Science in Agriculture. The four-year Curriculum in Milling Industry leads to the degree of Bachelor of Science in Milling Industry.

The curriculums in Agriculture and Agricultural Administration have a common freshman year, toward the end of which students decide which curriculum they will pursue.

CURRICULUM IN AGRICULTURE

Students choosing the Curriculum in Agriculture need not name the department in which they will major before the second semester of the sophomore year. They have their choice of numerous electives in soils, crops, agricultural economics, animal husbandry, dairy husbandry, horticulture, milling, and poultry husbandry.

All electives in any of the departments must be officially approved by the Dean of the Division of Agriculture and the head of the department in which the student majors.

A student may major not only in any department in the Division of Agriculture but also in the departments of Botany, Entomology, Zoölogy, Bacteriology, Chemistry, or Agricultural Engineering. Substitutions may be made to meet definite objectives. See "Substitutions to Meet Certain Objectives," following the outline of "Curriculum in Agriculture."

Any candidate for a degree in agriculture must have had at least six months of farm experience approved by the Dean of the Division of Agriculture. Students in dairy manufactures or specialized horticulture may substitute practical experience in their respective industries for farm experience.

A formal statement outlining farm experience or substitutions therefor must be filed in the dean's office during the last semester of the senior year.

The student who completes the freshman and sophomore years will have had basic studies in soils, farm crops, livestock, dairying, poultry husbandry, horticulture, and agricultural economics, giving him a general knowledge of the whole range of agriculture. More than one-third of his time will have been devoted to strictly agricultural courses.

During his junior and senior years, the student continues his studies of fundamental science and begins to learn to apply science to agriculture.

CURRICULUM IN DAIRY MANUFACTURING

This curriculum provides special training in the manufacture of dairy products. It will afford the student an opportunity to specialize in dairy manufacturing and to select, by means of properly chosen electives, one of three fields of specialization: (a) dairy plant operator; (b) dairy plant manager; and (c) dairy products technician. Electives selected by the student must be approved in advance by the head of the Department of Dairy Husbandry and the Dean of the Division of Agriculture.

CURRICULUM IN AGRICULTURAL ADMINISTRATION

The Curriculum in Agricultural Administration is planned to meet the needs of students preparing for industries closely related to farming, which require training in both agriculture and business principles. Among such industries and occupations are: agricultural services, rural banking, development and sale of lands, processing and marketing of grains, agricultural journalism, and the teaching of agriculture in high schools and elsewhere.

There is ample opportunity to elect business subjects such as accounting, business organization, credit and finance, business law, and marketing.

CURRICULUM IN SPECIALIZED HORTICULTURE

The Curriculum in Specialized Horticulture is planned for students who wish to prepare for one of the highly specialized subdivisions of horticulture such as landscape gardening and floriculture. It gives such students opportunity to elect a larger number of courses in artistic and technical branches of horticulture.

CURRICULUM IN MILLING INDUSTRY

The Curriculum in Milling Industry is planned for students in three major fields: (1) milling administration, (2) milling technology, (3) milling chemistry.

Major electives in each of the three fields are listed following the Curriculum in Milling Industry. Minor electives which are not listed are selected to meet the needs of the individual student.

Students choosing the field of milling chemistry must so indicate at the time of assignment in the first semester of their freshman year in order to be assigned to proper chemistry courses.

Students who bring credits to this College from some other college or university, and who choose the Curriculum in Milling Industry, should indicate in which of the three fields in milling they expect to major.

Any candidate for a degree in Milling Industry must have had at least three months' experience in a wheat elevator, flour mill, bakery, or cereal chemistry laboratory, or equivalent, before attaining senior classification.

MILLING ENROLLMENT LIMITED

By authority of the State Board of Regents, the number of students enrolled in the four-year Curriculum in Milling Industry is limited to 65. Students having their residence in Kansas have first preference. Out-of-state students who have had practical milling experience are given second preference. Selections from either group are further based on scholarship and other evidence of fitness.

Persons wishing to be selected for this curriculum must apply several weeks before the beginning of the academic year. Application should be made before August 15. Application blanks may be obtained from the Dean of the Division of Agriculture.

STATE TEACHER'S CERTIFICATE

By selection of proper electives in the Department of Education, the four-year curriculum in either Agriculture or Agricultural Administration may lead to the degree of Bachelor of Science in Agriculture and also qualify the graduate for the three-year Kansas state teacher's certificate, valid in any high school or other public school in the state, and renewable for life.

A student in the Curriculum in Agriculture desiring to qualify for teaching, should elect General Psychology in the first semester of his junior year. (This course is required in the second semester of the sophomore year in the Curriculum in Agricultural Administration.) A total of 18 hours in the Department of Education is required for this certificate, as follows: General Psychology, Principles of Secondary Education, Educational Psychology, Methods of Teaching Agriculture, Teaching Participation in Agriculture, and Vocational Education.

STATE CERTIFICATE FOR TEACHERS OF VOCATIONAL AGRICULTURE

Electives in the field of agricultural education may be so chosen as to meet requirements for the state certificate for teaching vocational agriculture in Kansas high schools participating in federal Smith-Hughes funds. The group of minor electives in related nonagricultural subjects must complete the candidate's professional preparation in education, and the group of general electives must include the mechanical training necessary for the handling of farm shop problems. Therefore, these groups must include the following courses or their equivalents.

Minor electives	15
Principles of Secondary Education, Educ. 236.....	3
Educational Psychology, Educ. 109.....	3
Methods of Teaching Agriculture, Educ. 136.....	3
Teaching Participation in Agriculture, Educ. 161.....	3
Vocational Education, Educ. 241.....	3
General electives	17
Gas Engines and Tractors, Agr. Engg. 130.....	3
Farm Buildings, Agr. Engg. 101.....	3
Farm Machinery, Agr. Engg. 108.....	3
Farm Carpentry, Shop 147.....	3
Farm Blacksmithing I, Shop 157.....	1
Farm Blacksmithing II, Shop 158.....	1
Farm Shop Methods, Shop 175.....	3
Total	32

AGRICULTURE IN THE SUMMER SCHOOL

All departments in the division usually offer courses in the Summer School. Some are basic college courses, but graduate work particularly suited to high-school teachers of vocational agriculture is emphasized. The Summer School number of the Kansas State College *Bulletin* may be obtained upon application to the vice-president of the College.

HOME STUDY IN AGRICULTURE

The home study department of the Division of College Extension offers a number of college courses in agriculture which can be taken by correspondence. Such courses carry the same credit as resident college courses having the same description. These courses will be found especially advantageous to college students who desire to make up deficiencies or to gain certain credits during the summer vacation season. All courses given by correspondence are listed in the latter part of this catalogue under the title "Home Study" in the Division of College Extension.

Curriculum in Agriculture

FRESHMAN

FIRST SEMESTER		SECOND SEMESTER	
College Rhetoric I, Engl. 101.....	*3(3-0)	College Rhetoric II, Engl. 104....	3(3-0)
Gen. Botany I, Bot. 101.....	3(1-6)	Gen. Geology, Geol. 103.....	3(3-0)
Chemistry I, Chem. 101.....	5(3-6)	Gen. Botany II, Bot. 105.....	3(1-6)
El. of An. Husb., An. Husb. 125..	3(2-3) <i>or</i>	Chemistry II Rec., Chem. 103....	3(3-0)
El. of Dairying, Dairy Husb. 101..	3(2-3)	El. of Dairying, Dairy Husb. 101..	3(2-3) <i>or</i>
Freshman Lect. Gen. Agr. 102....	1(2-0)	El. of An. Husb., An. Husb. 125..	3(2-3)
Infantry I, Mil. Sc. 101.....	1(1-2)	Library Methods, Lib. Ec. 101....	1(1-0)
Phys. Education M, Phys. Ed. 103,	R(0-2)	Infantry II, Mil. Sc. 102.....	1(1-2)
Agr. Seminar, ¹ Gen. Agr. 103.....	R	Phys. Education M, Phys. Ed. 103,	R(0-2)
		Agr. Seminar, ¹ Gen. Agr. 103.....	R
Total	16	Total	17

SOPHOMORE

FIRST SEMESTER		SECOND SEMESTER	
El. of Horticulture, Hort. 107.....	3(2-3)	Prin. of Feeding, An. Husb. 152 ² ..	3(3-0)
Organic Chemistry, Agr., Chem. 125,	3(3-0)	Economics I, Econ. 101.....	3(3-0)
Anat. and Physiol., Anat. 131....	3(2-3) <i>or</i>	Farm Crops, Agron. 101.....	4(2-6) <i>or</i>
Plant Physiology I, ³ Bot. 208.....	3(3-0)	Soils, Agron. 130.....	4(3-2, 1)
Soils, Agron. 130.....	4(3-2, 1) <i>or</i>	General Zoölogy, Zoöl. 105.....	5(3-6)
Farm Crops, Agron. 101.....	4(2-6)	Infantry IV, Mil. Sc. 104.....	1(1-2)
Farm Poul. Pro., Poul. Husb. 101,	2(1-3)	Phys. Education M, Phys. Ed. 103,	R(0-2)
Infantry III, Mil. Sc. 103.....	1(1-2)	Agr. Seminar, ¹ Gen. Agr. 103.....	R
Phys. Education M, Phys. Ed. 103,	R(0-2)		
Agr. Seminar, ¹ Gen. Agr. 103.....	R		
Total	16	Total	16

JUNIOR

FIRST SEMESTER		SECOND SEMESTER	
Genetics, An. Husb. 221.....	3(3-0) <i>or</i>	Gen. Econ. Entomology, Ent. 203..	3(2-3)
Agr. Microbiology, Bact. 105 ⁴	3(2-3)	Agr. Microbiology, Bact. 105 ⁴	3(2-3) <i>or</i>
Plant Pathology I, Bot. 205.....	3(2-3)	Genetics, An. Husb. 221.....	3(3-0)
Farm Organization, Agr. Ec. 106..	3(2-3)	Agr. Journalism, Ind. Jour. 160...	3(2-3)
Elective	7	Elective	7
Agr. Seminar, ¹ Gen. Agr. 103.....	R	Agr. Seminar, ¹ Gen. Agr. 103.....	R
Total	16	Total	16

SENIOR

FIRST SEMESTER		SECOND SEMESTER	
Elective	16	Agr. Relationships, Gen. Agr. 105,	R(1-0)
Agr. Seminar, ¹ Gen. Agr. 103.....	R	Elective	16
		Agr. Seminar, ¹ Gen. Agr. 103.....	R
Total	16	Total	16

Number of hours required for graduation, 129.§

* The number before the parentheses indicates the number of hours of credit; the first number within the parentheses indicates the number of hours of recitation each week; the second shows the number of hours to be spent in laboratory work each week; and the third, where there is one, indicates the number of hours of outside work in connection with the laboratory each week.

1. Four meetings each semester.
 2. Some time during the second semester of the sophomore year each student is required to file a written statement in the office of the Dean of the Division of Agriculture, designating the department of the division in which he will major.
 3. Students who do not expect to major in animal husbandry, dairy husbandry, or poultry husbandry may, with the approval of the head of the department in which they expect to major, take Plant Physiology I (Bot. 208) instead of Anatomy and Physiology (Anat. 131).
 4. Students expecting to take additional work in bacteriology, either for advanced work in soils or dairying, will take General Microbiology instead of Agricultural Microbiology.
- § Seniors must meet the graduation requirement in points as well as in hours. See section headed: The Point System.

Electives

The electives in the Curriculum in Agriculture are grouped as follows:

	<i>Semester hours</i>
MAJOR ELECTIVES	12
These electives may be taken in any one of the departments of the Division of Agriculture. In certain cases also a science department outside of the division may be selected for a major department; <i>e. g.</i> , Chemistry, Entomology, Bacteriology.	
MINOR AGRICULTURAL ELECTIVES.....	9
These electives may be taken from one or more departments, but must directly strengthen the student's preparation in agriculture.	
MINOR NONAGRICULTURAL ELECTIVES.....	6
These electives must be chosen from one or more of the following departments: English, Education, Economics and Sociology, History and Government, Mathematics, Modern Languages.	
GENERAL ELECTIVES	19
These electives should be chosen to meet individual needs and to round out the preparation provided by the rest of the student's curriculum. All students not offering one unit of high-school physics for entrance must include three hours of Agricultural Physics in their electives.	

All electives must be officially approved before assignment, by both the Dean of the Division of Agriculture and the head of the department in which the student majors.

SUBSTITUTION TO MEET CERTAIN OBJECTIVES

Students desiring to prepare themselves for scientific or special work in the field of agriculture may, with the approval of the Dean of the Division of Agriculture and the head of the department in which they expect to major, substitute courses in the departments of Mathematics, Physics, Chemistry, Bacteriology, Entomology, Zoölogy, Botany and Plant Pathology, Education, Agricultural Engineering, Modern Languages, and other approved departments, for twenty-five hours in the Curriculum in Agriculture; provided, that no student may receive a degree in agriculture who does not have at least twenty-five hours in technical agriculture in not fewer than three departments.

Electives for Students of Agriculture Majoring in Industrial Journalism

Students who wish to prepare for agricultural journalism may major in industrial journalism, thus combining training in agriculture or agricultural administration with the fundamentals of journalism. The electives provided for students selecting such a field for major work are as follows:

Industrial Writing, Ind. Jour. 161,	2(2-0)	Prin. of Advertising, Ind. Jour. 178,	4(4-0)
Editing, Ind. Jour. 166.....	2(2-0)	History and Ethics of Journalism,	
Ind. Feature Writing, Ind. Jour. 167,	2(2-0)	Ind. Jour. 273.....	3(3-0)
The Rural Press, Ind. Jour. 181..	2(2-0)	Journalism Surveys, Ind. Jour. 278,	2(0-6)

Curriculum in Dairy Manufacturing

FRESHMAN

FIRST SEMESTER

College Rhetoric I, Engl. 101.....	3(3-0)
Gen. Botany I, Bot. 101.....	3(1-6)
Chemistry I, Chem. 101.....	5(3-6)
El. of Dairying, Dairy Husb. 101..	3(2-3)
Freshman Lect., Gen. Agr. 102....	1(2-0)
Infantry I, Mil. Sc. 101.....	1(1-2)
Phys. Education M, Phys. Ed. 103,	R(0-2)
Agr. Seminar, ¹ Gen. Agr. 103.....	R

 Total 16

SECOND SEMESTER

College Rhetoric II, Engl. 104....	3(3-0)
Gen. Geology, Geol. 103.....	3(3-0)
Chemistry II Rec., Chem. 103....	3(3-0)
Chemistry II Lab., Chem. 104....	2(0-6) <i>or</i>
Dy. Cattle Judg., Dairy Husb. 105,	2(0-6)
El. of An. Husb., An. Husb. 125..	3(2-3)
Library Methods, Lib. Ec. 101....	1(1-0)
Infantry II, Mil. Sc. 102.....	1(1-2)
Phys. Education M, Phys. Ed. 103,	R(0-2)
Agr. Seminar, ¹ Gen. Agr. 103.....	R

 Total 16

SOPHOMORE

FIRST SEMESTER

Dairy Inspec., Dairy Husb. 106...	2(1-3)
General Algebra, Math. 108.....	5(5-0)
Farm Poult. Pro., Poult. Husb. 101,	2(1-3)
Gen. Microbiology, Bact. 101.....	3(1-6)
Organic Chemistry, Agr., Chem. 125,	3(3-0)
Infantry III, Mil. Sc. 103.....	1(1-2)
Phys. Education M, Phys. Ed. 103,	R(0-2)
Agr. Seminar, ¹ Gen. Agr. 103.....	R

 Total 16

SECOND SEMESTER

Farm Crops, Agron. 101.....	4(2-6)
Milk Production, Dairy Husb. 108,	3(3-0)
Dairy Bacteriology, Bact. 111....	3(1-6)
Economics I, Econ. 101.....	3(3-0)
Prin. of Feeding, An. Husb. 152..	3(3-0)
Infantry IV, Mil. Sc. 104.....	1(1-2)
Phys. Education M, Phys. Ed. 103,	R(0-2)
Agr. Seminar, ¹ Gen. Agr. 103.....	R

 Total 17

JUNIOR

FIRST SEMESTER

Genetics, An. Husb. 221.....	3(3-0)
Cond. & Pwd. Milk, Dairy Husb.	
128	3(2-3) <i>or</i>
Prin. of Accounting, Econ. 136....	3(3-0)
Agr. Seminar, ¹ Gen. Agr. 103.....	R
Elective	10

 Total 16

SECOND SEMESTER

Market Milk, Dairy Husb. 116....	3(2-3)
Ice Cream Mkg., Dairy Husb. 130,	3(2-3) <i>or</i>
Cheese Making, Dairy Husb. 135..	3(2-3)
Agr. Seminar, ¹ Gen. Agr. 103.....	R
Elective	10

 Total 16

SENIOR

FIRST SEMESTER

Butter Making, Dairy Husb. 110..	3(2-3)
Bact. of Butter Cult., Bact. 235...	1(0-3)
Cond. & Pwd. Milk, Dairy Husb.	
128	3(2-3) <i>or</i>
Prin. of Accounting, Econ. 136....	3(3-0)
Agr. Seminar, ¹ Gen. Agr. 103.....	R
Elective	9

 Total 16

SECOND SEMESTER

Ice Cream Mkg., Dairy Husb. 130,	3(2-3) <i>or</i>
Cheese Making, Dairy Husb. 135..	3(2-3)
Dairy Seminar, Dairy Husb. 202..	1(1-0)
Agr. Relationships, Gen. Agr. 105,	R(1-0)
Agr. Seminar, ¹ Gen. Agr. 103.....	R
Elective	12

 Total 16

1. Four meetings each semester.

Curriculum in Agricultural Administration

FRESHMAN

FIRST SEMESTER		SECOND SEMESTER	
College Rhetoric I, Engl. 101.....	3(3-0)	College Rhetoric II, Engl. 104....	3(3-0)
Gen. Botany I, Bot. 101.....	3(1-6)	Gen. Geology, Geol. 103.....	3(3-0)
Chemistry I, Chem. 101.....	5(3-6)	Gen. Botany II, Bot. 105.....	3(1-6)
El. of An. Husb. An. Husb. 125... 3(2-3)or		Chemistry II Rec., Chem. 103....	3(3-0)
El. of Dairying, Dairy Husb. 101..	3(2-3)	El. of Dairying, Dairy Husb. 101..	3(2-3)or
Freshman Lect., Gen. Agr. 102...	1(2-0)	El. of An. Husb., An. Husb. 125..	3(2-3)
Infantry I, Mil. Sc. 101.....	1(1-2)	Library Methods, Lib. Ec. 101....	1(1-0)
Phys. Education M, Phys. Ed. 103,	R(0-2)	Infantry II, Mil. Sci. 102.....	1(1-2)
Agr. Seminar,* Gen. Agr. 103.....	R	Phys. Education M, Phys. Ed. 103,	R(0-2)
		Agr. Seminar,* Gen. Agr. 103.....	R
Total	16	Total	17

SOPHOMORE

FIRST SEMESTER		SECOND SEMESTER	
Organic Chemistry, Agr., Chem. 125,	3(3-0)	El. of Hort., Hort. 107.....	3(2-3)
Economics I, Econ. 101.....	3(3-0)	Feeding L. S., An. Husb. 172.....	3(3-0)
General Algebra, Math. 108.....	5(5-0)	General Psychology, Educ. 184....	3(3-0)
Soils, Agron. 130.....4(3-2, 1)or		Soils, Agron. 130.....4(3-2, 1)or	
Farm Crops, Agron. 101.....	4(2-6)	Farm Crops, Agron. 101.....	4(2-6)
Infantry III, Mil. Sci. 103.....	1(1-2)	Farm Poul. Pro., Poul. Husb. 101,	2(1-3)
Phys. Education M, Phys. Ed. 103,	R(0-2)	Infantry IV, Mil. Sci. 104.....	1(1-2)
Agr. Seminar,* Gen. Agr. 103.....	R	Phys. Education M, Phys. Ed. 103,	R(0-2)
		Agr. Seminar,* Gen. Agr. 103....	R
Total	16	Total	16

JUNIOR

FIRST SEMESTER		SECOND SEMESTER	
Agr. Journalism, Ind. Jour. 160...	3(2-3)	Agr. Seminar,* Gen. Agr. 103.....	R
Agr. Seminar,* Gen. Agr. 103.....	R	Elective	16
Elective	13		
Total	16	Total	16

SENIOR

FIRST SEMESTER		SECOND SEMESTER	
Elective	16	Agr. Relationships, Gen. Agr. 105,	R(1-0)
Agr. Seminar,* Gen. Agr. 103.....	R	Agr. Seminar,* Gen. Agr. 103.....	R
		Elective	16
Total	16	Total	16

Number of hours required for graduation, 129.

Electives

The electives in the Curriculum in Agricultural Administration are grouped as indicated below in the following fields: (1) rural banking, (2) land economics, (3) grain industries, (4) agricultural journalism, (5) agricultural engineering, (6) agricultural service, and (7) agricultural education.

Students who bring credits to this College from some other college or university, and who choose the Curriculum in Agricultural Administration, must indicate whether or not they expect to enter the field of agricultural education.

SEMESTER HOURS OF ELECTIVES REQUIRED FOR VARIOUS FIELDS

GROUP	Hours in fields		Hours in field 7
	1, 2, 3, 4, 5, 6		
Major electives in agricultural economics.....	15		10
Minor agricultural electives (not more than nine semester hours from one department)	15		17
Minor electives in related nonagricultural subjects.....	15		15
General electives	16		19
Total	61		61

NOTE.—All students not offering one unit of high-school physics for entrance must include three hours of Agricultural Physics in their electives.

All electives must be officially approved before assignment, by both the Dean of the Division of Agriculture and the head of the Department of Economics and Sociology.

* Four meetings each semester.

Curriculum in Specialized Horticulture

FRESHMAN

FIRST SEMESTER

College Rhetoric I, Engl. 101.....	3(3-0)
Gen. Botany I, Bot. 101.....	3(1-6)
Chemistry I, Chem. 101.....	5(3-6)
Library Methods, Lib. Ec. 101...	1(1-0)
Freshman Lect., Gen. Agr. 102....	1(2-0)
Infantry I, Mil. Sc. 101 (men)...	1(1-2)
Phys. Education M, Phys. Ed. 103, R(0-2)or	
Phys. Education W, Phys. Ed. 151, R(0-3)	
Elective ¹	2
Agr. Seminar, Gen. Agr. 103 ²	R

Total 15 or 16

SECOND SEMESTER

College Rhetoric II, Engl. 104....	3(3-0)
Gen. Botany II, Bot. 105.....	3(1-6)
Chemistry II Rec., Chem. 103....	3(3-0)
Gen. Geology, Geol. 103.....	3(3-0)
Infantry II, Mil. Sc. 102 (men)...	1(1-2)
Phys. Education M, Phys. Ed. 103, R(0-2)or	
Phys. Education W, Phys. Ed. 151, R(0-3)	
Elective	4
Agr. Seminar, Gen. Agr. 103 ²	R

Total 16 or 17

SOPHOMORE

FIRST SEMESTER

Economics I, Econ. 101.....	3(3-0)
Soils, Agron. 130.....	4(3-2, 1)
Tax. Bot. Flrg. Plants, Bot. 225...	3(1-6)
Infantry III, Mil. Sc. 103 (men)...	1(1-2)
Phys. Education M, Phys. Ed. 103, R(0-2)or	
Phys. Education W, Phys. Ed. 151, R(0-3)	
Elective	5
Agr. Seminar, Gen. Agr. 103 ²	R

Total 15 or 16

SECOND SEMESTER

Plane Trigonometry, Math. 101...	3(3-0)
El. of Horticulture, Hort. 107....	3(2-3)
Agr. Journalism, Ind. Jour. 160...	3(2-3)
Infantry IV, Mil. Sc. 104 (men)...	1(1-2)
Phys. Education M, Phys. Ed. 103, R(0-2)or	
Phys. Education W, Phys. Ed. 151, R(0-3)	
Elective	6
Agr. Seminar, Gen. Agr. 103 ²	R

Total 15 or 16

JUNIOR

FIRST SEMESTER

Plant Materials I, Hort. 102.....	3(2-3)
Plant Physiology I, Bot. 208.....	3(3-0)
Elective	10
Agr. Seminar, Gen. Agr. 103 ²	R

Total 16

SECOND SEMESTER

Plant Materials II, Hort. 103....	3(2-3)
Gen. Entomology, Ent. 101.....	4(3-3)
Elective	9
Agr. Seminar, Gen. Agr. 103 ²	R

Total 16

SENIOR

FIRST SEMESTER

Plant Pathology I, Bot. 205.....	3(1-6)
Elective	13
Agr. Seminar, Gen. Agr. 103 ²	R

Total 16

SECOND SEMESTER

Agr. Relationships, Gen. Agr. 105..	R(1-0)
Plant Ecology, Bot. 228.....	2(2-0)
Spraying, Hort. 207.....	3(2-3)
Elective	11
Agr. Seminar, Gen. Agr. 103 ²	R

Total 16

Number of hours required for graduation: Men, 129; women, 125.

Electives in Landscape Gardening

Engg. Drawing, Mach. Des. 101..	2(0-6)	Domestic Arch., Arch. 124.....	2(2-0)
Freehand Draw. I, Arch. 111.....	2(0-6)	Freehand Draw. II, Arch. 114....	2(0-6)
Silviculture, Hort. 119.....	3(2-3)	Ext. Speech I, Pub. Spk. 106....	2(2-0)
Forest Nursery Prac., Hort. 120...	3(2-3)	Physiographic Geol., Geol. 110...	3(3-0)
Landscape Gardening I, Hort. 125,	3(3-0)	Water Color I, Arch. 118.....	2(0-6)
Pencil Rend. and Sketch., Arch. 116,	2(0-6)	Surveying III, Civ. Engg. 151, 155,	3(2-3)
Surveying I, Civ. Engg. 102.....	2(0-6)	Appreciation of Arch., Arch. 244..	3(3-0)
Theory of Lands, Design, Hort. 243,	3(3-0)	Landscape Gardening III, Hort. 246,	3(2-3)
El. of Floriculture, Hort. 127.....	3(3-0)	Applied Floriculture, Hort. 212....	3(2-3)
Landscape Gardening II, Hort. 238,	3(1-6)	Plant Ecology, Bot. 228.....	2(2-0)
Landscape Constr., Hort. 227.....	3(2-3)	Horticultural Probs., Hort. 244...	2 to 8
Civic Art, Hort. 223.....	3(1-6)		

From this group of courses, together with other courses, the student will elect fifty-eight credit hours to be approved in advance of assignment by the head of the Department of Horticulture and the Dean of the Division of Agriculture.

Electives in Floriculture

El. of Floriculture, Hort. 127....	3(3-0)	Gen. Org. Chemistry, Chem. 122..	5(3-6)
Floral Arrangement, Hort. 129....	2(1-3)	Org. Chemistry, Agr. Chem. 124..	3(3-0)
Landscape Gardening I, Hort. 125,	3(3-0)	Business Management, Econ. 126..	2(2-0)
Genetics, An. Husb. 221.....	3(3-0)	Applied Floriculture, Hort. 212...	3(2-3)
Forest Nursery Prac., Hort. 120...	3(2-3)	Plant Physiology III, Bot. 211....	3(3-0)
Plant Genetics, Agron. 208.....	3(3-0)	Credits and Collections, Econ. 223,	2(2-0)
Accounting I, Econ. 133.....	3(2-3)	Extern. Speech I, Pub. Spk. 106..	2(2-0)
Engg. Draw., Mach. Des. 101....	2(0-6)	Horticulture Seminar, Hort. 235...	1(1-0)
Modern Language	3(3-0)	El. of Vegetable Gard., Hort. 133,	3(2-3)
Meteorology, Phys. 133.....	3(3-0)	Literature of Hort., Hort. 208....	2(2-0)
Botanical Microtechnic, Bot. 217..	3(1-6)	Modern Language	3(3-0)
		Horticultural Probs., Hort. 244...	2 to 8

From this group of courses, together with other courses, the student will elect fifty-eight credit hours to be approved in advance of assignment by the head of the Department of Horticulture and the Dean of the Division of Agriculture.

Curriculum in Milling Industry

FRESHMAN

FIRST SEMESTER		SECOND SEMESTER	
El. of Milling, Mill. Ind. 101....	2(1-2, 1)	College Rhetoric II, Engl. 104....	3(3-0)
College Rhetoric I, Engl. 101....	3(3-0)	Plane Trigonometry, Math. 101...	3(3-0)
College Algebra, Math. 104.....	3(3-0)	Chemistry II Rec., Chem. 103....	3(3-0)
Chemistry I, Chem. 101.....	5(3-6)	Library Methods, Lib. Ec. 101...	1(1-0)
Freshman Lect., Gen. Agr. 102...	1(2-0)	Current History, Hist. 126.....	1(1-0)
Surv. of Mill. Ind., Mill. Ind. 102,	1(1-0)	Engg. Drawing, Mach. Des. 101..	2(0-6)
Artillery I, Mil. Sc. 113.....	1(1-2)	Flow Sheets, Mill. Ind. 103.....	2(0-6)
Phys. Education M, Phys. Ed. 103,	R(0-2)	Artillery II, Mil. Sc. 114.....	1(1-2)
Milling Seminar ¹	R	Phys. Education M, Phys. Ed. 103,	R(0-2)
		Milling Seminar ¹	R
Total	16	Total	16

SOPHOMORE

FIRST SEMESTER		SECOND SEMESTER	
Milling Practice I, Mill. Ind. 109..	3(1-6)	Gen. Physics II, Phys. 103.....	4(3-3)
Gen. Physics I, Phys. 102.....	4(3-3)	Gen. Botany II, Bot. 105.....	3(1-6)
Gen. Botany I, Bot. 101.....	3(1-6)	Milling Entomology, Ent. 117....	2(2-0)
Artillery III, Mil. Sc. 115.....	1(1-2)	Artillery IV, Mil. Sc. 116.....	1(1-2)
Phys. Education M, Phys. Ed. 103,	R(0-2)	Phys. Education M, Phys. Ed. 103,	R(0-2)
Milling Seminar ¹	R	Milling Seminar ¹	R
Elective ²	5	Elective ²	6
Total	16	Total	16

JUNIOR⁴

FIRST SEMESTER		SECOND SEMESTER	
Mkt. Grading Cereals, Agron. 115,	3(1-4, 2)	Mill. Qual. of Wheat, Mill. Ind. 212,	3(3-0)
Economics I, Econ. 101.....	3(3-0)	Milling Seminar ¹	R
Milling Seminar ¹	R	Elective ²	13
Elective ²	10		
Total	16	Total	16

SENIOR

FIRST SEMESTER		SECOND SEMESTER	
Milling Seminar ¹	R	Milling Seminar ¹	R
Elective ²	16	Agr. Relationships, Gen. Agr. 105..	R
		Elective ²	16
Total	16	Total	16

Number of hours required for graduation: 128—basic courses, 62 hours;
elective courses, 66 hours.

1. All students not offering one unit of high-school physics for entrance must include three hours of Agricultural Physics in their electives.

2. Four meetings each semester.

Electives for Students in Milling Administration**MAJOR ELECTIVES**

Gen. Org. Chem., Chem. 122.....	5(3-6)	Mktg. of Farm Prod., Econ. 202..	3(3-0)
General Psychology, Educ. 184....	3(3-0)	Grain Marketing, Econ. 203.....	3(3-0)
Extern. Speech I, Pub. Spk. 106..	2(2-0) <i>or</i>	Money and Banking, Econ. 116...	3(3-0)
Public Speaking, Pub. Spk. 107*...	2(2-0)	Business Law I, Hist. 163.....	3(3-0)
Extern. Speech II, Pub. Spk. 108,	2(2-0)	Business Law II, Hist. 164.....	3(3-0)
Coml. Correspondence, Engl. 122..	3(3-0)	Prin. of Advertising, Ind. Jour. 178,	4(4-0)
Writ. and Oral Salesmanship, Engl.		Economics II, Econ. 104.....	3(3-0)
123	3(3-0)	Business Org. & Fin., Econ. 215...	3(3-0)
Accounting I, Econ. 133.....	3(2-3)		
Accounting II, Econ. 134.....	3(2-3)	Total	49

MINOR ELECTIVES: A total of 17 hours of minor electives completes the work of the curriculum.

Electives for Students in Milling Technology**MAJOR ELECTIVES**

Gen. Org. Chem., Chem. 122.....	5(3-6)	Mill. Prac. II, Mill. Ind. 111.....	3(1-6)
Plane Anal. Geometry, Math. 110,	4(4-0)	Str. of Materials E, Ap. Mech. 216,	3(3-0)
Calculus I, Math. 114.....	4(4-0)	Flour Mill. Constr., Mill. Ind. 203,	3(0-9)
Calculus II, Math. 115.....	4(4-0)	Steam and Gas Engineering C,	
Applied Mechanics, Ap. Mech. 202,	4(4-0)	Mech. Engg. 120, 125.....	3(2-3)
Des. Geom., Mach. Des. 106.....	2(0-6)	Elec. Engg. C, Elec. Engg. 102, 106,	3(2-2, 1)
Mechanism, Mach. Des. 121.....	3(3-0)	Oxyacetylene Welding, Shop 171, 1(0-2, 1) <i>or</i>	
Mach. Drawing I, Mach. Des. 111,	2(0-6)	Arc Welding, Shop 172.....	1(0-2, 1) <i>or</i>
Mill. Tech. I, Mill. Ind. 201.....	2(0-6)	Sheet Metal Work, Shop 173.....	2(0-6)
Mill. Tech. II, Mill. Ind. 202....	2(0-6)	Total	47 or 48

MINOR ELECTIVES: A total of 18 or 19 hours of minor electives completes the work of the curriculum.

Electives for Students in Milling Chemistry**MAJOR ELECTIVES**

Gen. Org. Chem., Chem. 122.....	5(3-6)	Mill. Ind. Probs., Mill. Ind. 214...	3(0-9)
Chemistry II Lab., Chem. 104....	2(0-6)	Chemistry of Proteins, Chem. 236,	3(3-0)
Plane Anal. Geometry, Math. 110,	4(4-0)	Experimental Baking, Mill. Ind.	
Calculus I, Math. 114.....	4(4-0)	207	4(1-6, 3)
Physiological Chemistry, Chem. 231,	5(3-6)	Colloidal Chemistry, Chem. 213...	2(2-0)
Quan. Analysis A, Chem. 250.....	3(1-6)	Adv. Wheat and Flour Testing,	
Quan. Analysis B, Chem. 251.....	3(1-6)	Mill. Ind. 210.....	2(0-6)
Gen. Microbiology, Bact. 101.....	3(1-6)	Chemical Microscopy, Chem. 245..	1(0-3)
Wheat, Flour Test., Mill. Ind. 205,	3(0-9)	Total	52
Physical Chemistry I, Chem. 206..	5(3-6)		

MINOR ELECTIVES: A total of 14 hours of minor electives completes the work of the curriculum.

* For juniors and seniors.

1. Two meetings each month.

2. Major electives may be in milling administration, milling technology,³ or milling chemistry. These groups of electives are listed below. Minor electives are flexible to adapt the curriculum to individual needs. Minor electives must be officially approved before assignment by the Dean of the Division of Agriculture and the head of the Department of Milling Industry.

3. Students majoring in milling technology must include solid geometry in their minor electives unless this subject was included in their entrance requirements.

4. Any candidate for a degree in milling industry must have had at least three months' experience in a wheat elevator, flour mill, bakery, or cereal chemistry laboratory, or equivalent, before attaining senior classification.

Agricultural Economics

Section of

ECONOMICS AND SOCIOLOGY

Professor GRIMES
 Professor HOWE
 Professor HILL
 Associate Professor HODGES
 Associate Professor MONTGOMERY
 Assistant Professor PARSONS
 Assistant Professor EGGERT

Assistant Professor PINE
 Instructor DOLL
 Instructor WILSON
 Instructor OTTO
 Instructor MCCOY
 Instructor MEENEN

Work in economics and sociology is offered in the divisions of Agriculture and General Science. The more general courses are listed in the general science section of the catalogue. Those courses listed here have a direct bearing on agriculture.

The investigational work in agricultural economics and rural sociology brings together the latest information concerning the business problems of agriculture and the problems of rural life. These data are used in the instructional work of the department. The student has an opportunity to learn of the factors and economic forces involved in farm management, marketing, taxation, land utilization, agricultural finance, rural life, and other closely related subjects.

COURSES IN AGRICULTURAL ECONOMICS

FOR UNDERGRADUATE CREDIT

106. FARM ORGANIZATION. 3(2-3)*; I and II. Prerequisite: Econ. 101, Agron. 130. and An. Husb. 152. Hodges and staff.

Economic forces affecting the organization and operation of the farm business. Charge, \$1.

112. FARM ACCOUNTING. 3(2-3); I and II. Prerequisite: Econ. 101. Pine, Doll, Meenen.

Systems of farm records and accounts. Analysis and utilization of cost of production data. Charge, \$1.

FOR GRADUATE AND UNDERGRADUATE CREDIT

202. MARKETING OF FARM PRODUCTS. 3(3-0); I and II. Prerequisite: Econ. 101. Staff.

Marketing services and functions and price-making forces.

203. GRAIN MARKETING. 3(3-0); I. Prerequisite: Econ. 101. Montgomery, Wilson.

Price influences and relationships, buying and selling problems, domestic and export trade; grain trade organization and regulation.

206A. ADVANCED FARM ORGANIZATION. 3(2-3); II. Prerequisite: Econ. 106. Hodges, Pine.

Advanced studies of factors affecting the successful organization and operation of farms.

212. CONSERVATION OF NATURAL RESOURCES. 2(2-0); II. Prerequisite: Econ. 101; junior standing. Howe, McCoy.

218. LAND ECONOMICS. 3(3-0); I. Prerequisite: Econ. 101. Howe, Miller.
 Relation of population to land supply; land tenure, ownership, and valuation.

* The number before the parentheses indicates the number of hours of credit; the first number within the parentheses indicates the number of hours of recitation each week; the second shows the number of hours to be spent in laboratory work each week; and the third, where there is one, indicates the number of hours of outside work in connection with the laboratory each week. I, II, and SS indicate that the course is given the first semester, second semester, and summer school, respectively.

220. TAXATION AND LAND OWNERSHIP. 3(3-0); II. Prerequisite: Econ. 101. Not open to students having credit in Econ. 214. Howe.

Public expenditures and revenues, public credit, and fiscal administration.

LAND LAW. See Hist. 276.

225. AGRICULTURAL FINANCE. 3(3-0); II. Prerequisite: Econ. 101. Parsons.

Sources and use of credit for purchase of farm land and to finance farm operations.

226. MARKET PRICES. 3(3-0); I and II. Prerequisite: Econ. 101. Staff. Explanation of price analysis and forces determining prices.

227. FARMER MOVEMENTS. 3(3-0); I. Prerequisite: Econ. 101. Hodges. Principles underlying successful organization of farmers.

231. AGRICULTURAL ECONOMICS SEMINAR. 1(1-0); II. Prerequisite: Econ. 101. Staff.

Current questions in agricultural economics.

235. LIVESTOCK MARKETING. 3(3-0); II. Prerequisite: Econ. 101. Eggert, Wilson.

Livestock marketing services, functions, and prices.

240. PRINCIPLES OF COÖPERATION. 3(3-0); II. Prerequisite: Econ. 101. Montgomery.

Principles underlying successful coöperative activities.

251. MARKETING OF DAIRY PRODUCTS. 3(3-0); I. Prerequisite: Econ. 101. Parsons.

Factors affecting prices; dairy marketing organizations.

270. AGRICULTURAL ECONOMIC PROBLEMS. Credit to be arranged; I, II, and SS. Prerequisite: Consult instructor. Staff.

271. ECONOMIC ANALYSIS AND INTERPRETATION. 3(3-0); I. Prerequisite: Econ. 101. Hodges.

FOR GRADUATE STUDY

301. RESEARCH IN AGRICULTURAL ECONOMICS. Credit to be arranged; I, II, and SS. Prerequisite: Consult instructor. Staff.

Individual research problems which may be used for a master's thesis.

COURSES IN RURAL SOCIOLOGY

FOR UNDERGRADUATE CREDIT

156. RURAL SOCIOLOGY. 3(3-0); I. Preferably preceded by a course in sociology. Hill.

FOR GRADUATE AND UNDERGRADUATE CREDIT

256. ADVANCED RURAL SOCIOLOGY. 3(3-0); II. Prerequisite: Econ. 156. Hill. A continuation of Econ. 156.

FOR GRADUATE STUDY

350. RESEARCH IN RURAL SOCIOLOGY. Credit to be arranged; I, II, and SS. Prerequisite: Econ. 156. Hill.

Agronomy

Professor THROCKMORTON
 Professor LAUDE
 Professor CLAPP
 Associate Professor ZAHNLEY
 Associate Professor REITZ
 Associate Professor METZGER
 Associate Professor MYERS

Associate Professor MULLEN
 Associate Professor DAVIS
 Assistant Professor HIDE
 Assistant Professor ANDERSON
 Assistant HOLLEMBEAK
 Seed Analyst NORRIS
 Graduate Assistant KLINGMAN

The farm used by the Department of Agronomy comprises 320 acres of medium rolling upland soil, suited to experimental and demonstration work. The general fields and experimental plots used for the breeding and testing of farm crops, and for conducting experiments in soil fertility and methods of culture, afford the student excellent opportunities for study and investigation.

Laboratories for soil and crop work are maintained for the regular use of students. Material is provided for the study of the grain and forage crops best adapted to different purposes and most suitable for growing in the state. Greenhouse space is provided for problems and research work in crops and soils.

COURSES IN FARM CROPS

FOR UNDERGRADUATE CREDIT

101. FARM CROPS. 4(2-6); I and II. (Also summer of 1941 and 1943.) Prerequisite: Bot. 101. Davis, Klingman.

Economic significance of important grain and forage crops. Deposit, \$4.

105. SEED IDENTIFICATION AND WEED CONTROL. 2(1-3); I. Prerequisite: Agron. 101. Zahnley, Norris.

Laboratory.—Identification; germination and purity testing; field trips. Charge, \$1.

108. GRAIN GRADING AND JUDGING. 2(0-6); II. Prerequisite: Agron. 101. Zahnley.

Practice with cereals, grain sorghums, legumes, and other seed crops. Charge, \$3.

114. ADVANCED GRAIN JUDGING. 2(0-6); I. Prerequisite: Agron. 108. Zahnley.

Commercial grading and judging. Charge, \$3.

115. MARKET GRADING OF CEREALS. 3(1-4, 2); I. Prerequisite: Mill. Ind. 101. Zahnley, Mullen. Charge, \$3.50.

FOR GRADUATE AND UNDERGRADUATE CREDIT

202. CROP IMPROVEMENT. 3(2-3); or 4(2-6); II. Prerequisite: Agron. 101 and An. Husb. 221. Reitz.

Principles of breeding field crops; selection, hybridization, and breeding for special qualities.

Laboratory.—Laboratory, greenhouse, and field methods of plant breeding. Charge, \$1.

205. PRINCIPLES OF AGRONOMIC EXPERIMENTATION. 3(2-3); I. Prerequisite: Agron. 101 and 130. Laude.

Methods and historical development of experimentation; statistical analysis and interpretation of data. Charge, \$1.

207. PASTURE IMPROVEMENT I. 3(2-3); II. Prerequisite: Bot. 105 and Agron. 101. Anderson.

Study of management practices designed to improve Kansas pastures. Charge, \$1.

208. PLANT GENETICS. 3(3-0); I. Prerequisite: An. Husb. 221. Reitz.

An advanced course dealing with genetic principles as applied to plant species.

209. GENETICS SEMINAR. 1(1-0); I and II. Prerequisite: Consult instructors. Nabours, Reitz, Warren, Ibsen, Jugenheimer.

Study and criticism of genetic experiments in plants and animals, and of the biological and mathematical methods employed.

210. CROP PROBLEMS. Credit to be arranged; I, II, and SS. Prerequisite: Agron. 101 and 130. Staff.

Special problems assigned; written reports thereon. Deposit, \$4.

211. CROP ECOLOGY. 2(2-0); II. Prerequisite: Agron. 101 and 130. Laude.

A study of the environmental conditions that influence growth of crops; natural and economic factors primarily responsible for the concentration of crop production in different regions and countries.

214. ADVANCED CROPS. 3(2-3); I. Prerequisite: Agron. 101. Offered in 1941-'42 and alternate years thereafter. Zahnley.

Recent investigations in production and handling of forage, fiber, sugar, root, and other crops not considered in previous courses.

Laboratory.—Growth habits, classification, preparation for market, and grading of crops studied. Charge, \$1.

215. PASTURE IMPROVEMENT II. 2(2-0); II. Prerequisite: Agron. 207 and 208. Offered in 1942-'43 and alternate years thereafter. Anderson.

Experimental methods; selection and breeding of pasture plants.

216. AGRONOMIC LITERATURE. 2(2-0); I. Prerequisite: Senior standing. Reitz, Myers.

FOR GRADUATE CREDIT

301. RESEARCH IN CROPS. Credit to be arranged; I, II, and SS. Prerequisite depends on the problem selected. Staff.

Special problems chosen or assigned, resulting data being available for master's thesis. Deposit, \$4.

COURSES IN SOILS

FOR UNDERGRADUATE CREDIT

130. SOILS. 4(3-2, 1); I and II. (Also summer of 1941 and 1943.) Prerequisite: Chem. 101 and Geol. 103. Throckmorton, Myers, Hide, Metzger.

Fundamental principles underlying the management of soils. Charge, \$3.

FOR GRADUATE AND UNDERGRADUATE CREDIT

231. DRY-LAND FARMING. 2(2-0); I and II. Prerequisite: Agron. 130. Myers.

Principles of soil management under light rainfall conditions.

235. DEVELOPMENT AND CLASSIFICATION OF SOILS. 3(2-3); II. Prerequisite: Agron. 130. Metzger.

Influence of soil-forming agencies on soil characteristics. Charge, \$1.

236. SOIL PROBLEMS. Credit to be arranged; I, II, and SS. Prerequisite depends on problem assigned. Staff. Deposit, \$4.

244. SOIL MANAGEMENT. 3(2-3); I and II. Prerequisite: Agron. 101 and 130. Myers.

Tillage, erosion control, nitrogen maintenance, crop rotations; use of lime, manure, and commercial fertilizers.

248. SOIL FERTILITY. 3(3-0); I. Prerequisite: Agron. 130 and Bot. 208. Hide.

Chemistry of soils and related physical and biological factors. Major emphasis on fundamental soil fertility problems.

249. SOIL FERTILITY LABORATORY. 2(0-6); I. Prerequisite: Agron. 130 and Chem. 103. Metzger.

Chemical and physical laboratory studies of soils. Charge, \$4.

FOR GRADUATE CREDIT

331. RESEARCH IN SOILS. Credit to be arranged; I, II, and SS. Prerequisite: Consult instructor. Staff.

Special problems, which may extend throughout the year and furnish data for a master's thesis. Deposit, \$4.

Animal Husbandry

Professor McCAMPBELL
 Professor WEBER
 Professor BELL
 Professor IBSEN
 Professor AUBEL
 Associate Professor MACKINTOSH

Associate Professor COX
 Assistant Professor CATHCART
 Assistant BRADLEY
 Temporary Assistant Professor MARTIN
 Graduate Research Assistant BAKER
 Graduate Research Assistant BRAY

The courses in the Department of Animal Husbandry give the student special instruction in the selection, breeding, feeding, marketing, and management of all classes of livestock.

The department devotes 624 acres of land to the maintenance of herds and flocks of purebred horses, cattle, sheep, and hogs, and feeds experimentally from 750 to 1,000 animals each year, giving excellent opportunity to study problems in feeding.

The laboratory of the animal husbandry student is the feed lot and the judging pavilion, where the animal can be studied from the standpoint of the breeder and the feeder.

FOR UNDERGRADUATE CREDIT

125. ELEMENTS OF ANIMAL HUSBANDRY. 3(2-3); I and II. (Also summer of 1941 and 1943.) Staff.

A survey of the field of animal husbandry, with special emphasis on the importance of livestock as a major phase of agriculture, and the origin, history, and adaptability of the different breeds to different environments. Type, conformation, quality, and breed characteristics are studied in the laboratory. Charge, 50 cents.

140. ADVANCED STOCK JUDGING I. 2(0-6); I. Prerequisite: An. Husb. 125. Bell.

Judging market animals and different breeds of livestock. One field trip. Charge, 50 cents.

143. ADVANCED STOCK JUDGING II. 2(0-6); II. Prerequisite: An. Husb. 140. Bell.

Continuation of An. Husb. 140. One field trip required. Charge, 50 cents.

146. FORM AND FUNCTION IN LIVESTOCK. 2(0-6); I. Prerequisite: An. Husb. 143. Bell.

A detailed study of animal form and type; influence of type upon function; special training in presenting orally the relative merits of animals of all breeds. Charge, 50 cents.

152. PRINCIPLES OF FEEDING. 3(3-0); II. Prerequisite: Anat. 131 and Chem. 125. Open to students in the Curriculum in Agriculture. Cox.

The digestive system and processes of nutrition; origin, chemical analysis, and feeding values of different feeds; nutritive requirements for maintenance, growth, and production of farm animals.

154. BEEF-CATTLE PRODUCTION. 3(3-0); II. Prerequisite: An. Husb. 152 or 172. Weber. One field trip.

157. SWINE PRODUCTION. 3(3-0); II. Prerequisite: An. Husb. 152 or 172. Aubel. One field trip.

160. SHEEP PRODUCTION. 3(3-0); I. Prerequisite: An. Husb. 152 or 172. Cox. One field trip.

165. HORSE PRODUCTION. 2(2-0); I. Prerequisite: An. Husb. 152 or 172. Cathcart. One field trip.

168. MEATS. 3(2-3); I and II. Prerequisite: An. Husb. 125. Mackintosh. Killing, dressing, cutting, curing, judging, selecting, and grading meats. Charge, \$1.

171. LIVESTOCK PRODUCTION. 3(3-0); I. Prerequisite: An. Husb. 152 or 172. Open only to juniors and seniors not majoring in animal husbandry. Cox. Practical insight into the production of beef cattle, horses, swine, and sheep.

172. FEEDING LIVESTOCK. 3(3-0); II and SS. Prerequisite: Chem. 125 or its equivalent. Open only to students not enrolled in the Curriculum in Agriculture. Bell.

Processes of digestion and assimilation, feed requirements, feed values, calculating rations.

176. MEATS H. E. 1(0-3); I and II. Prerequisite: Foods II, 107. For juniors and seniors in home economics. Mackintosh.

Selecting, cutting, and curing meats; grading carcasses, uses of the various cuts. At least one field trip. Charge, \$1.

187. ANIMAL HUSBANDRY PRACTICUMS. 3(1-6); II. Staff. Manual phases of livestock management. Charge, 50 cents.

189. FEEDS AND FEEDING. 3(3-0); II. Prerequisite: Chem. 124 and Anat. 222. Open only to students in the Curriculum in Veterinary Medicine. Weber. A résumé of digestion and nutrition dealing primarily with practical feeding.

FOR GRADUATE AND UNDERGRADUATE CREDIT

221. GENETICS. 3(3-0); I, II, and SS. Prerequisite: Zoöl. 105 and Bot. 105. Ibsen.

Variation, Mendelian inheritance, and related subjects.

224. ANIMAL BREEDING. 2(2-0); I. Prerequisite: An. Husb. 221. Aubel. Physiology of reproduction; heredity; variation; systems of mating, pedigrees and herdbook standards; practices of leading breeders.

225. ADVANCED GENETICS. 4(3-3); II. Prerequisite: An. Husb. 221. Ibsen. Particular attention to the relation of chromosomes to heredity.

227. GENETICS SEMINAR. 1(1-0); I and II. Prerequisite: Consult instructors. Nabours, Ibsen, Reitz, Warren.

Genetic experiments in plants and animals, the biological and mathematical methods employed, and the validity of conclusions drawn.

229. RESEARCH IN GENETICS. Credit to be arranged; I and II. Prerequisite: An. Husb. 225. Ibsen.

Problems in which small mammals are used as the experimental animals.

233. ADVANCED FEEDING. 2(2-0); I. Prerequisite: An. Husb. 152 or 172. Weber.

Application of the principles of nutrition in the feeding of farm animals.

244. ANIMAL HUSBANDRY SEMINAR. 1(1-0); II. Prerequisite: An. Husb. 152. Open only to senior and graduate students majoring in animal husbandry. Weber.

245. ANIMAL HUSBANDRY PROBLEMS. Credit to be arranged; I, II, and SS. Prerequisite: An. Husb. 152 and other courses; consult instructor. McCampbell.

247. ADVANCED STUDIES IN BREEDS. 3(3-0); II. Prerequisite: Consult instructor. McCampbell.

Present status, blood lines, and breeders of purebred beef cattle, horses, swine, and sheep.

250. PUREBRED LIVESTOCK PRODUCTION. 2(2-0); II. Prerequisite: An. Husb. 184 and 224; senior or graduate standing. McCampbell.

One field trip.

260. LIVESTOCK AND MEAT INDUSTRY. 3(3-0); II. Prerequisite: An. Husb. 125 and 152. McCampbell.

The livestock and meat industry; its organization, operation, and development; relation to the public. Lectures, assigned readings, and reports.

268. PRINCIPLES OF ANIMAL HUSBANDRY EXPERIMENTATION. 2(2-0); II. Prerequisite: An. Husb. 152 and 221. McCampbell, Ibsen, Weber.

Conducting and interpreting experiments involving the use of animals.

274. ADVANCED MEATS. 1 to 4 hours; I. Prerequisite: An. Husb. 168. Mackintosh.

Grading; nutritive values; factors influencing quality; dressing percentages; identification of meats from different animals.

290. PROBLEMS IN TRAINING AGRICULTURAL JUDGING TEAMS. 2(10-0); four-week SS. Prerequisite: An. Husb. 125, Agron. 101, Poult. 101, Dairy Husb. 101, and one year's teaching experience. Cox, Zahnley, Scott, Shaw, Davidson.

A seminar course in training agricultural judging teams.

FOR GRADUATE CREDIT

301. RESEARCH IN ANIMAL HUSBANDRY. Credit to be arranged; I and II. Prerequisite: Consult instructor. Staff.

Special problems in genetics and in the production of all kinds of livestock except dairy cattle.

305. ANIMAL NUTRITION SEMINAR. 1(1-0); I and II. Prerequisite: Senior or graduate standing. McCampbell.

Study and criticism of experimental work in animal nutrition, of the methods employed, and of the validity of conclusions drawn.

311. THE WOOL INDUSTRY. 3(2-3); II. Prerequisite: An. Husb. 160. Cox. Supply and demand, production, marketing, manufacturing.

Dairy Husbandry

Professor ATKESON
Professor MARTIN
Associate Professor BECHTEL

Associate Professor CAULFIELD
Associate Professor SHAW
Instructor BECK
Graduate Assistant MORRISON

The activities of the Department of Dairy Husbandry are divided into two groups: those that deal with the production of milk, and those that deal with the manufacturing of the several dairy products. The animals in the dairy herd are used by judging classes and in experiments in the feeding, care, and management of dairy animals. They are purebred cattle of the four dairy breeds: Jersey, Guernsey, Ayrshire, and Holstein. The department operates a farm of 150 acres.

In the creamery up-to-date equipment is available for giving instruction in the handling of butter, cheese, milk, ice cream, and condensed milk. The dairy industry is expanding in Kansas, and demands more men with experience and knowledge of dairying.

Instruction in the Department of Dairy Husbandry includes study of the selection and breeding of dairy animals; and the production of milk, its manufacture into butter, cheese, and other dairy products, and its sale on the market.

FOR UNDERGRADUATE CREDIT

101. ELEMENTS OF DAIRYING. 3(2-3); I and II. (Also summer of 1942.) Staff.

Problems of the milk producer and manufacturer; feeding, handling, breeding, and selecting of dairy cattle; composition and properties of milk; manufacture of dairy products.

Laboratory.—Selection of dairy cattle, production, manufacture, and common tests of dairy products. Charge, \$1.50.

104. DAIRY CATTLE JUDGING FOR VETERINARY STUDENTS. 1(0-3); I. Bechtel.

105. DAIRY CATTLE JUDGING. 2(0-6); II. Prerequisite: Dairy Husb. 101. Shaw.

106. DAIRY INSPECTION. 2(1-3); I. Prerequisite: Dairy Husb. 101. Caulfield.

Advanced work in testing dairy products and testing for adulterations; practice in use of dairy and creamery score cards; state and city ordinances; duties of city, state, and government inspectors. Charge, \$3.

108. MILK PRODUCTION. 3(3-0); II. Prerequisite: Dairy Husb. 101 and An. Husb. 152 or 172. Atkeson.

Handling the dairy herd; construction of dairy barns and buildings; other subjects concerning the dairy farmer.

110. BUTTER MAKING. 3(2-3); I. Prerequisite: Dairy Husb. 101 and Bact. 101. To be taught concurrently with Bact. 235. Martin.

The butter industry; cream production and care on the farm and in the plant; manufacturing, marketing, and food value of butter.

Laboratory.—Sampling and grading cream, butter analysis and tests, preparation of cream for churning, manufacture of butter. Charge, \$3.

116. MARKET MILK. 3(2-3); II. Prerequisite: Dairy Husb. 101 and Bact. 101. Martin.

Classes of market milk; clean milk production; relation of clean milk to producer, dealer, and consumer; milk inspection, score cards, and milk and cream contests; milk plants.

Laboratory.—Actual processing of market milk and cream. Charge, \$3.

119. DAIRY INSPECTION FOR VETERINARY STUDENTS. 2(1-3); II. Caulfield.

Composition and properties of milk; clean milk production; study of state and city ordinances affecting milk and dairy products.

Laboratory.—Testing of milk and dairy products; preparation and testing of chemical disinfectants; scoring of dairy farms and milk plants. Charge, \$3.

120. ADVANCED DAIRY CATTLE JUDGING. 1(0-3); I. Shaw.

Continuation of Dairy Husb. 105; visits to some of the best farms in the state.

128. CONDENSED AND POWDERED MILK. 3(2-3); I. Prerequisite: Dairy Husb. 101 and Bact. 101. Offered in 1941-'42 and alternate years thereafter. Martin, Caulfield.

History, methods, condensing machinery, and powdered-milk industry.

Laboratory.—Condensing milk in the College plant. Charge, \$3.

130. ICE CREAM MAKING. 3(2-3); II. Prerequisite: Dairy Husb. 106 and Bact. 101. Offered in 1942-'43 and alternate years thereafter. Martin, Caulfield.

Laboratory.—Manufacture of ice cream and ices. Charge, \$3.

135. CHEESE MAKING. 3(2-3); II. Prerequisite: Dairy Husb. 106 and Bact. 101. Offered in 1941-'42 and alternate years thereafter. Caulfield.

Laboratory.—Manufacture of various types of cheese. Charge, \$3.

140. DAIRY PRODUCTS JUDGING. 1(0-3); II. Prerequisite: Dairy Husb. 101. Martin. Charge, \$2.

141. ADVANCED DAIRY PRODUCTS JUDGING. 1(0-3); I. Martin. Continuation of Dairy Husb. 140. Charge, \$2.

FOR GRADUATE AND UNDERGRADUATE CREDIT

202. DAIRY SEMINAR. 1(1-0); II. Prerequisite: Dairy Husb. 101, 106, and 108. Atkeson, Martin.

Study of dairy periodicals, bulletins, books, other dairy literature.

207. FEEDING AND MANAGEMENT OF DAIRY CATTLE. 3(2-3); II. Prerequisite: Dairy Husb. 108 and An. Husb. 152. Offered in 1942-'43 and alternate years thereafter. Shaw.

Laboratory.—Includes fitting of animals for show and sale. Charge, \$1.

214. DAIRY CATTLE BREEDING AND SELECTION. 3(2-3); II. Prerequisite: Dairy Husb. 108. Offered in 1941-'42 and alternate years thereafter. Bechtel

History of breeds and families; inheritance of milk secretion; bull indexes; selection of herd sire; systems of breeding.

Laboratory.—Herdbook studies; pedigree writing and analysis.

216. DAIRY PRODUCTION PROBLEMS. Credit to be arranged; I and II. Prerequisite: Dairy Husb. 101, 105, and 108, and An. Husb. 152. Atkeson, Bechtel, Shaw.

Dairy production problems that may be continued for more than one semester.

221. DAIRY MANUFACTURING PROBLEMS. Credit to be arranged; I and II. Prerequisite: Dairy Husb. 101, 106, 108, and 110. Martin, Caulfield.

Dairy manufacturing problems that may be continued for more than one semester.

226. CREAMERY MANAGEMENT. 2(2-0); II. Prerequisite: Dairy Husb. 110. Offered in 1942-'43 and alternate years thereafter. Martin.

An advanced course for students specializing in dairy manufacturing.

FOR GRADUATE CREDIT

301. RESEARCH IN DAIRY HUSBANDRY. Credit to be arranged; I and II. Prerequisite: Dairy Husb. 108, 110, 116, and 226; consult instructor. Staff.

Special investigation in dairy production or dairy manufactures which may form the basis of a master's thesis.

305. ANIMAL NUTRITION SEMINAR. 1(1-0); I and II. Prerequisite: Consult instructor. Atkeson, Bechtel, Shaw.

Study and criticism of experimental work in animal nutrition, of the methods employed, and of the validity of conclusions drawn.

DAIRY REFRIGERATION. See Mech. Engg. 170 and 175.

DAIRY BACTERIOLOGY. See Bact. 211.

BACTERIOLOGY OF BUTTER CULTURES. See Bact. 235.

DAIRY CHEMISTRY. See Chem. 254.

MARKETING OF DAIRY PRODUCTS. See Econ. 251.

General Agriculture

Dean CALL
Associate Professor MULLEN
Assistant Professor HEPLER

102. FRESHMAN LECTURES. 1(2-0); I. Call, Mullen, Peterson, various faculty members.

Guidance in learning to study; information regarding opportunities for graduates in various fields.

103. AGRICULTURAL SEMINAR. R; I and II. Four meetings each semester.

Programs presented by students, members of faculty, invited speakers. Charge, 75 cents.

105. AGRICULTURAL RELATIONSHIPS. R(1-0); II. Call.

Responsibilities and opportunities for agricultural graduates as citizens and as specialists in various phases of agricultural activity.

106. EXTENSION METHODS FOR MEN. 3(3-0); I. Hepler.

Problems of organization, administration, and supervision of state extension work. Designed for persons interested in county agent or other types of extension work.

Horticulture

Professor PICKETT
 Professor BARNETT
 Professor QUINLAN
 Associate Professor FILINGER
 Associate Professor DECKER

Assistant Professor ABMEYER
 Instructor JOHNSON
 Graduate Research Assistant BIRKELAND
 Graduate Assistant SAUNDERS
 Graduate Assistant JOHNSON

Instruction offered in the Department of Horticulture includes general horticulture, forestry, landscape gardening, pomology, vegetable gardening, floriculture, and greenhouse practices.

The horticultural farm, the campus, and the college greenhouses provide adequate materials for instructional use. There are ornamental plantings of many species, and vegetable and flower gardens on the campus. Field work in pomology and forestry is provided for on the horticultural farm.

In general, the basic Curriculum in Horticulture is the same as that followed by other departments in the Division of Agriculture. Students who desire to prepare for specialized work in horticulture, such as landscape gardening and floriculture, may arrange electives adapted to their objective throughout the four years of the curriculum. Each student should make provision for these electives with the head of the department before taking out his first freshman assignment.

COURSES IN GENERAL HORTICULTURE

FOR UNDERGRADUATE CREDIT

107. ELEMENTS OF HORTICULTURE. 3(2-3); I, II, and SS. Prerequisite: Bot. 105. Pickett and staff.

Principles and practices of successful orcharding and gardening.

Laboratory.—Study of fruit-bearing habits, propagation, pruning, spraying, transplanting, cover crops, fruit varieties, etc. Charge, \$2.

FOR GRADUATE AND UNDERGRADUATE CREDIT

207. SPRAYING. 3(2-3); II. Prerequisite: Chem. 103 or equivalent. Pickett, Filinger.

Spray machinery; chemical properties; insecticides; fungicides; spray dates; fumigation.

Laboratory.—Spray materials, residue determinations, fumigants; spray machinery and accessories. Charge, \$2.

208. LITERATURE OF HORTICULTURE. 2(2-0); II. Open only to junior, senior, and graduate students in horticulture. Offered in 1942-'43 and alternate years thereafter. Filinger.

Books and publications are reviewed and bibliographies prepared.

235. HORTICULTURE SEMINAR. 1(1-0); I and II. Open only to junior, senior, and graduate students in horticulture. Barnett.

Critical discussion of horticultural publications and of experimental and research projects under way at this and other experiment stations.

244. HORTICULTURAL PROBLEMS. Credit to be arranged; I, II, and SS. Prerequisite: Consult instructor. Staff.

Investigations and reports in pomology, olericulture, floriculture, forestry, or landscape gardening.

FOR GRADUATE CREDIT

301. RESEARCH IN HORTICULTURE. Credit to be arranged; I, II, and SS. Prerequisite: Consult instructor. Staff.

Problems in pomology, olericulture, floriculture, or landscape gardening. Data collected may form basis for a master's thesis.

COURSES IN FORESTRY**FOR UNDERGRADUATE CREDIT**

114. FARM FORESTRY. 3(2-3); I. Prerequisite: Bot. 105. Johnson. Management and utilization of woodlots and tree belts. Charge, \$2.
119. SILVICULTURE. 3(2-3); I. Prerequisite: Bot. 105. Johnson. Ecology of the forest; regions, types. Charge, \$2.
120. FOREST NURSERY PRACTICE. 3(2-3); I. Prerequisite: Bot. 105. Johnson. Tree seed; planting practice; regeneration. Charge, \$2.

COURSES IN LANDSCAPE GARDENING**FOR UNDERGRADUATE CREDIT**

102. PLANT MATERIALS I. 3(2-3); Prerequisite: Bot. 105. Quinlan, Johnson. Perennials and annuals for general ornamental planting; planting plans.
103. PLANT MATERIALS II. 3(2-3); II. Prerequisite: Hort. 102. Quinlan, Johnson. Trees, shrubs, vines for ornamental planting; planting plans and reports.
125. LANDSCAPE GARDENING I. 3(3-0); I and SS. Quinlan. An introductory course in the fundamental principles of landscape gardening.

FOR GRADUATE AND UNDERGRADUATE CREDIT

223. CIVIC ART. 3(1-6); II. Prerequisite: Hort. 243. Offered in 1941-'42 and alternate years thereafter. Quinlan. Growth and development of cities and towns; land subdivision. Charge, \$1.
227. LANDSCAPE CONSTRUCTION. 3(2-3); I. Prerequisite: Civ. Engg. 151, 155. Offered in 1942-'43 and alternate years thereafter. Quinlan. Topographic maps; grading plans; structures, sewage, water supply, lighting, and drainage on the private estate. Charge, \$1.
228. PLANTING DESIGN. 2(0-6); II. Prerequisite: Hort. 103. Offered in 1942-'43 and alternate years thereafter. Quinlan. The use of plants in landscape composition. Perspective and elevational sketches and plans.
238. LANDSCAPE GARDENING II. 3(1-6); I. Prerequisite: Hort. 103 and 125. Quinlan, Johnson. Elementary designing of the home grounds, country estates, special gardens; sketch problems. Charge, \$1.
243. THEORY OF LANDSCAPE DESIGN. 2(2-0); I. Prerequisite: Hort. 125. Offered in 1941-'42 and alternate years thereafter. Quinlan. The economic and esthetic theory of design; taste, character, historic styles, and composition; natural elements in design; planting design.
246. LANDSCAPE GARDENING III. 3(1-6); II. Prerequisite: Hort. 103, 238, and 243. Quinlan, Johnson. Advanced course in designing of large parks, cemeteries, golf courses, educational groups; and high-class land subdivisions. Sketch problems. Charge, \$1.

COURSES IN POMOLOGY**FOR UNDERGRADUATE CREDIT**

109. SMALL FRUITS. 3(2-3); II. Prerequisite: Bot. 105. Barnett, Filingier. Growing, harvesting, and marketing small fruits. Charge, \$2.
111. SYSTEMATIC POMOLOGY. 3(2-3); I. Prerequisite: Hort. 107. Filingier. Technical study of fruit varieties, varietal relationships, pomological nomenclature, variety description, artificial and natural systems of variety classification.

Laboratory.—Description, identification, judging, and preparation of displays. Charge, \$2.

FOR GRADUATE AND UNDERGRADUATE CREDIT

201. PRACTICAL POMOLOGY. 3(2-3); II. Prerequisite: Hort. 111. Filing. Applied orcharding; manufactured products; finances; marketing.

Laboratory.—Grading and packing fruits; identification of fruit plant varieties; propagation and advanced pruning. Charge, \$2.

202. SUBTROPICAL POMOLOGY. 2(2-0); II. Prerequisite: Hort. 111. Offered in 1941-'42 and alternate years thereafter. Barnett.

Geography and culture of subtropical fruits.

205. ADVANCED POMOLOGY. 3(2-3); I. Prerequisite: Hort. 111. Pickett, Filing.

A course in the fundamentals of orcharding. Charge, \$2.

COURSES IN VEGETABLE GARDENING AND FLORICULTURE

FOR UNDERGRADUATE CREDIT

127. GREENHOUSE CONSTRUCTION AND MANAGEMENT. 3(3-0); II. Decker. Greenhouse maintenance, heating, ventilation, soils, and water.

133. VEGETABLE GARDENING. 3(2-3); II. Decker.

Principles underlying vegetable production for the home or local market, special attention given to farm gardens.

Laboratory.—Varieties, planting schedules, and crop rotations. Charge, \$2.

135. FLORAL ARRANGEMENT I. 2(1-3); I. Decker. Consult instructor for prerequisites.

The commercial flower shop, source of supplies, sales.

Laboratory.—Arrangement of flowers for various occasions. Charge, \$2.

136. FLORAL ARRANGEMENT II. 2(1-3); II. Decker. Consult instructor for prerequisites. Continuation of Hort. 135.

Laboratory.—Care of cut flowers, packing, delivery, and arrangement. Charge, \$2.

140. COMMERCIAL FLORICULTURE I. 3(2-3); I. Prerequisite: Hort. 127. Decker.

Principles underlying the culture of greenhouse crops. Charge, \$2.

141. COMMERCIAL FLORICULTURE II. 3(2-3); II. Prerequisite: Hort. 140. Decker.

Continuation of Hort. 140. Charge, \$2.

FOR GRADUATE AND UNDERGRADUATE CREDIT

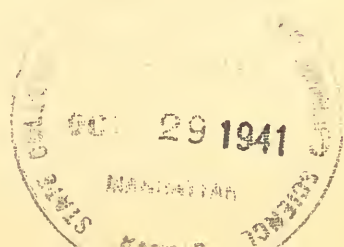
210. MARKET GARDENING. 3(2-3); I. Prerequisite: Agron. 130 and Hort. 133. Decker.

Competitive areas, market requirements, harvesting, grading, and costs.

Laboratory.—Grading and packing, sources of market supplies, and prices. Charge, \$2.

214. HORTICULTURAL CASH CROPS. 2(2-0); I. Prerequisite: Agron. 130 and Hort. 133. Decker.

Vegetable crops grown in Kansas principally as cash crops; potatoes, sweet potatoes, watermelons, and cantaloupes.



Milling Industry

Professor BAYFIELD
Professor SWANSON
Professor WORKING

Associate Professor PENCE
Instructor ANDERSON

The Department of Milling Industry offers courses to prepare students for work in flour-milling operation, products control, or administration.

The department has a flour mill of 65 barrels daily capacity, equipped as a commercial plant and also with many features designed for research and instruction. For the study of elementary principles in milling and special problems in milling technology there are several units of nonautomatic mills.

The baking laboratory has dough mixers, proofing cabinets, ovens, and other apparatus needed for baking tests in elementary and advanced work. The chemical laboratory has the usual chemical apparatus for wheat and flour testing, and special equipment for work on advanced problems.

FOR UNDERGRADUATE CREDIT

101. ELEMENTS OF MILLING. 2(1-2, 1); I and II. Anderson.
Elementary milling and work on experimental mills. Charge, \$2.

102. SURVEY OF MILLING INDUSTRY. 1(1-0); I. Bayfield.
A general survey of the milling industry field given primarily for freshmen.

103. FLOW SHEETS. 2(0-6); II. Prerequisite: Mill. Ind. 101. Pence.
The construction and assembling of a flow sheet. Charge, \$2.

107. PRINCIPLES OF BAKING. 3(1-6); II. Working.
Baking procedures and interpretation of qualities in baked products. Not open for credit to students who major in milling chemistry. Charge, \$5.

109. MILLING PRACTICE I. 3(1-6); I. Prerequisite: Mill. Ind. 103. Pence.
A study of milling machinery and methods of checking flour mill operations. Charge, \$2.

111. MILLING PRACTICE II. 3(1-6); II. Prerequisite: Mill. Ind. 109. Pence.
A study of roll and bolting surfaces, power transmission, lubrication, millwright work, and controls for flour mill operation. Charge, \$2.

FOR GRADUATE AND UNDERGRADUATE CREDIT

201. MILLING TECHNOLOGY I. 2(0-6); I. Prerequisite: Mill. Ind. 111. Anderson.

Technical study of special phases of wheat conditioning and flour milling. Charge, \$2.

202. MILLING TECHNOLOGY II. 2(0-6); II. Prerequisite: Mill. Ind. 201. Anderson.

A study of the physical, chemical, and engineering principles used in the control of flour mill operations. Charge, \$2.

203. FLOUR MILL CONSTRUCTION. 3(0-8, 1); I. Prerequisite: Mill. Ind. 111, Mach. Des. 111 and 121. Pence.

205. WHEAT AND FLOUR TESTING. 3(0-9); I. Prerequisite: Chem. 122 and 251. Working.

Special quantitative tests of cereals and their products; methods of analysis and interpretation of results. Deposit, \$7.50.

207. EXPERIMENTAL BAKING. 4(1-6, 3); II. Prerequisite: Chem. 122. Working.

Practice in baking tests; comparison of methods, formulas, and flours; interpretation of results. Charge, \$5.

210. ADVANCED WHEAT AND FLOUR TESTING. 1 to 5 semester hours; I and II. Prerequisite: Mill. Ind. 205 and other courses; consult instructor. Working.

Physiochemical and other methods used in testing wheat and flour. Deposit, \$2.50 per hour.

212. THE QUALITIES OF WHEAT AND FLOUR. 3(3-0); II. Prerequisite: Chem. 122. Swanson.

The qualities of wheat and flour as affected by growth, storage, physical, chemical, and biological factors.

214. MILLING INDUSTRY PROBLEMS. Credit to be arranged; I, II, and SS. Prerequisite: Mill. Ind. 212, or such other courses as are necessary for the problem selected. Staff. Charge, \$2.50 per hour.

218. MILLING INDUSTRY SEMINAR. R(1½-0); I and II. Staff.

Discussion of problems of general interest to all students in milling industry. Charge, 75 cents.

FOR GRADUATE CREDIT

301. RESEARCH IN MILLING INDUSTRY. Credit to be arranged; I, II, and SS. Prerequisite: Consult staff.

Research may be used as basis for the master's thesis.

Poultry Husbandry

Professor PAYNE
Professor WARREN
Associate Professor SCOTT

Assistant BOHREN
Graduate Assistant DARROW
Farm Superintendent GISH

The poultry plant, occupying twenty-four acres and situated just north of the northeast corner of the College campus is devoted to the breeding and rearing of the stock used for class and experimental work.

FOR UNDERGRADUATE CREDIT

101. FARM POULTRY PRODUCTION. 2(1-3); I and II. Payne, Scott, Bohren. An introductory course dealing with numerous phases of poultry production. Charge, \$2.

103. POULTRY HUSBANDRY. 3(2-3); SS. Bohren. A general introductory course dealing with poultry problems on the farm. Charge, \$2.

109. POULTRY JUDGING. 3(1-6); I. Prerequisite: Poult. Husb. 101. Scott. Production characteristics and evolution of present breed types.

Laboratory.—Judging the standard breeds and varieties by comparison; judging hens for egg production on the basis of their trap-nest records. Charge, \$2.

116. MARKET POULTRY AND EGGS. 4(2-6); I. Prerequisite: Poult. Husb. 101. Offered in 1941-'42 and alternate years thereafter. Payne.

Methods of handling market eggs and live and dressed poultry.

Laboratory.—Candling and grading eggs; crate-feeding, killing, dressing, grading, and packing market poultry. Charge, \$2.

120. ARTIFICIAL INCUBATION AND BROODING. 3(1-6) (laboratory 3 times a day, 7 days a week, for not fewer than 8 weeks, at hours outside the regular schedule); II. Prerequisite: Poult. Husb. 101 and Zoöl. 105. Offered in 1942 and alternate years thereafter. Scott.

Development of the chick; metabolism; survey of the literature on incubation and brooding; actual care of an incubator; bringing off the hatch; care of chicks in brooder for 3 weeks. Charge, \$2.

FOR GRADUATE AND UNDERGRADUATE CREDIT

202. PHYSIOLOGY AND NUTRITION OF THE FOWL. 3(2-3); II. Prerequisite: Poult. Husb. 101, An. Husb. 152, and Anat. 131. Offered in 1941-'42 and alternate years thereafter. Scott.

Designed for advanced students. The nutritive requirements of the fowl, metabolism of nutrients, reproduction, respiration, digestion and excretion.

Laboratory.—The feeding and care of chicks on various deficient diets. Influence of hormone administration on primary and secondary sex characters. Surgical technics. Charge, \$2.

204. POULTRY GENETICS. 3(3-0); II. Prerequisite: An. Husb. 221. Warren. Special reference to bearing of genetics on practical breeding problems.

POULTRY FARM ORGANIZATION. See Ag. Ec. 206A.

POULTRY SANITATION. See Bact. 218.

POULTRY ANATOMY. See Anat. 202.

206. POULTRY PROBLEMS. Credit to be arranged; I, II, and SS. Prerequisite: Poult. Husb. 101; consult instructors. Payne, Warren, Scott.

Investigations which may be continued into the next semester if necessary.

210. GENETICS SEMINAR. 1(1-0); I and II. Prerequisite: Consult Warren.

Genetics experiments in plants and animals; the biological and mathematical methods employed; and the validity of conclusions drawn.

216. POULTRY MANAGEMENT. 3(3-0); II. Prerequisite: Poult. Husb. 101; senior or graduate standing. Payne.

A detailed study of all phases of farm and commercial flocks, including cost of production.

220. POULTRY SEMINAR. 1(1-0); I. Prerequisite: Poult. Husb. 101. Required of all graduate students and of both juniors and seniors majoring in poultry husbandry. Warren.

FOR GRADUATE CREDIT

301. RESEARCH IN POULTRY HUSBANDRY. Credit to be arranged; I, II, and SS. Prerequisite: Poult. Husb. 101, 109, 116, and 120; consult instructors. Warren, Payne, Scott.

Investigations which may form the basis of a master's or doctor's thesis.

305. ANIMAL NUTRITION SEMINAR. 1(1-0); I and II. Prerequisite: Consult Payne.

Study and criticism of experimental work in animal nutrition.

The Agricultural Experiment Station

LELAND EVERETT CALL, *Director*

The Kansas Agricultural Experiment Station was organized under the provisions of an act of congress, approved March 2, 1887, which is commonly known as the Hatch act.

Two days later, March 4, 1887, the legislature of Kansas adopted a resolution accepting the conditions of the Hatch act, and vesting the responsibility of carrying out its provisions in the Board of Regents of Kansas State College.

The Hatch act carried an annual congressional appropriation of \$15,000. No further addition to this amount was made until the passage of the Adams act, approved March 16, 1906, which provided a sum beginning with \$5,000, and increasing each year by \$2,000 over the preceding years for five years. Since this time the annual appropriation has been \$15,000. Under the Adams act, experiments entered upon must be approved by the Office of Experiment Stations of the United States Department of Agriculture.

The Purnell act, approved February 24, 1925, authorized an appropriation of \$20,000 for the fiscal year beginning July 1, 1925, with allotments increasing annually by \$10,000 until a total of \$60,000 was reached for the fiscal year beginning July 1, 1929. The Purnell act is broad in scope and provides specifically for scientific research in agricultural economics, home economics, and rural sociology, in addition to providing more liberal support for the older established work of the Agricultural Experiment Station.

A fourth act authorizing support for the agricultural experiment stations is the Bankhead-Jones act, approved June 29, 1935. This act authorizes appropriations to the land-grant colleges for research, based upon the rural population of the various states. The amount available to Kansas was approximately \$12,000 for the first fiscal year, and will amount to approximately \$60,000 annually when the act is in full force. The Bankhead-Jones act states specifically that the research authorized shall be in addition to research provided for under existing laws and that no allotment of funds shall be made to a state for any fiscal year in excess of the amount which the state makes available for such fiscal year out of its own funds for research.

The Agricultural Experiment Station is, then, a research agency organized to ascertain facts of value to agriculture. It devotes its attention solely to the solution of problems of the farm and the farm home.

Farms, livestock, laboratories, and general equipment of the College are all directly available for the use of the station.

More than one hundred projects covering practically all phases of agricultural investigation are being studied by the members of the experiment station staff. Results of this work are published in the form of scientific papers and bulletins and circulars intended primarily for the general reader.

All bulletins and other publications from the Agricultural Experiment Station are sent without charge to citizens of the state. Any person in the state may have his name placed on the permanent mailing list of the station.

Letters of inquiry and general correspondence should be addressed to Agricultural Experiment Station, Manhattan, Kan. Special inquiries should be directed, as far as possible, to the head of the department having charge of the matter concerning which information is desired.

Branch Agricultural Experiment Stations

FORT HAYS BRANCH STATION

Land occupied by this station is part of what was originally the Fort Hays military reservation. A bill was approved by congress March 28, 1900, setting aside this reservation for experimental and educational purposes. By act of the state legislature, approved February 7, 1901, the act of congress donating this land and imposing the support of these institutions was accepted. The same session of the legislature passed an act providing for the organization of a branch experiment station and appropriating a small fund for preliminary work. In the division of this land, the college received 3,560 acres.

The work of this station may be divided into two divisions: (a) experimental projects; (b) general farm and livestock work. Investigations are confined primarily to the study of problems peculiar to the western half of the state where rainfall is limited. Facilities of the station are also being used for the growing of large quantities of pure seed of the strains and varieties which have proved in actual test to be most productive in the western part of the state.

GARDEN CITY BRANCH STATION

In 1906, the county commissioners of Finney county purchased for purposes of agricultural experimentation a tract of land amounting to 320 acres, situated four and one-half miles from Garden City in western Kansas. The land has been leased for a term of ninety-nine years to the Kansas Agricultural Experiment Station as an experimental and demonstration farm. Investigations in irrigation are conducted at this station.

COLBY BRANCH STATION

The legislature of 1913 provided for the establishment of a branch experiment station near Colby, in northwestern Kansas. It is located on a tract of 314 acres. The land was purchased by the county and deeded to the state. Operations were begun in March, 1914. Cropping experiments are being conducted under dry-land conditions and under irrigation. The primary purpose of the Colby station is to determine the best methods of developing the agriculture of northwestern Kansas.

TRIBUNE BRANCH STATION

At the Tribune station experimental and demonstration work is conducted for the benefit of the surrounding western territory. Special attention is paid to the problems of producing crops under conditions of limited rainfall.

The Division of Engineering and Architecture

ROY ANDREW SEATON, *Dean*

The Division of Engineering and Architecture offers curriculums in Agricultural Engineering, Architectural Engineering, Architecture, Chemical Engineering, Civil Engineering, Electrical Engineering, Industrial Arts, and Mechanical Engineering, each leading to the degree of Bachelor of Science in the particular branch of the profession selected.

The curriculums as tabulated give fundamental preparation for entering upon work in the several branches of the professions, with some opportunity for specialization through options and electives. To a limited extent substitutions may be made for certain of the courses listed as required when there appears to be a good reason for them, but each such substitution must have the approval of the head of the department in which the curriculum is administered, the head of the department giving the course which is displaced, and the dean of the division. In no case will the substitution of an additional amount of technical work for any of the cultural work be permitted.

Curriculum in Agricultural Engineering

The field of the agricultural engineer includes: research, sales, or advertising in the farm-machinery and farm-motor industry; farm structure design, or promotional work with the building materials industry; soil erosion prevention with the federal and state agencies; rural electric service with electric power companies; management of farms where drainage, irrigation, or power-farming methods are of major importance; and engineering in agricultural development.

The curriculum includes all basic courses which are common to the other engineering curriculums, such as mathematics, physics, and mechanics. Courses in agriculture are also included in order to familiarize the student with the modern methods of agriculture. Training along engineering lines includes farm machinery, farm power, farm structures, highway engineering, drainage, irrigation, soil-erosion control, and modern farm and home equipment.

Curriculum in Architectural Engineering

The Curriculum in Architectural Engineering emphasizes the structural and mechanical phases of architecture. The field of the architectural engineer comprises the superintending of building construction, general contracting, structural design, estimating construction costs, and specification writing.

Students pursuing the Curriculum in Architectural Engineering are urged to devote a fifth year to the work. By so doing they can combine the curriculums in Architecture and Architectural Engineering and receive the Bachelor of Science degree in both. Students intending to receive both degrees should consult with the head of the department at the beginning of the sophomore year.

Students should get practical experience during the summer vacations in the building industry, either on construction projects or in the office of an architect, construction engineer, or contractor.

Curriculum in Architecture

The Curriculum in Architecture, while stressing architectural design, includes also training in building construction, properties and uses of building materials, professional practice, and other phases important to the architectural profession. The aim is to train students for efficient service as draftsmen and designers in an architectural organization and provide them with the necessary foundation for future independent practice.

Students should get practical experience during the summer vacations in the building industry, either on construction projects or in the office of an architect.

Curriculum in Chemical Engineering

The aim of the Curriculum in Chemical Engineering is to prepare the student for work in the design, construction, and operation of chemical plants. The scope of chemical engineering includes the strictly chemical industries, such as those manufacturing acids, alkalis, lacquer solvents, dyes, explosives, metals, and like materials; and also the process industries, for instance, those processing petroleum, rubber, foods, leather, and those manufacturing cement, glass, soap, paints and varnishes, pulp and paper.

Curriculum in Civil Engineering

The first and second years are devoted largely to general cultural studies and the sciences, including mathematics. An introduction to the technical work is given in these years through courses in drawing, surveying, and the elementary phases of engineering.

The last two years are devoted largely to technical work. Provision is made for class and laboratory work in mechanical and electrical engineering. Because of the growing importance of municipal problems, such as paving, sewerage, and water supply, the curriculum includes required courses in these subjects.

Advanced elective courses in railway, highway, and irrigation and drainage engineering are offered in the second semester of the senior year.

Curriculum in Electrical Engineering

The graduate from the Curriculum in Electrical Engineering may enter either the power or the communication field of electrical engineering, and he may engage in such lines as research, design, application, business management, or plant operation.

The student must have a thorough grounding in mathematics and the sciences; practice and theoretical training in drawing, surveying, and shop practice; and a liberal training in the cultural subjects, English, history, and economics. Technical training begins with a course in the first year, followed by one in the second year, and is completed by several courses extending through the junior and senior years. The curriculum provides, in addition, elective work, giving the student opportunity for the selection of extra work along cultural, economic, or technical lines.

Curriculum in Industrial Arts

The Curriculum in Industrial Arts is designed to prepare students for positions as supervisors and directors of training schools in industry, or as teachers in colleges, high schools, and trade schools; also to give some technical training and experience in shop work and drafting, preparatory to entering industrial shops.

Curriculum in Mechanical Engineering

The Curriculum in Mechanical Engineering is designed to prepare students for research, design, production, operation, and sales positions in industries that produce or use power and machinery. The field of mechanical engineering is necessarily very broad, including practically every industry. To permit specialization by students in particular phases of mechanical engineering, the curriculum provides optional and elective courses in the junior and senior years, covering industrial engineering, power production, air conditioning, petroleum production, aeronautical engineering, and machine design.

Students should spend at least two summers in some shop or commercial plant.

ENGINEERING AND ARCHITECTURE IN THE SUMMER SCHOOL

The division offers summer courses in freehand and mechanical drawing, water-color and oil painting, manual training and shop practice for high-school and grade-school teachers, as well as various courses required in the several curriculums. Therefore, teachers who wish to take an engineering or architectural curriculum can get a considerable start on the work during their summer vacations, and College students who are irregular may make up courses.

Full information concerning the courses offered is contained in the Summer School number of the Kansas State College *Bulletin*, which may be obtained upon application to the vice-president of the College.

CURRICULUM IN AGRICULTURAL ENGINEERING

FRESHMAN

FIRST SEMESTER		SECOND SEMESTER	
Chemistry E-I, Chem. 107.....	4(3-3)	Chemistry E-II, Chem. 108.....	4(3-3)
College Algebra,* Math. 104.....	3(3-0)	Plane Analytical Geom., Math. 110,	4(4-0)
Plane Trigonometry, Math. 101...	3(3-0)	Agr. Mach. and Con., Agr. Engg.	
College Rhetoric I, Engl. 101.....	3(3-0)	122	2(1-3)
Engg. Drawing, Mach. Des. 101...	2(0-6)	College Rhetoric II, Engl. 104....	3(3-0)
Oxyacetylene Welding, Shop 171..	1(0-2, 1)	Desc. Geometry, Mach. Des. 106..	2(0-6)
Artillery I, Mil. Sc. 113.....	1(1-2)	Foundry Production, Shop 161....	1(0-3)
Engg. Lectures, Gen. Engg. 101...	R	Artillery II, Mil. Sc. 114.....	1(1-2)
Phys. Educ. M, Phys. Ed. 103....	R(0-2)	Engg. Lectures, Gen. Engg. 101...	R
		Phys. Educ. M, Phys. Ed. 103....	R(0-2)
Total	17	Total	17

SOPHOMORE

FIRST SEMESTER		SECOND SEMESTER	
Engg. Physics I, Phys. 105.....	5(4-3)	Engg. Physics II, Phys. 106.....	5(4-3)
Calculus I, Math. 114.....	4(4-0)	Calculus II, Math. 115.....	4(4-0)
Surveying I, Civ. Engg. 102.....	2(0-6)	Surveying II, Civil Engg. 111....	2(0-6)
Mach. Drawing I, Mach. Des. 111,	2(0-6)	Mechanism, Mach. Des. 121.....	3(3-0)
El. of An. Husb., An. Husb. 125..	3(2-3)	General Geology, Geol. 103.....	3(3-0)
Artillery III, Mil. Sc. 115.....	1(1-2)	Artillery IV, Mil. Sc. 116.....	1(1-2)
Engg. Assembly, Gen. Engg. 105..	R	Engg. Assembly, Gen. Engg. 105..	R
Phys. Educ. M, Phys. Ed. 103....	R(0-2)	Phys. Educ. M, Phys. Ed. 103....	R(0-2)
Total	17	Total	18

JUNIOR

FIRST SEMESTER		SECOND SEMESTER	
Applied Mechanics, Ap. Mech. 202,	4(4-0)	Str. of Mat., Ap. Mech. 211, 220..	6(5-3)
Field and Power Mach., Agr.		Farm Motors, Agr. Engg. 225....	4(2-6)
Engg. 111	4(2-6)	Farm Crops, Agron. 101.....	4(2-6)
Engg. Thermo. A, Mech. Engg.		Economics I, Econ. 101.....	3(3-0)
201A	3(3-0)	Graphic Statics, Ap. Mech. 225...	1(0-3)
Public Speaking, Pub. Spk. 107...	2(2-0)	Engg. Assembly, Gen. Engg. 105..	R
Metals and Alloys, Shop 165.....	2(2-0)		
Machine Tool Work I, Shop 170..	2(0-6)		
Technical Reports, Engl. 215.....	1(1-0)		
Engg. Assembly, Gen. Engg. 105..	R		
Total	18	Total	18

SENIOR

FIRST SEMESTER		SECOND SEMESTER	
Farm Structures, Agr. Engg. 203..	4(2-6)	Mod. Farm and Home Equipment,	
Soils, Agron. 130.....	4(3-2, 1)	Agr. Engg. 210.....	3(2-3)
Hydraulics, Ap. Mech. 230, 235...	4(3-3)	Land Reclamation, Agr. Engg. 245,	4(2-6)
Highway Engg. I, Civil Engg. 231,	2(2-0)	Elec. Engg. C, Elec. Engg. 102,	
Amer. Ind. History, Hist. 105.....	3(3-0)	106	3(2-2, 1)
Engg. Assembly, Gen. Engg. 105..	R	Farm Organization, Agr. Econ. 106,	3(2-3)
Inspection Trip, Agr. Engg. 140...	R	Elective†	4(-)
		Engg. Assembly, Gen. Engg. 105..	R
Total	17	Total	17

Number of hours required for graduation, 139.

* Students who offer but one unit of algebra for admission take a five-hour course in college algebra, Math. 107, the first semester, postponing two hours of other work.

† Electives are to be chosen with the advice and approval of the head of the department and the dean.

CURRICULUM IN ARCHITECTURAL ENGINEERING

FRESHMAN

FIRST SEMESTER		SECOND SEMESTER	
Chemistry E-I, Chem. 107.....	4(3-3)	Chemistry E-II, Chem. 108.....	4(3-3)
College Algebra,* Math. 104.....	3(3-0)	Plane Analytical Geom., Math. 110,	4(4-0)
Plane Trigonometry, Math. 101...	3(3-0)	College Rhetoric II, Engl. 104....	3(3-0)
College Rhetoric I, Engl. 101.....	3(3-0)	Shades and Shadows and Perspec-	
Desc. Geometry A, Mach. Des. 107,	3(0-9)	tive, Mach. Des. 108.....	3(0-9)
Artillery I, Mil. Sc. 113.....	1(1-2)	Freehand Drawing I, Arch. 112...	2(0-6)
Engg. Lectures, Gen. Engg. 101...	R	Artillery II, Mil. Sc. 114.....	1(1-2)
Phys. Educ. M, Phys. Ed. 103....	R(0-2)	Engg. Lectures, Gen. Engg. 101...	R
		Phys. Educ. M, Phys. Ed. 103...	R(0-2)
Total	17	Total	17

SOPHOMORE

FIRST SEMESTER		SECOND SEMESTER	
Engg. Physics I, Phys. 105.....	5(4-3)	Engg. Physics II, Phys. 106.....	5(4-3)
Calculus I, Math. 114.....	4(4-0)	Calculus II, Math. 115.....	4(4-0)
Freehand Drawing II, Arch. 113...	2(0-6)	Economics I, Econ. 101.....	3(3-0)
El. of Arch. I, Arch. 106A.....	3(0-9)	El. of Arch. II, Arch. 107A.....	3(0-9)
Surveying I, Civil Engg. 102.....	2(0-6)	Pencil Rend. and Sketch., Arch.	
Artillery III, Mil. Sc. 115.....	1(1-2)	116	2(0-6)
Engg. Assembly, Gen. Engg. 105...	R	Artillery IV, Mil. Sc. 116.....	1(1-2)
Phys. Educ. M, Phys. Ed. 103....	R(0-2)	Engg. Assembly, Gen. Engg. 105...	R
		Phys. Educ. M, Phys. Ed. 103...	R(0-2)
Total	17	Total	18

JUNIOR

FIRST SEMESTER		SECOND SEMESTER	
Applied Mechanics, Ap. Mech. 202,	4(4-0)	Str. of Mat., Ap. Mech. 211, 220,	6(5-3)
Bldg. Materials and Construction,		Work. Draw. and Spec., Arch. 191,	3(0-9)
Arch. 187A	3(3-0)	Architectural Design II, Arch. 144,	3(0-9)
Architectural Design I, Arch. 142..	3(0-9)	Hist. of Arch. II, Arch. 157A.....	2(2-0)
Hist. of Arch. I, Arch. 154A.....	2(2-0)	Water Color I, Arch. 118.....	2(0-6)
Foundations, Civil Engg. 121....	2(2-0)	Illumination A, Elec. Engg. 116...	2(2-0)
Law for Engineers, Hist. 167.....	2(2-0)	Engg. Assembly, Gen. Engg. 105...	R
Public Speaking, Pub. Spk. 107...	2(2-0)		
Engg. Assembly, Gen. Engg. 105...	R		
Total	18	Total	18

SENIOR

FIRST SEMESTER		SECOND SEMESTER	
Stresses in Framed Struc., Civil		Des. of Framed Struc., Civ. Engg.	
Engg. 201	4(4-0)	246	3(0-9)
Architectural Design III, Arch. 145,	5(0-15)	Reinforced Concrete Design, Civ.	
Hist. of Arch. III, Arch. 158A....	2(2-0)	Engg. 250, 255.....	3(2-3)
Civ. Engg. Draw. II, Civ. Engg.		Hist. of Arch. IV, Arch. 160A....	2(2-0)
205	2(0-6)	Building Equipment, Arch. 188...	2(2-0)
Soil Mechanics, Ap. Mech. 290....	2(0-6)	Air Cond. A, Mech. Engg. 135...	3(3-0)
Elective†	2(-)	Elective†	4(-)
Engg. Assembly, Gen. Engg. 105...	R	Engg. Assembly, Gen. Engg. 105...	R
Inspection Trip, Arch. 199.....	R		
Total	17	Total	17

Number of hours required for graduation, 139.

* Students who offer but one unit of algebra for admission take a five-hour course in college algebra, Math. 107, the first semester, postponing two hours of other work.

† Electives are to be chosen with the advice and approval of the head of the department and the dean.

CURRICULUM IN ARCHITECTURE

FRESHMAN

FIRST SEMESTER

College Algebra,* Math. 104.....	3(3-0)
College Rhetoric I, Engl. 101.....	3(3-0)
Desc. Geometry A, Mach. Des. 107,	3(0-9)
El. of Arch. I, Arch. 106A.....	3(0-9)
History of Arch. I, Arch. 154A...	2(2-0)
Freehand Drawing I, Arch. 112...	2(0-6)
Artillery I, Mil. Sc. 113 (men)...	1(1-2)
Engg. Lectures, Gen. Engg. 101...	R
Phys. Educ. M, Phys. Ed. 103....	R(0-2)or
Phys. Educ. W, Phys. Ed. 151....	R(0-3)

Total 16 or 17

SECOND SEMESTER

Plane Trigonometry, Math. 101...	3(3-0)
College Rhetoric II, Engl. 104....	3(3-0)
Shades and Shadows and Perspec-	
tive, Mach. Des. 108.....	3(0-9)
El. of Arch. II, Arch. 107A.....	3(0-9)
History of Arch. II, Arch. 157A..	2(2-0)
Freehand Drawing II, Arch. 113..	2(0-6)
Artillery II, Mil. Sc. 114 (men)...	1(1-2)
Engg. Lectures, Gen. Engg. 101...	R
Phys. Educ. M, Phys. Ed. 103....	R(0-2)or
Phys. Educ. W, Phys. Ed. 151....	R(0-3)

Total 16 or 17

SOPHOMORE

FIRST SEMESTER

General Physics I, Phys. 102.....	4(3-3)
Economics I, Econ. 101.....	3(3-0)
Architectural Design I, Arch. 142..	3(0-9)
Building Mat. and Con., Arch.	
187A	3(3-0)
History of Arch. III, Arch. 158A..	2(2-0)
Pencil Rend. and Sketch., Arch. 116.	2(0-6)
Artillery III, Mil. Sc. 115 (men)...	1(1-2)
Engg. Assembly, Gen. Engg. 105..	R
Phys. Educ. M, Phys. Ed. 103....	R(0-2)or
Phys. Educ. W, Phys. Ed. 151....	R(0-3)

Total 17 or 18

SECOND SEMESTER

General Physics II, Phys. 103....	4(3-3)
Applied Mech. A, Ap. Mech. 102..	3(3-0)
Architectural Design II, Arch. 144,	3(0-9)
Work. Draw. and Spec., Arch. 191,	3(0-9)
History of Arch. IV, Arch. 160A..	2(2-0)
Water Color I, Arch. 118.....	2(0-6)
Artillery IV, Mil. Sc. 116 (men)...	1(1-2)
Engg. Assembly, Gen. Engg. 105..	R
Phys. Educ. M, Phys. Ed. 103....	R(0-2)or
Phys. Educ. W, Phys. Ed. 151....	R(0-3)

Total 17 or 18

JUNIOR

FIRST SEMESTER

Str. of Mat. A, Ap. Mech. 116, 121	4(3-3)
French I, Mod. Lang. 151.....	3(3-0)
Architectural Design III, Arch. 145,	5(0-15)
Life Drawing I, Arch. 121.....	2(0-6)
Hist. of Painting and Sculpture,	
Arch. 179	3(3-0)
Engg. Assembly, Gen. Engg. 105..	R

Total 17

SECOND SEMESTER

Theory of Structures I, Arch. 192,	4(2-6)
French II, Mod. Lang. 152.....	3(3-0)
Architectural Design IV, Arch. 147,	5(0-15)
Life Drawing II, Arch. 123.....	2(0-6)
Building Equipment, Arch. 188...	2(2-0)
Public Speaking, Pub. Spk. 107...	2(2-0)
Engg. Assembly, Gen. Engg. 105..	R

Total 18

SENIOR

FIRST SEMESTER

Architectural Design V, Arch. 254,	7(0-21)
Theory of Structures II, Arch. 194A	5(3-6)
Law for Engineers, Hist. 167.....	2(2-0)
Elective†	3(-)
Engg. Assembly, Gen. Engg. 105..	R
Inspection Trip, Arch. 199.....	R

Total 17

SECOND SEMESTER

Architectural Design VI, Arch. 257,	7(0-21)
Theory of Structures III, Arch. 196,	4(2-6)
Professional Practice, Arch. 195...	2(0-6)
Elective†	4(-)
Engg. Assembly, Gen. Engg. 105..	R

Total 17

Number of hours required for graduation: Men, 139; women, 135.

* Students who offer but one unit of algebra for admission take a five-hour course in college algebra, Math. 107, the first semester, postponing two hours of other work.

† Electives are to be chosen with the advice and approval of the head of the department and the dean.

CURRICULUM IN CHEMICAL ENGINEERING

FRESHMAN

FIRST SEMESTER		SECOND SEMESTER	
Chemistry I, Chem. 101.....	5(3-6)	Chemistry II Rec., Chem. 103....	3(3-0)
College Algebra,* Math. 104.....	3(3-0)	Chemistry II Lab., Chem. 104....	2(0-6)
Plane Trigonometry, Math. 101...	3(3-0)	Plane Analytical Geom., Math. 110,	4(4-0)
College Rhetoric I, Engl. 101.....	3(3-0)	College Rhetoric II, Engl. 104....	3(3-0)
Engg. Drawing, Mach. Des. 101...	2(0-6)	Desc. Geometry, Mach. Des. 106..	2(0-6)
Artillery I, Mil. Sc. 113.....	1(1-2)	Mach. Drawing I, Mach. Des. 111,	2(0-6)
Engg. Lectures, Gen. Engg. 101...	R	Artillery II, Mil. Sc. 114.....	1(1-2)
Phys. Educ. M, Phys. Ed. 103....	R(0-2)	Engg. Lectures, Gen. Engg. 101...	R
		Phys. Educ. M, Phys. Ed. 103....	R(0-2)
Total	17	Total	17

SOPHOMORE

FIRST SEMESTER		SECOND SEMESTER	
Engg. Physics I, Phys. 105.....	5(4-3)	Engg. Physics II, Phys. 106.....	5(4-3)
Calculus I, Math. 114.....	4(4-0)	Calculus II, Math. 115.....	4(4-0)
English Literature, Engl. 172.....	3(3-0)	Economics I, Econ. 101.....	3(3-0)
Chem. Engg. Materials, Chem.		Quan. Analysis, Chem. 241.....	5(1-12)
Engg. 201	2(2-0)	Artillery IV, Mil. Sc. 116.....	1(1-2)
Mechanism, Mach. Des. 121.....	3(3-0)	Engg. Assembly, Gen. Engg. 105..	R
Artillery III, Mil. Sc. 115.....	1(1-2)	Phys. Educ. M, Phys. Ed. 103...	R(0-2)
Engg. Assembly, Gen. Engg. 105..	R		
Phys. Educ. M, Phys. Ed. 103....	R(0-2)		
Total	18	Total	18

JUNIOR

FIRST SEMESTER		SECOND SEMESTER	
Applied Mechanics, Ap. Mech. 202,	4(4-0)	Str. of Mat. E., Ap. Mech. 216,	
Phys. Chemistry I, Chem. 206....	5(3-6)	220	4(3-3)
Org. Chemistry I, Chem. 266.....	5(3-6)	Phys. Chemistry II, Chem. 272...	3(3-0)
Industrial Stoichiometry, Chem.		Org. Chemistry II, Chem. 267....	4(2-6)
Engg. 205	2(2-0)	Unit Operations I, Chem. Engg. 220,	4(3-3)
Elective†	2(-)	Elective†	2(-)
Engg. Assembly, Gen. Engg. 105..	R	Engg. Assembly, Gen. Engg. 105..	R
Total	18	Total	17

SENIOR

FIRST SEMESTER		SECOND SEMESTER	
Unit Operations II, Chem. Engg.		Chem. Engg. Plant Design, Chem.	
225	4(3-3)	Engg. 245.....	4(3-3)
Chem. Engg. Thermodynamics,		Org. Chem. Technology, Chem.	
Chem. Engg. 230.....	3(3-0)	Engg. 235	3(3-0)
Inorg. Chem. Tech. Rec., Chem.		Heat Power Engg. B, Mech. Engg.	
Engg. 210	3(3-0)	211	5(4-3)
Elec. Engg. C, Elec. Engg. 102, 106,	3(2-2, 1)	Unit-Process Lab., Chem. Engg.	
Elective†	4(-)	240	2(0-6)
Engg. Assembly, Gen. Engg. 105..	R	Elective†	3(-)
Inspection Trip, Chem. Engg. 150..	R	Engg. Assembly, Gen. Engg. 105..	R
Total	17	Total	17

Number of hours required for graduation, 139.

* Students who offer but one unit of algebra for admission take a five-hour course in college algebra, Math. 107, the first semester, postponing two hours of other work.

† Electives are to be chosen with the advice and approval of the head of the department and the dean. Students who expect to continue in graduate study are urged to elect German I and II.

CURRICULUM IN CIVIL ENGINEERING

FRESHMAN

FIRST SEMESTER

SECOND SEMESTER

Chemistry E-I, Chem. 107.....	4(3-3)
College Algebra,* Math. 104.....	3(3-0)
Plane Trigonometry, Math. 101....	3(3-0)
College Rhetoric I, Engl. 101.....	3(3-0)
Engg. Drawing, Mach. Des. 101..	2(0-6)
Surveying I, Civ. Engg. 102.....	2(0-6)
Artillery I, Mil. Sc. 113.....	1(1-2)
Engg. Lectures, Gen. Engg. 101...	R
Phys. Educ. M, Phys. Ed. 103....	R(0-2)

Chemistry E-II, Chem. 108.....	4(3-3)
Plane Analytical Geom., Math. 110,	4(4-0)
Amer. Ind. History, Hist. 105....	3(3-0)
College Rhetoric II, Engl. 104....	3(3-0)
Descriptive Geom., Mach. Des. 106,	2(0-6)
Artillery II, Mil. Sc. 114.....	1(1-2)
Engg. Lectures, Gen. Engg. 101...	R
Phys. Educ. M, Phys. Ed. 103....	R(0-2)

Total 18

Total 17

SOPHOMORE

FIRST SEMESTER

SECOND SEMESTER

Engg. Physics I, Phys. 105.....	5(4-3)
Calculus I, Math. 114.....	4(4-0)
Surveying II, Civ. Engg. 111.....	2(0-6)
Economics I, Econ. 101.....	3(3-0)
Mach. Drawing I, Mach. Des. 111,	2(0-6)
Artillery III, Mil. Sc. 115.....	1(1-2)
Engg. Assembly, Gen. Engg. 105..	R
Phys. Educ. M, Phys. Ed. 103....	R(0-2)

Engg. Physics II, Phys. 106.....	5(4-3)
Calculus II, Math. 115.....	4(4-0)
Surveying III, Civ. Engg. 151, 155,	3(2-3)
Metals and Alloys, Shop 165.....	2(2-0)
C. E. Drawing I, Civ. Engg. 125..	2(0-6)
Artillery IV, Mil. Sc. 116.....	1(1-2)
Engg. Assembly, Gen. Engg. 105..	R
Phys. Educ. M, Phys. Ed. 103....	R(0-2)

Total 17

Total 17

JUNIOR

FIRST SEMESTER

SECOND SEMESTER

Applied Mechanics, Ap. Mech. 202,	4(4-0)
Engg. Geology, Geol. 102.....	4(3-3)
Surveying IV, Civ. Engg. 156, 157,	3(2-3)
Highway Engg. I, Civ. Engg. 231..	2(2-0)
Steam and Gas Engg. C, Mech.	
Engg. 120	2(2-0)
Heat Power Lab. IA, Mech. Engg.	
125	1(0-3)
Water and Sewage Bact., Bact. 125,	2(0-6)
Engg. Assembly, Gen. Engg. 105..	R

Str. of Mat., Ap. Mech. 211, 220,	6(5-3)
Hydraulics, Ap. Mech. 230, 235...	4(3-3)
Foundations, Civ. Engg. 121.....	2(2-0)
Drain. and Irrig. I, Civ. Engg. 161,	4(2-0)
Railway Engg. I, Civ. Engg. 145..	2(2-0)
Public Speaking, Pub. Spk. 107..	2(2-0)
Engg. Assembly, Gen. Engg. 105..	R

Total 18

Total 18

SENIOR

FIRST SEMESTER

SECOND SEMESTER

Str. in Fmd. Struc., Civ. Engg. 201,	4(4-0)
Astr. and Geod., Civ. Engg. 211,	
216	4(2-6)
Water Supply, Civ. Engg. 220....	2(2-0)
Sewerage, Civ. Engg. 225.....	2(2-0)
C. E. Drawing II, Civ. Engg. 205,	2(0-6)
Soil Mechanics, Ap. Mech. 290...	2(0-6)
High. Mat. Lab., Ap. Mech. 250..	1(0-3)
Engg. Assembly, Gen. Engg. 105..	R
Inspection Trip, Civ. Engg. 180...	R

Reinforced Concrete Design, Civ.	
Engg. 250, 255.....	3(2-3)
Design of Framed Structures, Civ.	
Engg. 246	3(0-9)
Elec. Engg. C, Elec. Engg. 102,	
106	3(2-2, 1)
Law for Engineers, Hist. 167.....	2(2-0)
Technical Reports, Engl. 215.....	1(1-0)
Elective†	5(-)
Engg. Assembly, Gen. Engg. 105..	R

Total 17

Total 17

Number of hours required for graduation, 139.

* Students who offer but one unit of algebra for admission take a five-hour course in college algebra, Math. 107, the first semester, postponing two hours of other work.

† Electives are to be chosen with the advice and approval of the head of the department and the dean.

CURRICULUM IN ELECTRICAL ENGINEERING

FRESHMAN

FIRST SEMESTER

Chemistry E-I, Chem. 107.....	4(3-3)
College Algebra,* Math. 104.....	3(3-0)
Plane Trigonometry, Math. 101...	3(3-0)
College Rhetoric I, Engl. 101.....	3(3-0)
Engg. Drawing, Mach. Des. 101...	2(0-6)
Forging and Heat Treating, Shop 150	1(0-2, 1)
Artillery I, Mil. Sc. 113.....	1(1-2)
Engg. Lectures, Gen. Engg. 101...	R
Phys. Educ. M, Phys. Ed. 103....	R(0-2)

Total 17

SECOND SEMESTER

Chemistry E-II, Chem. 108.....	4(3-3)
Plane Analytical Geom., Math. 110,	4(4-0)
Elec. Mach. & Construction, Elec. Engg. 112	2(0-6)
College Rhetoric II, Engl. 104....	3(3-0)
Desc. Geometry, Mach. Des. 106,	2(0-6)
Arc Welding, Shop 172.....	1(0-2, 1)
Artillery II, Mil. Sc. 114.....	1(1-2)
Engg. Lectures, Gen. Engg. 101...	R
Phys. Educ. M, Phys. Ed. 103....	R(0-2)

Total 17

SOPHOMORE

FIRST SEMESTER

Engg. Physics I, Phys. 105.....	5(4-3)
Calculus I, Math. 114.....	4(4-0)
Amer. Ind. History, Hist. 105....	3(3-0)
Mechanism, Mach. Des. 121.....	3(3-0)
Surveying I, Civ. Engg. 102.....	2(0-6)
Artillery III, Mil. Sc. 115.....	1(1-2)
Engg. Assembly, Gen. Engg. 105..	R
Phys. Educ. M, Phys. Ed. 103....	R(0-2)

Total 18

SECOND SEMESTER

Engg. Physics II, Phys. 106.....	5(4-3)
Calculus II, Math. 115.....	4(4-0)
Economics I, Econ. 101.....	3(3-0)
Mach. Drawing I, Mach. Des. 111,	2(0-6)
Principles of Electronics, Elec. Engg. 120	2(2-0)
Artillery IV, Mil. Sc. 116.....	1(1-2)
Engg. Assembly, Gen. Engg. 105..	R
Phys. Educ. M, Phys. Ed. 103....	R(0-2)

Total 17

JUNIOR

FIRST SEMESTER

Applied Mechanics, Ap. Mech. 202,	4(4-0)
Bus. Engl. & Sales., Engl. 125....	3(3-0)
Machine Tool I, Shop 170.....	2(0-6)
D. C. Machinery Rec., Elec. Engg. 207	4(4-0)
Electrodynamics, Elec. Engg. 201..	2(2-0)
Differential Equations, Math. 121..	2(2-0)
Engg. Assembly, Gen. Engg. 105..	R

Total 17

SECOND SEMESTER

Str. of Mat. E, Ap. Mech. 216, 220,	4(3-3)
Public Speaking, Pub. Spk. 107...	2(2-0)
Metals and Alloys, Shop 165.....	2(2-0)
A. C. Circuits, Elec. Engg. 209...	4(4-0)
Elec. Meas. Rec., Elec. Engg. 227,	2(2-0)
Elec. Meas. and Electronics Lab., Elec. Engg. 229.....	2(0-4, 2)
D. C. Machinery Lab., Elec. Engg. 208	2(0-4, 2)
Engg. Assembly, Gen. Engg. 105..	R

Total 18

SENIOR

FIRST SEMESTER

A. C. Mach. I, Elec. Engg. 210, 211,	5(3-4, 2)
Engg. Thermo. A, Mech. Engg. 201A	3(3-0)
Heat Power Lab. IA, Mech. Engg. 125	1(0-3)
Wire Commun. I, Elec. Engg. 244,	3(3-0)or
Pub. Util. Managt., Elec. Engg. 290,	3(3-0)
Elec. Mach. Des., Elec. Engg. 270,	1(0-3)
Technical Reports, Engl. 215.....	1(1-0)
Elective†	3(-)
Engg. Assembly, Gen. Engg. 105..	R
Inspection Trip, Elec. Engg. 190..	R

Total 17

SECOND SEMESTER

A. C. Mach. II, Elec. Engg. 212,	
213	5(3-4, 2)
Heat Power Engg. A, Mech. Engg. 204	3(3-0)
Heat Power Lab. IIA, Mech. Engg. 205	1(0-3)
Hydraulics, Ap. Mech. 230.....	3(3-0)
Elective†	6(-)
Engg. Assembly, Gen. Engg. 105..	R

Total 18

Number of hours required for graduation, 139.

* Students who offer but one unit of algebra for admission take a five-hour course in college algebra, Math. 107, the first semester, postponing two hours of other work.

† Electives are to be chosen with the advice and approval of the head of the department and the dean.

CURRICULUM IN INDUSTRIAL ARTS

FRESHMAN

FIRST SEMESTER

Chemistry E-I, Chem. 107.....	4(3-3)
College Algebra,* Math. 104.....	3(3-0)
College Rhetoric I, Engl. 101.....	3(3-0)
Engg. Drawing, Mach. Des. 101...	2(0-6)
Sheet Metal Work, Shop 173.....	2(0-6)
Wood Turning, Shop 135.....	2(0-6)
Artillery I, Mil. Sc. 113.....	1(1-2)
Engg. Lectures, Gen. Engg. 101....	R
Phys. Education M, Phys. Ed. 103,	R(0-2)

Total 17

SECOND SEMESTER

Chemistry E-II, Chem. 108.....	4(3-3)
Plane Trigonometry, Math. 101...	3(3-0)
College Rhetoric II, Engl. 104....	3(3-0)
Desc. Geometry, Mach. Des. 106..	2(0-6)
Surveying I, Civ. Engg. 102.....	2(0-6)
Foundry Production, Shop 161....	1(0-3)
Farm Blacksmithing I, Shop 157..	1(0-3)
Artillery II, Mil. Sc. 114.....	1(1-2)
Engg. Lectures, Gen. Engg. 101....	R
Phys. Education M, Phys. Ed. 103,	R(0-2)

Total 17

SOPHOMORE

FIRST SEMESTER

General Physics I, Phys. 102.....	4(3-3)
Gen. Psychology, Educ. 184.....	3(3-0)
Mach. Drawing I, Mach. Des. 111,	2(0-6)
Mechanism, Mach. Des. 121.....	3(3-0)
Woodwork I, Shop 121.....	2(0-6)
Arc Welding, Shop 172.....	1(0-2, 1)
Elec. Mach. and Const., Elec. Engg.	
112	2(0-6)
Artillery III, Mil. Sc. 115.....	1(1-2)
Engg. Assembly, Gen. Engg. 105..	R
Phys. Education M, Phys. Ed. 103,	R(0-2)

Total 18

SECOND SEMESTER

General Physics II, Phys. 103....	4(3-3)
Educ. Psychology, Educ. 109.....	3(3-0)
Mach. Drawing II, Mach. Des. 118,	2(0-6)
Metals and Alloys, Shop 165.....	2(2-0)
Farm Carpentry, Shop 147.....	3(1-6)
Wood and Metal Fin., Shop 122..	2(0-6)
Artillery IV, Mil. Sc. 116.....	1(1-2)
Engg. Assembly, Gen. Engg. 105..	R
Phys. Education M, Phys. Ed. 103,	R(0-2)

Total 17

JUNIOR

FIRST SEMESTER

Economics I, Econ. 101.....	3(3-0)
Principles of Accounting, Econ. 136,	3(3-0)
Educ. Sociology, Educ. 239.....	3(3-0)
Public Speaking, Pub. Spk. 107...	2(2-0)
Woodwork II, Shop 126.....	2(0-6)
Farm Blacksmithing II, Shop 158..	1(0-3)
Metallography I, Shop 262.....	1(0-3)
Elective†	3(-)
Engg. Assembly, Gen. Engg. 105..	R

Total 18

SECOND SEMESTER

Labor Economics, Econ. 234.....	3(3-0)
Bus. Engl. and Sales., Engl. 125...	3(3-0)
Ap. Mechanics A, Ap. Mech. 102,	3(3-0)
Gas Engines and Tractors, Agr.	
Engg. 130	3(2-3)
Machine Tool Work I, Shop 170..	2(0-6)
Elective†	3(-)
Engg. Assembly, Gen. Engg. 105..	R

Total 17

SENIOR

FIRST SEMESTER

Business Law I, Hist. 163.....	3(3-0)
Extemp. Speech II, Pub. Spk. 108,	2(2-0)
Technical Reports, Engl. 215.....	1(1-0)
Str. of Mat. A, Ap. Mech. 116, 121,	4(3-3)
El. of Heat Power, Mech. Engg.	
131	2(2-0)
Machine Tool Work II, Shop 192..	2(0-6)
Oxyacetylene Welding, Shop 171..	1(0-2, 1)
Elective†	3(-)
Engg. Assembly, Gen. Engg. 105..	R
Inspection Trip, Shop 194.....	R

Total 18

SECOND SEMESTER

Business Law II, Hist. 164.....	3(3-0)
Amer. Ind. History, Hist. 105....	3(3-0)
Credits and Collections, Econ. 223,	2(2-0)
Elec. Engg. C, Elec. Engg. 102,	
106	3(2-2, 1)
Heat Power Lab. IA, Mech. Engg.	
125	1(0-3)
Elective†	5(-)
Engg. Assembly, Gen. Engg. 105..	R

Total 17

Number of hours required for graduation, 139.

Electives for students preparing to teach industrial arts in Kansas high schools must include the following:

Methods of Teaching Industrial Arts, Educ. 134.....	3(1-6)
Teaching Participation in High School, Educ. 163.....	3(-)
Principles of Secondary Education, Educ. 236.....	3(3-0)
Vocational Education, Educ. 241.....	3(3-0)

* Students who offer but one unit of algebra for admission take a five-hour course in college algebra, Math. 107, the first semester, postponing two hours of other work.

† Electives are to be chosen with the advice and approval of the head of the Department of Shop Practice and the dean.

CURRICULUM IN MECHANICAL ENGINEERING

FRESHMAN

FIRST SEMESTER		SECOND SEMESTER	
Chemistry E-I, Chem. 107.....	4(3-3)	Chemistry E-II, Chem. 108.....	4(3-3)
College Algebra,* Math. 104.....	3(3-0)	Plane Analytical Geom., Math. 110,	4(4-0)
Plane Trigonometry, Math. 101...	3(3-0)	Desc. Geometry, Mach. Des. 106..	2(0-6)
College Rhetoric I, Engl. 101.....	3(3-0)	College Rhetoric II, Engl. 104....	3(3-0)
Engg. Drawing, Mach. Des. 101...	2(0-6)	Metals and Alloys, Shop 165.....	2(2-0)
Oxyacetylene Welding, Shop 171..	1(0-2, 1)or	Forging and Heat Treating, Shop	
Arc Welding, Shop 172.....	1(0-2, 1)	150	1(0-2, 1)
Artillery I, Mil. Sc. 113.....	1(1-2)	Artillery II, Mil. Sc. 114.....	1(1-2)
Engg. Lectures, Gen. Engg. 101...	R	Engg. Lectures, Gen. Engg. 101...	R
Phys. Ed. M, Phys. Ed. 103.....	R(0-2)	Phys. Ed. M, Phys. Ed. 103.....	R(0-2)
Total	17	Total	17

SOPHOMORE

FIRST SEMESTER		SECOND SEMESTER	
Engg. Physics I, Phys. 105.....	5(4-3)	Engg. Physics II, Phys. 106.....	5(4-3)
Calculus I, Math. 114.....	4(4-0)	Calculus II, Math. 115.....	4(4-0)
Amer. Ind. History, Hist. 105....	3(3-0)	Mechanism, Mach. Des. 121.....	3(3-0)
Mach. Drawing I, Mach. Des. 111,	2(0-6)	El. Heat Power, Mech. Engg. 131,	2(2-0)
Machine Tool Work I, Shop 170..	2(0-6)	Surveying I, Civ. Engg. 102.....	2(0-6)
Artillery III, Mil. Sc. 115.....	1(1-2)	Foundry Prod., Shop 161.....	1(0-3)
Engg. Assembly, Gen. Engg. 105..	R	Artillery IV, Mil. Sc. 116.....	1(1-2)
Phys. Ed. M, Phys. Ed. 103.....	R(0-2)	Engg. Assembly, Gen. Engg. 105..	R
		Phys. Ed. M, Phys. Ed. 103.....	R(0-2)
Total	17	Total	18

JUNIOR

FIRST SEMESTER		SECOND SEMESTER	
Applied Mechanics, Ap. Mech. 202,	4(4-0)	Str. of Mat., Ap. Mech. 211, 220,	6(5-3)
Eng. Thermodynamics, Mech. Engg.		Hydraulics, Ap. Mech. 230.....	3(3-0)or
208	4(4-0)	Fluid Mechanics, Ap. Mech. 231,	3(3-0)
Economics I, Econ. 101.....	3(3-0)	Option (see next page).....	9(-)
Mach. Drawing II, Mach. Des. 118,	2(0-6)	Engg. Assembly, Gen. Engg. 105..	R
Metallography I, Shop 262.....	1(0-3)		
Heat Power Lab. I, Mech. Engg.			
209	1(0-3)		
Option (see next page).....	3(-)		
Engg. Assembly, Gen. Engg. 105..	R		
Total	18	Total	18

SENIOR

FIRST SEMESTER		SECOND SEMESTER	
Elec. Engg. M-I, Elec. Engg. 237,		Elec. Engg. M-II, Elec. Engg. 242,	
238	5(4-2, 1)	243	4(3-2, 1)
Heat Power Lab. II, Mech. Engg.		Graphic Statics, Ap. Mech. 225...	1(0-3)
213	1(0-3)	Hydr. Lab., Ap. Mech. 235.....	1(0-3)
Technical Reports, Engl. 215.....	1(1-0)	Option (see next page).....	11(-)
Option (see next page).....	10(-)	Engg. Assembly, Gen. Engg. 105..	R
Engg. Assembly, Gen. Engg. 105..	R		
Inspection Trip, Mech. Engg. 180..	R		
Total	17	Total	17

Number of hours required for graduation, 139.

* Students who offer but one unit of algebra for admission take a five-hour course in college algebra, Math. 107, the first semester, postponing two hours of other work.



Options: Curriculum in Mechanical Engineering**Power Option*****JUNIOR**

FIRST SEMESTER		SECOND SEMESTER	
Elective†	3(-)	Heat Transfer and Fluid Flow, Mech. Engg. 251.....	4(3-3)
		Public Speaking, Pub. Spk. 107...	2(2-0)
		Elective†	3(-)
Total	3	Total	9

SENIOR

FIRST SEMESTER		SECOND SEMESTER	
Pr. Plant Equipment, Mech. Engg. 216	3(2-3)	Pr. Plant Design, Mech. Engg. 217	3(1-6)
Air Conditioning, Mech. Engg. 228, Air Cond. Equipment Lab., Mech. Engg. 229	3(2-3)	Mach. Design I, Mach. Des. 204, 205	5(3-6)
Elective†	1(0-3)	Ht. Pr. Lab. III, Mech. Engg. 219,	1(0-3)
	3(-)	Elective†	2(-)
Total	10	Total	11

Industrial Option***JUNIOR**

FIRST SEMESTER		SECOND SEMESTER	
Elective†	3(-)	Heat Power Engg., Mech. Engg. 214	4(3-3)
		Public Speaking, Pub. Spk. 107...	2(2-0)
		Elective†	3(-)
Total	3	Total	9

SENIOR

FIRST SEMESTER		SECOND SEMESTER	
Ind. Management, Shop 246.....	3(3-0)	Factory Design, Shop 255.....	2(0-6)
Air Conditioning, Mech. Engg. 228, Air Cond. Equipment Lab., Mech. Engg. 229	3(2-3)	Machine Tool Work II, Shop 192, Mach. Design I, Mach. Des. 204, 205	2(0-6)
Elective†	1(0-3)	Elective†	5(3-6)
	3(-)		2(-)
Total	10	Total	11

Petroleum Production Option**JUNIOR**

FIRST SEMESTER		SECOND SEMESTER	
General Geology, Geol. 103.....	3(3-0)	Heat Power Engg., Mech. Engg. 214	4(3-3)
		Historical Geology, Geol. 203.....	4(3-3)
		Elective†	1(-)
Total	3	Total	9

SENIOR

FIRST SEMESTER		SECOND SEMESTER	
Petroleum Production I, Mech. Engg. 270	3(3-0)	Petroleum Production II, Mech. Engg. 271	3(2-3)
Public Speaking, Pub. Spk. 107...	2(2-0)	Petroleum Geology, Geol. 223.....	4(3-3)
Mach. Design I, Mach. Des. 204, 205	5(3-6)	Elective†	4(-)
Total	10	Total	11

* Students in the power option or the industrial option interested in aeronautics may substitute Differential Equations for Engineers 2(2-0), Aerodynamics 4(3-3), and Airplane Design 2(0-6) for Air Conditioning 3(2-3), Air Conditioning Equipment Laboratory 1(0-3), and electives 4(-). Students in the power option or the industrial option interested in machine design may substitute Differential Equations for Engineers 2(2-0), Machine Design II 2(0-6), and Machine Vibration 3(3-0) for Air Conditioning 3(2-3), Air Conditioning Equipment Laboratory 1(0-3), and elective 3(-).

† Electives are to be chosen with the advice and approval of the head of the department and the dean.

Agricultural Engineering

Professor FENTON
Associate Professor BARGER
Instructor ROBERTS

Instructor MARTIN
Instructor OTIS
Graduate Research Assistant PROMERSBERGER

FOR UNDERGRADUATE CREDIT

101. FARM BUILDINGS. 3(2-3)*; II. Fenton, Otis.

Requirements, details of arrangements, and materials of construction for farm buildings; preparation of plans, bills of material, and estimates of costs; water supply, sewage disposal, lighting, and other modern equipment for the farmstead.

108. FARM MACHINERY. 3(2-3); I and II. Barger, assistants.

Construction, operation, adjustment, power requirements, use, service, and repair of farm machinery. (For agricultural students.) Charge, \$2.

111. FIELD AND POWER MACHINERY. 4(2-6); I. Prerequisite: Mach. Des. 121 and Phys. 106. Barger, assistants.

A comprehensive study of the development, design, construction, economics, power requirements, use and servicing of farm machinery. Charge, \$2.

122. AGRICULTURAL MACHINES AND CONSTRUCTION. 2(1-3); II. Martin, assistants.

Review of introductory principles of mechanics and physics as applied to the construction and operation of farm machinery; practice in identification of structural parts, construction methods, and servicing of farm machinery. (For freshman agricultural engineers.) Charge, \$2.

130. GAS ENGINES AND TRACTORS. 3(2-3); I, II, and SS. Barger, Martin.

Principles of the internal combustion engine; carburetion, valve timing, ignition, cooling, lubrication, and fuels; the servicing and repair of farm engines and the selection of power for agriculture. (For agricultural students.) Charge, \$2.

140. INSPECTION TRIP. R; I. Prerequisite: Senior classification. Fenton, assistants.

A trip of three to five days for the purpose of studying farm machinery production and other projects of special interest to agricultural engineers. Cost of trip, \$25 to \$50.

FOR GRADUATE AND UNDERGRADUATE CREDIT

201. POWER AND MACHINERY IN AGRICULTURE. 2(2-0); I. Prerequisite: Junior or senior classification. Barger.

History and development of machinery in agriculture; the application, selection, management, and cost of machines; future development; a survey course dealing with the mechanization of agriculture. Open to all students who have not taken Agr. Engg. 108 or 130.

203. FARM STRUCTURES. 4(2-6); I. Prerequisite: Ap. Mech. 211 and 225. Fenton, Otis.

Design of farm structures; details and materials of construction; specifications and estimates.

205. AGRICULTURAL ENGINEERING PROBLEMS. Credit to be arranged; I, II, and SS. Prerequisite: Permission of instructors. Fenton, Barger.

Problems in the design, construction, or application of machinery or power in agriculture, structures, modern conveniences, rural electrification.

* The number before the parentheses indicates the number of semester hours of credit; the first number within the parentheses indicates the number of hours of recitation each week; the second shows the number of hours to be spent in laboratory work each week; and the third, where there is one, indicates the number of hours of outside work in connection with the laboratory required each week. I, II, and SS indicate that the course is given the first semester, second semester, and summer school, respectively.

210. MODERN FARM AND HOME EQUIPMENT. 3(2-3); II. Prerequisite: Ap. Mech. 230 and 235. Fenton, Martin.

Water supply, sewage disposal, lighting, heating, and ventilation of farm buildings; refrigeration; rural electrification. Charge, \$2.

215. TRACTOR RESEARCH. Credit to be arranged; I. Prerequisite: Agr. Engg. 225 or equivalent. Barger, Martin.

Research studies relating to tractor construction and operation.

225. FARM MOTORS. 4(2-6); II. Prerequisite: Phys. 106, Math. 114, and Mech. Engg. 201A. Barger, assistants.

Theory, design, operation, and adjustment of the internal combustion engine, and a comprehensive study of power and its application to agriculture. Charge, \$3.

240. DRAINAGE, EROSION CONTROL, AND IRRIGATION. 3(2-3); II. Prerequisite: Agron. 130. Otis.

Principles and practices of land improvement by terracing and other methods of erosion control; drainage, irrigation, and land clearing. (For agricultural students.) Charge, \$1.

245. LAND RECLAMATION. 4(2-6); II. Prerequisite: Ap. Mech. 230 and Agron. 130. Fenton, Otis.

Principles and methods of land drainage, soil and water conservation, and irrigation. Charge, \$2.

FOR GRADUATE CREDIT

301. RESEARCH IN AGRICULTURAL ENGINEERING. Credit to be arranged; I, II, and SS. Prerequisite: Agron. 130 and Phys. 106 or equivalent. Fenton, Barger.

The laboratories of the College are available for research in the design, use, and application of machinery and equipment in the development of agriculture. The results of such investigation, if suitable, may be incorporated in bulletins of the Engineering Experiment Station, or furnish material for the Master's thesis.

Applied Mechanics

Professor SCHOLER
Professor ROBERT
Professor DAWLEY
Assistant Professor KOENITZER
Assistant Professor McCAULLEY
Assistant Professor TAYLOR

Assistant Professor THOMSON
Instructor McCORMICK
Instructor GUSTAFSON
Research Assistant MUNGER
Graduate Assistant

FOR UNDERGRADUATE CREDIT

102. APPLIED MECHANICS A. 3(3-0); II. Prerequisite: Math. 101 and Phys. 102. McCaulley.

A study of statics, with applications to stress in structures; center of gravity; moment of inertia.

116. STRENGTH OF MATERIALS A RECITATION. 3(3-0); I. Prerequisite: Ap. Mech. 102. McCaulley.

Behavior of materials subjected to tension, compression, shear, and bending; designs of beams of wood, steel, and reinforced concrete; design and investigation of columns; practice in the use of a handbook.

121. STRENGTH OF MATERIALS A LABORATORY. 1(0-3); I. Prerequisite: Ap. Mech. 102. McCaulley.

A study of various testing machines; tension, compression, shear, and bending tests on iron, steel, wood, and concrete; tests on cement and on the fine and coarse aggregates for concrete. Charge, \$2.

150. THESIS. Credit to be arranged; I, II, and SS. Scholer, Robert.

Subject of investigation to be selected in consultation with the head of the department at the beginning of the senior year.

FOR GRADUATE AND UNDERGRADUATE CREDIT

202. APPLIED MECHANICS. 4(4-0); I, II, and SS. Prerequisite: Math. 115 and Phys. 105. Staff.

Composition, resolution, and conditions of equilibrium of concurrent and nonconcurrent forces; center of gravity; friction; laws of rectilinear and curvilinear motion of material points; moments of inertia; relations between forces acting on rigid bodies and the resulting motions; work, energy, and power.

211. STRENGTH OF MATERIALS RECITATION. 5(5-0); I, II, and SS. Prerequisite: Ap. Mech. 202. Staff.

Behavior of materials subject to tension, compression, and shear; riveted joints; torsion; shafts, and the transmission of power; strength and stiffness of simple and continuous beams, bending moments and shear forces in beams; design of beams; stresses in columns and hooks; design of columns; the mechanics of reinforced concrete. About two-fifths of the time is devoted to the mechanics of reinforced concrete.

216. STRENGTH OF MATERIALS E RECITATION. 3(3-0); I, II, and SS. Prerequisite: Ap. Mech. 202. Staff.

Similar to Ap. Mech. 211, but much less time given to study of continuous girders and of reinforced concrete.

220. STRENGTH OF MATERIALS LABORATORY. 1(0-3); I, II, and SS. Prerequisite or concurrent: Ap. Mech. 211 or 216. Staff.

Tension, compression, shear, and bending tests on specimens of iron, steel, wood, and concrete; torsion tests on steel shafting; standard tests on fine and coarse aggregates for concrete. Charge, \$2.

225. GRAPHIC STATICS. 1(0-3); I, II, and SS. Prerequisite or concurrent: Ap. Mech. 102 or 202. Robert.

Graphical solutions of the stresses existing in a number of typical trusses under a variety of loadings.

230. HYDRAULICS RECITATION. 3(3-0); I, II, and SS. Prerequisite: Ap. Mech. 202. Staff.

Fluid pressures, center of pressure, immersion and flotation; Bernoulli's theorem; orifices, weirs, short and long pipes, flow of water in open channels, and its measurements; elements of water power, impulse wheels, reaction turbines, and centrifugal pumps.

231. FLUID MECHANICS. 3(3-0); II. Prerequisite: Ap. Mech. 202 and Mech. Engg. 208. Robert.

An optional course to hydraulics, for mechanical engineering students, in which both gaseous and liquid fluids are treated. (Not open to students with credit in Ap. Mech. 230.)

235. HYDRAULICS LABORATORY. 1(0-3); I, II, and SS. Prerequisite: Ap. Mech. 202; prerequisite or concurrent: Ap. Mech. 230 or 231. Staff.

Tests to determine the coefficients of weirs and orifices, loss of head in pipes, water wheels, water turbines, rams and pumps. Charge, \$1.

250. HIGHWAY MATERIALS LABORATORY. 1(0-3); I and II. Prerequisite: Ap. Mech. 220. Koenitzer, Taylor.

A comprehensive course in the examination and testing of road materials. Charge, \$1.50.

265. ADVANCED MECHANICS OF MATERIALS. 2(2-0); I. Prerequisite: Ap. Mech. 211 or 216. Scholer, Robert.

A more comprehensive presentation of the methods of analysis of stresses in the members of machines and structures.

268. ELASTIC ENERGY THEORY. 3(3-0); I. Prerequisite: Ap. Mech. 211 or 216. Scholer, Thomson.

The elastic energy theory applied to trusses, frames, beams, and curved beams.

269. APPLIED ELASTICITY. 3(3-0); II. Prerequisite: Ap. Mech. 211 or 216; Math. 201. Thomson.

Theory of elasticity with its application to stress analysis.

270. HYDRAULIC MACHINERY. 2(2-0); I. Prerequisite: Ap. Mech. 230. Robert.

Characteristics and applications of water wheels, turbines, pumps, and other hydraulic machinery.

275. ADVANCED HIGHWAY MATERIALS. 2(1-3); II. Prerequisite: Ap. Mech. 250. Scholer.

An advanced course in the properties and testing of the various materials used in road construction.

276. DESIGN OF CONCRETE MIXTURES. 3(1-6); I. Prerequisite: Ap. Mech. 220. Dawley.

Practical applications of the fundamental principles of concrete making, using various kinds of cement and placing special emphasis on the proper designing, mixing, and placing of concrete mixtures to meet certain strength and durability requirements. Charge, \$2.50.

290. SOIL MECHANICS. 2(0-6); I and II. Prerequisite: Ap. Mech. 220. Koenitzer.

The physical properties of soil which govern its behavior as a material for highway surfaces or foundations; the behavior of soil when used as a material of construction in fills and dams. Charge, \$1.50.

FOR GRADUATE CREDIT

301. RESEARCH IN MATERIALS OF CONSTRUCTION. Credit to be arranged; I, II, and SS. Prerequisite: Consult instructors. Scholer, Robert, Dawley.

Many problems related to materials used in engineering construction offer attractive fields for research. A number of special pieces of apparatus in addition to the usual equipment of strength-of-materials laboratory are available for this work. The results of such investigations, if suitable, may be incorporated in bulletins of the Engineering Experiment Station, or furnish materials for the Master's thesis.

Architecture

Professor WEIGEL
Professor HELM
Associate Professor WICHERS
Assistant Professor WARE

Assistant Professor McCULLLEY
Assistant Professor MACKEY
Instructor WASSERMAN

Students should consider the advantages of combining the work in architectural engineering and in architecture, receiving the degree of Bachelor of Science in Architectural Engineering at the end of the fourth year, and the degree of Bachelor of Science in Architecture at the end of the fifth year. Students wishing to combine both curriculums should enroll in the curriculum in Architectural Engineering for the first three years.

All drawings or designs made by the student during the course become the property of the department, to be used or returned at the discretion of the faculty.

FOR UNDERGRADUATE CREDIT

106A. ELEMENTS OF ARCHITECTURE I. 3(0-9); I and II. Wasserman.

A study of the fundamentals of architectural design by their application in the original solution and presentation of simple architectural problems. Charge, \$1.

107A. ELEMENTS OF ARCHITECTURE II. 3(0-9); I and II. Prerequisite: Arch. 106A. Wasserman.

A continuation of Arch. 106A. Charge, \$1.

112. FREEHAND DRAWING I. 2(0-6); I, II, and SS. Helm, Wichers. A basic course in the fundamentals of freehand drawing.
113. FREEHAND DRAWING II. 2(0-6); I, II, and SS. Prerequisite: Arch. 112. Helm, Wichers. A continuation of Arch. 112.
116. PENCIL RENDERING AND SKETCHING. 2(0-6); I, II, and SS. Prerequisite: Arch. 112. Helm, Wasserman.
117. STILL-LIFE DRAWING. 2(0-6); I and SS. Prerequisite: Arch. 112. Helm. Sketches in various media of still-life groups in the studio and out-of-doors.
118. WATER COLOR I. 2(0-6); I, II, and SS. Prerequisite: Arch. 116 or approval of instructor. Helm. Rudiments of water color painting; translation and theory of color. Sketching of simple objects and groups of objects; includes both studio and outdoor sketching.
119. WATER COLOR II. 2(0-6); I, II, and SS. Prerequisite: Arch. 118. Helm. Advanced study in the technique of the medium. Includes both studio work and outdoor sketching.
120. INTERIOR DESIGN. 2(0-6); I and SS. Prerequisite: Arch. 118, 125, and 145. Helm. A study of the principles of interior architecture. Deposit, \$1.
121. LIFE DRAWING I. 2(0-6); I, II, and SS. Prerequisite: Arch. 118. Helm. Charge, \$3.
123. LIFE DRAWING II. 2(0-6); I, II, and SS. Prerequisite: Arch. 121. Helm. A continuation of Arch. 121. Charge, \$3.
124. DOMESTIC ARCHITECTURE. 2(2-0); II. Wichers. An elective course intended for students not enrolled in the Department of Architecture. A study of the design and planning problems of the small home.
125. APPRECIATION OF ARCHITECTURE. 3(3-0); II. Mackey. A survey of the history of architecture. An elective, nontechnical course intended for students not enrolled in the Department of Architecture.
133. CLAY MODELING. 2(0-6); I and SS. Prerequisite: Arch. 117. Helm. The making of clay models, plaster casts of simple decorative fragments and anatomical forms; and construction of relief maps. Charge, \$1.
134. PEN AND INK DRAWING. 2(0-6); I, II, and SS. Prerequisite: Approval of instructor. Helm, Wasserman.
137. BLOCK PRINTS. 2(0-6); I and SS. Prerequisite: Arch. 113 or approval of instructor. Helm. The carving of original compositions in linoleum and wood blocks. Charge, \$1.
- 142, 144. ARCHITECTURAL DESIGN I and II. 3(0-9) each; I and II each. Prerequisite: For I, Arch. 107A; for II, Arch. 142. Wasserman. A continuation of Arch. 107A. Charge, \$1 for each course.
- 145, 147. ARCHITECTURAL DESIGN III and IV. 5(0-15) each; I and II each. Prerequisite: For III, Arch. 144; for IV, Arch. 145. Mackey. Continuation of Arch. 144; time problems and rapid design sketches required at frequent intervals. Charge, \$1 for each course.
153. RURAL ARCHITECTURE. 2(0-6); I. Prerequisite: Arch. 144 and 191. Wichers. A study of the architectural needs of rural communities, with special emphasis on the small home, using architectural models as a medium.

154A, 157A. HISTORY OF ARCHITECTURE I and II. 2(2-0) each; I and II, respectively. Prerequisite: For II, Arch. 154A. Mackey.

I, preclassical and classical architecture; II, medieval architecture.

158A, 160A. HISTORY OF ARCHITECTURE III and IV. 2(2-0) each; I and II, respectively. Prerequisite: For III, Arch. 157A; for IV, Arch. 158A. Mackey.

III, Italian and French Renaissance architecture; IV, continuation of Arch. 158A through modern architecture.

165, 170. COMMERCIAL ILLUSTRATION I and II. 2(0-6) each; I, II, and SS, each. Helm.

The principles of advertising arrangements; making various types of advertising design, such as newspaper advertisements, lettering, and posters, making cover designs for magazines, books, and trade catalogues; for headings, tail pieces, and decorative page arrangements; drawings carried out in black and white and in one or more colors.

179. HISTORY OF PAINTING AND SCULPTURE. 3(3-0); I. Helm.

The appreciation and development of painting and sculpture. A required course for students in architecture and a recommended elective for other students.

187A. BUILDING MATERIALS AND CONSTRUCTION. 3(3-0); I. McCaulley.

An introduction to the properties and uses of the materials of construction; construction methods; occasional visits to buildings under construction.

188. BUILDING EQUIPMENT. 2(2-0); II. Prerequisite: Arch. 187A. McCaulley.

A study of plumbing, sanitation systems, and mechanical equipment of buildings.

191. WORKING DRAWINGS AND SPECIFICATIONS. 3(0-9); II. Prerequisite: Arch. 142 and 187A. Wichers.

Preparing working drawings and specifications for a residence.

192. THEORY OF STRUCTURES I. 4(2-6); II. Prerequisite: Ap. Mech. 116 and 121. McCaulley.

Mathematical and graphical solutions of stresses in framed structures under static loading; practical problems in the design of wood construction; occasional inspection trips to buildings under construction.

194A. THEORY OF STRUCTURES II. 5(3-6); I. Prerequisite: Arch. 192. McCaulley.

A continuation of Theory of Structures I applied to steel and masonry structures.

195. PROFESSIONAL PRACTICE. 2(0-6); II. Prerequisite: Arch. 147. Weigel.

The preparation of building documents; interpretation of building codes and analysis of documents of American Institute of Architects; office organization; client and contractor relationships.

196. THEORY OF STRUCTURES III. 4(2-6); II. Prerequisite: Arch. 194A. McCaulley.

A continuation of Theory of Structures II, including design of reinforced concrete building frames; footings, columns, and floor systems, attention being given to costs and economical design.

199. INSPECTION TRIP. R; I. Prerequisite: Senior classification. Weigel.

An inspection trip is made to one of the larger cities of the Middle West, usually Chicago, by the senior students in Architectural Engineering and Architecture. The inspection party is under the charge of one or more faculty members of the Department of Architecture. Time allotted to the trip is from three days to one week. Approximate cost of trip, \$50.

FOR GRADUATE AND UNDERGRADUATE CREDIT

201. ADVANCED FREEHAND DRAWING. Credit to be arranged. I, II, and SS. Prerequisite: Arch. 117 and 118. Helm.

217. ETCHING. 2(0-6); I, II, and SS. Prerequisite: Arch. 117 and 134. Helm.

Technical principles and practice of etching on copper and zinc plate. Charge, \$1.

221. PROBLEMS IN ARCHITECTURAL DEVELOPMENT. Credit to be arranged; I, II, and SS. Prerequisite: Approval of instructor. Weigel, McCaulley.

Under direct supervision of some member of the departmental staff, study of specific architectural problems. Deposit, \$1.

230. OIL PAINTING. Credit to be arranged. I, II, and SS. Prerequisite: Arch. 118 or approval of instructor. Helm.

249. CITY PLANNING. 3(0-9); II. Prerequisite: Arch. 144. Weigel.

A study of city planning, including transportation and street systems, parks and recreation facilities, public buildings and civic centers, subdivisions of land, restrictions and zoning.

254, 257. ARCHITECTURAL DESIGN V AND VI. 7(0-21) each; I and II each. Prerequisite: For V, Arch. 147; for VI, Arch. 254. Weigel.

Continuation of Arch. 147. Charge, \$1 for each course.

FOR GRADUATE CREDIT

301, 304. ADVANCED ARCHITECTURAL DESIGN I AND II. Prerequisite: Arch. 257. Credit to be arranged. I, II, and SS, each. Weigel.

A study of the planning of important buildings and groups of buildings. II, a continuation of I, may furnish material for the Master's thesis. Deposit, \$1 each.

Chemical Engineering

Professor FAITH
Assistant Professor GREENE
Instructor HEDRICK
Instructor HAWKINS

The instruction in this department deals primarily with those unit physical operations and unit chemical processes which, when coördinated and in their proper sequence, constitute a physical or chemical process as conducted on an industrial scale. Chemistry, physics, and mathematics are the underlying sciences of chemical engineering, and economics its guide in practice.

FOR UNDERGRADUATE CREDIT

150. INSPECTION TRIP. R; I. Greene.

Such manufacturing centers as Kansas City, St. Louis, and Chicago are visited. The cost of the trip varies from about \$30 to not more than \$50.

FOR GRADUATE AND UNDERGRADUATE CREDIT

201. CHEMICAL ENGINEERING MATERIALS. 2(2-0); I and II. Prerequisite: Chem. 103 and 104. Faith, Hawkins.

Manufacture, use, and properties of metallic and nonmetallic materials of construction.

205. INDUSTRIAL STOICHIOMETRY. 2(2-0); I. Prerequisite: Chem. 241. Faith, Hawkins.

Problems involving heat, material, and economic balances.

210. INORGANIC CHEMICAL TECHNOLOGY RECITATION. 3(3-0); I. Prerequisite: Chem. 206. Faith, Hawkins.

Applications of physical chemistry, unit operations, and economics to the inorganic chemical industry.

215. INORGANIC CHEMICAL TECHNOLOGY LABORATORY. 2(0-6); I. Prerequisite: Chem. 241. Hawkins.

Gas, oil, water, and fuel analysis; manufacturing problems. Deposit, \$10.

220. UNIT OPERATIONS I. 4(3-3); II. Prerequisite: Chem. 206 and Math. 115. Staff.

Fundamentals of chemical engineering unit operations, with emphasis on flow of fluids and flow of heat; application of these principles to equipment design. Deposit, \$10.

225. UNIT OPERATIONS II. 4(3-3); I. Prerequisite: Chem. Engg. 220. Staff.
A study of unit operations, including filtration, evaporation, humidification and drying, absorption, distillation, and crystallization. Deposit, \$10.

230. CHEMICAL ENGINEERING THERMODYNAMICS. 3(3-0); I. Prerequisite: Chem. 272. Greene, Hedrick.

Thermodynamics applied to chemical engineering.

232. ADVANCED CHEMICAL ENGINEERING THERMODYNAMICS. 3(3-0); II. Prerequisite: Chem. Engg. 230. Greene.

235. ORGANIC CHEMICAL TECHNOLOGY. 3(3-0); II. Prerequisite: Chem. 206 and 219. Faith.

Organic process industries, including oil refining, synthetic organic chemicals, cellulose, fats and oils.

240. UNIT-PROCESS LABORATORY. 2(0-6); II. Prerequisite or concurrent: Chem. Engg. 235. Faith.

Investigation of the important unit processes. Deposit, \$10.

245. CHEMICAL ENGINEERING PLANT DESIGN. 4(3-3); II. Prerequisite: Chem. Engg. 225. Greene.

Unit operations, thermodynamics, reaction kinetics, and economic balance, solution of the annual A. I. Ch. E. contest problem.

250. PROBLEMS IN CHEMICAL ENGINEERING. Credit to be arranged; I and II. Staff.

An introduction to chemical engineering research. Deposit, \$10.

255. CHEMICAL ENGINEERING ANALYSIS. 3(3-0); I or II. Prerequisite: Chem. 272. Greene.

Graphical methods and dimensional analysis applied to chemical engineering problems.

265. DISTILLATION. 3(3-0); I or II. Prerequisite: Chem. Engg. 225. Hedrick.

Advanced study of distillation.

270. ABSORPTION AND EXTRACTION. 3(3-0); I or II. Prerequisite: Chem. Engg. 225. Greene.

Advanced study of absorption and extraction.

280, 285. PETROLEUM REFINING ENGINEERING I AND II. 3(3-0) each; I and II, respectively. Prerequisite: For I, Chem. Engg. 225 or concurrent registration; for II, Chem. Engg. 280. Hedrick.

I: Properties of hydrocarbon mixtures, cracking, polymerization, hydrogenation, separation by distillation.

II: Design and operation of plants, refinery economics, natural gasoline plants.

FOR GRADUATE CREDIT

301. RESEARCH IN CHEMICAL ENGINEERING. Credit to be arranged; I, II, and SS. Prerequisite: Consent of instructor. Staff.

Original investigations in the fields of unit operations, unit processes, petroleum refining, and industrial utilization of Kansas raw materials. Work is usually correlated with the research projects of the engineering or agricultural experiment stations. Satisfactory results may be used for the Master's thesis.

305. UNIT-PROCESS DESIGN. 3(3-0); I.

Prerequisite: Chem. Engg. 245 or equivalent. Faith.

Design of reaction equipment.

Civil Engineering

Professor CONRAD
 Professor FRAZIER
 Professor FURR
 Associate Professor WHITE
 Assistant Professor CRAWFORD

Assistant Professor MORSE
 Instructor MOELLER
 Graduate Assistant DEAN
 Graduate Assistant STEVENS

FOR UNDERGRADUATE CREDIT

102. SURVEYING I. 2(0-6); I, II, and SS. Prerequisite or concurrent: Math. 101. Staff.

The use and care of engineer's surveying instruments, and plane surveying practice. Charge, \$1.

111. SURVEYING II. 2(0-6); I, II, and SS. Prerequisite: Civ. Engg. 102. White, Morse.

Land surveying, the U. S. system of public land surveys, route surveying, the legal survey, the stadia survey, and calculations of areas and boundaries. Charge, \$1.

121. FOUNDATIONS. 2(2-0); I, II, and SS. Prerequisite or concurrent: Ap. Mech. 202. Frazier.

Design and construction of foundations.

125. CIVIL ENGINEERING DRAWING I. 2(0-6); II and SS. Prerequisite: Mach. Des. 111. White.

Stereotomy, shades and shadows, isometric and perspective drawing; copying working drawings of engineering structures.

145. RAILWAY ENGINEERING I. 2(2-0); II and SS. Prerequisite: Civ. Engg. 156 and 157. Frazier.

Railway engineering based on Wellington's economic theory; study of track construction and maintenance; design of yards and terminals.

151, 155*. SURVEYING III. 3(2-3); I, II, and SS. Prerequisite: Civ. Engg. 111. White, Crawford, Schmidt.

Topographic, municipal, and underground surveying; the celestial sphere; elements of horizontal and vertical curves and earthwork.

Laboratory.—Topographic surveying and topographic mapping. Charge, \$1.

156, 157. SURVEYING IV. 3(2-3); I, II, and SS. Prerequisite: Civ. Engg. 151 and 155. Furr.

Field engineering; various problems in curve selection and location; including pertinent curve, spiral and earthwork computations; railway track and cross-over exercises. Charge, \$1.

161. DRAINAGE AND IRRIGATION I. 2(2-0); II and SS. Prerequisite or concurrent: Ap. Mech. 230 and 235. Furr, White.

Design and construction of drainage and irrigation works.

170. THESIS. Credit to be arranged; I and II. Conrad.

180. INSPECTION TRIP. R; I. Prerequisite: Senior classification. Conrad.

A trip of four to six days to one or more industrial centers for the purpose of making inspections of power plants, mills, structures, waterworks, sewage disposal plants, to illustrate the principles and applications of interest to civil engineers. Approximate cost of trip, \$50.

FOR GRADUATE AND UNDERGRADUATE CREDIT

201. STRESSES IN FRAMED STRUCTURES. 4(4-0); I, II, and SS. Prerequisite: Ap. Mech. 211. Conrad, Morse.

Computation of stresses in bridges and buildings.

* In the case of many of the engineering courses, one course number is used for the recitation and another for the laboratory part of the course.

205. CIVIL ENGINEERING DRAWING II. 2(0-6); I and SS. Prerequisite or concurrent: Civ. Engg. 201. Conrad, Morse.

Graphic statics and design of simple roof trusses in timber and steel.

207. ADVANCED BRIDGE STRESSES. 3(3-0); I and SS. Prerequisite: Civ. Engg. 201. Conrad.

A study of deflections; stresses in continuous, movable, cantilever, suspension, and steel-arch bridges; and secondary stresses.

211, 216. ASTRONOMY AND GEODESY. 4(2-6); I and SS. Prerequisite: Civ. Engg. 151 and 155 and Math. 115. Frazier.

The elements of practical astronomy; precise methods of surveying and leveling.

Laboratory.—Astronomical observations, principally for determining true meridian and latitude; base-line measurements and triangulation work.

220. WATER SUPPLY. 2(2-0); I and SS. Prerequisite: Ap. Mech. 230 and 235 and Bact. 125. Frazier.

Water supply from the standpoint of consumption, collection, storage, distribution, and purification.

225. SEWERAGE. 2(2-0); I and SS. Prerequisite: Ap. Mech. 230 and Bact. 125. Crawford.

A study of sewer systems and sewage treatment.

228. SANITARY ENGINEERING DESIGN. 2(0-6); II and SS. Prerequisite: Civ. Engg. 220 and 225. Frazier.

Design of water purification plants, sewage treatment plants, water distribution systems, and sewage collecting systems. Estimates of costs and methods of financing.

231. HIGHWAY ENGINEERING I. 2(2-0); I, II, and SS. Prerequisite: Civ. Engg. 111. Furr.

Fundamental principles, location, design, construction, and maintenance of roads and pavements.

246. DESIGN OF FRAMED STRUCTURES. 3(0-9); I, II, and SS. Prerequisite: Civ. Engg. 201. Conrad.

The making of general drawings for a highway truss bridge, a railroad truss bridge, and a railroad deck-plate girder.

248. ECONOMICS OF DESIGN AND CONSTRUCTION. 3(3-0); II and SS. Prerequisite: Civ. Engg. 201 and 231. Conrad.

Primarily a study of methods, equipment, construction costs, and economy in design.

250, 255. REINFORCED CONCRETE DESIGN. 3(2-3); I, II, and SS. Prerequisite: Ap. Mech. 211. Frazier, Furr.

Design of reinforced concrete retaining walls, dams, slab bridges, and girder bridges.

Laboratory.—Drawing reinforced concrete retaining walls, dams, slab bridges, and girder bridges.

256. REINFORCED CONCRETE ARCHES. 3(3-0); II and SS. Prerequisite: Ap. Mech. 211. Conrad.

Various types of reinforced concrete arches adapted for use in bridges, buildings, and dams; computation of stresses; arrangement of details.

266. RAILROAD TRANSPORTATION. 3(3-0); II and SS. Prerequisite: Civ. Engg. 145. Frazier.

A study of the function of the railway system; its relation to industrial development, and its correlation with other methods of transportation.

270, 275. HIGHWAY ENGINEERING II. 4(2-6); II and SS. Prerequisite: Civ. Engg. 156, 157, and 231. Furr.

Highway laws, highway administration, and highway economics.

Laboratory.—A reconnaissance and survey for a highway a few miles long; making maps, profiles, and estimates from the survey. Charge, \$2.

276. HIGHWAY ECONOMICS. 3(3-0); I and SS. Prerequisite: Civ. Engg. 231. Furr.

Economic concepts, highway transport, design, and construction problems as affected by recent findings of research agencies.

FOR GRADUATE CREDIT

304. RESEARCH IN CIVIL ENGINEERING. Credit to be arranged; I, II, and SS. Prerequisite: Consult instructors. Conrad, Frazier, Furr.

Original investigation or advanced study in some field related to the practice of civil engineering.

Electrical Engineering

Professor KLOEFFLER
Professor BRENNEMAN
Professor KERCHNER
Associate Professor HUNT

Associate Professor JORGENSEN
Assistant Professor SITZ
Assistant Professor SELVIDGE
Instructor TREGIDGA
Instructor WARD

Special laboratories are provided for the research conducted by the electrical engineering staff and for television and other investigations made by graduate students.

FOR UNDERGRADUATE CREDIT

102, 106. ELECTRICAL ENGINEERING C. 3(2-2, 1); I, II, and SS. Prerequisite: Phys. 106. Jorgenson, Sitz.

The fundamental principles of direct-current and alternating-current circuits and machinery. For nonelectrical students.

Laboratory.—Experiments covering characteristics and applications of direct-current and alternating-current machinery. Charge, \$1.50.

112. ELECTRICAL MACHINERY AND CONSTRUCTION. 2(0-6); I and II. Hunt, Jorgenson.

An introductory course in applied electricity covering various methods of interior wiring, theory of simple electric circuits, and tests of dynamos. Charge, \$3.

116. ILLUMINATION A. 2(2-0); II. Prerequisite: Phys. 106 or 103. Hunt. Systems, calculations, and specifications of interior wiring; principles of illumination.

120. PRINCIPLES OF ELECTRONICS. 2(2-0); I and II. Prerequisite: Chem. 107 and 108, and Phys. 105. Kloeffer.

The fundamental principles of electronics.

190. INSPECTION TRIP. R; I. Prerequisite: Senior classification. Kloeffer.

A trip of four to six days to St. Louis, Chicago, and other cities for the purpose of making inspections of power plants and various industries illustrating the application of electrical engineering principles. Approximate cost of trip, \$50.

195. THESIS. Credit to be arranged; I and II. Staff.

A subject for thesis work is selected in consultation with the department head at the beginning of the senior year; every opportunity is given to work out original ideas as to design and operation of electrical apparatus and machinery.

FOR GRADUATE AND UNDERGRADUATE CREDIT

201. ELECTRODYNAMICS. 2(2-0); I, II, and SS. Prerequisite: Phys. 106; prerequisite or concurrent: Math. 115. Brenneman.

Principles of magnetic, electric, and electrostatic circuits.

207. DIRECT-CURRENT MACHINERY. 4(4-0); I, II, and SS. Prerequisite or concurrent: Elec. Engg. 201. Brenneman, Sitz.

Principles of operation and the characteristics of direct-current generators and motors.

208. DIRECT-CURRENT MACHINERY LABORATORY. 2(0-4, 2); I, II, and SS. Prerequisite: Elec. Engg. 207. Sitz.

Experiments illustrating operating characteristics, losses, and efficiencies of direct-current motors and generators. Charge, \$3.

209. ALTERNATING-CURRENT CIRCUITS. 4(4-0); I, II, and SS. Prerequisite: Elec. Engg. 207; prerequisite or concurrent: Math. 121. Kerchner, Hunt, Jorgenson.

A mathematical treatment of alternating-current phenomena in single and polyphase circuits.

210, 211. ALTERNATING-CURRENT MACHINERY I. 5(3-4, 2); I, II, and SS. Prerequisite: Elec. Engg. 209. Kerchner, Hunt, Sitz.

Principles of design, construction, and operation of transformers, alternating-current generators, and polyphase induction motors.

Laboratory.—Experiments illustrating the characteristics of alternating-current circuits and transformers. Charge, \$3.

212, 213. ALTERNATING-CURRENT MACHINERY II. 5(3-4, 2); I, II, and SS. Prerequisite: Elec. Engg. 210 and 211. Kerchner, Hunt, Sitz.

Continuation of Elec. Engg. 210, including synchronous motors, parallel operation of alternators, converters, induction and commutator alternating-current motors, rectifiers, and accessory apparatus.

Laboratory.—Continuation of Elec. Engg. 211. Experiments on machines listed in Elec. Engg. 212. Charge, \$3.

227. ELECTRICAL MEASUREMENTS RECITATION. 2(2-0); I and II. Prerequisite: Elec. Engg. 120 and 201. Tregidga.

Methods for electric and magnetic measurements; resistance, quantity, current, electromotive force, capacity, inductance.

229. ELECTRICAL MEASUREMENTS AND ELECTRONICS LABORATORY. 2(0-4, 2); I and II. Prerequisite or concurrent: Elec. Engg. 227. Tregidga.

Characteristics of electron tubes; measurement of potential, resistance, inductance, capacity, etc. Charge, \$3.

237, 238. ELECTRICAL ENGINEERING M-I. 5(4-2, 1); I, II, and SS. Prerequisite: Math. 114 and Phys. 106. Hunt, Sitz.

Theory of direct-current circuits and machines, magnetic circuits, and alternating-current circuits.

Laboratory.—Experiments on measurement of resistance and study of direct-current machine characteristics. Charge, \$1.50.

242, 243. ELECTRICAL ENGINEERING M-II. 4(3-2, 1); I and II. Prerequisite: Elec. Engg. 237 and 238. Hunt.

Theory of alternating-current machinery.

Laboratory.—Experiments on alternating-current circuits and alternating-current machinery characteristics. Charge, \$1.50.

244. WIRE COMMUNICATION I. 3(3-0); I. Prerequisite: Elec. Engg. 209. Kloeffer.

Principles of wire communication; telephone and telegraph switching systems, line loading, repeaters, and carrier currents.

248, 249. WIRE COMMUNICATION II. 3(2-2, 1); II. Prerequisite: Elec. Engg. 209 and 244. Selvidge.

Transmission problems, networks, wave filters.

Laboratory.—Measurements as applied to wire communication networks. Charge, \$1.50.

251, 253. RADIO COMMUNICATION I. 3(2-2, 1); I. Prerequisite: Elec. Engg. 120 and 209. Selvidge.

An introduction to radio theory and practice, including a study of tuned circuits, electron tubes, and audio-frequency amplifiers.

Laboratory.—The application and operation of electron tubes in radio circuits; audio- and radio-frequency measurements. Charge, \$1.50.

255. RADIO COMMUNICATION II. 3(3-0); II. Prerequisite: Elec. Engg. 251 and 253. Selvidge.

Radio-frequency amplifiers and oscillators, modulation; application to transmitter circuits; antennas and wave propagation.

256. INDUSTRIAL ELECTRONICS. 2(2-0); I. Prerequisite: Elec. Engg. 120 and 209. Tregidga.

The fundamental principles of electronics and their application to the type of tubes and circuits used in industry.

260, 261. ILLUMINATING ENGINEERING. 3(2-2, 1); II. Prerequisite: Math. 114 and Phys. 106. Hunt.

Photometry, light standards, principles of illumination, and illumination design.

Laboratory.—Photometric measurements of light intensity, luminous flux, brightness, and illumination. Charge, \$1.50.

262. ADVANCED ILLUMINATING ENGINEERING. 3(3-0); II. Prerequisite: Phys. 106 and Math. 116. Hunt.

The various theories on the property of light, the theoretical distribution curves from light sources of various shapes, psychological and physiological phases of lighting, daytime illumination in buildings, and spectrophotometry.

270. ELECTRICAL MACHINE DESIGN. 1(0-3); I and II. Prerequisite: Elec. Engg. 207. Brenneman, Hunt.

The principles of electrical design. Each student makes calculation for electromagnets and a direct-current motor.

280. TRANSMISSION AND DISTRIBUTION OF ELECTRICAL ENERGY. 3(3-0); II. Prerequisite: Elec. Engg. 210. Brenneman.

Transmission line design, economic and technical features; and properties of cables and insulators.

284. TRANSIENT ELECTRICAL PHENOMENA. 3(3-0); II. Prerequisite: Elec. Engg. 210 and Math. 121. Brenneman.

Two phases of electrical phenomena: (a) transients in time, and (b) transients in space.

290. PUBLIC UTILITY MANAGEMENT. 3(3-0); I and II. Prerequisite: Econ. 101 and Elec. Engg. 209. Kloeffer.

The problems of depreciation, finance, rates, and public regulation in gas, electric, and telephone properties.

FOR GRADUATE CREDIT

301. ADVANCED ELECTRIC CIRCUITS I. 3(3-0); I. Prerequisite: Elec. Engg. 212. Kerchner.

Short-circuit currents in networks; equivalent impedance of multicircuit transformers; analysis of unbalanced polyphase circuits and analysis of induction motor performance on unbalanced voltages; short transmission lines in steady state.

304. ADVANCED ELECTRIC CIRCUITS II. 3(3-0); II. Prerequisite: Elec. Engg. 301. Kerchner.

Long transmission lines in steady state with various terminal conditions; transmission charts; harmonics in circuits; general circuit constants; charts and transmission problems involving synchronous machines.

313, 314. HIGH-FREQUENCY MEASUREMENTS. 3(2-2, 1); II. Prerequisite: Elec. Engg. 209 and 251. Selvidge.

Theory of measurement at radio frequencies of current, voltage, frequency, modulation; antenna and transmission line characteristics.

Laboratory.—Applications of high-frequency measurements. Charge, \$1.50.

316. ADVANCED ELECTRICAL THEORY. Credit to be arranged; I and II. Prerequisite: Elec. Engg. 212. Staff.

336. RESEARCH IN ELECTRICAL ENGINEERING. Credit to be arranged: I, II, and SS. Prerequisite: Elec. Engg. 210. Staff.

Special investigations adapted to the needs of individual students. The laboratory work is correlated with the work of the Engineering Experiment Station and may be used as the basis of a Master's thesis.

General Engineering

Dean SEATON
Assistant Dean DURLAND

101. ENGINEERING LECTURES. R(1-0); entire freshman year. Dean Seaton, other members of the engineering faculty, and visiting practicing engineers.

Designed to acquaint freshman engineers and architects with fundamental principles of their profession and to give a general survey of the field. Charge, 75 cents.

105. ENGINEERING ASSEMBLY. R(1-0); sophomore, junior, and senior years. Members of the engineering faculty.

Presentation by students of abstracts and reviews of articles appearing in the journals of their respective societies or in the technical press of their profession, and reports of engineering projects, industrial experiences, and original investigations; as far as possible conducted by the student branches of the professional engineering societies. Occasionally two or more of these individual groups unite for lectures by practicing engineers and by members of the engineering and college faculties. Charge, 75 cents.

Machine Design

Professor PEARCE
Professor DURLAND
Professor SMUTZ
Associate Professor GINGRICH

Assistant Professor BRANIGAN
Instructor WOOD
Instructor SULLIVAN
Instructor FRY

The courses in drawing deal principally with the training of the freshman and sophomore students in visualization, and the application of graphical language to engineering problems, with particular reference to commercial drafting-room methods.

The courses in machine design deal with mechanical transmission of power, analysis of the action of machine parts, design of machine elements and of complete machines, aërodynamic forces, and airplane structures.

Information on the Civil Pilot Training Programs administered by the head of the Department of Machine Design is given elsewhere in this catalogue. (See index.)

FOR UNDERGRADUATE CREDIT

101. ENGINEERING DRAWING. 2(0-6); I, II, and SS. Staff.

The selection and use of drawing instruments; construction of geometrical figures; lettering; orthographic projections and sections; pictorial methods of representation.

106. DESCRIPTIVE GEOMETRY. 2(0-6); I, II, and SS. Prerequisite: Math. 102 or equivalent and Mach. Des. 101. Staff.

Problems involving the point, line, and plane; the intersection and development of the surfaces of geometric solids; practical applications of the principles involved; emphasis on developing the student's ability to visualize drawings in the third angle.

107. DESCRIPTIVE GEOMETRY A. 3(0-9); I. Prerequisite: Math. 102 or equivalent. Smutz, Gingrich.

This course is similar in content to Mach. Des. 106, but is primarily for architectural students, and its problems are related to their work.

108. SHADES AND SHADOWS AND PERSPECTIVE. 3(0-9); II. Prerequisite: Mach. Des. 107 and Arch. 106A. Smutz, Gingrich.

Conventional shades and shadows of common geometrical solids and solids of revolution; simple architectural problems; the theory of perspective as applied to the same simple solids and to problems from architectural practice. Charge, \$1.50.

111. MACHINE DRAWING I. 2(0-6); I, II, and SS. Prerequisite: Mach. Des. 101. Staff.

Conventional representations; working drawings; dimensioning; the reproduction of drawings; checking for errors; arrangement of titles and notes; sheet and metal drafting; simple perspective.

118. MACHINE DRAWING II. 2(0-6); I, II, and SS. Prerequisite: Mach. Des. 111. Staff.

Machine sketching from parts of actual machines; complete working and assembly drawings; tracing and blue printing.

121. MECHANISM. 3(3-0); I, II, and SS. Prerequisite: Math. 101 and Mach. Des. 106. Staff.

A careful study of the fundamental elements of machinery with reference to the transmission of motion and force, and to their forms and arrangements in actual machines.

126. THESIS. Credit to be arranged; I and II. Pearce, Durland.

Excellent material for thesis study is furnished by projects in machine design or aërodynamics; the subject of the investigation is selected in consultation with the head of the department at the beginning of the senior year.

FOR GRADUATE AND UNDERGRADUATE CREDIT

204, 205. MACHINE DESIGN I. 5(3-6); I and II. Prerequisite: Ap. Mech. 211 and Mach. Des. 111. Staff.

The straining actions in machine elements; friction and lubrication; problems arising in the transmission of power and in the design of high-speed machinery; fastenings.

Laboratory.—Riveted joints designed in conformity to the A. S. M. E. Boiler Code; calculations for a number of simple machines and machine parts, paralleling the recitation class assignments.

210. MACHINE DESIGN II. 2(0-6); II. Prerequisite: Mach. Des. 204 and 205. Pearce, Sullivan.

Complete design of a small power shear with a graphical analysis of the shaft; the rotative effect diagram and balancing of an engine.

215. MACHINE VIBRATION. 3(3-0); II. Prerequisite: Ap. Mech. 202 and Math. 121. Pearce, Durland.

A general consideration of free and forced vibration in machines for various degrees of freedom; critical speed; vibration isolation.

220. KINEMATICS AND KINETICS. 2(2-0); II. Prerequisite: Mach. Des. 121 and Ap. Mech. 202. Pearce, Durland.

A study of the velocities and accelerations in mechanisms and machines, and of the forces resulting therefrom.

225. GRAPHICS OF ENGINEERING FORMULAS. 2(2-0); II. Prerequisite: Math. 110. Pearce.

Simple empirical equations; diagramming of formulas; nomographic or alignment charts; special slide rules.

230. PATENTS AND INVENTIONS. 2(2-0); I. Prerequisite: Junior or senior standing. Pearce.

A brief consideration of the fundamental principles of United States patents and their relationship to the engineer; the inception and development of inventions.

250, 251. AËRODYNAMICS. 4(3-3); I. Prerequisite: Ap. Mech. 202. Staff.

A general introduction into aërodynamics, particularly as regards action of air foils, parasite drag, prediction of performance, stability and control.

Laboratory.—Determination of performance curves and the stability of an airplane; operation of demonstration wind tunnel.

255. AIRPLANE DESIGN. 2(0-6); II. Prerequisite: Mach. Des. 250 and 251, and Ap. Mech. 211 and 220. Pearce, Durland.

A general presentation of the problems involved in the design and stress analysis of an airplane structure, particularly as regards the requirements of the United States Department of Commerce.

FOR GRADUATE CREDIT

301. ADVANCED MACHINE DESIGN. Credit to be arranged; I and II. Prerequisite: Consult instructors. Pearce, Durland.

At the option of the student this course may include a study of some advanced subject related to courses in this department.

310. RESEARCH IN DESIGN. Credit to be arranged; I, II, and SS. Prerequisite: Consult instructors. Pearce, Durland.

Original investigation in some advanced subject related to courses in this department. This work may furnish material for the Master's thesis.

Mechanical Engineering

Professor HELANDER
Professor MACK
Professor BRAINARD
Assistant Professor FLINNER

Assistant Professor TRIPP
Instructor PIPPIN
Instructor MATTING
Graduate Assistant FEARN

The instruction in the Department of Mechanical Engineering covers courses in thermodynamics, heat transfer, heat power engineering, air conditioning, refrigeration, and petroleum production. Additional courses closely allied to and a part of mechanical engineering are given in the departments of Machine Design and Shop Practice.

In addition to the equipment installed especially for experimental purposes, all the heating, power, ventilating, and pumping equipment of the College subserves the further purposes of experimental work.

FOR UNDERGRADUATE CREDIT

120. STEAM AND GAS ENGINEERING C. 2(2-0); I and II. Prerequisite: Math. 114 and Phys. 105. Staff.

Steam boilers, steam engines, steam turbines, internal combustion engines, and auxiliaries.

125. HEAT POWER LABORATORY IA. 1(0-3); I and II. Prerequisite or concurrent: Mech. Engg. 120, 131, or 201A. Staff.

Power-plant instruments and testing of power-plant equipment. Charge, \$2.

131. ELEMENTS OF HEAT POWER. 2(2-0); I and II. Prerequisite: Phys. 105. Mack.

Principles and practices underlying the conversion of fuel energy into mechanical energy, and essential equipment in heat power plants.

135. AIR CONDITIONING A. 3(3-0); II. Prerequisite: Phys. 105 or 102. Primarily for students who have not had engineering thermodynamics. Mack.

Principles of heating, cooling, and ventilating; heat transmission; equipment used for heating, cooling, and ventilating.

170, 175. DAIRY REFRIGERATION. 2(1-3); I of the even-numbered years. Mack, Brainard.

Cold storage and the elementary theory and principles of operation of various refrigerating and ice-making machinery, with special reference to the dairy industry.

Laboratory.—Refrigeration systems and their operation; tests of refrigeration machines. Charge, \$1.

180. INSPECTION TRIP. R; I. Prerequisite: Senior classification. Helander.

A trip of three to six days to industrial centers for the purpose of inspecting industrial plants of special interest to mechanical engineering students.

195. THESIS. Credit to be arranged; I and II. Helander, Mack.

Subject for investigation to be selected in consultation with the department head at the beginning of the senior year.

FOR GRADUATE AND UNDERGRADUATE CREDIT

201A. ENGINEERING THERMODYNAMICS A. 3(3-0); I and II. Prerequisite: Math. 115. Staff.

Similar to Mech. Engg. 208, but designed for nonmechanical engineering students.

204. HEAT POWER ENGINEERING A. 3(3-0); I and II. Prerequisite: Mech. Engg. 201A. Staff.

Power-plant equipment, fuels and combustion.

205. HEAT POWER LABORATORY IIA. 1(0-3); I and II. Prerequisite: Mech. Engg. 125; prerequisite or concurrent: Mech. Engg. 204. Staff.

Similar to Heat Power Laboratory II. Charge, \$2.

208. ENGINEERING THERMODYNAMICS. 4(4-0); I and II. Prerequisite: Math. 115 and Mech. Engg. 131. Staff.

Laws of the conversion of heat energy into mechanical energy; properties of fluids; gases, vapors, and gas vapor mixtures; flow and nonflow processes; power generating cycles; air compressions and refrigeration.

209. HEAT POWER LABORATORY I. 1(0-3); I and II. Prerequisite or concurrent: Mech. Engg. 208. Staff.

Power-plant instruments and testing of power-plant equipment. Charge, \$2.

211. HEAT POWER ENGINEERING B. 5(4-3); II. Prerequisite: Phys. 106 and Math. 115. Staff.

Same as Mech. Engg. 204, except that some material on Engineering Thermodynamics has been added.

Laboratory.—Power plant instruments, tests of lubricating oils, testing of power-plant equipment. Charge, \$2.

213. HEAT POWER LABORATORY II. 1(0-3); I and II. Prerequisite: Mech. Engg. 208; prerequisite or concurrent: Mech. Engg. 214 or 216. Staff.

Continuation of Heat Power Lab. I. Charge, \$2.

214. HEAT POWER ENGINEERING. 4(3-3); I and II. Prerequisite: Mech. Engg. 208. Staff.

Application of thermodynamic principles to power generation, flow of fluids, turbines, engines, compressors, and blowers; also a study of prime movers, steam generating equipment, auxiliaries, fuels and combustion, and evaporators.

216. POWER-PLANT EQUIPMENT. 3(2-3); I. Prerequisite: Mech. Engg. 251. Helander, Pippin.

Similar to Mech. Engg. 214, except that more attention is paid to design factors.

217. POWER-PLANT DESIGN. 3(1-6); II. Prerequisite: Mech. Engg. 214 or 216. Helander, Pippin.

Industrial and central station power generation practices, means for effecting economies in central station and industrial plants that use process steam; preliminary design of a power plant, selection of pressures, temperatures, and equipment, including an evaluation of economic factors; and a complete determination of the station heat balance.

219. HEAT POWER LABORATORY III. 1(0-3); I and II. Prerequisite: Mech. Engg. 213 and 214 or 216. Helander, Pippin.

Performance tests of power generating equipment, internal combustion engines, steam engines, turbines, and auxiliaries. Students are required to organize and conduct tests and to submit complete reports. Charge, \$2.

221. REFRIGERATION. 2(2-0); I. Prerequisite: Mech. Engg. 201A or 208. Mack, Pippin.

Thermodynamics of refrigeration; systems of refrigeration and their operation; application of refrigeration to ice making, cold storage, and the cooling of gases, liquids, and solids.

228. AIR CONDITIONING. 3(2-3); I and II. Prerequisite: Mech. Engg. 201A or 208. Mack, Flinner.

Psychrometry; heat transmission; air-conditioning equipment and systems; design problems.

229. AIR-CONDITIONING EQUIPMENT LABORATORY. 1(0-3); I and II. Prerequisite or concurrent: Mech. Engg. 228. Flinner, Pippin. Charge, \$1.

230. ADVANCED THERMODYNAMICS. 2(2-0); I. Prerequisite: Mech. Engg. 208. Helander.

240. INTERNAL COMBUSTION ENGINES. 2(2-0); II. Prerequisite: Mech. Engg. 201A or 208. Brainard, Flinner.

251. HEAT TRANSFER AND FLUID FLOW. 4(3-3); II. Prerequisite: Mech. Engg. 208. Tripp.

Particular reference to heat exchangers, air preheaters, economizers, boilers, condensers, evaporators, and similar equipment.

Laboratory.—Tests to study transfer of heat by radiation, convection, and conduction, and the flow of fluids in pipes and heat exchangers. Charge, \$1.50.

260. ADVANCED POWER-PLANT ENGINEERING. Credit to be arranged. Prerequisite: Mech. Engg. 217. Helander.

An advanced course in the economic problems met with in the design of power plants and in the generation of power. Selection of equipment, choice of station heat balances, generation of by-product power in industries, and interconnections between utilities and industrial plants for the economical interchange of power.

270. PETROLEUM PRODUCTION I. 3(3-0); I. Prerequisite: Senior standing in Department of Mechanical Engineering or permission of head of department. Brainard.

Properties of petroleum; exploration methods; field developments; drilling; oil field hydrology; casing and well completion; and fishing tools and methods.

271. PETROLEUM PRODUCTION II. 3(2-3); II. Prerequisite: Mech. Engg. 270. Brainard.

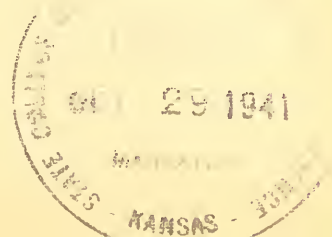
Prime movers and fuels; production methods; methods of flowing and pumping wells; refining; storage; transportation.

Laboratory.—Construction and study of oil field peg models; tests on oil bearing sands; field trips to study equipment and operations. Charge, \$2.

FOR GRADUATE STUDY

305. RESEARCH IN MECHANICAL ENGINEERING. Credit to be arranged; I, II, and SS. Prerequisite: Consult instructors. Helander, Mack.

The laboratory work is correlated with the work of the Engineering Experiment Station. Research in any field pertinent to subjects taught in the Department of Mechanical Engineering.



Shop Practice

Professor CARLSON
 Professor SELLERS
 Associate Professor WILSON
 Assistant Professor JONES
 Assistant Professor LYNCH
 Assistant Professor ATMAN

Instructor MARSH
 Instructor GRANT
 Instructor MCCOLLUM
 Instructor MOORE
 Instructor LADD
 Graduate Research Assistant—————

The work in the Department of Shop Practice is planned to meet the needs of two classes of students: (1) those who are preparing for the teaching field and need a general knowledge of the principles of industrial arts work in metal and wood, of the materials and equipment used, including their control and arrangement, and of methods of handling work and students in the laboratory, together with sufficient skill in the performance of the various tool operations to be able to instruct others; and (2) those in the courses in engineering who need to secure a general knowledge of machine operations and methods used in job shops and mass-production factories, and of the economical selection and control of the materials, machinery, buildings, and personnel used in the manufacturing industries.

FOR UNDERGRADUATE CREDIT

118. **ELEMENTARY CRAFTS FOR TEACHERS.** 2(0-6); SS. Moore.
 Exercises and projects suitable for pupils from the primary to eighth grade. Special instruction in methods of teaching, materials, and equipment. Charge, \$3.
119. **REED FURNITURE CONSTRUCTION.** 2(0-6); SS. Moore.
 Exercises and instruction in methods of teaching this work. Charge, \$2.50.
121. **WOODWORK I.** 2(0-6); I and SS. Moore.
 Elementary bench work course in tool operations. Charge, \$2.50.
122. **WOOD AND METAL FINISHING.** 2(0-6); II and SS. Prerequisite: Shop 121. Moore.
 A study of materials, processes, methods of applications of finishes for both wood and metal. Brush and spray equipment used. Charge, \$2.50.
126. **WOODWORK II.** 2(0-6); II and SS. Prerequisite: Shop 121. Moore.
 Continuation of Woodwork I, including the use of the power machines. Charge, \$2.50.
131. **WOODWORK III.** 2(0-6); I and SS. Prerequisite: Shop 126. Moore.
 Advanced woodwork and cabinetmaking. Charge, \$2.50.
134. **METHODS OF TEACHING INDUSTRIAL ARTS.** 3(1-6); I, II, and SS. Prerequisite: Senior standing and approval of instructor. Wilson.
 See Department of Education, Division of General Science. Charge, \$2.50.
135. **WOOD TURNING.** 2(0-6); I, II, and SS. Moore.
 Practice in handling the lathe and turning tools. Charge, \$2.50.
139. **WOODWORK IV.** 2(0-6); II and SS. Prerequisite: Shop 131. Moore.
 An opportunity to specialize in wood finishing, carpentry work, cabinet work, or some other work of special interest to the student. Charge, \$2.50.
147. **FARM CARPENTRY.** 3(1-6); I, II, and SS. Wilson.
 Rafter cutting and erection, studding and siding work, making window and door frames, hanging doors, and similar operations on full-size construction work; making out bill of material; care and upkeep of tools; designed for training of teachers who must solve problems in connection with carpentry work on the farm. Charge, \$2.50.
150. **FORGING AND HEAT TREATING.** 1(0-2, 1); I and II. Lynch.
 (a) Forging of iron and steel; (b) production equipment as used in the commercial forage shop; (c) operation of gas, oil, and electric furnaces, and the heat treatment of steel. Charge, \$3.

157, 158. FARM BLACKSMITHING I and II. 1(0-3); each; I, II, and SS, and II and SS, respectively. Lynch.

In I, exercises closely related to work on the farm; designed to train teachers for work in rural communities. Charge, \$2.50.

In II, exercises in the annealing, hardening, and tempering of tools, and on the arc and oxyacetylene welders. Charge, \$3.

161. FOUNDRY PRODUCTION. 1(0-3); I and II. Grant.

(a) Bench, floor, and pit molding, use of molding and core machines, operating nonferrous furnaces and cupola; (b) study of commercial foundry equipment and the operation and control of the foundry. Charge, \$1.

165. METALS AND ALLOYS. 2(2-0); I and II. Prerequisite: Chem. 107 and 108, or may be taken with Chem. 108. Sellers, Marsh.

The manufacture and use of iron, steel, copper, aluminum, and their alloys.

170. MACHINE TOOL WORK I. 2(0-6); I, II, and SS. Jones, McCollum.

Practice in chipping, filing, shaper and planer work; drilling and turning on the lathe. Charge, \$5.

171. OXYACETYLENE WELDING. 1(0-2, 1); I, II, and SS. Ladd.

The theory and practice of oxyacetylene welding, including a microscopic study of welds. Charge, \$3.

172. ARC WELDING. 1(0-2, 1); I, II, and SS. Ladd.

The theory and practice of arc welding, including a microscopic study of welds. Charge, \$3.

173. SHEET METAL WORK. 2(0-6); I, II, and SS. Prerequisite: Mach. Des. 101 or equivalent. Moore.

Covers developments, the use of templates, practice in soldering, brazing, folding, wiring, flanging, seaming, rolling, and the more common operations on sheet metal. Charge, \$2.50.

175. FARM SHOP METHODS. 3(1-6); I, II, and SS. Prerequisite: Shop 147 and 157. Wilson.

Babbling, soldering, drilling and drill grinding, thread cutting with dies and taps, tool sharpening, belt lacing, repair of machinery, and other practical operations; designed to train teachers in farm-shop work. Charge, \$2.50.

192, 193. MACHINE TOOL WORK II and III. 2(0-6) and 1(0-3), respectively; I, II, and SS. Prerequisite: Shop 170. Jones, McCollum.

In II, progressive problems in turning, calipering, boring, reaming, taper turning, threading on the lathe, in chucking, use of forming tools, gear cutting; study of cutting edges and tool adjustments best suited to the different metals, cutting speeds and feeds. Charge, \$5.

In III, work on the turret lathe, boring mill, hand and automatic screw machines, and grinder; practical work with jigs and fixtures and a study of rapid production of duplicate parts. Charge, \$2.50.

194. INSPECTION TRIP. R; I. Prerequisite: Senior classification. Staff.

A trip of three to six days to industrial centers for inspection of establishments of special interest to industrial arts students.

195. THESIS. Credit to be arranged; I and II. Carlson, Sellers.

FOR GRADUATE AND UNDERGRADUATE CREDIT

246. INDUSTRIAL MANAGEMENT. 3(3-0); I. Prerequisite: Shop 170 and Ap. Mech. 116 or 211. Carlson.

Problems of the industrial executive, such as plant location, selection and arrangement of buildings and equipment, production planning and control, simplification and standardization, time and motion study, job and methods standardization, control of inventory and costs.

255. FACTORY DESIGN. 2(0-6); II. Prerequisite: Shop 246. Carlson.

Knowledge gained in shops and laboratories and in Shop 246 is used in the design of a factory.

261. **ADVANCED SHOP PRACTICE.** Credit to be arranged; I, II, and SS. Prerequisite: Consult instructor. Staff.

Opportunity is offered to specialize to a limited degree along certain lines such as heat treatment of steel, oxyacetylene and arc welding, jig fixtures and die work, metallography, pattern making, and any shop work that may be of special interest to the student. All assignments must be approved by the head of the Department of Shop Practice. Charge varies with subject matter.

262. **METALLOGRAPHY I.** 1(0-3); I and II. Prerequisite: Shop 165, or may be taken with Shop 165. Sellers, Marsh.

The microscopic constituents of the different grades of iron and steel; changes in the structure and properties as produced by heat treatment, mechanical working, and composition. Charge, \$2.50.

263. **PHYSICAL METALLURGY.** 2(2-0); II and SS. Prerequisite: Shop 262. Sellers, Marsh.

An advanced study of the structure, properties, and uses of the more common metals and alloys involving heat and mechanical treatment and casting.

265. **METALLOGRAPHY II.** 2(0-6); I, II, and SS. Prerequisite: Shop 262. Sellers, Marsh.

A continuation of Shop 262, nonferrous metals, with special attention to photomicrographic analysis. Charge, \$5.

274. **GENERAL SHOP ORGANIZATION.** 3(1-6); II and SS. Prerequisite: Shop 147, 157, 161, 170, 171, 172, 173, and Elec. Engg. 112. Wilson.

A course covering the organization, methods of teaching, and equipment for the general shop. Charge, \$2.50.

286. **SHOP PRACTICE TEACHING.** Credit to be arranged; I, II, and SS. Prerequisite: Consult instructor. Staff.

Actual laboratory teaching experience under the supervision of an instructor. Work covers the outlining, preparation, and presentation of assignments and the supervision of the work; procurement of materials and equipment, shop layouts and upkeep, and general considerations. Insofar as possible the course is adapted to the particular needs of the student. All assignments must be approved by the head of the Department of Shop Practice.

FOR GRADUATE CREDIT

301. **RESEARCH IN SHOP PRACTICE.** Credit to be arranged; I, II, and SS. Prerequisite: Consult instructors. Staff.

Investigations of interest to the individual student. May be used as the basis of the Master's thesis, and is usually correlated with the work of the Engineering Experiment Station.

The Engineering Experiment Station

ROY ANDREW SEATON, *Director*

The Engineering Experiment Station was established for the purpose of carrying on tests and research work of engineering and manufacturing value to the state of Kansas, and of collecting, preparing, and presenting technical information in a form readily available for the use of the industries and the people of the state. All the work of the Experiment Station is intended to be of direct importance to Kansas.

All the equipment of the engineering and scientific laboratories, the shops, and the College power plant are available for the work, while the personnel of the station consists of members of the teaching staff from the departments of the Division of Engineering and Architecture and from other scientific departments whose work is directly related to the work of this division, and others employed especially for the work of the station.

Among the investigations now being carried on are: Atmospheric resistance of automobiles; *pisé de terre* construction; durability of concrete; school shops for vocational agriculture and industrial arts instruction; deterioration of concrete silos; air conditioning for residences; cost and depreciation of farm machinery; wind pressures on farm buildings; cutting edges of tillage implements; tractor fuels; television apparatus; electrical grounds; wind-electric plants; residential construction units; ductility of welded joints; cutting-tool performance; binders for foundry cores; rubber tires for tractors and implements; farm fencing; catalytic oxidation of petroleum derivatives; planning farm homes; soil and water conservation; uses of materials in farm shops; fluid flow friction factors; heat transfer in heat-exchange equipment; Kansas coal; starch production from sorghum grains, potatoes, and other farm crops; mixing as a chemical engineering unit operation; new sources of concrete aggregate; and scattering of ultra-short radio waves.

The testing laboratories of this station have been made available by law† for the use of the State Highway Commission and the state highway engineer, and the road materials for use in state road construction are tested in these laboratories.

Some of the results of the investigations are published as bulletins of the Engineering Experiment Station, which are sent free to any citizen of the state upon request. Thirty-six such bulletins have been published. Besides issuing these bulletins, the station answers yearly many hundreds of requests for information upon matters coming within its field.

Requests for bulletins and general correspondence should be addressed to Engineering Experiment Station, Manhattan, Kan. Requests for information in specific matters should be addressed, as far as possible, to the heads of departments in whose fields the particular matters lie.

† Chapter 281, Laws of 1931.

The Division of General Science

RODNEY WHITTEMORE BABCOCK, *Dean*

In the land-grant colleges, of which this institution is one, the classical studies of the older type of college are replaced by work in the sciences and in professional and vocational subjects. Education should also include some preparation for the discharge of one's duties to the state and to the community. It is the province of the departments grouped in this division of the College to give this basic, scientific, and cultural training.

CURRICULUM IN GENERAL SCIENCE

The Curriculum in General Science includes fundamental training in English, mathematics, science, history, economics, military science, and physical training, which constitute the central educational basis of the institution. Groups of electives meet the needs of several types of students, among whom are: (1) those who have not yet chosen their vocation, but who wish a well-balanced education; (2) those who expect to teach in the high schools of the state; (3) those who are fitting themselves for research work in the sciences; (4) those for whom a general education is required or desirable before studying a profession such as law or medicine.

CURRICULUM IN INDUSTRIAL JOURNALISM

The Curriculum presents such subjects as will enable the writer to see his work in proper perspective, to obtain authoritative knowledge of some field of industrial activity, and to write acceptably. It offers fundamental studies of literary, social, and scientific character. The student must select subjects in agriculture, mechanic arts, applied science, or home economics, depending on the portion of the field of industrial journalism which he desires to enter. Theory and practice of journalism are presented in a series of courses extending through the sophomore, junior, and senior years, and students may take additional electives in journalism.

CURRICULUM IN INDUSTRIAL CHEMISTRY

Demand of students for a curriculum planned especially to give chemical training is such that a formulation has been made to meet the needs of those who desire to specialize in industrial chemistry. The facilities of the Department of Chemistry, reinforced by opportunities for practical work in connection with the research of the experiment stations, provide for this specialized training. A Curriculum in Chemical Engineering is offered in the Division of Engineering and Architecture.

CURRICULUMS IN MUSIC

A four-year curriculum is offered in applied music, which prepares the student with a major in voice, piano, violin, organ, or other instrument, and with a minor in another of these subjects. Students who complete this curriculum are awarded the degree Bachelor of Music, and are eligible to receive a three-year special state certificate in music renewable for three-year terms if they have elected the required subjects in education.

A four-year Curriculum in Music Education is also offered, with specialization in voice, instrument, or public-school band or orchestra. Students who complete this curriculum are awarded the degree Bachelor of Science in Music

Education, and are eligible to receive a special state certificate to teach music and permission to teach any nonmusic subject in which they have completed fifteen or more college hours; students who complete this curriculum with sufficient extra hours so that not more than forty hours in music are submitted to the State Board of Education, are eligible to receive the state three-year renewable-for-life certificate.

CURRICULUMS IN PHYSICAL EDUCATION

The theoretical and practical instruction given in these curriculums prepares students for coaching athletic games. The curriculums are also planned to enable the student to elect work in some other subject which may be taught in connection with physical education.

CURRICULUMS IN BUSINESS ADMINISTRATION

The curriculums in Business Administration are designed to train men and women for citizenship and business. The Curriculum in Business Administration with Special Training in Accounting furnishes a course of study for those who wish preparation in this important activity of business and government. The basic subjects of the four-year Curriculum in Business Administration are included, and a sequence of courses in accounting extends through the entire four years.

Curriculum in General Science

FRESHMAN

FIRST SEMESTER		SECOND SEMESTER	
College Rhetoric I, Engl. 101.....	*3(3-0)	College Rhetoric II, Engl. 104....	3(3-0)
Chemistry I, Chem. 101.....	5(3-6)	Chemistry II Rec., Chem. 103....	3(3-0)
College Algebra,† Math. 104.....	3(3-0)	Chemistry II Lab., Chem. 104....	2(0-6)
General Botany I, Bot. 101.....	3(1-6)	Plane Trigonometry, Math. 101...	3(3-0)
Library Methods, Lib. Ec. 101....	1(1-0)	General Botany II, Bot. 105.....	3(1-6)
Infantry I, Mil. Sc. 101 (men)....	1(1-2)	Current History, Hist. 126.....	1(1-0)
Phys. Ed., M or W.....	R	Infantry II, Mil. Sc. 102 (men)...	1(1-2)
		Phys. Ed., M or W.....	R
Total	15 or 16	Total	15 or 16

SOPHOMORE

FIRST SEMESTER		SECOND SEMESTER	
English Literature, Engl. 172.....	3(3-0)	American Literature, Engl. 175....	3(3-0)
English History, Hist. 121.....	3(3-0)	Modern Europe II, Hist. 223.....	3(3-0)
General Physics I, Phys. 102.....	4(3-3)	General Physics II, Phys. 103....	4(3-3)
General Zoölogy, Zoöl. 105.....	5(3-6)	General Psychology, Educ. 184....	3(3-0)
Infantry III, Mil. Sc. 103 (men)...	1(1-2)	Elective‡	2(-)
Phys. Ed., M or W.....	R	Infantry IV, Mil. Sc. 104 (men)...	1(1-2)
		Phys. Ed., M or W.....	R
Total	15 or 16	Total	15 or 16

JUNIOR

FIRST SEMESTER		SECOND SEMESTER	
Gen. Microbiology, Bact. 101.....	3(1-6)	American History I, Hist. 201....	3(3-0)
Amer. Govt., Hist. 151.....	3(3-0)	Economics I, Econ. 101.....	3(3-0)
Current History, Hist. 126.....	1(1-0)	Hist. of Engl. Lit., Engl. 181....	3(3-0)
Public Speaking, Pub. Spk. 107...	2(2-0)	Elective‡	6(-)
Elective‡	6(-)		
Total	15	Total	15

SENIOR

FIRST SEMESTER	SECOND SEMESTER
Elective‡	Elective‡
15(-)	15(-)

Summary.—Men: Physical education, two years required; military science, 4 hours; other prescribed subjects, 76 hours; electives, 44 hours; total, 124 hours. Women: The same, except no military science; total, 120 hours.

* The number before the parentheses indicates the number of hours of credit; the first number within the parentheses indicates the number of hours of recitation each week; the second shows the number of hours to be spent in laboratory work each week.

† Students who offer but one unit of algebra for admission take a five-hour course in College Algebra, Math. 107. The additional hours are applied as electives.

‡ Electives are to be chosen, with the advice and approval of the dean, in groups of not fewer than eight hours, or in courses which extend fields already entered in the required work.

Pre-Veterinary Adaptation of Curriculum in General Science

The following arrangement is prepared for students who wish to enter the Division of Veterinary Medicine. At least 32 hours must be completed, after which students are eligible for consideration by the Committee on Selection of Veterinary Students for admission to the first year of the Curriculum in Veterinary Medicine.

FIRST SEMESTER		SECOND SEMESTER	
College Rhetoric I, Engl. 101.....	3(3-0)	College Rhetoric II, Engl. 104....	3(3-0)
Chemistry I, Chem. 101.....	5(3-6)	Chemistry II Rec., Chem. 103....	3(3-0)
Extern. Speech I, Pub. Spk. 106...	2(2-0)	Chemistry II Lab., Chem. 104....	2(0-6)
Elective**	5(-)	General Zoölogy, Zoöl. 105.....	5(3-6)
Infantry I, Mil. Sc. 101 (men)....	1(1-2)	Elective**	2(-)
Phys. Ed., M or W.....	R	Infantry II, Mil. Sc. 102 (men)...	1(1-2)
		Phys. Ed., M or W.....	R
Total	15 or 16	Total	15 or 16

Adaptation of Curriculum in General Science for Medical Technicians

Work outlined below has been approved by the Registry of Medical Technologists as preparation for admission to hospital training for medical technicians.

FRESHMAN

FIRST SEMESTER		SECOND SEMESTER	
College Rhetoric I, Engl. 101.....	3(3-0)	College Rhetoric II, Engl. 104....	3(3-0)
Chemistry I, Chem. 101.....	5(3-6)	Chemistry II Rec., Chem. 103....	3(3-0)
College Algebra, Math. 104.....	3(3-0)	Chemistry II Lab., Chem. 104....	2(0-6)
General Zoölogy, Zoöl. 105.....	5(3-6)	Plane Trigonometry, Math. 101...	3(3-0)
Infantry I, Mil. Sc. 101 (men)....	1(1-2)	Gen. Microbiology, Bact. 101.....	3(1-6)
Phys. Ed., M or W.....	R	Elective	2(-)
		Infantry II, Mil. Sc. 102 (men)...	1(1-2)
		Phys. Ed., M or W.....	R
Total	16 or 17	Total	16 or 17

SOPHOMORE

FIRST SEMESTER		SECOND SEMESTER	
Organic Chemistry, Chem. 220....	5(3-6)	Quan. Anal. B, Chem. 251.....	3(1-6)
Human Physiology, Zoöl. 221.....	4(3-3)	General Physics II, Phys. 103....	4(3-3)
General Physics I, Phys. 102.....	4(3-3)	Adv. Serology, Bact. 229.....	5(3-6)or
Hyg. Bact., Bact. 207.....	5(3-6)	Biochemistry, Chem. 231.....	5(3-6)
Infantry III, Mil. Sc. 103 (men)...	1(1-2)	Elective	4(-)
Phys. Ed., M or W.....	R	Infantry IV, Mil. Sc. 104 (men)...	1(1-2)
		Phys. Ed., M or W.....	R
Total	18 or 19	Total	16 or 17

** Electives should be chosen in economics, mathematics, modern languages, or physics.

Curriculum in Industrial Chemistry

FRESHMAN

FIRST SEMESTER

College Rhetoric I, Engl. 101.....	3(3-0)
Chemistry I, Chem. 101.....	5(3-6)
College Algebra, Math. 104.....	3(3-0)
Plane Trigonometry, Math. 101...	3(3-0)
Engg. Drawing, Mach. Des. 101...	2(0-6)
Artillery I, Mil. Sc. 113 (men)....	1(1-2)
Phys. Ed., M or W.....	R

Total 16 or 17

SECOND SEMESTER

College Rhetoric II, Engl. 104....	3(3-0)
Chemistry II Rec., Chem. 103....	3(3-0)
Chemistry II Lab., Chem. 104....	2(0-6)
Plane Anal. Geom., Math. 110....	4(4-0)
Library Methods, Lib. Ec. 101....	1(1-0)
Des. Geometry, Mach. Des. 106...	2(0-6)
Artillery II, Mil. Sc. 114 (men)...	1(1-2)
Phys. Ed., M or W.....	R

Total 15 or 16

SOPHOMORE

FIRST SEMESTER

Quant. Anal. A, Chem. 250.....	3(1-6)
Adv. Inorg. Chem., Chem. 207....	3(3-0)
Calculus I, Math. 114.....	4(4-0)
Engg. Physics I, Phys. 105.....	5(4-3)
Artillery III, Mil. Sc. 115 (men)..	1(1-2)
Phys. Ed., M or W.....	R

Total 15 or 16

SECOND SEMESTER

Quant. Anal. B, Chem. 251.....	3(1-6)
Inorg. Preparations, Chem. 202...	2(0-6)
Calculus II, Math. 115.....	4(4-0)
Engg. Physics II, Phys. 106.....	5(4-3)
Elective†	2(-)
Artillery IV, Mil. Sc. 116 (men)..	1(1-2)
Phys. Ed., M or W.....	R

Total 16 or 17

JUNIOR

FIRST SEMESTER

German I, Mod. Lang. 101.....	3(3-0)
Organic Chemistry I, Chem. 266...	5(3-6)
Physical Chemistry I, Chem. 206..	5(3-6)
Elective†	4(-)

Total 17

SECOND SEMESTER

German II, Mod. Lang. 102.....	3(3-0)
Organic Chemistry II, Chem. 267...	4(2-6)
Physical Chemistry II, Chem. 272,	3(3-0)
Economics I, Econ. 101.....	3(3-0)
Elective†	4(-)

Total 17

SENIOR

FIRST SEMESTER

Amer. Govt., Hist. 151.....	3(3-0)
Inorg. Chem. Tech. Rec., Chem.	
Engg. 210	3(3-0)
Inorg. Chem. Tech. Lab., Chem.	
Engg. 215	2(0-6)
Scientific German, Mod. Lang. 137,	4(4-0)
Inspection Trip, Chem. 132.....	R
Elective†	5(-)

Total 17

SECOND SEMESTER

Org. Chem. Tech., Chem. Engg.	
235	3(3-0)
Prob. in Chemistry, Chem. 270...	3(0-9)
Hist. of Chemistry, Chem. 208....	1(1-0)
Elective†	9(-)

Total 16

Summary.—Men: Physical education, two years required; military science, 4 hours; chemistry, 42 hours; engineering, 12 hours; other prescribed subjects, 51 hours; electives, 24 hours; total, 133 hours. Women: The same, except no military science; total, 129 hours.

† Electives are to be chosen, with the advice and approval of the dean, in groups of not fewer than eight hours, or in courses which extend fields already entered in the required work.

Curriculum in Industrial Journalism

FRESHMAN

FIRST SEMESTER

College Rhetoric I, Engl. 101.....	3(3-0)
General Chemistry, Chem. 110.....	5(3-6)
Modern Language	3(3-0)
Library Methods, Lib. Ec. 101.....	1(1-0)
General Psychology, Educ. 184.....	3(3-0)
Industrial Journalism Lecture.....	R
Infantry I, Mil. Sc. 101 (men)....	1(1-2)
Phys. Ed., M or W.....	R

SECOND SEMESTER

College Rhetoric II, Engl. 104....	3(3-0)
General Geology, Geol. 103.....	3(3-0)
Modern Language	3(3-0)
Option*	6(-)
Industrial Journalism Lecture.....	R
Infantry II, Mil. Sc. 102 (men)...	1(1-2)
Phys. Ed., M or W.....	R

Total 15 or 16

Total 15 or 16

SOPHOMORE

FIRST SEMESTER

Elem. Journalism, Ind. Jour. 150..	2(2-0)
Option*	2(-)
Prin. of Typog., Ind. Jour. 101...	3(2-3)
Biological science	5(-)
Modern Language	3(3-0)
Industrial Journalism Lecture.....	R
Infantry III, Mil. Sc. 103 (men)..	1(1-2)
Phys. Ed., M or W.....	R

Total 15 or 16

SECOND SEMESTER

Ind. Writing, Ind. Jour. 157.....	3(1-6)
Economics I, Econ. 101.....	3(3-0)
Option*	3(-)
English Literature, Engl. 172....	3(3-0)
Extens. Speech I, Pub. Spk. 106..	2(2-0)
Current History, Hist. 126.....	1(1-0)
Industrial Journalism Lecture.....	R
Infantry IV, Mil. Sc. 104 (men)..	1(1-2)
Phys. Ed., M or W.....	R

Total 15 or 16

JUNIOR

FIRST SEMESTER

News. and Mag. Writing, Ind. Jour. 167	2(2-0)
History and Ethics of Journalism, Ind. Jour. 273.....	3(3-0)
Prin. of Adv., Ind. Jour. 178.....	4(4-0)
American Literature, Engl. 175....	3(3-0)
Option*	3(-)
Industrial Journalism Lecture.....	R

Total 15

SECOND SEMESTER

Pub. Inf. Methods, Ind. Jour. 183	2(2-0)or
Rural Press, Ind. Jour. 181.....	2(2-0)or
Radio Writing, Ind. Jour. 162....	2(2-0)
Editing, Ind. Jour. 166.....	2(0-6)
English Elective	3(3-0)
Elective and Option*	8(-)
Industrial Journalism Lecture.....	R

Total 15

SENIOR

FIRST SEMESTER

Cont. Affairs I, Ind. Jour. 253....	3(3-0)
Adv. Reporting, Ind. Jour. 228...	3(2-3)or
Jour. for Women, Ind. Jour. 170..	3(3-0)
Elective and Option*	9(-)
Industrial Journalism Lecture.....	R

Total 15

SECOND SEMESTER

Cont. Affairs II, Ind. Jour. 255...	3(3-0)
American Government, Hist. 151..	3(3-0)
Elective and Option*	9(-)
Industrial Journalism Lecture.....	R

Total 15

Summary.—Men: Physical education, two years required; military science, 4 hours; industrial journalism, 30 hours; options, 25 hours; modern language, 9 hours; other prescribed subjects, 41 hours; general electives, 15 hours; total, 124 hours. Women: The same, except no military science; total, 120 hours.

* The options and electives are chosen with the advice and approval of the dean. The options are in two general groups: (1) fifteen hours in courses related to an industry or to applied science, and (2) ten hours in courses in political or social science, history, government, economics, or sociology. The options taken in the freshman year, and a large part of those in the sophomore year, must be those related to an industry or applied science. In the tabulated presentation of electives for students in the Division of General Science, groups may be found that will be accepted as the required options and electives. These are printed following the tabulation of the curriculums. The fifteen-hour option related to an industry or to applied science must be selected from one of the following groups: Group 31 (applied science), group 32 (home economics), group 35 (agriculture), group 36 (drawing and art), group 37 (manual and industrial arts), group 38 (printing), and group 39 (radio). The ten-hour option in social science may be selected by any combination formed from group 15 (history, government and law) and group 16 (economics and sociology).

Proficiency equivalent to nine hours of study in a modern language is required. Each unit of German, French, or Spanish offered for entrance reduces this requirement in that language by three hours, an equal amount of additional electives being chosen.

Electives are to be chosen in groups of usually not fewer than eight hours, unless they are selected in subjects which extend fields already entered through the required subjects or the options.

Curriculum in Music Education

Students who wish special training in Band or Orchestra make the following substitution:

Instrument, 16 hours, for Voice, 6 hours, Piano, 2 hours, and Voice or Instrument, 8 hours, and take Chorus R(1-0), throughout the senior year.

FRESHMAN

FIRST SEMESTER		SECOND SEMESTER	
College Rhetoric I, Engl. 101.....	3(3-0)	College Rhetoric II, Engl. 104....	3(3-0)
Harmony I, Mus. 101.....	2(2-0)	Harmony II, Mus. 102.....	2(2-0)
Ear Tr. and St. Sing. I, Mus. 105,	2(1-3)	Ear Tr. and St. Sing. II, Mus. 106,	2(1-3)
Piano, Mus. 161.....	2(1-6)	Piano, Mus. 161.....	2(1-6)
Voice, Mus. 156.....	2(1-6)	Voice, Mus. 156.....	2(1-6)
Orch. Instruments I, Mus. 151A..	$\frac{1}{2}$ (1-0)	Orch. Instruments II, Mus. 151B..	$\frac{1}{2}$ (1-0)
Choral Ensemble, Mus. 194.....	$\frac{1}{2}$ (0-2)	Choral Ensemble, Mus. 194.....	$\frac{1}{2}$ (0-2)
General Psychology, Educ. 184....	3(3-0)	Phys. or Biol. Science.....	3(-)
Infantry I, Mil. Sc. 101 (men)....	1(1-2)	Infantry II, Mil. Sc. 102 (men)...	1(1-2)
Phys. Ed., M or W.....	R	Phys. Ed., M or W.....	R
Total	15 or 16	Total	15 or 16

SOPHOMORE

FIRST SEMESTER		SECOND SEMESTER	
Harmony III, Mus. 103.....	2(2-0)	Harmony IV, Mus. 104.....	2(2-0)
Ear Tr. and St. Sing. III, Mus. 107,	2(1-3)	Ear Tr. and St. Sing. IV, Mus. 108,	2(1-3)
Piano, Mus. 161.....	1($\frac{1}{2}$ -3)	Piano, Mus. 161.....	1($\frac{1}{2}$ -3)
Voice, Mus. 156.....	1($\frac{1}{2}$ -3)	Voice, Mus. 156.....	1($\frac{1}{2}$ -3)
Orch. Instr. III, Mus. 151C.....	$\frac{1}{2}$ (1-0)	Orch. Instr. IV, Mus. 151D.....	$\frac{1}{2}$ (1-0)
Choral Ensemble, Mus. 194.....	$\frac{1}{2}$ (0-2)	Choral Ensemble, Mus. 194.....	$\frac{1}{2}$ (0-2)
Hist. and Ap. of Mus. I, Mus. 130,	2(2-0)	Hist. and Ap. of Mus. II, Mus. 131,	2(2-0)
Choral Conducting, Mus. 133.....	1(1-0)	English Literature, Engl. 172.....	3(3-0)
Phys. or Biol. Science.....	5(-)	Nonmusic elective	3(-)
Infantry III, Mil. Sc. 103 (men)..<	1(1-2)	Infantry IV, Mil. Sc. 104 (men)..<	1(1-2)
Phys. Ed., M or W.....	R	Phys. Ed., M or W.....	R
Total	15 or 16	Total	15 or 16

JUNIOR

FIRST SEMESTER		SECOND SEMESTER	
Counterpoint, Mus. 109.....	2(2-0)	Musical Form and Analysis, Mus.	
Voice or Instrument.....	2(1-6)	111	1(1-0)
School Music I, Mus. 138.....	2(2-0)	Voice or Instrument.....	2(1-6)
Rad. Mus. Ap. Programs, Mus. 115,	1(1-0)	School Music II, Mus. 139.....	2(2-0)
Instrumental Conducting, Mus. 134,	1(1-0)	Pub. Spk. for Teachers, Pub. Spk.	
Orch. Instr. V, Mus. 151E.....	$\frac{1}{2}$ (1-0)	138	1(1-0)
Choral Ensemble, Mus. 194.....	$\frac{1}{2}$ (0-2)	Orch. Instr. VI, Mus. 151F.....	$\frac{1}{2}$ (1-0)
Educ. Psychology, Educ. 109.....	3(3-0)	Choral Ensemble, Mus. 194.....	$\frac{1}{2}$ (0-2)
Education elective	3(3-0)	Educ. Admin., Educ. 210.....	3(3-0)
Total	15	American Literature, Engl. 175... 3(3-0)	
		Nonmusic elective	2(-)
		Total	15

SENIOR

FIRST SEMESTER		SECOND SEMESTER	
Voice or Instrument.....	2(1-6)	Voice or Instrument.....	2(1-6)
Orch. Instr. VII, Mus. 151G.....	$\frac{1}{2}$ (1-0)	Orch. Instr. VIII, Mus. 151H....	$\frac{1}{2}$ (1-0)
Choral Ensemble, Mus. 194.....	$\frac{1}{2}$ (0-2)	Choral Ensemble, Mus. 194.....	$\frac{1}{2}$ (0-2)
Teach. Part. in Music, Educ. 129..	3(3-0)	School Music III, Mus. 143.....	2(2-0)
Instr. and Orches., Mus. 136.....	3(3-0)	Education elective	3(3-0)
English elective	3(3-0)	Nonmusic elective	7(-)
Nonmusic elective	3(-)	Total	15
Total	15		

Summary.—Men: Physical education, two years required; military science, 4 hours; theoretical music, 39 hours; applied music, 24 hours; other prescribed subjects, 36 hours; restricted electives, 6 hours; nonmusic electives, 15 hours; total, 124 hours. Women: The same, except no military science; total, 120 hours.

Curriculum in Applied Music

Students who major in piano or pipe organ are required to take Piano Ensemble, R(1-0), each semester.

FRESHMAN

FIRST SEMESTER

College Rhetoric I, Engl. 101.....	3(3-0)
Music Major	4(1-12)
Ear Tr. and St. Sing. I, Mus. 105,	2(1-3)
Harmony I, Mus. 101.....	2(2-0)
Modern Language	3(3-0)
Orch. Instr. I, Mus. 151A.....	$\frac{1}{2}$ (1-0)
Ensemble, Mus. 183.....	$\frac{1}{2}$ (0-2)
Infantry I, Mil. Sc. 101 (men)....	1(1-2)
Phys. Ed., M or W.....	R

Total 15 or 16

SECOND SEMESTER

College Rhetoric II, Engl. 104....	3(3-0)
Music Major	4(1-12)
Ear Tr. and St. Sing. II, Mus. 106,	2(1-3)
Harmony II, Mus. 102.....	2(2-0)
Modern Language	3(3-0)
Orch. Instr. II, Mus. 151B.....	$\frac{1}{2}$ (1-0)
Ensemble, Mus. 183.....	$\frac{1}{2}$ (0-2)
Infantry II, Mil. Sc. 102 (men)...	1(1-2)
Phys. Ed., M or W.....	R

Total 15 or 16

SOPHOMORE

FIRST SEMESTER

Music Major	4(1-12)
Music Minor	2(1-6)
Harmony III, Mus. 103.....	2(2-0)
Orch. Instr. III, Mus. 151C.....	$\frac{1}{2}$ (1-0)
Ensemble, Mus. 183.....	$\frac{1}{2}$ (0-2)
Recital I, Mus. 181A.....	R
Hist. and Ap. of Mus. I, Mus. 130,	2(2-0)
Rad. Mus. Ap. Programs, Mus. 115,	1(1-0)
Modern Language	3(3-0)
Infantry III, Mil. Sc. 103 (men)...	1(1-2)
Phys. Ed., M or W.....	R

Total 15 or 16

SECOND SEMESTER

Music Major	4(1-12)
Music Minor	2(1-6)
Harmony IV, Mus. 104.....	2(2-0)
Orch. Instr. IV, Mus. 151D.....	$\frac{1}{2}$ (1-0)
Ensemble, Mus. 183.....	$\frac{1}{2}$ (0-2)
Recital II, Mus. 181B.....	R
Hist. and Ap. of Mus. II, Mus. 131,	2(2-0)
Pub. Spk. for Teachers, Pub. Spk.	
138	1(1-0)
Modern Language	3(3-0)
Infantry IV, Mil. Sc. 104 (men)...	1(1-2)
Phys. Ed., M or W.....	R

Total 15 or 16

JUNIOR

FIRST SEMESTER

Music Major	4(1-12)
Music Minor	2(1-6)
Counterpoint, Mus. 109.....	2(2-0)
Orch. Instr. V, Mus. 151E.....	$\frac{1}{2}$ (1-0)
Ensemble, Mus. 183.....	$\frac{1}{2}$ (0-2)
Recital III, Mus. 181C.....	R
Choral Conducting, Mus. 133.....	1(1-0)
Phys. for Musicians I, Phys. 121..	5(4-3)

Total 15

SECOND SEMESTER

Music Major	4(1-12)
Music Minor	2(1-6)
Musical Form and Analysis, Mus.	
111	1(1-0)
Orch. Instr. VI, Mus. 151F.....	$\frac{1}{2}$ (1-0)
Ensemble, Mus. 183.....	$\frac{1}{2}$ (0-2)
Recital IV, Mus. 181D.....	R
General Psychology, Educ. 184....	3(3-0)
Nonmusic elective	4(-)

Total 15

SENIOR

FIRST SEMESTER

Music Major	4(1-12)
Ensemble, Mus. 183.....	$\frac{1}{2}$ (0-2)
Orch. Instr. VII, Mus. 151G.....	$\frac{1}{2}$ (1-0)
Recital V, Mus. 181E.....	R
Methods and Materials for the	
Studio, Mus. 149.....	1(2-0)
English Literature, Engl. 172.....	3(3-0)
Nonmusic elective	6(-)

Total 15

SECOND SEMESTER

Music Major	4(1-12)
Orch. Instr. VIII, Mus. 151H.....	$\frac{1}{2}$ (1-0)
Ensemble, Mus. 183.....	$\frac{1}{2}$ (0-2)
Recital VI, Mus. 181F.....	R
Instr. and Orches., Mus. 136.....	3(3-0)
Prac. Teach. of Music, Mus. 187..	R
American Literature, Engl. 175....	3(3-0)
Nonmusic elective	4(-)

Total 15

Summary.—Men: Physical education, two years required; military science, 4 hours; theoretical music, 25 hours; applied music, 48 hours; other prescribed subjects, 33 hours; nonmusic electives, 14 hours; total, 124 hours. Women: The same, except no military science; total, 120 hours.

Curriculum in Physical Education for Men

FRESHMAN

FIRST SEMESTER

Intro. to Phys. Ed., Phys. Ed. 107,	1(1-0)
Phys. Ed. Act. I, Phys. Ed. 137..	1(0-3)
Basketball, Phys. Ed. 130.....	2(1-3)
College Rhetoric I, Engl. 101.....	3(3-0)
Extern. Speech I, Pub. Spk. 106..	2(2-0)
Chemistry I, Chem. 101.....	5(3-6)
Library Methods, Lib. Ec. 101.....	1(1-0)
Infantry I, Mil. Sc. 101.....	1(1-2)
Phys. Ed., M.....	R

 Total 16

SECOND SEMESTER

Phys. Ed. Act. II, Phys. Ed. 138,	2(0-6)
Football, Phys. Ed. 126.....	2(1-3)
General Zoölogy, Zoöl. 105.....	5(3-6)
College Rhetoric II, Engl. 104....	3(3-0)
Chemistry II Rec., Chem. 103....	3(3-0)
Infantry II, Mil. Sc. 102.....	1(1-2)
Phys. Ed., M.....	R

 Total 16

SOPHOMORE

FIRST SEMESTER

Human Anatomy, Zoöl. 123.....	5(3-6)
General Psychology, Educ. 184....	3(3-0)
Personal Hygiene, Phys. Ed. 119..	2(2-0)
Phys. Ed. Act. III, Phys. Ed. 139..	2(0-6)
Current History, Hist. 126.....	1(1-0)
Hist. of Phys. Ed., Phys. Ed. 143,	2(2-0)
Infantry III, Mil. Sc. 103.....	1(1-2)
Phys. Ed., M.....	R

 Total 16

SECOND SEMESTER

Baseball, Phys. Ed. 133.....	2(1-3)
Swimming M, Phys. Ed. 120.....	1(0-3)
Nat. and Fen. of Play, Phys. Ed.	
145	2(2-0)
Kinesiology M, Phys. Ed. 141....	3(3-0)
Human Physiology, Zoöl. 221....	4(3-3)
Gen. Microbiology, Bact. 101....	3(1-6)
Infantry IV, Mil. Sc. 104.....	1(1-2)
Phys. Ed., M.....	R

 Total 16

JUNIOR

FIRST SEMESTER

Community Hygiene, Phys. Ed. 147,	2(2-0)
Org. and Admin. of Phys. Ed. M.,	
Phys. Ed. 146.....	3(3-0)
Sociology, Econ. 151.....	3(3-0)
Phys. Ed. Act. IV, Phys. Ed. 140,	1(0-3)
Psych. of Child. and Adol., Educ.	
250	3(3-0)
Elective*	4(-)

 Total 16

SECOND SEMESTER

First Aid and Mas., Phys. Ed. 113,	3(3-0)
Track and Field Sports, Phys. Ed.	
140	2(1-3)
Educ. Admin., Educ. 210.....	3(3-0)
Practice Teaching in Phys. Ed.,	
Phys. Ed. 134.....	2(0-6)
Teaching Health, Phys. Ed. 149...	2(2-0)
Elective*	4(-)

 Total 16

SENIOR

FIRST SEMESTER

Phys. Diagnosis and Prescrip.,	
Phys. Ed. 124.....	3(3-0)
Physiol. of Exercise, Phys. Ed. 123,	2(2-0)
Educ. Psychology, Educ. 109.....	3(3-0)
Practice Teaching in Phys. Ed.,	
Phys. Ed. 134.....	2(0-6)
Elective*	5(-)

 Total 15

SECOND SEMESTER

Teach. Partic. in H. S., Educ. 163,	3(3-0)
Public-school Program in Phys.	
Ed., Phys. Ed. 142.....	2(2-0)
Educ. Sociology, Educ. 239.....	3(3-0)
Community Recreation, Phys. Ed.	
203	2(2-0)
Elective*	5(-)

 Total 15

Summary.—Military science, 4 hours; physical education, 48 hours; professional education, 18 hours; other prescribed subjects, 38 hours; electives, 18 hours; total, 126 hours.

* Electives are to be chosen with the advice and approval of the dean, in groups of not fewer than eight hours, and from departments other than physical education.

Curriculum in Physical Education for Women

FRESHMAN

FIRST SEMESTER		SECOND SEMESTER	
College Rhetoric I, Engl. 101.....	3(3-0)	College Rhetoric II, Engl. 104....	3(3-0)
General Chemistry, Chem. 110....	5(3-6)	General Psychology, Educ. 184....	3(3-0)
Music Fundamentals, Mus. 118...	2(3-0)	Extern. Speech I, Pub. Spk. 106...	2(2-0)
Fund. Rhythms, Phys. Ed. 155...	1(0-3)	General Zoölogy, Zoöl. 105.....	5(3-6)
Personal Health, Child Welf. 101..	2(2-0)	Phys. Ed., W.....	R
Phys. Ed., W.....	R	Gen. Technic II, Phys. Ed. 157B..	2(1-3)
Gen. Technic I, Phys. Ed. 157A...	2(1-3)		
Total	15	Total	15

SOPHOMORE

FIRST SEMESTER		SECOND SEMESTER	
Human Anatomy, Zoöl. 123.....	5(3-6)	Kinesiology W, Phys. Ed. 184....	2(2-0)
English Literature, Engl. 172.....	3(3-0)	Human Physiology, Zoöl. 221.....	4(3-3)
Sociology, Econ. 151.....	3(3-0)	History and Prin. of Phys. Ed.,	
Playground Management and Games		Phys. Ed. 192.....	3(3-0)
W, Phys. Ed. 182A.....	2(1-3)	American Literature, Engl. 175....	3(3-0)
Phys. Ed., W.....	R	Phys. Ed., W.....	R
Gen. Technic III, Phys. Ed. 157C,	2(1-3)	Gen. Technic IV, Phys. Ed. 157D,	2(1-3)
		Elective†	1(-)
Total	15	Total	15

JUNIOR

FIRST SEMESTER		SECOND SEMESTER	
Heal. Tehg. in H. S., Phys. Ed.		Psych. of Child. and Adol., Educ.	
179	3(3-0)	250	3(3-0)
Embryology, Zoöl. 219.....	4(3-3)	Teach. and Adapt. of Phys. Educ.,	
Phys. Ed., W.....	R	Phys. Ed. 188.....	3(3-0)
Gen. Technic V, Phys. Ed. 157E..	2(1-3)	Phys. Ed., W.....	R
Health Exam. W, Phys. Ed. 171..	2(0-6)	Gen. Technic VI, Phys. Ed. 157F,	2(0-6)
Elective†	4(-)	Therap. and Mas., Phys. Ed. 172..	2(0-6)
		Elective†	5(-)
Total	15	Total	15

SENIOR

FIRST SEMESTER		SECOND SEMESTER	
Amer. Hist. III, Hist. 203.....	3(3-0)	Rec. Ldrship., Phys. Ed. 191....	2(2-0)
Educ. Psychology, Educ. 109.....	3(3-0)	Educ. Sociology, Educ. 239.....	3(3-0)
Ap. Nutr., Foods and Nutr. 121..	2(2-0)	Organization and Administration of	
Teach. Partic. in H. S., Educ. 163,	3(3-0)	Phys. Ed. W, Phys. Ed. 176..	2(2-0)
Phys. Ed., W.....	R	Phys. Ed., W.....	R
Gen. Technic VII, Phys. Ed. 157G,	2(1-3)	Gen. Technic VIII, Phys. Ed.	
Elective†	2(-)	157H	2(1-3)
		Educ. Admin., Educ. 210.....	3(3-0)
		Elective†	3(-)
Total	15	Total	15

Summary.—Physical education, 40 hours; professional education, 18 hours; other prescribed subjects, 47 hours; electives, 15 hours; total, 120 hours.

† Electives are to be chosen with the advice and approval of the dean, in groups of not fewer than eight hours, and from departments other than physical education.

Curriculum in Business Administration

FRESHMAN

FIRST SEMESTER		SECOND SEMESTER	
College Rhetoric I, Engl. 101.....	3(3-0)	College Rhetoric II, Engl. 104....	3(3-0)
Phys. or biol. science*.....	3(-)	Phys. or biol. science*.....	5(-)
Current History, Hist. 126.....	1(1-0)	Current History, Hist. 126.....	1(1-0)
General Algebra, Math. 108.....	5(5-0)	Amer. Ind. History, Hist. 105....	3(3-0)
Accounting I, Econ. 133.....	3(2-3)	Accounting II, Econ. 134.....	3(2-3)
Infantry I, Mil. Sc. 101 (men)....	1(1-2)	Infantry II, Mil. Sc. 102 (men)...	1(1-2)
Phys. Ed., M or W.....	R	Phys. Ed., M or W.....	R
Total	15 or 16	Total	15 or 16

SOPHOMORE

FIRST SEMESTER		SECOND SEMESTER	
Coml. Correspondence, Engl. 122..	3(3-0)	General Psychology, Educ. 184....	3(3-0)
Economics I, Econ. 101.....	3(3-0)	English Literature, Engl. 172....	3(3-0)
History elective	3(-)	Economics II, Econ. 104.....	3(3-0)
El. Statistics, Math. 126.....	3(3-0)	Sociology, Econ. 151.....	3(3-0)
Valuation Accounting, Econ. 280..	3(3-0)	Option*	3(-)
Infantry III, Mil. Sc. 103 (men)...	1(1-2)	Infantry IV, Mil. Sc. 104 (men)...	1(1-2)
Phys. Ed., M or W.....	R	Phys. Ed., M or W.....	R
Total	15 or 16	Total	15 or 16

JUNIOR

FIRST SEMESTER		SECOND SEMESTER	
Public Speaking, Pub. Spk. 107...	2(2-0)	Amer. Govt., Hist. 151.....	3(3-0)
Option*	3(-)	Bus. Org. and Fin., Econ. 215....	3(3-0)
Money and Banking, Econ. 116...	3(3-0)	Option*	3(-)
Marketing, Econ. 246.....	3(3-0)	Elective†	6(-)
Elective†	4(-)		
Total	15	Total	15

SENIOR

FIRST SEMESTER		SECOND SEMESTER	
Business Law I, Hist. 163.....	3(3-0)	Business Law II, Hist. 164.....	3(3-0)
Public Finance, Econ. 214.....	3(3-0)	Bus. Adm. Seminar, Econ. 249....	1(1-0)
Elective†	9(-)	Elective†	11(-)
Total	15	Total	15

Summary.—Men: Physical education, two years required; military science, 4 hours; business administration courses, 43 hours; other prescribed courses, 38 hours; option, special and general electives, 39 hours; total, 124 hours. Women: The same, except no military science; total, 120 hours.

* Eight hours of physical or biological science are to be elected in this curriculum, if possible in the freshman year. Subject to any prerequisites, chemistry, physics, botany, zoölogy, entomology, and geology are available.

If Chemistry I, Chem. 101, is taken, Chemistry II Rec., Chem. 103, is required also. The nine hour option is selected from a modern language, or a single department in a natural science. Students who present one and one-half units of high-school algebra may replace General Algebra, Math. 108, by College Algebra, Math. 104.

† Thirteen hours of special electives must be chosen from the following group: Economics 222, Investments; 223, Credits and Collections; 230, Principles of Transportation; 234, Labor Economics; 242, Property Insurance; 244, Life Insurance; 248, Problems in Economics; 258, Social Pathology; 280, Valuation Accounting; 281, Advanced Accounting; 286, Tax Accounting; 287, Cost Accounting; 288, Advanced Cost Accounting; 289, Government Accounting; 291, Auditing; Education 265, Psychology of Advertising and Selling; 273, Psychology and Personnel Management; English 123, Written and Oral Salesmanship; 223, Advanced Problems in Commercial Correspondence; History and Government 260, Government and Business; Industrial Journalism 178, Principles of Advertising; and Mathematics 150, Mathematics of Finance.

Curriculum in Business Administration with Special Training in Accounting

FRESHMAN

FIRST SEMESTER		SECOND SEMESTER	
College Rhetoric I, Engl. 101.....	3(3-0)	College Rhetoric II, Engl. 104....	3(3-0)
Phys. or biol. science*.....	3(-)	Phys. or biol. science*.....	5(-)
Accounting I, Econ. 133.....	3(2-3)	Accounting II, Econ. 134.....	3(2-3)
Current History, Hist. 126.....	1(1-0)	Current History, Hist. 126.....	1(1-0)
General Algebra, Math. 108.....	5(5-0)	Amer. Ind. History, Hist. 105....	3(3-0)
Infantry I, Mil. Sc. 101 (men)....	1(1-2)	Infantry II, Mil. Sc. 102 (men)...	1(1-2)
Phys. Ed., M or W.....	R	Phys. Ed., M or W.....	R
Total	15 or 16	Total	15 or 16

SOPHOMORE

FIRST SEMESTER		SECOND SEMESTER	
Economics I, Econ. 101.....	3(3-0)	Economics II, Econ. 104.....	3(3-0)
Coml. Correspondence, Engl. 122..	3(3-0)	English Literature, Engl. 172.....	3(3-0)
General Psychology, Educ. 184....	3(3-0)	Valuation Accounting, Econ. 280..	3(3-0)
Cost Accounting, Econ. 287.....	3(3-0)	Math. of Finance, Math. 150.....	3(3-0)
Options*	3(-)	Options*	3(-)
Infantry III, Mil. Sc. 103 (men)...	1(1-2)	Infantry IV, Mil. Sc. 104 (men)...	1(1-2)
Phys. Ed., M or W.....	R	Phys. Ed., M or W.....	R
Total	15 or 16	Total	15 or 16

JUNIOR

FIRST SEMESTER		SECOND SEMESTER	
El. of Statistics, Math. 126.....	3(3-0)	Auditing, Econ. 291.....	3(3-0)
Money and Banking,* Econ. 116...	3(3-0)	Am. Govt., Hist. 151.....	3(3-0)
Bus. Org. and Fin., Econ. 215....	3(3-0)	Public Speaking, Pub. Spk. 107...	2(2-0)
Adv. Accounting, Econ. 281.....	3(3-0)	Elective†	7(-)
Options*	3(-)		
Total	15	Total	15

SENIOR

FIRST SEMESTER		SECOND SEMESTER	
Govt. Accounting, Econ. 289.....	2(2-0)	Business Law II, Hist. 164.....	3(3-0)
Public Finance, Econ. 214.....	3(3-0)	Bus. Adm. Seminar, Econ. 249....	1(1-0)
Business Law I, Hist. 163.....	3(3-0)	Adv. Cost Accounting, Econ. 288..	2(2-0)
Elective†	7(-)	Tax Accounting, Econ. 286.....	3(3-0)
		Elective†	6(-)
Total	15	Total	15

Summary.—Men: Physical education, two years required; military science, 4 hours; business administration courses, 56 hours; other prescribed courses, 35 hours; option, 9 hours; electives, 20 hours; total, 124 hours. Women: The same, except no military science; total, 120 hours.

* Eight hours of physical or biological science are to be elected in this curriculum, if possible in the freshman year. Subject to any prerequisites, chemistry, physics, botany, zoölogy, entomology, and geology are available.

If Chemistry I, Chem. 101, is taken, Chemistry II Rec., Chem. 103, is required also. The nine hour option is selected from a modern language, or a single department in a natural science. Students who present one and one-half units of high-school algebra may replace General Algebra, Math. 108, by College Algebra, Math. 104.

† Electives are to be chosen, with the advice and approval of the dean, in groups of not fewer than eight hours, or in courses which extend fields already entered in the required work.

Groups of Electives and Options for Students in the Division of General Science

At least eight hours in any new field are usually required, but a smaller number will be accepted in a field already entered. In a modern language a student must reach a point equivalent to that obtained by college courses which aggregate nine hours, or six hours in a second modern language. Students who wish to major in a certain field should confer in the sophomore year with the head of the department in which most of the work is given.

1. English Language

Students who wish English should elect Engl. 219 and 220, and twelve to twenty additional hours of English language and literature, under the guidance of the head of the department. Twelve hours of a modern foreign language are strongly recommended.

Engineering English, Engl. 110....	2(2-0)	Adv. Prob. in Coml. Correspondence, Engl. 223.....	3(3-0)
Coml. Correspondence, Engl. 122..	3(3-0)	Short Story I, Engl. 228.....	3(3-0)
Writ. and Oral Salesmanship, Engl. 123	3(3-0)	Short Story II, Engl. 230.....	3(3-0)
Agricultural English, Engl. 137...	3(3-0)	Oral English, Engl. 232.....	3(3-0)
Adv. Composition I, Engl. 219....	3(3-0)	Advanced Grammar, Engl. 243....	3(3-0)
Adv. Composition II, Engl. 220...	3(3-0)		

2. English Literature

English Literature, Engl. 172.....	3(3-0)	Wordsworth, Shelley, and Keats, Engl. 278	3(3-0)
American Literature, Engl. 175...	3(3-0)	World Classics I, Engl. 280.....	3(3-0)
Hist. of Eng. Lit., Engl. 181.....	3(3-0)	World Classics II, Engl. 281.....	3(3-0)
Probs. in English, Engl. 247.....	Cr. Ar.	Contemporary Fiction, Engl. 283..	3(3-0)
Chaucer, Engl. 260.....	3(3-0)	Contemporary Drama, Engl. 284..	3(3-0)
Milton and the Puritan Revolt, Engl. 262	3(3-0)	Novel I, Engl. 286.....	3(3-0)
Literature of Middle West, Engl. 268	3(3-0)	Novel II, Engl. 287.....	3(3-0)
English Bible, Engl. 271.....	3(3-0)	English Survey I, Engl. 288.....	2(2-0)
Shakes. Drama I, Engl. 273.....	3(3-0)	English Survey II, Engl. 290.....	2(2-0)
Shakes. Drama II, Engl. 274.....	3(3-0)	Browning and Tennyson, Engl. 293,	3(3-0)
English Essayists, Engl. 276.....	3(3-0)	Mod. Thgt. in Rec. Lit., Engl. 295,	3(3-0)
		Contemporary Poetry, Engl. 297..	3(3-0)

3. Modern Languages

German I, Mod. Lang. 101.....	3(3-0)	Spanish Comp. and Conv., Mod. Lang. 194	3(3-0)
German II, Mod. Lang. 102.....	3(3-0)	Schiller, Mod. Lang. 209.....	3(3-0)
German III, Mod. Lang. 111.....	3(3-0)	Goethe, Mod. Lang. 213.....	3(3-0)
German IV, Mod. Lang. 112.....	3(3-0)	German Drama, Mod. Lang. 215..	3(3-0)
Scien. German, Mod. Lang. 137...	4(4-0)	French Prose, Mod. Lang. 252....	3(3-0)
French I, Mod. Lang. 151.....	3(3-0)	17th Cent. French Drama, Mod. Lang. 257	3(3-0)
French II, Mod. Lang. 152.....	3(3-0)	Mod. French Drama, Mod. Lang. 258	3(3-0)
French III, Mod. Lang. 161.....	3(3-0)	Spanish Prose, Mod. Lang. 275...	3(3-0)
French IV, Mod. Lang. 162.....	3(3-0)	Spanish Drama, Mod. Lang. 280..	3(3-0)
French Comp. and Conv., Mod. Lang. 163	3(3-0)	Span.-Amer. Lit., Mod. Lang. 282,	3(3-0)
Spanish I, Mod. Lang. 176.....	3(3-0)	Probs. in Mod. Lang., Mod. Lang. 299	Cr. Ar.
Spanish II, Mod. Lang. 177.....	3(3-0)		
Spanish III, Mod. Lang. 180.....	3(3-0)		
Spanish IV, Mod. Lang. 181.....	3(3-0)		

5. Mathematics

Students who wish mathematics beyond trigonometry are advised to take courses in the following order: Math. 110, 114, 115, 201, 210, 213, and 216, and in any event strictly in accordance with the stated prerequisites.

Plane Anal. Geom., Math. 110....	4(4-0)	Advanced Calculus II, Math. 213..	3(3-0)
Calculus I, Math. 114.....	4(4-0)	Theory of Equations, Math. 216..	3(3-0)
Calculus II, Math. 115.....	4(4-0)	Fourier's Series, Math. 223.....	3(3-0)
Diff. Equations, Math. 201.....	3(3-0)	Modern Plane Geom., Math. 225..	3(3-0)
Higher Algebra, Math. 202.....	3(3-0)	Vector Analysis, Math. 230.....	3(3-0)
Statistics, Math. 203.....	3(3-0)	Topics in Math., Math. 299.....	Cr. Ar.
Advanced Calculus I, Math. 210..	3(3-0)		

6. Inorganic and Physical Chemistry

Students who wish extensive training in chemistry are advised to take the curriculum in Industrial Chemistry, supplementing the required work by electives chosen with the advice of the head of the department. Those who wish to prepare for teaching chemistry in high schools, in addition to Chem. 101, 103, and 104, should elect Chem. 266 and 267, and Chem. 207, 241, and 206. Math. 110, 114, and 115 are very desirable, and Phys. 102 and 103, or 105 and 106, are essential.

Ind. Electrochem., Chem. 205.....	2(2-0)	Inorg. Chem. Tech. Rec., Chem.	
Physical Chemistry I, Chem. 206..	5(3-6)	Engg. 210	3(3-0)
Adv. Inorg. Chem., Chem. 207....	3(3-0)	Inorg. Chem. Tech. Lab., Chem.	
Surf. Tension and Rel. Phenomena,		Engg. 215	2(0-6)
Chem. 209	2(2-0)	Selected Topics in Inorg. Chem.,	
Colloid Chem., Chem. 213.....	2(2-0)	Chem. 271	2(2-0)
Chem. Thermodyn., Chem. 215....	3(3-0)	Physical Chem. II, Chem. 272....	3(3-0)
Theo. Electrochemistry, Chem. 216,	3(3-0)	Adv. Phys. Chem. I, Chem. 288..	3(3-0)
Electrochem. Lab., Chem. 217....	2(0-6)	Adv. Phys. Chem. II, Chem. 289..	3(3-0)
		Adv. Phys. Chem. III, Chem. 294,	3(3-0)

7. Analytical and Organic Chemistry

Qual. Org. Analysis, Chem. 221....	3(1-6)	Laboratory Technic in Animal	
Organic Preparations, Chem. 223..	5(0-15)	Nutrition, Chem. 239.....	2(0-6)
Stereoisomeric and Tautomeric Com-		Adv. Qual. Analysis, Chem. 240..	3(1-6)
pounds, Chem. 225.....	2(2-0)	Quant. Analysis, Chem. 241.....	5(1-12)
Carbocyclic and Heterocyclic Com-		Quant. Analysis A., Chem. 250...	3(1-6)
pounds, Chem. 226.....	2(2-0)	Quant. Analysis B., Chem. 251....	3(1-6)
Biochem., Chem. 231.....	5(3-6)	Vitamin Analysis, Chem. 258....	2(0-6)
Pathological Chem., Chem. 235...	2(2-0)	Organic Chemistry I, Chem. 266..	5(3-6)
Biochemical Analysis, Chem. 237..	2(0-6)	Organic Chemistry II, Chem. 267..	4(2-6)
		Quant. Org. Anal., Chem. 295....	2(0-6)

9. Physics

Students who wish to teach physics in high schools should complete a course in college physics and at least ten hours additional as advised by the head of the department. Students who wish to major in physics may, with the advice of the major instructor, choose from Phys. 227, 228, 238, 239, 240, 243, 244, 251, 254, and 270. Math. 110, 114, and 115 are desirable or necessary for the advanced courses. Phys. 136, 141, 146, and 151 are available for students in business administration or industrial journalism.

Household Physics, Phys. 109.....	4(3-3)	Heat Laboratory, Phys. 239.....	1(0-3)
Descriptive Physics, Phys. 136....	3(3-0)	Sound, Phys. 240.....	3(3-0)
Descriptive Astronomy, Phys. 141,	3(3-0)	Light, Phys. 243.....	3(3-0)
Meteorology, Phys. 146.....	3(3-0)	Light Laboratory, Phys. 244....	1(0-3)
Photography, Phys. 151.....	2(1-3)	Elec. and Magnetism, Phys. 251..	3(3-0)
Lab. Tech. and App., Phys. 201..	2(0-6)	Elec. and Magnetism Lab., Phys.	
Applied X rays, Phys. 205.....	3(2-3)	254	1(0-3)
Astronomy, Phys. 210.....	3(3-0)	Elec. Oscill. and Waves, Phys. 265,	3(3-0)
Geophysics I, Phys. 217.....	3(3-0)	Elec. Oscill. and Waves Lab., Phys.	
Geophysics II, Phys. 218.....	3(1-6)	266	2(0-6)
Applied Spectroscopy, Phys. 220..	3(2-3)	Electron Optics, Phys. 268.....	2(2-0)
Mechanics, Phys. 227.....	3(3-0)	Atomic Physics, Phys. 270.....	3(3-0)
Mechanics Laboratory, Phys. 228..	1(0-3)	Problems in Physics, Phys. 297...	Cr. Ar.
Heat, Phys. 238.....	3(3-0)		

10. Bacteriology

Bact. 101 may be followed in order by 202, 204, 206, 229, 222, and 225.

Gen. Microbiology, Bact. 101.....	3(1-6)	Poultry Sanitation, Bact. 218.....	3(2-3)
Path. Bacteriology I, Bact. 111...	4(2-6)	Physiol. of Microorg., Bact. 222..	3(3-0)
Path. Bacteriology II, Bact. 116..	4(2-6)	Bact. Technic, Bact. 225.....	3(0-9)
Soil Microbiol., Bact. 202.....	3(3-0)	Adv. Serology, Bact. 229.....	5(3-6)
Soil Microbiol. Lab., Bact. 204....	2(0-6)	Determinative Bact., Bact. 240...	3(1-6)
Hyg. Bacteriology, Bact. 206.....	5(3-6)	Microbial Fermentations, Bact. 242,	2(2-0)
Dairy Bacteriology, Bact. 211....	3(1-6)	Sanitary and Food Bact., Bact. 244,	3(1-6)



11. Botany

Bot. 101 and 105 are prerequisite to all other courses, excepting 110 and 126. Students who specialize in plant diseases should take, in order, Bot. 205, 202 or 241, and 232; in plant physiology, Bot. 208, 211, 210, and 232; in taxonomy and ecology, Bot. 225, 228, and 232. For general training, all are available subject to prerequisites.

General Botany I, Bot. 101.....	3(1-6)	Tax. Bot. of Flowering Plants, Bot. 225	3(1-6)
General Botany II, Bot. 105.....	3(1-6)	Plant Ecology, Bot. 228.....	2(2-0)
Nat. and Dev. of Plants, Bot. 110,	3(3-0)	Problems in Botany, Bot. 232....	Cr. Ar.
Medical Botany, Bot. 126.....	2(1-3)	Field Crop Diseases, Bot. 241.....	3(1-6)
Fruit Crop Diseases, Bot. 202....	2(1-3)	Anatomy of Higher Plants, Bot. 251	3(1-6)
Plant Pathology I, Bot. 205.....	3(2-3)	Literature of Botany, Bot. 266....	2(2-0)
Morphology of Fungi, Bot. 206....	3(1-6)	Plant Cytology, Bot. 268.....	3(1-6)
Plant Physiology I, Bot. 208.....	3(3-0)	Recent Advances in Cytogenetics, Bot. 270	3(2-3)
Plant Physiology II, Bot. 210....	3(1-6)		
Plant Physiology III, Bot. 211....	3(3-0)		
Botanical Microtechnic, Bot. 217..	3(1-6)		

12. Zoölogy

Students who wish zoölogy should, in connection with the required work or after its completion, elect from courses in parasitology, embryology, or genetics. Consult the head of the department.

Human Anatomy, Zoöl. 123.....	5(3-6)	Adv. Embryology, Zoöl. 220.....	4(2-6)
Problems in Zoölogy, Zoöl. 203....	Cr. Ar.	Human Physiology, Zoöl. 221.....	4(3-3)
Field Zoölogy, Zoöl. 205.....	2(1-3)	General Physiology, Zoöl. 222.....	3(2-3)
Zoölogical Technic, Zoöl. 206.....	1(0-3)	Protozoölogy, Zoöl. 223.....	3(2-3)
Animal Parasitology, Zoöl. 208....	3(2-3)	Zoöl. and Ent. Sem., Zoöl. 225....	1(1-0)
Prin. of Parasitology, Zoöl. 209....	2(2-0)	Genetics Seminar, Zoöl. 227.....	1(1-0)
Invert. Zoölogy, Zoöl. 212.....	4(2-6)	Taxonomy of Parasites, Zoöl. 240..	2(1-3)
Cytology, Zoöl. 214.....	4(2-6)	Ornithology, Zoöl. 244.....	3(2-3)
Evol. and Heredity, Zoöl. 215....	3(3-0)	Comp. Anat. of Vert., Zoöl. 246....	4(2-6)
Heredity and Eugenics, Zoöl. 216..	2(2-0)	Endocrinology, Zoöl. 247.....	3(3-0)
Human Parasitology, Zoöl. 218....	3(3-0)	Applied Zoölogy, Zoöl. 248.....	3(3-0)
Embryology, Zoöl. 219.....	4(3-3)		

13. Geology

The basic courses are Geol. 103, 203, and 209. Students who wish geology should take these three courses as early as possible.

General Geology, Geol. 103.....	3(3-0)	Stratig. Geol., Geol. 224.....	4(3-3)
Physiographic Geol., Geol. 110....	3(3-0)	Field Meth. in Geol., Geol. 230...	3(1-6)
Prin. of Geography, Geol. 140....	3(3-0)	Optical Mineralogy, Geol. 235....	4(2-6)
Historical Geology, Geol. 203.....	4(3-3)	Sedimentary Petrology, Geol. 236..	5(3-6)
Economic Geology, Geol. 207.....	4(3-3)	Geologic Literature, Geol. 241.....	3(3-0)
Cryst. and Min., Geol. 209.....	4(2-6)	Vert. Paleontology, Geol. 255.....	3(3-0)
Structural Geology, Geol. 215.....	4(3-3)	Micropaleontology, Geol. 256.....	3(1-6)
Invert. Paleontology, Geol. 220....	4(3-3)	Problems in Geology, Geol. 275....	Cr. Ar.
Petro. Geol., Geol. 223.....	4(3-3)		

14. Entomology

Students who wish entomology should take Ent. 203, 211, 212, 231, 216, 217, 218, 226, 206, 221, and 238, in sequence determined by prerequisites.

Gen. Entomology, Ent. 101.....	3(3-0)	Taxonomy of Insects II, Ent. 218..	3(0-9)
Gen. Econ. Ent., Ent. 203.....	3(2-3)	Adv. Gen. Ent., Ent. 221.....	3(3-0)
Staple Crop Ent., Ent. 206.....	3(2-3)	Medical Ent., Ent. 226.....	3(2-3)
General Apiculture, Ent. 208.....	3(2-3)	Adv. Apiculture I, Ent. 229.....	3(2-3)
Ext. Insect Morph., Ent. 211.....	3(1-6)	Adv. Apiculture II, Ent. 230....	3(2-3)
Int. Insect Morph., Ent. 212.....	3(0-9)	Ent. and Zoöl. Lit., Ent. 231.....	2(2-0)
Prin. of Taxonomy, Ent. 216.....	1(1-0)	Problems in Ent., Ent. 238.....	Cr. Ar.
Taxonomy of Insects I, Ent. 217..	2(0-6)	Insect Physiology, Ent. 240.....	3(3-0)

15. History, Government, and Law

Students who wish to teach history should include fifteen hours of college history following two units in high school, or its equivalent in college. Consult the head of the department.

Ancient Civilizations, Hist. 101....	3(3-0)	Amer. Pol. Parties, Hist. 206.....	2(2-0)
Medieval Europe, Hist. 102.....	3(3-0)	Latin America, Hist. 208.....	3(3-0)
Amer. Ind. History, Hist. 105....	3(3-0)	Modern Europe II, Hist. 223.....	3(3-0)
Hist. of Com. and Ind., Hist. 110,	3(3-0)	History of the Home, Hist. 225...	3(3-0)
Modern Europe I, Hist. 115.....	3(3-0)	British Empire, Hist. 226.....	2(2-0)
English History, Hist. 121.....	3(3-0)	Amer. Dip. Hist., Hist. 228.....	2(2-0)
Current History, Hist. 126.....	1(1-0)	History of Religions, Hist. 231....	2(2-0)
Amer. Govt., Hist. 151.....	3(3-0)	20th Cent. Europe, Hist. 234.....	3(3-0)
Amer. Natl. Govt., Hist. 152.....	3(3-0)	Far East, Hist. 236.....	3(3-0)
Amer. State Govt., Hist. 153.....	3(3-0)	Comp. Govt., Hist. 252.....	2(2-0)
Business Law I, Hist. 163.....	3(3-0)	City Govt., Hist. 253.....	3(3-0)
Business Law II, Hist. 164.....	3(3-0)	International Law, Hist. 256.....	2(2-0)
Farm Law, Hist. 175.....	2(2-0)	Govt. and Business, Hist. 260....	2(2-0)
Amer. History I, Hist. 201.....	3(3-0)	Problems in Hist. and Govt., Hist.	
Amer. History II, Hist. 202.....	3(3-0)	270	Cr. Ar.
Amer. History III, Hist. 203.....	3(3-0)	Land Law, Hist. 276.....	2(2-0)
Amer. Agr. History, Hist. 205....	2(2-0)		

16. Economics and Sociology

Economics I, Econ. 101.....	3(3-0)	Property Insurance, Econ. 242....	2(2-0)
Economics II, Econ. 104.....	3(3-0)	Life Insurance, Econ. 244.....	2(2-0)
Money and Banking, Econ. 116...	3(3-0)	Marketing, Econ. 246.....	3(3-0)
Business Management, Econ. 126..	2(2-0)	Market Adm., Econ. 247.....	3(3-0)
Economic Systems, Econ. 210.....	2(2-0)	Problems in Econ., Econ. 248.....	Cr. Ar.
Public Finance, Econ. 214.....	3(3-0)	Sociology, Econ. 151.....	3(3-0)
Bus. Org. and Fin., Econ. 215....	3(3-0)	Social Pathology, Econ. 258.....	3(3-0)
Investments, Econ. 222.....	3(3-0)	Com. Org. and Lead., Econ. 267..	3(3-0)
Credits and Coll., Econ. 223.....	2(2-0)	Adv. Sociology, Econ. 273.....	3(3-0)
International Trade, Econ. 224....	2(2-0)	Hist. Soc. Thought, Econ. 277....	3(3-0)
Prin. of Trans., Econ. 230.....	3(3-0)	Problems in Sociology, Econ. 279..	Cr. Ar.
Labor Economics, Econ. 234.....	3(3-0)		

17. Accounting

Accounting I, Econ. 133.....	3(2-3)	Adv. Cost Accounting, Econ. 288..	2(2-0)
Accounting II, Econ. 134.....	3(2-3)	Govt. Accounting, Econ. 289.....	2(2-0)
Valuation Accounting, Econ. 280..	3(3-0)	Auditing, Econ. 291.....	3(3-0)
Advanced Accounting, Econ. 281..	3(3-0)	C. P. A. Problems, Econ. 292.....	3(3-0)
Tax Accounting, Econ. 286.....	3(3-0)	Inst. Accounting, Econ. 293.....	2(1-3)
Cost Accounting, Econ. 287.....	3(3-0)		

18. Education and Psychology

See "Education" in this catalogue for information concerning certificates.

Gen. Psychology, Educ. 184.....	3(3-0)	Principles of Secondary Education,	
Educ. Psychology, Educ. 109.....	3(3-0)	Educ. 236	3(3-0)
Methods of Teaching, Educ. 111..	3(3-0)	Educ. Sociology, Educ. 239.....	3(3-0)
Meth. of Teaching Home Econom-		Psychology of Childhood and Ado-	
ics, Educ. 132.....	3(3-0)	lescence, Educ. 250.....	3(3-0)
Meth. of Teach. Agr., Educ. 136..	3(3-0)	Abnormal Psychology, Educ. 254..	3(3-0)
Teach. Participation in High School,		Adv. Gen. Psychology, Educ. 257,	3(3-0)
Educ. 163	1-4 hrs.	Experimental Psych., Educ. 259...	3(3-0)
Extracur. Activities, Educ. 202....	3(3-0)	Mental Tests, Educ. 260.....	3(3-0)
Educ. Admin., Educ. 210.....	3(3-0)	Psych. of Excep. Child., Educ. 266,	3(3-0)
Educ. Measurements, Educ. 212...	3(3-0)	Animal Psychology, Educ. 269....	3(3-0)
Stat. Meth. Applied to Education,		Social Psychology, Educ. 270.....	3(3-0)
Educ. 223	3(3-0)	Psychology of Art, Educ. 276.....	3(3-0)

20. Industrial Journalism

News Pictures, Ind. Jour. 144....	2(0-6)	Adv. Reptg., Ind. Jour. 228.....	3(2-3)
Elem. Journalism, Ind. Jour. 150...	2(2-0)	Form. of Pub. Op., Ind. Jour. 230,	3(3-0)
Ind. Writing, Ind. Jour. 157.....	3(1-6)	Cont. Affairs I, Ind. Jour. 253....	3(3-0)
Radio Writing, Ind. Jour. 162....	2(2-0)	Cont. Affairs II, Ind. Jour. 255...	3(3-0)
Editing, Ind. Jour. 166.....	2(0-6)	Mat. of Jour., Ind. Jour. 265....	2(2-0)
News. and Mag. Writ., Ind. Jour.		Hist. and Eth. of Jour., Ind.	
167	2(2-0)	Jour. 273	3(3-0)
Jour. for Women, Ind. Jour. 170..	3(3-0)	Col. Cond., Ind. Jour. 282.....	2(2-0)
Prin. of Adv., Ind. Jour. 178.....	4(4-0)	Cur. Period., Ind. Jour. 287.....	3(3-0)
Radio Adv., Ind. Jour. 179.....	3(3-0)	News. Mgt., Ind. Jour. 289.....	2(2-0)
Rural Press, Ind. Jour. 181.....	2(2-0)	Probs. in Ind. Jour., Ind. Jour.	
Pub. Inf. Meth., Ind. Jour. 183..	2(2-0)	295	Cr. Ar.

23. Music

Acceptability for elective credit of work in voice or instrumental music is contingent upon the attainment of an effective degree of proficiency.

APPLIED MUSIC

Instrument, Mus. 153.....	0-4 hours	Double Bass, Mus. 167.....	0-4 hours
Voice, Mus. 156.....	0-4 hours	Organ, Mus. 172.....	0-4 hours
Violin, Mus. 158.....	0-4 hours	Choral Ensemble, Mus. 194.....	$\frac{1}{2}$ (0-2)
Piano, Mus. 161.....	0-4 hours	Orchestra, Mus. 195.....	$\frac{1}{2}$ (0-2)
Violoncello, Mus. 163.....	0-4 hours	Band, Mus. 198.....	$\frac{1}{2}$ (0-2)

THEORETICAL MUSIC

Harmony I, Mus. 101.....	2(2-0)	Hist. and Apprec. of Music I, Mus. 130	2(2-0)
Harmony II, Mus. 102.....	2(2-0)	Hist. and Apprec. of Music II, Mus. 131	2(2-0)
Harmony III, Mus. 103.....	2(2-0)	Inst. and Orch., Mus. 136.....	3(3-0)
Harmony IV, Mus. 104.....	2(2-0)	School Music I, Mus. 138.....	2(2-0)
Counterpoint, Mus. 109.....	2(2-0)	School Music II, Mus. 139.....	2(2-0)
Mus. Form and Anal., Mus. 111..	1(1-0)	School Music III, Mus. 143.....	2(2-0)
Radio Music Appreciation Pro-grams, Mus. 115.....	1(1-1)		

25. Military Science and Tactics

Men who have completed the basic course in infantry may elect the advanced course if approved by the dean and the head of the Department of Military Science and Tactics.

Infantry V, Mil. Sc. 109.....	3(2-3)	Infantry VII, Mil. Sc. 111.....	3(2-3)
Infantry VI, Mil. Sc. 110.....	3(2-3)	Infantry VIII, Mil. Sc. 112.....	3(2-3)

26. Physical Education and Athletics

FOR MEN

Int. to Phys. Ed., Phys. Ed. 107..	1(1-0)	Phys. Ed. Act. IV, Phys. Ed. 140,	1(0-3)
First Aid and Massage, Phys. Ed. 113	3(3-0)	Kinesiology M, Phys. Ed. 141....	3(3-0)
Personal Hygiene, Phys. Ed. 119..	2(2-0)	Pub. Sch. Prog. in Phys. Ed., Phys. Ed. 142	2(2-0)
Swimming M, Phys. Ed. 120.....	1(0-3)	Hist. of Phys. Ed., Phys. Ed. 143,	2(2-0)
Physiol. of Ex., Phys. Ed. 123....	2(2-0)	Track and Field Spts., Phys. Ed. 144	2(1-3)
Phys. Diag. and Pres., Phys. Ed. 124	3(3-0)	Nat. and Fcn. of Play, Phys. Ed. 145	2(2-0)
Football, Phys. Ed. 126.....	2(1-3)	Community Hyg., Phys. Ed. 147..	2(2-0)
Baseball, Phys. Ed. 133.....	2(1-3)	Teaching Health, Phys. Ed. 149...	2(2-0)
Phys. Ed. Act. I, Phys. Ed. 137..	1(0-3)	Community Recreation, Phys. Ed. 203	2(2-0)
Phys. Ed. Act. II, Phys. Ed. 138..	2(0-6)		
Phys. Ed. Act. III, Phys. Ed. 139,	2(0-6)		

FOR WOMEN

Fund. Rhythm, Phys. Ed. 155....	1(0-3)	Prin. and Phil. of Phys. Educ., Phys. Ed. 162.....	3(3-0)
Gen. Tech. I, Phys. Ed. 157A....	2(1-3)	Health Tchg. in H. S., Phys. Ed. 179	3(3-0)
Gen. Tech. II, Phys. Ed. 157B...	2(1-3)	Playgr. Mgmt. and Games, Phys. Ed. 182	2(1-3)
Gen. Tech. III, Phys. Ed. 157C...	2(1-3)	Teach. and Adapt. of Phys. Ed., Phys. Ed. 188.....	3(3-0)
Gen. Tech. IV, Phys. Ed. 157D...	2(1-3)	Rec. Ldrship, Phys. Ed. 191.....	2(2-0)
Gen. Tech. V, Phys. Ed. 157E....	2(1-3)		
Gen. Tech. VI, Phys. Ed. 157F...	2(0-6)		
Gen. Tech. VII, Phys. Ed. 157G...	2(1-3)		
Gen. Tech. VIII, Phys. Ed. 157H,	2(1-3)		

27. Public Speaking

Oral Interp., Pub. Spk. 101.....	2(2-0)	Arg. and Debate, Pub. Spk. 121..	2(2-0)
Dram. Reading, Pub. Spk. 102....	2(2-0)	Parl. Proced., Pub. Spk. 126.....	1(1-0)
Extm. Speech I, Pub. Spk. 106...	2(2-0)	Dram. Produc. I, Pub. Spk. 207..	2(1-3)
Public Speaking, Pub. Spk. 107...	2(2-0)	Dram. Produc. II, Pub. Spk. 208..	2(0-6)
Extm. Speech II, Pub. Spk. 108...	2(2-0)	Adv. Debate, Pub. Spk. 222.....	2(2-0)
El. of Phonetics, Pub. Spk. 110..	2(2-0)	Public Program, Pub. Spk. 225...	2(2-0)

31. Applied Science

For industrial option in the Curriculum in Industrial Journalism.

Seed Iden. and Weed Cont., Agron. 105	2(1-3)	General Geology, Geol. 103.....	3(3-0)
Soils, Agron. 130.....	4(3-3)	Physiographic Geol., Geol. 110...	3(3-0)
General Microbiology, Bact. 101...	3(1-6)	Prin. of Geography, Geol. 140....	3(3-0)
Hygienic Bacteriology, Bact. 206..	5(3-6)	Historical Geology, Geol. 203.....	4(3-3)
General Botany I, Bot. 101.....	3(1-6)	Economic Geology, Geol. 207.....	4(3-3)
General Botany II, Bot. 105.....	3(1-6)	Cryst. and Min., Geol. 209.....	4(2-6)
Nature and Dev. of Plants, Bot. 110	3(3-0)	Sedimentary Petrology, Geol. 236..	5(3-6)
Fruit Crop Diseases, Bot. 202....	2(1-3)	Vert. Paleontology, Geol. 255.....	3(3-0)
Plant Pathology I, Bot. 205.....	3(2-3)	Micropaleontology, Geol. 256.....	3(1-6)
Plant Ecology, Bot. 228.....	2(2-0)	El. of Horticulture, Hort. 107....	3(2-3)
Field Crop Diseases, Bot. 241.....	3(1-6)	Small Fruits, Hort. 109.....	3(2-3)
Gen. Org. Chemistry, Chem. 122..	5(3-6)	Farm Forestry, Hort. 114.....	3(2-3)
Dairy Chemistry, Chem. 254.....	3(1-6)	Land. Gardening I, Hort. 125....	3(3-0)
Gen. Entomology, Ent. 101.....	3(3-0)	Household Physics, Phys. 109....	4(3-3)
Hort. Entomology, Ent. 201.....	2(2-0)	Descriptive Physics, Phys. 136....	3(3-0)
Gen. Economic Ent., Ent. 203....	3(2-3)	Des. Astronomy, Phys. 141.....	3(3-0)
Staple Crop Ent., Ent. 206.....	3(2-3)	Meteorology, Phys. 146.....	3(3-0)
General Apiculture, Ent. 208.....	3(2-3)	Photography, Phys. 151.....	2(1-3)
Human Nutrition, Foods and Nutr. 112	3(3-0)	General Zoölogy, Zoöl. 105.....	5(3-6)
Ap. Nutr., Foods and Nutr. 121..	2(2-0)	Animal Parasitology, Zoöl. 208....	3(2-3)
		Embryology, Zoöl. 219.....	4(3-3)
		Endocrinology, Zoöl. 247.....	3(3-0)

32. Home Economics

For industrial option in the Curriculum in Industrial Journalism.

Elementary Design I, Art 101A...	2(0-6)	Applied Nutrition, Foods and Nutr. 121	2(2-0)
Costume Design I, Art 130.....	2(0-6)	The House, Household Econ. 107,	3(2-3)
Principles of Art I, Art 201.....	3(3-0)	Family Finance, Household Econ. 263	2(2-0)
Principles of Art II, Art 202.....	3(3-0)	Econ. Probs. of the Family, Household Econ. 265.....	2(2-0)
Child Guidance I, Child Welf. 201,	3(1-6)	Consumer Buying, Household Econ. 270	2(2-0)
The Family, Child Welf. 216.....	2(2-0)		
Clothing for the Ind., Clo. and Text. 103	4(1-9)		
Foods I, Foods and Nutr. 102.....	5(3-6)		

35. Agriculture

For industrial option in the Curriculum in Industrial Journalism.

Farm Crops, Agron. 101.....	4(2-6)	Field Crop Diseases, Bot. 241....	3(1-6)
Soils, Agron. 130.....	4(3-3)	Gen. Org. Chemistry, Chem. 122..	5(3-6)
El. of An. Husb., An. Husb. 125..	3(2-4)	El. of Dairy., Dairy Husb. 101....	3(2-3)
Prin. of Feeding, An. Husb. 152...	3(3-0)	Dairy Cattle Judging, Dairy Husb. 105	2(0-6)
Genetics, An. Husb. 221.....	3(3-0)	El. of Horticulture, Hort. 107....	3(2-3)
General Botany I, Bot. 101.....	3(1-6)	Farm Poultry Prod., Poult. Husb. 101	2(1-3)
General Botany II, Bot. 105.....	3(1-6)		
Plant Pathology I, Bot. 205.....	3(2-3)		

36. Drawing and Art

For industrial option in the Curriculum in Industrial Journalism.

Freehand Drawing I, Arch. 112...	2(0-6)	Design in Crafts, Art 102.....	2(0-6)
Freehand Drawing II, Arch. 113...	2(0-6)	Intermediate Design, Art 103....	2(0-6)
Pen. Rend. and Sketch., Arch. 116,	2(0-6)	Advanced Design, Art 105.....	2(0-6)
Still-life Drawing, Arch. 117.....	2(0-6)	Interior Decoration I, Art 113....	2(0-6)
Water Color I, Arch. 118.....	2(0-6)	Interior Decoration II, Art 115....	2(0-6)
Water Color II, Arch. 119.....	2(0-6)	Interior Decoration III, Art 117...	2(0-6)
Life Drawing I, Arch. 121.....	2(0-6)	Drawing, Art 120.....	2(0-6)
Life Drawing II, Arch. 123.....	2(0-6)	Lettering, Art 127.....	2(0-6)
Domestic Architecture, Arch. 124..	2(2-0)	Costume Design I, Art 130.....	2(0-6)
Apprec. of Arch., Arch. 125.....	3(3-0)	Costume Design II, Art 134.....	2(0-6)
Clay Modeling, Arch. 133.....	2(0-6)	Costume Design III, Art 138....	2(0-6)
Pen and Ink Drawing, Arch. 134..	2(0-6)	Principles of Art I, Art 201.....	3(3-0)
Block Prints, Arch. 137.....	2(0-6)	Principles of Art II, Art 202....	3(3-0)
Commercial Illus. I, Arch. 165....	2(0-6)	Costume Illustration, Art 212....	2(0-6)
Commercial Illus. II, Arch. 170...	2(0-6)	Problems in Design, Art 217.....	Cr. Ar.
Hist. Paint. and Sculp., Arch. 179,	3(3-0)	Problems in Interior Decoration, Art 232	Cr. Ar.
Adv. Freehand Drawing, Arch. 201,	Cr. Ar.	Historic Textiles Design, Art 233..	2(2-0)
Etching, Arch. 217.....	2(0-6)	Problems in Costume Design, Art 235	Cr. Ar.
Oil Painting, Arch. 230.....	Cr. Ar.	Art of the S. W. Indians, Art 242,	2(2-0)
Elementary Design I, Art 101A....	2(0-6)		
Elementary Design II, Art 101B..	2(0-6)		

37. Manual and Industrial Arts

For industrial option in the Curriculum in Industrial Journalism; for certification, fifteen hours are required.

Farm Buildings, Agric. Engg. 101,	3(2-3)	Farm Carpentry, Shop 147.....	3(1-6)
Farm Mach., Agr. Engg. 108.....	3(2-3)	Forging, Shop 150.....	1(0-3)
Gas Eng. and Tract., Agric. Engg.		Farm Blacksmithing I, Shop 157..	1(0-3)
130	3(2-3)	Farm Blacksmithing II, Shop 158,	1(0-3)
Surveying I, Civ. Engg. 102.....	2(0-6)	Foundry Production, Shop 161....	1(0-3)
Engg. Drawing, Mach. Des. 101..	2(0-6)	Metals and Alloys, Shop 165.....	2(2-0)
Des. Geom., Mach. Des. 106.....	2(0-6)	Machine Tool Work I, Shop 170..	2(0-6)
Mach. Draw. I, Mach. Des. 111..	2(0-6)	Oxyacetylene Welding, Shop 171..	1(0-3)
Ele. Crafts for Teachers, Shop 118,	2(0-6)	Arc Welding, Shop 172.....	1(0-3)
Reed Furn. Const., Shop 119.....	2(0-6)	Sheet Metal Work, Shop 173.....	2(0-6)
Woodwork I, Shop 121.....	2(0-6)	Farm Shop Methods, Shop 175....	3(1-6)
Wood and Metal Fin., Shop 122..	2(0-6)	Machine Tool Work II, Shop 192,	2(0-6)
Woodwork II, Shop 126.....	2(0-6)	Machine Tool Work III, Shop 193,	1(0-3)
Woodwork III, Shop 131.....	2(0-6)	Adv. Shop Practice, Shop 261....	Cr. Ar.
Woodturning, Shop 135.....	2(0-6)	Metallography I, Shop 262.....	1(0-3)
Woodwork IV, Shop 139.....	2(0-6)		

38. Printing

For industrial option in the Curriculum in Industrial Journalism.

Ad Comp. I, Ind. Jour. 108.....	2(0-6)	Job Comp. II, Ind. Jour. 118.....	2(0-6)
Ad Comp. II, Ind. Jour. 111.....	2(0-6)	Job Comp. III, Ind. Jour. 120....	2(0-6)
Ad Comp. III, Ind. Jour. 112.....	2(0-6)	Press Work I, Ind. Jour. 122.....	2(0-6)
Job Comp. I, Ind. Jour. 114.....	2(0-6)	Press Work II, Ind. Jour. 126....	2(0-6)

39. Radio Broadcasting

For industrial option in the Curriculum in Industrial Journalism.

Radio Writing, Ind. Jour. 162....	2(2-0)	Broadcasting Inf. Programs, Pub.	
Radio Advertising, Ind. Jour. 179..	3(3-0)	Spk. 163	2(2-0)
Broadcasting Station Practice, Ind.		Radio Speech, Pub. Spk. 166....	1(0-3)
Jour. 180	1(0-3)	Radio Program Participation, Pub.	
Broadcast Musical Programs, Mus.		Spk. 168	1(0-3)
119	2(3-0)	Adv. Phonetics, Pub. Spk. 201....	4(3-3)
Hist. and Apprec. of Music I,		Radio Program Production, Pub.	
Mus. 130	2(2-0)	Spk. 231	2(1-3)
Hist. and Apprec. of Music II,		Problems in Broadcasting, Pub.	
Mus. 131	2(2-0)	Spk. 232	Cr. Ar.
Survey of Broadcasting, Pub. Spk.		Radio Continuity I, Pub. Spk. 240,	2(2-0)
162	1(1-0)	Radio Continuity II, Pub. Spk.	
		241	2(2-0)

40. Milling Industry

Farm Crops, Agron. 101.....	4(2-6)	Milling Technology I, Mill. Ind.	
Grain Grad. and Judging, Agron.		201	2(0-6)
108	2(0-6)	Milling Technology II, Mill. Ind.	
Colloid Chemistry, Chem. 213....	2(2-0)	202	2(0-6)
Chem. of Proteins, Chem. 236....	3(3-0)	Wheat and Flour Testing, Mill.	
Quant. Analysis A, Chem. 250....	3(1-6)	Ind. 205	3(0-9)
Quant. Analysis B, Chem. 251....	3(1-6)	Exper. Baking, Mill. Ind. 207....	4(2-6)
Grain Marketing, Econ. 203.....	3(3-0)	Advanced Wheat and Flour Test-	
El. of Milling, Mill. Ind. 101.....	2(1-3)	ing, Mill. Ind. 210.....	1-5 hrs.
Flow Sheets, Mill. Ind. 103.....	2(0-6)	Qual. of Wheat and Flour, Mill.	
Mill. Practice I, Mill. Ind. 109....	3(1-6)	Ind. 212	3(3-0)
Mill. Practice II, Mill. Ind. 111....	3(1-6)	Mill. Ind. Probs., Mill. Ind. 214..	Cr. Ar.

42. Personnel Management

Economics II, Econ. 104.....	3(3-0)	Prin. of Guidance, Educ. 230.....	3(3-0)
Business Management, Econ. 126..	2(2-0)	Vocational Education, Educ. 241..	3(3-0)
Prin. of Accounting, Econ. 136....	3(3-0)	Mental Tests, Educ. 260.....	3(3-0)
Business Organization and Finance,		Technic of Mental Tests, Educ.	
Econ. 215	3(3-0)	261	3(1-6)
Labor Economics, Econ. 234.....	3(3-0)	Psych. of Adv. and Selling, Educ.	
Social Pathology, Econ. 258.....	3(3-0)	265	3(3-0)
Com. Org. and Lead., Econ. 267....	3(3-0)	Social Psychology, Educ. 270.....	3(3-0)
Advanced Sociology, Econ. 273....	3(3-0)	Psych. of Personnel Mgmt., Educ.	
Stat. Meth. App. to Educ., Educ.		273	3(3-0)
223	3(3-0)		

44. Social Welfare Work

Personal Health, Child Welf. 101,	2(2-0)	Com. Org. and Lead., Econ. 267..	3(3-0)
Child Guid. I, Child Welf. 201...	3(1-6)	Advanced Sociology, Econ. 273....	3(3-0)
Child Guid. II, Child Welf. 206..	3(3-0)	General Psychology, Educ. 184....	3(3-0)
Family Health, Child Welf. 211...	3(3-0)	Psychology of Childhood and	
The Family, Child Welf. 216.....	2(2-0)	Adolescence, Educ. 250.....	3(3-0)
Clo. for Ind., Clo. and Text. 103..	4(1-9)	Abnormal Psychology, Educ. 254..	3(3-0)
Clo. Select., Clo. and Text. 110...	2(2-0)	Social Psychology, Educ. 270.....	3(3-0)
Economics I, Econ. 101.....	3(3-0)	Psych. and Pers. Mgmt., Educ. 273,	3(3-0)
Economics II, Econ. 104.....	3(3-0)	Foods I, Foods and Nutr. 102....	5(3-6)
Sociology, Econ. 151	3(3-0)	The House, Household Econ. 107..	3(2-3)
Rural Sociology, Econ. 156.....	3(3-0)	Home Mgmt., Household Econ. 116,	3(1-6)
Labor Economics, Econ. 234.....	3(3-0)	Heredity and Eugenics, Zoöl. 216..	2(2-0)
Social Pathology, Econ. 258.....	3(3-0)		

Bacteriology

Professor BUSHNELL
 Professor GAINNEY
 Assistant Professor FOLTZ
 Assistant Professor NELSON
 Instructor TWIEHAUS

Instructor McCALLA
 Instructor PEPPLER
 Graduate Assistant HAAS
 Graduate Assistant BARRETT

FOR UNDERGRADUATE CREDIT

101. GENERAL MICROBIOLOGY. 3(1-6)*; I, II, and SS. Prerequisite: Chem. 103 or 110. Staff.

Morphological and biological characters, classification and distribution of bacteria, development of bacteria, culture media, staining values, and principles of applied bacteriology. Deposit, \$8.

105. AGRICULTURAL MICROBIOLOGY. 3(2-3); I and II. Prerequisite: Chem. 103. Staff. Deposit, \$4.

For students in the Division of Agriculture. Students who expect to take Bact. 202 or 235 should take Bact. 101. Sterilization and disinfection; analyses of water, milk, and soil.

111. PATHOGENIC BACTERIOLOGY I. 4(2-6); II. Prerequisite: Chem. 122. Bushnell, Foltz, Twiehaus.

Fundamentals of bacteriology as applied to veterinary medicine. Deposit, \$8.

116. PATHOGENIC BACTERIOLOGY II. 4(2-6); I. Prerequisite: Bact. 111. Bushnell, Foltz, Twiehaus.

Continuation of Bact. 111. Deposit, \$8.

125. WATER AND SEWAGE BACTERIOLOGY. 2(0-6); I. Prerequisite: Chem. 108. Gainey.

Water purification and sewage disposal; analyses of water supplies; microbial changes involved in the disposal of sewage. Deposit, \$5.

FOR GRADUATE AND UNDERGRADUATE CREDIT

202. SOIL MICROBIOLOGY. 3(3-0); II. Prerequisite: Bact. 101. Gainey.
 Influences of soil upon the activities of soil microorganisms.

204. SOIL MICROBIOLOGY LABORATORY. 2(0-6); II. Prerequisite: Bact. 202 or concurrent registration. Gainey.

Plot experiments and field work illustrative of theories developed in Bact. 202. Deposit, \$8.

206. HYGIENIC BACTERIOLOGY. 5(3-6); I. Prerequisite: Bact. 101. Bushnell, Foltz.

Pathogenic bacteria and their effect upon human health and diseases. Deposit, \$8.

* The number before the parentheses indicates the number of hours of credit; the first number within the parentheses indicates the number of hours of recitation each week, and the second shows the number of hours to be spent in laboratory work each week. I, II, and SS indicate that the course is given the first semester, the second semester, and summer school, respectively.

211. DAIRY BACTERIOLOGY. 3(1-6); II. Prerequisite: Bact. 101 or 111. Nelson.

Bacterial flora and their effects in milk, butter, cheese, and other dairy products; laboratory practice to accompany the theory. Deposit, \$8.

217. POULTRY DISEASES. 2(2-0); II. Prerequisite: Bact. 116 and Surg. and Med. 163. Bushnell, Twiehaus.

Anatomy of fowls; poultry sanitation and hygiene; infectious and noninfectious diseases of fowls; parasites; minor surgery.

218. POULTRY SANITATION. 3(2-3); II. Prerequisite: Bact. 101 or 105 or 111. Twiehaus.

Methods of control of poultry diseases. Deposit, \$3.

222. PHYSIOLOGY OF MICROÖRGANISMS. 3(3-0); I. Prerequisite: Bact. 101 or 111 and Chem. 122. Offered in 1942-'43 and alternate years thereafter. Nelson.

Chemistry and physics of microbial processes.

225. BACTERIOLOGICAL TECHNIC. 3(0-9); I. Prerequisite: Bact. 101 or 111. Offered in 1942-'43 and alternate years thereafter. Gainey.

Technic of laboratory manipulation; fundamental experiments and special experiments selected according to the interest of the student. Deposit, \$5.

229. ADVANCED SEROLOGY. 5(3-6); II. Prerequisite: Bact. 206. Offered in 1941-'42 and alternate years thereafter. Bushnell, Foltz.

Immunity and immunization; preparation, purification, and standardization of biological products for human and veterinary medicine. Deposit, \$8.

235. BACTERIOLOGY OF BUTTER CULTURES. 1(0-3); I. Prerequisite: Bact. 211 and concurrent registration in Dairy Husb. 110. Nelson.

240. DETERMINATIVE BACTERIOLOGY. 3(1-6); I. Prerequisite: Bact. 101 or 111. Bushnell, Foltz.

Isolation, study, and identification of unknown organisms. Deposit, \$8.

242. SANITARY AND FOOD BACTERIOLOGY. 3(1-6); I. Prerequisite: Bact. 101 or 111. Nelson.

Bacteriology of water and food supplies. Deposit, \$8.

244. MICROBIAL FERMENTATIONS. 2(2-0); II. Prerequisite: Bact. 101. Offered in 1942-'43 and alternate years thereafter. Nelson.

Microbiology and chemistry of fermentation processes.

270. PROBLEMS IN BACTERIOLOGY. Credit to be arranged; I, II, and SS. Prerequisite: Bact. 101, 111, or 116. Staff. Deposit, \$3 a credit hour.

Work is offered in:

Dairy. Nelson.

Foods. Foltz.

Poultry diseases. Bushnell, Twiehaus.

Soils. Gainey.

275. BACTERIOLOGY SEMINAR. 1(1-0); I and II. Prerequisite: Consult instructor in charge. Bushnell.

FOR GRADUATE CREDIT

301. RESEARCH IN BACTERIOLOGY. Credit to be arranged; I, II, and SS. Prerequisite: At least two courses in this department. Staff. Deposit, \$3 a credit hour.

Work is offered in:

Dairy. Nelson.

Foods. Foltz.

Poultry diseases. Bushnell.

Soils. Gainey.

Botany and Plant Pathology

Professor MELCHERS
 Professor MILLER
 Professor DAVIS
 Professor HAYMAKER
 Professor GATES
 Associate Professor ELMER
 Assistant Professor NEWCOMB

Assistant Professor FRAZIER
 Instructor KINGSLEY
 Instructor BATES
 Instructor McCracken
 Instructor HANSING
 Graduate Assistant KOEPPER
 Graduate Research Assistant LUNSFORD

FOR UNDERGRADUATE CREDIT

101. GENERAL BOTANY I. 3(1-6); I and SS. Staff.

Photosynthesis, digestion, respiration, transpiration, growth, environmental conditions, and plant anatomy. Charge, \$3.50.

105. GENERAL BOTANY II. 3(1-6); II and SS. Staff.

Plant morphology, physiology, taxonomy, ecology, fungi and other pathogenic plants, and plant evolution. Charge, \$3.50.

110. NATURE AND DEVELOPMENT OF PLANTS. 3(3-0); II and SS. Haymaker.

Structure, life processes, identification, classification, evolutionary development, geographical distribution, and economic importance of plants.

126. MEDICAL BOTANY. 2(1-3); I. Prerequisite: High-school botany or equivalent. Gates.

Stock-poisoning plants of the range; habitat, poisonous properties, and methods of control and elimination of native poisonous plants. Charge, \$2.

FOR GRADUATE AND UNDERGRADUATE CREDIT

202. FRUIT CROP DISEASES. 2(1-3); I. Prerequisite: Bot. 205. Offered in 1941-'42 and alternate years thereafter. Haymaker.

Diseases of major and minor fruit crops; cause, effect on host, control. Charge, \$2.

205. PLANT PATHOLOGY I. 3(2-3); I and SS. Prerequisite: Bot. 101 and 105. Melchers, Haymaker, Elmer.

Important diseases of crops and the organisms which cause them. Charge, \$3.

206. MORPHOLOGY OF THE FUNGI. 3(1-6); I. Prerequisite: Bot. 105. Offered in 1942-'43 and alternate years thereafter. Hansing.

Structure of slime molds, moldlike bacteria, and fungi studied to determine taxonomic relationships.

208. PLANT PHYSIOLOGY I. 3(3-0); I. Prerequisite: Bot. 101 and 105 and Chem. 103 and 104 or 110. Miller.

The plant cell, solutions and membranes in relation to the cell, root systems, intake of water, intake of solutes, elements used, and loss of water.

210. PLANT PHYSIOLOGY II. 3(1-6); II. Prerequisite: Bot. 208. Offered in 1942-'43 and alternate years thereafter. Miller.

Methods used to obtain data which concern common functions of plants. Charge, \$5.

211. PLANT PHYSIOLOGY III. 3(3-0); II. Prerequisite: Bot. 208. Miller.

Continuation of Bot. 208, including photosynthesis, nitrogen metabolism, fat metabolism, digestion, translocation, respiration, and growth.

212. PROBLEMS IN BOTANICAL INSTRUCTION. 3(2-3); SS. Prerequisite: Ten hours in botany or in courses of botanical nature. Haymaker.

Advanced morphology, anatomy, physiology, taxonomy, and diseases of plants; technic in presenting botany to high-school and college students. Charge, \$2.

217. BOTANICAL MICROTECHNIC. 3(1-6); II. Prerequisite: Bot. 101 and 105. Offered in 1941-'42 and alternate years thereafter. Bates.

Preparation of plant materials for histological or cytological study. Charge, \$3.

218. FIELD BOTANY. 3(2-3); SS. Prerequisite: Bot. 101 and 105. Haymaker.

Identification and classification of seed plants. Charge, \$2.

220. BOTANY SEMINAR. 1(1-0); I and II. Prerequisite: Consult head of department.

Reports of investigational work or other matters of interest in the various branches of botany.

225. TAXONOMIC BOTANY OF THE FLOWERING PLANTS. 3(1-6); I. Prerequisite: Bot. 101 and 105. Gates.

Systems of classification; identification of plants in the field and in the laboratory; orders and families of plants. Charge, \$2.

228. PLANT ECOLOGY. 2(2-0); II. Prerequisite: Bot. 101 and 105. Gates. Structure and dynamics of vegetation. Field trips.

232. PROBLEMS IN BOTANY. Credit to be arranged; I, II, and SS. Prerequisite: Bot. 101 and 105, and consent of instructor. Staff. Charge, \$2.

Work is offered in:

Anatomy. Newcomb.

Cytology. Newcomb.

Ecology. Gates.

Mycology. Hansing.

Pathology. Melchers, Haymaker, Elmer.

Physiology. Miller.

Taxonomy. Gates.

241. FIELD CROP DISEASES. 3(1-6); II. Prerequisite: Bot. 205. Offered in 1941-'42 and alternate years thereafter. Melchers.

Diseases of cereal and forage crops; cause, effect on host, control. Breeding for disease resistance. Charge, \$2.

251. ANATOMY OF HIGHER PLANTS. 3(1-6); II. Prerequisite: Bot. 101 and 105. Offered in 1942-'43 and alternate years thereafter. Newcomb.

Structure and development of the various tissues and organs of seed plants. Charge, \$3.

266. LITERATURE OF BOTANY. 2(2-0); I. Prerequisite: Bot. 205. Offered in 1942-'43 and alternate years thereafter. Davis.

Current botanical publications, together with the classics of botanical literature; historical development of botany.

268. PLANT CYTOLOGY. 3(1-6); I. Prerequisite: Bot. 101 or Zoöl. 105. Offered in 1941-'42 and alternate years thereafter. Newcomb.

Structure, development, and functions of the plant cell, with special reference to chromosome behavior and its bearing on genetic results. Charge, \$3.

270. RECENT ADVANCES IN CYTOGENETICS. 3(2-3); II. Prerequisite: Agron. 208 or Bot. 268 or Zoöl. 214. Offered in 1941-'42 and alternate years thereafter. McCracken.

Chromosome structure, mechanics, and behavior; their significance for problems of genetics, evolution, and the origin of species. Charge, \$3.

FOR GRADUATE CREDIT

301. PLANT PATHOLOGY III. 3(1-6); I. Prerequisite: Bot. 205. Offered in 1942-'43 and alternate years thereafter. Elmer. Charge, \$5.

310. RESEARCH IN BOTANY. Credit to be arranged; I, II, and SS. Prerequisite: At least two courses in this department. Staff.

Work is offered in:

Anatomy. Newcomb.

Cytology. Newcomb.

Ecology. Gates.

Mycology. Hansing.

Pathology. Melchers, Haymaker, Elmer.

Physiology. Miller.

Taxonomy. Gates.

Chemistry

Professor KING
 Professor HUGHES
 Professor BRUBAKER
 Professor COLVER
 Professor KEITH
 Professor PERKINS
 Associate Professor VAN WINKLE
 Associate Professor BARHAM
 Assistant Professor HALL
 Assistant Professor HARRISS
 Assistant Professor WHITNAH
 Assistant Professor LASH
 Assistant Professor MARLOW
 Assistant Professor SMITS
 Assistant Professor SHENK
 Assistant Professor CONRAD
 Assistant Professor ANDREWS
 Assistant Professor PETERSON

Instructor McDOWELL
 Instructor REED
 Instructor CALDWELL
 Instructor HOSTETTER
 Instructor DORF
 Instructor BEERS
 Instructor OLSEN
 Instructor FISHER
 Instructor NEAL
 Instructor SCHRENK
 Instructor SINGLETON
 Instructor HUFFMAN
 Graduate Assistant DEVOR
 Graduate Assistant CRON
 Graduate Assistant OLSON
 Graduate Assistant EDGAR
 Graduate Assistant FRIEDE

FOR UNDERGRADUATE CREDIT

101. CHEMISTRY I. 5(3-6); I, II, and SS. Not open to students who have credit in Chem. 107, 108, or 110. Staff.

Beginning of the study of general chemistry. Deposit, \$10.

103. CHEMISTRY II RECITATION. 3(3-0); I, II, and SS. Not open to students who have credit in Chem. 108 or 110. Prerequisite: Chem. 101. Staff.
 Completion of the study of general chemistry.

104. CHEMISTRY II LABORATORY. 2(0-6); I, II, and SS. Not open to students who have credit in Chem. 108 or 110. Prerequisite: Chem. 103 or concurrent registration. Staff.

General principles of qualitative analysis. Deposit, \$10.

107. CHEMISTRY E-I. 4(3-3); I, II, and SS. Not open to students who have credit in Chem. 101. Staff.

Similar content to Chem. 101, with special emphasis on applications to engineering. Deposit, \$7.50.

108. CHEMISTRY E-II. 4(3-3); I, II, and SS. Prerequisite: Chem. 101 or 107. Not open to students who have credit in Chem. 103 and 104. Staff.

Continuation of Chem. 107. Deposit, \$7.50.

110. GENERAL CHEMISTRY. 5(3-6); I and II. Not open to students who have credit in any college courses in inorganic chemistry. Staff.

Principal laws and theories of chemistry; important metallic and nonmetallic substances. Deposit, \$10.

122. GENERAL ORGANIC CHEMISTRY. 5(3-6); I, II, and SS. Prerequisite: Chem. 110. Staff.

General study of some of the more important classes of organic compounds. Deposit, \$10.

125. ORGANIC CHEMISTRY (AGR.). 3(3-0); I, II, and SS. Prerequisite: Chem. 103. Staff.

Fundamentals of organic chemistry, particularly fats, proteins, and carbohydrates.

132. INSPECTION TRIP. R; I. Staff.

Such manufacturing centers as Kansas City, St. Louis, and Chicago are visited. Cost varies from \$30 to \$50.

FOR GRADUATE AND UNDERGRADUATE CREDIT

202. INORGANIC PREPARATIONS. Credit to be arranged; one credit for each three hours of laboratory; I, II, and SS. Prerequisite: Chem. 104. Brubaker.

Preparation and purification of some typical inorganic compounds, of those of more complex composition, and compounds of the rarer elements. Deposit, \$10.

205. INDUSTRIAL ELECTROCHEMISTRY. 2(2-0); II. Prerequisite: Chem. 104 or 110 and Phys. 103 or 106.

206. PHYSICAL CHEMISTRY I. 5(3-6); I. Prerequisite: Chem. 220 and 241, and Math. 115. Students from other divisions may enroll without Math. 115. King, Hall, Shenk.

Relations with matter in the gaseous, liquid, and solid states; elementary principles of thermodynamics, solution phenomena, colloids, surface chemistry, and thermochemistry. Deposit, \$10.

207. ADVANCED INORGANIC CHEMISTRY. 3(3-0); I. Prerequisite: Chem. 104. Keith.

Facts of chemistry and their present theoretical interpretations; properties of elements as a basis for methods of classification; rarer elements and compounds. Students who elect this course are advised to take Chem. 202.

208. HISTORY OF CHEMISTRY. 1(1-0); II. Prerequisite: Chem. 206. Olsen.

Development of the principal laws and theories of chemistry; failures and triumphs of the founders of chemical science.

209. SURFACE TENSION AND RELATED PHENOMENA. 2(2-0); I and II. Prerequisite: Chem. 206. King, Andrews.

Methods of measuring surface tension; surface energetics, relation of surface tension to adsorption; and colloidal formation.

211. PAINT OILS AND PIGMENTS. 2(2-0); I. Prerequisite: Chem. 104 and 122. Olsen.

Extraction, purification, and properties of the oils commonly used in paints; manufacture and properties of paint pigments; products employed as protective coverings for both wood and metal.

213. COLLOID CHEMISTRY. 2(2-0); II. Prerequisite: Chem. 206. Fisher.

Suspensoids and emulsoids, optical and electrical properties of colloids, Brownian movement, action of electrolytes on colloids, adsorption and surface phenomena, and short review of the method for the preparation of colloids.

215. CHEMICAL THERMODYNAMICS. 3(3-0); II. Prerequisite: Chem. 206 and Math. 115. Keith.

Thermodynamics particularly applicable to chemistry, the first and second laws of thermodynamics and their application.

216. THEORETICAL ELECTROCHEMISTRY. 3(3-0); I. Prerequisite: Chem. 206 and 272. Keith.

Theory of electrolytic cells, electrochemical series of metals, electrodes, potentials, polarization, overvoltage, and deposition of metals by electrolysis.

217. ELECTROCHEMISTRY LABORATORY. 2(0-6); II. Prerequisite: Chem. 216 or concurrent registration. Hall.

Electrometric titrations, storage battery efficiency, polarization, overvoltage, electrode potentials, and related subjects. Deposit, \$10.

220. ORGANIC CHEMISTRY. 5(3-6); I, II, and SS. Prerequisite: Chem. 104. Colver.

Topics selected from the content of Chem. 266 and 267. Deposit, \$10.

221. QUALITATIVE ORGANIC ANALYSIS. 3(1-6); I. Prerequisite: Chem. 267. Colver. Deposit, \$10.

223. ORGANIC PREPARATIONS. 1 to 5 hours; I. Prerequisite: Chem. 267. Colver. Deposit, \$10.

225. STEREOISOMERIC AND TAUTOMERIC COMPOUNDS. 2(2-0); II. Prerequisite: Chem. 267. Colver.

226. CARBOCYCLIC AND HETEROCYCLIC COMPOUNDS. 2(2-0); II. Prerequisite: Chem. 267. Colver.

228. SPECIAL REACTIONS OF ORGANIC COMPOUNDS. 2(2-0); I. Prerequisite: Chem. 267. Colver.

230. PRINCIPLES OF ANIMAL NUTRITION. 3(3-0); II. Prerequisite: Chem. 122. Hughes.

231. BIOCHEMISTRY. 5(3-6); I, II, and SS. Prerequisite: Chem. 122. Hughes, Marlow, Devor. Deposit, \$10.

232. VITAMINS. 2(2-0); I or II. Prerequisite: Chem. 231. Hughes.
Chemistry and functions of vitamins and related compounds.

233. BIOCHEMICAL PREPARATIONS. 2(0-6) to 5(0-15); II. Prerequisite: Chem. 231 and 267. Marlow. Deposit, \$10.

235. PATHOLOGICAL CHEMISTRY. 2(2-0). Prerequisite: Chem. 231. Hughes.

236. CHEMISTRY OF PROTEINS. 3(3-0); I. Prerequisite: Chem. 122 and 206. Conrad.

237. BIOCHEMICAL ANALYSIS. 2(0-6); I and II. Prerequisite: Chem. 231 and 241. Marlow. Deposit, \$10.

238A. CATALYSIS IN ORGANIC CHEMISTRY. 3(3-0); I. Prerequisite: Chem. 206 and 267. Barham.

239. LABORATORY TECHNIC IN ANIMAL NUTRITION. 2(0-6); I and II. Prerequisite: An acceptable course in nutrition or Chem. 231. Hughes.

Preparation of diet and the care of experimental animals used in the study of various nutritional problems. Deposit, \$10.

240. ADVANCED QUALITATIVE ANALYSIS. 3(1-6); I and II. Prerequisite: Chem. 104. Van Winkle. Deposit, \$10.

241. QUANTITATIVE ANALYSIS. 5(1-12); II and SS. Prerequisite: Chem. 104. Brubaker.

Practically the same as Chem. 250 and 251. Deposit, \$10.

242. FIRE ASSAYING. 2(0-6); I. Prerequisite: Chem. 241.

Assays of ores containing such metal as copper, zinc, lead, bismuth, tin, silver, and gold. Deposit, \$10.

243. GAS ANALYSIS. 1(0-3); I. Prerequisite: Chem. 241.

Analysis of air, flue and furnace gases, and illuminating gas. Deposit, \$7.50.

245. CHEMICAL MICROSCOPY. 1(0-3); I, II, and SS. Prerequisite: Chem. 122 and 250. Brubaker.

Use of the microscope in chemical analysis, both qualitative and quantitative, applied both to inorganic substances and to vegetable and animal products. Deposit, \$7.50.

250. QUANTITATIVE ANALYSIS A. 3(1-6); I and SS. Prerequisite: Chem. 104. Brubaker.

General procedure of gravimetric analysis. Deposit, \$10.

251. QUANTITATIVE ANALYSIS B. 3(1-6); II and SS. Prerequisite: Chem. 104. Brubaker.

General procedure of volumetric analysis. Deposit, \$10.

252A. CHEMISTRY OF SOILS AND FERTILIZERS. 2(0-6); I. Prerequisite: Chem. 250. Perkins. Deposit, \$10.

253A. CHEMISTRY OF CROPS. 2(0-6); II. Prerequisite: Chem. 122 and 250. Perkins. Deposit, \$10.

254. DAIRY CHEMISTRY. 3(1-6); I. Prerequisite: Chem. 122 and 250. Whitnah. Deposit, \$10.

255. ADVANCED SOIL CHEMISTRY. 3(1-6); I and II. Prerequisite: Chem. 206 and an acceptable course in soils. Perkins.

Chemical phenomena of soils, ionic exchange, electrodialysis, solutions, and colloid phenomena. Deposit, \$10.

256. INSECTICIDES AND FUNGICIDES. 2(2-0); Prerequisite: Chem. 122 and 250. Smits.

257. FOOD ANALYSIS. 3(0-9); II and SS. Prerequisite: Chem. 220 and 241 or 251. Brubaker.

Quantitative methods employed in the analysis of foodstuffs, practice in testing for adulterants, preservatives, and coloring materials. Deposit, \$10.

258. VITAMIN ANALYSIS. 2(0-6); I, II, and SS. Prerequisite: Chem. 231 and 251. Peterson.

Chemical and biological determination of vitamins. Deposit, \$10.

259. INSTRUMENTAL METHODS IN CHEMICAL ANALYSIS. 3(2-3); Prerequisite: Chem. 206. Shenk.

Application of the spectrograph, spectrophotometer, colorimeter, nephelometer, refractometer, X-ray equipment, and other instruments in the chemical analysis of gases, liquids, and solids. Deposit, \$7.50.

260. ADVANCED QUANTITATIVE ANALYSIS. 1 to 5 hours. Prerequisite: Chem. 241 or 250 and 251. Brubaker. Deposit, \$10.

262. INTERMEDIARY METABOLISM OF PROTEINS. 2(2-0); I. Prerequisite: Chem. 231. Hughes.

263. INTERMEDIARY METABOLISM OF CARBOHYDRATES AND LIPINS. 2(2-0); II. Prerequisite: Chem. 231. Marlow.

265. CHEMISTRY OF CARBOHYDRATES. 2(2-0); I or II. Prerequisite: Chem. 122. Whitnah.

266. ORGANIC CHEMISTRY I. 5(3-6); I. Prerequisite: Chem. 104. Colver, Neal. Deposit, \$10.

267. ORGANIC CHEMISTRY II. 4(2-6); II. Prerequisite: Chem. 266. Colver, Neal. Deposit, \$10.

269. SPECIAL TOPICS IN ORGANIC CHEMISTRY. 2(2-0); I, II, and SS. Prerequisite: Chem. 267. Colver, Barham.

Lectures with assigned readings which deal with special phases of organic chemistry.

270. PROBLEMS IN CHEMISTRY. Credit to be arranged; I, II, and SS. Staff. Deposit, \$10.

Work is offered in:

Agricultural Chemistry. King, Perkins.

Analytical Chemistry. Brubaker, Perkins.

Biochemistry. Hughes, Whitnah, Marlow, Peterson.

General and Physical Chemistry. King, Keith, Hall, Lash, Andrews.

Industrial Chemistry. Van Winkle.

Organic Chemistry. Colver, Barham, Whitnah, Reed.

271. SELECTED TOPICS IN INORGANIC CHEMISTRY. 2(2-0); II. Prerequisite: Chem. 206. Staff.

Thermal analysis, temperature measurements, atomic hydrogen, hydrides, halogens, solutions, ammonia systems, and crystal chemistry.

272. PHYSICAL CHEMISTRY II. 3(3-0); II. Prerequisite: Chem. 206. King, Shenk.

Homogeneous and heterogeneous equilibria, chemical kinetics, electrical conductance, electromotive force, chemical thermodynamics, photochemistry, and atomic and molecular structure.

275. CHEMISTRY SEMINAR. R; I and II. Staff.

276. CHEMICAL LITERATURE. 2(2-0); I and II. Prerequisite: Chem. 267. Reed.

287. CORROSION. 3(3-0); I and II. Prerequisite: Chem. 122 and 206 or concurrent registration. Van Winkle.

Theories and various factors involved in the corrosion of iron, steel, and nonferrous metals; methods of testing for and preventing corrosion.

288. ADVANCED PHYSICAL CHEMISTRY I. 3(3-0); I. Prerequisite: Chem. 272 or consent of instructor. Andrews.

Extension of certain topics of physical chemistry such as thermodynamics, chemical kinetics, photochemistry, atomic and molecular structure.

289. ADVANCED PHYSICAL CHEMISTRY II. 3(3-0); II. Prerequisite: Chem. 272 or consent of instructor. Andrews.

Continuation of Chem. 288.

290. BIOCHEMISTRY OF INTERNAL SECRETIONS. 2(2-0); I or II. Prerequisite: Chem. 231. Marlow.

Chemistry of the glands of internal secretions.

294. ADVANCED PHYSICAL CHEMISTRY III. 3(3-0); I or II. Prerequisite: Chem. 272 or consent of instructor. Andrews.

Continuation of Chem. 288.

295. QUANTITATIVE ORGANIC ANALYSIS. 2(0-6); I, II, and SS. Prerequisite: Chem. 241 and 267. Reed.

Combustion analysis of organic compounds for carbon, hydrogen, and nitrogen; halogen and sulfur determination by the Carius method. Deposit, \$10.

299. CHEMICAL TOXICOLOGY. 3(2-3); I, II, and SS. Prerequisite: Chem. 122, 220, or 267. Smits.

Occurrence, chemical properties, and detection of the more common poisons. Deposit, \$7.50.

FOR GRADUATE CREDIT

301. RESEARCH IN CHEMISTRY. Credit to be arranged; I, II, and SS. Prerequisite: At least two courses in this department. Staff.

Work is offered in:

Agricultural Chemistry. King, Perkins.

Analytical Chemistry. Brubaker, Perkins.

Biochemistry. Hughes, Whitnah, Marlow, Peterson.

General and Physical Chemistry. King, Keith, Hall, Lash, Andrews.

Industrial Chemistry. Van Winkle.

Organic Chemistry. Colver, Barham, Whitnah, Reed.

305. ANIMAL NUTRITION SEMINAR. 1(1-0); I and II. Prerequisite: Consult instructor. Hughes, McCampbell, Burt, Payne.

Experiments in nutrition, methods employed, and validity of conclusions drawn.

309. HORMONE PREPARATION AND ASSAY. 2(0-6); I and II. Prerequisite: Chem. 290 or Zoöl. 247 or concurrent registration. Marlow. Deposit, \$10.

311. CHEMISTRY OF ENZYMES. 3(1-6); II. Prerequisite: Chem. 220 or 267. Hall.

Extraction, purification, and action of enzymes. Deposit, \$10.

Economics and Sociology

Professor GRIMES
 Professor HOWE
 Professor HILL
 Associate Professor STEWART
 Associate Professor HOLTZ
 Associate Professor HODGES
 Associate Professor THOMPSON
 Associate Professor MONTGOMERY
 Associate Professor WARD
 Assistant Professor PARSONS
 Assistant Professor EGGERT

Assistant Professor PINE
 Instructor DOLL
 Instructor WILSON
 Instructor LETBETTER
 Instructor LONG
 Instructor GELLEIN
 Instructor OTTO
 Instructor MCCOY
 Instructor BAGLEY
 Instructor CONLEY
 Instructor MEENEN

Work in economics and sociology is offered in the divisions of General Science and Agriculture. The general courses are listed here. Those which have a direct bearing on agriculture are listed in the agricultural section of the catalogue.

CERTIFICATE OF CERTIFIED PUBLIC ACCOUNTANT

By act of the Kansas legislature passed March 24, 1915, provision is made for the examination for the certificate of Certified Public Accountant. Applicants must be citizens of the United States or must have declared their intention to become citizens. They must be at least twenty-one years of age; must have good moral character; must have a high-school education or the equivalent thereof; must have four years of experience and study in accountancy, at least three of which must have been in the office of a public accountant or on their own account; and must pass an examination in auditing, accounting, and business law given by the State Board of Examiners.

Examination questions are prepared and graded by the American Institute of Accountants and examinations are held in May and November of each year.

COURSES IN ECONOMICS

FOR UNDERGRADUATE CREDIT

(For Econ. 106, see agricultural section.)

101. ECONOMICS I. 3(3-0); I, II, and SS. Staff.

Introductory study of the principles of economics.

104. ECONOMICS II. 3(3-0); I, II, and SS. Prerequisite: Econ. 101. Bagley.
 Continuation of Econ. 101.

116. MONEY AND BANKING. 3(3-0); I, II, and SS. Prerequisite: Econ. 101. Thompson.

Nature, history, and functions of money; banking in its modern and historic forms.

126. BUSINESS MANAGEMENT. 2(2-0); I, II, and SS. Not open to students in curriculums in Business Administration. Prerequisite: Econ. 101. Thompson.

Analysis of management factors such as personnel, finance, accounting, production, and marketing.

FOR GRADUATE AND UNDERGRADUATE CREDIT

(For Econ. 202, 203, 206A, 212, 218, 220, 225, 226, 227, 231, 235, 240, 251, 270, and 271, see agricultural section.)

210. ECONOMIC SYSTEMS. 2(2-0); I and SS. Prerequisite: Econ. 101. Thompson.

214. PUBLIC FINANCE. 3(3-0); I. Not open to students with credit in Econ. 220. Prerequisite: Econ. 101. Howe.

Public expenditures and revenues; administration of public funds.

215. BUSINESS ORGANIZATION AND FINANCE. 3(3-0); I and II. Prerequisite: Econ. 116 and 134. Thompson.

Organization and classification of business enterprises, their financial structure, and internal management.

222. INVESTMENTS. 3(3-0); II and SS. Prerequisite: Econ. 134 or 136 and 215. Stewart.

Types of investment securities; investment risks and values; investment banks; investment policies.

223. CREDITS AND COLLECTIONS. 2(2-0); II. Prerequisite: Econ. 101. Thompson.

224. INTERNATIONAL TRADE. 2(2-0); II. Prerequisite: Econ. 101. Bagley.

230. PRINCIPLES OF TRANSPORTATION. 3(3-0); II. Prerequisite: Econ. 101. Ward.

Development of transportation; principles involved; public regulation.

234. LABOR ECONOMICS. 3(3-0); I and II. Prerequisite: Econ. 101 or 151. Holtz.

Status and trends in industrial relations.

242. PROPERTY INSURANCE. 2(2-0); I and SS. Prerequisite: Econ. 101. Stewart.

Fire, marine, automobile, title, and credit insurance and corporate bonding; also other forms of property insurance.

244. LIFE INSURANCE. 2(2-0); II and SS. Prerequisite: Econ. 101. Stewart.

Nature and uses of life insurance, kinds of policies, determination of premiums, reserves, surrender values, dividends.

246. MARKETING. 3(3-0); I and SS. Prerequisite: Econ. 101. Ward.

Marketing functions, services, and agencies.

247. MARKET ADMINISTRATION. 3(3-0); II. Prerequisite: Econ. 246. Ward.

Problem approach to management aspects of market control.

248. PROBLEMS IN ECONOMICS. Credit to be arranged; I, II, and SS. Prerequisite: Senior standing. Staff.

Work is offered in:

Banking, finance, business organization and management. Thompson.

General economics and international trade. Grimes, Bagley.

Insurance, investments, and accounting. Stewart.

Marketing. Ward.

Public finance. Howe.

249. BUSINESS ADMINISTRATION SEMINAR. 1(1-0); I and II. Prerequisite: Senior standing. Staff.

Current questions in economics and business.

FOR GRADUATE CREDIT

(For Econ. 301, see agricultural section.)

302. RESEARCH IN ECONOMICS. Credit to be arranged; I, II, and SS. Prerequisite: At least two courses in this department. Staff.

Work is offered in:

Banking, finance, business organization and management. Thompson.

General economics and international trade. Grimes, Bagley.

Insurance, investments, and accounting. Stewart.

Marketing. Ward.

Public finance. Howe.

305. ADVANCED ECONOMICS. 3(3-0); I. Prerequisite: Econ. 101. Ward.

Advanced study of economic theory.

310. HISTORY OF ECONOMIC THOUGHT. 3(3-0); II. Prerequisite: Econ. 101. Grimes.

Development of economics and relation of economic doctrines to conditions existing when they were formulated.

COURSES IN SOCIOLOGY**FOR UNDERGRADUATE CREDIT**

(For Econ. 156, see agricultural section.)

151. SOCIOLOGY. 3(3-0); I, II, and SS. Prerequisite: Sophomore standing. Hill, Ward.

Fundamental principles of social life as related to other scientific principles.

FOR GRADUATE AND UNDERGRADUATE CREDIT

(For Econ. 256, see agricultural section.)

258. SOCIAL PATHOLOGY. 3(3-0); I, II, and SS. Prerequisite: Econ. 151. Hill, Ward.

Problems of society, poverty, crime, delinquency, immigration, family discord, group conflict, and population.

259. POPULATION AND HUMAN ECOLOGY. 2(2-0); I. Prerequisite: Six hours of sociology or economics or history. Hill.

Early theories, policies, growth, composition, spatial aspects, movements, and population trends.

260. FAMILY AND SOCIETY. 2(2-0); II. Prerequisite: Econ. 151. Hill.

Origin and development of marriage customs and systems of family organizations; the family under present conditions.

267. COMMUNITY ORGANIZATION AND LEADERSHIP. 3(3-0); II and SS. Prerequisite: Econ. 151. Hill.

Organizations working in urban and rural fields; principles involved and technic of organization.

273. ADVANCED SOCIOLOGY. 3(3-0); II. Prerequisite: Econ. 151. Hill. Continuation of Econ. 151.

277. HISTORY OF SOCIAL THOUGHT. 3(3-0); I. Prerequisite: Econ. 151. Holtz.

Development of social thought from ancient civilization to the present.

279. PROBLEMS IN SOCIOLOGY. Credit to be arranged; I, II, and SS. Prerequisite: Econ. 151. Hill.

FOR GRADUATE CREDIT

(For Econ. 350, see agricultural section.)

351. RESEARCH IN SOCIOLOGY. Credit to be arranged; I, II, and SS. Prerequisite: At least two courses in sociology. Hill.



COURSES IN ACCOUNTING

FOR UNDERGRADUATE CREDIT

(For Econ. 112, see agricultural section.)

133. ACCOUNTING I. 3(2-3); I, II, and SS. Stewart, Letbetter.

Principles and structure of accounts designed to give power to analyze commercial accounts and statements; problems and practice sets used as an application of principles to practice.

134. ACCOUNTING II. 3(2-3); I, II, and SS. Prerequisite: Econ. 133. Stewart, Letbetter.

Partnership and corporation accounting and problems; valuation of balance-sheet items, with special reference to depreciation, inventories, and intangibles.

136. PRINCIPLES OF ACCOUNTING. 3(3-0); I and II. Not open to students in curriculums in Business Administration. Stewart, Letbetter.

Principles of accounting; use of accounting records and statements.

FOR GRADUATE AND UNDERGRADUATE CREDIT

280. VALUATION ACCOUNTING. 3(3-0); I, II, and SS. Prerequisite: Econ. 134. Stewart.

Advanced course in accounting theory; content and analysis of accounting statements.

281. ADVANCED ACCOUNTING. 3(3-0); I and SS. Prerequisite: Econ. 134. Stewart.

Application of accounting principles to partnerships, corporations with subsidiaries and branches, companies in financial difficulties, and estates and trusts.

286. TAX ACCOUNTING. 3(3-0); II. Prerequisite: Econ. 280 or concurrent registration. Stewart, Letbetter.

Accounting problems in income, sales, social security, and other taxes.

287. COST ACCOUNTING. 3(3-0); I and SS. Prerequisite: Econ. 134. Stewart, Letbetter.

Allocation of production and distribution costs to determine financial results and guide the management of business enterprises.

288. ADVANCED COST ACCOUNTING. 2(2-0); II. Prerequisite: Econ. 287. Offered in 1941-'42 and alternate years thereafter. Stewart, Letbetter.

289. GOVERNMENTAL ACCOUNTING. 2(2-0); I. Prerequisite: Econ. 280 or 287. Stewart.

Federal, state, and municipal accounts, and accounts for public institutions.

291. AUDITING. 3(3-0); I. Prerequisite: Econ. 280 and consent of instructor. Offered in 1942-'43 and alternate years thereafter. Letbetter.

Audits of accounts of commercial enterprises; attention to balance sheet and detail audits.

292. C. P. A. PROBLEMS. 3(3-0); II. Prerequisite: Consent of instructor. Stewart, Letbetter.

Problems given in various C. P. A. examinations.

293. INSTITUTIONAL ACCOUNTING. 2(1-3); II. Not open to students in curriculums in Business Administration. Stewart.

Accounting principles and their application to cafeteria, lunch and tea rooms, restaurants, dormitories, clubs, and other institutions.

294. SPECIALIZED ACCOUNTING. 3(3-0); II. Prerequisite: Econ. 281. Stewart, Letbetter, Gellein.

Specialized statements, foreign exchange, estates and trusts, bank accounting, and stock brokerage.

Education

Professor HOLTON
 Professor PETERSON
 Professor WILLIAMS
 Professor STRICKLAND
 Professor RUST
 Professor DAVIDSON
 Professor ALM
 Associate Professor LANGFORD
 Assistant Professor HALL

Assistant Professor BAXTER
 Assistant Professor MOGGIE
 Instructor BROWN
 Instructor BARE
 Instructor ROSKIE
 Instructor DEMAND
 Assistant SHIELDS
 Assistant MIZELL

The State Board of Education has set up the following standards or their equivalents for certification of high-school teachers:

1. Three-year Certificate Renewable for Life.
 - a. Complete four years of college work with degree.
 - b. At least eighteen hours must be taken in the Department of Education, as follows:
 - (1) Three hours each in General Psychology, Educational Psychology, Educational Administration, and Teaching Participation in High School.
 - (2) Six hours elected from the following courses: Extracurricular Activities, Educational Measurements, Curriculum, Statistical Methods Applied to Education, Educational Sociology, Vocational Education, History of Education, Psychology of Childhood and Adolescence, Abnormal Psychology, Mental Tests, Technic of Mental Tests, Social Psychology, Psychology of Art, Psychology of Exceptional Children, and Principles of Guidance.
 - c. Valid in any elementary or high school in Kansas.
2. Certificate for Teachers of Vocational Agriculture.
 - a. Complete four years of college work with degree, including the following:
 - (1) Not fewer than fifty hours in technical or practical agriculture.
 - (2) Not fewer than twenty-one hours of science related to agriculture.
 - (3) Eighteen hours in the Department of Education: Three each in General Psychology, Educational Psychology, Vocational Education, Methods of Teaching Agriculture, Teaching Participation in Agriculture and Educational Administration or Principles of Secondary Education.
 - (4) Seventeen hours in mechanical lines related to farm-shop problems.
 - b. Valid for three years and may be renewed for life.
 - c. The State Board for Vocational Education issues certificates of approval for one year only, to teachers of Vocational Agriculture, and reserves the right to require individual teachers to return to summer school for further preparation when the need becomes apparent.
3. Certificate for Teachers of Vocational Homemaking.
 - a. Complete four years of college work with degree, including the following:
 - (1) Thirty-four hours in technical home economics, three in Child Welfare, and three in Practice Work in Home Management.
 - (2) Eighteen hours in the Department of Education: Three each in General Psychology, Educational Psychology, Vocational Education, Methods of Teaching Home Economics, Teaching Participation in Home Economics, and Educational Administration or Principles of Secondary Education.
 - b. Valid for three years and may be renewed for life.

4. Certificate for Teachers of Industrial Arts.
 - a. Complete four years of college work with degree, including the following: Eighteen hours in the Department of Education; three each in General Psychology, Educational Psychology, Educational Sociology, Methods of Teaching Industrial Arts, Teaching Participation in High School, and Educational Administration or Principles of Secondary Education.
 - b. Valid for three years and may be renewed for life.
5. To comply with the regulations of the State Board of Education regarding teachers' certificates based on four years of college work, the student must complete at least twenty-four of the last thirty semester hours or fifty of the last sixty semester hours, in residence at the college which grants the degree.
6. Any student who wishes to prepare for certification must present a statement from the Department of Student Health which shows that a satisfactory physical examination has been passed.
7. A certificate of proficiency in guidance will be issued by the Department of Education to those with satisfactory scholarship requirements who have completed the following: Educational Measurements, Statistical Methods Applied to Education, Principles of Guidance, Mental Tests, Technic of Mental Tests, Psychology of Exceptional Children, and Guidance Practicum.

COURSES IN EDUCATION

FOR UNDERGRADUATE CREDIT

109. EDUCATIONAL PSYCHOLOGY. 3(3-0); I, II, and SS. Prerequisite: Educ. 184 and junior standing. Moggie.

Native equipment of human beings, individual differences, psychology of learning, motivation, and psychology of school subjects.

111. METHODS OF TEACHING. 3(3-0); SS. Prerequisite: Educ. 184; open to freshmen and sophomores only. Moggie.

Problems of general method in classroom procedure in grades and junior high school.

129. TEACHING PARTICIPATION IN MUSIC. 1 to 4 hours. I, II, and SS. Prerequisite: Educ. 111 and 184. Hartman.

Work in this course is done in an elementary school of Manhattan. Appointment must be made at the time of registration for the semester during which it is done.

132. METHODS OF TEACHING HOME ECONOMICS. 3(3-0); I, II, and SS. Prerequisite: Clo. and Text. 103, Educ. 184, and Foods and Nutr. 102 and 107. Rust, Baxter.

Principles of teaching applied to the selection and development of home economics subject matter in lessons for all types of pupils, and to the conduct of laboratory and classroom exercises.

134. METHODS OF TEACHING INDUSTRIAL ARTS. 3(1-6); I, II, and SS. Prerequisite: Senior standing and consent of instructor. Wilson.

Methods of teaching, lesson planning, organization of subject matter, and class projects applied to general shop work, woodworking, sheet metal, arc and oxyacetylene welding, machine shop practice, motor mechanics, and other industrial arts subjects.

136. METHODS OF TEACHING AGRICULTURE. 3(3-0); I, II, and SS. Prerequisite: Educ. 184. Davidson.

Lesson plans, organization of materials, and direction of class, laboratory, and field instructional work in vocational agriculture. Individual and class projects are studied, as well as coördination of farm mechanics work.

160. TEACHING PARTICIPATION IN HOME ECONOMICS. 3 hours. I, II, and SS. Prerequisite: Clo. and Text. 103, Educ. 132, and Foods and Nutr. 102 and 107, or concurrent registration. Rust, Baxter.

Supervised teaching carried on in the home economics classes of the Manhattan high school.

161. TEACHING PARTICIPATION IN AGRICULTURE. 3 hours. I and II. Prerequisite: Educ. 109 and 136. Davidson.

Three weeks of observation and practice teaching in vocational agriculture classes in Manhattan high school and other high schools by arrangement; group study of classroom problems; lesson plans and presentation criticized by the College instructor and the vocational teacher in the practice department.

163. TEACHING PARTICIPATION IN HIGH SCHOOL. 1 to 4 hours. I, II, and SS. Prerequisite: Educ. 109 and senior standing. Strickland, Washburn, Saum.

Work is done in classes in the Manhattan high school, and special appointment must be made at the time of registration for the semester in which it is done. The work may be elected in biology, English, mathematics, modern languages, physical science, social science, art, physical education, and industrial arts.

FOR GRADUATE AND UNDERGRADUATE CREDIT

202. EXTRACURRICULAR ACTIVITIES. 3(3-0); II and SS. Prerequisite: Educ. 210. Moggie.

Extracurricular activities of the junior and senior high schools; educational objectives of these activities; methods and means employed in their accomplishment.

206. PHILOSOPHY OF EDUCATION. 3(3-0); SS. Prerequisite: Educ. 109. Holton.

Controlling and unifying philosophy of the American public school system and its European background.

210. EDUCATIONAL ADMINISTRATION. 3(3-0); I, II, and SS. Prerequisite: For undergraduate credit, junior standing; for graduate credit, Educ. 109 and 184. Strickland.

Organization of state, county, city, and rural school systems in Kansas; Kansas school laws.

212. EDUCATIONAL MEASUREMENTS. 3(3-0); I, II, and SS. Prerequisite: Educ. 109 and 184. Strickland.

Scientific measurement of achievement as distinguished from intelligence testing.

219. CURRICULUM. 3(3-0); SS. Prerequisite: Six hours in education and junior standing. Holton.

Requirements of modern life upon schools and their objectives; examination of the entire school curriculum.

223. STATISTICAL METHODS APPLIED TO EDUCATION. 3(3-0); I, II, and SS. Prerequisite: Junior standing. Not open to students who have credit in Math.

203. Moggie.

Statistical interpretation of data from educational and biological experience and research; graphical representation and interpretation; experimental and research methods.

230. PRINCIPLES OF GUIDANCE. 3(3-0); I, II, and SS. Prerequisite: Educ. 210 or 236. Williams.

Methods and practices in pupil guidance for vocations and career planning; analysis of desirable trades, professions, and business callings; guidance problems in the public schools.

232. TEACHING SUBJECTS RELATED TO HOME ECONOMICS. 1 to 3 hours; I, II, and SS. Prerequisite: Educ. 132 and 184. Rust.

Objectives and principles in teaching subjects related to home economics; planning of courses of study which are based upon the problem methods of

teaching. Designed for teachers of vocational homemaking in the Smith-Hughes high-school courses.

234. METHODS IN ADULT HOMEMAKING CLASSES. 1 to 3 hours; SS. Prerequisite: Educ. 132 and 184 or equivalent. Wyckoff.

Principles of teaching applied to adult classes and a demonstration class in one or more phases of homemaking.

236. PRINCIPLES OF SECONDARY EDUCATION. 3(3-0); I, II, and SS. Prerequisite: Educ. 184 and junior standing. Williams.

Historical study of secondary education; objectives of junior and senior high-school organization, administration, and supervision; methods of organizing and conducting secondary education; field problems in junior and senior high school. A limited amount of field work required.

239. EDUCATIONAL SOCIOLOGY. 3(3-0); I, II, and SS. Prerequisite: Educ. 184 and junior standing. Holton.

Group activities of the school in relation to personality traits, psychology of personality, the school's responsibility in the development of socialized personality traits.

241. VOCATIONAL EDUCATION. 3(3-0); I, II, and SS. Prerequisite: Educ. 210 and 236 and junior standing. Williams.

Provisions for vocational education in Kansas and other states and countries; principles underlying such education; relation of vocational education to the community, county, state, and nation.

244. HISTORY OF EDUCATION. 3(3-0); I, II, and SS. Williams.

History of education in the United States, with a consideration of the more important present-day problems in the organization, administration, and adjustment of public education in the light of historical development.

248. PROBLEMS IN EDUCATION. Credit to be arranged; I, II, and SS. Prerequisite: Educ. 184 and consent of instructor. Staff.

Work is offered in:

Educational Administration. Strickland.

Educational Measurements. Strickland.

Educational Psychology. Moggie.

Educational Sociology. Holton.

Extension Education. Gemmell, Fleenor.*

Principles of Guidance. Williams.

Teaching Methods. Strickland.

Statistical Methods Applied to Education. Moggie.

Vocational Education. Williams.

FOR GRADUATE CREDIT

306. ADVANCED EDUCATIONAL ADMINISTRATION. 3(3-0); SS. Prerequisite: Educ. 210 or equivalent. Strickland.

Constitutional and legal basis of public-school administration. Intended primarily for school executives.

313. RESEARCH IN ORGANIZATION AND PRESENTATION OF HOME ECONOMICS. Credit to be arranged; I, II, and SS. Prerequisite: Graduate standing. Justin, Rust.

Individual research problems in phases of organization and administration for home economics. May be chosen as the basis for thesis for the Master's degree. The nature of the problem will depend upon the student's major interest.

314. PROBLEMS IN ORGANIZATION AND PRESENTATION OF HOME ECONOMICS. Credit to be arranged; I, II, and SS. Prerequisite: Graduate standing. Justin, Rust.

315. SUPERVISION IN HOME ECONOMICS. 2(2-0); II and SS. Prerequisite: Educ. 160 and experience in teaching home economics. Rust.

Problems met by a supervisor or director of home economics in the public schools, standardization of work, relation of supervisor to teacher, modernization of plant and equipment, course of study.

318. SEMINAR IN HOME ECONOMICS EDUCATION. 2 or 3 hours; II and SS. Prerequisite: Educ. 160 and experience in teaching home economics. Rust and visiting instructors.

Recent trends in home economics education.

325. RESEARCH IN EDUCATION. Credit to be arranged; I and II. Prerequisite: At least two courses in this department. Staff.

Work is offered in:

Educational Administration. Strickland.

Educational Measurements. Strickland.

Educational Psychology. Moggie.

Educational Sociology. Holton.

Principles of Guidance. Williams.

Teaching Methods. Strickland.

Statistical Methods Applied to Education. Moggie.

Vocational Education. Williams.

COURSES IN PSYCHOLOGY

FOR UNDERGRADUATE CREDIT

137. INDIVIDUAL PROBLEMS AND PERSONAL ADJUSTMENT. 3(2-3); I and II. Not to be substituted for Educ. 184. Peterson.

Analysis of problems of living and learning in college, with readings and conferences concerning personal adjustments.

184. GENERAL PSYCHOLOGY. 3(3-0); I, II, and SS. Peterson, Alm, Langford. Charge, 25 cents.

FOR GRADUATE AND UNDERGRADUATE CREDIT

250. PSYCHOLOGY OF CHILDHOOD AND ADOLESCENCE. 3(3-0); I, II, and SS. Prerequisite: Educ. 184. Alm.

Genetic study of the trends in the development of structures, capacities, interests, and personality traits that facilitate understanding and control of the behavior of childhood and adolescence.

254. ABNORMAL PSYCHOLOGY. 3(3-0); I and II. Prerequisite: Educ. 184. Alm.

Maladjustment of personality, behavioral disorders, psychoneuroses, dementias, dreams, hypnotism, and multiple personality.

257. ADVANCED GENERAL PSYCHOLOGY. 3(3-0); II. Prerequisite: Educ. 184. Langford.

Fundamental problems, methods, and interpretations of general psychology.

259. EXPERIMENTAL PSYCHOLOGY. 3(3-0); I or II. Prerequisite: Educ. 184. Peterson.

Experiments in animal and sensorimotor learning; survey of the experimental literature; objective studies of the thought processes.

260. MENTAL TESTS. 3(3-0); I and II. Prerequisite: Educ. 184. Peterson.

Selection of the best tests for particular purposes at various age and school levels; methods of conducting and scoring tests and of utilizing test results.

261. TECHNIC OF MENTAL TESTS. 3(1-6); II. Prerequisite: Educ. 223 and 260 or concurrent registration. Peterson.

Methods of giving and scoring the principal standard group tests of intelligence and special abilities; choice of tests; tabulation and interpretation of scores.

* From the staff of the Department of Home Study.

265. **PSYCHOLOGY OF ADVERTISING AND SELLING.** 3(3-0); II. Prerequisite: Educ. 184. Peterson.

Experimental results of present advertising and selling practices.

266. **PSYCHOLOGY OF EXCEPTIONAL CHILDREN.** 3(3-0); II and SS. Prerequisite: Educ. 184. Alm.

Mental giftedness, mental subnormality, speech disorder, handedness, psychoneurotic and psychopathic personality trends and delinquency in children, with emphasis on causes, diagnostic tests, and behavioral adjustments.

269. **ANIMAL PSYCHOLOGY.** 3(3-0); I. Prerequisite: Educ. 184 and Zoöl. 105. Alm.

Animal behavior from the standpoint of sensory capacities, perception, adaptive behavior, learning, insight, and other functions. A survey of psychological apparatus and contributions to animal psychology.

270. **SOCIAL PSYCHOLOGY.** 3(3-0); II and SS. Prerequisite: Educ. 184. Langford.

The individual as a member of the group, including results of experiments upon and observations of the individual in the group situation.

273. **PSYCHOLOGY AND PERSONNEL MANAGEMENT.** 3(3-0); I. Prerequisite: Educ. 184. Peterson.

Scientific principles and procedures involved in employment; promotion, motivation of work, measurement and reward of achievements.

276. **PSYCHOLOGY OF ART.** 3(3-0); I, II, and SS. Prerequisite: Educ. 184. Langford.

Brief introduction to the philosophy of art; interpretation of psychological principles used in production and appreciation of art; review of experimental esthetics in pictorial art and music, with special emphasis on the former.

278. **PROBLEMS IN PSYCHOLOGY.** Credit to be arranged; I, II, and SS. Prerequisite: Consult instructor. Peterson, Alm, Langford.

279. **GUIDANCE PRACTICUM.** Credit to be arranged; I, II, and SS. Prerequisite: Educ. 212, 230, 260, and senior standing. Peterson, Williams, Strickland.

Field practice in areas of testing, measurement, organization, and counseling.

FOR GRADUATE CREDIT

373. **PSYCHOLOGY OF TEACHING AND LEARNING.** 3(3-0); I and SS. Prerequisite: Educ. 184. Peterson.

Analysis of the various forms of learning and of the conditions favorable to the rapid development and effective functioning of knowledge, skills, attitudes, and purposes.

376. **RESEARCH IN PSYCHOLOGY.** Credit to be arranged; I, II, and SS. Staff.

COURSES FOR FOUR-WEEK SUMMER SCHOOL**FOR GRADUATE AND UNDERGRADUATE CREDIT**

283. ADMINISTRATION AND SUPERVISION OF SECONDARY SCHOOLS. 2(10-0); four-week SS. Prerequisite: Educ. 210. Williams.

Problems of organization, administration, and supervision which cover the complete program of an administrative head of a school system in a small city. Designed for principals of rural high schools and superintendents of small city systems.

285. PROJECT METHOD IN AGRICULTURAL EDUCATION. 2(10-0); four-week SS. Prerequisite: Educ. 161. Davidson, Hall.

Intensive treatment of values, analysis, accounting, supervision, types, results, records, reports of projects; conducted on the problem basis.

287. ORGANIZATION AND CONDUCT OF GROUP ACTIVITIES. 2(10-0); four-week SS. Prerequisite: Educ. 241. Davidson, Brown.

Fundamentals and principles on which productive class projects should be organized, research and field work in class project study.

289. ADMINISTRATION AND SUPERVISION OF VOCATIONAL EDUCATION. 2(10-0); four-week SS. Prerequisite: Educ. 210. Williams.

Objectives, curriculum organization and content, administrative and supervisory problems from the viewpoint of the city superintendent; leadership needs which must be met in a school system which offers vocational education; problem basis of treatment is used.

291. COMMUNITY PROBLEMS IN VOCATIONAL AGRICULTURE. 2(10-0); four-week SS. Williams, Davidson.

Methods, organization, and conduct of club work, junior project work, class projects, and community projects in general; a course conducted on the problem basis and designed specifically for teachers, supervisors, and directors of agricultural work.

293. PROBLEMS IN EVENING SCHOOL CLASSES. 2(10-0); four-week SS. Prerequisite: Graduate standing and one year's experience teaching vocational agriculture. Davidson, Brown.

Problems of organization, curriculum, and methods of teaching evening schools and classes sponsored by the national vocational education act, designed for teachers in service.

295. ORGANIZATION PROBLEMS IN TEACHING FARM MECHANICS. 2(10-0); four-week SS. Prerequisite: Educ. 161. Davidson, Hall.

Analysis of the farm mechanics course of study; needs and interests of boys, learning difficulties, skills, and technical knowledge required, correlation with agriculture; application of laws of learning to the teaching process; determination of objectives.

FOR GRADUATE CREDIT

339. PROBLEMS IN PART-TIME CLASSES. 2(10-0); four-week SS. Prerequisite: Graduate standing and one year's experience teaching vocational agriculture. Davidson, Hall.

Organization, curriculum, and methods of teaching part-time classes, sponsored by national vocational education act, designed for teachers in service.

340. STATISTICAL METHODS IN AGRICULTURAL EDUCATION. 2(10-0); four-week SS. Prerequisite: Graduate standing. Moggie.

Fundamental statistical technics and interpretation of results; problems encountered in the organization, use, and expression of agricultural data.

English

Professor DAVIS
 Professor CONOVER
 Professor ROCKEY
 Professor MATTHEWS
 Professor RICE
 Professor FAULKNER
 Associate Professor STURMER
 Associate Professor ELCOCK
 Associate Professor BREEDEN

Associate Professor CALLAHAN
 Associate Professor PETERSON
 Assistant Professor GARVEY
 Assistant Professor PARKER
 Assistant Professor ABERLE
 Assistant Professor SCOTT
 Instructor LAMAN
 Instructor PEERY
 Instructor BAKER

COURSES IN ENGLISH LANGUAGE

FOR UNDERGRADUATE CREDIT

101. COLLEGE RHETORIC I. 3(3-0); I, II, and SS. Prerequisite: Three units of high-school English. Staff.

104. COLLEGE RHETORIC II. 3(3-0); I, II, and SS. Prerequisite: Engl. 101. Staff.

110. ENGINEERING ENGLISH. 2(2-0); I and II. Prerequisite: Engl. 104 and junior standing. Rockey, Matthews, Faulkner.

Technical descriptions, expositions of ideas, mechanisms, and processes; preparation of engineering talks, business letters, technical manuscripts, and records; brief review of composition.

122. COMMERCIAL CORRESPONDENCE. 3(3-0); I, II, and SS. Prerequisite: Engl. 104. Faulkner, Callahan.

Writing of adjustment, credit, collection, and sales letters; principles of effective commercial writing.

123. WRITTEN AND ORAL SALESMANSHIP. 3(3-0); I and II. Prerequisite: Engl. 104. Faulkner.

Writing of follow-up systems of sales letters; composition and display of circular material and catalogues; principles of advertising and psychology of selling; sales talks; actual sales practice with commercial concerns.

125. BUSINESS ENGLISH AND SALESMANSHIP. 3(3-0); II. Prerequisite: Engl. 104. Callahan.

Principles of business letter writing and salesmanship in the field of engineering; writing of business letters; preparation of oral and written sales material.

137. AGRICULTURAL ENGLISH. 3(3-0); I. Prerequisite: Engl. 104. Davis, Matthews, Faulkner.

Review of the composition essentials; business correspondence; bulletin writing; organization of short business talks; principles of farm advertising; problems that confront the county agent, the high-school teacher of agriculture, and the farm manager.

140. LITERATURE FROM THE READERS. 3(3-0); SS. Staff.

Planned to meet the needs of teachers of rural and grade schools.

FOR GRADUATE AND UNDERGRADUATE CREDIT

215. TECHNICAL REPORTS. 1(1-0); I and II. Prerequisite: Engl. 104. Peterson.

Organization and writing of technical reports, to accompany certain courses in engineering specified by heads of engineering departments.

219. ADVANCED COMPOSITION I. 3(3-0); I. Prerequisite: Engl. 104. Davis.

Subjects selected from the student's particular field of work; exposition of mechanisms, processes, and general expository writing. For graduate students practice is given in thesis organization and style.

220. ADVANCED COMPOSITION II. 3(3-0); II. Prerequisite: Engl. 104. Davis. Narrative writing both in its relation to the other forms of composition and as an independent form. Direction and criticism of thesis work is offered to graduate students.

223. ADVANCED PROBLEMS IN COMMERCIAL CORRESPONDENCE. 3(3-0); II. Prerequisite: Engl. 122. Faulkner.

Writing adjustment, credit, and collection letters; specialized study and writing sales and business promotion letters; composition of form paragraphs and circular letters; correspondence supervision.

228. SHORT STORY I. 3(3-0); I. Prerequisite: Engl. 172. Rice.

The world's best short stories; practice in writing sketches and short stories.

230. SHORT STORY II. 3(3-0); II. Prerequisite: Engl. 228. Rice.

Preparation of the short story for publication; the short story in America; types, characteristics, and tendencies.

232. ORAL ENGLISH. 3(3-0); I, II, and SS. Prerequisite: Engl. 104. Matthews, Faulkner.

Oral composition as applied to conversation and informal discussions; correction of errors in grammar, pronunciation, and idiom in everyday speech; a brief history of English sounds. Investigations in phonology for graduate students.

243. ADVANCED GRAMMAR. 3(3-0); I, II, and SS. Prerequisite: Engl. 104. Elcock, Aberle.

English etymology, inflections, syntax, and modern English and American usage. For graduate credit, reports on problems in modern English grammar.

245. HISTORY OF THE ENGLISH LANGUAGE. 1(1-0). Prerequisite: For undergraduates, consent of the instructor; for graduates, Engl. 181. Nock.

Nature of language and its development; English language and its use in the United States.

247. PROBLEMS IN ENGLISH. Credit to be arranged; I, II, and SS. Prerequisite: Engl. 104. Staff.

Work is offered in:

Chaucer and Shakespeare. Elcock, Sturmer.

Classical Epics. Faulkner.

Midwestern Literature. Callahan.

Modern Drama and Fiction. Conover.

Novel and Short Story. Rice, Breeden.

Old and Middle English. Matthews.

Romantic Revival. Rockey.

Sketch and Column Writing. Davis.

Technical Reports. Peterson.

COURSES IN ENGLISH LITERATURE

FOR UNDERGRADUATE CREDIT

172. ENGLISH LITERATURE. 3(3-0); I, II, and SS. Prerequisite: Engl. 104. Staff.

175. AMERICAN LITERATURE. 3(3-0); I, II, and SS. Prerequisite: Engl. 172. Staff.

181. HISTORY OF ENGLISH LITERATURE. 3(3-0); I, II, and SS. Prerequisite: Engl. 172. Staff.

FOR GRADUATE AND UNDERGRADUATE CREDIT

255. CULTURAL READING. 3(3-0); I and II. Not open to students who have credit in Engl. 172, 175, or 181. Prerequisite: Engl. 104. Matthews.

Reading course in English and American literature, designed for students in agriculture, engineering, and other technical curriculums.

260. CHAUCER. 3(3-0); I. Prerequisite: Engl. 172. Elcock.

262. MILTON AND THE PURITAN REVOLT. 3(3-0); II. Prerequisite: Engl. 172. Elcock.

268. MIDWESTERN LITERATURE. 3(3-0); I. Prerequisite: Engl. 172. Callahan.

Literature of the Middle West, particularly Kansas and the surrounding territory; its background, authors, and literature since the close of the Civil War.

271. ENGLISH BIBLE. 3(3-0); I, II, and SS. Prerequisite: Engl. 172. Conover, Rockey.

273. SHAKESPEAREAN DRAMA I. 3(3-0); I. Prerequisite: Engl. 172. Conover, Sturmer.

Life and times of Shakespeare; five of Shakespeare's tragedies: Macbeth or Othello, Hamlet, King Lear, Romeo and Juliet, and Coriolanus.

274. SHAKESPEAREAN DRAMA II. 3(3-0); II. Prerequisite: Engl. 172. Conover, Sturmer.

Five of Shakespeare's comedies: The Winter's Tale, As You Like It, Twelfth Night, Cymbeline, and The Tempest; collateral reading of earlier, contemporary, and Shakespearean comedy; present-day criticism of Shakespeare.

276. ENGLISH ESSAYISTS. 3(3-0); II. Prerequisite: Engl. 172. Davis, Conover.

Among the authors discussed are Swift, Addison, Steele, Johnson, Burke, Lamb, Hazlitt, DeQuincey, Wilson, Newman, Ruskin, Spencer, Huxley, Pater, and Wilde.

278. WORDSWORTH, SHELLEY, AND KEATS. 3(3-0); I. Prerequisite: Engl. 172. Rockey.

280. WORLD CLASSICS I. 3(3-0); I. Prerequisite: Engl. 172. Faulkner.

Literary masterpieces (in translation) of early times, particularly Greek and Latin classics.

281. WORLD CLASSICS II. 3(3-0); II. Prerequisite: Engl. 172. Faulkner.

Literary masterpieces (in translation) of Western Europe, particularly Italian, Spanish, French, and German writings.

283. CONTEMPORARY FICTION. 3(3-0); I and SS. Prerequisite: Engl. 172. Conover, Scott.

The more important British and American fiction since Hardy.

284. CONTEMPORARY DRAMA. 3(3-0); II. Prerequisite: Engl. 172. Conover.

Development of the drama since Ibsen; types of modern drama; works of important English, Irish, and American dramatists.

286. NOVEL I. 3(3-0); I. Prerequisite: Engl. 172. Breeden.

287. NOVEL II. 3(3-0); II. Prerequisite: Engl. 172. Breeden.

288. ENGLISH SURVEY I. 2(2-0); I. Prerequisite: Engl. 172. Matthews.

History of English literature from Anglo-Saxon times down to the close of the Elizabethan period.

290. ENGLISH SURVEY II. 2(2-0); II. Prerequisite: Engl. 172. Matthews.

Rise of Puritanism and its influence on English literature; classical movement; romanticism and its development.

293. BROWNING AND TENNYSON. 3(3-0); II. Prerequisite: Engl. 172. Rockey.

295. MODERN THOUGHT IN RECENT LITERATURE. 3(3-0); I and II. Prerequisite: Engl. 175. Elcock.

Trends in thought, of especial interest to women, in British and American literature since 1914.

297. CONTEMPORARY POETRY. 3(3-0); II and SS. Prerequisite: Engl. 172. Davis, Conover.

FOR GRADUATE CREDIT

305. RESEARCH IN ENGLISH. Credit to be arranged; I, II, and SS. Prerequisite: At least two courses in this department. Staff.

Work is offered in:

Chaucer and Shakespeare. Elcock, Sturmer.

Classical Epics. Faulkner.

Midwestern Literature. Callahan.

Modern Drama and Fiction. Conover.

Novel and Short Story. Rice, Breeden.

Old and Middle English. Matthews.

Romantic Revival. Rockey.

Sketch and Column Writing. Davis.

Technical Reports. Peterson.

Entomology

Professor DEAN
Professor SMITH
Professor PARKER
Associate Professor PAINTER
Assistant Professor BRYSON

Assistant Professor WILBUR
Assistant LAMERSON
Assistant FRITZ
Graduate Assistant GRUNDMANN
Graduate Assistant SCHWITZGEBEL

FOR UNDERGRADUATE CREDIT

101. GENERAL ENTOMOLOGY. 3(3-0) or 4(3-3); I and II. Smith.

Insects and related arthropods in their relations to plants and animals, including man. Charge, \$1. Students who desire to use this course as a prerequisite to other courses in entomology should register for the laboratory, which is the same as for Ent. 203.

117. MILLING ENTOMOLOGY. 2(2-0); I. Dean.

Insect pests of flour mills, elevators, granaries, warehouses, and bakeries, and standard methods of dealing with them; inspection trips to flour mills and warehouses.

FOR GRADUATE AND UNDERGRADUATE CREDIT

201. HORTICULTURAL ENTOMOLOGY. 2(2-0); I. Prerequisite: Ent. 101 (4 hours) or 203. Parker.

Injurious insects of the vegetable garden, shade trees, flowering and greenhouse plants, deciduous and citrus orchards; methods of control; insecticides.

203. GENERAL ECONOMIC ENTOMOLOGY. 3(2-3); I and II. Prerequisite: Zoöl. 105 or Bot. 101 and 105; when taken for graduate credit, Zoöl. 105. Staff.

Elementary anatomy and physiology of insects and the general principles upon which the control of these economic forms is based. Charge, \$1.50.

206. STAPLE CROP ENTOMOLOGY. 3(2-3); II. Prerequisite: Ent. 101 (4 hours) or 203, and Zoöl. 105. Dean, Wilbur.

Important economic insects of field crops, and methods to be used in dealing with them. Charge, \$1.50.

208. GENERAL APICULTURE. 3(2-3); II. Prerequisite: Ent. 101 (4 hours) or 203. Parker.

Structure, life history, general behavior, activities, and products of the honeybee; practice bee keeping; bee diseases and their eradication and control; relation of bees to agriculture and horticulture. Charge, \$1.

211. EXTERNAL INSECT MORPHOLOGY. 3(1-6); I. Prerequisite: Ent. 203. Wilbur.

External anatomy of representative insects belonging to a number of orders; structure of the exoskeleton; a basis for taxonomy and hexapod morphology. Charge, \$1.50.

212. INTERNAL INSECT MORPHOLOGY. 3(0-9); II. Prerequisite: Ent. 211. Painter.

Internal anatomy of representative insects; plan and structure of the internal systems. Charge, \$1.

216. PRINCIPLES OF TAXONOMY. 1(1-0); II. Prerequisite: Ent. 203 and 211. Painter.

217. TAXONOMY OF INSECTS I. 2(0-6); II. Prerequisite: Ent. 203, 211, and 216 or concurrent registration. Painter.

Determination of major order of insects; taxonomic literature; use of catalogues. Charge, \$1.50.

218. TAXONOMY OF INSECTS II. 3(0-9); II. Prerequisite: Ent. 217. Painter.

Intensive study of a selected group of insects. Charge, \$1.50.

221. ADVANCED GENERAL ENTOMOLOGY. 3(3-0); II. Prerequisite: Ent. 101 (4 hours) or 203, and Zoöl. 105. Wilbur.

Broad biological aspects of the subject; understanding of the relation of insects to the complex environmental factors; the various subdivisions of entomology.

226. MEDICAL ENTOMOLOGY. 3(2-3); I. Prerequisite: Ent. 101 (4 hours) or 203, and Zoöl. 105. Smith.

Insects and other arthropods as parasites and disseminators of disease; life cycles, biology, and control of insect parasites. Charge, \$1.50.

229. ADVANCED APICULTURE I. 3(2-3); I and II. Prerequisite: Ent. 208. Parker.

Requeening; wintering; honey extraction and marketing. Charge, \$1.

230. ADVANCED APICULTURE II. 3(2-3); I and II. Prerequisite: Ent. 208. Parker.

Honey plant and beekeeping regions; swarm control and colony division; queen rearing and introduction; honey production. Charge, \$1.

231. ENTOMOLOGICAL AND ZOÖLOGICAL LITERATURE. 2(2-0); I. Prerequisite: Ent. 101 or 203, and Zoöl. 105. Smith.

All advanced students of entomology and zoölogy are expected to take this course.

233. INSECT ECOLOGY. 2(2-0); II. Prerequisite: Ent. 101 (4 hours) or 203, and Zoöl. 105. Bryson.

Influence of light, temperature, pressure, moisture, evaporation, air movements, food relations, biotic and other conditions of soil and atmosphere.

234. INSECT CONTROL BY HOST PLANT RESISTANCE. 2(2-0); I. Prerequisite: An. Husb. 221 and Ent. 101 (4 hours) or 203. Offered in 1942-'43 and alternate years thereafter. Painter.

Resistance of varieties of crop plants to insect attack and their utilization in insect control; insect habits and physiology in relation to the cause of resistance and methods of breeding resistant varieties of crops.

236. ZOÖLOGY AND ENTOMOLOGY SEMINAR. 1(2-0); I and II. Prerequisite: Consult seminar committee.

238. PROBLEMS IN ENTOMOLOGY. Credit to be arranged; I, II, and SS. Prerequisite: Ent. 208 or 217. Staff.

Work is offered in:

Apiculture. Parker.

Economic Entomology. Staff.

Taxonomy and Morphology. Smith, Painter, Wilbur.

240. INSECT PHYSIOLOGY. 3(3-0); II. Prerequisite: Ent. 211 and Zoöl. 222. Parker.

Physiology of the cell, respiration, metabolism, reproduction, muscular action, nervous responses, sense organs and senses, circulation, glandular system, metamorphosis, and effects of insecticides.

FOR GRADUATE CREDIT

316. RESEARCH IN ENTOMOLOGY. Credit to be arranged; I, II, and SS. Prerequisite: At least two courses in this department. Staff.

Work is offered in:

Apiculture. Parker.

Economic Entomology. Staff.

Medical Entomology. Smith.

Taxonomy and Morphology. Smith, Painter, Wilbur.

Geology

Professor SPERRY
Assistant Professor BYRNE

Instructor CHELIKOWSKY
Graduate Assistant MCNEAL

FOR UNDERGRADUATE CREDIT

102. ENGINEERING GEOLOGY. 4(3-3); I and II. Prerequisite: Chem. 110 or equivalent. Sperry, Chelikowsky.

General principles of geology and their application to engineering problems. Charge, \$1.50.

103. GENERAL GEOLOGY. 3(3-0); I, II, and SS. Staff.

Structural and dynamic features of the earth; the rock-forming minerals; the rocks and their decay; a short history of the earth. Three or four field trips during the semester. Charge, \$1.50.

110. PHYSIOGRAPHIC GEOLOGY. 3(3-0); II and SS. Prerequisite: Geol. 102 or 103. Sperry.

Topography of the earth and forces that have produced it. Origin of the topographic features of North America. Charge, \$1.50.

140. PRINCIPLES OF GEOGRAPHY. 3(3-0); II and SS. Sperry, Byrne.

Introductory course in college geography, relationships between human activities and environment. Charge, \$1.50.

FOR GRADUATE AND UNDERGRADUATE CREDIT

203. HISTORICAL GEOLOGY. 4(3-3); I and II. Prerequisite: Geol. 102 or 103. Sperry, Byrne.

Physical and biological events through which the earth has gone. Charge, \$1.50.

207. ECONOMIC GEOLOGY. 4(3-3); II. Prerequisite: Chem. 110 and Geol. 203. Sperry.

Origin and mode of occurrence of nonmetallic minerals, including coal and petroleum, and of metallic mineral deposits. Charge, \$1.50.

209. CRYSTALLOGRAPHY AND MINERALOGY. 4(2-6); I. Prerequisite: Chem. 110. Sperry, Chelikowsky. Charge, \$1.50.

210. FIELD GEOLOGY. SS. Credit to depend upon the amount of work done. Opportunity is offered students to do field work in the Rocky Mountains. Students interested should consult Mr. Sperry.

215. STRUCTURAL GEOLOGY. 4(3-3); II. Prerequisite: Geol. 203 and 209. Sperry, Chelikowsky.

Mechanics of the earth's crust, interrelation of structures found in the earth. Charge, \$1.50.

220. INVERTEBRATE PALEONTOLOGY. 4(3-3); I. Prerequisite: Geol. 203. Byrne.

Evolution and geologic history of the invertebrate animals. Charge, \$1.50.

223. PETROLEUM GEOLOGY. 4(3-3); II. Prerequisite: Geol. 203. Chelikowsky.

Origin, migration, and accumulation of petroleum, stratigraphy and structure of important fields. Charge, \$1.50.

224. STRATIGRAPHIC GEOLOGY. 4(3-3); I. Prerequisite: Geol. 203. Byrne.

Description, classification, and correlation of stratigraphic units, with emphasis on those of Kansas. Charge, \$1.50.

230. FIELD METHODS IN GEOLOGY. 3(1-6); I. Prerequisite: Geol. 203. Byrne.

Construction of geologic maps, including a complete map of the Manhattan area; application of field methods to the problems of geology. Charge, \$1.50.

235. OPTICAL MINERALOGY. 4(2-6); I. Prerequisite: Geol. 209. Sperry, Chelikowsky.

Polarizing microscope used to identify crystal fragments, powders, sediments, and thin sections; optical methods of microscopic research. Charge, \$1.50.

236. SEDIMENTARY PETROLOGY. 5(3-6); I. Prerequisite: Geol. 203 and 209. Sperry.

Mineralogy and origin of soils and other sediments, their transportation, deposition, and transformation. Charge, \$1.50.

241. GEOLOGIC LITERATURE. 3(3-0); I. Prerequisite: Geol. 203 and 209. Staff.

Current geologic literature and history of geology. Charge, \$1.50.

255. VERTEBRATE PALEONTOLOGY. 3(3-0); II. Prerequisite: Geol. 203 or ten hours of zoölogy. Byrne.

Evolution, geologic history, and classification of the vertebrates. Charge, \$1.50.

256. MICROPALAEONTOLOGY. 3(1-6); I. Prerequisite: Geol. 203 and junior standing. Byrne.

Preparation, identification, and use of microscopic fossils. Charge, \$1.50.

275. PROBLEMS IN GEOLOGY. Credit to be arranged; I, II, and SS. Prerequisite: Geol. 203 and 209. Staff.

Work is offered in:

Mineralogy. Chelikowsky.

Paleontology. Byrne.

Sedimentary Petrology. Sperry.

FOR GRADUATE CREDIT

301. RESEARCH IN GEOLOGY. Credit to be arranged; I, II, and SS. Prerequisite: At least two courses in this department. Staff.

Work is offered in:

Mineralogy. Chelikowsky.

Paleontology. Byrne.

Sedimentary Petrology. Sperry.



History and Government

Professor PRICE
 Professor ILES
 Professor JAMES
 Professor CORRELL

Professor PARRISH
 Professor WILLIAMS
 Associate Professor SAGESER
 Assistant Professor ALSOP

COURSES IN HISTORY**FOR UNDERGRADUATE CREDIT**

101. ANCIENT CIVILIZATIONS. 3(3-0); I and SS. Parrish.

Early western culture and civilization, from its beginning to the decline of the Roman empire.

102. MEDIEVAL EUROPE. 3(3-0); II and SS. Parrish.

General history of Europe from the decline of the Roman empire to the discovery of the new world.

104. AMERICAN HISTORY SURVEY. 3(3-0); I and SS. Not open to students who have credit in Hist. 105, 201, or 202. Price.

American history and institutions, combining constitutional, political, diplomatic, economic, and social phases of the growth of our republic, with background and interpretation. Charge, \$1.

105. AMERICAN INDUSTRIAL HISTORY. 3(3-0); I, II, and SS. Not open to students who have credit in Hist. 104, 201, 202, or 203. Staff.

History of American agriculture, manufactures, and commerce, with related activities from their colonial beginnings to the present; European developments, as a side light on American history; growth of our national industrial organization and its present-day aspects.

110. HISTORY OF COMMERCE AND INDUSTRY. 3(3-0); I. Sageser.

Evolution of industry and commerce from primitive beginnings to present-day organization. Economic survey of world history, with special stress on the modern period.

115. MODERN EUROPE I. 3(3-0); I. Alsop.

Development of Europe from 1500 to 1815, with special study of the Commercial Revolution; the Reformation; political democracy; French Revolution; and the Napoleonic era.

121. ENGLISH HISTORY. 3(3-0); I, II, and SS. James.

Political history of England; constitutional growth, and development of the British Commonwealth.

126. CURRENT HISTORY. 1(1-0); I, II, and SS. May not be taken more than four semesters for credit. Staff.

FOR GRADUATE AND UNDERGRADUATE CREDIT

201. AMERICAN HISTORY I. 3(3-0); I, II, and SS. Prerequisite: When taken for graduate credit, six hours of college history. Price.

Beginning of American nationality and democracy through the War of 1812, including our industrial, constitutional, and political development with the European background. Charge, \$1.

202. AMERICAN HISTORY II. 3(3-0); I, II, and SS. Prerequisite: When taken for graduate credit, six hours of college history. Price.

Western expansion and sectionalism; industrial conditions, political and constitutional issues, and leaders from 1812 to 1876. Charge, \$1.

203. AMERICAN HISTORY III. 3(3-0); I, II, and SS. Prerequisite: When taken for graduate credit, six hours of college history. Price, Iles, Sageser.

Recent and contemporary problems in American history and government from the Civil War to the present; the new industrial nation. Charge, \$1.

205. AMERICAN AGRICULTURAL HISTORY. 2(2-0); I and SS. Prerequisite: When taken for graduate credit, six hours of college history. Sageser.

European background and Indian beginnings; development during the colonial period; the westward movement into the prairie regions of the Mississippi valley, with the distinctive American developments in methods, livestock, and farm machinery.

206. AMERICAN POLITICAL PARTIES. 2(2-0); I. Prerequisite: When taken for graduate credit, six hours of college history. Iles.

Origin, development, leaders, and functions of political parties in America; issues and results of presidential elections; growth of nationality and development of self-government with special reference to present tendencies.

208. LATIN AMERICA. 3(3-0); I, II, and SS. Prerequisite: When taken for graduate credit, six hours of college history. James.

Spanish expansion movement into the New World; development of Hispanic institutions therein; movement for independence and problems of the republican period.

223. MODERN EUROPE II. 3(3-0); I, II, and SS. Prerequisite: When taken for graduate credit, Hist. 115 or 121. Parrish.

General history of Europe from 1815 to the present, with emphasis upon the social and political developments, including international relations.

225. HISTORY OF THE HOME. 3(3-0); II. Prerequisite: When taken for graduate credit, six hours of college history. Alsop.

History of marriage and the family from primitive times to the present; marriage customs, position of women, child training; the modern home and recent changes and tendencies.

226. BRITISH EMPIRE. 2(2-0); II and SS. Prerequisite: When taken for graduate credit, six hours of college history. James.

British maritime expansion movement; founding of colonies overseas; growth of self-governing dominions and the British Commonwealth.

228. AMERICAN DIPLOMATIC HISTORY. 2(2-0); I and SS. Prerequisite: When taken for graduate credit, six hours of college history. Price, James.

Causes and effects of the coming of the foreigner; changes as to the character of the immigrants; conditions in Europe and in America that affect the number and quality of immigrants; survey of our diplomatic history.

231. HISTORY OF RELIGIONS. 2(2-0); I and SS. Prerequisite: When taken for graduate credit, six hours of college history. Parrish.

Historical survey of the world's living religions; relation of each religion to its natural and cultural environment; dominating religious concepts, leaders, and historic developments which characterize each.

234. TWENTIETH CENTURY EUROPE. 3(3-0); I, II, and SS. Prerequisite: When taken for graduate credit, Hist. 223 or equivalent. Correll.

236. FAR EAST. 3(3-0); II and SS. Prerequisite: When taken for graduate credit, six hours of college history. Parrish.

Chinese culture and civilization from the beginning to the present day; achievements in the classical period; contacts with outsiders since 1840; new role of China and Japan in world commerce, trade, and politics.

250. SEMINAR IN HISTORY AND GOVERNMENT. 2 to 5 hours; I, II, and SS. Prerequisite: Six hours of college history and consent of instructor. Staff.

270. PROBLEMS IN HISTORY AND GOVERNMENT. Credit to be arranged; I, II, and SS. Prerequisite: When taken for graduate credit, six hours of history and government. Staff.

Work is offered in:

American History. Price, Sageser.

English History. James.

European History. Parrish.

Government and Law. Iles, Williams.

20th Century Europe. Correll.

290. HISTORICAL METHOD AND BIBLIOGRAPHY. 2(2-0); I and SS. Prerequisite: When taken for graduate credit, six hours of college history. Required of graduate majors in history. Sageser.

Survey of historical works; methods in writing history, historical articles, or theses.

FOR GRADUATE CREDIT

301. RESEARCH IN HISTORY. Credit to be arranged; I, II, and SS. Prerequisite: Hist. 290 or concurrent registration, and at least two courses in this department. Staff.

Work is offered in:

American History. Price, Sageser.

English History. James.

European History. Parrish.

20th Century Europe. Correll.

COURSES IN GOVERNMENT

FOR UNDERGRADUATE CREDIT

151. AMERICAN GOVERNMENT. 3(3-0); I, II, and SS. Iles.

State and national government with emphasis on constitutional principles and on functional activity.

152. AMERICAN NATIONAL GOVERNMENT. 3(3-0); I. Not open to students who have credit in Hist. 151. Iles.

Mechanism, functions, and control of the government of the United States. With Hist. 153, this course affords a comprehensive study of American national, state, and local government.

153. AMERICAN STATE GOVERNMENT. 3(3-0); II. Not open to students who have credit in Hist. 151. Iles.

State and local government with special attention to functions and problems.

163. BUSINESS LAW I. 3(3-0); I. Williams.

Contracts, agency, and sales.

164. BUSINESS LAW II. 3(3-0); II. Williams.

Negotiable instruments, partnership, and corporations.

167. LAW FOR ENGINEERS 2(2-0); I and II. Williams.

Case study of such rules of law as will prove most useful to engineers and architects; law of contracts.

175. FARM LAW. 2(2-0); I. Offered in 1941-'42 and alternate years thereafter. Not open to students who have credit in Hist. 276. Williams.

Law, particularly real property, deeds, mortgages, relation of landlord and tenant, developed through study of Kansas cases.

FOR GRADUATE AND UNDERGRADUATE CREDIT

252. COMPARATIVE GOVERNMENT. 2(2-0); I or II, and SS. Prerequisite: Hist. 151 or equivalent. Iles, Williams.

Principal democracies, including comparisons with the government of the United States; principal dictatorships of Europe.

253. CITY GOVERNMENT. 3(3-0); II. Prerequisite: Junior standing; when taken for graduate credit, six hours of history and government. Iles, Williams.

Government and administration of American cities.

256. INTERNATIONAL LAW. 2(2-0); I. James.

Nature and scope of international law; factors contributing to its growth; tendencies in the development of the law today.

260. GOVERNMENT AND BUSINESS. 2(2-0); II. Prerequisite: When taken for graduate credit, Hist. 151, 163, 167, 175, or 276. Williams.

Constitutional limitations upon the powers of government; laws which affect economic interests such as trade regulations, taxation, labor legislation; legislation for the benefit of debtors, and emergency legislation.

276. LAND LAW. 2(2-0); I. Planned to supplement Econ. 218. Offered in 1942-'43 and alternate years thereafter. Not open to students who have credit in Hist. 175. Williams.

Interests and rights in land; methods by which such interests and rights are acquired and protected; relation of landlord and tenant and that of mortgagor and mortgagee, developed by study of Kansas cases.

FOR GRADUATE CREDIT

351. RESEARCH IN GOVERNMENT. Credit to be arranged; I, II, and SS. Prerequisite: At least two courses in this department. Staff.

Work is offered in:

Government. Iles.

Law. Williams.

Industrial Journalism and Printing

Professor THACKREY
Professor KEITH
Associate Professor AMOS
Associate Professor HOSTETTER

Associate Professor LASHBROOK
Assistant Professor KRIEGHBAUM
Instructor DITTEMORE
Instructor ROCKWELL

All students enrolled in the Curriculum in Industrial Journalism and all other students who take courses designated "Journalism fee charged," pay a charge of \$1.50 a semester. Only one journalism fee is charged a student in a semester.

To be classified as "professionals," students in the Curriculum in Industrial Journalism must attain a typing speed of thirty words a minute.

COURSES IN PRINTING

FOR UNDERGRADUATE CREDIT

101. PRINCIPLES OF TYPOGRAPHY. 3(2-3); I and II. Prerequisite: Ind. Jour. 140 or sophomore classification. Amos.

History and art of printing; practice in setting straight matter; typography of advertisements and head display; principles of effective makeup. Journalism fee charged.

108. AD COMPOSITION I. 2(0-6); I and II. Prerequisite: Ind. Jour. 101. Amos.

Principles of display and design as applied to advertisements. Journalism fee charged.

111. AD COMPOSITION II. 2(0-6); I and II. Prerequisite: Ind. Jour. 108. Amos.

Continuation of Ind. Jour. 108. Journalism fee charged.

112. AD COMPOSITION III. 2(0-6); I and II. Prerequisite: Ind. Jour. 111. Amos.

Continuation of Ind. Jour. 111. Journalism fee charged.

114. JOB COMPOSITION I. 2(0-6); I and II. Prerequisite: Ind. Jour. 101. Amos.

Differences in requirements for job composition and ad composition. Journalism fee charged.

118. JOB COMPOSITION II. 2(0-6); I and II. Prerequisite: Ind. Jour. 114. Amos.

Color work, tabular forms, and other job work. Journalism fee charged.

120. JOB COMPOSITION III. 2(0-6); I and II. Prerequisite: Ind. Jour. 118. Amos.

Continuation of Ind. Jour. 118. Journalism fee charged.

122. PRESSWORK I. 2(0-6); I and II. Prerequisite: Ind. Jour. 108 or 114. Amos.

Practical platen presswork under ordinary printing-office conditions. Journalism fee charged.

126. PRESSWORK II. 2(0-6); I and II. Prerequisite: Ind. Jour. 122. Amos.

Continuation of Ind. Jour. 122; mixing inks; color work. Journalism fee charged.

COURSES IN INDUSTRIAL JOURNALISM

FOR UNDERGRADUATE CREDIT

144. NEWS PICTURES. 2(0-6); I, II, and SS. Prerequisite: Phys. 151 and consent of instructor. Lashbrook.

Special work in production of news pictures, and writing of picture captions. Journalism fee charged.

150. ELEMENTARY JOURNALISM. 2(2-0); I, II, and SS. Prerequisite: Sophomore standing or consent of instructor. Hostetter, Kriehbaum.

Methods of obtaining news of various types, the writing of the lead, and the general styles of the news story. Journalism fee charged.

153. KANSAS STATE COLLEGIAN JOURNALISM. 1(0-3); I, II, and SS. Prerequisite: Consent of instructor. Lashbrook, Kriehbaum.

Gathering and writing of news, or advertising practice, on *The Kansas State Collegian* under the supervision of the instructor.

157. INDUSTRIAL WRITING. 3(1-6); I and II. Prerequisite: Ind. Jour. 150. Hostetter, Kriehbaum.

Principles of journalism in the treatment of industrial subjects. Journalism fee charged.

160. AGRICULTURAL JOURNALISM. 3(2-3); I and II. Lashbrook, Dittmore.

Principles of news writing as applied to agriculture. Journalism fee charged.

162. RADIO WRITING. 2(2-0); I, II, and SS. Prerequisite: Ind. Jour. 150. Lashbrook.

Preparation and broadcasting of radio news.

166. EDITING. 2(0-6); I, II, and SS. Prerequisite: Ind. Jour. 157. Lashbrook, Kriehbaum. Journalism fee charged.

167. NEWSPAPER AND MAGAZINE WRITING. 2(2-0); I, II, and SS. Prerequisite: Ind. Jour. 157 and consent of instructor. Kriehbaum.

Feature articles; underlying principles applied to writing on agricultural and other industrial subjects. Journalism fee charged.

170. JOURNALISM FOR WOMEN. 3(3-0); II and SS. Prerequisite: Ind. Jour. 167. Hostetter.

A course for women students in news and feature writing for women's pages and women's magazines and consideration of specialized fields for the woman writer. Journalism fee charged.

178. PRINCIPLES OF ADVERTISING. 4(4-0); I and II. Prerequisite: For students in Curriculum in Industrial Journalism, Ind. Jour. 164; for students in the curriculums in Business Administration, Engl. 123. Keith.

Study of goods to be advertised, analysis of the market, psychology of advertising, preparation of advertising copy. Journalism fee charged.

179. RADIO ADVERTISING. 3(3-0); I, II, and SS. Prerequisite: For students in Curriculum in Industrial Journalism, Ind. Jour. 178; for other students, Pub. Spk. 162. Summers.

Broadcasting station management, principles and practice in radio advertising.

180. BROADCASTING STATION PRACTICE. 1(0-3); I, II, and SS. Prerequisite: Ind. Jour. 162. Thackrey.

News gathering, writing, and broadcasting over radio station KSAC.

181. RURAL PRESS. 2(2-0); I and II. Prerequisite: Ind. Jour. 150. Lashbrook.

Community newspapers; emphasis on presentation of agriculture and rural life. Journalism fee charged.

183. PUBLIC INFORMATION METHODS. 2(2-0); I. Prerequisite: Ind. Jour. 150. Lashbrook. Journalism fee charged.

199. INDUSTRIAL JOURNALISM LECTURE. R; I and II.

Addresses by practicing newspaper workers and members of the department. Required of all students in the Curriculum in Industrial Journalism. Journalism fee charged.

FOR GRADUATE AND UNDERGRADUATE CREDIT

228. ADVANCED REPORTING. 3(2-3); II and SS. Prerequisite: For graduate credit, Ind. Jour. 157. Lashbrook, Krieghbaum.

Work of the reporter of news of local, state, and national governments; industrial and scientific news. Journalism fee charged.

229. SUPERVISION OF SCHOOL PUBLICATIONS. 2(2-0); II and SS. Prerequisite: For graduate credit, four hours of journalism. Journalism fee charged.

230. FORMATION OF PUBLIC OPINION. 3(3-0); I and SS. Prerequisite: Junior standing and consent of instructor; for graduate credit, eight hours of social science. Thackrey.

Role of the press and communication agencies in formation of public opinion, work of propagandists and pressure groups. Journalism fee charged.

252. LANGUAGE OF JOURNALISM. 2(2-0); II. Prerequisite: Ind. Jour. 157 or consent of instructor. Nock.

Nature and development of the English language, uses of language, words and meaning, jargon. Journalism fee charged.

253. CONTEMPORARY AFFAIRS I. 3(3-0); I. Prerequisite: Ind. Jour. 164 or consent of instructor. Concurrent registration with Hist. 126 not permitted. Thackrey, Hostetter, Krieghbaum.

Contemporary news events and their background. Journalism fee charged.

255. CONTEMPORARY AFFAIRS II. 3(3-0); II. Prerequisite: For students in Curriculum in Industrial Journalism, Ind. Jour. 253 and consent of instructor; for others, Econ. 101. Thackrey.

Correlation and unification of various subjects previously pursued in college; contemporary development and contemporary figures in science, the arts, and philosophy. Journalism fee charged.

265. MATERIALS OF JOURNALISM. 2(2-0); I. Prerequisite: Ind. Jour. 166. Hostetter.

Principal newspapers and magazines; accuracy and adequacy of news reports and other published matter; materials handled by the publications; methods of treatment; character of editorial comment.

270. ADVANCED MAGAZINE WRITING AND EDITING. 2(2-0); I, II, and SS. Prerequisite: For students in Curriculum in Industrial Journalism, Ind. Jour. 167; for others, Engl. 104 and consent of department. Thackrey.

Content of the course varied to suit the needs and desires of the students, emphasis upon such types of magazine writing as members of the class wish to practice. Journalism fee charged.

273. HISTORY AND ETHICS OF JOURNALISM. 3(3-0); I. Prerequisite: Ind. Jour. 255. Hostetter.

278. JOURNALISM SURVEYS. 2(0-6); II. Prerequisite: Ind. Jour. 166. Hostetter.

Investigation of the periodical reading matter of communities; tabulation of information obtained; relation of the reading matter to the industrial, economic, social and moral life of the communities.

282. COLUMN CONDUCTING. 2(2-0); II. Prerequisite: Engl. 104. Davis.

287. CURRENT PERIODICALS. 3(3-0); II. Prerequisite: Engl. 104. Hostetter.

288. TRADE AND TECHNICAL WRITING. 2(2-0); II. Prerequisite: Ind. Jour. 178.

Theory and practice writing which pertains to the special interests of industry, trade, and business.

289. NEWSPAPER MANAGEMENT. 2(2-0); I. Prerequisite: Ind. Jour. 178.

Relation of departments of a newspaper to one another, costs, statistics, advertising news, and business methods in publishing.

295. PROBLEMS IN INDUSTRIAL JOURNALISM. Credit to be arranged; I, II, and SS. Prerequisite: consent of instructor. Staff.

Work is offered in:

Advertising. Keith.

Agriculture. Lashbrook.

Contemporary affairs. Krieghbaum.

Current newspapers and periodicals. Hostetter.

High-school journalism. Thackrey.

History and ethics. Hostetter.

Home economics. Hostetter.

News photography. Lashbrook.

Radio. Lashbrook.

Science. Krieghbaum.

FOR GRADUATE CREDIT

351. RESEARCH IN INDUSTRIAL JOURNALISM. Credit to be arranged; I, II, and SS. Prerequisite: At least two courses in this department. Staff.

Work is offered in:

Advertising. Keith.

Agriculture. Lashbrook.

Contemporary affairs. Krieghbaum.

Current newspapers and periodicals. Hostetter.

High-school journalism. Thackrey.

History and ethics. Hostetter.

Home economics. Hostetter.

News photography. Lashbrook.

Radio. Lashbrook.

Science. Krieghbaum.

Library Economics

Associate Librarian DERBY
Reference Librarian DAVIS

Assistant Reference Librarian SWENSON

FOR UNDERGRADUATE CREDIT

101. LIBRARY METHODS. 1(1-0); I and II. Derby, Davis, Swenson.

Mathematics

Professor STRATTON
 Professor REMICK
 Professor WHITE
 Associate Professor HYDE
 Associate Professor LEWIS
 Associate Professor MUNRO
 Associate Professor SIGLEY
 Assistant Professor JAMES

Assistant Professor MOSSMAN
 Assistant Professor HOLROYD
 Assistant Professor DAUGHERTY
 Assistant Professor FRYER
 Instructor BUIKSTRA
 Instructor FAULKNER
 Instructor CARLSON

FOR UNDERGRADUATE CREDIT

101. PLANE TRIGONOMETRY. 3(3-0); I, II, and SS. Prerequisite: Plane geometry and one and one-half units of high-school algebra. Staff.

102. SOLID GEOMETRY. 2(2-0); I, II, and SS. Prerequisite: Plane geometry and one unit of high-school algebra. Staff.

104. COLLEGE ALGEBRA. 3(3-0); I, II, and SS. Prerequisite: Plane geometry and one and one-half units of high-school algebra. Staff.

107. COLLEGE ALGEBRA A. 5(5-0); I, II, and SS. Prerequisite: Plane geometry and one unit of high-school algebra. Staff.

The third semester of high-school algebra and the chief content of Math. 104.

108. GENERAL ALGEBRA. 5(5-0); I, II, and SS. Prerequisite: Plane geometry and one unit of high-school algebra. Not open to students with credit in Math. 104 or 107. For students in the curriculums in Business Administration and Agricultural Administration. Staff.

110. PLANE ANALYTIC GEOMETRY. 4(4-0); I, II, and SS. Prerequisite: Math. 101 and 104 or 107. Staff.

114. CALCULUS I. 4(4-0); I, II, and SS. Prerequisite: Math. 110. Staff.

115. CALCULUS II. 4(4-0); I, II, and SS. Prerequisite: Math. 114. Staff.

121. DIFFERENTIAL EQUATIONS FOR ENGINEERS. 2(2-0); I, II, and SS. Prerequisite: Math. 115. Stratton, White, Sigley.

126. ELEMENTS OF STATISTICS. 3(3-0); I and II. Not open to students who have credit in Educ. 223. White.

150. MATHEMATICS OF FINANCE. 3(3-0); II. Prerequisite: Econ. 133 and Math. 104 or 107. James.

Interest, annuities, sinking funds, amortization, valuation of bonds, depreciation, building and loan, and life insurance.

FOR GRADUATE AND UNDERGRADUATE CREDIT

201. DIFFERENTIAL EQUATIONS. 3(3-0); I. Prerequisite: Math. 115. Stratton, White, Munro.

202. HIGHER ALGEBRA. 3(3-0); I, II, and SS. Prerequisite: Math. 115. Stratton, Munro, Sigley.

Material selected from Bocher's Higher Algebra.

203. STATISTICS. 3(3-0); II. Prerequisite: Math. 126. White.

Random sampling, frequency curves, correlation theory, curve fitting, significant differences, and analysis of variance; practice with data from biology, economics, and agronomy.

207. SOLID ANALYTIC GEOMETRY. 3(3-0); II. Prerequisite: Math. 115. Stratton.

Coördinates of points in space and their transformation, involving discussion of lines and planes; quadric surfaces, their classification and principal properties.

210. ADVANCED CALCULUS I. 3(3-0); I. Prerequisite: Math. 115. White. Special topics in integral calculus, including various methods of integrating elementary forms, definite integrals with attention to gamma and beta functions, and applications to lengths and areas.

213. ADVANCED CALCULUS II. 3(3-0); II. Prerequisite: Math. 210. White. Continuation of Math. 210.

216. THEORY OF EQUATIONS. 3(3-0); I. Prerequisite: Math. 115. Stratton, Sigley, Janes.

221. HISTORY OF MATHEMATICS. 3(3-0); I, II, and SS. Prerequisite: Math. 110. Staff.

223. FOURIER'S SERIES. 3(3-0); II. Prerequisite: Math. 201. White.

225. MODERN PLANE GEOMETRY. 3(3-0); II. Prerequisite: Math. 110. Stratton.

Properties of a triangle and its circles, harmonic ranges and pencils, inversion, poles and polars.

230. VECTOR ANALYSIS. 3(3-0); I or II. Prerequisite: Math. 115. Babcock. Methods of vector algebra and geometry, with applications, and the elements of tensors.

231. SURVEY OF APPLIED MATHEMATICS I. 3(3-0); I. Prerequisite: Math. 115. Babcock.

Determinants and matrices; infinite series; Fourier's series; multiple, line, and improper integrals; elliptic integrals.

232. SURVEY OF APPLIED MATHEMATICS II. 3(3-0); II. Prerequisite: Math. 115. Babcock.

Continuation of Math. 231, including ordinary and partial differential equations; vector analysis; probability; curve fitting.

235. STATISTICAL METHODS I. 3(3-0); I. Prerequisite: Junior standing. Not open for graduate credit to students who major in mathematics. Fryer.

Development of proficiency in statistical technics; the Chi-square test, t-test, analysis of variance, and linear regression; application to sampling problems in agriculture and biology.

236. STATISTICAL METHODS II. 3(3-0); II. Prerequisite: Math. 235 or consent of instructor. Not open for graduate credit to students who major in mathematics. Fryer.

Further study of analysis of variance; technic and applications of covariance, multiple and curvilinear regression, and introduction to designing of experiments.

299. TOPICS IN MATHEMATICS. Credit to be arranged; I, II, and SS. Prerequisite: Math. 115. Staff.

Work is offered in:

Analysis. Stratton, White, Sigley.

Applied Mathematics. Babcock.

Differential Equations. Munro.

Geometry. Stratton, Janes.

Statistics. White, Fryer.

FOR GRADUATE CREDIT

301. THEORY OF FUNCTIONS OF A COMPLEX VARIABLE. 3(3-0); II. Prerequisite: Math. 201. Stratton, Munro.

306. THEORETICAL MECHANICS. 3(3-0); I. Prerequisite: Math. 115. Stratton.

310. INTEGRAL EQUATIONS AND GREEN'S FUNCTIONS. 3(3-0); II. Prerequisite: Math. 201. Sigley.

Solutions of boundary problems, particularly in elasticity and aerodynamics, by means of integral equations, Green's functions, and partial differential equations.

312. HIGHER GEOMETRY. 3(3-0); II. Prerequisite: Math. 225. Stratton.

Linear dependence, homogeneous coördinates, cross ratio, properties of conics, elements of projective geometry.

316. ADVANCED DIFFERENTIAL EQUATIONS. 3(3-0); I. Prerequisite: Math. 201. Munro.

Special topics, such as the equations of Legendre, Bessel, and Ricatti, with applications.

331. RESEARCH IN MATHEMATICS. Credit to be arranged; I, II, and SS. Prerequisite: At least two courses in this department subsequent to Math. 115. Staff.

Work is offered in:

Analysis. Stratton, White, Sigley.

Applied Mathematics. Babcock.

Differential Equations. Munro.

Geometry. Stratton, Janes.

Statistics. White, Fryer.

Military Science and Tactics

Professor MCKINNEY, Colonel, Inf., U. S. A.

Associate Professor CAMPBELL, Lieut. Colonel, Inf., U. S. A.

Associate Professor MACKIRDY, Lieut. Colonel, C.A.C., U. S. A.

Associate Professor HOLMES, Major, Inf., U. S. A.

Assistant Professor CLARK, Captain, C.A.C., Ret., U. S. A.

Assistant Professor STOVER, Captain, C.A.C., Res., U. S. A.

Assistant Professor TAYLOR, Captain, C.A.C., Res., U. S. A.

Assistant Professor PETERS, 1st Lieut., Inf., Res., U. S. A.

Assistant Professor JESSUP, 1st Lieut., Inf., Res., U. S. A.

Assistant WILLIAMS, Staff Sergeant, D.E.M.L., U. S. A.

Assistant LARSON, Staff Sergeant, D.E.M.L., U. S. A.

Assistant WILSON, Staff Sergeant, D.E.M.L., U. S. A.

Assistant McDONALD, Staff Sergeant, D.E.M.L., U. S. A.

Military Property Custodian SECREST, Mr. Sgt., Ret., U. S. A.

This College is one of the beneficiaries of the act of Congress of July 2, 1862, known as the Land-grant College Act. Military tactics is required in the College curriculums. All male students who are citizens of the United States, and not physically disqualified, are required to take military training three hours a week for two years. Students who enter with 25 hours of advanced credit are excused from the second year of military training; those who enter with 59 hours of advanced credit are excused from all military requirements.

Requests for excuse from military science, or for postponement, are acted upon by the president of the College. Such requests are presented through the student's dean, and the president obtains the advice of the professor of military science and tactics, who investigates each case on its merits and makes his recommendation to the president. Requests based on physical condition must be accompanied by a recommendation made by the College physician. Students excused from military science for any reason are assigned an equivalent amount of other College work.

Students who have received previous military training in a junior division unit, or in a school or college which conducts military training under an officer of the Army of the United States detailed as professor of military science and tactics, will receive such credit toward eligibility for the advanced course as the professor of military science and tactics and the head of the institution may determine. Credit shall be given only for time during which the student has received a course of military training substantially equivalent to that prescribed for the corresponding period or periods of training of the senior division. Credit will not be given to a student for military training received prior to his fourteenth birthday.

An infantry unit and a coast artillery unit of the Reserve Officers' Training Corps have been established in this College.

A laboratory fee of 75 cents per semester is required of all students assigned to military training.

PERTINENT REGULATIONS OF THE R. O. T. C.

1. **BASIC COURSE.** (Freshmen, sophomores.) Each student in these classes will be furnished a complete uniform and equipment for his use in the course. The articles remain the property of the United States and must be turned in by each student at the close of each College year or upon withdrawal from the R. O. T. C. Shoes are not furnished. Brown or tan shoes of smooth leather must be worn with the uniform. If low shoes are worn, brown or tan socks must be worn with them.

To insure the return of this uniform, a deposit of \$5 is required of each basic-course student. The deposit will be refunded when the complete uniform is returned to the department in good condition.

In case any article of clothing is lost or because of carelessness or improper use becomes unfit for reissue or requires repairs, the student to whom it was issued must pay the cost of replacement or of repairs. In any instance, the extent and cause of the damage will be determined by the professor of military science and tactics or by a member of the regular military faculty designated by him.

No course in military science will be regarded as completed by any student who is indebted to the College for loss of, or damage to, government property.

2. **ADVANCED COURSE.** The student who continues in the R. O. T. C. after completing the Basic Course will receive the following:

a. A special uniform allowance.

b. Commutation of subsistence at the rate of 25 cents per day, provided he agrees to complete the Advanced Course, including a course in camp training. The camp training referred to is without expense to the student. Clothing and subsistence will be furnished and he will be paid at the rate of 70 cents per day, and five cents per mile to and from camp for travel expenses.

After graduation he will be eligible for appointment by the President of the United States as a reserve officer of the Army of the United States, and if so appointed he may, under certain conditions, be appointed and commissioned a regular second lieutenant in the Army of the United States.

c. Because of limitations in electives, the maximum number of hours in advanced R. O. T. C. available toward an undergraduate degree in the several divisions is: Agriculture, 6; Engineering and Architecture, 8; General Science, 12; Veterinary Medicine, none.

The corps of cadets at present is organized as one regiment with a military band.

FOR UNDERGRADUATE CREDIT**Senior Division, R. O. T. C.****BASIC COURSE, INFANTRY**

(For students not in the Division of Engineering and Architecture or in the curriculums in Industrial Chemistry and Milling Industry.)

101. **INFANTRY I.** 1(1-2); I. Jessup.

Leadership; orientation in military fundamentals; military discipline, courtesies and customs of the service; military sanitation and first aid; general military organization; weapons.

102. **INFANTRY II.** 1(1-2); II. Prerequisite: Mil. Sc. 101. Jessup.

Leadership; military organization; map reading; weapons.

103. **INFANTRY III.** 1(1-2); I. Prerequisite: Mil. Sc. 102. Peters.

Leadership; weapons; musketry.

104. **INFANTRY IV.** 1(1-2); I and II. Prerequisite: Mil. Sc. 103. Peters.

Leadership; scouting and patrolling; combat principles.

ADVANCED COURSE, INFANTRY

(For students not in the Division of Engineering and Architecture or in the curriculums in Industrial Chemistry and Milling Industry.)

109. INFANTRY V. 3(2-3); I. Prerequisite: Mil. Sc. 104. Campbell.
Leadership, aerial photograph reading; combat orders; defense against chemical warfare; administration; care and operation of motor vehicles.

110. INFANTRY VI. 3(2-3); II. Prerequisite: Mil. Sc. 109. Campbell.
Leadership; weapons; marksmanship.

111. INFANTRY VII. 3(2-3); I. Prerequisite: Mil. Sc. 110. Holmes.
Leadership; military history and policy; military law; property, emergency procurements and funds; mechanization; tanks; infantry signal communications; combat training; anti-aircraft defense.

112. INFANTRY VIII. 3(2-3); II. Prerequisite: Mil. Sc. 111. Holmes.
Leadership; combat orders; anti-tank defense; attack, defense and security; combat intelligence.

NOTE.—Advanced-course students are required to attend one camp. This comes normally at the end of the junior year, and is held usually at Fort Leavenworth, Kansas.

BASIC COURSE, COAST ARTILLERY

(For students in the Division of Engineering and Architecture and in the curriculums in Industrial Chemistry and Milling Industry.)

113. ARTILLERY I. 1(1-2); I. Stover, Taylor.
Leadership; military fundamentals; military sanitation and first aid; map reading; coast artillery weapons and matériel; rifle marksmanship.

114. ARTILLERY II. 1(1-2); II. Prerequisite: Mil. Sc. 113. Stover, Taylor.
Leadership; organization of the army; organization of the coast artillery; military discipline, courtesies and customs of the service; military sanitation and first aid; map reading; coast artillery ammunition, weapons, and matériel.

115. ARTILLERY III. 1(1-2); I and II. Prerequisite: Mil. Sc. 114. Stover, Taylor.

Leadership; coast artillery weapons and matériel; fire-control and position-finding for seacoast artillery; basic gunnery for anti-aircraft artillery; characteristics of naval targets; rigging.

116. ARTILLERY IV. 1(1-2); I and II. Prerequisite: Mil. Sc. 115. Stover, Taylor.

Leadership; coast artillery weapons and matériel; basic gunnery; fire-control and position-finding for anti-aircraft artillery; identification of aircraft; operation and maintenance of coast artillery motor transportation.

ADVANCED COURSE, COAST ARTILLERY

(For students in the Division of Engineering and Architecture and in the curriculums in Industrial Chemistry and Milling Industry.)

117. ARTILLERY V. 3(2-3); I. Prerequisite: Mil. Sc. 116. Clark.
Leadership; administration; aerial photograph reading; defense against chemical warfare; applied gunnery, fire-control and position-finding for seacoast artillery; coast artillery signal communications; orientation.

118. ARTILLERY VI. 3(2-3); II. Prerequisite: Mil. Sc. 117. Clark.
Leadership; basic and applied gunnery, fire-control and position-finding for anti-aircraft artillery; rifle and pistol marksmanship.

119. ARTILLERY VII. 3(2-3); I. Prerequisite: Mil. Sc. 118. MacKirdy.
Leadership; military law; orientation; field fortifications for seacoast artillery; technic and elementary tactics for seacoast artillery.

120. ARTILLERY VIII. 3(2-3); II. Prerequisite: Mil. Sc. 119. MacKirdy.
Leadership; property, emergency procurement, and funds; military history and policy; combat orders and solution of map problems; technic and elementary tactics for anti-aircraft artillery; mechanization; Officers' Reserve Corps.

NOTE.—Advanced-course students are required to attend one camp. This comes normally at the end of the junior year, and is held usually at Fort Sheridan, Illinois.

Modern Languages

Professor MOORE
 Professor LIMPER
 Associate Professor CRITTENDEN

Associate Professor PETTIS
 Associate Professor MUNRO

Students who have had German, French, or Spanish in high school may not duplicate that work for college credit. One year of a language in high school is, as a rule, equivalent to one semester in college. In doubtful cases, the head of the department should be consulted.

FOR UNDERGRADUATE CREDIT

101. GERMAN I. 3(3-0); I, II, and SS. Moore, Limper, Munro.
102. GERMAN II. 3(3-0); I, II, and SS. Prerequisite: Mod. Lang. 101 or equivalent. Moore, Limper, Munro.
111. GERMAN III. 3(3-0); I, II, and SS. Prerequisite: Mod. Lang. 102 or equivalent. Moore, Limper.
112. GERMAN IV. 3(3-0); I, II, and SS. Prerequisite: Mod. Lang. 111 or equivalent. Moore.
137. SCIENTIFIC GERMAN. 4(4-0); I. Prerequisite: Mod. Lang. 102 or equivalent. Munro.
138. ADVANCED SCIENTIFIC GERMAN. 2(2-0); II. Prerequisite: Mod. Lang. 137. Moore, Munro.
151. FRENCH I. 3(3-0); I, II, and SS. Limper, Pettis.
152. FRENCH II. 3(3-0); I, II, and SS. Prerequisite: Mod. Lang. 151 or equivalent. Limper, Pettis.
161. FRENCH III. 3(3-0); I, II, and SS. Prerequisite: Mod. Lang. 152 or equivalent. Limper, Pettis.
162. FRENCH IV. 3(3-0); I, II, and SS. Prerequisite: Mod. Lang. 161 or equivalent. Pettis.
163. FRENCH COMPOSITION AND CONVERSATION. 3(3-0); I, II, and SS. Prerequisite: Mod. Lang. 162. Pettis.
176. SPANISH I. 3(3-0); I, II, and SS. Moore, Crittenden, Munro.
177. SPANISH II. 3(3-0); I, II, and SS. Prerequisite: Mod. Lang. 176 or equivalent. Moore, Crittenden, Munro.
180. SPANISH III. 3(3-0); I, II, and SS. Prerequisite: Mod. Lang. 177 or equivalent. Moore, Crittenden, Munro.
181. SPANISH IV. 3(3-0); I and II. Prerequisite: Mod. Lang. 180 or equivalent. Crittenden, Munro.
194. SPANISH COMPOSITION AND CONVERSATION. 3(3-0); II. Prerequisite: Mod. Lang. 181. Munro.

FOR GRADUATE AND UNDERGRADUATE CREDIT

209. SCHILLER. 3(3-0); I, II, and SS. Prerequisite: Mod. Lang. 112 or equivalent. Moore, Limper.
213. GOETHE. 3(3-0); I or II. Prerequisite: Mod. Lang. 112 or equivalent. Moore.
215. GERMAN DRAMA. 3(3-0); I or II. Prerequisite: Eighteen hours of college German or equivalent. Moore.
252. FRENCH PROSE. 3(3-0); I, II, and SS. Prerequisite: Mod. Lang. 162 or equivalent. Limper, Pettis.

257. SEVENTEENTH CENTURY FRENCH DRAMA. 3(3-0); I or II. Prerequisite: Fifteen hours of college French or equivalent. Pettis.

258. MODERN FRENCH DRAMA. 3(3-0); I or II. Prerequisite: Fifteen hours of college French or equivalent. Pettis.

275. SPANISH PROSE. 3(3-0); I and II. Prerequisite: Mod. Lang. 181. Crittenden, Munro.

280. SPANISH DRAMA. 3(3-0); II. Prerequisite: Mod. Lang. 181. Crittenden, Munro.

282. SPANISH-AMERICAN LITERATURE. 3(3-0); I or II. Prerequisite: Fifteen hours of college Spanish or equivalent. Munro.

299. PROBLEMS IN MODERN LANGUAGES. Credit to be arranged; I, II, and SS. Prerequisite: When taken for graduate credit, nine hours of modern languages. Staff.

Work is offered in:

French. Limper, Pettis.

German. Moore, Limper, Munro.

Spanish. Crittenden, Munro.

Music

Professor LINDQUIST
Associate Professor SAYRE
Associate Professor DOWNEY
Assistant Professor HARTMAN
Assistant Professor PAINTER
Assistant Professor JEFFERSON

Assistant Professor MARTIN
Assistant Professor STRATTON
Assistant Professor PELTON
Assistant Professor JESSON
Assistant Professor GROSSMANN

Instruction in voice, piano, organ, violin, violoncello, double-bass, and other instruments, is given in private lessons. All theoretical subjects are taught in classes.

PRELIMINARY MUSICAL TRAINING

Applicants for freshman standing in the four-year music curriculums must pass an examination over certain requirements, which are as follows:

CURRICULUM IN APPLIED MUSIC

Voice majors: A voice of superior quality, ability to sing in time and in tune, and a practical knowledge of musical notation.

Piano and Organ majors: A considerable degree of proficiency in the fundamentals of piano technic and in the playing of the easier classics.

Other Instrumental majors: A practicable knowledge of the fundamental technic of playing the instrument in the study of which the student desires to major, and a considerable degree of proficiency in the playing of the easier classics written for that instrument.

CURRICULUM IN MUSIC EDUCATION

School Music majors: A practicable degree of proficiency in the fundamentals of piano technic and sight reading, and the ability to sing in time and in tune.

Band and Orchestra majors: A practicable degree of proficiency in the fundamentals of piano technic.

COURSES IN THE THEORY OF MUSIC**FOR UNDERGRADUATE CREDIT**

101. HARMONY I. 2(3-0); I, II, and SS. Prerequisite: Mus. 118 or equivalent. Stratton, Jesson.

Major and minor scales; intervals; primary triads and their inversions; dominant seventh and its inversions; harmonizing melodies and basses.

102. HARMONY II. 2(3-0); I, II, and SS. Prerequisite: Mus. 101. Stratton, Jesson.

Subordinate triads and their sevenths in progressions and inversions; elementary modulation; original exercises.

103. HARMONY III. 2(3-0); I and SS. Prerequisite: Mus. 102. Stratton, Jesson.

Modulation completed; altered and mixed chords; embellishments.

104. HARMONY IV. 2(3-0); II and SS. Prerequisite: Mus. 103. Stratton, Jesson.

Works of the masters; writing of original exercises and small compositions.

105. EAR TRAINING AND SIGHT SINGING I. 2(1-3); I. Hartman.

Reading and hearing of intervals, chords, and rhythmical forms.

106. EAR TRAINING AND SIGHT SINGING II. 2(1-3); II. Prerequisite: Mus. 105. Hartman.

Continuation of Mus. 105.

107. EAR TRAINING AND SIGHT SINGING III. 2(1-3); I. Prerequisite: Mus. 106. Hartman.

Continuation of Mus. 106.

108. EAR TRAINING AND SIGHT SINGING IV. 2(1-3); II. Prerequisite: Mus. 107. Hartman.

Continuation of Mus. 107.

109. COUNTERPOINT. 2(2-0); I, II, and SS. Prerequisite: Mus. 104. Stratton.

Melody writing; association of melodies in simple counterpoint, leading to the writing of original two- and three-part inventions.

111. MUSICAL FORM AND ANALYSIS. 1(1-0); I, II, and SS. Prerequisite: Mus. 109. Jesson.

Forms used in composition; the music of Bach, Haydn, Mozart, Beethoven, Schumann, Chopin, Brahms, Wagner, and others.

115. RADIO MUSIC APPRECIATION PROGRAMS. 1(1-1); I, II, and SS. Prerequisite: Mus. 130 or concurrent registration. Grossmann.

Program building, and practical experience in planning and presentation of music appreciation programs.

118. MUSIC FUNDAMENTALS. 2(3-0); I, II, and SS. Not open to students in music curriculums. Sayre.

Elementary instruction in the theory of music.

119. BROADCAST MUSICAL PROGRAMS. 2(3-0); I, II, and SS. Prerequisite: Pub. Spk. 162 or equivalent. Stratton.

Planning and arranging broadcasts of musical programs; copyright law as applied to musical broadcasts; theme, transitional, background, and incidental music; microphone technic applied to music.

121. APPRECIATION OF MUSIC I. 1(2-0); I. Not open to students in music curriculums. Pelton.

Styles of music explained and illustrated from recordings.

122. APPRECIATION OF MUSIC II. 1(2-0); II. Not open to students in music curriculums. Pelton.

Continuation of Mus. 121.

130. HISTORY AND APPRECIATION OF MUSIC I. 2(3-0); I and SS. Lindquist. The three periods in the history of music, the style of music peculiar to each, and musical contact with the great composers.

131. HISTORY AND APPRECIATION OF MUSIC II. 2(3-0); II and SS. Prerequisite: Mus. 130 or equivalent. Lindquist. Continuation of Mus. 130.

133. CHORAL CONDUCTING. 1(2-0); I, II, and SS. Prerequisite: Mus. 118 or equivalent. Lindquist.

134. INSTRUMENTAL CONDUCTING. 1(2-0); I, II, and SS. Prerequisite: Mus. 104 and 133. Downey.

136. INSTRUMENTATION AND ORCHESTRATION. 3(3-0); I, II, and SS. Prerequisite: Mus. 109. Downey.

Instruments of the band and orchestra studied with relation to tone, color, range, and function; simple and familiar compositions scored for ensemble, including full orchestra.

138. SCHOOL MUSIC I. 2(2-0); I and SS. Prerequisite: Mus. 106. Hartman. Methods and materials for teaching music in kindergarten and primary grades. Adaptation is made in summer school to meet the needs of rural and smaller city schools. Prerequisite waived for nonmusic students, but recommended as parallel noncredit courses for those taking Mus. 138 and 139.

139. SCHOOL MUSIC II. 2(2-0); II and SS. Prerequisite: Mus. 138. Hartman.

Methods and materials for teaching music in elementary grades.

143. SCHOOL MUSIC III. 2(2-0); I, II, and SS. Prerequisite: Mus. 138 and 139. Hartman.

Methods and teaching materials suitable for junior and senior high school.

149. METHODS AND MATERIALS FOR THE STUDIO. 1(2-0); I and II. Staff. Methods of teaching fundamental technic; selection of teaching materials, and outlining of courses of study. For students in the Curriculum in Applied Music; taught in separate divisions for voice, piano, organ, violin.

151A to 151H. ORCHESTRAL INSTRUMENTS I to VIII. $\frac{1}{2}$ (1-0) each; I, II, and SS. Downey, Martin.

Methods of tone production of the most important instruments of the orchestra. Fee, \$2.

COURSES IN APPLIED MUSIC

When Mus. 153, 156, 158, 161, 163, 167, or 172 are elected by students outside the music curriculums, a maximum of two hours per semester is allowed.

153. INSTRUMENT. 0 to 4 hours, maximum of 32 hours allowed; I, II, and SS. Downey, Martin. For fees, see table following Mus. 198.

156. VOICE. 0 to 4 hours, maximum of 32 hours allowed; I, II, and SS. Lindquist, Sayre, Grossmann. For fees, see table following Mus. 198.

158. VIOLIN. 0 to 4 hours, maximum of 32 hours allowed; I, II, and SS. Martin. For fees, see table following Mus. 198.

161. PIANO. 0 to 4 hours, maximum of 32 hours allowed; I, II, and SS. Staff. For fees, see table following Mus. 198.

163. VIOLONCELLO. 0 to 4 hours, maximum of 32 hours allowed; I, II, and SS. Downey. For fees, see table following Mus. 198.

167. DOUBLE BASS. 0 to 4 hours, maximum of 32 hours allowed; I, II, and SS. Downey. For fees, see table following Mus. 198.

172. ORGAN. 0 to 4 hours, maximum of 32 hours allowed; I, II, and SS. Jesson. For fees, see table following Mus. 198.

174. VOCAL ENSEMBLE. R(0-2); I, II, and SS. Elective for students of superior vocal talent. Lindquist, Sayre, Grossmann. Fee, \$2.

176. PIANO ENSEMBLE. R(1-0); I and II. Required of students who major in piano or organ. Painter. Fee, \$2.

178. INSTRUMENTAL ENSEMBLE. 1(0-3); I, II, and SS. Elective for selected students. Downey, Martin. Fee, \$2.

181A to 181F. RECITAL I to VI. R; I (181 A, C, and E) and II (181 B, D, and F). Staff.

A joint solo recital appearance in Recital IV, and an individual solo recital in Recital VI.

183. ENSEMBLE. $\frac{1}{2}$ (0-2); I and II. Staff.

Required ensemble work may be taken in Choral Ensemble (Mus. 194); Orchestra (Mus. 195); or Band (Mus. 198).

187. PRACTICE TEACHING IN MUSIC. R(1-0); II. Staff.

Practice teaching in private classes for students in the Curriculum in Applied Music.

191. CHORUS. Weekly rehearsals. I and II. Prerequisite: Ability to read musical notation and to sing in time and in tune. Membership is open to the entire student body, and to others who may qualify. Consent of the head of the Department of Music must be obtained. Lindquist.

MEN'S GLEE CLUB. Membership, by competitive tryouts, is open to the entire student body. Lindquist.

WOMEN'S GLEE CLUB. Membership, by competitive tryouts, is open to the entire student body. Sayre, Grossmann.

194. CHORAL ENSEMBLE. $\frac{1}{2}$ (0-2); I and II. Weekly rehearsals, all special rehearsals, and public performances. Prerequisite: A voice of good quality, a knowledge of musical notation, and the ability to sing in time and in tune. Lindquist, Sayre, Grossmann.

Membership in both the College Chorus and the Men's Glee Club or the College Chorus and the Women's Glee Club.

195. ORCHESTRA. $\frac{1}{2}$ (0-2); I and II. Weekly rehearsals. Membership, by competitive tryouts, is open to the entire student body. Downey.

198. BAND. $\frac{1}{2}$ (0-2); I and II. Weekly rehearsals. Membership, by competitive tryouts, is open to the entire student body. Downey, Martin. Fee, 50 cents; deposit, \$2.

FEES IN MUSIC

COURSE

Two lessons each week for a semester:

Voice	\$36	\$30*	\$24*	\$14†
Piano	36	30*	24*	14†
Organ	36	30*	24*	14†
Violin	36	30*	24*	14†
Violoncello	36	30*	24*	14†
Other orchestral instruments	30	30*	24*	14†

One lesson each week for a semester:

Voice	\$20	\$17*	\$14*	\$9†
Piano	20	17*	14*	9†
Organ	20	17*	14*	9†
Violin	20	17*	14*	9†
Violoncello	20	17*	14*	9†
Other orchestral instruments	17	17*	14*	9†

Piano rent, one hour daily—\$4 a semester.

Piano rent, two hours daily—\$6 a semester.

Organ rent, one hour weekly—\$4 a semester.

* Fees for children.

† Student assistant fees.

Physical Education and Athletics

Professor AHEARN
 Professor SAUM
 Professor WASHBURN
 Professor ADAMS
 Associate Professor HAYLETT
 Assistant Professor GEYER
 Assistant Professor MAYTUM
 Assistant Professor MOLL

Assistant Professor GARDNER
 Assistant Professor COCHRANE
 Instructor PATTERSON
 Instructor THOMPSON
 Instructor SCHUTTE
 Instructor WILLIAMS
 Assistant MYERS

Each student receives a physical examination before enrollment in courses in this department. Transfer students who enter this College with 15, 25, 44, or 59 hours of credit are excused from one, two, three, or four semesters, respectively, of Phys. Ed. 103 or 151.

COURSES IN PHYSICAL EDUCATION FOR MEN

FOR UNDERGRADUATE CREDIT

A deposit of \$3 is required of each student enrolled in any course designated "Deposit." Only one deposit is required from any student in one semester.

103. PHYSICAL EDUCATION M. R(0-2); I, II, and SS. Staff. Deposit.

Activities offered: Boxing, corrective gymnastics, floorwork, golf, handball, swimming, tennis, and wrestling.

107. INTRODUCTION TO PHYSICAL EDUCATION. 1(1-0); I. Washburn.

Introductory survey of the field and study of the principles of health and physical education.

113. FIRST AID AND MASSAGE. 3(3-0); II and SS. Prerequisite: Zöol. 123. Moll.

118. COMMUNITY HEALTH. 1(1-0); SS. Washburn.

Water supply; sewage disposal; milk, food, and general sanitation.

119. PERSONAL HYGIENE. 2(2-0); I and SS. Moll.

120. SWIMMING M. 1(0-3); I and SS. Moll.

Instruction and practice in breast, back, and crawl strokes; diving, treading water, and floating. Deposit.

123. PHYSIOLOGY OF EXERCISE. 2(2-0); I. Prerequisite: Zöol. 123 and 221. Washburn.

Effects of exercise on the tissues, systems, and organs of the body.

124. PHYSICAL DIAGNOSIS AND PRESCRIPTION. 3(3-0); I. Prerequisite: Phys. Ed. 107, 137, 138, and 141. Washburn.

Normal and physical diagnosis; individual corrective exercise.

126. FOOTBALL. 2(1-3); II and SS. Adams.

Study of rules, theory and practice; methods of coaching. Deposit.

130. BASKETBALL. 2(1-3); I and SS. Gardner.

Study of rules, theory and practice; methods of coaching. Deposit.

133. BASEBALL. 2(1-3); II and SS. Ahearn.

Study of rules, theory and practice; methods of coaching. Deposit.

134. PRACTICE TEACHING IN PHYSICAL EDUCATION. 1(0-3) or 2(0-6); I and II. Prerequisite: Junior standing. Total credit allowed, four hours. Washburn.

Supervised students assist in physical education classes, and officiate in intramural games. Deposit.

137. PHYSICAL EDUCATION ACTIVITIES I. 1(0-3); I. Thompson.

Theory and practice of soccer, volleyball, and gymnasium games. Deposit.

138. PHYSICAL EDUCATION ACTIVITIES II. 2(0-6); II. Thompson.

Theory and practice of calisthenics, the gymnastic lesson, and tumbling. Deposit.

139. PHYSICAL EDUCATION ACTIVITIES III. 2(0-6); I. Thompson.
Graded exercises on gymnasium apparatus, gymnastic dancing, pyramids.
Deposit.
140. PHYSICAL EDUCATION ACTIVITIES IV. 1(0-3); I. Patterson.
Theory and practice of wrestling and boxing. Deposit.
141. KINESIOLOGY M. 3(3-0); II. Prerequisite: Zöol. 123. Thompson.
Body movements analyzed; principles involved applied to teaching of physical education.
142. PUBLIC-SCHOOL PROGRAM IN PHYSICAL EDUCATION. 2(2-0); II. Prerequisite: Senior standing. Washburn.
Educational, health, and recreative significance and content of the school program; types of activity to be emphasized in grades and in high school.
143. HISTORY OF PHYSICAL EDUCATION. 2(2-0); I. Prerequisite: Phys. Ed. 107. Moll.
144. TRACK AND FIELD SPORTS. 2(1-3); II. Haylett.
Study of rules, theory and practice; methods of coaching. Deposit.
145. NATURE AND FUNCTION OF PLAY. 2(2-0); II. Prerequisite: Educ. 184. Washburn.
Theoretical explanation of play, age and sex characteristics which influence play, value of play to individual and community.
146. ORGANIZATION AND ADMINISTRATION OF PHYSICAL EDUCATION M. 3(3-0); I. Prerequisite: Junior standing. Washburn.
147. COMMUNITY HYGIENE. 2(2-0); I. Prerequisite: Bact. 101 and Phys. Ed. 119. Moll.
Production, improvement, maintenance, and defense of public health.
149. TEACHING HEALTH. 2(2-0); I. Prerequisite: Phys. Ed. 119, Zöol. 123 and 221. Moll.

FOR GRADUATE AND UNDERGRADUATE CREDIT

203. COMMUNITY RECREATION. 2(2-0); II and SS. Prerequisite: Phys. Ed. 145. Washburn.

FOR GRADUATE CREDIT

301. PROBLEMS IN PHYSICAL EDUCATION. Credit to be arranged. Prerequisite: Variable, depending upon problem chosen. Washburn.

COURSES IN PHYSICAL EDUCATION FOR WOMEN

A deposit of \$2.50 is required of each student enrolled in any course designated "Deposit." Only one deposit is required from any student in one semester. A refund of 50 cents, each semester, is made upon return of locker key.

Recreational swimming is offered on Tuesdays and Thursdays at 4 o'clock for those who have registered in the College and paid the necessary fees. Swimming fee, \$1 each semester.

The following courses may be elected by those who wish a minor in home economics: Art 101A, Elementary Design I; Art 130, Costume Design I; Food and Nutr. 102, Foods I; Clo. and Text. 103, Clothing for the Individual.

FOR UNDERGRADUATE CREDIT

151. PHYSICAL EDUCATION W. R(0-3); I, II, and SS. Staff.
Activities offered: Archery, baseball, basketball, fieldball, golf, hockey, individual and Danish gymnastics, recreational sports, soccer, swimming, and tennis.
155. FUNDAMENTAL RHYTHM. 1(0-3); I. Williams.
Body rhythm, fundamentals of music, and percussion accompaniment for rhythmic activities. Deposit.

- 157A. GENERAL TECHNIC I. 2(1-3); I. Maytum.
Theory and practice of self-testing activities. Deposit.
- 157B. GENERAL TECHNIC II. 2(1-3); Maytum.
Theory and practice of tumbling and recreational sports. Deposit.
- 157C. GENERAL TECHNIC III. 2(1-3); I. Prerequisite: Ability to play hockey and soccer. Geyer.
Methods of teaching soccer, hockey, fieldball, and speedball. Deposit.
- 157D. GENERAL TECHNIC IV. 2(1-3); II. Prerequisite: Ability to play volleyball, basketball, and baseball. Geyer.
Methods of teaching volleyball, basketball, and baseball. Deposit.
- 157E. GENERAL TECHNIC V. 2(1-3); I. Prerequisite: Knowledge of Danish gymnastics, tennis, and golf. Geyer.
Methods of teaching Danish gymnastics, tennis, and golf. Deposit.
- 157F. GENERAL TECHNIC VI. 2(0-6); II. Prerequisite: Phys. Ed. 155 and one-half semester each of folk dancing and tap dancing. Maytum.
Methods of teaching child rhythms and folk dancing. Deposit.
- 157G. GENERAL TECHNIC VII. 2(1-3); I. Prerequisite: A semester each of beginning and intermediate dancing. Williams.
Methods of teaching modern dance. Deposit.
- 157H. GENERAL TECHNIC VIII. 2(1-3); II. Prerequisite: A semester each of beginning and intermediate swimming; one-half semester of archery. Saum.
Methods of teaching swimming and archery. Deposit.
159. FIRST-AID. 2(2-0); SS.
Prevention of accidents and the treatment of injuries in an emergency. Upon satisfactory completion of this course, a certificate is awarded by the American Red Cross and the holder is in line for consideration as an instructor in first aid.
162. PRINCIPLES AND PHILOSOPHY OF PHYSICAL EDUCATION. 3(3-0); II. Prerequisite: Sophomore standing. Maytum.
Aims and objectives of physical education, historical development, relation to general education, analysis of programs and methods.
164. CLOG AND CHARACTER DANCING W. 1(0-3); SS.
165. TUMBLING, PYRAMIDS, AND STUNTS W. 1(0-3); SS.
166. INTRAMURAL ATHLETICS FOR WOMEN. 1(1-0); SS.
This course is offered for teachers who direct intramural activities. Types and methods of conducting intramural athletics in high schools will be considered.
167. CAMP CRAFT W. 1(0-3); SS.
Fire building, outdoor cooking, day and overnight trips, and handicraft; lectures, reports, and practical work.
168. GAMES FOR GRADES AND HIGH SCHOOL. 2(1-3); SS. Maytum.
Methods of teaching games in public schools suitable for recess, noon, and after-school periods. Deposit.
169. PHYSICAL EDUCATION IN SMALL SCHOOLS. 2(1-3); SS. Not open to students in physical education curriculums.
Practical work for women not professionally trained in physical education. Deposit.
171. HEALTH EXAMINATIONS W. 2(0-6); I. Prerequisite: Phys. Ed. 184 and Zoöl. 123 and 221. Maytum.
Methods of giving health examinations, analysis of normal body mechanics, postural deviations; first-aid emergency treatment.
172. THERAPEUTICS AND MASSAGE. 2(0-6); II. Prerequisite: Phys. Ed. 171 and 184 and Zoöl. 123. Maytum.

Postural defects studied and exercises given for correction of each; general and local massage practiced for cases which can be treated by the Department of Physical Education. Deposit.

176. ORGANIZATION AND ADMINISTRATION OF PHYSICAL EDUCATION W. 2(2-0); II. Prerequisite: Phys. Ed. 157A to 157G, 182 and 188. Saum.

Administrative policies of departments of physical education; the staff, activities, basic principles; construction, equipment, and care of plant.

178. FOLK DANCING. 1(0-3); SS.

Singing games, rhythms, and folk dancing for elementary and secondary schools. Deposit.

179. HEALTH TEACHING IN HIGH SCHOOL W. 3(3-0); I. Prerequisite: Child Welf. 101. Saum.

Subject matter and methods of presentation of health education, integration with general courses.

180. PRINCIPLES OF HEALTH EDUCATION W. 2(2-0); SS. Saum.

182. PLAYGROUND MANAGEMENT AND GAMES W. 2(1-3); I. Maytum.

Organization and administration of playground activities and equipment; history of the playground movement; types of games suitable for different age periods; practice teaching in elementary schools. Deposit.

184. KINESIOLOGY W. 2(2-0); II. Prerequisite: Zöol. 123. Geyer.

Mechanics of movement; body movements analyzed and principles involved applied to the teaching of physical education.

187. TECHNIC OF BASKETBALL, BASEBALL, AND VOLLEYBALL. 1(0-3); SS.

Rules, duties of officials, organization of squads and teams, equipment; methods of coaching and conducting of tournaments. Deposit.

188. TEACHING AND ADAPTATION OF PHYSICAL EDUCATION. 3(3-0); I. Prerequisite: Phys. Ed. 157A to 157F, and 182. Maytum.

Problems of physical education and general principles of leadership; adaptation of material to meet needs of various groups and to meet aims and ideals of physical education.

191. RECREATIONAL LEADERSHIP W. 2(2-0); II. Prerequisite: Phys. Ed. 182. Maytum.

Principles and methods of organizing communities for leisure activities.

COURSE IN PHYSICAL EDUCATION FOR MEN AND WOMEN

198. GROUP RECREATION. 2(1-3); SS.

Selection and organization of recreation for men and women, for class, noon-hour, or extracurricular activities. Deposit.

Physics

Professor CARDWELL
Professor RABURN
Professor FLOYD
Professor McMILLEN
Associate Professor BRACKETT
Associate Professor LYON

Associate Professor CHAPIN
Associate Professor ALLEN
Assistant Professor HARTEL
Assistant Professor MAXWELL
Assistant Professor AVERY
Assistant Professor HUDIBURG

FOR UNDERGRADUATE CREDIT

102. GENERAL PHYSICS I. 4(3-3); I, II, and SS. Prerequisite: Math. 101. Not open for full credit to students who have credit in Phys. 109 or 136. Staff. Mechanics, heat, and sound. Charge, \$4.

103. GENERAL PHYSICS II. 4(3-3); I, II, and SS. Prerequisite: Phys. 102 or 136. Not open for full credit to students who have credit in Phys. 109 or 136. Staff.

Magnetism, electricity, and light. Charge, \$4.

105. ENGINEERING PHYSICS I. 5(4-3); I, II, and SS. Prerequisite: Math. 101. Not open for full credit to students who have credit in Phys. 102, 103, 109, or 136. Staff.

Mechanics, heat, and sound for technical students. Charge, \$4.

106. ENGINEERING PHYSICS II. 5(4-3); I, II, and SS. Prerequisite: Phys. 105. Not open for full credit to students who have credit in Phys. 102, 103, 109, or 136. Staff.

Magnetism, electricity, and light for technical students. Charge, \$4.

109. HOUSEHOLD PHYSICS. 4(3-3); I, II, and SS. Avery, Hudiburg.

Lectures and demonstrations in which the laws and principles involved in household appliances are explained and illustrated. Charge, \$4.

121. PHYSICS FOR MUSICIANS I. 5(4-3); I. Prerequisite: Mus. 102. Floyd, Chapin.

Selected topics applied to the physics of music and musical instruments. Charge, \$3.

122. PHYSICS FOR MUSICIANS II. 3(3-0); II. Prerequisite: Phys. 102, 105, or 121. Floyd, Chapin.

Sound from the musician's point of view.

125. ARCHITECTURAL ACOUSTICS. 2(2-0); II. Prerequisite: Phys. 103 or 105. Floyd, Chapin.

Prediction of acoustic properties of buildings in advance of construction and the correction of acoustic defects.

134. AGRICULTURAL PHYSICS. 3(3-0); II. Brackett.

Fundamental principles as related to agriculture. Required of students in agriculture who enter without high-school physics.

136. DESCRIPTIVE PHYSICS. 3(3-0); I, II, and SS. Not for credit if following Phys. 102, 103, 105, or 106. Brackett, Maxwell.

Nonmathematical explanations and experimental demonstrations of selected principles in physics.

141. DESCRIPTIVE ASTRONOMY. 3(3-0); I and II. Hartel.

146. METEOROLOGY. 3(3-0); I and II. Raburn, Hudiburg.

Weather phenomena and principles of forecasting; climatic factors; relation of weather studies to agriculture, general science, and physiography.

151. PHOTOGRAPHY. 2(1-3); I and II. Hudiburg.

Chemical and physical principles involved in photography; practice in making good negatives and prints. Deposit, \$6.

160. INTRODUCTION TO MODERN PHYSICS. 2(2-0); I, II, and SS. Prerequisite: A course in physics and in chemistry. Cardwell, Brackett, Lyon.

Nonmathematical introduction to contemporary problems and theories.

FOR GRADUATE AND UNDERGRADUATE CREDIT

201. LABORATORY TECHNIC AND APPARATUS DESIGN. 1(0-3) or 2(0-6); I, II, and SS. Prerequisite: Phys. 103 or 106. Hudiburg.

Glass blowing and shopwork designed to meet the needs of the individual student. Charge, \$3.

205. APPLIED X RAYS. 3(2-3); I or II. Prerequisite: Phys. 103, 106, or 109. McMillen, Hudiburg.

Radiology, theory of short waves and of the equipment used in production; use and operation of X ray equipment; exposures and development of X ray plates and films. Charge, \$3.

210. ASTRONOMY. 3(3-0); I or II. Prerequisite: Math. 115 and Phys. 103 or 106, and 141. Babcock.

A second course by methods of the calculus.

217. GEOPHYSICS I. 3(3-0); I. Prerequisite: Phys. 103 or 106. Cardwell, Lyon.

Theory of the field work in gravitational, magnetic, electrical, seismic, radio-active, and temperature surveys.

218. GEOPHYSICS II. 3(1-6); II. Prerequisite: Phys. 217. Cardwell, Lyon.

Continuation of Phys. 217 with laboratory work on the use of the torsion balance, the dip needle, and the methods of equipotential. Charge, \$3.

220. APPLIED SPECTROSCOPY. 3(2-3); I. Prerequisite: Chem. 104 or 110 and Phys. 103 or 106. McMillen.

Spectrographic methods for detecting, qualitatively and quantitatively, chemical constituents of minerals, metals, and biological specimens. Charge, \$3.

227. MECHANICS. 3(3-0); I. Prerequisite: Math. 115 and Phys. 102 or 105. Cardwell, McMillen.

Theoretical mechanics by methods of the calculus with an introduction to generalized coördinates.

228. MECHANICS LABORATORY. 1(0-3) or 2(0-6); I. Prerequisite: Phys. 227 or concurrent registration. Cardwell, McMillen. Charge, \$3.

238. HEAT. 3(3-0); I. Prerequisite: Math. 115 and Phys. 103 or 106. Cardwell, Chapin.

239. HEAT LABORATORY. 1(0-3); I. Prerequisite: Phys. 238 or concurrent registration. Chapin. Charge, \$3.

240. SOUND. 3(3-0); I and SS. Prerequisite: Math. 115 and Phys. 102 or 105. Floyd, Chapin.

243. LIGHT. 3(3-0); II. Prerequisite: Math. 114 and Phys. 103 or 106. Cardwell, Chapin.

244. LIGHT LABORATORY. 1(0-3); II. Prerequisite: Phys. 243 or concurrent registration. Cardwell, Chapin. Charge, \$3.

251. ELECTRICITY AND MAGNETISM. 3(3-0); I or II. Prerequisite: Math. 115 and Phys. 103 or 106. Lyon.

Electricity and magnetism by methods of the calculus.

254. ELECTRICITY AND MAGNETISM LABORATORY. 1(0-3) or 2(0-6); I or II. Prerequisite: Phys. 251 or concurrent registration. Lyon. Charge, \$3.

265. ELECTRIC OSCILLATIONS AND WAVES. 3(3-0); II. Prerequisite: Phys. 251. Lyon.

Radiation field theory and radio circuits.

266. ELECTRIC OSCILLATIONS AND WAVES LABORATORY. 2(0-6); II. Prerequisite: Phys. 265 or concurrent registration. Lyon. Charge, \$3.

268. ELECTRON OPTICS. 2(2-0); II. Prerequisite: Math. 115 and Phys. 103 or 106. McMillen.

Theory of the bending and focusing of electron beams by electric and magnetic fields.

270. ATOMIC PHYSICS. 3(3-0); I or II. Prerequisite: Math. 115 and Phys. 103 or 106. Cardwell, McMillen, Lyon.

Contemporary theories and problems.

297. PROBLEMS IN PHYSICS. Credit to be arranged; I, II, and SS. Prerequisite: Phys. 103 or 106. Staff.

Work is offered in:

Electricity. Lyon, Allen.

Electronics. Cardwell.

Sound. Floyd, Chapin.

Spectroscopy. McMillen.

299. COLLOQUIUM IN PHYSICS. R; I and II. Required of graduate majors and senior undergraduate majors. Staff.

FOR GRADUATE CREDIT

302. INTRODUCTION TO THEORETICAL PHYSICS I. 3(3-0). Prerequisite: Math. 201 and Phys. 227. Cardwell, McMillen.

303. INTRODUCTION TO THEORETICAL PHYSICS II. 3(3-0). Prerequisite: Phys. 302. Cardwell, McMillen.

Continuation of Phys. 302.

305. QUANTUM AND WAVE MECHANICS. 3(3-0). Prerequisite: Math. 201 and Phys. 103 or 106. McMillen.

310. GENERAL THERMODYNAMICS. 3(3-0). Prerequisite: Math. 201 and Phys. 238. Cardwell, Chapin.

313. KINETIC THEORY OF GASES. 3(3-0). Prerequisite: Math. 201 and Phys. 238. Floyd.

315. VECTOR MECHANICS. 3(3-0). Prerequisite: Math. 230. Babcock.

317. X RAY. 3(3-0); I, II, and SS. Prerequisite: Math. 201 and Phys. 103 or 106. Allen.

390. RESEARCH IN PHYSICS. Credit to be arranged; I, II, and SS. Prerequisite: At least two courses in this department. Staff.

Work is offered in:

Electricity. Lyon, Allen.

Electronics. Cardwell.

Sound. Floyd, Chapin.

Spectroscopy. McMillen.

Public Speaking

Professor HILL
Professor SUMMERS
Associate Professor HEBERER

Associate Professor TROUTMAN
Instructor WEBSTER
Instructor ELLIOTT

All students who take courses designated "Radio fee charged," pay a charge of \$2 a semester. Only one radio fee is charged a student in a given semester.

FOR UNDERGRADUATE CREDIT

101. ORAL INTERPRETATION. 2(2-0); I, II, and SS. Hill, Webster.

Attainment of some proficiency in the art of reading aloud. Charge, \$1.

102. DRAMATIC READING. 2(2-0); II. Prerequisite: Pub. Spk. 101. Troutman, Elliott.

Advanced study and application of the principles of oral interpretation to platform reading.

106. EXTEMPORE SPEECH. I. 2(2-0); I, II, and SS. Not open to students who have credit in Pub. Spk. 107. Staff.

Preparation and delivery of short addresses based on prepared outlines. Charge, \$1.

107. PUBLIC SPEAKING. 2(2-0); I, II, and SS. Prerequisite: Junior standing. Not open to students who have credit in Pub. Spk. 106. Staff.

Practical public speaking of the extempore type. Charge, \$1.

108. EXTEMPORE SPEECH II. 2(2-0); I, II, and SS. Prerequisite: Pub. Spk. 106 or 107. Staff.

Pub. Spk. 106 continued, with special attention to illustrative material.

110. ELEMENTS OF PHONETICS. 2(2-0); I. Elliott. Charge, \$1.

121. ARGUMENTATION AND DEBATE. 2(2-0); II. Prerequisite: Pub. Spk. 106 or 107. Webster.

123. INTERCOLLEGIATE DEBATE I. 2(2-0); I and II. Prerequisite: Pub. Spk. 121. Webster.
Open only to members of the intercollegiate debate squads.
124. INTERCOLLEGIATE DEBATE II. 2(2-0); I and II. Prerequisite: Pub. Spk. 123. Webster.
Open only to members of the intercollegiate debate squads.
126. PARLIAMENTARY PROCEDURE. 1(1-0); II. Hill, Summers.
138. PUBLIC SPEAKING FOR TEACHERS. 1(1-0); II and SS. Hill, Troutman.
142. ORATORICAL CONTEST. 2 hours; I and II. Hill.
144. DRAMATIC PARTICIPATION. 1(0-3) or 2(0-6); I, II, and SS. Prerequisite: Junior standing. Heberer.
150. DEVELOPMENT OF THE THEATER I. 2(2-0); I. Heberer, Troutman.
The theater to the end of the nineteenth century.
152. DEVELOPMENT OF THE THEATER II. 2(2-0); II. Heberer, Troutman.
The modern and the contemporary theater.
162. SURVEY OF BROADCASTING. 1(1-0); I and II. Prerequisite: Pub. Spk. 106 or 107. Summers.
Survey of radio industry; social importance of broadcasting. Radio fee charged.
163. BROADCASTING INFORMATIVE PROGRAMS. 2(2-0); I and II. Prerequisite: Pub. Spk. 106 or 107. Summers.
Radio fee charged.
166. RADIO SPEECH. 1(0-3); I and II. Prerequisite: Permission of instructor. Summers.
Training in voice and diction for broadcasting. Radio fee charged.
168. RADIO PROGRAM PARTICIPATION. 1(0-3); I and II. Prerequisite: Pub. Spk. 163. May not be taken for more than four semesters for credit. Summers. Webster. Radio fee charged.

FOR GRADUATE AND UNDERGRADUATE CREDIT

201. ADVANCED PHONETICS. 4(3-3); II. Prerequisite: Pub. Spk. 101, 106, 107, and 110. Elliott.
207. DRAMATIC PRODUCTION I. 2(1-3); I, II, and SS. Prerequisite: Pub. Spk. 102. Heberer.
Theory of and practice in fundamentals of acting and direction. Charge, \$1.
208. DRAMATIC PRODUCTION II. 2(0-6); I, II, and SS. Prerequisite: Pub. Spk. 207. Heberer.
Projects in direction and stagecraft. Charge, \$1.
222. ADVANCED DEBATE. 2(2-0); I. Prerequisite: Pub. Spk. 121. Webster.
Advanced study of and participation in the methods of persuasion in public discussion.
225. PUBLIC PROGRAM. 2(2-0); II and SS. Prerequisite: Pub. Spk. 106 or 107. Hill, Troutman.
Planning, building, and presenting nonradio public programs.
231. RADIO PROGRAM PRODUCTION. 2(1-3); I and II. Prerequisite: Pub. Spk. 163. Summers, Heberer.
Production and direction of radio programs. Radio fee charged.
232. PROBLEMS IN BROADCASTING. Credit to be arranged; I and II. Prerequisite: Pub. Spk. 163. Summers, Heberer.
Individual problems in the general field of radio broadcasting. Radio fee charged.

240. RADIO CONTINUITY I. 2(2-0); I. Prerequisite: Pub. Spk. 163. Summers.

Planning and construction of radio programs. Radio fee charged.

241. RADIO CONTINUITY II. 2(2-0); II. Prerequisite: Pub. Spk. 240. Summers.

Continuation of Pub. Spk. 240. Radio fee charged.

FOR GRADUATE CREDIT

301. RESEARCH IN SPEECH. Credit to be arranged; I, II, and SS. Prerequisite: At least two courses in this department. Staff.

Work is offered in:

Debate. Webster.

Dramatics. Heberer, Troutman.

Oratory. Hill

Phonetics. Elliott.

Radio. Summers.

305. CLINICAL PROBLEMS IN DEFECTIVE SPEAKING. 4(2-6); II. Prerequisite: Pub. Spk. 101, 106 or 107, 108, and 201. Hill.

Student Health

Professor HUSBAND

FOR UNDERGRADUATE CREDIT

101. PREVENTIVE MEDICINE AND PUBLIC HEALTH. 2(2-0); I and II. Prerequisite: Sophomore standing. Husband.

Communicable diseases and their control; factors involved in healthful living.

Zoölogy

Professor NABOURS

Professor ACKERT

Professor HARMAN

Associate Professor HERRICK

Associate Professor WIMMER

Assistant Professor HARBAUGH

Assistant Professor GOODRICH

Instructor AMEEL

Instructor EDGAR

Instructor LOCKHART

Instructor JENNINGS

Assistant STEBBINS

Graduate Assistant WASSMER

Graduate Assistant OAKBERG

Graduate Research Assistant FRICK

Graduate Research Assistant GOOD

Graduate Research Assistant REID

Graduate Research Assistant HOLBERT

FOR UNDERGRADUATE CREDIT

105. GENERAL ZOÖLOGY. 5(3-6); I, II, and SS. Staff. Charge, \$3.

123. HUMAN ANATOMY. 5(3-6); I. Prerequisite: Zoöl. 105. Wimmer.

General anatomy studied by means of dissectable models, skeletons, and charts. Charge, \$3.

FOR GRADUATE AND UNDERGRADUATE CREDIT

203. PROBLEMS IN ZOÖLOGY. Credit to be arranged; I, II, and SS. Staff. Charge, \$2 per credit hour.

Work is offered in:

Cytology and Embryology. Harman.

Endocrinology. Herrick.

Heredity. Nabours.

Ornithology. Goodrich.

Parasitology. Ackert.

Physiology. Wimmer.

Protozoölogy. Ameel.

Zoölogical Technic. Edgar.

205. FIELD ZOÖLOGY. 2(1-3) or 3(1-6); II and SS. Prerequisite: Zoöl. 105. Harbaugh.

Habitat, distribution, and relationship of animals. Charge, \$3.

206. ZOÖLOGICAL TECHNIC. 1(0-3) or 2(0-6); II and SS. Prerequisite: Zoöl. 105. Edgar.

Methods and processes in preparation of microscopical slides; principles of photomicrography. Charge, \$3.

208. ANIMAL PARASITOLOGY. 3(2-3); I. Prerequisite: Zoöl. 105. Ackert.

Biology, pathology, and prophylaxis of the principal external and internal parasites of the domestic animals. Charge, \$2.

209. PRINCIPLES OF PARASITOLOGY. 2(2-0); I. Prerequisite: Zoöl. 105. Ackert.

Principles, origin, history, and theories of animal parasitism.

212. INVERTEBRATE ZOÖLOGY. 4(2-6); I and SS. Prerequisite: Zoöl. 105. Goodrich. Charge, \$3.

214. CYTOLOGY. 4(2-6); I. Prerequisite: Zoöl. 105. Harman.

Cells, chromosomes, and heredity. Charge, \$3.

215. EVOLUTION AND HEREDITY. 3(3-0); II. Prerequisite: Zoöl. 105. Nabours.

Development of the idea of evolution; evidence and principal theories of the causes of evolution; problems of variation, heredity, and experimental evolution.

216. HEREDITY AND EUGENICS. 2(2-0); I. Prerequisite: Zoöl. 105. Nabours.

Human inheritance and the interactions of nature and heredity.

218. HUMAN PARASITOLOGY. 3(3-0); II. Prerequisite: Zoöl. 105. Ackert.

219. EMBRYOLOGY. 4(3-3); I, II, and SS. Prerequisite: Zoöl. 105. Harman.

Physiology of reproduction and developmental anatomy of mammals, with special reference to man. Charge, \$3.

220. ADVANCED EMBRYOLOGY. 4(2-6); II and SS. Prerequisite: Zoöl. 219. Harman. Charge, \$3.

221. HUMAN PHYSIOLOGY. 4(3-3); I, II, and SS. Prerequisite: Chem. 101 or 110 and Zoöl. 105. Wimmer.

Functions of various organ systems of the body. Charge, \$3.

222. GENERAL PHYSIOLOGY. 3(2-3); I and SS. Prerequisite: Chem. 122 and Zoöl. 105. Wimmer.

Life functions in living organisms. Charge, \$3.

223. PROTOZOÖLOGY. 3(2-3); II. Prerequisite: Zoöl. 105. Ameel.

Taxonomy, morphology, and biology of the free living and parasitic protozoa. Charge, \$2.

225. ZOÖLOGY AND ENTOMOLOGY SEMINAR. 1(1-0); I and II. Prerequisite: Zoöl. 105. Staff.

227. GENETICS SEMINAR. 1(1-0); I and II. Prerequisite: Zoöl. 105. Nabours, Warren, Ibsen.

240. TAXONOMY OF PARASITES. 2(1-3); II and SS. Prerequisite: Zoöl. 208 or 218. Ackert. Charge, \$2.

244. ORNITHOLOGY. 3(2-3); II, or 2(1-3); SS. Prerequisite: Zoöl. 105. Goodrich. Charge, \$2.

246. COMPARATIVE ANATOMY OF VERTEBRATES. 4(2-6); II. Prerequisite: Zoöl. 105. Herrick. Charge, \$3.

247. ENDOCRINOLOGY. 3(3-0); I and SS. Prerequisite: Zoöl. 221 and 219 or 246 and consent of instructor. Herrick.

248. APPLIED ZOÖLOGY. 3(3-0); I and SS. Prerequisite: Zoöl. 105. Herrick, Harbaugh.

Valuable and destructive animals in relation to mankind.

FOR GRADUATE CREDIT

301. RESEARCH IN ZOÖLOGY. Credit to be arranged; I, II, and SS. Prerequisite: At least two courses in this department. Staff.

Work is offered in:

Cytology and Embryology. Harman.

Endocrinology. Herrick.

Heredity. Nabours.

Ornithology. Goodrich.

Parasitology. Ackert.

Physiology. Wimmer.

Protozoölogy. Ameel.

The Division of Home Economics

MARGARET M. JUSTIN, *Dean*

The aim of a collegiate course in home economics is not merely to increase the student's stock of information, but to stimulate interest in continued study or research, to train in accuracy in detail, to teach discrimination with regard to criteria by which to interpret results, and to cultivate an attitude of economic and social responsibility.

The curriculums as outlined below are arranged to meet the needs of those who wish to teach, those who wish to enter graduate courses leading to technical or professional work, and those who wish to apply their knowledge to various problems of home life, or to industry and social service. The training includes the laws of health; an understanding of the sanitary requirements of the home; the study of values of the various articles used in the home; the wise expenditure of money, time, and energy; the scientific principles underlying the selection and preparation of food; the care of children; and the ability to secure efficient service from others. Life in the residence hall, in which the student participates in the numerous duties pertaining to the routine of living, is a sustaining influence in the mastery of instruction offered in the classroom and laboratory, and is desirable for all students not participating otherwise in group life.

Because of the prospective intimate relationship between students of home economics and human health, all seniors in the Division of Home Economics must take physical examinations given by the Department of Student Health, the records of which will become part of the permanent college records of the students.

The three four-year curriculums in this division lead to the degree of Bachelor of Science in Home Economics, and a five-and-one-half-year curriculum leads to the degree of Bachelor of Science in Home Economics and Nursing.

CURRICULUM IN HOME ECONOMICS

Since scientific training is fundamental in the administration of the home, courses in the sciences are given as a foundation for the special training in home economics. English, history, economics, and psychology receive due attention. The time of the student is about equally divided among the purely technical subjects, the fundamental sciences, and studies of general interest. In the junior and senior years opportunity for choice of electives makes it possible for students to specialize in some chosen line. There is provision for electives to be chosen in groups approved by the faculty or by the students' dean. This choice of electives will be made during the first semester of the sophomore year.

This curriculum is recommended to those who desire general training in home economics or who have not yet determined the special fields in which they wish to major. It is the curriculum to be chosen by those who wish to teach home economics or to engage in home demonstration work.

CURRICULUM IN HOME ECONOMICS AND ART

The courses in this curriculum give background for professional work in art and for teaching art.

CURRICULUM IN HOME ECONOMICS AND INSTITUTIONAL MANAGEMENT AND DIETETICS

This curriculum is designed to meet the needs of the student who wishes to become a dietitian or director of food services in a college residence hall, cafeteria, tearoom, or hotel. It meets the requirements set by the American Dietetic Association for entrance to accredited hospitals and at the same time

provides practical training for the management of the food unit of various types of institutions. As a part of the training, residence in the college residence hall for one semester is required. Usually after graduation the student serves an apprenticeship in a recommended establishment.

CURRICULUM IN HOME ECONOMICS AND NURSING

The five-and-one-half-year curriculum is offered in affiliation with the University of Kansas hospitals. A student wishing to take the degree of Bachelor of Science and the full professional training in nursing can complete this work in five and one-half years. The first three years are spent in the College. The last two and one-half years are spent in the school of nursing of the hospitals, where theoretical and practical training in nursing is given. Upon completion of the hospital training, the student presents her application for graduation to the registrar of Kansas State College.

The student is approved for the curriculum by the Dean of the Division of Home Economics. At some time during her freshman year she must be approved by the superintendent of the school of nursing. Further information may be obtained from the Dean of the Division of Home Economics.

CERTIFICATE FOR TEACHING HOME ECONOMICS

The student who, in addition to securing the degree of Bachelor of Science, is desirous of qualifying for the three-year Kansas state teacher's certificate, renewable for life and valid in any high school or other public school in the state, should elect certain courses in the Department of Education and other technical courses which are essential for vocational home economics and desirable for all teaching of home economics. These courses are as follows:

EDUCATIONAL SUBJECTS		TECHNICAL SUBJECTS	
Educ. Psychology, Educ. 109.....	3(3-0)	Child Guidance I, Child Welf. 201,	3(2-3)
Educ. Admin., Educ. 210.....	3(3-0)or	Home Mgmt., Hshld. Econ. 116...	3(1-6)
Prin. of Secondary Educ., Educ. 236,	3(3-0)	Adv. Clothing, Clo. and Text. 123,	4(1-9)
Vocational Educ., Educ. 241.....	3(3-0)	School Food Service, Inst. Mgmt.	
Methods of Teach. Home Econom-		218	2(1-3)
ics, Educ. 132.....	3(3-0)		
Teach. Particip. in Home Economics,			
Educ. 160	3(-)		

The stipulated course for the certificate for teaching home economics requires 27 out of the 42 hours of possible electives allowed in the Curriculum of Home Economics. The remaining 15 hours of electives are to be selected from among nontechnical courses outside the Division of Home Economics, with the advice and approval of the dean. In the choice of courses for these hours, consideration is given to the desirability of directing the student's interest and efforts toward the exploration and mastery of some one field, such as Social Science, Modern Language, Mathematics, Music, Physical Education, Journalism, Physical or Biological Science and Art.

The State Board for Vocational Education issues certificates of approval for one year only to teachers of Vocational Homemaking, and reserves the right to require individual teachers to return to summer school for further preparation when the need becomes apparent.

HOME ECONOMICS IN THE SUMMER SCHOOL

In addition to the regular instruction in home economics, the division offers numerous courses in the Summer School. These courses apply directly on the Curriculum in Home Economics, or on graduate credit.

Full information concerning the courses offered is contained in the Summer School number of the Kansas State College *Bulletin*, which may be obtained upon application to the vice-president of the College.



Curriculum in Home Economics

FRESHMAN

FIRST SEMESTER		SECOND SEMESTER	
College Rhetoric I, Engl. 101.....	*3(3-0)	College Rhetoric II, Engl. 104....	3(3-0)
Gen. Chemistry, Chem. 110.....	5(3-6)	Gen. Organic Chemistry, Chem. 122,	5(3-6)
Elementary Design I, Art 101A...	2(0-6)	Costume Design I, Art 130.....	2(0-6)
Foods I, Foods and Nutr. 102.....	5(3-6) <i>or</i>	Gen. Psychology, Educ. 184.....	3(3-0) <i>and</i>
Gen. Psychology, Educ. 184.....	3(3-0) <i>and</i>	Personal Health, Child Welf. 101..	2(2-0) <i>or</i>
Personal Health, Child Welf. 101..	2(2-0)	Foods I, Foods and Nutr. 102.....	5(3-6)
H. E. Lectures, Gen. H. E. 130...	R(1-0)	H. E. Lectures, Gen. H. E. 130...	R
Phys. Educ. W, Phys. Ed. 151....	R(0-3)	Phys. Educ. W, Phys. Ed. 151....	R(0-3)
Total	15	Total	15

SOPHOMORE

FIRST SEMESTER		SECOND SEMESTER	
English Literature, Engl. 172.....	3(3-0)	American Literature, Engl. 175....	3(3-0)
General Zoölogy, Zoöl. 105.....	5(3-6)	Embryology, Zoöl. 219.....	4(3-3) <i>or</i>
Elementary Design II, Art 101B...	2(0-6)	Human Physiology, Zoöl. 221.....	4(3-3)
Foods II, Foods and Nutr. 107....	3(1-6) <i>or</i>	Clothing for the Individual,	
Clothing for the Individual, Clo.		Clo. and Text. 103.....	4(1-9) <i>or</i>
and Text. 103.....	4(1-9)	Foods II, Foods and Nutr. 107....	3(1-6)
Economics I, Econ. 101.....	3(3-0)	Current History, Hist. 126.....	1(1-0)
H. E. Lectures, Gen. H. E. 130...	R	Household Physics,** Phys. 109...	4(3-3)
Phys. Educ. W, Phys. Ed. 151....	R(0-3)	H. E. Lectures, Gen. H. E. 130...	R
Home Projects, Gen. H. E. 140....	R	Phys. Educ. W, Phys. Ed. 151....	R(0-3)
Total	16 or 17	Total	15 or 16

JUNIOR

FIRST SEMESTER		SECOND SEMESTER	
Human Nutr., Foods and Nutr. 112,	3(3-0)	Textiles, Clo. and Text. 116.....	3(2-3)
The House, Household Econ. 107..	3(2-3)	General Microb., Bact. 101.....	3(1-6)
Interior Decoration I, Art 113....	2(0-6)	Elective	10(-)
Family Finance, Hshld. Econ. 263,	2(2-0)	H. E. Lectures, Gen. H. E. 130...	R
Elective‡	6(-)		
H. E. Lectures, Gen. H. E. 130...	R		
Home Projects, Gen. H. E. 140...	R		
Total	16	Total	16

SENIOR

FIRST SEMESTER		SECOND SEMESTER	
Dietetics, Foods and Nutr. 202....	4(3-3)	Family Health, Child Welf. 211..	3(3-0)
The Family, Child Welf. 216.....	2(2-0)	Elective	12(-)
Elective	10(-)	H. E. Lectures, Gen. H. E. 130...	R(1-0)
H. E. Lectures, Gen. H. E. 130...	R		
Total	16	Total	15

Number of hours required for graduation, 125.

* The number before the parentheses indicates the number of hours of credit; the first number within the parentheses indicates the number of hours of recitation each week; the second shows the number of hours to be spent in laboratory work each week; and the third, where there is one, indicates the number of hours of outside work in connection with the laboratory each week.

** Subject to prerequisite, General Physics may be substituted if a student plans to pursue research later.

‡ Electives are chosen with the approval of the dean during the sophomore year. They give opportunity for special training in the various fields. If the teaching of home economics is elected, certain educational and technical subjects are required as given under "Certificate for Teaching Home Economics."

Curriculum in Home Economics with Special Training in Art

FRESHMAN

FIRST SEMESTER

College Rhetoric I, Engl. 101.....	3(3-0)
Gen. Chemistry, Chem. 110.....	5(3-6)
Elementary Design I, Art 101A...	2(0-6)
Foods I, Foods and Nutr. 102.....	5(3-6) <i>or</i>
Gen. Psychology, Educ. 184.....	3(3-0) <i>and</i>
Personal Health, Child Welf. 101..	2(2-0) <i>or</i>
H. E. Lectures, Gen. H. E. 130...	R(1-0)
Phys. Educ. W, Phys. Ed. 151....	R(0-3)

Total 15

SECOND SEMESTER

College Rhetoric II, Engl. 104....	3(3-0)
Gen. Organic Chemistry, Chem. 122,	5(3-6)
Costume Design I, Art 130.....	2(0-6)
Gen. Psychology, Educ. 184.....	3(3-0) <i>and</i>
Personal Health, Child Welf. 101..	2(2-0) <i>or</i>
Foods I, Foods and Nutr. 102.....	5(3-6)
H. E. Lectures, Gen. H. E. 130...	R
Phys. Educ. W, Phys. Ed. 151....	R(0-3)

Total 15

SOPHOMORE

FIRST SEMESTER

English Literature, Engl. 172.....	3(3-0)
General Zoölogy,* Zoöl. 105.....	5(3-6)
Elementary Design II, Art 101B...	2(0-6)
Clothing for the Individual, Clo.	
and Text. 103.....	4(1-9) <i>or</i>
Foods II, Foods and Nutr. 107....	3(1-6)
Ancient Civilizations, Hist. 101....	3(3-0)
H. E. Lectures, Gen. H. E. 130...	R
Phys. Educ. W, Phys. Ed. 151....	R(0-3)
Home Projects, Gen. H. E. 140...	R

Total 16 or 17

SECOND SEMESTER

American Literature, Engl. 175....	3(3-0)
Lettering, Art 127.....	2(0-6)
Drawing, Art 120.....	2(0-6)
Foods II, Foods and Nutr. 107....	3(1-6) <i>or</i>
Clothing for the Individual, Clo.	
and Text. 103.....	4(1-9)
Extern. Speech I, Pub. Spk. 106...	2(2-0)
Medieval Europe, Hist. 102.....	3(3-0)
H. E. Lectures, Gen. H. E. 130...	R
Phys. Educ. W, Phys. Ed. 151....	R(0-3)

Total 15 or 16

JUNIOR

FIRST SEMESTER

Human Nutr., Foods and Nutr. 112,	3(3-3) <i>or</i>
Applied Nutr., Foods and Nutr. 121,	2(2-0)
Intermediate Design, Art 103.....	2(0-6)
Costume Design II, Art 134.....	2(0-6)
Textiles, Clo. and Text. 116.....	3(2-3)
The House, Household Econ. 107.	3(2-3)
Elective**	3 or 4(-)
H. E. Lectures, Gen. H. E. 130...	R
Home Projects, Gen. H. E. 140...	R

Total 16

SECOND SEMESTER

Costume Design III, Art 138.....	2(0-6)
Interior Decoration I, Art 113....	2(0-6)
Design in the Crafts, Art 102....	2(0-6)
Art of the S. W. Indians, Art 242,	2(2-0)
Advanced Design, Art 105.....	2(0-6)
Elective	5(-)
H. E. Lectures, Gen. H. E. 130...	R

Total 15

SENIOR

FIRST SEMESTER

Child Guidance I, Child Welf. 201,	3(2-3)
Principles of Art I, Art 201.....	3(3-0)
Interior Decoration II, Art 115....	2(0-6)
Elective	8(-)
H. E. Lectures, Gen. H. E. 130...	R

Total 16

SECOND SEMESTER

Principles of Art II, Art 202.....	3(3-0)
Interior Decoration III, Art 117...	2(0-6)
Elective	10(-)
H. E. Lectures, Gen. H. E. 130...	R(1-0)

Total 15

Number of hours required for graduation, 124.

* General Botany I and II may be taken as an option for General Zoölogy and the necessary adjustment made in providing the required number of hours each semester and in lessening the electives one hour if the option is desired.

** See footnote regarding electives under Curriculum in Home Economics.

Curriculum in Home Economics with Special Training in Institutional Management and Dietetics

FRESHMAN

FIRST SEMESTER		SECOND SEMESTER	
College Rhetoric I, Engl. 101.....	3(3-0)	College Rhetoric II, Engl. 104....	3(3-0)
Gen. Chemistry, Chem. 110.....	5(3-6)	Gen. Organic Chemistry, Chem. 122,	5(3-6)
Elementary Design I, Art 101A...	2(0-6)	Costume Design I, Art 130.....	2(0-6)
Foods I, Foods and Nutr. 102.....	5(3-6)or	Gen. Psychology, Educ. 184.....	3(3-0)and
Gen. Psychology, Educ. 184.....	3(3-0)and	Personal Health, Child Welf. 101..	2(2-0)or
Personal Health, Child Welf. 101,	2(2-0)	Foods I, Foods and Nutr. 102....	5(3-6)
H. E. Lectures, Gen. H. E. 130...	R(1-0)	H. E. Lectures, Gen. H. E. 130...	R
Phys. Educ. W, Phys. Ed. 151....	R(0-3)	Phys. Educ. W, Phys. Ed. 151....	R(0-3)
Total	15	Total	15

SOPHOMORE

FIRST SEMESTER		SECOND SEMESTER	
English Literature, Engl. 172.....	3(3-0)	American Literature, Engl. 175....	3(3-0)
General Zoölogy, Zoöl. 105.....	5(3-6)	Human Physiology, Zoöl. 221.....	4(3-3)
Current History, Hist. 126.....	1(1-0)	Foods II, Foods and Nutr. 107....	3(1-6)
Clothing for the Individual,		Household Physics,* Phys. 109....	4(3-3)or
Clo. and Text. 103.....	4(1-9)or	Clothing for the Individual,	
Household Physics,* Phys. 109....	4(3-3)	Clo. and Text. 103.....	4(1-9)
Economics I, Econ. 101.....	3(3-0)	Interior Decoration I, Art 113....	2(0-6)
H. E. Lectures, Gen. H. E. 130...	R	H. E. Lectures, Gen. H. E. 130...	R
Phys. Educ. W, Phys. Ed. 151....	R(0-3)	Phys. Educ. W, Phys. Ed. 151....	R(0-3)
Total	16	Total	16
Home Projects, Gen. H. E. 140...	R		

JUNIOR

FIRST SEMESTER		SECOND SEMESTER	
Human Nutr., Foods and Nutr. 112,	3(3-0)	Physiol. Chemistry, Chem. 231....	5(3-6)
Sociology, Econ. 151.....	3(3-0)	Inst. Cookery, Inst. Mgmt. 101...	4(1-9)
General Micro., Bact. 101.....	3(1-6)	Inst. Food Buying, Inst. Mgmt.	
Meats H. E. An. Husb. 176.....	1(0-3)	103	2(2-0)
Elective†	6(-)	Inst. Furnishings and Equipment,	
H. E. Lectures, Gen. H. E. 130...	R	Inst. Mgmt. 105.....	2(2-0)
Home Projects, Gen. H. E. 140...	R	Elective	3(-)
		H. E. Lectures, Gen. H. E. 130...	R
Total	16	Total	16

SENIOR

FIRST SEMESTER		SECOND SEMESTER	
Dietetics, Foods and Nutr. 202....	4(3-3)	Child Guidance I, Child Welf. 201,	3(2-3)
Meth. of Teaching H. E., Educ.		Dietetics for Abn. Conditions,	
132	3(3-0)	Foods and Nutr. 205.....	2(1-3)
Exper. Cookery, Food and Nutr.		Tea Room Mgmt., Inst. Mgmt. 225,	3(0-9)or
255	2(0-6)	Field Work in Nutr., Foods and	
Organ. and Admin. of Inst., Inst.		Nutr. 215	3(2-3)
Mgmt. 206	3(3-0)	Food Econ. and Nutr. Seminar,	
Elective	2(-)	Food and Nutr. 251.....	2(2-0)
H. E. Lectures, Gen. H. E. 130...	R	Inst. Accounting, Econ. 284.....	2(2-0)
		Elective	4(-)
		H. E. Lectures, Gen. H. E. 130...	R
Total	14	Total	16

Number of hours required for graduation, 124.

* See footnote regarding Household Physics under Curriculum in Home Economics.

† See footnote regarding electives under Curriculum in Home Economics.

Curriculum in Home Economics and Nursing

FRESHMAN

FIRST SEMESTER

College Rhetoric I, Engl. 101.....	3(3-0)
Gen. Chemistry, Chem. 110.....	5(3-6)
Foods I, Foods and Nutr. 102.....	5(3-6)
Gen. Psychology, Educ. 184.....	3(3-0)
H. E. Lectures, Gen. H. E. 130....	R(1-0)
Phys. Educ. W, Phys. Ed. 151....	R(0-3)

Total 16

SECOND SEMESTER

College Rhetoric II, Engl. 104....	3(3-0)
Gen. Organic Chemistry, Chem. 122,	5(3-6)
Economics I, Econ. 101.....	3(3-0)
Personal Health, Child Welf. 101..	2(2-0)
Extemp. Speech I, Pub. Spk. 106,	2(2-0)
H. E. Lectures, Gen. H. E. 130....	R
Phys. Educ. W, Phys. Ed. 151....	R(0-3)

Total 15

SOPHOMORE

FIRST SEMESTER

English Literature, Engl. 172.....	3(3-0)
General Zoölogy, Zoöl. 105.....	5(3-6)
Foods II, Foods and Nutr. 107....	3(1-6)
Current History, Hist. 126.....	1(1-0)
Sociology, Econ. 151.....	3(3-0)
H. E. Lectures, Gen. H. E. 130....	R
Phys. Educ. W, Phys. Ed. 151....	R(0-3)
Home Projects, Gen. H. E. 140....	R

Total 15

SECOND SEMESTER

American Literature, Engl. 175....	3(3-0)
Human Physiology, Zoöl. 221.....	4(3-3)
Gen. Microbiology, Bact. 101.....	3(1-6)
Elective*	6(-)
H. E. Lectures, Gen. H. E. 130....	R
Phys. Educ. W, Phys. Ed. 151....	R(0-3)

Total 16

JUNIOR

FIRST SEMESTER

Human Anatomy, Zoöl. 123A.....	5(3-6)
Physiol. Chemistry, Chem. 231....	5(3-6)
Dietetics, Foods and Nutr. 202....	4(3-3)
H. E. Lectures, Gen. H. E. 130....	R
Elective	2(-)

Total 16

SECOND SEMESTER

Child Guidance I, Child Welf. 201,	3(2-3)
The Family, Child Welf. 216.....	2(2-0)
Abn. Psychology, Educ. 204.....	3(3-0)
Elective	7(-)
H. E. Lectures, Gen. H. E. 130....	R(1-0)

Total 15

SENIOR

(Replaced by two and one-half years at University of Kansas Hospitals)

(Equivalent to 31 college hours)

THEORETICAL WORK

Professional Adjustments I and II
Nursing Arts I and II
Materia Medica
Medical Nursing (including specialties)
Surgical Nursing (including specialties)
Dietotherapy
Obstetrical Nursing
Pediatric Nursing
Principles of Public Health Nursing
Principles of Public Hygiene and Sanitation
Social Aspects of Nursing

PRACTICAL WORK

Medicine
Surgery (including operating room)
Pediatrics
Nursery
Obstetrics
Dispensary
Tuberculosis
Public Health

Number of hours required for graduation, 124.

* See footnote regarding electives under Curriculum in Home Economics.

Groups of Electives for Students in the Division of Home Economics

The groups given below are selected with a view to training students for the vocations in which home economics may be directly applied.

A sufficient number of hours may be chosen from any group to fill the elective requirement, or a smaller number of hours may be taken from a group and, for the remaining elective hours, advanced courses of related subject matter may be chosen.

Music may be added to any group, in a minimum of six hours.

Child Care and Training

Sociology, Econ. 151.....	3(3-0)	Parent Guidance, Child Welf. 231,	3(3-0)
Social Pathology, Econ. 258.....	3(3-0)	Psyc. of Childhood and Adoles-	
Family Relationships, Child Welf.		cence, Educ. 250.....	3(3-0)
240	2(2-0)	Child Guidance II, Child Welf. 206,	3(3-0)
Field Work in Nutr., Foods and		Problems in Child Welfare and	
Nutr. 215	3(2-3)	Euthenics, Child Welf. 221....	1 to 5
Heredity and Eugenics, Zool. 216..	2(2-0)	Nutr. of Dev., Foods and Nutr. 210,	2(2-0)
Child Guidance I, Child Welf. 201,	3(2-3)	Psyc. of Excep. Children, Educ. 266,	3(3-0)
Seminar in Child Welfare and		Consumer Buying, Hshld. Econ. 272	3(3-0)
Euthenics, Child Welf. 226....	1 or 2	Econ. Prob. of the Family, Hshld.	
Mental Tests, Educ. 260.....	3(3-0)	Econ. 265	2(2-0)
History of the Home, Hist. 225....	3(3-0)	Social Psychology, Educ. 270.....	3(3-0)

Costume Design

Hist. of Costume, Clo. and Text.		Elem. Journalism, Ind. Jour. 150..	2(2-0)
225	2(2-0)	Journalism for Women, Ind. Jour.	
Adv. Clothing, Clo. and Text. 123,	4(1-9)	170	3(3-0)
Historic Textile Design, Art 233..	2(2-0)	Magazine Features, Ind. Jour. 270,	2(2-0)
Clothing Econ., Clo. and Text. 201,	3(3-0)	Ind. Feature Writing, Ind. Jour.	
Costume Illustration, Art 212.....	2(0-6)	167	2(2-0)
Problems in Costume Design, Art		Radio Writing, Ind. Jour. 162....	2(2-0)
235	2(0-6)	Sociology, Econ. 151.....	3(3-0)
Oral English, Engl. 232.....	3(3-0)	Modern Europe I, Hist. 115.....	3(3-0)

Interior Decoration

Domestic Architecture, Arch. 124..	2(2-0)	Elem. Journalism, Ind. Jour. 150..	2(2-0)
The Family, Child Welf. 216.....	2(2-0)	Journalism for Women, Ind. Jour.	
Historic Textile Design, Art 233..	2(2-0)	170	3(3-0)
Landscape Gardening I, Hort. 125,	3(3-0)	Magazine Features, Ind. Jour. 270,	2(2-0)
Problems in Design, Art 217.....	2(0-6)	Ind. Feature Writing, Ind. Jour.	
Problems in Interior Dec., Art 232,	4(0-12)	167	2(2-0)
Oral English, Engl. 232.....	3(3-0)	Radio Writing, Ind. Jour. 162....	2(2-0)
Modern Europe I, Hist. 115.....	3(3-0)	Sociology, Econ. 151.....	3(3-0)

HOME SERVICE AND FOOD DEMONSTRATION WORK

Public Speaking, Pub. Spk. 107...	2(2-0)	Exp. Cookery, Foods and Nutr. 255,	2(0-6)
Extens. Speech II, Pub. Spk. 108..	2(2-0)	Problems in Foods, Foods and	
Oral English, Engl. 232.....	3(3-0)	Nutr. 245	1(-)
Elem. Journalism, Ind. Jour. 150..	2(2-0)	Inst. Cookery, Inst. Mgmt. 101...	4(1-9)
Journalism for Women, Ind. Jour.		Meats, H. E., An. Husb. 176.....	1(0-3)
170	3(3-0)	Home Mgmt., Hshld. Econ. 240....	3(1-6)
Editing, Ind. Jour. 166.....	2(2-0)	Hshld. Equipment I, Hshld. Econ.	
Prin. of Advertising, Ind. Jour. 178,	4(4-0)	203	2(0-6)
Broadcasting Station Practice, Ind.		Hshld. Equipment II, Hshld. Econ.	
Jour. 180	1(0-3)	205	2(0-6)
Photography, Phys. 151.....	2(1-3)	Problems in Hshld. Econ., Hshld.	
Sociology, Econ. 151.....	3(3-0)	Econ. 243	1 to 3
Methods of Teaching H. E., Educ.		Consumer Buying, Hshld. Econ.	
132	3(3-0)	272	3(3-0)
Field Work in Nutr., Foods and		Econ. Prob. of the Family, Hshld.	
Nutr. 215	3(2-3)	Econ. 265	2(2-0)

Research in Nutrition

Pathogenic Bact. I, Bact. 111.....	4(2-6)	Quant. Anal. B, Chem. 251.....	3(1-6)
Pathogenic Bact. II, Bact. 116....	4(2-6)	Plane Trig., Math. 101.....	3(3-0)
Bact. Technic, Bact. 225.....	3(0-9)	Col. Alg., Math. 104.....	3(3-0)
Chem. I, Chem. 101.....	5(3-6)	Plane Analytical Geom., Math. 110,	4(4-0)
Org. Chem. I, Chem. 218.....	4(2-6)	Calculus I, Math. 114.....	4(4-0)
Org. Chem. II, Chem. 219.....	4(2-6)	Calculus II, Math. 115.....	4(4-0)
Physiol. Chem., Chem. 231.....	5(3-6)	German I, Mod. Lang. 101.....	3(3-0)
Biochem. Analysis, Chem. 237....	2(0-6)	German II, Mod. Lang. 102.....	3(3-0)
Quant. Anal. A, Chem. 250.....	3(1-6)	Scientific German, Mod. Lang. 137,	4(4-0)
Sanitary and Food Bacteriology, Bact. 242	3(1-6)		

Biological Technician

Hygienic Bact., Bact. 206.....	5(3-6)	Quant. Anal. A, Chem. 250.....	3(1-6)
Advanced Serology, Bact. 229.....	5(3-6)	Quant. Anal. B, Chem. 251.....	3(1-6)
Physiol. of Microorganisms, Bact. 222	3(3-0)	Human Physiol., Zoöl. 221.....	4(3-3)or
Bact. Tech., Bact. 225.....	3(0-9)	Embryol., Zoöl. 219.....	4(3-3)
Physiol. Chem., Chem. 231.....	5(3-6)	Human Parasitol., Zoöl. 218.....	3(3-0)
Biochem. Prep., Chem. 234.....	2 to 5	Comparative Anatomy of Vert., Zoöl. 246	4(2-6)
Pathological Chem., Chem. 235....	2(2-0)	Special Histology, Path. 252.....	3(1-6)
Biochem. Analysis, Chem. 237....	2(0-6)		

Homemaking

Child Guidance I, Child Welf. 201,	3(2-3)	Principles of Art I, Art 124.....	3(3-0)
Sociology, Econ. 151.....	3(3-0)	Adv. Clothing, Clo. and Text. 123,	4(1-9)
Com. Organization, Econ. 267.....	3(3-0)	Meats, H. E., An. Husb. 176.....	1(0-3)
Problems in Foods, Foods and Nutr. 310	1 to 3	Hist. of Engl. Literature, Engl. 181,	3(3-0)
Home Mgmt., Household Econ. 240	3(1-6)	Psyc. of Childhood and Adolescence, Educ. 250	3(3-0)
World Classics I, Engl. 280.....	3(3-0)	Econ. Prob. of the Family, Hshld. Econ. 265	2(2-0)
Nutr. of Dev., Foods and Nutr. 210,	2(2-0)	Sanitary and Food Bacteriology, Bact. 242	3(1-6)
Consumer Buying, Hshld. Econ. 272,	3(3-0)		
Child Guidance II, Child Welf. 206,	3(3-0)		

Social and Welfare Work

Child Guidance I, Child Welf. 201,	3(2-3)	Psychol. of Childhood and Adoles- cence, Educ. 250	3(3-0)
Sociology, Econ. 151.....	3(3-0)	Child Guidance II, Child Welf. 206,	3(3-0)
Com. Organization, Econ. 267.....	3(3-0)	Labor Problems, Econ. 233.....	2(2-0)
Field Work in Nutrition, Foods and Nutr. 215	3(2-3)	Rural Sociology, Econ. 156.....	3(3-0)
Econ. Prob. of the Family, Hshld. Econ. 265	2(2-0)	Social Pathology, Econ. 258.....	3(3-0)
Consumer Buying, Hshld. Econ. 272,	3(3-0)	Immi. and Int. Rel., Hist. 228....	2(2-0)
Parent Guidance, Child Welf. 231,	3(3-0)	Probs. in Child Welfare and Euthenics, Child Welf. 221....	1 to 5
American History III, Hist. 203...	3(3-0)	Soc. Psychology, Educ. 270.....	3(3-0)
Prevent. Med. and Pub. Health, Stud. Health, 101.....	2(2-0)	Mental Tests, Educ. 260.....	3(3-0)
		Family Relationships, Child Welf. 240	2(2-0)

Textiles

College Algebra, Math. 104.....	3(3-0)	Physical Chemistry I, Chem. 206,	5(3-6)
General Physics I, Phys. 102.....	4(3-3)	Qual. Organ. Analysis, Chem. 224..	2(0-6)
General Physics II, Phys. 103....	4(3-3)	Probs. in Clo. and Text., Clo. and Text. 215	1 to 3
Plane Trigonometry, Math. 101...	3(3-0)	Human Physiology, Zoöl. 221.....	4(3-3)
Clothing Econ., Clo. and Text. 201,	3(3-0)	Statis. Meth. Ap. to Educ., Educ. 223	3(3-0)
Plane Analytical Geom., Math. 110,	4(4-0)	Bact. Problems, Bact. 270.....	1 to 4
Calculus I, Math. 114.....	4(4-0)	Adv. Textiles, Clo. and Text. 205,	3(1-6)
Calculus II, Math. 115.....	4(4-0)	Exp. Textiles, Clo. and Text. 312,	2 to 5
Consumer Buying, Hshld. Econ. 272,	3(3-0)		
Econ. Prob. of the Family, Hshld. Econ. 265	2(2-0)		

Teaching Home Economics

See "Certificate for Teaching Home Economics."

Art

Professor BARFOOT
Associate Professor EVERHARDY
Assistant Professor HARRIS
Assistant Professor MORRIS
Assistant Professor DARST

Instructor STALDER
Instructor HOLLAND
Instructor KEDZIE
Temporary Assistant WAGNER

The Curriculum in Art is designed to provide a background for homemaking or other professional work. Depending upon their interests, the undergraduate students may specialize in design, interior decoration, costume design, or teaching of art. Major work leading to the degree Master of Science is offered in costume design and interior decoration.

FOR UNDERGRADUATE CREDIT

101A. ELEMENTARY DESIGN I. 2(0-6)*; I, II, and SS. Staff.

A fundamental course in color and form and the application of their principles to daily living. Charge, \$1; deposit, 25 cents.†

101B. ELEMENTARY DESIGN II. 2(0-6); I and II. Prerequisite: Art 101A. Staff.

A continuation of Art 101A, incorporating a unit in history and appreciation of art. Charge, \$1; deposit, 25 cents.

102. DESIGN IN THE CRAFTS. 2(0-6); I, II, or SS. Prerequisite: Art 101B or permission of instructor. Staff.

An application of design principles to various technical processes, as book-binding, block printing, carving, decorative stitchery, leatherwork, and metalwork. Projects selected from this group will make up a semester's work. Charge, \$1.50; deposit, 25 cents.

103. INTERMEDIATE DESIGN. 2(0-6); I. Prerequisite: Art 101B. Staff.

A continuation of Art 101B, with special emphasis on color possibilities and different design media. Charge, \$1; deposit, 25 cents.

105. ADVANCED DESIGN. 2(0-6); II or SS. Prerequisite: Art 103. Barfoot, Everhardy, Morris.

A continuation of Art 103, with emphasis on art structure. Charge, \$1; deposit, 25 cents.

106. WEAVING. 2(0-6); I, II, or SS. Prerequisite: Art 101B. Kedzie.

A study of the principles of design, color, and texture applied to textile construction. Charge, \$2; deposit, 25 cents.

109. POTTERY DESIGN. 2(0-6); I, II, or SS. Prerequisite: Art 101B. Staff.

Art principles applied to specific processes in the production of pottery. Charge, \$2; deposit, 25 cents.

113. INTERIOR DECORATION I. 2(0-6); I, II, and SS. Prerequisite: Art 101B. Staff.

The decoration and furnishing of the modern dwelling. Charge, \$1; deposit, 25 cents.

115. INTERIOR DECORATION II. 2(0-6); I. Prerequisite: Art 113. Staff.

A continuation of Art 113, with attention paid especially to the interplay between modern culture and art expression as shown in interior decoration. Charge, \$1.50; deposit, 25 cents.

* The number before the parentheses indicates the number of hours of credit; the first number within the parentheses indicates the number of hours of recitation each week; the second shows the number of hours to be spent in laboratory work each week; and the third, where there is one, indicates the number of hours of outside work in connection with the laboratory required each week. I, II, and SS indicate that the course is given the first semester, second semester, and summer school, respectively.

† Only one key deposit is made in a given semester, regardless of the number of art courses taken.

117. INTERIOR DECORATION III. 2(0-6); II. Prerequisite: Art 115. Harris, Morris, Darst.

A continuation of Art 115, including a study of house types, furniture, and fabric styles. Charge, \$1.50; deposit, 25 cents.

120. DRAWING. 2(0-6); I and II. Prerequisite: Art 101B. Staff.

Representative sketching, decorative illustrating, and creative designing in which a variety of media and technique is employed. Charge, \$2; deposit, 25 cents.

127. LETTERING. 2(0-6); I, II, or SS. Prerequisite: Art 101B. Harris, Morris, Darst.

Creative design in the field of lettering in relation to historic and natural forms. Charge, \$1; deposit, 25 cents.

130. COSTUME DESIGN I. 2(0-6); I, II, and SS. Prerequisite: Art 101A. Staff.

Line, form, color, texture in costume design and selection as related to the requirements of the individual. This course is a design basis for garment selection and construction. Charge, \$1; deposit, 25 cents.

134. COSTUME DESIGN II. 2(0-6); I. Prerequisite: Art 130. Staff.

A continuation of Art 130, with review and application of the principles of art in modern costume in relation to the human figure as the structural basis for costume. Charge, \$1.50; deposit, 25 cents.

138. COSTUME DESIGN III. 2(0-6); II. Prerequisite: Art 134. Staff.

A continuation of Art 134, dealing with the relation between the historic background and fabric and costume design. Charge, \$1.50; deposit, 25 cents.

FOR GRADUATE AND UNDERGRADUATE CREDIT

201. PRINCIPLES OF ART I. 3(3-0); I or SS. Prerequisite: Art 101B. Barfoot, Harris, Morris.

The culture of various peoples and their homes as shown by their use of color, line, and form in architecture, sculpture, and painting.

202. PRINCIPLES OF ART II. 3(3-0); II or SS. Prerequisite: Art 201. Barfoot, Harris, Morris.

A continuation of Art 201, dealing particularly with home crafts and minor arts.

212. COSTUME ILLUSTRATION. 2(0-6); II or SS. Prerequisite: Art 101B and 130. Staff.

Costume figures for fashion illustration rendered in various media suitable for reproduction. Charge, \$2; deposit, 25 cents.

217. PROBLEMS IN DESIGN. Credit to be arranged; I, II, or SS. Prerequisite: eight hours in art or permission of instructor. Staff.

Problems in design planned to meet the particular needs of the student. Charge, \$1; deposit, 25 cents.

230. PROBLEMS IN TEACHING ART. Credit to be arranged; I, II, or SS. Prerequisite: Art 101B and Educ. 132 or its equivalent. Barfoot, Everhardy.

For the high-school teacher who is correlating art with home economics, particularly for the teacher of art connected with vocational training. Lectures and class discussions of methods, consideration of suitable laboratory equipment, use of illustrative material, and preparation of courses of study. Charge, \$1; deposit, 25 cents.

232. PROBLEMS IN INTERIOR DECORATION. Credit to be arranged; I, II, or SS. Prerequisite: Art 117 or permission of instructor. Harris, Morris, Darst.

Problems planned with the student to meet her particular needs. Charge, \$1; deposit, 25 cents.

233. HISTORIC TEXTILE DESIGN. 2(2-0); I, II, or SS. Prerequisite: Art 101B and Clo. and Text. 116. Staff.

Design employed in fabrics in each of the great art periods.

235. PROBLEMS IN COSTUME DESIGN. Credit to be arranged; I, II, or SS. Prerequisite: eight hours in art or permission of instructor. Staff.

Problems planned with the student to meet her particular needs. Charge, \$1; deposit, 25 cents.

242. ART OF THE SOUTHWEST INDIANS. 2(2-0); I, II, or SS. Prerequisite: Art 101A. Everhardy.

Discussions of the origin and development of the decorative arts and ceremonials of the Southwest area from prehistoric times to the present. Deposit, 25 cents.

244. THE ARTS OF MEXICO. 2(2-0); I, II, or SS. Prerequisite: Art 101A. Harris.

A survey of the arts of pre-Spanish, colonial, and modern Mexico, their origins and developments. Deposit, 25 cents.

246. ART OF PRIMITIVE PEOPLE. 2(2-0); II. Prerequisite: Art 101A. Everhardy.

A study of the local art styles of various groups of primitive people, stressing their skills in designing for everyday living. Deposit, 25 cents.

FOR GRADUATE CREDIT

302. ADVANCED COSTUME DESIGN. Credit to be arranged. I, II, and SS. Prerequisite: consult instructors. Staff.

Individual research problems which may form the basis for the Master's thesis. Charge to be arranged with instructor.

304. ADVANCED INTERIOR DECORATION. Credit to be arranged. I, II, and SS. Prerequisite: consult instructors. Staff.

Individual research problems which may form the basis for the Master's thesis. Charge to be arranged with instructor.

Child Welfare and Euthenics

Professor ROY
Associate Professor KELL
Associate Professor WILLIAMS
Assistant Professor RAFFINGTON
Instructor ALDOUS

Instructor BURTON
Instructor KENT
Graduate Assistant WATERSON
Graduate Assistant FLAGG

In the Department of Child Welfare and Euthenics, instruction is given in physical and mental health, child behavior and guidance, and family relationships. The instruction in child behavior and guidance is based on work with children 2 to 5 years of age in the two nursery schools.

FOR UNDERGRADUATE CREDIT

101. PERSONAL HEALTH. 2(2-0); I, II, and SS. Staff.

The maintenance and improvement of social, mental, and physical health. Charge, 25 cents.

FOR GRADUATE AND UNDERGRADUATE CREDIT

201. CHILD GUIDANCE I. 3(2-3); I, II, and SS. Prerequisite: Educ. 184 and Child Welf. 101 or equivalent. Staff.

The needs of young children, the principles involved in understanding and guiding young children, and the application of these principles in daily life.

Laboratory.—Directed observation and assisting in the nursery school. Charge, \$1. Additional charge for lunches, \$2.

206. CHILD GUIDANCE II. 3(3-0); II. Prerequisite: Child Welf. 201. Roy. Guidance principles applied to the needs of adolescents.

211. FAMILY HEALTH. 3(3-0); I, II, and SS. Prerequisite: Junior standing and Educ. 184; Zoöl. 105 or 221; Child Welf. 101 or equivalent. Williams.

Factors conducive to family and community health; physical development and care of the child; simple first-aid and home nursing procedures. Charge, 50 cents.

216. THE FAMILY. 2(2-0) I, II, or SS. Prerequisite: Educ. 184 and junior standing. Roy, Kell.

An approach to an understanding of the American family of today, made through study of the dynamic relationship of family members. Charge, 50 cents.

221. PROBLEMS IN CHILD WELFARE AND EUTHENICS. Credit to be arranged; I, II, and SS. Prerequisite: Child Welf. 201; consult instructor. Staff.

226. SEMINAR IN CHILD WELFARE AND EUTHENICS. 1 to 2 hours; II. Prerequisite: Child Welf. 201. Roy, Kell.

Consideration of current research in the field.

231. PARENT GUIDANCE. 3(3-0); I. Prerequisite or concurrent: Child Welf. 206 and 216. Kell.

Survey and organization of principles, methods, and materials useful to advanced students. Field work is offered whenever practicable. Charge, \$1.

240. FAMILY RELATIONSHIPS. 2(2-0); II. Prerequisite: Child Welf. 216. Roy, Kell.

Advanced study of current research relating to interaction of family members. Charge, 50 cents.

FOR GRADUATE CREDIT

301. RESEARCH IN CHILD WELFARE AND EUTHENICS. Credit to be arranged; I, II, and SS. Consult instructor. Roy, Kell, Williams.

Individual research problems which may form the basis for the Master's thesis. Charge to be arranged.

Clothing and Textiles

Professor LATZKE
Associate Professor COWLES
Associate Professor HESS
Assistant Professor CORMANY
Assistant Professor FLETCHER

Instructor HOWE
Instructor GILMORE
Instructor LUNDVICK
Graduate Assistant SURRETT

The Department of Clothing and Textiles offers courses designed to furnish essential knowledge for the selection of clothing and household fabrics. Design principles and the technique of garment construction are presented. Advanced courses are offered for students who wish to prepare for vocational, professional, and business positions such as college teachers, research workers, textile chemists, clothing consultants, purchasing agents for institutions and department stores, and extension workers.

FOR UNDERGRADUATE CREDIT

101. ELEMENTARY CLOTHING. 0(0-6); I, II. Staff.

Fundamental processes of garment construction. No credit, but is required of all home economics students who have not had sufficient work to enter Clo. and Text. 103. Charge, \$1; deposit, 25 cents.

103. CLOTHING FOR THE INDIVIDUAL. 4(1-9); I, II, and SS. Prerequisite: One semester of clothing in high school or equivalent and Art 130. Staff.

Application of design principles to dress; budgeting and buying procedures.

Laboratory.—Development of foundation pattern; flat pattern designing; construction of wool or silk garment. Charge, \$2.50; deposit, 25 cents.

110. CLOTHING SELECTION. 2(2-0); I and II. Cowles, Gilmore.

Selection of clothing with self-analysis as a basis; budgeting, buying procedures. Designed for students not majoring in home economics, or those not planning to take Clo. and Text. 103.

116. TEXTILES. 3(2-3); I, II, and SS. Prerequisite: Chem. 122; Phys. 101 recommended. Hess, Fletcher.

Fundamentals of textiles as related to the problems of the consumer.

Laboratory.—Fabrics for specific uses; identification of fibers; simple fabric analysis; the effect on fabrics of various methods of cleaning. Charge, \$2; deposit, 25 cents.

123. ADVANCED CLOTHING. 4(1-9); I, II, and SS. Prerequisite: Clo. and Text. 103. Open to juniors and seniors. Latzke, Cormany, Howe.

Social significance of fashion; application of design principles to dress.

Laboratory.—Designs draped in cotton and then in silk or wool. Charge, \$3; deposit, 25 cents.

FOR GRADUATE AND UNDERGRADUATE CREDIT

201. CLOTHING ECONOMICS. 3(3-0); I or II, and SS. Prerequisite: Clo. and Text. 103 and 116 and Econ. 101. Latzke.

The organization of textile industries and markets; consumer problems in relation to market conditions; standardization of clothing and textiles.

205. ADVANCED TEXTILES. 3(1-6); I or II, and SS. Prerequisite: Clo. and Text. 116. Hess, Fletcher.

Physical, chemical, and optical testing of textiles.

Laboratory.—Emphasis placed on research technique. Charge, \$3; deposit, 25 cents.

215. PROBLEMS IN CLOTHING AND TEXTILES. Credit to be arranged; I, II, and SS. Prerequisite: Senior or graduate standing; consult instructor. Staff.

An assigned problem in clothing or textiles. Charge to be arranged with instructor.

225. HISTORY OF COSTUME. 2(2-0); II. Prerequisite: Hist. 101 or equivalent. Cowles.

FOR GRADUATE CREDIT

301. RESEARCH IN CLOTHING AND TEXTILES. Credit to be arranged; I, II, and SS. Prerequisite: Graduate standing; consult instructor. Latzke, Hess, Fletcher.

Individual research in clothing or in textiles which may form the basis for the Master's thesis. Charge to be arranged with instructor.

304. CLOTHING AND TEXTILES SEMINAR. 1(1-0); II and SS. Prerequisite: Graduate standing. Staff.

Assigned readings and discussion of current developments in the field.

312. EXPERIMENTAL TEXTILES. 2 to 5 hours; I, II, and SS. Prerequisite: Clo. and Text. 205. Hess, Fletcher. Charge to be arranged with instructor.

Food Economics and Nutrition

Professor PITTMAN
Associate Professor VAIL
Associate Professor McMILLAN
Assistant Professor BROWNING
Assistant Professor KUNERTH
Assistant Professor NUTTER
Instructor MEYER

Instructor MULLEN
Instructor FORNEY
Instructor MEILLER
Instructor STEWART
Technician CEDERQUIST
Assistant EDELBLUTE

Selection, preservation, preparation, and service of food suited to individual requirements involve the application of principles of chemistry, physics, bacteriology, physiology, economics, and art. Courses in these subjects are required and some are prerequisite to courses offered in this department.

Training is provided for teachers of foods, dietitians, and commercial, extension, and research workers.

FOR UNDERGRADUATE CREDIT

102. **FOODS I.** 5(3-6); I, II, and SS. Staff.

Elementary nutrition and food economics. Practice in food preparation and meal service. Charge, \$5; deposit, \$1.

107. **FOODS II.** 3(1-6); I and II. Prerequisite. Chem. 122 and Foods and Nutr. 102 or equivalent. Staff.

Chemical and physical properties of food related to preparation and preservation. Charge, \$4; deposit, \$1.

112. **HUMAN NUTRITION.** 3(3-0); I and II. Prerequisite: Foods and Nutr. 107 and Zoöl. 219 or 221. ‡ Staff.

Chemistry of foods and nutrition, emphasizing food nutrients, digestion, and metabolism.

121. **APPLIED NUTRITION.** 2(2-0); I and II. Prerequisite: Chem. 122 or permission of instructor. Pittman, Forney.

Practical nutrition, including food requirements, food selection, and food habits. For men and women students not majoring in home economics.

176. **MEATS H. E.** 1(0-3); I and II.

See Department of Animal Husbandry, Division of Agriculture, An. Husb. 176.

FOR GRADUATE AND UNDERGRADUATE CREDIT

202. **DIETETICS.** 4(3-3); I, II, and SS. Prerequisite: Foods and Nutr. 112. Staff.

Food requirements in health during infancy, childhood, adolescence, adult life, and old age. Principles of human nutrition applied to adequate diets at different cost levels.

Laboratory.—Calorie, protein, mineral, and vitamin values; diets for infants, children, and adults. Charge, \$4.50; deposit, \$1.

205. **DIETETICS FOR ABNORMAL CONDITIONS.** 2(1-3); I and II. Prerequisite: Foods and Nutr. 202. Meiller.

Dietetic requirements in pathological and abnormal conditions. (For students who expect to qualify as professional dietitians.)

Laboratory.—Demonstration of diets used in special conditions, preparation of trays, computation of dietaries, consideration of costs. Charge, \$1; deposit, \$1.

210. **NUTRITION OF DEVELOPMENT.** 2(2-0); II. Prerequisite: Foods and Nutr. 202. Pittman.

Nutrition in pregnancy and lactation. Food requirements of fetus, infant, pre-school child, and school child through adolescence.

215. **FIELD WORK IN NUTRITION.** 3(2-3); I and II. Prerequisite: Foods and Nutr. 202. Browning, Mullen.

Survey of field of child nutrition, field work with school children, special work with malnourished and normal individuals. Charge to be arranged with instructor.

245. **PROBLEMS IN FOODS.** Credit to be arranged; I, II, and SS. Prerequisite: Consult instructor. Staff.

Problems dealing with preparation, preservation, and storage of food. Charge to be arranged with instructor.

248. **PROBLEMS IN FOOD ECONOMICS AND NUTRITION.** Credit to be arranged. I, II, and SS. Prerequisite: Senior or graduate standing. Staff.

Problems dealing with the nutritive value of foods; feeding experiments; dietary studies, practice in methods commonly used in simpler experiments in nutrition. Charge to be arranged with instructor.

‡ Students from other divisions desiring to elect Food and Nutr. 112 may substitute an equivalent number of hours in other sciences for these requirements.

251. **FOOD ECONOMICS AND NUTRITION SEMINAR.** 1 to 2 hours a semester; maximum, 4 credits; I, II, and SS. Prerequisite: Foods and Nutr. 112. Staff. Individual reports and discussion of topics in fields of food economics and nutrition. Special attention to recent literature. Charge, \$1.

255. **EXPERIMENTAL COOKERY.** 2(1-3); I and II. Prerequisite or concurrent: Foods and Nutr. 202. Vail, McMillan, Meyer.

Food preparation from experimental standpoint. Charge to be arranged with instructor; deposit, \$1.

256. **FUNDAMENTALS OF DEMONSTRATIONS.** 2(0-6); II. Prerequisite: Foods and Nutr. 255, Hshld. Econ. 203, and Educ. 132. Staff.

Purposes and techniques of demonstrations in foods and household equipment, with special reference to their application in the field of business. In coöperation with the Department of Household Economics. Charge to be arranged with the instructor.

FOR GRADUATE CREDIT

305. **RESEARCH IN FOOD ECONOMICS AND NUTRITION.** Credit to be arranged; I, II, and SS. Prerequisite: Consult instructor. Staff.

Individual research problems which may form the basis for the Master's thesis. Charge to be arranged with instructor.

General Home Economics

Dean JUSTIN
Assistant Dean McMILLAN
Assistant Professor RAFFINGTON
Assistant BARE

FOR UNDERGRADUATE CREDIT

130. **HOME ECONOMICS LECTURES.** R (meetings by appointment). Staff, department heads of the division, professors of subject-matter departments, students, and invited speakers. Charge, 75 cents.

Freshmen meet weekly during the fall semester. The purpose of these meetings is: (1) The orientation of the student to her college environment; (2) the development of the ability to study; (3) guidance in choice of one of the several fields of home economics for her profession.

Seniors meet weekly during the spring semester. The opportunities and responsibilities of the home economist are presented, and means for professional growth and personal advancement of the trained woman are stressed.

All students of the division meet in interest groups during each semester, the division into groups being made on the basis of classification and professional interest. Programs are presented by members of the faculty and speakers from outside. These groups are sponsored by the Home Economics Club.

135. **GUIDANCE OF FRESHMEN.** 1(1-0); I. Prerequisite: Junior or senior standing or special permission from the dean. Application for enrollment in this class must be made the preceding spring semester. Dean's staff, Division of Home Economics, and others.

Instruction in counseling techniques employed in freshman orientation in the Division of Home Economics.

140. **HOME PROJECTS.** R (meetings by appointment). Each student must complete a minimum of two home projects at least one semester before graduation, except that students in the Curriculum in Home Economics and Nursing and those transferring from other colleges and divisions with junior or senior standing need to complete only one. Bare.

COURSES IN HOME ECONOMICS EDUCATION*

Professor RUST
Assistant Professor BAXTER
Instructor BARE

Instructor ROSKIE
Assistant MIZELL

FOR UNDERGRADUATE CREDIT

132. METHODS OF TEACHING HOME ECONOMICS. 3(3-0); I, II, and SS. Rust, Baxter.

See Department of Education, Division of General Science.

160. TEACHING PARTICIPATION IN HOME ECONOMICS. 3(-); I, II, and SS. By appointment. Rust, Baxter, Bare.

See Department of Education, Division of General Science.

FOR GRADUATE AND UNDERGRADUATE CREDIT

232. TEACHING SUBJECTS RELATED TO HOME ECONOMICS. 1 to 3 hours; I, II, and SS. Prerequisite: Educ. 184 and 132. Rust, Wyckoff.

See Department of Education, Division of General Science.

234. METHODS IN ADULT HOMEMAKING CLASSES. 1 to 3 hours; SS. Prerequisite: Educ. 132 and 184 or equivalent. Wyckoff.

The principles of teaching applied to adult classes and a demonstration class in one or more phases of homemaking.

FOR GRADUATE CREDIT

313. RESEARCH IN ORGANIZATION AND PRESENTATION OF HOME ECONOMICS. Credit to be arranged; I, II, and SS. Prerequisite: graduate standing and confirmation of Division of Home Economics. Justin, Rust.

See Department of Education, Division of General Science.

314. PROBLEMS IN ORGANIZATION AND PRESENTATION OF HOME ECONOMICS. Credit to be arranged; I, II, and SS. Prerequisite: senior or graduate standing. Justin, Rust.

See Department of Education, Division of General Science.

315. SUPERVISION IN HOME ECONOMICS. 2 hours; I, II, and SS. Prerequisite: Educ. 160 and experience in teaching home economics. Rust.

See Department of Education, Division of General Science.

318. SEMINAR IN HOME ECONOMICS EDUCATION. 2 or 3 hours; II and SS. Prerequisite: Educ. 160 and experience in teaching home economics. Rust and visiting instructors.

Recent trends in home economics education.

See Department of Education, Division of General Science.

Household Economics

Professor LINDQUIST
Associate Professor GUNSELMAN
Assistant Professor AGAN
Assistant Professor MCKINNEY

Instructor BARE
Instructor BARNES
Graduate Assistant DAVIS

Through the courses in the Department of Household Economics an opportunity is offered for studying the effect of social and economic forces on the home and its management. The phases presented for study include housing, home management, equipment, and economic problems of the family. Graduate students preparing to become advisers in home management houses, specialists and consultants in home management, teachers, homemakers, or research workers in this field find suitable courses in this department.

* The eight courses named here are given by the Department of Education for the Division of Home Economics. The staff is appointed coöperatively by that department and the Division of Home Economics.

FOR UNDERGRADUATE CREDIT

107. *THE HOUSE*. 3(2-3); I, II, and SS. Prerequisite: Foods and Nutr. 102; Phys. 109 recommended. Agan, Barnes.

A consideration of dwellings, their environment, plan, furnishings, and equipment, which will promote good utilization of family resources.

Laboratory.—A survey of certain furnishings and equipment for the home and their use. Charge, \$1.

FOR GRADUATE AND UNDERGRADUATE CREDIT

203. *HOUSEHOLD EQUIPMENT I*. 2(0-6); I, II, and SS. Prerequisite: Phys. 109; Hshld. Econ. 107. Agan.

Selection, care, construction, operation, and use of certain equipment used in the home. Charge, \$2.50.

205. *HOUSEHOLD EQUIPMENT II*. 2(0-6); II. Prerequisite: Hshld. Econ. 203. Agan.

A continuation of Household Equipment I. Charge, \$2.50.

240. *HOME MANAGEMENT*. 3(1-6); I, II, and SS. Prerequisite: senior standing. Lindquist, McKinney, Bare.

Application of basic courses in home economics to the management of a home.

Laboratory.—Residence is required in the home-management houses for a period of six weeks.

243. *PROBLEMS IN HOUSEHOLD ECONOMICS*. Credit to be arranged; I, II, and SS. Prerequisite: consult instructor. Staff.

Special problems for individual investigation in standards of living and family expenditures; housing and household equipment; use of family resources.

256. *FUNDAMENTALS OF DEMONSTRATIONS*. 2(0-6); II. Prerequisite: Foods and Nutr. 255, Hshld. Econ. 203, and Educ. 132. Staff.

See Department of Food Economics and Nutrition.

263. *FAMILY FINANCE*. 2(2-0); I, II, and SS. Gunselman, McKinney.

Economic problems involved in the efficient management of the family's financial resources.

265. *ECONOMIC PROBLEMS OF THE FAMILY*. 2(2-0); II and SS. Prerequisite: Econ. 101 and Hshld. Econ. 263. Lindquist, Gunselman.

Problems of household production and of earning and spending the money income; factors determining the purchasing power of the "dollar of the home."

272. *CONSUMER BUYING*. 3(3-0); I, II, and SS. Prerequisite: Econ. 101 and junior standing. Gunselman and others from related subject-matter fields.

Problems of the consumer in the present market, aids toward intelligent buying of commodities, and the need for protective legislation. Field trip.

275. *SEMINAR IN HOME MANAGEMENT*. 2 to 3 hours a semester. I, II, and SS. Prerequisite: senior or graduate standing. Lindquist.

A review of management literature and trends; the contribution made by home management to the family and community. Charge, \$1.

FOR GRADUATE CREDIT

305. *ECONOMICS OF CONSUMPTION*. 2(2-0); II and SS. Prerequisite: Econ. 101 and Hshld. Econ. 263 and 265. Lindquist, Gunselman.

The consumer and his function; the economic significance of choice and of the planes of consumption.

310. *RESEARCH IN HOUSEHOLD ECONOMICS*. Credit to be arranged; I, II, and SS. Prerequisite: Consult instructors. Lindquist, Gunselman, Agan.

Individual research problems in household economics, housing, equipment, or management, which may form the basis for the Master's thesis.

Institutional Management

Professor WEST
Associate Professor WOOD
Instructor SMULL
Instructor MILLER

*Assistant MIZELL
Graduate Assistant WILLEY
Graduate Assistant DZIEGIEL

Courses in this department provide training for cafeteria, tearoom, and lunchroom managers, dietitians, and directors of residence halls.

FOR UNDERGRADUATE CREDIT

101. INSTITUTIONAL COOKERY. 4(1-9); I, II, and SS. Prerequisite: Foods and Nutr. 107. Smull.

Food problems of institutions, including preparation and serving of food in large quantities, menu planning, and food costs.

Laboratory.—Carried on in College cafeteria where food is prepared and served in large quantities. Charge, \$2.50.

103. INSTITUTIONAL FOOD BUYING. 2(2-0); I, II, and SS. Prerequisite or concurrent: Inst. Mgmt. 101. West.

Producing areas; distribution of food products; methods of purchasing food in large quantities.

105. INSTITUTIONAL FURNISHINGS AND EQUIPMENT. 2(2-0); I, II, and SS. Prerequisite or concurrent: Inst. Mgmt. 101. Miller.

Selection, arrangement, installation, and care of the different types of equipment for the house and food departments of institutions.

FOR GRADUATE AND UNDERGRADUATE CREDIT

206. ORGANIZATION AND ADMINISTRATION OF INSTITUTIONS. 3(3-0); I and II. Prerequisite (or concurrent for graduate students): Inst. Mgmt. 101. West, Wood.

Organization and administration problems of the food and house departments of certain institutions such as the school lunchroom, residence halls, hospitals, cafeteria. Concurrent residence in Van Zile Hall gives opportunity for actual managerial experience.

210. PROBLEMS IN INSTITUTIONAL MANAGEMENT. Credit to be arranged; I, II, and SS. Prerequisite or concurrent: Inst. Mgmt. 206; consult instructor. Staff.

Individual investigation of problems in institutional management. Conferences and reports at appointed hours.

218. SCHOOL FOOD SERVICE. 2(1-3); I, II, and SS. Prerequisite: Foods and Nutr. 107. Staff.

Organization, administration, equipment, food buying, food costs, and menu planning for special meals and school lunchroom service.

225. TEAROOM MANAGEMENT. 3(0-9); I and II. Prerequisite or concurrent: Inst. Mgmt. 206. Miller.

Practical experience in planning, preparing, and serving food for the public. The College tearoom serves as a laboratory for this course. Charge, \$2.50.

235. INSTITUTIONAL HOUSEKEEPING. 2(1-3); II. Prerequisite or concurrent: Inst. Mgmt. 206. Wood.

Problems involved in the management and care of the house departments of various types of institutions. Charge, \$1.

FOR GRADUATE CREDIT

301. RESEARCH IN INSTITUTIONAL MANAGEMENT. Credit to be arranged: I, II, and SS. Prerequisite: Consult instructor. Staff.

* See Department of Education, Division of General Science.

Bureau of Research in Home Economics

The Bureau of Research in Home Economics conducts investigations in the scientific, economic, and social problems of the home. The purpose of this research is to discover new facts and new methods in the application of scientific knowledge bearing upon the welfare of the members of the family and the conditions under which they live.

The fields of research included in the bureau are: child welfare, clothing and textiles, foods, food economics, household administration, institutional management, human nutrition, dietetics, and public health.

The laboratories of the Division of Home Economics include equipment suitable for work on certain of the problems. Opportunities for surveys and investigations of conditions in the state are found through the coöperation of various educational and social agencies.

The results of all investigations are published from time to time and are available on request to all citizens of the state.

The personnel of the bureau staff includes members of the teaching faculty in home economics. Several of the departments in other divisions of the College advise or collaborate with officers of the bureau on problems of related interest.

Among the investigations in progress are the following:

- *Effect upon the animal body of varying the amount of vitamin in the diet.

- *Vitamin content of foods relating to human nutrition:

- a. Fruits.
- b. Vegetables.
- c. Cereals.
- d. Eggs.
- e. Dairy products.
- f. Meat.

- *Utilization by human subjects of the nitrogen and phosphorus of different cuts of meat.

Factors affecting the quality of cakes.

- *Composition of cooked meats.

Dietary studies—group, individual, and balance studies.

- *Nutritional status of college women as related to dietary habits.

- *A study of the factors affecting service qualities of certain textile fabrics.

- *A comparison of the service qualities of certain synthetic fabrics and mixed synthetic fabrics.

- *A study of the rayon fiber as affected by light, light and moisture, and light and perspiration.

Coefficient of absorption of textile materials.

Comparative study of certain body measurements:

- a. With those of selected commercial patterns.
- b. With those of certain commercially made garments.

Methods in parent education.

Behavior records for nursery school.

The difference in individuals in maintaining physical equilibrium under varying conditions.

Studies of factors affecting the expenditures for family living.

* The investigations starred are being supported in part by funds from the Agricultural Experiment Station.

The Division of Veterinary Medicine

RALPH R. DYKSTRA, *Dean*

VETERINARY ENROLLMENT LIMITED

By authority of the State Board of Regents, enrollment in the Curriculum in Veterinary Medicine is limited to a total of 200 students. Persons wishing to enter this curriculum should apply several weeks in advance of the opening of the college year. Admission to each of the four years is based on the applicant's scholarship record and other evidence of his fitness. When all other factors are equal, first preference is given to applicants who are residents of Kansas, and second preference to applicants who are residents of those states having no standard college of veterinary medicine. In general, no requests for admission will be approved after August 15. Application blanks may be obtained from the Dean of the Division of Veterinary Medicine.

Effective on and after January 1, 1940, the College is authorized to require each nonresident of Kansas filing an application for selection as a student in the Division of Veterinary Medicine to deposit the amount of the nonresident matriculation fee, which at present is \$20. If the application for selection is approved by the Committee on the Selection of Veterinary Students, the deposit is to be applied when the student enrolls as payment of the usual matriculation fee required of nonresidents, or in the case of those nonresidents who have been previously enrolled in the College—though not as students of Veterinary Medicine—it is to be applied on the incidental fee. If the applicant is not approved by the Committee on the Selection of Veterinary Students, the deposit is to be returned to him in full. If an approved applicant does not present himself for registration within ten days after the opening of the next semester following the date of the receipt of the application, 50 percent of the deposit will be forfeited to the College.

Applicants must offer: (1) the high-school units required for admission to the pre-veterinary adaptation of the freshman year of the Curriculum in General Science; (2) thirty-two hours of college work as prescribed in or equivalent to the pre-veterinary year in the Division of General Science. This work may be done here or in any approved junior college, college, or university.

CURRICULUM IN VETERINARY MEDICINE

The Curriculum in Veterinary Medicine in Kansas State College was established to give the young men of this state an opportunity to pursue these studies in an agricultural environment, where the facilities offered by other branches of the College would be at their command. Better to fit the veterinarian to deal wisely with the livestock problems which he has to meet, he is required to take the work in livestock feeding, breeding, and judging, in milk inspection, and in zoölogy, in addition to his purely professional work.

Work must be taken as prescribed, except that certain courses may be selected from the list of extracurricular electives if the student has the prerequisites.

Curriculum in Veterinary Medicine

FIRST YEAR

FIRST SEMESTER		SECOND SEMESTER	
Anatomy I, Anat. 104.....	*4(3-3)	Anatomy II, Anat. 110.....	8(4-12)
El. Histology, Path. 103.....	1(0-3)	Histology I, Path. 104.....	3(1-6)
El. of An. Husb., An. Husb. 125..	3(2-3)	Path. Bact. I, Bact. 111.....	4(2-6)
Gen. Org. Chemistry, Chem. 122..	5(3-6)	Infantry IV, Mil. Sc. 104.....	1(1-2)
Medical Botany, Bot. 126.....	2(1-3)	Phys. Educ. M, Phys. Ed. 103....	R(0-2)
Infantry III, Mil. Sc. 103.....	1(1-2)		
Phys. Educ. M, Phys. Ed. 103....	R(0-2)		
Total	16	Total	16

SECOND YEAR

FIRST SEMESTER		SECOND SEMESTER	
Anatomy III, Anat. 112.....	4(1-9)	Pathology I, Path. 203.....	5(3-6)
Comp. Physiology I, Anat. 222....	4(3-3)	Comp. Physiology II, Anat. 224....	5(3-6)
Histology II, Path. 106.....	3(1-6)	Farm Poul. Prod., Poul. Husb. 101,	2(1-2, 1)
Path. Bact. II, Bact. 116.....	4(2-6)	Feeds and Feeding, An. Husb. 189,	3(3-0)
Dairy Cattle Judg., Dairy Husb.		Dairy Inspec. for Veterinary Stu-	
104	1(0-3)	dents, Dairy Husb. 119.....	2(1-3)
Total	16	Total	17

THIRD YEAR

FIRST SEMESTER		SECOND SEMESTER	
Surgery I, Surg. 102.....	5(5-0)	Surgery II, Surg. 107.....	5(5-0)
Materia Medica, Surg. 158.....	4(3-3)	Dis. of Large Animals I, Surg. 175,	5(5-0)
Pathology II, Path. 208.....	4(3-3)	Pathology III, Path. 211.....	3(2-3)
Parasitology, Zoöl. 208.....	3(2-3)	Therapeutics, Surg. 163.....	3(3-0)
Clinics I, Surg. 138.....	2(0-6)	Clinics II, Surg. 141.....	2(0-6)
Total	18	Total	18

FOURTH YEAR†

FIRST SEMESTER		SECOND SEMESTER	
Dis. of Large Animals II, Surg. 177,	5(5-0)	Inf. Dis. of Large Animals, Surg.	
Dis. of Small Animals, Surg. 186..	2(2-0)	181	5(5-0)
Surgical Exercises, Surg. 112.....	1(0-3)	Obst. and Breed. Dis., Surg. 130..	5(5-0)
Meat Hygiene, Path. 217.....	3(3-0)	Poultry Diseases, Bact. 217.....	2(2-0)
Pathology IV, Path. 214.....	3(2-3)	Med. Econ. and Law, Surg. 191..	2(2-0)
Clinics III, Surg. 144.....	4(0-12)	Clinics IV, Surg. 147.....	4(0-12)
Clinical Path. I, Path. 225.....	R(0-12)	Clinical Path. II, Path. 226.....	R(0-12)
Total	18	Total	18

Number of hours required for graduation, 137.

Extracurricular Electives

FIRST SEMESTER		SECOND SEMESTER	
Vaccine Manu. I, Path. 228.....	2-5(-)	Vaccine Manu. II, Path. 231.....	2-5(-)

FIRST OR SECOND SEMESTER

Special Histology, Path. 252.....	3(1-6)
Pathological Technic and Diagnosis I, Path. 222.....	2 to 5(-)
Pathological Technic and Diagnosis II, Path. 223.....	2 to 5(-)
Special Anatomy, Anat. 202.....	2 to 4(-)
Applied Anatomy, Anat. 206.....	1(0-3)
Research in Pathology, Path. 302.....	Credit to be arranged
Problems in Physiology, Anat. 215.....	Credit to be arranged
Research in Medicine, Surg. 310.....	Credit to be arranged
Research in Surgery, Surg. 301.....	Credit to be arranged
Senior Seminar, V. M. 101.....	2(1-3)
Applied Veterinary Parasitology, Path. 250.....	2(1-3)
Urine Analysis, Anat. 228.....	1(0-3)

* The number before the parentheses indicates the number of hours of credit; the first number within the parentheses indicates the number of hours of recitation each week; the second shows the number of hours to be spent in laboratory work each week; and the third, where there is one, indicates the number of hours of outside work in connection with the laboratory each week.

† Because of the prospective intimate relationship between students of veterinary medicine and human health, all fourth-year students of veterinary medicine must take physical examinations given by the Department of Student Health, the records of which will become part of the permanent college records of the students.

Anatomy and Physiology

Professor BURT
Professor McLEOD
Professor LEASURE
Instructor LINK
Instructor COVER

The classroom instruction consists of lectures, quizzes, and recitations, and special dissection of the part under discussion; also a study of dissected specimens, various models, and the Azoux model of the horse. Mounted skeletons and limbs and loose bones are abundant in the museum. The horse is taken as a type, and the other domestic animals are compared with the horse. As often as necessary parts of other animals are dissected to show the differences.

The equipment for instruction in physiology is ample to give the student a thoroughly comprehensive course in laboratory study.

COURSES IN ANATOMY

FOR UNDERGRADUATE CREDIT

104. ANATOMY I. 4(3-3)*; I. McLeod, Cover.

A detailed study of the bones of the horse, and a comparative study of the bones of other animals and of man. Deposit, \$3.

110. ANATOMY II. 8(4-12); II. Prerequisite: Anat. 104. Burt, McLeod, Cover.

Dissection of the trunk and limbs of the horse; study of the muscles, viscera, and joints, and of the blood and nerve supply of the same. Deposit, \$8.

112. ANATOMY III. 4(1-9); I. Prerequisite: Anat. 104. Burt, Cover.

Dissection and study of all structures of the head of the horse with exception of the bones; the comparative anatomy of other domestic animals. Deposit, \$8.

101. V. M. SENIOR SEMINAR. 2(1-3); II. Prerequisite: Senior standing. Staff.

Given coöperatively by the several departments of the division; largely a review of the courses in the professional curriculum, and a study of recent developments in veterinary medicine; special emphasis on preparation for federal and state examinations. Deposit, \$3.

FOR GRADUATE AND UNDERGRADUATE CREDIT

202. SPECIAL ANATOMY. 2 to 4 hours; II. Prerequisite: Anat. 104 or 110 or 112 or 131 or equivalent. Burt, McLeod.

Study of any part of the horse (as the digestive system, the genital system), ox, sheep, pig, dog, cat, or poultry; adapted to the work in which the student is specializing. Deposit, \$5.

206. APPLIED ANATOMY. 1(0-3); I. Prerequisite: Anat. 112. Burt, McLeod.

Dissection of certain areas embraced in performing the various surgical operations, and study of all the structures in each area and their relation to one another as they would present themselves during an operation. Deposit, \$2.

* The number before the parentheses indicates the number of hours of credit; the first number within the parentheses indicates the number of hours of recitation each week; the second shows the number of hours to be spent in laboratory work each week; and the third, where there is one, indicates the number of hours of outside work in connection with the laboratory each week. I, II, and SS indicate that the course is given the first semester, second semester, and summer school, respectively.

COURSES IN ANATOMY AND PHYSIOLOGY**FOR UNDERGRADUATE CREDIT**

131. ANATOMY AND PHYSIOLOGY. 3(2-3); I. Adapted to students majoring in Animal Husbandry. Link.

Physiology of the domestic animals, with special emphasis on digestion, absorption, metabolism, and excretion; sufficient anatomy to give a thorough understanding of the correlation between the two subjects and of the physiologic relations existing among the various organs of the body. Charge, \$1.

COURSES IN PHYSIOLOGY**FOR GRADUATE AND UNDERGRADUATE CREDIT**

215. PROBLEMS IN PHYSIOLOGY. Credit to be arranged; I and II. Prerequisite: Anat. 131 or 222 or 224 or equivalent. Leasure, Link.

Individual investigational problems in the physiology of digestion, reproduction, endocrine glands, etc. Charge, \$1.50 per semester hour.

222. COMPARATIVE PHYSIOLOGY I. 4(3-3); I and SS. Prerequisite: For veterinary students, Anat. 104 and 110 and Chem. 122; for others, an approved course in organic chemistry. Leasure, Link.

Physiology of domestic animals; the blood, heart, and blood vessels, the ductless glands and internal secretions, respiration, digestion, and absorption.

Laboratory.—A practical application of the knowledge derived in the classroom. Laboratory directions furnished the student. Deposit, \$5.

224. COMPARATIVE PHYSIOLOGY II. 5(3-6); II and SS. Prerequisite: Same as for Anat. 222. Leasure, Link.

The urine and urinary system, nutrition, animal heat, muscular and nervous systems, locomotion, generation and development, growth and decay, and selected physiological experiments. Deposit, \$10.

228. URINE ANALYSIS. 1(0-3); II and SS. Prerequisite: Anat. 224. Leasure, Link.

A laboratory course devoted to the comparative study of human urine and the urine of domestic animals, especially the horse, cow, and dog. A microscopic study of urinary deposits will be carried out also. Class limited to ten students. Deposit, \$5.

FOR GRADUATE CREDIT

301. ANIMAL NUTRITION SEMINAR. 1(1-0); I and II. Prerequisite: Consult Burt.

Study and criticism of experimental work in animal nutrition, of the methods employed, and of validity of conclusions drawn.

Pathology

Professor RODERICK
Professor KITSELMAN
Associate Professor FARLEY
Assistant Professor THOMPSON

Assistant Professor WHITLOCK
Assistant Professor WAGERS
Technician KIMBALL

The Department of Pathology presents courses in histology, pathology, and meat inspection. Instruction is by lectures, recitations, laboratory work, and demonstrations with the aid of lantern slides and autopsies.

COURSES IN HISTOLOGY**FOR UNDERGRADUATE CREDIT**

103. ELEMENTARY HISTOLOGY. 1(0-3); I. Prerequisite: Zoöl. 105. Whitlock.

Form, structure, organization, and activities of the cell and its parts. Deposit, \$1.

104. HISTOLOGY I. 3(1-6); II. Prerequisite: Path. 103, Elementary Histology. Whitlock.

Origin, development, structure, and appearance of the various cells and tissues of the animal body. Particular attention is paid to the relationships between structure and function and to the fundamental similarities and differences of cells and tissues. Deposit, \$3.

106. HISTOLOGY II. 3(1-6); I. Prerequisite: Path. 104, Histology I. Whitlock.

Origin, development, structure, and microscopic appearance of the various organs and systems of the animal body. Particular emphasis is laid on the correlation of tissue distribution and regional function. Deposit, \$3.

101. V. M. SENIOR SEMINAR. See "Courses in Anatomy."

FOR GRADUATE AND UNDERGRADUATE CREDIT

252. SPECIAL HISTOLOGY. 3(0-9); I, II, and SS. Prerequisite: Path. 106, Histology II. Whitlock.

Fundamental histological technics studied by means of problems. Deposit, \$3.

COURSES IN PATHOLOGY

FOR GRADUATE AND UNDERGRADUATE CREDIT

203. PATHOLOGY I. 5(3-6); II. Prerequisite: Anat. 222, Bact. 116, Chem. 122, and Path. 106. Roderick, Wagers.

General pathology, treating of the history of pathology, predisposition, immunity, congenital and inherited disease, etiology, course and termination of disease. Deposit, \$3.

208. PATHOLOGY II. 4(3-3); I. Prerequisite: Path. 203 and Anat. 227. Roderick, Wagers.

Special pathology, study of specific pathological processes occurring in the various organs of the body. Deposit, \$3.

211. PATHOLOGY III. 3(2-3); II. Prerequisite: Path. 208. Roderick, Wagers.

Special pathology; continuation of Pathology II. Deposit, \$3.

214. PATHOLOGY IV. 3(2-3); I. Prerequisite: Path. 211. Roderick.

Pathology of the infectious diseases and laboratory diagnosis. Deposit, \$2.50.

217. MEAT HYGIENE. 3(3-0); I. Prerequisite: Path. 211. Kitselman.

Kinds and classes of stock, transportation of animals, inspection before and after slaughter, disposition of the condemned carcasses from economic and hygienic standpoints, different methods of preservation, adulterations, and sanitary laws and regulations dealing with healthful meat production.

222, 223. PATHOLOGICAL TECHNIC AND DIAGNOSIS I and II. 2 to 5 hours each; I and II each. Prerequisite: For I, Path. 203; for II, Path. 211 and 222. Roderick, Wagers.

Pathological technic; collecting, fixing, hardening, embedding in celloidin and paraffin, also freezing and sectioning of tissues; methods of preserving gross specimens; practice in post-mortem and laboratory diagnosis. Deposit \$3 to \$7.50 for each course.

225, 226. CLINICAL PATHOLOGY I and II. R(0-12); I and II. Credit in Clinics III and IV. Open only to senior students in veterinary medicine, and to graduate students. Prerequisite: Surg. 138 and 141. Staff.

The unification and practical application of the various laboratory test procedures to clinical diagnosis. Pathological examinations will include autopsies, biopsies, and hematological, bacteriological, serological, chemical pathological, and parasitological diagnosis. If the student is simultaneously enrolled

in Clinics III and IV, the grade reported for these courses will include the grade for the courses in Clinical Pathology I and II.

228, 231. VACCINE MANUFACTURE I and II. 2 to 5 hours each; I, II, and SS each. Prerequisite: Bact. 116. Farley.

I: Theory and practice of immunization as applied to blackleg and hog cholera.

Laboratory.—Isolation and identification of the blackleg organism and of related anaërobes, and practical production of blackleg immunizing agents and anti-hog cholera serum and virus. Deposit, \$3 to \$7.50 for each course.

II: Preparation and standardization of various veterinary biological products, such as tuberculin, bacterial vaccines, and bacterins.

Laboratory.—Production of some of the products mentioned and special work on blackleg immunizing agents and antihog-cholera serum and virus. Deposit, \$3.

250. APPLIED VETERINARY PARASITOLOGY. 2(1-3); II. Limited to veterinary students. Prerequisite: Zoöl. 208. Whitlock.

Identification and diagnosis of parasites and parasitoses in living and dead animals; important parasitic diseases of livestock in the United States; animal parasites of public-health importance; field trips. Charge, \$2.

FOR GRADUATE CREDIT

302. RESEARCH IN PATHOLOGY. Credit to be arranged; I and II. Prerequisite: Path. 214 and 222, Bact. 116, and Chem. 235 or equivalent. Roderick.

Individual research in the pathology of an animal disease problem. This work may form the basis for a Master's thesis. Deposit, \$1.50 to \$15.

310. ANIMAL NUTRITION SEMINAR. 1(1-0); I and II. Prerequisite: Consult Roderick.

Study and criticism of experimental work in animal nutrition, of the methods employed, and of validity of conclusions drawn.

Surgery and Medicine

Professor FRICK
Professor FRANK
Professor DYKSTRA

Instructor ROBERTS
Instructor MOORE

The veterinary hospital is equipped with every modern appliance for surgical operations and treatment of animal diseases. The hospital has capacity for more than fifty horses or cattle, and in addition it can accommodate fifty small animals, such as sheep, swine, cats, dogs, etc. Members of the clinical staff, accompanied by students, make trips into the surrounding country to treat patients. In this way the students come in contact every year with the diseases of animals and their treatment.

COURSES IN SURGERY

FOR UNDERGRADUATE CREDIT

102. SURGERY I. 5(5-0); I. Prerequisite: Junior or senior standing in veterinary medicine. Frank.

Lectures, recitations, and demonstrations on the fundamental principles of surgery, methods of restraint, asepsis and antiseptis, anaesthesia, division of tissues, union of tissues, control of hemorrhage, neoplasms, and animal dentistry.

107. SURGERY II. 5(5-0); II. Prerequisite: Surg. 102. Frank.

Lectures, recitations, and demonstrations on the surgical diseases of domestic animals; horseshoeing is included.

112. SURGICAL EXERCISES. 1(0-3); I. Prerequisite: Surg. 107. Staff.

Major surgical operations on anaesthetized domestic animals and on cadavers. Charge, \$5.

101. V. M. SENIOR SEMINAR. See "Courses in Anatomy."

FOR GRADUATE CREDIT

301. RESEARCH IN SURGERY. Credit to be arranged; I and II. Prerequisite: Anat. 104, 110, and 112, and Surg. 102, 107, and 163. Dykstra, Frank.

The purpose of this course is to attempt to solve many of the surgical problems confronting the average veterinary practitioner. Offered especially for graduates in veterinary medicine.

COURSES IN OBSTETRICS

FOR UNDERGRADUATE CREDIT

130. OBSTETRICS AND BREEDING DISEASES. 5(5-0); II. Prerequisite: Senior standing in veterinary medicine. Roberts.

Physiology of reproduction, principles of normal and abnormal parturition, special attention given to handling of reduced fertility.

COURSES IN CLINICS

FOR UNDERGRADUATE CREDIT

138, 141. CLINICS I AND II. 2(0-6) each; I and II, respectively. Prerequisite: Junior or senior standing in veterinary medicine. Staff.

All species of domestic animals are treated at a free clinic. Students assist in the restraint of animals, in bandaging, in compounding prescriptions, and in preparing antiseptics and other medicinal agents. Deposit, \$5 for each course.

144, 147. CLINICS III AND IV. 4(0-12) each; I and II, respectively. Prerequisite: Junior or senior standing in veterinary medicine. Staff.

Diagnosis and treatment of hospital patients, including keeping clinical records, administering medicines, changing dressings on surgical wounds. X-ray technique, etc.; assisting clinicians in out-clinic work. Deposit, \$5 for each course.

150. EXTRA CLINICS. 1(0-3); I, II, and SS. Prerequisite: Surg. 141 or 147. Staff.

A course in clinics intended for those undergraduate students desiring clinical training in addition to that offered in the Curriculum in Veterinary Medicine. Deposit, \$2.50.

COURSES IN MATERIA MEDICA

FOR UNDERGRADUATE CREDIT

158. MATERIA MEDICA. 4(3-3); I. Prerequisite: Junior standing in veterinary medicine. Moore.

A detailed study of important drugs; their origins, properties, and classification; their physiological actions, clinical administration, and dosage; metrology, prescription writing, pharmaceutical processes, and pharmaceutical preparations; compounding of prescriptions. Deposit, \$3.

163. THERAPEUTICS. 3(3-0); II. Prerequisite: Surg. 158. Moore.

History of therapeutics; healing methods; types of therapy, including mechanical, chemical, electrical, biological, dietetic, and thermal; toxicology as encountered in veterinary practice.

COURSES IN MEDICINE**FOR UNDERGRADUATE CREDIT**

175, 177. DISEASES OF LARGE ANIMALS I AND II. 5(5-0) each; II and I, respectively. Prerequisite: Surg. 158 and junior or senior standing in veterinary medicine. Frick, Roberts.

I: Different diagnostic methods employed for the detection of disease; noninfectious diseases of the digestive, circulatory, and respiratory organs of the larger animals.

II: Noninfectious diseases of the urinary organs, diseases of metabolism, of the nervous system, of the organs of locomotion, of the skin, and of the eye.

181. INFECTIOUS DISEASES OF LARGE ANIMALS. 5(5-0); II. Prerequisite: Surg. 177 and senior standing in veterinary medicine. Frick.

186. DISEASES OF SMALL ANIMALS. 2(2-0); I. Prerequisite: Surg. 158 and 163 and senior standing in veterinary medicine. Frick.

Infectious and noninfectious canine and feline diseases; breeds of dogs, cats, and fur-bearing animals; erection of kennels; the breeding and care of puppies, care and feeding of dogs in general, and the hygienic measures pertaining thereto.

191. MEDICAL ECONOMICS AND LAW. 2(2-0); II. Prerequisite: Senior standing in veterinary medicine. Staff.

The veterinarian's legal responsibilities; national and state livestock laws; quarantine regulations; principles of business law.

FOR GRADUATE CREDIT

310. RESEARCH IN MEDICINE. Credit to be arranged; I, II, and SS. Prerequisite: Surg. 158, 175, 177, and 181. Frick.

An attempted solution of some of the medical and parasitological problems confronting the practitioner of veterinary medicine. Offered especially for graduates in veterinary medicine.

The Division of College Extension

HARRY UMBERGER, *Dean and Director*

Extension Publicity and Information

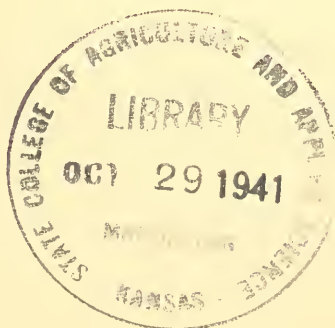
Extension Editor LONGSDORF, Program Director, in Charge
Extension Editor SCHEEL
Assistant Extension Editor CHAPMAN
Assistant Extension Editor _____

The Division of College Extension offers the benefits of the College to farm people throughout Kansas. It is active in every county in the state. By means of institutes, training schools, publications, correspondence courses, and radio programs, information on agriculture, home economics, and rural engineering is made readily available to everyone.

In the beginning, this work was informal. Members of the College staff answered inquiries by mail and occasionally met with small groups at various places in the state. The exchange of information thus made possible proved valuable both to the citizens of the state and to the College investigators. In 1914, with the passage of the Smith-Lever Act, this type of work became a coöperative undertaking of the federal and state governments, through the United States Department of Agriculture and the agricultural colleges.

There now are six major departments in this division, each with its own head and staff. Coöperatively employed extension agents are located in 103 counties of the state. The extension organization, which reaches more than 800,000 Kansas people each year, still serves its original function of a two-way communication system between the College and the general public. Extension workers take to the people of the state information developed by the experiment stations, by the United States Department of Agriculture, and by the experience of the best farmers and homemakers. They bring to the state and federal research workers information concerning problems that are of immediate general interest. Their goal is to assist in making agriculture more prosperous and rural living more satisfying.

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Extension Schools

In Agriculture and Home Economics

Professor WILLIAMS in Charge

Professor LUMB, Veterinary Medicine
 Professor KELLY, Entomology
 Asso. Prof. AMSTEIN, Horticulture
 Asso. Prof. ELLING, Animal Husbandry
 Asso. Prof. LINN, Dairy Husbandry
 Asso. Prof. GILMORE, Dairy Husbandry
 Asso. Prof. WILLOUGHBY, Farm Crops
 Asst. Prof. MOXLEY, Animal Husbandry
 Asst. Prof. SEATON, Poultry Husbandry
 Asst. Prof. HALBROOK, Poultry Husbandry
 Asst. Prof. CLEAVINGER, Farm Crops
 Asst. Prof. COMPTON, Farm Crops
 Asst. Prof. BELL,* Farm Crops
 Asst. Prof. DOMINY, Agricultural Economics

Asst. Prof. MATHER, Agricultural Economics
 Asst. Prof. COOLIDGE, Agricultural Economics
 Asst. Prof. JACCARD, Agricultural Economics
 Asst. Prof. ROBINSON, Agricultural Economics
 Asst. Prof. CONOVER, Agricultural Economics
 Asst. Prof. SCHRUBEN, Agricultural Economics
 Asst. Prof. COPENHAVER, Landscape Gardening
 Instructor BURSON, Agricultural Economics
 Instructor SHOEMAKER, Agricultural Economics
 Instructor BROWN, Agricultural Economics
 Instructor BISKIE, Agricultural Economics
 Instructor HARDEN, Agricultural Economics
 Instructor JOHNSON, Forestry
 Instructor MILLER, Plant Pathology

This department includes those members of the extension staff who conduct and supervise programs in agricultural education throughout the state. The programs are developed in coöperation with the residents of the counties through their designated leaders. The department also has charge of the program and arrangements for Farm and Home Week, annual state-wide farmers' meetings, and the scheduling of judges for county and local fairs.

FARM AND HOME INSTITUTES

A farm and home institute is an association of farmers and farm homemakers with regular officers, constitution, and bylaws. Some organizations hold six or more meetings during the year and no institute can obtain state aid unless, in addition to the annual meeting at which representatives of the College must be present, it also holds at least three local meetings. It is the plan of the College to send two specialists, one in agriculture and one in home economics, to the annual meetings to present certain well-defined lessons and to give the results of demonstration work for the county or locality. The specialists and their subjects are chosen because of known need or interest of a particular community or because of a plan to start or encourage certain definite lines of work.

EXTENSION SCHOOLS

Extension schools are meetings of one or two days' duration conducted for the purpose of giving practical instruction in agriculture, rural engineering, and home economics. Most of these schools are organized on a project basis, and they are an important feature in the yearly program of work conducted by each specialist. Results of demonstrations and experiments are given at these meetings and suggestions are made for their practical application under local conditions.

Extension schools are classified according to the subject matter presented. Each year schools are held in horticulture, animal husbandry, veterinary medicine, entomology, poultry husbandry, dairying, agronomy, marketing, farm management, plant pathology, and farm forestry. In addition to these specialized meetings, schools of a more general character are held, and these are designed to present the extension program best suited to the communities of the county. Home economics and 4-H club work have an important place on the program of these schools.

* On leave.

EXTENSION PROJECTS

The specialists of the division work in extension schools and institutes during the winter months only, and a portion of this time is devoted to coöperative demonstration work in agriculture and home economics. During the remainder of the year, they conduct special extension programs in soil management and crop production, plant pathology, horticulture, animal husbandry, dairying, veterinary medicine, poultry husbandry, entomology, farm management, marketing, land use planning, and farm forestry. This phase of the work of the extension specialist is being supplemented by coöperative demonstration work. In much of the coöperative work each specialist has from 10 to 100 or more coöperators in each county. These men and women work under the direction of the specialist and the county agent. They keep records of the work and demonstration meetings are held at their farms.

The extension specialist takes to the farm and farm homes the results of the research work of the Agricultural Experiment Station and the United States Department of Agriculture in a practical, effective, and usable form. He brings back reports of the progress of demonstration work in the field. He seldom makes a trip without coming in contact with agricultural problems requiring the attention of research workers.

COUNTY AND LOCAL FAIRS

The agricultural specialists devote some time each year to judging livestock and agricultural products at county and local fairs. An excellent opportunity for lectures and demonstration work is furnished and each specialist endeavors to make his judging work as instructive as possible.

FARM AND HOME WEEK

The purpose of Farm and Home Week is to interest the farmers of the state in methods of production and management that will increase farm profits, to demonstrate to farm women methods of home management that will add to the comfort and enjoyment of farm life, and to encourage farm folks in social organization that will enrich the social life of the rural community.

All meetings, lectures, and demonstrations during Farm and Home Week are free of charge. The United States Department of Agriculture, the Agricultural Experiment Station, the Extension Service, agricultural specialists, and leading farmers bring to those in attendance the latest results of investigations in agriculture, home economics, and rural engineering. Problems concerning crops and soils, dairying, beef cattle, horses, hogs, sheep, poultry, horticulture, community service, beekeeping, and diseases of animals are discussed by some of the leading agricultural authorities in America. In addition to these lectures and demonstrations there are other interesting features.

County Agent Work*

Associate Professor TURNER, Field Agent
Assistant Professor BLECHA, District Agent
Assistant Professor HEPLER, District Agent
Assistant Professor TEAGARDEN, District Agent
District Supervisor BAIRD
District Supervisor GLOVER
District Supervisor NEFF

The county agent constitutes a direct and continuous contact of the College and the United States Department of Agriculture with the rural population of the state. The program of county-agent work is as broad as the interests of rural life. It includes the farm as a business, the farm home, the farm youth, and the rural community. The program for the farm as a business involves those things that may be done by the individual farmer and those that require extensive coöperation among farmers. On the one hand it includes organization and management, and production problems such as soil manage-

* To find an alphabetical list of county agricultural agents, see pages 51 to 56.

ment, erosion control, cropping systems, crop pests, adapted crop varieties, and livestock management. On the other hand it includes coöperative financing, coöperative marketing of farm products, and agricultural adjustment procedure.

The first county agent in Kansas was employed by the Leavenworth county farm bureau, August 1, 1912. At first county agents were financed by membership dues, private subscription, and a small state appropriation. In 1914 Congress enacted the Smith-Lever law and in 1915 the Kansas legislature passed the farm-bureau law. These statutes remain the basis of county-agent work. Additional federal funds have been made available in recent years under several other statutes such as the Capper-Ketcham, Clark-McNary, and Bankhead-Jones acts.

On October 1, 1940, there were 103 county agents and 33 assistant county agents. Eight of the assistant county agents are coöperating with soil conservation associations, seventeen serve as testers for dairy herd improvement associations, six are securing training in various counties under the leadership of county agricultural agents, one is employed as horticultural assistant in Wyandotte county, and one is temporarily taking the place of an extension agronomist who is on leave of absence.

Home Economics*

Professor SMURTHWAITE, State Home Demonstration Leader, in Charge

DISTRICT AGENTS

Assistant Professor BACHELOR†
Instructor

Assistant Professor WINTER‡
Instructor

SPECIALISTS IN HOME ECONOMICS

Assistant Professor WIGGINS, Clothing
and Textiles
Assistant Professor ALLEN, Foods and
Nutrition
Assistant Professor FLETCHER, Foods and
Nutrition
Instructor MYERS, Home Management

Instructor HILYARD, Clothing and Textiles
Instructor MARTENS, Home Furnishings
Instructor FARRIS, Home Furnishings
Instructor MARTIN, Home Health and
Sanitation
Instructor ELLITHORPE, Home Management

Extension work in home economics is carried on in counties through organized groups and through extension schools, particularly those of the more general type. Organized programs are pursued throughout the year in connection with county farm bureaus. Material furnished by the specialists and by home demonstration agents is used by local leaders in their respective communities.

Home demonstration work was made possible in August, 1917, when Congress provided funds for the employment of emergency home demonstration agents. The work was instituted under the auspices of city or county organizations, but after a short time the placing of home demonstration agents was deferred until the counties were properly organized for this specific purpose. Since August, 1918, the organization of a county farm bureau, providing membership for women as well as for men, has been required; and since July 1, 1921, a county desiring a home demonstration agent has had to provide a well-equipped office with adequate stenographic help, transportation facilities, and a county appropriation of not less than \$2,400 toward the salaries and expenses of the agricultural agent and the home demonstration agent.

The program of work for the home demonstration agent is based on the interest and the needs of the communities in the county. It is evolved through community and committee meetings and includes the development of activities pertaining to the farm, the home, and the community. Such programs of work become a part of the state program. On October 1, 1940, fifty counties had home demonstration agents.

* To find an alphabetical list of home demonstration agents, see pages 58 to 60.

† On leave.

‡ Temporary.

Boys' and Girls' 4-H Club Work*

Professor COB, State Club Leader
Assistant Professor BORDER, Junior Extension
Instructor SMITH, Junior Extension
Instructor JOHNSON, Junior Extension
Instructor REGNIER, Junior Extension

The 4-H Club work is conducted by the College in coöperation with the counties, the county farm bureaus, and the United States Department of Agriculture. Community 4-H Clubs are open to all young people between the ages of ten and twenty years, inclusive. They work under the direction of the county extension agents with the help of local voluntary 4-H Club leaders. Local organizations also give important assistance. County 4-H councils assist the county agents in the supervision and promotion of the 4-H program. 4-H members receive visits from their county agents and from their local leaders; written material is prepared by specialists and sent out by the state club leader to give members definite information and suggestions regarding farm and home practices recommended by the College.

The origin of the 4-H Club work is obscure. Shortly after 1900, farmers' institutes, farm leaders, and educators, in various parts of the country, made efforts to bring about a more definite connection between real life and school life. They assisted boys and girls to conduct, at home, various educational demonstrations or contests, centering around improved agricultural practices.

It became evident that the educational development of the boys and girls was of greater importance than the spread of improved farm and home practices. Hence the 4-H Club program was broadened to include not only projects of a farm and home nature, but also many activities such as health, music, conservation of wild life and natural resources, recreation, parliamentary practices, and art. The present 4-H Club program is designed to develop wholesome citizenship and leadership among rural young people and to provide them with the opportunity to participate with their parents and friends in the adoption and spread of better farm and home practices. Coöperation with the group is promoted, leadership is encouraged, exhibitions and contests are conducted, accurate records and reports are required, and achievements are suitably recognized. Wholesome recreation is promoted and county and state-wide round-ups, camps, and conferences are arranged.

Engineering Extension

Professor WARD, Architecture, in Charge
Instructor WARNER, Architecture
Instructor EIER, Agricultural Engineering
Instructor STOVER,† Agricultural Engineering
Instructor FERGUSON, Agricultural Engineering
Instructor CARLETON,‡ Agricultural Engineering

The function of this department is to assist in the application of engineering principles to various phases of agriculture. In the beginning, in 1910, it dealt chiefly with drainage and irrigation. Other subjects have been added, including the control of soil erosion, farm buildings, conveniences for the farm home, rural electrification, and farm machinery. Annually thousands of direct inquiries on these subjects are answered by mail.

Much of the work is conducted in coöperation with the county farm bureaus. All counties in the state are coöperating with the department in demonstration work involving drainage, irrigation, or the control of erosion. Standardized plans for hundreds of farm buildings are furnished each year. One-day builders' schools are held in various counties to supply information on the planning, construction, and maintenance of farm buildings. Advice is given on the selection, installation, and operation of systems of water supply, sewage disposal, lighting, and heating for the rural home. The selection, use, adjustment, and repair of farm machinery are discussed with distributors and farmers in one-day and two-day schools.

* To find an alphabetical list of county club agents, see page 58.

† On leave.

‡ Temporary.

Home Study

Professor GEMMELL, in Charge
Professor FLEENOR, Education
Professor PATTISON, Mechanical Engineering
Associate Professor BILLINGS, History and Civics
Associate Professor SCHALL, English
Instructor BILLINGS, Agriculture

The Department of Home Study is a member of the National University Extension Association comprising forty-eight leading universities in America with whom extension credits are interchangeable. The members of the department devote their entire time to the work of teaching by correspondence. They keep in close touch with the various departments of the College, and all credit courses which are offered by correspondence must first meet the requirements of the regular College departments handling the courses in residence.

There are many people in Kansas and elsewhere who cannot attend classes on the College campus, but who can use the facilities of the College to great advantage. The Department of Home Study is designed through correspondence courses to enable the College to go to those who cannot come to it. The gross time required to complete correspondence courses is practically the same as would be necessary for the same courses in residence.

FOR WHOM INTENDED

Though credit courses offered by the Department of Home Study are limited, it is the purpose of the department to add courses whenever a demand for them becomes evident. The following groups in particular should profit by the courses offered:

1. Those who have completed a common-school course but who are unable to attend high school.
2. High-school graduates unable to attend college.
3. Students who have fallen behind in their work and wish to use their spare time catching up.
4. Students whose attendance at high school or college has been interrupted.
5. The strong, aggressive student who does not wish to halt his progress for vacation and other interruptions.
6. High-school and grade-school classes in practical courses that need supplementing and enrichment.
7. Teachers who wish further training or who need help in planning and conducting their work.
8. Professional and business men who wish to keep growing along some line of interest, industrial or avocational.
9. Clubs and other organizations that wish to make systematic studies.
10. Men and women who wish effective help in meeting the demands of their vocations for technical and scientific knowledge and training.

HOW THE WORK IS CONDUCTED

In correspondence courses the work usually takes the form of assigned readings, studies, problems, and investigations, together with a list of questions and directions for a written report. The correspondence lesson is usually much longer than the common lesson in resident class work, eight such lessons being the equivalent of one semester hour of college credit. When necessary, the lessons are supplemented by lectures prepared by the instructor containing outlines and explanations, additional subject matter, and such special directions as seem desirable.

As soon as an enrollment card and fee are received at the Department of Home Study, the first assignments are sent out. As reports are received, additional assignments are mailed. The plan keeps work always at hand for the student and makes it possible for the instructor to keep in close touch with the student's progress and to offer suggestions to guide the student in his work.

The student should make careful study of the corrections, comments, and suggestions upon receiving a returned paper before going further with succeeding lessons.

The progress made by the student depends entirely upon his ability, preparedness, and application. In general, an hour a day spent in systematic study should enable the average student to complete an assignment a week. Students may work more rapidly if their opportunities permit. Lessons will be received as rapidly as is consistent with good work, provided not more than eight assignments are sent in one week. Under no circumstances will hastily prepared manuscripts, showing superficial knowledge, be accepted.

The questions accompanying each assignment are intended to help the student to a better understanding of the subject. After careful study of the assignment, the student is required to write his manuscript, answering the questions carefully and concisely. The manuscript is then mailed to the Department of Home Study, where all lesson papers are read carefully, criticized, marked, and returned to the student with such comments, suggestions, advice, and additional references as may be deemed necessary. Each student is invited to ask questions, relate his personal experience, and in every way possible get into close contact with his instructors.

No effort is spared by the department to bring about the nearest possible approach to personal acquaintanceship between each instructor and his students. To this end the student is required to fill out and mail to the department with his first lesson a personal acquaintance blank giving full information about himself, his aims, ambitions, and previous experience and education, as well as the conditions of his daily work that necessarily affect his responses to the lessons. This information enables the instructor to enter at once into cordial, sympathetic, and helpful relations with the student.

EXAMINATION

At the close of each course, before a grade is issued, a final examination is necessary. The final examination may be taken in the office of the Department of Home Study at the College, or other arrangements may be made by the student to take it locally under the city or county superintendent of schools or the principal of the local high school. In the latter case, the examination questions and instructions for conducting the examination are mailed from the department to the examiner, and the student's paper is sent in by him.

FEES

For residents of Kansas there is an initial enrollment fee of \$10 for a course of three semester hours of credit or less, with \$3 additional for each added hour of work; for nonresidents of the state an initial enrollment fee of \$15 for a course of three semester hours of credit or less, and \$4 for each additional hour of work.

For courses of secondary school (high school) grade there is an initial enrollment fee for residents of the state of \$6 for the first half-unit course and \$5 for each additional half-unit course; for nonresidents of the state an initial enrollment fee of \$9 for the first half-unit course, with a fee of \$7 for each additional half-unit.

Each student pays the postage on his lessons, manuscripts, and communications sent to the department. The department pays the postage for the return of all such papers to students.

REGULATIONS

1. Enrollments for correspondence study will be received at any time during the year, and students may continue their work throughout the entire year.
2. Correspondence students are expected to complete any course for which they are enrolled within twelve months from date of enrollment.
3. Not more than two courses are advised at any one time. It is recommended that a student carry but one subject at a time, particularly where only part of the time is given to the work.
4. Each subject listed under the various departments constitutes what is known as a correspondence "course."
5. Students enrolling for correspondence courses must meet the prerequisites the same as if undertaking the work in residence.
6. A student may not be enrolled for correspondence work while in attendance at any institution of learning without special permission from the dean or proper authorities in the institution of which he is a student.
7. No correspondence student will be permitted to complete a three-hour course in less than three weeks, a two-hour course in less than two weeks, or a one-hour course in less than one week.
8. Where there is evidence that any correspondence student has copied any part of the lessons from the papers of another student who has previously taken the course, such student will be automatically and permanently dropped from the course and a failing grade will be sent to the registrar's office with notation of the cause.
9. Credit for correspondence courses is determined by a final examination prepared by the Department of Home Study.

STUDY-CENTER EXTENSION CLASSES

Study-center classes conducted by regular instructors from the College may be organized if the demand is sufficient. Regulations concerning such classes are obtainable from the Department of Home Study.

HIGH-SCHOOL COURSES

(College Entrance Credit Work)

In offering the following work for high-school credit, there is no intention of competing with high schools of the state. It is not the purpose of those who have planned the work to present a full four-year high-school course. Students who can attend high school should do so, for in such attendance they will have the benefits to be derived from association with fellow students, as well as many other advantages which will be helpful to immature students of high-school age.

These courses are offered as an aid to those who may be temporarily out of high school, who may not find the work which they desire offered locally, or who wish to work for high-school credit during vacation periods. It is not to be expected that a student can progress as rapidly by correspondence-study methods as he can by devoting his full time to his work when attending high school. Any student who completes a half year of high-school work in a year by correspondence may feel that he has done exceedingly well.

The high-school courses will be especially advantageous to prospective college students who have entrance deficiencies and to school teachers who may not have had the opportunity to do this type of work. No effort has been spared to make the work as nearly as possible parallel with the course offered by the accredited high schools of the state. The same textbooks have been used wherever feasible, and the credits issued by this department are recognized by the colleges and State Board of Education.

List of High-school Courses

Course No.		Number of assignments	Unit H. S. credit
AGRICULTURE			
PCA 1.	Elementary Agriculture I.....	20	1/2
PCA 2.	Elementary Agriculture II.....	20	1/2
DRAWING			
PCD 3.	Shop Mechanical Drawing I.....	20	1/2
PCD 4.	Shop Mechanical Drawing II.....	20	1/2
ENGLISH			
PCE 1C.	Grammar and Composition (first year).....	20	1/2
PCE 2L.	Literature (first year).....	20	1/2
PCE 3C.	Composition (second year).....	20	1/2
PCE 4L.	Literature (second year).....	20	1/2
PCE 5C.	Composition (third year).....	20	1/2
PCE 6L.	Literature (third year).....	20	1/2
HISTORY AND CIVICS			
PCH 1.	Ancient History I.....	20	1/2
PCH 2.	Ancient History II.....	20	1/2
PCH 3.	Modern History I.....	20	1/2
PCH 4.	Modern History II.....	20	1/2
PCH 5.	American History I.....	20	1/2
PCH 6.	American History II.....	20	1/2
PCH 7.	Community Civics.....	20	1/2
PCH 8.	Constitution of United States.....	20	1/2
PCH 9.	World History I.....	20	1/2
PCH 10.	World History II.....	20	1/2
MATHEMATICS			
PCM 1.	Algebra I.....	20	1/2
PCM 2.	Algebra II.....	20	1/2
PCM 3.	Algebra III.....	20	1/2
PCM 4.	Plane Geometry I.....	20	1/2
PCM 5.	Plane Geometry II.....	20	1/2
PCM 6.	Solid Geometry.....	20	1/2
PCM 7.	Bookkeeping.....	20	1/2
SCIENCE			
PCS 1.	Physical Geography.....	20	1/2
PCS 2.	Botany.....	20	1/2
PCS 4.	Physiology.....	20	1/2
PCS 5.	General Science.....	20	1/2
PCC 1.	Commercial Geography.....	20	1/2
PCC 2.	Elementary Economics.....	20	1/2
PCC 3.	Elementary Sociology.....	20	1/2
PCC 4.	Elementary Psychology.....	20	1/2

COLLEGE COURSES

Numerous college courses paralleling resident courses and carrying the same credit are offered through the Department of Home Study. These will be found especially advantageous for college students who desire to make up deficiencies or to gain credits during the vacation season; for teachers who wish to further their professional training; and for men and women who wish to promote their cultural, technical, or vocational interests. The prerequisites are the same as for corresponding courses in resident instruction.

The following course is available through resident enrollment for graduate and undergraduate credit. Graduates may be enrolled for from one to six hours of research or problem work *in absentia*, on the recommendation of a member of the graduate faculty and with the approval of the Dean of the Division of Graduate Study.

EDUC. 249. PROBLEMS IN EXTENSION EDUCATION. Credit to be arranged. Prerequisite: Econ. 151 or CS 3, and Educ. 184 or CP 8 or EXT 5. Dr. Gemmell and Dr. Fleenor.

Problems in extension met by director, supervisor, county agricultural agent, county home demonstration agent, 4-H club leader, or specialist.

List of College Courses

DIVISION OF AGRICULTURE

<i>Course No.</i>	<i>AGRONOMY</i>	<i>Assignments</i>	<i>Semester hours of credit</i>
CA 3.	Farm Crops	16	2
<i>ANIMAL HUSBANDRY</i>			
CL 2.	History of Breeds.....	16	2
<i>HORTICULTURE</i>			
CH 1.	Elements of Horticulture.....	16	2
CH 2.	Vegetable Gardening	16	2
CH 3.	Floriculture	16	2
CH 5.	Landscape Gardening	8	1
CH 6.	Small Fruits	16	2
<i>POULTRY HUSBANDRY</i>			
CPP 1.	Farm Poultry Production.....	8	1

DIVISION OF ENGINEERING

<i>MACHINE DESIGN</i>			
CE 2.	Engineering Drawing	16	2
CE 6.	Machine Drawing I.....	16	2
CE 4.	Mechanism	24	3
CE 11.	Descriptive Geometry	16	2
<i>CIVIL ENGINEERING</i>			
CE 1.	Highway Engineering I.....	16	2
<i>SHOP PRACTICE</i>			
CE 7.	Metals and Alloys.....	16	2
<i>AGRICULTURAL ENGINEERING</i>			
CE 3.	Gas Engines and Tractors.....	16	2
<i>MECHANICAL ENGINEERING</i>			
CE 9.	Steam Turbines	16	2

DIVISION OF GENERAL SCIENCE

<i>ECONOMICS AND SOCIOLOGY</i>			
CEc 1.	Economics	24	3
CS 2.	Rural Sociology	24	3
CS 3.	Sociology	24	3
CS 4.	Community Leadership	16	2
<i>EDUCATION (PROFESSIONAL)</i>			
CP 2.	Educational Psychology	24	3
CP 3.	Educational Sociology	24	3
CP 4.	History of Education.....	24	3
CP 5.	School Management	24	3
CP 6G.	Methods of Teaching in Elementary Graded Schools and Rural Schools	24	3
CP 6H.	Methods of Teaching in the High School.....	24	3
CP 7.	Educational Administration	24	3
CP 8.	Psychology	24	3
CP 14.	Vocational Education	24	3
CP 17.	Introduction to Philosophy	24	3
<i>ENGLISH</i>			
CCE 1.	College Rhetoric I.....	24	3
CCE 2.	College Rhetoric II.....	24	3
CCE 3.	Commercial Correspondence	24	3
CCE 4.	The Short Story.....	24	3
CCE 6.	English Literature	24	3
CCE 7.	American Literature	24	3
CCE 8.	Children's Literature	24	3
<i>JOURNALISM</i>			
CCJ 1.	Agricultural Journalism	24	3

PHYSICAL EDUCATION

CPE 1.	Personal and Community Hygiene.....	24	3
CPE 2.	Community Health	8	1
CPE 3.	Playground Activities	16	2

GEOLOGY

CG 1.	Geology	24	3
CG 2.	Principles of Geography.....	24	3

HISTORY AND CIVICS

CHC 1.	Community Civics	16	2
CHC 2.	Modern Europe I.....	24	3
CHC 3.	Modern Europe II.....	24	3
CHC 4.	English History	24	3
CHC 5.	Medieval History	24	3
CHC 6.	Ancient Civilizations	24	3
CHC 7.	History of Latin America.....	24	3

MATHEMATICS

CM 6.	Solid Geometry	16	2
CM 7.	Plane Trigonometry	25	3
CM 8.	College Algebra	24	3
CM 9.	College Algebra A.....	40	5

DIVISION OF COLLEGE EXTENSION

EXT 5.	Extension Education	24	3
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Prerequisite: Educ. 184 and junior standing. Dr. Fleenor. Origin and development of extension work, its aim and purposes, and its relation to other general educational activities; organization and administration of extension work under the Smith-Lever law and the part taken by colleges and the Department of Agriculture; psychological and sociological bases and various methods employed in extension teaching; achievements and future problems of extension work.

Degrees Conferred
In the Year 1940
Seventy-seventh Annual Commencement
May 27, 1940

DEGREES CONFERRED
Division of Graduate Study

MASTER OF SCIENCE

Annette Alsop, B. S., Kansas State College, 1938; Manhattan.
John Dewey Axtell, B. S., Kansas State College, 1939; Manhattan.
James Anderton Blodgett, B. S., Oregon State College, 1939; Corvallis, Ore.
Blanche Sappenfield Bowman, B. S., Kansas State College, 1920; Abilene.
Marjorie Louise Burton, B. S., Iowa State College, 1933; Ames, Iowa.
*Alfred Charles Curtiss, A. B., Southwestern College, 1937; Beeler.
John Wesley DeMand, A. B., University of Kansas, 1937; Lincolnville.
Nina Edelblute, B. S., Kansas State College, 1931; Manhattan.
Lee Shriver Fent, B. S., Kansas State College, 1938; Newton.
*Alva Leroy Finkner, B. S., Colorado State College, 1938; Akron, Colo.
Helen Marguerite Foster, B. S., North Dakota Agricultural College, 1935; Williston, N. Dak.
George Alexander Gries, A. B., Miami University, 1938; Conover, Ohio.
*Anna Lucille Hadden, B. S., Iowa State College, 1932; Primghar, Iowa.
*Charles Wendell Hadley, A. B., Southwestern College, 1938; Manhattan.
Charles Hal Harned, B. S., Kansas State College, 1938; Manhattan.
George Herbert Larson, B. S., Kansas State College, 1939; Lindsborg.
Alvin George Law, B. S., Kansas State College, 1938; Hill City.
Morrison Loewenstein, B. S., University of Nebraska, 1938; Lincoln, Neb.
Eula May Neal, B. S., Northeast Missouri State Teachers College, 1927; Olathe.
*Maxine Josephine Osbourne, B. S., Kansas State College, 1935; Manhattan.
Iver Eugene Ellsworth Peterson, B. S., Kansas State College, 1928; Phillipsburg.
*Maurice Lewellen Peterson, B. S., University of Nebraska, 1938; Manhattan.
Roland Wagner Portman, B. S., Colorado State College, 1937; Manhattan.
Louis Raymon Shobe, B. S., Kansas State Teachers College, Emporia, 1936; Waverly.
Laurence Nelson Skold, B. S., Colorado State College, 1938; Haxtun, Colo.
*Raymond R Sollenberger, B. S., Kansas State College, 1938; Manhattan.
Charles Edward Wagoner, B. S., McPherson College, 1938; McPherson.
Norman Coates Webster, A. B., Geneva College, 1928; Manhattan.
George Harvey Wellington, B. S., Michigan State College, 1937; Manhattan.
Hugh Erwin White, B. S., Kansas State College, 1929; Kingsdown.
Samuel Lonnie Williams, B. S., North Carolina State College, 1938; Sparta, N. C.

Division of Agriculture

BACHELOR OF SCIENCE IN AGRICULTURE

William Benton Ackley, Portis	Cecil Eugene Cleland, Eskridge
Alfred Eugene Anderson, Courtland	John Leslie Clow, Goodland
Allan Vincent Ayres, Augusta	Louis Wilton Cooper, Peabody
Eugene Ware Baird, Kansas City	Ray Earl Cudney, Trousdale
Evans Eugene Banbury, Pratt	Rex Edgar Cudney, Belpre
Lawrence Newton Barker, Louisburg	Charles Willard Davis, Richmond
William Millington Beezley, Girard	John Gillette Dean, Baldwin
Floyd Willis Berger, Barnes	George Edwards Dillenbeck, Poultney, Vt.
John Kermit Blythe, White City	Wilbert William Duitsman, Washington
Andrew Jackson Bozarth, Jr., Liberal	Dwight Kendall Ellison, Ogden, Utah
Albert Wade Brant, Sawyer	Frederick Dale Engler, Topeka
William Ormond Breeden, Quinter	Farland Edgar Fansher, Hutchinson
Leo James Brenner, Bazine	Leland Samuel Frey, Sacramento, Cal.
James Charles Brock, Glasco	Arthur Raymond Garvin, Ogden
*Carroll Wright Brooks, Manhattan	Gaylord George Green, Whiting
Richard Melven Bullock, Glasco	Gordon Charles Green, Whiting
Walter Jackson Campbell, Wilsey	Ralph Lewis Gross, Colby
Charles Otis Carter, Morrowville	Isaac Kieth Harrison, Ottawa
Allen Roland Clark, Miltonvale	Richard William Heikes, Wakefield
Thaine Alvin Clark, Concordia	Marjorie Lenore Higgins, Linn

* In absentia.

BACHELOR OF SCIENCE IN AGRICULTURE—*Concluded*

Lester John Hoffman, Haddam	Ellsworth Dale Mustoe, Jr., Rexford
Charles Harris Holm, Dwight	Sheryl Arthur Nicholas, La Harpe
Frances Elizabeth Holman, Leavenworth	Kenneth Frederick Parsons, Manhattan
Ralph LaVern Huffman, Chanute	Harvey Lee Peterson, Wellington
Clifton Edward Jackson, Elsmore	Melvin Urbin Raymond Peterson, Riley
*Dale Edgar Johnson, Manhattan	Winzer James Petr, Waterville
Harold Eugene Jones, Concordia	Gerald Ellsworth Pierce, Garrison
Charles Isaac Kern, Smith Center	Harry Plotkin, Pittsburgh, Pa.
Elwood Chase King, Potwin	Melvin Clark Poland, Barnes
Ronald Bishop King, Council Grove	Kenneth Boyd Porter, Stafford
Donald Benton Kinkaid, Medicine Lodge	Kenneth Herbert Praeger, Claflin
John Wallace Kirkbride, Medicine Lodge	John Clyde Pretzer, Elmdale
Wesley Charles Kirschner, Humboldt	Wilbur Abe Rawson, Wamego
Roy Wilbur Kiser, Manhattan	Thomas Morse Reed, Circleville
*Wayne Klammm, Bonner Springs	Cecil Redford Robinson, Nashville
George William Kleier, Oxford	Vernal George Levi Roth, Emporia
Glenn Homer Kruse, Morrill	Brace Donald Rowley, La Cygne
Roland Andrew Kruse, Barnes	Aaron Kurt Schmidt, Newton
Lewis Emsley Landsberg, Bonner Springs	John Alex Shaw, Joes, Colo.
Robert Byron Lank, Kansas City	Robert Nurman Shoffner, Manhattan
William Allen Ljungdahl, Menlo	Carl Simpson, Milton
Charles William Lobenstein, Edwardsville	Edward George Smerchek, Garnett
*Donald Kenneth Long, Neodesha	Milan William Smerchek, Topeka
Harry Wilbur Longberg, Soldier	Otto Franklin Spencer, Leavenworth
Donald Irvine McCoy, Manhattan	Beverly David Stagg, Manhattan
John Henry McCoy, Manhattan	Allen Edward Starosta, Pomona
Delbert Earl McCune, Stafford	Herbert Carl Steinhausen, Omaha, Neb.
Marcel Dale McVay, Sterling	George Stevens, Waterbury, Conn.
Manford Edward Mansfield, McCune	Raymond Shields Tanner, St. John
Harold Doig Martin, La Cygne	Waldo Tate, Junction City
*Theodore Vernon Martin, Kingsdown	Keith Bennett Wagoner, Blue Rapids
Robert Edwin Marx, Emporia	Horace Cledus Watson, Lake City
Henry John Meenen, Clifton	William Walter Wempe, Frankfort
Wayne Delos Morgan, Ottawa	Merle Ray Whitlock, Elmdale
Ronald Morton, Green	Joseph James Winderlin, Scott City
Robert Clark Mossman, Manhattan	Sylvester Harlan Womer, Smith Center
Grayson Elwood Murphy, Norton	Gordon Harold Woodrow, Sharon Springs
Robert Howard Musser, Milwaukee, Wis.	John Robert Works, Humboldt

BACHELOR OF SCIENCE IN MILLING INDUSTRY

John Wallace Elling, Manhattan	Marvin Roy Shetlar, Bayard
Gerald Howard Ingraham, Manhattan	James Wilmeth Speers, Manhattan
Lyman DuVall Ketchum, Kansas City	William Francis Stewart, Saffordville
Richard Hamilton Magerkurth, Salina	Harry Wayne Stockhoff, Bethel
Charles Franklin Manspeaker, Topeka	Benjamin Donald Trout, Boonville, Mo.
LaVerne Maurice Odden, Buffalo, N. Y.	John Lee Urquhart, Wamego
Joseph Edmond Robertson, Brownstown, Ind.	Glenn Arnold West, Manhattan
George Walter Schiller, Frankfort	Walter Robert Wichser, Beardstown, Ill.

Division of Engineering and Architecture

BACHELOR OF SCIENCE IN AGRICULTURAL ENGINEERING

Loren John Dilsaver, Athol	Merton Alvin Rietzke, Kensington
Harold Ellsworth Gray, North Stonington, Conn.	Arthur Henry Thompson, Delia
Emory Harmon Lackey, Manhattan	Homer Triss Wesche, Manhattan
William Edward McCune, Leavenworth	Oren Dale Whistler, Independence

BACHELOR OF SCIENCE IN ARCHITECTURE

Eileen Marie Bergsten, Randolph	Manuel Morris, Manhattan
Gordon Graham Hazell, Kansas City, Mo.	James Arthur Pierce, Jr., Orangeburg, S. C.

BACHELOR OF SCIENCE IN ARCHITECTURAL ENGINEERING

Ralph Clayton Kantz, Jr., Wichita	Robert Orpin, Newton
Charles Murry McCormick, El Dorado	Thiel Holmes Sweet, Formoso
Leland Mark Moss, Miltonvale	

* In absentia.

BACHELOR OF SCIENCE IN CHEMICAL ENGINEERING

Earl Walter Amthauer, Junction City
 Vernon Glenn Boger, Junction City
 David Wilson Brower, Emporia
 Donald Sefton Brown, Manhattan
 William Kenneth Conwell, Manhattan
 John Henry Eppard, Kansas City
 Wilbert John Foos, Manhattan
 William Bertrand Freeman, Manhattan
 John Walters Friedline, Grand Saline, Tex.
 Milton Kaslow, New York, N. Y.
 Colter Adiel Landis, St. George

Lester Isaac Miller, Le Roy
 Park Lawrence Morse, Emporia
 Robert Lee Mueller, Anthony
 Carroll Dean Owensby, Manhattan
 Victor Raymond Piatt, Santa Fe, N. Mex.
 Virgil Leonard Simpson, Towanda
 George Harmon Smith, Manchester
 Ivan Roland Smith, Highland
 Morton Smutz, Manhattan
 Solon Luther Willsey, Anthony

BACHELOR OF SCIENCE IN CIVIL ENGINEERING

Bruce Logue Amos, Arkansas City
 Dale Wesley Baxter, Manhattan
 Chester Lloyd Boles, Turon
 *Vernon Lee Brensing, Mullinville
 Jack Delos Butler, Hutchinson
 *Roger McKee Crow, Topeka
 George Thomas Dean, Manhattan
 LaRue Eldred Delp, Lenora
 *Donald Frederick Dresselhaus, Lincoln
 Chester Alanson Foreman, Wichita
 Jack Pearson Fuller, Kansas City
 Clement Garrelts, McPherson
 *Harold Vincent Henderson, Eskridge
 Michael Earl Hickey, Hoisington
 Duane George Jehlik, Cuba

Alvin Daniel Kaufman, Moundridge
 Wayne Percy Lill, Mount Hope
 *Richard Edgar Lindgren, Dwight
 Louie Marshall, Minneola
 *Kenneth William Matthews, Mullinville
 Glenn Russell Nelson, McPherson
 *Lester Leroy Peterie, Kinsley
 Albert Paul Price, St. Paul
 Donald Dorman Reid, Manhattan
 William Ronald Rostine, Hutchinson
 William Roy Sachse, Easton
 Merle Mathias Shilling, Manhattan
 Fred Franklin Townsend, Waverly
 George Willits Vaught, Iola
 Frederick Lyle Wiruth, Manhattan

BACHELOR OF SCIENCE IN ELECTRICAL ENGINEERING

Lawrence Douglas Adams, Mount Hope
 Donald Gordon Beatson, Arkansas City
 *Roy Edward Davis, Birmingham, Ala.
 *Donald Reid DeTar, Bridgeport, Conn.
 Richard Cameron Evenson, Claffin
 *Albert Ross Ewing, Great Bend
 John Madison Eyer, Larned
 Austin Jean Fink, Lafontaine
 Philip McNabb Gainey, Manhattan
 William Gerald Gordon, Topeka
 Robert Lyman Hammond, Parsons
 Harold Arthur Heimerich, Clay Center
 *Van Chaffin Jones, Parsons
 Donald Eugene King, Wichita

*Merle Ashton Knepper, Winfield
 Robert Glenn Lake, Lake City
 *Daniel Martin Longenecker, Kingman
 *James Stanley Lucas, Kansas City
 Dean Nonamaker, Osborne
 Rex Lewis Parcels, Hiawatha
 Leonard Bruce Patton, Solomon
 *Robert Arthur Remington, Hutchinson
 Warren Wallace St. Pierre, Ames
 *Kenneth Lee Stuckey, Kansas City
 Linn Meredith Swenson, Council Grove
 Morris Brewer Willis, Kirwin
 Francis Bamford Woestemeyer, Bethel

BACHELOR OF SCIENCE IN INDUSTRIAL ARTS

Fred Granger Carman, St. Francis
 Carl John Coulter, Leon

Roland Harry Kaufman, Galva

BACHELOR OF SCIENCE IN MECHANICAL ENGINEERING

Fred Edwin Appleton, Salina
 Roy Swan Belcher, Topeka
 Walter Eugene Burrell, Emporia
 Harold Eugene Carpenter, Coffeyville
 Harlan Wendell Casper, Clifton
 Forest Dee Ellis, Garden City
 Lyle Willis Falkenrich, Manhattan
 John Robert Farmer, Manhattan
 Jess Dudley Garinger, Harveyville
 Thomas Knight Henderson, Wichita
 John Emmett Hesselbarth, Abilene
 Raymond Wells Hopkins, River Forest, Ill.
 Frank Raymond Hunter, Kansas City, Mo.
 Osborn Arthur Kershner, Paola
 James Herbert Lundsted, Kansas City, Mo.
 *James William McKinley, Manhattan

Herman Peter Madsen, Corbin
 John Ludvig Mitcha, Rossville
 Patrick Exum Morgan, Wichita
 James Ancil Nixon, Eureka
 George Herbert O'Brien, Iola
 Marvin Andrew Pringle, Eskridge
 Matthew Allen Reber, Oneida
 James Otto Ridenour, Moscow
 *William Armour Roark, Lake City
 Leon Washington Schindler, Topeka
 James McCabe Shaffer, Humboldt
 Ernest Christian Sieder, Schenectady, N. Y.
 *Ramond Edward Small, Conway Springs
 Edmund Clyde Thomas, Kansas City
 *Clifford Eli Wilson, Caney

* In absentia.

Division of General Science

BACHELOR OF SCIENCE

Voma Elda Alcott, Colby	Marjorie Loretta McCaslin, Manhattan
Lois Geraldine Aldous, Manhattan	Dorothy Louise McCully, El Dorado
Howard Nelson Batchelder, Hiawatha	Dorothy Lucille McIntosh, Palmer
Ross Beach, Hays	Jeanne Eloise Meadows, Gaylord
Alice Lucille Beal, Eureka	Leonard Housden Moulden, Manhattan
*William Woodrow Bell, Marysville	Conrad Lundsgard Nelson, Oklahoma City, Okla.
Edward Erle Buller, Inman	Pearl Signe Jane Norberg, Winfield
Elisabeth Kerr Chickering, Hutchinson	Dorothy Frances Ott, Wichita
Dorothy Dean, Manhattan	Mary Anne Pafford, Salina
Karl Drechsel Edwards, Manhattan	Helen Isabel Peterson, Howard
Robert Clare Foulston, Jr., Wichita	Ralph Edward Peterson, Manhattan
Janis Leigh Gainey, Manhattan	Charles Albert Pray, Hope
Frances Louise Gonder, Coffeyville	Ervin Ellis Reid, Manhattan
Dorothy Helen Greeson, Partridge	Anelda Rich Runnels, Wichita
Harold Allen Gregg, Manhattan	*George Woodrow Shaw, Moscow
Ruth Helen Hammel, Clay Center	Bertha Spoelstra, Prairie View
Gilbert Marri Hassur, Hanover	Kenneth Earl Spring, Sabetha
Albert Sidney Holbert, Newton	Melvin Andrew Stoner, Edson
Floyd Arthur Holmes, Prescott	Delora Ellen Stricker, Highland
Marjorie Louise Jacobs, Kansas City	Mildred Darline Tuttle, Coffeyville
Ruth Mildred Jameson, Garrison	Arthur Wexler, New York, N. Y.
Calvin McVeigh Jenkins, Manhattan	Melford Marcelle Wheatley, Gypsum
Mildred King, Minneola	Florence Josephine Wheeler, Jewell
Freda Ellen Lipper, Sterling	Roger Ferris White, Princeton, Ill.
Chauncey Karl Lundberg, Manhattan	
Virginia Ethel Lupfer, Larned	

BACHELOR OF SCIENCE IN BUSINESS ADMINISTRATION

Loyd Miller Angelo, Horton	Thomas Conrad Hutcherson, Manhattan
Fern Bair, Wamego	Ralph Wesley Knedlik, Belleville
*Ellwood Herschel Beeson, Parsons	Sidney Jean Lawson, Sylvan Grove
Helen Mae Blake, Kansas City	Maxine Elizabeth Lippy, Independence
*Frank Leroy Blakely, Waterbury, Conn.	Marjorie Ellen McLenon, Effingham
Theodore Stanley Clark, Penokce	Gail Andrew Malson, Chanute
Carlos Irving Cole, Logan	John Stephen Maurer, Winfield
Keith Lundy Cowden, Kansas City, Mo.	Vern Vencil Morris, Manhattan
Charlene Mildred Davis, Kansas City	William Lloyd Muir, Norton
Adah Lou Eier, Manhattan	Mary Martha Phillips, Manhattan
Mary Elizabeth Elliott, Manhattan	George Eldon Powell, Manhattan
Ralph Edgar Evans, Kansas City	Virgil Lyle Pyke, Enterprise
Doris Muriel Ewing, Sabetha	William Harvey Rankin, Idana
Leora Aliene Fencil, Haddam	Ralph Emery Reitz, Shady Bend
William Jack Glover, Syracuse	Myron Carl Scott, Newton
*Beverly Stubbs Greene, Dallas, Tex.	John Aaron Sheetz, Topeka
James Russell Hammitt, St. John	George William Shrack, Pratt
Frank Conrad Hefner, Manhattan	Robert John Tindall, Lakin
Marion John Hennessy, Jr., Hutchinson	Leland Mark Townsend, Junction City
Frederick Allen Heskett, Alton, Ill.	Howard Oscar Wagner, Jr., Arkansas City
Conner Garth Hopkins, Parsons	Carl William Walsten, Inman
Blanche Margaret Howe, Stockdale	Louis Monroe Wheeler, Plevna
Arlyn Morris Humburg, Bison	

BACHELOR OF SCIENCE IN INDUSTRIAL CHEMISTRY

Ina Jean Bentley, Coffeyville	Harold Hedrick Coffman, Overbrook
Margaret Helen Blevins, Manhattan	Wayne Allard Rutter, Kensington
Donald Sefton Brown, Manhattan	Lawrence Curtis Schubert, Hutchinson
George Frank Burditt, Coldwater	Robert Jefferson Walker, Dodge City

BACHELOR OF SCIENCE IN INDUSTRIAL JOURNALISM

Marian Phyllis Barnes, Manhattan	Ivan Charles Griswold, Marysville
Martha Ann Black, Independence	*Charles Warren Hestwood, Kansas City, Mo.
Helen Frances Chambers, Chanute	Mary Eleanor Jones, Garden City
Doris Winona Christophersen, Manhattan	Gwendolyn Romine Jordan, Abilene
James Fenimore Cooper, Manhattan	Richard Merrill Mall, Manhattan
June Darby, Kansas City	Maxine Jeanne Martin, Manhattan
Betty June Doan, Pratt	Theo Beatrice Nix, Kansas City, Mo.
Charles Allan Fisher, Wellington	Carl Robert Rochat, Wilsey
Roy Mac Fisher, Belleville	Walter Schanfeldt, Jr., Cimarron
Donald Galen Forbes, Kansas City	Robert Edward Summers, Manhattan
Helen Jean Gibbs, Kincaid	Donald Bland Thackrey, Camden, Ark.

* In absentia.

BACHELOR OF SCIENCE IN MUSIC EDUCATION

Madeline Blanche Anderson, Courtland
 Melvin Lester Barrett, Dodge City
 Mary Dean Brainard, Carlyle
 Elinor Althea Buenning, Hope
 Helen Amelia Droll, Alta Vista

Harriet Mayer Duvanel, Alta Vista
 Ruth Ella Johnston, Remsen, Iowa
 Eldon Charles Kaup, Holton
 Vera Lucille Wycoff, Norcatur

BACHELOR OF SCIENCE IN PHYSICAL EDUCATION

James Walter Barger, Blue Mound
 Metta Lucille Baxter, Manhattan
 Jean Boyle, Lawrence
 Paul Rutherford Dickens, Long Island
 Paul Fagler, Uniontown, Pa.
 Edna Alletta Heaton, Buford, Ark.
 Helen Henrietta Johnstone, Wamego
 Lowell Elvis McCutchen, Kingman

Maxine Virginia Redman, Manhattan
 Leon Merle Reynard, Manhattan
 Maxene LaJune Richardson, Sharon Springs
 Melvin Harry Seelye, Fort Scott
 Frank Everett Sicks, Okmulgee, Okla.
 Helen Louise Van Der Stelt, Wakefield
 Frank Edward Woolf, Wichita

Division of Home Economics

BACHELOR OF SCIENCE IN HOME ECONOMICS

Vivian Ethel Anderson, Kansas City, Mo.
 Mary Margaret Arnold, Newton
 Ethel Evelyn Avery, Riley
 Ruth Elizabeth Baldwin, Manhattan
 Marylee Berry, Kensington
 Louise Evelyn Boyle, Spivey
 Margaret Keith Breneman, Wichita Falls, Tex.
 Marjorie Bee Breneman, Macksville
 Berniece Lanoda Brien, Bern
 Eleanor Stanton Brinton, DeKalb, Mo.
 Elizabeth Maude Brooks, Scott City
 Katharine Elizabeth Brown, Emporia
 Edith Carey Brownlee, Hutchinson
 Dorothy May Buchanan, Kansas City
 Jean Louise Buchanan, Kansas City
 Pauline Clare Budde, Albert
 Margaret Bessie Cassidy, Clifton
 Maurine Chambers, Newton
 *Eunice Sarah Cristenson, Olsburg
 Robertha Jeanette Clark, Arkansas City
 Grace Rosamond Claywell, Kansas City
 Ruth Elizabeth Cochran, Topeka
 Dorothy Frances Cole, Fowler
 Rachael Jane Congdon, Sedgwick
 Irene Beardwell Cook, Wakeeney
 Corinne Ruth Corke, Studley
 Mary Ellen Corman, El Dorado
 Virginia Lee Coy, Kansas City
 Margaret May Davidson, Madison
 Jean Frances DeYoung, Manhattan
 Mildred Faith Dodge, Manhattan
 Grace Helen Dunlap, Manhattan
 Ruth Trousdale Ellison, Ogden, Utah
 Martha Elnora Emery, Manhattan
 Lottie Caroline Ewing, El Dorado
 Mary Helen Filley, Kansas City, Mo.
 Elizabeth Louise Fisher, Manhattan
 Elizabeth Lane Gage, Kansas City, Mo.
 Mary Alexander Gray, Topeka
 Katherine Piercy Grimes, Lenexa
 Alice Ruth Gulick, Olathe
 Celia Camilla Guthrie, Walton
 Marie Louise Haberthier, Wichita
 Beatrice Gertrude Habiger, Bushton
 Julia Helen Hamm, Humboldt
 Florence Marie Hammett, Manhattan
 Dorothy Mary Henderson, Bloomington, Neb.
 Jennie Elizabeth Higdon, Goodland
 Belle Arvice Hoffman, Hope
 Helen Elizabeth Hood, Salina
 Dawn Lorraine Hornbaker, Artesia, N. Mex.
 Edna Grace Hostetler, Harper
 Wilma Vivian Humbert, Danville
 Hannora Maude Hummel, Towanda
 Lucille Opal Ifand, Gaylord
 Margaret Edith Iverson, Wilmette, Ill.

Elizabeth Ann Jenkins, Wamego
 Grace Gladys Jenkins, Jewell
 Martha Josephine Johnson, Simpson
 Grace Kellogg, Leocompton
 Dora Grey King, Manhattan
 Muriel Ruth King, Ottawa
 Olga Alma Knapp, Topeka
 Dorothea Leland, Manhattan
 Dorothy Merle Lerew, Portis
 Alvina Frieda Licht, Ludell
 Ethel Iona Lienhardt, Manhattan
 Luella Elizabeth Lint, Wichita
 Elizabeth May Lyman, Northfield, Minn.
 Margaret Eva McAllister, Garden City
 Vesta Beam McCammon, Manhattan
 Maurine Myrl McCann, Newton
 Velma Maysle McGaugh, Garden City
 Carrie McLain, Kansas City
 Helen Frances Macan, Edwardsville
 Carroll Louise Meyer, Fort Leavenworth
 Frances Lucille Meyer, Lillis
 Margaret Louise Meyer, Jewell
 Virginia Roget Meyer, Fort Leavenworth
 Abbie Maurine Miller, Agra
 Lucille Eleanor Mollhagen, Frederick
 Ellen Wauneta Moore, Burden
 Vera Lorene Morgan, Hugoton
 Margery Byrl Morris, Topeka
 Barbara Jane Myers, Topeka
 Ingrid Leone Nordin, Marquette
 Barbara Maria Okerberg, Ottawa
 Angela Lillian Oliva, Kensington
 Arlene Octavia Orme, Kansas City
 Miriam Sophia Ostlund, Washington
 Carolyn Jane Overholt, Milwaukee, Wis.
 Margaret Louise Owen, Edson
 Rosemary Parisa, Lansing
 Jane Lillian Partridge, Kansas City, Mo.
 Viola Anna Peter, Manhattan
 Gertrude Maurine Pollom, Manhattan
 Kathleen Mary Porter, Stafford
 Hontas Quarles, Claremont, Cal.
 Virginia Ray, Kansas City, Mo.
 Florence Arline Raynesford, Salina
 Lucy Josephine Reader, Sterling
 Etta Elizabeth Richardson, Cawker City
 Helen Rosander, Lindsborg
 Genevieve Estella Scheier, Everest
 Anna Martha Scholz, Huron
 Alice LaVerne Schroeder, Lorraine
 Genevieve Eleanor Schroer, Manhattan
 Ruby Juanita Shamburg, Scottsville
 Gladys Morgan Shoffner, Manhattan
 Damaris Irene Sipes, Le Roy
 *Evelyn Avery Smith, Salina
 Ann Francis Steinkirchner, Newton

* In absentia.

BACHELOR OF SCIENCE IN HOME ECONOMICS—*Concluded*

Vivian Lorraine Stewart, Hartford
Enid Lorraine Stoops, Sawyer
Swanna Lee Suits, Odessa, Mo.
Elnora Jane Thomas, Salina
Celeste Jane Throckmorton, Manhattan
Floy Frances Toothaker, Protection
Dorothy Ann Uhl, Smith Center
Verna May Ward, St. Joseph, Mo.

Faith Ella Watts, Havensville
Katherine Evelyn Weldon, Smith Center
Alice Margaret Wilson, New Cambria
Evelyn Agnes Wilson, Grantville
Norma Geraldine Wunder, Valley Falls
Erma Gene Wunderlich, Kansas City, Mo.
Juanita Charlene Wyckoff, Luray

BACHELOR OF SCIENCE IN HOME ECONOMICS AND NURSING

Martha Esther Brill, Westmoreland
*Marion Arlene Cross, Wilson
Laura Jane Goodall, Coats
Ruth May King, Council Grove
*Janice Roberta Lehmann, Manhattan

Mabel Ellen Toothaker, Protection
Dorothy Agnes Warner, Goodland
Dolores Ellene Williamson, Little River
Mary Josephine Winter, Dresden

Division of Veterinary Medicine

DOCTOR OF VETERINARY MEDICINE

*Carter Howell Anthony, La Jolla, Cal.
Neville LaVon Astle, Manhattan
Theodore Mason Beard, Topeka
Victor Bernard Beat, Kingman
James Milton Brown, Los Angeles, Cal.
Frederick Louis Buente, Evansville, Ind.
Howard Sidney Cantwell, Riverside, Cal.
Bill Milton Carnes, Henryetta, Okla.
Glenn Irville Case, Nickerson
Richard Alford Case, Nickerson
Lloyd Dale Cherry, Redwood Falls, Minn.
Stanley James Dowds, Fellsburg
Orin Ellis, Phillipsburg
Burt Walter English, Manhattan
Carl Frederick Erickson, Aurora
Truman Brandon Fleener, Tulsa, Okla.
Frank Glendon Gillett, Wichita
Henry Clifford Graefe, Elwood
Mark Leon Greenberg, Camden, N. J.
Murray Greensaft, Belmar, N. J.
Frederic Wilhelm Hansen, Pelican Rapids, Minn.
Charles Edwin Hofmann, Manhattan
James Lynn Hourrigan, Langdon
Horton Kent Howard, Canton, N. Y.
Morgan Knott Jarvis, Minden, Nev.
Ross Lyman Jewell, Irving
Kenneth Lowell Johnson, Fresno, Cal.
Chester Hennessy Kennedy, Chase
Francis Maxwell Kennedy, Lawrence

Perle Everett Kimball, Eskridge
Karl Knoche, Adrian, Minn.
Harold Anderson Krig, Manhattan
Russell Arden Leeper, Plymouth, Ind.
Paul Torrence Loyd, Valley Center
Robert MacDonald, Newburgh, N. Y.
Walter Farrel Maninger, Harper
Gordon John Marold, Saguache, Colo.
Roy Leonard Mesenbrink, St. Louis, Mo.
Albert Peter Mitchell, Osborne
Charles Carson Moore, Louisburg
Claude Franklin Murphy, Conway Springs
Paul Richard Noller, Mankato
Paul Edward Phillips, Ottawa
Buford Doyle Philpy, Manhattan
Nathan Matthew Rosenbaum, Yonkers, N. Y.
Stephen Francis Rosner, Bucyrus
William Rosner, Philadelphia, Pa.
Leroy Edward Schafer, Valley Center
Francis Noel Schlaegel, Olsburg
Vincent Joseph Schweiger, Lenexa
William Edgerly Smith, Fowler, Cal.
Charles Henry Snider, East St. Louis, Ill.
Guy Roger Spencer, Whiting
Morgan William Tempero, Clay Center
Glenn Benton Van Ness, Harrison, Ark.
Charles Kenneth Whitehair, Abilene
Leonard Charles Witt, Scribner, Neb.
Dale J Yokum, Colony

51

* In absentia.

COMMISSIONS AWARDED

SECOND LIEUTENANT, OFFICERS' RESERVE CORPS

Dale Wesley Baxter (CAC)	Robert Glenn McKay (CAC)
†William Daniel Beeby (Inf)	Raymond Charles McPeck (Inf)
William Goddard Bensing (CAC)	Alfred Eugene Makins (Inf)
†George Joseph Bird (Inf)	Charles Franklin Manspeaker (CAC)
Edward Leo Brady (Inf)	*Joseph Eugene Meier (Inf)
James Charles Brock (Inf)	Robert Lee Mueller (CWS)
*Walter Eugene Burrell (CAC)	William Lloyd Muir (Inf)
Jack Delos Butler (CAC)	Robert Howard Musser (Inf)
*Theodore Stanley Clark (Inf)	Arthur Thomas Mussett (Inf)
Virgil Eugene Craven (Inf)	James Thomas Neill (Inf)
Charles James Davidson (Inf)	Albert Louis Niemoller (CAC)
Roger S. Dildine (Inf)	John Patrick Nulty (CAC)
‡Donald Frederick Dresselhaus (CAC)	†Ray Hamlin Pollom (Inf)
*Lawrence Jack Duncan (CAC)	Clarence Arthur Powers (CAC)
Robert Joseph Edwards (Inf)	Elwin Raymond Prather (Inf)
Richard Cameron Evenson (CAC)	Donald Calvin Pricer (Inf)
Gustave Edmund Fairbanks (CAC)	Robert Howard Pyle (CAC)
Robert Clare Foulston (Inf)	Earl Llwyn Redfield (Inf)
*Richard Grant Freeman (Inf)	Joseph James Redmond (CAC)
Frederick James Gardner (CAC)	Leon Merle Reynard (Inf)
Clement Garrelts (CAC)	John Lenheart Rice (Inf)
Elvin Vance Giddings (CAC)	James Otto Ridenour (CAC)
James Russell Hammitt (CAC)	Vernal George Levi Roth (Inf)
Marion John Hennessy (CAC)	Winston Albert Schmidt (CAC)
Albert Raymond Henry (Inf)	Edward Frank Sefcik (CAC)
Albert Sidney Holbert (CAC)	John Alden Shaver (CAC)
Gerald Howard Ingraham (Inf)	George William Shrack (Inf)
*Calvin McVeigh Jenkins (Inf)	Clarence Paul Smith (CAC)
‡Dale Edgar Johnson (Inf)	Kenneth Earl Spring (Inf)
Robert Landis Kauffman (Inf)	Harry James Stockman (CAC)
Ralph Wesley Knedlik (Inf)	Robert Sanders Thornburrow (CAC)
Henry Fred Kupfer (Inf)	Rex Franklin Toomey (CAC)
Ernest Wayne Leive (CAC)	Harold Wertz Underhill (CAC)
Delbert Earl McCune (Inf)	Louis Monroe Wheeler (Inf)

* Requirements for commission completed January 27, 1940.

† Certificate in lieu of commission—not 21 years of age.

‡ Commissioned at end of summer camp, 1939.

CAC—Coast Artillery Corps.

Inf—Infantry.

CWS—Chemical Warfare Service.

Sixteenth Annual Summer School Commencement

July 26, 1940

DEGREES CONFERRED

Division of Graduate Study

MASTER OF SCIENCE

Hilding August Anderson, B. S., Kansas State College, 1939; Cleburne.
 Mary Caroline Boyer, B. S., Drexel Institute of Technology, 1937; Philadelphia, Pa.
 Bula May Carlson, B. S., Kansas State College, 1939; Manhattan.
 Merrill Levern Carter, B. S., Kansas State College, 1934; Wamego.
 Laurence Larue Compton, B. S., Kansas State College, 1930; Manhattan.
 Orville Wesley Connett, B. S., Bradley Polytechnic Institute, 1930; Peoria, Ill.
 Majel Muriel Coopridge, A. B., Municipal University of Wichita, 1931; Wichita.
 Golda Mildred Crawford, B. S., Kansas State College, 1928; Manhattan.
 Lucile Florence Dauner, B. S., Kansas State Teachers College, Emporia, 1927; Junction City.
 Doris Hays Fenton, A. B., Swarthmore College, 1920; Manhattan.
 Homer Wendell Flemming, B. S., Kansas State College, 1939; Pratt.
 Henry Isley Germann, B. S., Kansas State College, 1928; Fairview.
 Amy Houchin Goldsmith, A. B., Indiana University, 1916; Manhattan.
 Herbert Frank Haas, B. S., Kansas State College, 1938; Kansas City.
 Meade Cecil Charles Harris, Jr., B. S., Kansas State College, 1939; Topeka.
 Ira Miller Hassler, A. B., Baker University, 1912; Chapman.
 Rolland Theodore Hinkle, B. S., Kansas State College, 1935; Ithaca, N. Y.
 Julian Almon Johnson, B. S., University of Missouri, 1926; Buhler.
 Glenn Walter Kerr, B. S., Kansas State College, 1939; Rossville.
 George Robert Kramer, B. S., Kansas State College, 1939; Mankato.
 Glenn Wesley Long, A. B., Baker University, 1926; Manhattan.
 Max Elton McCluggage, B. S., Kansas State College, 1935; Manhattan.
 Charles Mantz, B. S., Kansas State College, 1930; Downs.
 Rachel Martens, B. S., Kansas State College, 1936; Manhattan.
 Kenneth William Miller, B. S., Kansas State College, 1936; Manhattan.
 Alice Carol Mitchelson, B. S., Kansas State College, 1938; Baxter Springs.
 Signe Irene Monson, A. B., Concordia College, 1936; Osnabrock, N. Dak.
 Leo Albert Moore, B. S., Kansas State College, 1925; Manhattan.
 Ward Leonard Neel, A. B., Highland University, 1913; Kansas City.
 Leo Vaughn Nothstine, B. S., Michigan State College, 1938; Mancelona, Mich.
 Helen King Platt, B. S., Women's College of University of North Carolina, 1937; Manhattan.
 Addison Doyle Reed, B. S., Kansas State College, 1938; Manhattan.
 Charles Edward Reitz, A. B., Baker University, 1928; Riley.
 Clarence Walter Rice, A. B., Kalamazoo College, 1938; Grand Rapids, Mich.
 William Schauer, B. S., Kansas State Teachers College, Emporia, 1935; Wheeler.
 Christiana Marie Shields, B. S., Kansas State College, 1928; Lost Springs.
 Sister Mary Catherine Floersch, B. S., St. Mary College, 1934; Leavenworth.
 Sister Mary Martha Scott, B. S., Fontbonne College, 1934; St. Louis, Mo.
 Sister Rose Ellen O'Neil, A. B., St. Mary College, 1935; Leavenworth.
 Leroy Franklin Stutzman, B. S., Purdue University, 1939; Petersburg, Ind.
 John Bennett Sutherland, B. S., Kansas State College, 1939; Burlingame.
 Thomas Radford Thomson, B. S., University of California, 1939; Alameda, Cal.
 John Calvin Williams, B. S., Hampton Institute, 1932; Kansas City.
 Charles Peairs Wilson, B. S., Kansas State College, 1938; Manhattan.
 Ralph Ernest Wolfe, A. B., College of Emporia, 1931; Paxico.
 J Edmond Wolfe, B. S., Kansas State College, 1939; Kansas City.
 *John Henry Young, B. S., Kansas State College, 1939; Centralia.
 Catharine Eva Zink, B. S., Kansas State College, 1932; Lincoln.

Division of Agriculture

BACHELOR OF SCIENCE IN AGRICULTURE

Ralph Arthur Bohner, Glen Elder	*Walter John Leland, Manhattan
Travis Epps Brooks, Salina	Gerald Orestes McMaster, Eskridge
Leo Michael Hoover, Greenleaf	James Thomas Neill, Miltonvale
Elgie Gerald Jones, Tonganoxie	Everett Oyster, Paola
Henry Fred Kupfer, Kansas City, Mo.	Francis Benjamin Shoup, Udall

* In absentia.

Division of Engineering and Architecture**BACHELOR OF SCIENCE IN AGRICULTURAL ENGINEERING**

George W French, Augusta

Robert Harry Joyce, Ulysses

BACHELOR OF SCIENCE IN ARCHITECTURE

*William Borland Fullerton, Jr., Independence, Mo.

BACHELOR OF SCIENCE IN CHEMICAL ENGINEERINGRaymond Harry Groth, Bushton
Joseph Ralph Marshall, Manhattan
Robert Dunlap Miller, Junction CityDon Arnold Snyder, Elkhart
Robert Lansdowne Teeter, McPherson
Homer Theodore Wells, Jr., Marysville**BACHELOR OF SCIENCE IN CIVIL ENGINEERING**Clarence Leaman Abell, Oakley
*Dean Lewis Fisher, Mankato
William Larry Fowler, Wakeeney
Freddie Joe Galvani, Pittsburg
*Howard Nelson Jackson, BarnesDavid Francis Mickey, Junction City
Kenneth Willard Randall, Haddam
Charles Junior Sheetz, Topeka
William Wafler, White City**BACHELOR OF SCIENCE IN ELECTRICAL ENGINEERING**Orven Harry Armstrong, Garden City
Carroll Gould Blanden, Greeley
Robert Frederick Dundon, Junction City
Otto Ambrose Hauck, Jackson Heights, N. Y.Jack Wilton Jeakins, El Dorado
Isaac Henry Kriebel, Coffeyville
Joseph James Redmond, Lillis
Raymond Lyle Surtees, Wichita**BACHELOR OF SCIENCE IN MECHANICAL ENGINEERING***Michael Bartley Adams, Newton
Robert Glenn McKay, Winfield
Lester Lee Mehaffey, FarmingtonWilliam Bain Sellers, Winfield
Kermit Karl Thompson, Wichita
Homer Theodore Wells, Jr., Marysville**Division of General Science****BACHELOR OF SCIENCE**Joan Ellen Black, Chanute
Albert Baker Cameron, Smith Center
Rose Geraldine Diller, Manhattan
Jane Ethel Dodge, Manhattan
Juanita Hoopes Germann, Oneida
Georgia Washington Hemphill, Clay Center
Eleanor Catherine Kohake, Seneca
Gordon Grigsby Lill, Mount Hope
John D. McNeal
Joseph Ralph Marshall, ManhattanHarry Eugene Martin, Manhattan
Paul Wesley Meyer, Kansas City
Doris Louise Miller, Winfield
Roger Gray Miller, Kansas City
*Harold Edward Taylor, Norton
Daniel Max Thompson, Almena
Dixon Irving Wands, Manhattan
Etta Beck Warner, Glasco
Nellie Leone Yount, Bazine**BACHELOR OF SCIENCE IN BUSINESS ADMINISTRATION***Earl William Atkins, Topeka
Warren Harvey Boomer, Portis
Maurice Eugene Bostwick, Wichita
Theodore Orice Dodge, Dighton
Edward Merrill Downer, Manhattan
Albert Raymond Henry, Salina
Irvin Brown Jenkins, Kansas City*Edward LeRoy McCoy, Manhattan
Ernest Raymond McDonald, Salina
Robert William Nelson, Leavenworth
Chester Dale Nielson, Bennington
Enid Lillian Palmer, Parsons
*John Henderson Washburne, Waterbury, Conn.**BACHELOR OF SCIENCE IN INDUSTRIAL CHEMISTRY**

George Richard Rugger, Topeka

Ray Edmond Wright, Osawatomie

BACHELOR OF SCIENCE IN INDUSTRIAL JOURNALISMJames LeRoy Gould, Manhattan
Alfred Joseph Eugene Makins, AbileneTheron Andrew Newell, Manhattan
Roy William Swafford, Jr., Topeka**BACHELOR OF SCIENCE IN MUSIC EDUCATION**Norma Elizabeth Cook, Monument
Iona Marie Dunlap, Keats
Anthony Kimmi, Everest
Junior Andrew Nelson, GypsumMavis Lucille Plattner, Sabetha
Bueford Talmage Roper, Atchison
Margaret Anne Thomas, Baxter Springs

* In absentia.

Division of Home Economics

BACHELOR OF SCIENCE IN HOME ECONOMICS

Margaret Wilma Clark, Manhattan
Agatha Neoma Crawshaw, Maple Hill
Ileene Genevieve Davis, Marysville
Gertrude Charlotte Dirks, Hillsboro
Marcella Genevieve Hobbie, Tipton
Helen Pansy Hostetter, Manhattan
Betty Jean Jones, Salina
Lucile Alice Lund, Manhattan
Raedine McCulley, LaHarpe
Shirley Elizabeth Murphy, Emporia

Evelyn Victoria Nagel, Wichita
Dorothea Marie Nielson, Marysville
Lola Irene Riggs, Welda
Helen Jane Roderick, Manhattan
Luella Velva Siek, Hope
Gwendolyn LaVerne Tinklin, Atchison
Evelyne Elnora Ward, Langdon
Roma Mae Wenger, Sabetha
Frances Mildred Wilkins, Chapman

Honors

PHI KAPPA PHI

1939-1940

Division of Graduate Study

Golda Mildred Crawford
Alva L. Finkner
George A. Gries
Ira Miller Hassler

Louis Raymon Shobe
Leroy Franklin Stutzman
Thomas Radford Thomson
Charles Peairs Wilson

Division of Agriculture

John G. Dean
Dwight Kendall Ellison
Isaac Kieth Harrison
Leo Michael Hoover
Harold Eugene Jones
Donald Irvine McCoy
John Henry McCoy
Delbert Earl McCune

Henry John Meenen
Kenneth Frederick Parsons
Melvin Urban Raymond Peterson
*Joseph Edmond Robertson
John Alex Shaw
Marvin Ray Shetlar
Glenn Arnold West

Division of Engineering and Architecture

Clarence Leaman Abell
Vernon Glenn Boger
Jack Pearson Fuller
Harold Ellsworth Gray
Thomas Benton Haines
Robert Glenn Lake
Wayne Percy Lill
Park Lawrence Morse
Glenn Russell Nelson
Carroll Dean Owensby

Matthew Allen Reber
Joseph James Redmond
Leon Washington Schindler
Kenneth Lee Stuckey
Robert Lansdowne Teeter
Fred Franklin Townsend
George Willits Vaught
Solon Luther Willsey
Clifford Eli Wilson

Division of General Science

Lois Geraldine Aldous
Fern Bair
Margaret Helen Blevins
Edward Erle Buller
Harold Hedrick Coffman
Norma Elizabeth Cook
Dorothy Dean
Karl Drechsel Edwards
Adah Lou Eier
Juanita Hoopes Germann
Ruth Helen Hammel

Albert Sidney Holbert
Marjorie Loretta McCaslin
Doris Louise Miller
Helen Isabel Peterson
Mavis Lucille Plattner
Maxine LaJune Richardson
Marjorie Nell Spillman
Daniel Max Thompson
Roger Ferris White
Esther Irene Wiedower

Division of Home Economics

Vivian Ethel Anderson
Elizabeth Maude Brooks
Jean Frances DeYoung
Dawn Lorraine Hornbaker
Elizabeth Ann Jenkins
Betty Jean Jones
Frances Lucille Meyer
Abbie Maurine Miller

Barbara Jane Myers
Carolyn Jane Overholt
Genevieve Estella Scheier
Genevieve Eleanor Schroer
Luella Velva Siek
Evelyn Avery Smith
Elnora Jane Thomas

Division of Veterinary Medicine

Howard Sidney Cantwell
Orin Ellis
Carl Frederick Erickson

Mark Leon Greenberg
Charles Carson Moore
Roger Guy Spencer

SENIOR HONORS

1940

In each division of the College, high honors are awarded to three percent of the senior class having the highest standing in scholarship during their junior and senior years. Honors are also awarded to not more than an additional seven percent of the senior class.

Division of Agriculture

HIGH HONORS

Leo Michael Hoover
*Donald Irvine McCoy

Henry John Meenen
*Melvin Urbin Raymond Peterson

HONORS

Richard Melven Bullock
John Leslie Clow
*John Gillette Dean
Lester John Hoffman
*Harold Eugene Jones

Elwood Chase King
*John Henry McCoy
*Delbert Earl McCune
*John Alex Shaw
*Marvin Roy Shetlar

Division of Engineering and Architecture

HIGH HONORS

George Thomas Dean
*Carroll Dean Owensby

*Robert Lansdowne Teeter
George Willits Vaught

HONORS

*Clarence Leaman Abell
Vernon Glenn Boger
David Wilson Brower
*Milton Kaslow
*Robert Glenn Lake
*Richard Edgar Lindgren

*James William McKinley
Glenn Russell Nelson
Matthew Allen Reber
*Joseph James Redmond
Leon Washington Schindler

Division of General Science

HIGH HONORS

Karl Drechsel Edwards
*Ruth Helen Hammel
Marjorie Loretta McCaslin

Doris Louise Miller
*Helen Isabel Peterson

HONORS

Lois Geraldine Aldous
*Fern Bair
Howard Nelson Batchelder
Alice Lucille Beal
*Margaret Helen Blevins
Harold Hedrick Coffman
*Carlos Irving Cole
*Dorothy Dean

Rose Geraldine Diller
Adah Lou Eier
Juanita Hoopes Germann
Georgia Washington Hemphill
Albert Sidney Holbert
Daniel Max Thompson
Roger Ferris White

Division of Home Economics

HIGH HONORS

*Vivian Ethel Anderson
*Dawn Lorraine Hornbaker

*Abbie Maurine Miller
*Elnora Jane Thomas

HONORS

Grace Rosamond Claywell
Jean Frances DeYoung
Florence Marie Hammett
Elizabeth Ann Jenkins
Betty Jean Jones
*Ruth May King

Frances Lucille Meyer
Barbara Jane Myers
Carolyn Jane Overholt
Anna Martha Scholz
Evelyn Avery Smith

* Awarded sophomore honors at end of sophomore year.

Division of Veterinary Medicine**HIGH HONORS**

*Orin Ellis

HONORS*Mark Leon Greenberg
Horton Kent Howard*Guy Roger Spencer
Dale J Yokum**SOPHOMORE HONORS****1940**

In each division of the College, honors are awarded at commencement to not more than five percent of the sophomore class having the highest standing in scholarship during their freshman and sophomore years.

Division of AgriculturePaul Quintin Chronister
Ray Albert Keen
Murray Luther Kinman
Joseph William Mudge
Oscar Woodrow NorbyRaymond Ruben Rokey
Robert Ralph Singleton
Floyd William Smith
Robert Earl Wagner**Division of Engineering and Architecture**William Royce Bixler
James Marston Bowyer, Jr.
Lyle Ashton Cox
George J. Fetter
William Halpin Fitzsimmons
Don Franklin Holshouser
Arthur Douglas McGovernDonald George Moss
Dennis Gordon O'Neill
George Arthur Sample
Glenn Orville Schwab
Lawrence Eldon Spear
Paul John Waibler
Alice Elizabeth Warren**Division of General Science**Charles Jerome Glotzbach
Helen Virginia Holbert
Philip Gibbs Kaul
Richard McClanahan Keith
Raymond Orville Keltner
Reva Alma King
Hurst Kreek MajorsIda Isabel Moore
Marjorie Jane Rogers
Harold Jay Santner
Dreda Maxine Smith
Marjorie Jean Spurrier
Keith Wallingford**Division of Home Economics**Dorothy Grace Beezley
Phyllis Evelyn Billings
Von Eloise Eastman
Jane Haymaker
Jean Marie Knott
Beatrice Marie MontgomeryShirley Alice Pohlenz
Irma Lucille Popp
Helen Florence Reiman
Nita Mae Stricklin
Eleanor Earlene Trekell**Division of Veterinary Medicine**Donald Keith Christian
Glover Wilson Laird

Frederic Barber Walker, Jr.

* Awarded sophomore honors at end of sophomore year.





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18-6401



LIST OF STUDENTS

SEVENTY-SIXTH SESSION

1940-1941

(305)

LIST OF STUDENTS **

Students Pursuing Graduate Work in Regular Session

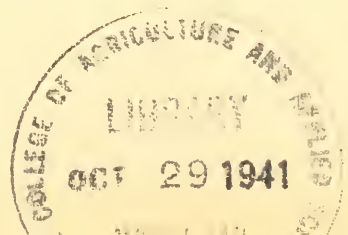
Graduate Students

- *Mildred Pearl Allen; Bluff City
John Edmond Anderson; Manhattan
Kling LeRoy Anderson; Manhattan
Harry Charles Baird; Manhattan
*Jane Elizabeth Baker; Springfield, Mo.
*Montee Robert Baker; North Platte, Neb.
Edna Marie Bare; Protection
Dorothy Barfoot; Manhattan
*Harle Virgle Barrett; Shawnee, Okla.
†Viola Frances Barron; Merriam
Virginia Faye Baxter; Manhattan
Glenn Hanse Beck; Manhattan
Ballard Keller Bennett; Manhattan
†Lawrence Raymond Berg; Spokane, Wash.
Marjorie M. Berger; Manhattan
Charles John Birkeland; Manhattan
Everett George Blood; Garnett
Bernard Benjamin Bohren; Manhattan
Hobart Paul Boles; Wilmore
*Edward Lowell Brandner; Leoti
Norman G. Branson; Belleville
†Charles H. Bratt; Nebraska City, Neb.
*Robert Woodbury Bray; Dodgeville, Wis.
Augustin Wilber Breeden; Manhattan
Travis Epps Brooks; Salina
Gerald James Brown; Manhattan
William Everett Brown; Junction City
Thomas R. Brunner; Wamego
Burnill Howard Buikstra; Manhattan
*Billy Boone Bunger; Topeka
Frank Sherman Burson; Manhattan
Marion John Caldwell; Manhattan
Walter Monroe Carleton; Manhattan
Annette Alsop Case; Manhattan
Ralph Boyd Cathcart; Manhattan
Hsieu Tsin Chang; Shanghai, China
*Ruth Ellen Chenoweth; Del Norte, Colo.
*Eleanor Berdina Collins; San Antonio, Tex.
*Morris Seifer Cover; Manhattan
Golda Mildred Crawford; Manhattan
Minerva Marie Cron; Alamo, Tex.
Charles Burton Crook; Ogden
Alfred Charles Curtiss; Ness City
*Merritt Ira Darrow; Leslie, Mich.
Floyd Ewing Davidson; Parsons
*Laura Pettice Davis; Lexington, Mo.
†*Marguerite Rose Davis; Independence
*LaVerne Deal; Sawyer
George Thomas Dean; Manhattan
Ernest Wilson Decker; Tecumseh
*Lillian Alpha Dees; San Antonio, Tex.
Arthur William Devor; Manhattan
Paul Lawrence Dittmore; Manhattan
*Helen Marjorie Duncan; Wichita
*Genevieve Elizabeth Dziegiel;
Clinton, N. Y.
Nina Edelblute; Manhattan
*Donald John Edgar; Sterling
Adah Lou Eier; Manhattan
Hal Field Eier; Manhattan
*John Frederick Eppler; Manhattan
*Frank David Faulkner; Severy
Ralph Frederick Fearn; Peoria, Ill.
Walter Federer; Cheyenne, Wyo.
Karl Frederick Finney; Manhattan
*Esther Margaret Flagg; Chehalis, Wash.
Helen Gertrude Forney; Manhattan
Jean Dobbs Frank; Manhattan
*Charles Keith Franks; Winfield
Lyman Phillip Frick; Kansas City, Mo.
*Charles Robison Friede;
Washington, D. C.
*Harold Fry; Manhattan
Phillip MacNab Gaaney; Manhattan
*Ernal P. Gallbraith; Blanding, Utah
Roger K. Ghormley; Hutchinson
Otis Benton Glover; Manhattan
†Ernest Constance Goforth; Keats
*Edith Goldstein; Manhattan
Charles Martin Good; Plevna
*George Vernon Goodding; Lincoln, Neb.
*Frederick John Gradishar; Ely, Minn.
Josie Griffith; Manhattan
Albert Wendell Grundmann;
Salt Lake City, Utah
*Georgia May Howlett; Golden, Colo.
Herbert Frank Haas; Kansas City
Howard James Haas; Garden City
*C. Clyde Harbison; Wichita
*Raymond Daniel Harrington; Syracuse
Orville Beatty Harris; Baxter, Tenn.
Wilda M. Hay; Belleville
Elizabeth Allen Heinz; Manhattan
*Harold Kenneth Heizer; Marysville, Ohio
Elmer George Heyne; Manhattan
Leona Thurow Hill; Manhattan
Raymona Mayme Hilton; Omaha, Neb.
Zelma Ellen Hockett; Manhattan
Albert Sidney Holbert; Newton
Floyd Arthur Holmes; Prescott
*Kenneth Bert Hoover; Detroit
Ruth Mildred Jameson; Garrison
Dolf Jesse Jennings; Manhattan
Edgar Abner Johnson; Fort Collins, Colo.
Geneva Johnson; Marysville
*John Alexander Johnson, Jr.;
 Fargo, N. Dak.
*Oscar Edward Jones; Kansas City
*Raymond Webster Jones; Peck
Milton Kaslow; Manhattan
*Donald Henry Kaufmann; La Crosse
*Pauline Atkins Keller; Topeka
†Glenn Charles Klingman; Chappell, Neb.
James Michael Koepper; Medora, Ind.
†Marvin Koger; State College, N. Mex.
Earl McKee Kroth; Denison
Raymond John Ladd; Manhattan
Peter Henry Leendertse; Wichita
Franz Leidler; Manhattan
Gertrude Elizabeth Lockhart; Manhattan
*John Hall Lonnquist; Elgin, Ill.
*Leon George Lungstrom; Lindsborg

** May 29, 1940, to May 27, 1941.

* Matriculated 1940-'41.

† In absentia.



GRADUATE STUDENTS—*Concluded*

- *William A. Lunsford; Hamilton, Ohio
 Patricia Fleining McCluggage; Manhattan
 John Henry McCoy; Manhattan
 John D. McNeal; Boyle
 *Melvin Magilow; Kansas City, Mo.
 Beulah Callis Martin; Manhattan
 Edgar Martin; Manhattan
 Donald Laurence Maxwell; Menlo
 Henry John Meenen; Clifton
 Raymond Maurice Menard; Manhattan
 *Darrel Seymour Metcalfe; Arkansas, Wis.
 Doris Louise Miller; Winfield
 John O. Miller; Meriden
 Joyce W. Miller; Sycamore
 Kenneth William Miller; Manhattan
 Merna Beatrice Miller; Kansas City
 *Ruth Lo-Tak Mo; Hongkong, China
 Clifford Merrill Moeller; Manhattan
 Signe Irene Monson; Osnabrock, N. Dak.
 *Miriam Moore; Manhattan
 *Raymond William Morrison;
 Keosauqua, Iowa
 Leonard Housden Moulden; Manhattan
 Harold Hawley Munger; Manhattan
 Carolyn Overholt Nelson; Manhattan
 Joseph William Newman; Manhattan
 Theo Beatrice Nix; Kansas City, Mo.
 *Eugene Franklin Oakberg;
 New Windsor, Ill.
 †Harry B. Olson; Cuba
 *Raymond August Olson; Lindsborg
 Merton Louis Otto; Manhattan
 *Dorothy Vernon Packwood; Manhattan
 Carolyn Marchbank Parker; Manhattan
 Buel Rorex Patterson; Manhattan
 *John Kenneth Patterson; Reynolds, Neb.
 Marion Herfort Pelton; Manhattan
 Helen Isabel Peterson; Manhattan
 *Jonnie Morris Peterson; Manhattan
 Ralph Howard Peterson; Manhattan
 Winzer J. Petr; Waterville
 Wilfred Harold Pine; Manhattan
 Clarence Andrew Pippin; Manhattan
 Charles Morris Platt; Manhattan
 Clare R. Porter; Kingman
 *William Joseph Promersberger;
 Littlefork, Minn.
 Willard Malcolm Reid; Monmouth, Ill.
 Eldon Eugene Retzer; Kansas City
 Stephen James Roberts; Manhattan
 *Jane Rockwell; Topeka
 Robert Max Roelfs; Bushton
 Elmer John Rollins; Manhattan
 Marian E. Rude; Manhattan
 Ralph Emanuel Samuelson; Manhattan
 E. Eugene Saunders; Manhattan
 Paul A. Schoonhoven; Manhattan
 †Ehner Philip Schrag; Fredonia
 William George Schrenk; Manhattan
 *Dorothea Ann Schroeder; Newton
 †Louis C. Schwanke; Altamont
 Richard B. Schwitzgebel; Manhattan
 *Raymond Eugene Seltzer; Elmwood, Ill.
 †Rowena Hammons Sherrill; Brownell
 Karl Gardner Shoemaker; Manhattan
 Paul Maurice Simpson; Salina
 *Sister Rose Genevieve Downs;
 St. Louis, Mo.
 Robert Fred Sloan; Leavenworth
 *Jacob Jay Smaltz; Manhattan
 George Lee Smith; Prairie View, Texas
 Hester Smith; Manhattan
 *Mary Smull; Manhattan
 Morton Smutz; Manhattan
 William Zanzil Sosna; Manhattan
 †*Frieda May Steckel; St. John
 *James Edward Stevens; Mitchell, S. Dak.
 *Jacqueline Louise Stewart; Fort Riley
 *Edward Siemantel Stickley; Topeka
 Alice Mary Stockwell; Manhattan
 †*Evelyn Emma Stout; Chanute
 Hilmar C. Stuart; Garrison
 Charles Raymond Stumbo; Manhattan
 Francis Joseph Sullivan; Manhattan
 *Andrea Jean Surratt; Springfield, Ill.
 *Lowell William Taylor; Salina
 *Horace Carl Traulsen; Paxton, Neb.
 †John W. Truax; Lyons
 Joseph B. Tuck; Morrisville, Mo.
 *Franklyn Morris Victor; Topeka
 Carolyn Margaret Wagner; Seattle, Wash.
 *John Allen Wagoner; Hugoton
 Anne E. Washington; Manhattan
 †Orla Virgil Washler; Penalosa
 Irene Margaret Wassmer; Garnett
 Dwight Silas Waters; Manhattan
 Arlene Lois Waterson; Dighton
 *Thomas Aloysius Weldon; Aurora, Ind.
 †James Ralph Wells; Centralia
 Otto Ernest Wenger; Basehor
 Glenn Arnold West; Manhattan
 *Anita Frances White; Wichita
 Roger Ferris White; Buda, Ill.
 *Betty Whittemore; Topeka
 Donald Alden Wilbur; Manhattan
 †Ernest Sherman Wild; Morehead
 *Cleo Elizabeth Willey; Osage, Iowa
 Bill Milton Williams; Topeka
 *Doris Jeanne Williams; Lawrence
 Charles Peairs Wilson; Manhattan
 James Kelly Woods; Burden
 *Nelson Jones Wright; Wamego
 †Helen Iams Wroten; Beattie
 Millard F. Yantzi; Kansas City

* Matriculated 1940-'41.

† In absentia.

UNDERGRADUATE STUDENTS

In Regular Session

The following lists include seniors, juniors, sophomores, freshmen and special students in College. For students in summer schools see lists following these.

Abbreviations here used denote curriculums as follows: AA, agricultural administration; Ag, agriculture; AE, agricultural engineering; Ar, architecture; AH&V, animal husbandry and veterinary medicine; ArE, architectural engineering; BA, business administration; BA&A, business administration and accounting; CE, civil engineering; ChE, chemical engineering; EE, electrical engineering; GS, general science; HE, home economics; HE&A, home economics and art; IA, industrial arts; IC, industrial chemistry; IJ, industrial journalism; IM&D, institutional management and dietetics; M, applied music; MuE, music education; ME, mechanical engineering; MI, milling industry; PE, physical education; PVM, preveterinary medicine; SH, specialized horticulture and VM, veterinary medicine.

SENIORS

- | | |
|--|---|
| <p>Edward Linn Abernathy (ArE);
 Sharon Springs
 Merrill Glee Abrahams (AA); Wayne
 Warren Harlin Acker (ChE); Junction City
 Charles Henry Adams (Ag); Wilsey
 James Otis Adams (CE); Eureka
 Raymond Voiles Adams, Jr. (GS);
 Manhattan
 Walter Alfred Adams (ME); Leavenworth
 Charles Warren Adcock (ME);
 Washington, D. C.
 Donald Dwight Adee (PE); Wells
 Vance Ellsworth Aeschleman (Ag); Wichita
 DeWitt Bennard Ahlerich (AA); Winfield
 Julia Jane Alderman (HE); Ottawa
 Eugene Alford (EE); Arkansas City
 Carl Ellsworth Alleman (ChE);
 Kansas City
 Dale Allen (Ag); Seneca
 Genevieve Elizabeth Allen (HE); Manhattan
 Richard Carl Allen (EE); Carthage, Mo.
 Lueva Alsop (GS); Wamego
 Enid Alene Altwegg (IJ); Junction City
 Edith Hewitt Anderson (HE);
 Leavenworth
 Howard Rowles Anderson (AA); Patridge
 Wilfred Ira Anderson (CE); Clay Center
 Fernando E. Armstrong (VM);
 Ponce, Puerto Rico
 George Rankin Armstrong (VM);
 Gastonia, N. C.
 Edwin M. Aronson (ME); Fort Scott
 Richard Elton Atkins (Ag); Manhattan
 Leroy Nichols Atkinson (VM); Hutchinson
 Ellita Bernice Atwell (HE); Utica
 Dorothy Elizabeth Axcell (IM&D);
 Chanute
 ‡John Henry Babcock (EE); Manhattan
 Benson Floyd Bachus (ME); Abbeyville
 ‡Merton Bierman Badenhop (AA);
 Kensington
 Lawrence Roy Bain (VM); Pittsburg
 Mary Ann Bair (HE); Wamego
 Walter Bruce Ball (BA&A); Topeka
 William Joseph Ball (MI); Oswego
 Jack Junior Banks (BA); Winfield
 Virginia Lee Barnard (IM&D); Belleville
 Arthur C. Barney (ME); South Haven
 Truman Morris Barrett (IA); Dodge City</p> | <p>Wallace DeArmond Barry (AA);
 Manhattan
 Laura Florence Bartholow (GS);
 Coffeyville
 Clyde Jennings Bateman (ME); Herington
 Frank Alexander Bates (ME); Topeka
 Fremont H. Baxter (SH); Larned
 Winifred Jean Bayer (HE); Manhattan
 Annabelle Bays (BA&A); Onaga
 ‡Edwin Howard Beach (IC); Marysville
 Forrest Overton Beardmore (AE);
 Manhattan
 Clarence August Bechtold (AA); Gaylord
 De Elroy Beeler (ME); Kansas City
 Maurice Wayne Beichley (BA&A);
 Longford
 Carroll Lee Bell (ME); Hutchinson
 Rena Lauretta Bell (HE); McDonald
 William Perry Bell (EE); Silver Lake
 Welcome A. Bender (HE); Plains
 William Goddard Bensing (EE);
 Manhattan
 Maurice Wittry Bergerhouse (BA&A);
 Greeley
 Minnie Josephine Bergsma (HE);
 Goodland
 ‡Carl Theodore Besse (CE); Clay Center
 James Grant Betts (VM); Randall
 Edwin Leroy Betz (AA); Enterprise
 Carl Frederick Beyer (ME); Glen Elder
 Ralph Julius Bieberly (Ag); Dodge City
 Ronald Leroy Biggs (MI); Potwin
 Maxine Beryl Bishop (HE); Abilene
 Eloise Artis Black (GS); Coffeyville
 Charles Wilson Blackburn (EE); Topeka
 E. Joseph Blackburn (ME); Alma
 Pauline Isabel Blackwell (HE); Rozel
 Robert Hale Blair (IJ); Ottawa
 Victor Ross Blanks (IJ); Manhattan
 Russell William Blessing (MI); Emporia
 ‡Kathryn Elizabeth Blevins (GS);
 Manhattan
 John Mathew Boalen (GS); Concordia
 Betty Boehm (IM&D); Manhattan
 Wayne Columbus Bogard (Ag);
 Junction City
 Emory Bond (CE); Burlingame
 Ralph Edwin Bonewitz (Ag); Meriden
 Betty Bonnell (HE); Kansas City, Mo.</p> |
|--|---|

‡ Also pursuing graduate study.

SENIORS—Continued

James Frederick Booth (AA); Fairview
Pauline Marie Borth (HE); Plains
Lawrence Ralph Bowdish (Ar&ArE);
Wichita

William Dale Bowerman (VM);
Oklahoma City, Okla.

John Harrison Bowers, Jr. (BA);
Kansas City

Mary Jane Boyd (MuE); Hutchinson
Esther May Boys (HE&A); Linwood
James Thomas Bradley (EE); Sedan
Edward Leo Brady (BA&A); Fredonia
Elliot Wilson Brady (ME); Manhattan
James Richard Brandon (CE); Wichita
‡Jack Wallace Branson (GS); Belleville
Alfred Merle Brecheisen (GS); Rolla
Richard Harold Breckenridge (ME);
Woodston

Edward Francis Brenner (AA); Bazine
David Henry Breuninger (BA); Manhattan
John Gilbert Brewer (ChE); Arkansas City
John Augustus Brewer (ME); Concordia
Harold Brickey (ChE); Emporia
William Blount Briggs (MI);
Landrum, S. C.

John Richard Brock (BA); Glasco
Frances Lorraine Brooks (HE); Norton
Arthur William Brower (VM); Emporia
Jacquelyn Lenore Brower (HE); Attica
Arlo Allen Brown (Ag); Almena
Bernice Beatrice Brown (HE); Toronto
Dwight Carl Brown (ArE); Osborne
Francis Richard Brown (AA); Fall River
Lester Earl Brown (AA); Circleville
Lewis Ernest Brown (ME); Chanute
Paul Lawson Brown (Ag); Sylvan Grove
Sara Davidson Brown (IM&D); Manhattan
Kenneth Lee Bruce (VM); Orchard, Neb.
Joe Bruntington, Jr. (EE); Kansas City
Oscar Benjamin Brumback (ChE);
El Dorado

Ruth Miller Brunner (GS); Wamego
Robert William Brush (Ag); Wichita
Joe Bryske (IC); Mankato
Edith Louise Buchholtz (HE); Olathe
Charles Adelbert Buck (ChE); Anthony
Lawrence Theodore Buening (BA&A);
Valley Falls

Ravmond Martin Bukaty (ME);
Kansas City

James Donald Bulger (AA); Cherryvale
Curtis Ames Burgan (EE); Hoisington
Wesley Burgan (ArE); Hoisington
Max Morris Burger (IA); Randall
Orville Brown Burtis (Ag); Hymers
Bernard Busby (VM); Wakefield, Neb.
Glenn Marton Busset (AA); Manhattan
Sarah Jane Buster (HE); Larned
Wilma Hortense Cade (GS); Manhattan
Tarlton Aura Caldwell (BA); Manhattan
Roy Dell Call (EE); Manhattan
Bessie Marie Campbell (HE); Concordia
Mary Alice Campbell (HE); Concordia
Ruth Pearl Campbell (HE); Lakin
Lester Wendell Canny (BA); Mound Valley
Ellen Mae Cardarelli (GS); Republic, Pa.
Gilbert Wilson Carl (VM); Hutchinson
Lillie Martin Carlton (HE); Abilene
Doris Virginia Carlson (IM&D);
Osage City

Howard Leon Carnahan (Ag); Parsons
Eldon John Carper (GS); Cherryvale

* Lyle Murphy Carson (EE); Dennis
Dean Robert Cassity (SH); Clifton
Richard John Cech (IJ); Kansas City
Severo Jose Cervera (Ag); Junction City

Edward Eldridge Chambers (VM); Parsons
Robert George Chapman (GS); Manhattan
Walter Eugene Chappell (AA); Chanute
Clayton Ralph Chartier (MuE);
Concordia

William Graham Chester (ME);
Kansas City, Mo.

Garland Baxter Childers (CE); Augusta
Katharine Chubb (IJ); Topeka

‡Frank Adelbert Churchill (ME);
Detroit, Mich.

Betty Jean Clapp (IM&D); Manhattan
Doris Leota Clark (GS); Longton

Lowell Warren Clark (MuE); Waterville
Robert Hugh Clark (VM); Manhattan

Donald Ernest Cleland (AE); Eskridge
Paul Lawrence Clingman (BA); Harlan

Alonzo Leon Cloninger (EE); Chanute
‡George Wilson Cochran (Ag); Topeka

Charlotte Jean Cockerill (HE); Frankfort
Robert Benson Coder (IA); Manhattan

Robert Christian Colburn (AE); Spearville
Wayne Robert Colle (AA); Sterling

Clark C. Collins (VM); West Point, Neb.
Jessie Margaret Collins (IM&D); Dwight

Lawrence Keith Collins (AE);
Junction City

Lee Wilson Collinsworth (Ag); Rosalia

Stanley Elbert Combs (Ag); Wilson, N. C.
Clarence Charles Compton (CE); Atchison

Norman Travis Cook (CE); Monument
Carleton Cooper (BA&A); St. John

Richard Warren Cope (GS); Holton
Charles Joseph Correll (BA); Manhattan

Lucile Mae Cosandier (HE); Onaga
‡Robert Thomas Cotton (GS); Manhattan

Harry Cowman, Jr. (AA); Lost Springs
Marie Jane Cox (IM&D); Iola

Elvin Wayne Cramer (GS); Glasco
Virgil Eugene Craven (BA); Erie

David Franklin Crews (MI); Manhattan
James Martin Cripps (IC); Manhattan

Joseph Celester Crofton (Ag); Kansas City
Leo Edward Cross (PE); Burrton

Sarah Crottinger (HE); Bison
Robert Earhart Crow (GS); Harper

Edgar Crowley, Jr. (ChE); Kansas City
Don Eldon Crumbaker (Ag); Onaga

Betty Jane Curtis (IM&D); McPherson
Emerson Lyle Cyphers (Ag); Fairview

Fay Anna Dale (GS); Coldwater
Durward Clair Danielson (ChE); Clyde

Paul Stromquist Danielson (Ag);
Lindsborg

Clayton Cunningham David (Ag);
North Topeka

Lawrence Roy Davidson (BA); Manhattan
Betty Lou Davis (BA); Severance

Mildred Bozarth Davis (HE); Concordia
Shirley LeRoy Davis (VM); Fort Scott

Clarence Arthur Day, Jr. (ChE); Ottawa
Robert Edward Deats (ChE); Hutchinson

Wayne Xavier Deaver (MI); Sabetha
Warren James Dedrick (VM); Kansas City

Marieta Jane Delano (HE); Hutchinson
Virginia R. Delano (BA); Hutchinson

Jean Chandler DeVault (ChE);
Kansas City

Warren Eugene Dewlin (AA); Coffeyville
Irving Diamond (ChE); Bronx, N. Y.

Alma Lorraine Dickerhoof (IM&D);
Chanute

Dale Dietz (BA&A); Esbon
‡Richard Dilley (CE); Topeka

‡Richard Dillan (MuE); Hutchinson
Herbert Merrill Dimond (EE); Manhattan

* Matriculated 1940-'41.

‡ Also pursuing graduate study.

SENIORS—Continued

- Thello Clarence Dodd (AA); Linn
 Helen Gordon Dodds (HE); Lawrence
 Darold Ardale Dodge (AA); Dighton
 Robert Hollister Dodge (BA&A);
 Kansas City
 Isabel Naomi Dodrill (HE); Stockton
 John James Dooley (ChE); Parsons
 William Earl Doty (Ar); Manhattan
 Ruth Elma Douglas (IM&D); Coffeyville
 Jack Edwin Downs (ME); Wichita
 Richard Eugene Dreyer (ME); Newton
 Leslie Albert Droge (PE); Seneca
 Joyce Lenore Dryden (HE); Stockton
 Alva Lease Duckwall (BA); Abilene
 Samuel G. Dukelow (ME); Hutchinson
 Lillian Ruth Dumler (IM&D); Gorham
 John Wallace Dummermuth (AA); Barnes
 Glenn Ellsworth Duncan (VM);
 St. Francis
 Jane Cuthbert Dunham (HE); Topeka
 Ray Charles Dunlay, Jr. (CE); Parsons
 Wellington John Dunn (AA); Manhattan
 Walter Elsworth Dwy (CE);
 Waterbury, Conn.
 Everett James Eastman (ME);
 Independence
 John Springer Eaton (AE); Hutchinson
 George Washington Eberhart (VM);
 Jewell
 Howard Clayton Eberline (EE);
 Manhattan
 Fay Albert Edwards (EE); Arlington
 Paul Raymond Edwards (SH); Meade
 Theodore Max Ehlert (Ag); Neodesha
 Vincent Henry Ellis (ME); Urbana, Ill.
 Marion Claire Elmer (HE); Manhattan
 Rush Elmore, Jr. (MI); Topeka
 Helen Louise Ensign (IM&D); Garrison
 John Ernest Erickson (VM); Clairton, Pa.
 Aven Lamor Eshelman (CE); Abilene
 Elise Eshelman (BA); Wichita
 Melvin Eugene Estey (ME); Langdon
 Lola Grace Evans (HE); Hutchinson
 Wilma Florine Evans (HE); Hutchinson
 Clair Eugene Ewing (CE); Blue Rapids
 Shirley Frederick Eyestone (EE); Wichita
 Willard Halsey Eyestone (VM); Pittsburg
 George Allen Fadler (ME); Carthage, Mo.
 Blanchetta Fair (GS); Dearing
 Harry Eugene Fair (Ag); Alden
 Gustave Edmund Fairbanks (AE); Topeka
 Charles Edward Fairman (PE);
 Manhattan
 ‡James Madison Fallis (IC); Luray
 John Philip Featheringill (AA);
 Independence
 Rachel Louise Featheringill (HE);
 Independence
 Elizabeth Anne Ferrier (GS); Seneca
 Autumn Felton Fields (HE); McPherson
 George Howard Fittell (MI); Beloit
 Taylor Leland Fitzgerald (Ag); Silver Lake
 Helen Elaine Fleming (HE); Ottawa
 Edward Horton Fletcher (ME);
 Council Grove
 Reed Charles Fleury (Ag); Manhattan
 Frank Abram Flipse (VM); Oakley
 Franklin James Flynn (BA); Wamego
 Merle Everett Foland (MI); Almena
 Floyd Greer Foley (ME); Norton
 John Lowell Foley (AA); Manhattan
 William Roy Ford (EE); Frankfort
 John Cotterill Foster (Ar); Manhattan
 Lowell Windell Fowler (GS); El Dorado
 Paul E. Fowler (Ag); Independence
 Harold Robert Fox (AA); Rozel
 HoBart W. Frederick (Ag); Burrton
 Lawrence Dale Freel (GS); Goff
 Clarence Albert Frese (AE); Hoyt
 Evalyn Mae Frick (HE); Larned
 John Henry Frohn (EE); Manhattan
 LeRoy Frank Fry (AA); Little River
 Margaret Lucille Furbeck (HE);
 Manhattan
 Erma Katherine Gamby (HE); Everest
 Alva Rodell Gardner (ME); Pomona
 ‡Bertram Wallace Gardner, Jr. (Ag);
 Carbondale
 William Arthur Gardner (CE); Chanute
 Neva Marguerite Garrett (GS);
 Clay Center
 John William Geddis (MI); Larned
 William Burris Geery (CE); Burrton
 Gerald Geiger (BA&A); Belvidere, N. J.
 Alexander Rinaldo Geldhof (EE);
 Pittsburg
 Jackson George (Ag); Lebo
 ‡Roger K. Ghormley (EE-I; Grad-2);
 Hutchinson
 Dale Edsel Gibson (GS); Winchester
 Guy Edgar Gibson, Jr. (CE); Kensington
 Elvin Vance Giddings (CE); Manhattan
 Mahlon H. Giffin (ME); Sedgwick
 Paul Gilbert, Jr. (CE); Pawnee Rock
 Robert Albert Gilles (CE); Kansas City
 Neil David Gillmore (CE); Hutchinson
 John Gifford Gish (VM); El Dorado
 Margaret Jane Goble (IJ); Riley
 Grayce Edyth Goertz (HE); Moundridge
 Florence Clarice Gosney (HE); Mulvane
 Virginia Lee Goss (HE); Dwight
 Kenneth Herbert Graham (BA);
 Framingham, Mass.
 Madalene Mildred Graves (IM&D);
 Clifton
 Richard Loy Gray (BA); Wichita
 Dorothy Mae Green (HE); Wichita
 Julia Louise Green (IM&D); Iola
 Wilbert Greer (Ag); Council Grove
 Mary Jean Grentner (IJ); Junction City
 C. Lyndon Griffith (ME); Elkhart
 Eugenia Louise Grob (HE); Randolph
 Leland Leon Groff (Ag); Parsons
 Emory Allen Groves (AA); Burlingame
 Warren Gerald Grubb (ChE); Phillipsburg
 Melvin Ferdinand Gruber (AA); Hope
 David Edward Guerrant (IJ); Manhattan
 Alice Crosby Gunn (HE&A);
 Kansas City, Mo.
 Mildred Joyce Gurtler (HE); Summerfield
 Mary Alice Guy (HE); Longford
 Ralph Edward Guyton (BA); Salina
 Florence Verda Gwin (HE); Junction City
 Elmer Loyd Hackney (PE); Oberlin
 Robert Monroe Hackney (BA); Parsons
 Richard Hagadorn (GS); Gaylord
 ‡Thomas Benton Haines (ChE); Manhattan
 Lucille Haley (PE); Kansas City, Mo.
 Ethel Dorothy Haller (IM&D); Alma
 Glenn Clough Halver (VM); Crane, Mont.
 Ruth Agnes Hanson (GS); Chanute
 Paul Ernest Harbison (AE); Johnson
 Orval Albert Harold (AA); Oberlin
 *‡Raymond Daniel Harrington (Grad-1;
 AA-2); Syracuse
 ‡Harold Raymond Harris (ChE);
 Geuda Springs
 George William Hartter (IC); Sabetha
 Doris Elizabeth Harvey (HE); Wichita
 Jane Louise Hastings (HE); Lakin
 Don Franklin Hathaway (BA); Coffeyville
 Paul Clement Hauber (EE); Kansas City
 Eugene Edmond Haun (AE); Larned

* Matriculated 1940-'41.

‡ Also pursuing graduate study.

SENIORS—Continued

- Pattie Patrice Hay (HE); Eskridge
 John Norris Haymaker (MI); Manhattan
 Richard Neil Heaton (BA); Norton
 Lewis Ernest Heiney (ME); Bloom
 Carl Helm (CE); Chanute
 Sherman Nelson Helm (AA); Manhattan
 William Douglas Helm (EE); Manhattan
 Wilbur Ellis Hendershot (Ag); Hutchinson
 ‡Kenneth Dean Henry (CE); Robinson
 Laura Elizabeth Herr (HE); Abilene
 Donald Dwight Hesselbarth (BA); Abilene
 Frank Albert Hetzke (ChE); Moundridge
 William Herbert Hickman (IJ); Kirwin
 Lacy Hightower (EE); Centralia
 Viola May Hill (HE); Hope
 Clesson Leigh Hines (Ag); Kanorado
 ‡James Robert Hoath (GS); Anthony
 Edward Vaughn Hobbs (ME); Manhattan
 ‡Edwin B. Holland (EE); Liberal
 Herbert Dale Hollinger (IJ); Chapman
 Arthur Vernon Holman (EE); Wichita
 Norris Everett Holstrom (BA); Topeka
 Raymond Hook (ME); Osborne
 Allison Lynn Hornbaker (GS); Hutchinson
 Charles Kendal Horner (MuE); Abilene
 Marcella Arlidene Horner (HE); Haviland
 Warren Thomas Hornsby (BA); Topeka
 Bernice Maude Horton (BA); Wayside
 William Mixon Horton (EE);
 Valley Center
 Frank Wilson Howard, Jr. (Ag); Oakley
 Dorothy Elizabeth Howat (HE);
 Wakeeney
 Gordon Clark Howell (VM); Kansas City
 Herbert Winston Howell (VM);
 Kansas City
 Gerald Albert Hoyt (EE); Thayer
 Robert Vern Huffman (ME);
 Kansas City, Mo.
 ‡Howard McCune Hughes (Ag); Formoso
 Rees Woodford Hughes (AA); Fort Scott
 ‡Dena Everett Huitt (AE); Talmage
 Mary Ellen Hull (HE); El Dorado
 Gorman Earl Hunt (ME); Leavenworth
 Dale Craig Hupe (Ag); Perry
 Henry George Hartig (GS); Hanover
 Hazelbel M. Hutchins (GS); Sterling
 Robert Donald Immenschuh (VM);
 San Diego, Cal.
 Ann Elizabeth Jackson (BA); El Dorado
 Helen Maurine Jackson (GS); Salina
 John James Jackson (PE); Eureka
 *Wilma Jean Jackson (HE); Wichita
 Harold Rolland Jaeger (Ag); Vesper
 Madelyn Frances James (HE); Parsons
 Kenneth Ralph Jameson (AA); Ottawa
 ‡Neal Mike Jenkins (GS); Manhattan
 Charles Franklin Johnson (EE);
 Kansas City, Mo.
 Earl Clinton Johnson, Jr. (ChE);
 Coffeyville
 Eleanor Lee Johnson (HE); Salina
 Herbert Donald Johnson (Ag); Macksville
 Sammie Johnson (BA); Oswego
 Susan Merilla Johnson (BA); Potwin
 Charles Fisher Jones (VM); Lisbon, N. Y.
 Jake Roderick Jones (BA); Brodhead, Wis.
 Lloyd Charles Jones (Ag); Frankfort
 Robert Jonathan Jones (MI); Wichita
 Mary Margaret Jordan (HE); Wichita
 Donald A. Justice (ME); Topeka
 Martin Kadets (VM); Matick, Mass.
 Charles Ellsworth Kaiser (ArE);
 Kansas City
 Jean Margaret Kallenberger (HE); Edna
 Mary Marvel Kantz (PE); Wichita
 Jacob Landers Karnes (VM); Benton, Ky.
 Shirley Evelyn Karns (GS); Coffeyville
 Robert L. Kauffman (BA); Salina
 ‡Richard McClanahan Keith (M);
 Manhattan
 Walter Marvin Keith (SH); Manhattan
 Edward Jacob Keller (V); St. Francis
 Lawrence Edward Kelley (Ag); Chapman
 Mary Elizabeth Kelley (HE); Atwood
 Virgil Roscoe Kelley (VM); Arkansas City
 Harold Eugene Keltner (ArE); Hoisington
 James Merlin Kendall (IJ); Dwight
 *Irene Pearl Kenneck (IM&D); Wichita
 Charles Alvin Kennedy (VM); Kansas City
 Mary Evelyn Kennedy (SH); Lawrence
 Mary Keturah Kennedy (IM&D);
 Neodesha
 ‡William Thomas Keogh (ChE & IC);
 New York, N. Y.
 Anna Mae Kern (HE); Hiawatha
 *Eleanor Constance Kershner (GS); Paola
 Paul Laurence Kewley (EE); Stockton
 Ruth Vernita Keys (HE); Winchester
 George Wendell Kilian (EE); Detroit
 Doris Chung Sook Kim (GS);
 Honokua, Hawaii
 Ruth Ella Kindred (BA); Bonner Springs
 ‡Leroy King (CE); Hesston
 Reva Alna King (GS); Council Grove
 Theron Lambert King (BA); Manhattan
 Alan D. Kinney (CE); Hainesburg, N. J.
 Helen Eunice Kirk (HE); Wellington
 Orville Kenneth Kirkpatrick (Ag); Bucklin
 Marianna Kistler (IJ); Manhattan
 Doris Marie Kittell (PE); Topeka
 LeRoy Vernon Kleppe (EE); Everest
 Dorothy Maye Knaus (HE); Neodesha
 Hildegard Charlotte Knopp (IM&D);
 Kansas City
 Hugo Koester (ChE); Herington
 Richard Benton Koger (VM); Belvidere
 Louis Daniel Kottmann (IC); Manhattan
 Tom Frederic Kropf (ME); Wamego
 Glover Wilson Laird (VM);
 Kansas City, Mo.
 Roberta Jean Lamb (IM&D); Ottawa
 Eleanor Jane Lambert (GS); Hiawatha
 Oliver Diston Lambirth (ME);
 Elida, N. Mex.
 Caralee Laming (IM&D); Tonganoxie
 Shelby Harrison Lane (ArE); Bucklin
 Floreine Edith Langenegger (HE); Burns
 Chris William Langvardt (AA); Alta Vista
 Josephine Estelle Lann (HE); Axtell
 Betty Lou LaPlante (MuE); Minneapolis
 John Henry Larkins (EE); Le Roy
 Doyle Wayne LaRosh (AA); Natoma
 ‡Carl Ernest Latschar (IC); Manhattan
 Henry S. C. Lau (IC); Arkansas City
 Oliver Ned Laurie (EE); Mulvane
 Gwendolyn Lucille Lee (GS); Lyons
 Leo Raymond Leggitt (ME); Russell
 Ernest Wayne Leive (EE); Brookville
 Clifford Alonzo Lemen (VM); Manhattan
 Yvonne Joy Lemen (GS); Manhattan
 Harold McKee Lemert (BA);
 Arkansas City
 Max Clarence Leuze (IA); Sabetha
 Emery John Levin (ChE); Lindsborg
 Carol Byron Lewis (Ar); Salina
 Frank Everett Lichtlyter (VM); El Dorado
 Leonard Lille (BA); Ellsworth
 Barney Lee Limes (ME); La Harpe
 James Worth Linn (GS); Manhattan
 Ralph Iden Lipper (AE); Sterling
 Wilbert Lloyd Loewen (ME); Goessel
 Helen Mae Lohmeyer (HE); Newton
 Kenneth LeeRoy Lohmeyer (GS); Bern
 Frank Robert Lonberger (BA);
 Manhattan

* Matriculated 1940-'41.

‡ Also pursuing graduate study.

SENIORS—Continued

- Dudley Randolph Londeen (BA&A); Abilene
 David Hale Long (Ag); Abilene
 Roscoe Dean Long (Ag); Drexel, Mo.
 Helen M. Loofbourrow (HE); Scandia
 Orville Walter Love (AA); Neosho Rapids
 Katherine Jane Lovitt (IJ); Great Bend
 Harley Eugene Lucas (CE); Coffeyville
 *Marian Frances McBride (HE); Hume, Mo.
 Dean McCandless (GS); St. John
 John Donnelly McClurkin (ME); Clay Center
 ‡Robert James McColloch (GS); Manhattan
 Charles M. McCrann (PE); Manhattan
 Boyd Homer McCune (Ag); Stafford
 Kenneth McEntire (EE); Pittsburg
 William Richard McGrew (GS); Coffeyville
 Morris J. McGaw, (MuE); Topeka
 Marjorie Jane McKee (IM&D); Chanute
 Noel LeRoy McKee (AA); Havensville
 Martha Roseline McKenna (HE); Kingman
 Nolan G. McKenzie (AA); Solomon
 Percy Herbert McKinley (EE); Kansas City
 Virgil Keith McMahan (VM); Manhattan
 Wilbur Doyle McNeese (ChE); Atchison
 Freda Lenore McNickle (HE); Zenith
 Raymond Charles McPeck (VM); Ramsey, N. J.
 Helen McVey (IM&D); Hill City
 Jennie Marie Madsen (IJ); Dwight
 Julius Henry Mai (Ag); Tribune
 Kenneth Edwin Makalous (AA); Cuba
 Donald Regis Makins (IJ); Abilene
 Arthur Charles Mangelsdorf (AA); Atchison
 David Oscar Manley (VM); Wakarusa
 Milton Lloyd Manuel (AA); Havensville
 Wyatt Parkman Marbourg (CE); Emporia
 Melvin Wayne Marcoux (Ag); Havensville
 Hazel Marguerite Marlow (GS); Manhattan
 ‡Helen Rowena Marshall (HE); Wheaton, Ill.
 ‡Marlin Wray Martin (EE); Hutchinson
 Ralph Edward Martin (GS); Solomon
 ‡Ruth Eleanor Martin (HE); Kansas City, Mo.
 Walter Woodrow Martin (IJ); Pratt
 Dwight Murray Mason (IJ); Manhattan
 Jessie Marguerite Mason (HE); Redfield
 Mary Alice Matchette (HE&N); Kansas City, Mo.
 Grace Elizabeth Mather (HE); Grinnell
 V. Evelyn Matson (HE); Miltonvale
 Robert Frank Mears (SH); Kansas City
 Jack Lewis Medaris (VM); Parsons
 ‡Friedrich Edward Meenen (Ag); Clifton
 Willard H. Meinecke (MI); Herkimer
 Raymond L. Meisenheimer (EE); Hiawatha
 Marie Melia (HE); Ford
 Victor Graham Mellquist (ME); Manhattan
 Gertrude Lucille Mensch (HE); Independence
 Bert Meriweather (VM); Manhattan
 Dick G. Merryfield (AA); Minneapolis
 Donald Herman Merten (GS); Morganville
 William Arthur Metcalf (ME); Kansas City, Mo.
 Dolores Ann Meyer (GS); Frankfort
 Edith Wilma Meyer (HE); Basehor
 Kathryn Louise Millard (HE); Zenda
 ‡Frank Miller, Jr. (GS); Milford
 Joan Miller (HE); Milford
 Russell Wayne Miller (AA); Lebanon
 Walter McNab Miller (AE); Tonganoxie
 Donald Edward Miltner (EE); Wichita
 Alden Borthwick Miner (GS); Ness City
 Virginia Belle Monahan (IM&D); Leavenworth
 Dorothy Mae Montgomery (IM&D); Sabetha
 Dale Lewis Moore (Ag); Ashland
 John Richard Moore (BA); Atchison
 William Dennis Moran (EE); Weir
 Marjorie Lucile Moree (MuE); Belleville
 Eloise Morris (BA); Wichita
 Ruthe Eileen Morrow (IM&D); Larned
 Norina M. Simon Morrison (HE); Stockton
 Ray Morrison (AA); Larned
 Karl J. Mosbacher, Jr. (ME); Wichita
 Marylee Mossman (HE); Manhattan
 Evelyn Mae Moyer (HE); Dodge City
 Wendell Austin Moyer (Ag); Manhattan
 Glen Edward Mueller (BA); Anthony
 John Thomas Muir (BA); Norton
 Earl Lawrence Mundell (VM); Kansas City
 Dennis Everett Murphy (ChE); Little River
 Jean Murphy (GS); Abilene
 Joe Kenneth Murphy (EE); Chapman
 ‡Vera Lois Murphy (HE); Detroit
 J. Donald Musil (EE); Manhattan
 Homer Samuel Myers (MI); Salina
 Bernard Carlton Nash (BA); Lakin
 Walter M. Naylor (CE); Burr Oak
 Jesse Eugene Nease (EE); Concordia
 Russell Carl Nelson (Ag); Falun
 Willard Dean Nelson (MI); Haddam
 ‡Anna Mae Nemecek (GS); Abilene
 Joan Nethaway (HE&A); Salina
 Rex Allan Neubauer (GS); Manhattan
 Robert Walter Neve (BA); Enterprise
 John Elmer Newacheck (EE); El Dorado
 Charles Clarence Newhart (VM); Delaware Water Gap, Pa.
 David Edgar Newman (BA); Junction City
 William Phillip Nichols (PE); Waterville
 Albert Louis Niemoller (ME); Wakefield
 Robert M. Niquette (Ag); Garden City
 Norman Lynn Noble (CE); Johnson
 Louis Etzold Noel (ME); Webster Groves, Mo.
 John Patrick Nulty (ME); Jewell
 Janet Yvonne Nutter (HE); Shelton, Neb.
 Charles Frederick O'Brien (IC); Iola
 Mabel Ruth O'Brien (HE); Muscotah
 Marvin Alvin Ochsner (Ag); Tribune
 Jewel Martin Ogden (GS); Frederick
 Richard Henry Ogle (ME); Scotia, N. Y.
 ‡Dorothy Ruth O'Loughlin (HE); Lakin
 Auriel Lee Olson (GS); Erie
 Max Charles Opperman (BA); Yates Center
 Lloyd Rueben Orrell (Ag); Peck
 *Evelyn Elizabeth Oswalt (GS); Bucklin
 Harry Otto (BA); Manhattan
 Aileen Ozment (HE); Manhattan
 George VanNoy Packer (ChE); Manhattan
 Robert Kerr Page (MI); Topeka
 ‡John Marchbank Parker (GS-1; Grad-2); Manhattan
 Fred Mac Parris (IJ); Burlington
 Kent Leonard Patton (AA); Chase
 Thornton Jones Patton (ArE); Hamilton
 Cecil Lewis Paulsen (VM); Onaga
 James Wilbur Paustian (BA); Manhattan
 Loyal Cobb Payne (VM); Manhattan
 ‡Willis Dey Payton (ChE); Arkansas City
 Ellen Peak (IJ); Manhattan
 James Russell Peddicord (AA); Manhattan
 Velva Aldene Peffly (IM&D); Waldron

* Matriculated 1940-'41.

‡ Also pursuing graduate study.

SENIORS—Continued

- George H. Peirce (BA); Waterbury, Conn.
 ‡Jessie Adeline Pelham (GS); Albany, Ga.
 Keith Pohl Pendergraft (AE); Emporia
 Harry Alfred Peterson (EE);
 Kansas City, Mo.
 Robert Allen Peterson (EE); Jasper, Mo.
 Carl Lea Pettyjohn (IC); Talmo
 Isabelle Marjorie Phelan (BA);
 Kansas City, Mo.
 LeRoy Albert Pierce (VM); Manhattan
 Helen Leona Pilcher (IM&D); Gridley
 Vernon Leslie Plattner (BA); Coffeyville
 Lewis Eugene Poggemeyer (AA); Topeka
 John Germann Poole (Ag); Manhattan
 Cheryl Gertrude Poppen (IM&D);
 Burr Oak
 Rodney Iverson Port (VM);
 Cheyenne, Wyo.
 Leland Cyril Porter (CE); Dellvale
 Clarence Arthur Powers (ME); Alta Vista
 Herman Albert Praeger (Ag); Claflin
 Elwin Raymond Prather (VM); Eureka
 Carroll Wayne Preusch (GS); Healy
 Glenn Emerson Pribbeno (ME);
 Sharon Springs
 Donald Calvin Pricer (MuE); Hill City
 Alberta Lounell Pullins (HE);
 Council Grove
 Paul A. Puttroff (BA&A); Newton
 Robert Howard Pyle (ME); Wellington
 Byron White Quinby (AH&V); Sun City
 ‡Louis Earl Raburn (EE); Manhattan
 Marion Albert Ramage (PE); Manhattan
 Cleda Doris Rambo (IM&D); Paola
 Vinson Leroy Rambo (CE); Wichita
 Ruth Pauline Ramsay (IM&D); Beloit
 Laura Virginia Randall (HE); Ashland
 Wallace Edward Rankin (ChE);
 Manhattan
 John Parke Ransom (ME); Homewood
 Robert B. Rathbone (IJ); Manhattan
 William Joseph Ratliff (MI); Manhattan
 Lowell Robert Ray (IC); Wiley
 Earl Llwyn Redfield (GS); Bucklin
 Myron Dale Reed (VM); Smith Center
 Harlan Edward Rees (GS); Manhattan
 Arden Reiman (Ag); Byers
 Charles Dixon Renfrow (VM);
 West Plains, Mo.
 Gerald Dale Ressel (Ag); Colony
 Earl Boise Reynolds (GS); Colony
 Mary Jo Rhine (HE); Manhattan
 Opal Elнора Rhoads (GS); Goodland
 Ralph Warren Rhodes (AA); McLouth
 Vivian P. Rice (HE); Greensburg
 Harriett Frances Richardson (HE); Oswego
 Jean Dimsdale Richardson (GS);
 Kansas City
 Mary Pauline Richarz (HE); Coffeyville
 ‡Frank Edgar Rickel (GS); Manhattan
 Gerald Moore Riley (GS); Concordia
 Charles William Rindom (ME); Liberal
 Alouise Leila Roberts (HE); Parsons
 Margaret Kathleen Roberts (IM&D);
 McPherson
 Ralph Roy Roberts (MI); Phillipsburg
 Virginia Frances Robinson (HE); Harper
 Walter Stuart Robinson (Ag); Nashville
 ‡Robert Max Roelfs (GS-1; Grad-2);
 Bushton
 Robert Rex Rogers (IJ); Manhattan
 ‡Elmer John Rollins (ChE-1; Grad-2);
 Manhattan
 John Richard Romig (ChE); Bethany, Mo.
 Joseph Jackson Rosacker (AA); Emporia
 Margaret Frances Roseman (HE);
 New Cambria
 Bette Elaine Roth (GS); Moundridge
 Paul Jay Ruckel, Jr. (ChE); Arkansas City
 Frances Lillian Ruhl (IJ); Hiawatha
 Ruth Roberta Ruhlén (HE); Woodbine
 Wayne Winston Rumold (BA); Elmo
 Fred Lafayette Rumsey (SH); Kinsley
 Oral Dale Rundle (HE); Axtell
 Jack Harnuan Rupe (ME); Kansas City
 Joseph Sachén (ChE); Kansas City
 Grant Angus Salisbury (IJ); El Dorado
 Ruth Elizabeth Salley (HE); Silver Lake
 Margaret E. Salser (HE); Wichita
 Moutrie Wilbur Slater (Ag); Wakefield
 ‡Ralph Emanuel Samuelson (ChE-1;
 Grad-2); Manhattan
 Paul Everett Sanford (Ag); Milford
 Alice Mary Santner (HE); Gaylord
 Ruth Elouise Santner (HE); Gaylord
 Mary Frances Sauder (IJ); Madison
 Harold Elwood Saum (BA&A); Oberlin
 Arthur LeRoy Saylor (Ag); Langdon
 ‡Melvin Eugene Scanlan (CE); Agra
 Charles Paul Schafer (IC); Vermillion
 Sam Schendel (VM); Richmond
 Marcine Elizabeth Scheurer (IJ); Gypsum
 Keith Merrill Schmiedemann (BA&A);
 Junction City
 August Mangelsdorf Schmeling (EE);
 Atchison
 Virginia Helene Schmidt (HE); Raymond
 Winston Albert Schmidt (CE); Lyons
 Bernard Lee Schmitt (BA&A); Powhattan
 Margaret Winnifred Schnacke (HE);
 La Crosse
 Marc Marion Schowalter (IJ); Halstead
 George Davis Schumacher (GS); Lyons
 ‡Elmer William Schwartz (ArE); Hoisington
 Albert Erwin Schwerin (ME);
 Kansas City, Mo.
 Jean Jewett Scott (HE); Manhattan
 Ralph Eldon Sechler (ArE); Hutchinson
 Edward Frank Sefeik (ME); Cuba
 Helen Marie Sellens (HE); Hoisington
 ‡Bert Eugene Sells (ME); Wichita
 John Vito Sette (CE); Corona, N. Y.
 Margaret Alma Sewing (HE); Kansas City
 Manette Sexson (HE); Goodland
 Rule O. Seymour (GS); Ottawa
 Emerson Hugh Shade (ChE); Rantoul
 Ophelia Deborah Sharp (HE); Great Bend
 John Alden Shaver (Ar); Salina
 Jack Sheets (EE); Cozad, Neb.
 ‡Claude Wesley Shenkel (GS); Lyons
 Helen Aileen Shepard (HE); Erie
 Lorraine Gladys Shepardson (HE);
 Junction City
 Kathleen Olive Sheppard (IM&D);
 Manhattan
 ‡Val Gene K. Sherrard (MuE); Great Bend
 ‡Kenneth Thomas Sherrill (AA); Brownell
 Joseph Clyde Short (Ag); Manhattan
 Ernest Harold Simpson (Ag);
 Conway Springs
 Henry Lyman Singer (AA); Parker
 Walter Turner Singleton (ME); Tribune
 George Sklar (ChE); Manhattan
 Frank Allan Slead (AA); Neosho Rapids
 Laurence Oscar Slief (EE); Pratt
 Irene Eloise Sloan (HE); Stratford, Tex.
 ‡Henry Joseph Smies (Ag); Courtland
 Agnes Marie Smith (HE&A); Toronto
 Charles Combie Smith (VM);
 Kansas City, Mo.
 Charles Lewis Smith (VM); Harveyville
 Clarence Paul Smith (ME); Marysville
 Hattie Alice Smith (HE); Highland
 Paul Elbert Smith (Ag); Lebanon
 Richard Wilkeson Smith (GS); Salina

* Matriculated 1940-'41.

‡ Also pursuing graduate study.

SENIORS—Continued

- Vernon Eugene Smith (AA); Bloomington
Allen Ellwood Smoll (EE); Wichita
*Jefferson Sogard (BA); Kansas City, Mo.
‡Galen Max Sollenberger (ArE); Hutchinson
Mary Pauline Spain (HE); Beloit
Hazel Aldene Spessard (IM&D);
Junction City
Marjorie Nell Spillman (BA&A); Coyville
Carmin Barton Sprague (ChE); Douglass
Marjorie Jean Spurrier (GS); Kingman
Blanche LaVaughn Stacy (HE); Byers
Charles W. Stafford (GS); Republic
Raymond William Stanzel (VM); La Harpe
Lloyd Arnold Starkweather (BA&A);
Clay Center
‡Rollin Max Starosta (AA); Pomona
Merwin Milton Stearns (AA); Haddam
Ann Steinheimer (IJ); Hutchinson
Dorothy Jane Steinkirchner (HE); Newton
Evelyn Lucille Stener (GS); Courtland
Jack Murray Stevenson (EE); Hutchinson
Kathleen Beryl Stewart (HE); Stockton
Mary Louetta Stewart (HE); Saffordville
Raymond Stewart (AA); Manhattan
Arthur Stiebe (Ag); Rozel
Theda Stine (HE); Glasco
‡George James Stipe (GS); Manhattan
Marvin Dean Stitt (VM); Clearwater
Theodore Edward Stivers, Jr. (MI);
Rome, Ga.
Victor Dale Stockebrand (CE);
Yates Center
Charles Lyman Streeter (AA); Milford
Mailand Rainey Strunk (ChE);
Kansas City
*Dorothy Irene Stutzman (HE); Ransom
John Dennis Sulton (Ar); Manhattan
George Lester Sundgren (Ag); Coldwater
William L. Sutherland (CE); Highland
Earnestine Alice Sutter (HE); Leon
Gloria Joyce Swanson (HE); Hutchinson
Robert Vernon Swanson (BA);
Waterbury, Conn.
Wallace Albert Swanson (GS);
Sharon Springs
Richard William Swart (VM); Manhattan
Perrin Kent Symns (Ag); Atchison
Rosalie Syres (HE); Hutchinson
Fred S. Talbot (AA); Manhattan
*Tony Tassone, Jr. (GS); Republic, Pa.
Arlene Grace Taylor (HE); Enterprise
‡Lloyd Campbell Teas (CE); Manhattan
Benjamin Wickham Tempero (Ag);
Clay Center
James Dow Thackrey (ME); Portland, Ore.
Ralph Theodore Thomas (ChE);
Independence
Charlotte Thompson (HE); Iola
Clarence Henry Thompson, Jr. (VM);
Ozawkie
‡Leslie Earl Thompson (ChE); Fort Scott
‡Robert Sanders Thornburrow (ArE);
Wetmore
Orval Elmer Thrush (AA); Wakefield
Henry Albert Thurstin (ME); Chanute
Constance Patricia Thurston (IM&D);
Elmdale
Mina Fay Tillman (HE); Topeka
Alvin Paul Timmons (AA); Geneseo
Helen Tipton (IM&D); Paola
Hobart Tipton (ME); Paola
Elizabeth Lurene Titus (HE);
Cottonwood Falls
David Salem Totah (Ag); Victoria, Texas
Earl Clair Toynton (VM); Dodge City
Earlene Eleanor Trekell (HE&A);
Manhattan
Marvin Elmer Trembly (GS); Chanute
Thomas Edmund Trenkle (BA); Topeka
Lloyd Bryan Tribble (EE); Soldier
Wilbur Gerald Trostle (VM); Hope
‡Harden Halleck Tubbs (ME); Elkhart
Lewis Mack Turner (PE); El Dorado
‡Lois Belle Turner (GS); Manhattan
Donald Radell Tutchter (IC); Overbrook
R. V. Tye (GS); Hanover
Joseph Uhrin (GS); Metuchen, N. J.
Harold Wertz Underhill, Jr. (ArE);
Wichita
Jane LaVerne Utterback (HE);
Yates Center
William Henry Vanderbilt (VM); Eureka
Cornelius John Vanderwilt (ME); Solomon
Loren Lauffer VanPetten (Ag);
Washington
Dorothy Mae VanTuyt (HE); Basehor
Gerald Thomas VanVleet (AE);
Danbury, Neb.
Roberta Viola Vawter (HE); Oakley
Victor Theodore Volsky (IJ);
Pittsfield, Mass.
Katherine Jean Wadley (HE);
Silver Spring, Md.
Daniel W. Wagoner (EE); Manhattan
Ralph John Wahrenbrock (ME);
Enterprise
Norma Irene Waits (PE); Wichita
‡James Harvey Walker (ME); Emporia
Janet Ross Wallace (IM&D); Hays
Keith Wallingford (M); Manhattan
*Keith Lee Wallis (ME); Wichita
Jack Winfred Warner (EE); Clay Center
Robert Buchanan Washburn (EE);
Manhattan
Lindley Eugene Watson (Ag); Peck
Garold Benjamin Way (EE); Wichita
John Franklin Weary (EE); Junction City
Charles Elmer Webb (ChE); Hill City
Vanora Arlene Weber (HE); Caldwell
John Raymond Weddle (AA); Fort Scott
Ila Hall Wells (HE); Manhattan
Oliver Rex Wells (BA); Marysville
Robert Blaine Wells (Ag); Manhattan
William Henry Wells (GS); Colony
Delbert Oscar Wendt (VM);
Bonner Springs
Johnnie Wenger (GS); Powhattan
Cecil Monroe Wenkheimer (SH);
Hutchinson
Alfred Marvin White (EE); Topeka
‡Roby Byron White (ME); Neodesha
Wilbur Waldo White (AA); Garfield
Dean Duane Whitmore (Ag); Portis
Don Oliver Whitney (VM); Phillipsburg
Esther Irene Wiedower (M); Sneaville
Dorothee Marie Wiles (HE); Parsons
Margaret Ann Wilkerson (GS);
Smith Center
Donald Keith Wilkin (EE & BA);
Nortonville
Nancy Pat Wilkins (MuE); Steelville, Mo.
John Marks Williams (IJ); Parsons
Robert Dean Williams (GS); Manhattan
Byron Kimble Wilson (Ag); Manhattan
Garl Alton Wilson (Ag); Quenemo
George Lincoln Wilson (ME); Hoisington
Mark Francis Wilson (AH&V); Ashland
William Horn Wilson (ME); Augusta
‡Marjorie Bee Windhorst (GS); Glasco
Blanche Maida Winkler (HE); Riley
William Howard Winner (AA); Topeka
John Stanley Winter (Ag); Dresden
Keith Leon Witt (ME); Independence
Carlyle Philip Woelfer (MI); Manhattan

* Matriculated 1940-'41.

‡ Also pursuing graduate study.

SENIORS—Concluded

Betty Catherine Wolf (HE); McPherson
 Thomas Richard Woods (ChE); Burden
 Eugene Ellsworth Woolley (MI); Osborne
 Charles Edward Works (AA); Humboldt
 Martha Jane Wreath (HE); Manhattan
 Elizabeth Barclay Wright (HE); Salina
 Winnivere Button Wright (HE);
 Manhattan
 Mack Yenzer (AA); Saffordville
 Irl Clarence Yeo (EE); Manhattan

Robert Warren Yeoman (GS); Kingman
 Kenneth Morton Yoos (EE); Atwood
 Ralph Edgar York (BA&A); Dunlap
 Donald Allan Yost (Ag); La Crosse
 Evelyn Ernestine Yost (HE); Downs
 Albert Warren Yoxall (AA); Woodston
 Dale Edwin Zabel (IA); Westmoreland
 Edward B. Zahn (AA); Miltonvale
 ‡Howard Miller Zeidler (EE); Girard

JUNIORS

Maynard Lynn Abrahams (Ag); Wayne
 Alvin Wayne Acker (ME); Severance
 *Petrena Elliouse Addington (HE); Altoona
 Kathleen Ahearn (MuE); Manhattan
 Francis George Ahrendes (VM); Miltonvale
 James Franklin Aiken, Jr. (MI); Moran
 Louis Fred Akers (BA); Atchison
 *Leonard Herman Akes (GS); Dennis
 Martha Louise Alexander (HE);
 Hutchinson
 Loren Edward Amerine (EE); Great Bend
 *Geralee Ames (IJ); Arkansas City
 Jeanne Amos (HE); Manhattan
 Charles Cornelius Anderson (ME); Emporia
 Mary Bernice Anderson (MuE);
 Manhattan
 Walter Glen Andrea (ME); Holyrood
 Robert Warren Annis (EE); Gypsum
 Wayne Leroy Appleton (VM); Manhattan
 Robert Arbutnot (Ag); Morrowville
 Gordon Arnett (CE); Topeka
 Delmar Wallace Atchison (BA); McPherson
 John Mitchell Atherton (ME);
 Waterbury, Conn.
 Ruth Margaret Aushman (HE);
 North Topeka
 Jack Shupe Austin (ME); Wilmore
 Gladys Irene Babb (HE&N); Manhattan
 Ben Stockwell Baldwin (IC); Anthony
 *Gladys Fay Baldwin (HE); Potwin
 Bernice Grace Bale (PE); Clay Center
 Maurice Ball (VM); Newport, R. I.
 Robert Orrin Balsters (CE); Arkansas City
 Ralph Edward Barker (Ag); Douglass
 Robert Lee Barnett (BA&A); Glen Elder
 Willard Marshall Barry (AA); Manhattan
 *David George Batchelder (AE); Hiawatha
 Charles Thomas Baxter (Ag); Circleville
 Marie Hunt Baylies (PE); Fort Riley
 Evelyn Belle Bearman (HE); Wamego
 Betty Lee Beatty (IJ); Ellsworth
 Kenneth Lewis Bechtold (ME); Formoso
 Henry Vorce Beck (GS); Colby
 *Alma Amelia Lydia Becker (HE); Hartford
 Dorothy Grace Beezley (HE); Girard
 Robert Verle Behrent (EE); Selden
 Elizabeth Louise Bell (HE&A); Osborne
 James Junior Bell (BA); Cottonwood Falls
 George Robert Belt (EE); Lane
 Bryce Ralph Benedict (BA); Chanute
 Harold Nolan Benham (GS); El Dorado
 Philip Frank Bennett (CE); Eskridge
 Marjorie Benson (HE); Sabetha
 Ada May Bentley (HE&N); Shields
 Thomas Ragan Benton (Ag); Olathe
 Sylvia Louise Bergling (BA); Ludell
 George Albert Berlin (IJ); Wakefield
 Waldemar T. Berner (VM);
 Santa Rosa, Cal.
 Donald Earl Bertholf (AA); Spivey
 Leo Russel Best (ChE); Bushong
 *Walter Leo Bieberly (Ag); Dodge City
 Phyllis Evelyn Billings (IM&D); Topeka
 Ema Lou Bireline (IJ); Lewis

*Frances Irene Bishop (HE); Emporia
 *Jean Elizabeth Bishop (GS); Whitewater
 Verne Emil Bistline (BA&A); Topeka
 William Royce Bixler (ME); Emporia
 Dwight Duane Blaesi (AA); Abilene
 Joe Loren Blattner (CE); Rozel
 Ralph Willard Blazier (VM);
 Junction City
 *Betty May Bloom (IJ); Hutchinson
 *Phil Franklin Blum (EE);
 Kansas City, Mo.
 *Bonnie Marie Bobbitt (IM&D); El Dorado
 Marian F. Boomer (BA); Kansas City
 Gladys L. Boone (HE); Toronto
 Ross W. Booth (ME); Paradise
 *James Otis Bordner (CE); Kansas City
 Harry Phillips Bouck (IJ); Manhattan
 James Marston Bowyer, Jr. (ME); Augusta
 *Luther Frank Boyd, Jr. (Ag); Moran
 Darrell Ray Bozarth (Ag); Liberal
 Harold Henderson Bozarth (ME); Eskridge
 *George Bradbury, Jr. (PVM); Minneapolis
 Gilbert Branda (Ag); Wilson
 Gordon McClellan Braun (GS);
 Kansas City
 *Samuel Peter Breiner (AA); Savonburg
 Lester Joseph Brenneis (MI); Hollenberg
 Elizabeth Ann Brenz (IJ); Arkansas City
 Elizabeth Louise Brewer (MuE);
 Minneapolis
 Cruger Lane Bright (VM); Junction City
 James Eugene Bright (VM);
 Port Murrey, N. J.
 Allen Lee Brite (VM); Manhattan
 Sydney George Bromell (BA); Leavenworth
 Marcene Irene Brose (PE); Clay Center
 Acton Richard Brown (Ag); Sylvan Grove
 Allen O. Brown (ArE); Osborne
 Clarence Bernard Brown (EE); Manhattan
 *Clarence Kendrick Brown (MI); Salina
 Dale Edward Brown (Ag); Manhattan
 Donald Wayne Brown (BA&A); Paradise
 Esther Brown (HE); Partridge
 Lloyd N. Brown, Jr. (BA); Manhattan
 *Marie Louise Paschal Brown (GS);
 Osborne
 Martha Jane Brown (GS); Manhattan
 *Milfred Leverette Brown (ChE); Augusta
 Robert Myron Brown (EE); Natoma
 Teloir Marie Brown (IM&D); Ashland
 Wayne Edward Brown (BA); Manhattan
 Wendell Lewis Brubaker (Ag); Manhattan
 Ralph A. Bruce (VM); Prescott
 *Frances Argyle Brumfield (IJ); Jetmore
 Oral Francis Brunk (Ag); Norcatur
 Ben Raleigh Bryant (GS); Garnett
 Wesley F. Buchele (AE); Cedarvale
 Carroll La Rhue Buck (HE); Welda
 Herbert L. Bunker, Jr. (GS); Junction City
 Orley Glade Burges (PE); Arnold
 Charles Floyd Burket (ME); Elkhart
 *Clodagh Maurine Burkhead (HE); Utica
 Cornelia Lee Burtis (IM&D); Hymer
 Margaret M. Burton (GS); Manhattan

* Matriculated 1940-'41.

‡ Also pursuing graduate study.

JUNIORS—Continued

- *Henrion Paul Buser (ME); Wichita
Freda Lenore Butcher (HE); Coldwater
Martin Eugene Butler (ME); Clayton
Cecil Eugene Byers (ME); Ulysses
Laura Vivian Cadwallader (PE); Corbin
Richard Lee Cadwell, Jr. (Ag); Marquette
John Dale Cady (VM); Arlington, Neb.
Hugh Port Callaway (VM);
Grand Pass, Mo.
George Baldwin Callow (EE); Garnett
*Barbara Jean Campbell (BA); Lakin
Jean Walton Campbell (IJ); Coffeyville
John Carl Campbell (AE); Wilsey
Ronald Wayne Campbell (Ag); Cherryvale
Everett Elwin Cannon (EE); Manhattan
*Mary Katherine Cantrell (IJ); Oil Hill
*Rosalie Adaline Cantrell (GS); Manhattan
Lyle Pattan Carmony (MI); Manhattan
Robert Alfred Carpenter (GS); Oswego
*Edith Marie Carr (IJ); Hutchinson
*Marilynn Grace Carr (HE&A-1; GS-2);
Kansas City, Mo.
Maude Elaine Carson (IM&D);
Clay Center
Arthur Adam Case (VM); Manhattan
Clifford Erle Case (Ag); Coldwater
Frank A. Cash (MuE); Fredonia, N. Y.
James Francis Cavanaugh (Ag);
Dodge City
Howard Wendell Channell (Ag);
Kansas City
Beverly Ross Chapin (ME); Wichita
Doris Lillian Chapin (GS); Manhattan
Cora Margaret Chapman (HE);
Scotia, N. Y.
William Edward Charlson (ME);
Manhattan
Richard George Checkfield (ChE); Topeka
Donald Keith Christian (VM); Manhattan
*Prunella Marie Christopher (GS); Wichita
Thomas Riley Church (EE); Minneola
Charles Eldon Clark (AA); Paxico
*Mittie Irene Clark (HE); Burr Oak
*Ruth Ellen Clarke (HE); Plainville
*Howard Eugene Clements (ChE); Salina
Lorraine Florence Clements (IM&D);
Havensville
*Ruth Mary Cole (HE-1; GS-2); Winfield
*Russell Vaughn Collins (GS); Goff
Kenneth W. Colwell (ME); Emporia
Max Raymond Colwell (ME); Centralia
Lloyd Waugh Compton (AA); Effingham
Harry Hunt Converse (AE); Eskridge
William Frohman Cook (PE); Manhattan
*Warren Boughton Cooper (ME); Gridley
*Warren Harding Corbet (AE); Severance
Keller Cordon (AE); Holton
Robert Vaile Corns (BA); Greensburg
Marjorie Jean Courter (HE); Severy
Alan Neil Cowles (EE); El Dorado
Lyle Ashton Cox (ChE); Atchison
*Florine Elizabeth Craig (IM&D);
Kansas City
Arthur Joseph Crawford (ArE); Clements
Glen Thomas Crawford (Ag); Manhattan
Chester Lee Crotts (AA); Turon
Riley Tieman Crow (AA); Independence,
Mo.
Hilmer Artie Crumrine (ME); Rose
*Jack Curtis (IJ); Garden City
Richard C. Curtis (PE); Lenora
James Robert Cushing (ArE); Manhattan
*Dorothy May Dabbs (HE); Emporia
*Robert Donald Dahlin (EE); Kansas City
*Jane Elizabeth Daily (HE); Ashland
George Ted Dalziel (VM);
San Mateo, Cal.
*Betty Jeanne Daniel (GS); Ellinwood
C. Bertil Danielson (Ag); Lindsborg
Gloria Jane Danielson (HE); St. Francis
Clara Marie Darby (MuE); Morrowville
John Cecil Dart (GS); Newton
William Elsworth Daseler (VM);
Oroville, Cal.
Galen F. Davidson (EE); Plevna
Joseph McDowell Davidson (BA);
Manhattan
Daisy Davis (HE); Beloit
Duane Richard Davis (EE); Beloit
William Russell Davis (EE); Topeka
J. Dale Davison (EE); Newton
Max Laurence Dawdy (Ag); Washington
William Paul Deam (Ag-1; GS-2);
Manhattan
Leonard Austin Deets (AA); South Haven
Martha Lorraine DeMand (HE);
Lincolnton
Ethel Dorothy Denio (IM&D); Woodston
Catherine E. Detrich (GS); Chapman
*Thornton Cornell Dewey (CE); Pittsburg
Hiram Benjamin Dickson (PE); Admire
Evan D. Dildine (ArE); Delphos
George E. Dillenbeck (VM); Poultney, Vt.
Millard Fay Dilsaver (AE); Athol
Virgil O. Dilsaver (EE); Athol
Calvin Arthur Doile (AA); Emporia
*Glennys Ethel Doll (IM&D); McPherson
Bert William Doran (AE); Macksville
Terry Dougherty (IJ); Manhattan
*Gerald Newell Doughty (ME); Moran
*Jane Ann Douglass (BA); Wichita
Keith Warnell Downey (VM);
Appleton, Wis.
*Joe Francis Drgastin (IJ); Kansas City
*John Verner Drun (Ag); Leslie, Mich.
Donald Kenneth Dubois (MI); Burlingame
*Anne Elizabeth Dukelow (HE&N);
Hutchinson
Olivia Alfreda Dunham (HE); Jewell
*William Harrison Dunham (EE); Wichita
Harry Harold Dunlap (MI); Liberal
Robert Matthew Dunlap (ME); Liberal
*Lloyd Charles Durow (CE); Topeka
Donald Kent Duwe (ME); Lucas
Dale Hamlin Dyer (AE); Clearwater
Velma S. Eberhart (BA); Westmoreland
Vernon Eberhart (AA); Turon
Richard Ward Eddington (AE); Courtland
Harry Leslie Eddy (BA); Topeka
Lyle Harris Edelblute (GS); Manhattan
Leslie Ruel Edrington (VM); Manhattan
Edward Hernes Elling (MI); Manhattan
Lucille Elizabeth Elmore (BA); McCracken
*Nona O. Emmitt (GS); Wichita
Perry C. Emmons (PE); Lenora
Elton A. Endacott (Ag); Manhattan
Barbara Ruth Enlow (PE);
Silver Springs, Md.
*Anbeth Lee Enns (HE); Newton
Winifred Jane Enns (HE); Inman
Dorothy Rachel Erickson (HE);
Manhattan
Loren Dean Eshelman (ArE); Abilene
R. Keith Eshelman (BA&A); Sedgwick
*George Christian Etherington (AA);
Abilene
Kendall Evans (IJ); Amarillo, Tex.
Richard Lewis Evans, Jr. (Ag);
Hutchinson
Jean Elaine Falkenrich (HE); Manhattan
Clifford Earl Fanning (AE); Melvern
*Marion Lee Farmer (ME); Fort Scott
Violet Hazel Farmer (GS); Fredonia
*Ernest Elrey Faulk (GS); Independence
*Mary Pauline Feder (HE); El Dorado
Judith Fehr (HE); Kansas City, Mo.

JUNIORS—Continued

- Nick V. Fent (GS); Newton
 *Clancy Carlyle Ferguson (ChE); El Dorado
 *Helen Virginia Ferrier (HE); Altamont
 George J. Feters (EE); Topeka
 Jack Byron Fields (Ag); Manhattan
 John E. Fieser (VM); Norwich
 *Millard Wesley Fillmore (AE); Emporia
 *Margaret Jeane Fincham (IJ); Pratt
 Raymond Elmer Fincham (Ag); Waterville
 Elbridge Gerry Fish (BA); Salina
 Gerald Keith Fish (AA); Neodesha
 William Halpin Fitzsimmons (ME);
 Macksville
 Don Edwin Fleming (MI); Ottawa
 Lynn Dewell Fleury (SH); Jamestown
 *Lois Irene Florman (HE&N); McPherson
 William Rex Fockele (Ag); Ottawa
 Bettie Fogelstrom (PE); Junction City
 Bill Page Folck (GS); Junction City
 *Eugene Broadie Foncannon (BA); Ashland
 James Robert Foster (AA); Eflingham
 Eric B. Fowler (GS); Milbank, S. Dak.
 Jack Elbert Fox (VM); Kansas City
 Marvin Eugene Fox (ME); Larned
 Arthur Lloyd Francis, Jr. (Ag); St. John
 Helen Mae Frasier (HE); Sharon Springs
 Ray Day Freeman (ME-1; GS-2); Paola
 George Henry Fritz (Ag); Lake City
 Anne Fry (IM&D); Morrill
 Alma Deane Fuller (IJ); Courtland
 Paul L. Furbeck (AE); Larned
 *Harold Weldon Furneaux (ChE); Pittsburg
 *Virginia Belle Furneaux (HE); Moran
 Jane Frances Galbraith (HE&N);
 Cottonwood Falls
 Chester Wilson Gantz (AA); Plevna
 John Pershing Garrett (VM); Joplin, Mo.
 Warren Harley Garrett (BA); Manhattan
 Bettie Irene Garrison (HE); Kansas City
 *Avery M. Garton, Jr. (GS); Chanute
 William Samuelson Gaston (VM); Axtell
 Lloyd Reed Gebhart (CE); Culver
 *Vernon Victor Geissler (AA); Durham
 N. Katharine Gentry (HE); Salina
 Warren Leo Gibbs (ArE-1; GS-2);
 Kansas City
 Gerald Bowen Gibson (BA&A); Kensington
 Geraldine Marie Giffin (HE); Spring Hill
 Robert Currie Gilliford (Ag); Garrison
 *Gloria Ann Gish (HE); El Dorado
 Eldon Dale Gladow (MI); Alma
 *Elizabeth Anne Glidden (GS); Osborne
 Charles Jerome Glotzbach (GS); Paxico
 Oscar Joseph Glotzbach (AA); Paxico
 George William Godfrey (ME); Haven
 Dave John Goertz (Ag); Hillsboro
 Charles Richard Goff (BA); Oroville, Cal.
 Roger Lewis Goff (BA); Bucklin
 Meyer Ben Goldfarb (Ag); Newark, N. J.
 *Janet Goodjohn (GS); Leavenworth
 Edythe Elaine Goodwin (HE); Gypsum
 Virginia A. Goodwin (HE); Hiawatha
 Richard John Gorman (VM);
 Hartford, Conn.
 Kenneth Max Gould (VM);
 Broken Bow, Neb.
 Alice Elizabeth Grandfield (HE);
 Manhattan
 *Carl R. Gray (Ag); Neodesha
 *Frances Louise Gray (BA); Pittsburg
 Emma Lou Gillett (IJ); Westmoreland
 J. Wyeth Green (EE); Mound City
 Mont John Green (ArE); Manhattan
 *Lloyd Burton Greer (ME); Pittsburg
 Truman DeRoam Gregory (AA);
 Woodston
 Norman Jav Griffith (AA); Clayton
 Leland Bradford Grimes (GS); Manhattan
 Mary Elizabeth Griswold (HE);
 Manhattan
 *Alberta Groves (IM&D); Midian
 Gene Jordan Guerrant (GS); Manhattan
 Geraldine Gundy (M); Manhattan
 Edward Luther Gustafson, Jr. (ChE);
 Lindsborg
 Tom DeForest Guy (BA); Liberty
 William Donald Guy (AA); Liberty
 Roy Emerson Gwin (Ag); Leoti
 Dorothy Regina Haberthier (HE); Wichita
 *Lawrence Vincent Haff (IC); Coffeyville
 William August Hagen (ME); Manhattan
 Robert John Haggerton (ME);
 Junction City
 Eugene Hicks Hall (EE); Amoret, Mo.
 Freeman Milton Hall (VM); Kansas City
 *William Bandt Hall (IJ); Phillipsburg
 Harold John Hamilton (CE); Corning
 Kenneth Blaine Hamlin (EE); Manhattan
 John Harvey Hancock (BA); St. Francis
 Wilma Mae Hannah (HE); Beloit
 Ardyce Louise Hanson (GS); Garrison
 Irene M. Harbour (HE); Osage City
 *Bernard Lewis Harden (GS); Coffeyville
 *Catherine Aretta Hardin (HE);
 Rosendale, Mo.
 *William Henry Hardy (AA); Arkansas City
 *Margaret Virginia Harmon (HE);
 Kansas City
 *Dexter Harper (EE); Healy
 Dorothy Mariann Harper (IJ); Topeka
 Roberta Jean Harrill (HE); Augusta
 Ernest Owen Harris (Ag); Havensville
 Wilton Eugene Harry (AA); Home
 *Corby Lee Hart (EE); Wichita
 William Eugene Hartman (SH); Hoxie
 Robert Emmett Hauke (VM); Meriden
 Jane Haymaker (HE); Manhattan
 Ray Wesley Headrick (Ag); McDonald
 Harvey Harlan Hefner (BA); Gove
 Vernon Lee Heitman (Ag); Dellvale
 Alice Marie Hejtmánek (HE); Delia
 Robert Henry Hellener (BA); Wichita
 Clara Elizabeth Hellmer (HE); Olpe
 John Gunion Helm (IJ); Simpson
 *Martha Ellen Hemphill (BA); Chanute
 Alma K. Henry (HE); Everest
 Jerry J. Hickey (ME); Russell
 George Hickman (VM); Venice, Cal.
 Robert Lester Higginbottom (ME);
 Fredonia
 Thaine Robert High (PE); Abilene
 *Ferne Corinne Hill (GS); Salina
 Margaret Louise Hill (HE); Topeka
 Milt Dean Hill (IJ); Kansas City, Mo.
 Orville Slocum Hill (AA); Bloom
 *Lewis L. Himelie (ChE); Arkansas City
 John Albert Hineman (CE); Dighton
 Charles Willis Hodgson (AE); Little River
 Etta May Hodgson (HE); Harveyville
 Eva Mae Hodgson (MuE); Little River
 Irvin George Hodgson (ChE); Little River
 *Harold Clifford Hogue (BA); Hutchinson
 H. Virginia Holbert (GS); Manhattan
 Wilber Glen Hole (EE); Topeka
 *James Maynard Holecek (ME); Burns
 *George Lindley Hollowell (BA);
 Kansas City
 Don F. Holshouser (EE); Dwight
 Arthur Herman Holste (AE); Ludell
 Joseph Benedict Hoover (ChE); Greenleaf
 Josephine Ann Hoover (HE); Greenleaf
 Julia Janes Hoover (HE); Kansas City
 Leonard Ralph Hoover (CE); Manhattan
 Jack Louis Horacek (BA); Topeka
 Myron Finley Hornbaker (Ag); Hutchinson
 Harold William Hossfeld (EE); Willis

JUNIORS—Continued

- Harry Earl House, Jr. (ME);
Cheyenne, Wyo.
- Vaughn Henry Howard (GS);
Washington, D. C.
- Murlin Thomas Howerton (ChE); Newton
- Eula Merna Hudson (HE); Wilsey
- Griffith Richard Hughes (AA); Fort Scott
- LeRoy Lyman Hughes (ArE); Topeka
- June Delore Hull (GS); Dodge City
- Donald Munro Hunt (Ag); Manhattan
- Louise Grace Hunt (HE); Blue Rapids
- Charles Calvin Hunter (EE); Ottawa
- David Henry Hurst (BA); Kirwin
- Louis Anthony Hurtig (GS); Hanover
- Betty Elaine Hutchinson (HE); Goddard
- Thomas Junior Hutchison (ChE);
Burlingame
- Archie Richard Hyle (CE); Madison
- George Nelson Inskeep (AA); Manhattan
- Conrad Jackson (Ag); Elsmore
- Ledie Mae Jackson (HE); Carneiro
- Thomas Page Jackson (ME); Kansas City
- George Preston James (AA);
East Greenwich, R. I.
- Jeanne Frances James (HE&A); Manhattan
- *Walter Delmer Janssens (IC); Kansas City
- Robin Joan Jefferis (IM&D); Lewis
- *Dayton Bruce Jenkins (BA&A);
Kansas City
- Dwight Hillis Jenkins (ArE); Madison
- Ralph Vincent Jennings (ME); Arnold
- *Marion Ann Jensen (IM&D); Hays
- Quentin Ellsworth Jeppesen (VM);
Garden City, Minn.
- Alice Marie Johnson (HE); Olsburg
- Cecil Loring Johnson (ChE); Wamego
- Dorothy Ruth Johnson (HE); Manhattan
- *John Kenneth Johnson (EE); McPherson
- Lorraine Lawrence Johnson (ME);
Concordia
- Mary Lucile Johnson (IM&D); Osage City
- Melvin Louis Johnson (EE); Quinter
- Romaine Edwin Johnson (GS); Manhattan
- William Pitner Johnson (VM); Manhattan
- Delmar Doyle Jones (Ag); Mulvane
- *Marjorie Patricia Jones (HE);
Omaha, Neb.
- Mona Marie Jones (HE); Wichita
- Wilbur Fred Jones (GS); Wichita
- Gladys June Jordan (HE); Goff
- Thomas Edward Joyce (ME); Ulysses
- Dorris Mae Kastner (HE&A); Manhattan
- Philip Gibbs Kaul (GS); Holton
- *Virginia Alta Keas (IM&D); Chanute
- Robert Dinsmore Keel (IC); Abilene
- Ray Albert Keen (SH); Topeka
- Vernon Dennis Kein (AA); Manhattan
- *Geneie Keller (IM&D); Clyde
- William Gibbens Kelly (MI); Hutchinson
- Scott Winfield Kelsey (Ag); Topeka
- Raymond Orville Keltner (GS);
Hoisington
- *Kenneth LaVon Kerr (BA); Topeka
- Margaret Belle Kerr (HE&A);
Hackensack, N. J.
- Richard John Kilian (ME); Detroit
- Marjorie Vivien Kimsey (HE&A);
Barnard
- Helen Eunita King (HE); Hutchinson
- Karleen Junette King (HE&N);
Hutchinson
- William Gregg King (CE) Fort Dodge
- Murray Luther Kinman (Ag); Manhattan
- Carlton Miller Kinzler (Ag);
Sturgis, Mich.
- *Gerald Arthur Kiouss (EE); Parsons
- Arthur Durward Kirk (VM); Scott City
- Edward Earl Kirkham (ME); Topeka
- Floyd Ernest Kirkland (BA&A);
Junction City
- Caroline Kiser (IM&D); Clayton, N. Mex.
- Luther Cleveland Kissick (Ag);
Mount Hope
- Doris Charlotte Klaumann (IM&D);
Belleville
- *Edwin Albert Kline (IC-1; Ag-2);
Mentor
- *Russell Charles Klotz (AA); Saffordville
- Virginia Carolyn Knauer (BA); Manhattan
- Jean Marie Knott (HE); Independence
- James William Knox (VM);
Overland Park
- Glenn Alfred Koby (AA); Sedgwick
- John Marshall Koger (BA); Cheney
- *Gerald Carl Kolsky (GS-1; ME-2);
Logan
- *Leland Thomas Konz (IC-1; ME-2);
Independence
- Harvey Reuben Kopper (AA); Ingalls
- Donald Ely Kortman (BA&A); Manhattan
- Charles Edward Krause (GS); Belleville
- *Deborah Kubin (IM&D); McPherson
- Laura Lee Kubin (HE); McPherson
- Ralph Jennings Kueker (MI); Belleville
- Edward E. Kunze (MI); Garrison
- Joe Lewis Lacey (EE); Hoxie
- William Edward Lacy (ChE); Kansas City
- Frank William Ladd (BA); Sabetha
- Edwina Lambertson (HE); Fairview
- Freda Martha Landis (GS); St. George
- William James Langworthy (GS);
Manhattan
- Robert Byron Lank (VM); Kansas City
- Robert Dean Laramey (Ar); Pueblo, Colo.
- Harlan Larson (IJ); Topeka
- Mack Field Lattimore (IJ); Topeka
- *Margery Lawrence (PE); Topeka
- Harold Francis Leekron (CE); Abilene
- Marjorie Ruth Lee (HE); Manhattan
- *Alfred Raymond Leek (EE); Independence
- *Roger Dean Lehman (BA&A); Protection
- Jack Conroy Leonard (ChE);
Junction City
- Theodore William Levin (Ag); Agra
- Ernest Eber Lewis (ME); Mansfield, Pa.
- John Kenneth Lewis (EE); Arlington, Va.
- Mildred Josephine Lewis (HE);
Dodge City
- Don Malcolm Liebengood (VM);
Kentland, Ind.
- June Elaine Light (PE); Liberal
- Sarah Elizabeth Lillibridge (HE);
Hutchinson
- Lona Faye Lillie (HE); Atwood
- Marjorie Anne Lindgren (BA); Dwight
- Leland Leroy Linn (VM); Clyde
- Fred James Little (SH); Parsons
- Cam Fackler Logan (ME); Paola
- Rector Philip Louthan (ChE); Simpson
- Clarence Alvin Love (VM); Coffeyville
- Jodie Ray Lowrance (Ag); Midian
- *Laurel Eugene Loyd (ME); Hiawatha
- Hal Arthur Lund (ChE); Manhattan
- Margaret Ann Lupfer (IJ); Larned
- Arlene Minnie Luthi (IM&D); Wakefield
- Hazel Juanita McAninch (HE); Stockdale
- Robert David McClure (Ag); Manhattan
- Robert Clendenin McClymonds (Ag);
Walton
- *Donald Dale McCollister (IC); Pittsburg
- Dale Frederic McCune (Ag); Stafford
- Margaret Ella McCutchan (HE);
Lost Springs
- *Warren Ross McDaniel (ME); Wichita
- Edward James McDonald (VM);
Peabody, Mass.

* Matriculated 1940-'41.

JUNIORS—Continued

- John Gerald McEntyre (CE); Topeka
 Arthur Douglas McGovern (ME);
 Schenectady, N. Y.
 Marjorie Lucille McGrew (PE);
 Coffeyville
- *Doris Marjorie McGugin (GS);
 Kansas City, Mo.
- *Dorothy Margaret McGugin (GS);
 Kansas City, Mo.
- Robert Beitzel McIntire (ChE-1; GS-2);
 Manhattan
- James King McKie, Jr. (BA); Salina
- Mary Rowene McMaster (HE&N);
 Eskridge
- Donald Wallace McMillan (BA);
 Manhattan
- *Mary Margaret McNeal (BA); Edna
- Lois Marie McVay (HE); Junction City
- *Lois Jeanette Mace (IM&D); Willis
- Burt Randolph MacKirdy (CE);
 Manhattan
- Roderick Elvyn MacRae (VM);
 Evanston, Ill.
- Helen Jane Macredie (HE); Clearwater
- *Alice Magdalene Magers (HE); Parker
- *Harold Aley Magnus (ChE);
 Arkansas City
- Edward Jay Mahler (VM); Salinas, Cal.
- Mildred Marie Major (IM&D); Wilson
- Hurst Kreek Majors (IJ); Manhattan
- Robert Drury Manly (GS); Manhattan
- Frank Lucius Marcy (AA); Milford
- Jerome Edward Marschallinger (ME);
 Pittsburg
- Gerald Leonard Marsh (ME); Troy
- John Alexander Marten (SH); Winfield
- Audwin Joseph Martin (CE); Norwich
- *Daniel Edward Maurin (BA); Kansas City
- Everett Griffith May (EE); Salina
- Arlene Venita Mayer (MuE); Alta Vista
- Edward Mayo (MI); Indianapolis, Ind.
- Leonard Mealy (ME); Summerfield
- Forrest Eugene Mears (AA); Eskridge
- Blanche Marie Medaris (HE); Manhattan
- Arthur Fred Meeks (CE); Kansas City
- Carl Arthur Mehl (ChE); Robinson
- Orval H. Meinecke (VM); Marvsville
- Harold Raymond Melia (AA); Bucklin
- George Atholstone Mellard (ME); Russell
- *Samuel Joseph Meltzer (ME);
 New York, N. Y.
- *Ethel Imogene Mendenhall (HE);
 Fort Dodge
- George Lester Mendenhall, Jr. (ME);
 Belleville
- Bettie Merrill (IJ); Ellis
- *Flora Kathryn Merrill (GS); Wathena
- *Kenneth Alonzo Messner (BA);
 Arkansas City
- Leonard Milton Meyer (BA); Basehor
- *Walter Richard Meyer (AE);
 Tombstone, Ariz.
- *Herbert Dalton Michael (EE); St. John
- Kenneth Benton Middleton (VM);
 Manhattan
- *William Benton Middleton (ChE); Selma
- Bob Glenn Miller (BA); Manhattan
- Marion Andlauer Miller (AE); Topeka
- *Eugene Booth Mills (ME); Wichita
- Harriette Louise Minton (HE&N); Harper
- Evelyn Elnora Mitchell (HE); Topeka
- Carroll Alvin Mogge (Ag); Goodland
- *George Robert Monroe (BA&A); Wichita
- Beatrice Marie Montgomery (HE);
 Hazelton
- *Betty Lou Moore (IM&D);
 Kansas City, Mo.
- Isabel Moore (GS); Alta Vista
- Willis E. Moore (EE); Goff
- Virgil Fred Morford (Ag); Olsburg
- Lois Lorraine Morgan (GS); Manhattan
- Tom Francis Morrey (ME); Coffeyville
- *Clarice June Morris (GS); Wichita
- Mary Belle Morris (IJ); Chapman
- Edward Walter Morrison (MI);
 Denton, Tex.
- Bruce Henderson Mosbacher (ME);
 Wichita
- Donald George Moss (EE); Miltonvale
- Robert Clark Mossman (VM); Manhattan
- Joseph William Mudge (Ag); Gridley
- *George Alfred Mullen, Jr. (Ag); McCune
- *Freda Evelyn Mumaw (IM&D); Onaga
- Donald Lee Munzer (BA); Herington
- Raymond C. Muret (Ag); Winfield
- Ray V. Murphy (SH); Manhattan
- Ray Patrick Murray (EE); St. Marys
- Raymond Lee Mussatto (ME); Burlingame
- Imogene Gail Myers (HE&A);
 Sharon Springs
- *Phillip Samuel Myers (ME); Formoso
- Robert Kirkland Nabours (GS);
 Manhattan
- *Ineta Ruth Neel (HE); Hutchinson
- Erma Mildred Neely (HE); Hopewell
- Conrad L. Nelson (VM);
 Oklahoma City, Okla.
- Edwin Lee Nelson (EE); Allen
- Elva Ann Nelson (HE); Concordia
- *Raymond Lawrence Nelson (ME); Wichita
- *Robert Gerald Nelson (BA); Kansas City
- Warren B. Nelson (AA); Manhattan
- Donald Orion Neubauer (ME); Manhattan
- *Shirley Frances Newacheck (IM&D);
 El Dorado
- Mary Evelyn Nielson (IM&D); Atchison
- Wilburt Gates Nixon (Ag); Virgil
- Oscar Woodrow Norby (AA); Pratt
- Richard William Nordeen (GS);
 Manhattan
- Avery Albert Norlin (ME); McCracken
- Harold Sylvester Novak (ME); Ottawa
- Otto Fredrick Oberhelman (EE);
 Parkville, Mo.
- *Lynndel Dean Old (Ag); Chanute
- Zoe Elizabeth Oliver (HE); Junction City
- Anna Bernice Olson (HE); Manhattan
- Ben Eric Olson (ChE); Manhattan
- Earl LeRoy Olson (EE); Axtell
- George Norman Olson (ChE-1; IC-2);
 Wichita
- Mary Marie Olson (HE); Dwight
- Gordon O'Neill (CE); Ransom
- Maxine Alma O'Neill (IJ); Manhattan
- Lindell Cook Owensby (GS); Manhattan
- Peggy Paddock (IM&D); Manhattan
- James Thomas Painter (EE); Meade
- Corliss Athol Paramore (Ag); Delphos
- Aubrey Glen Park (ME); Oakley
- *James Robert Parsons (EE); Hiawatha
- Phyllis Opie Patrick (IJ); Omaha, Neb.
- Duane Marshall Patterson (ME);
 Kansas City
- William Henry Patterson (SH); Holton
- Martha Ann Pattison (IM&D);
 Manhattan
- Frank George Paulson (CE); Whitewater
- Doris Elaine Paustian (HE); Manhattan
- Martha Marie Payne (HE); Manhattan
- Ivan Carlton Peck (AA); Soldier
- Clyde Wilson Pence (AA); North Topeka
- Helen Catherine Perkins (IM&D);
 Kansas City
- Ralph Hamilton Perry (BA&A); Oskaloosa

* Matriculated 1940-'41.

JUNIORS—Continued

- Orland Joseph Peterka (PE); Manhattan
George William Peterkord (ME); Greeley
Richard Lewis Peters (PE); Valley Falls
*Irene Grace Peterschmidt (HE); El Dorado
Alge Peterson, Jr. (IA); Overland Park
*Arnold Linn Peterson (BA); McPherson
Carl Adolph Peterson (GS-1; ChE-2);
Kansas City, Mo.
Gladys Alberta Peterson (HE); Garrison
Harold Elof Peterson (Ag); Bridgeport
Vernon Hendrick Peterson (EE); Weskan
Benjamin Rankin Petrie, Jr. (GS);
Syracuse
Helen Genevieve Phillips (HE&N);
Parsons
Roger Neil Phillips (Ag); Manhattan
Wayne F. Pickell (ChE-1; BA-2);
Kansas City
Maxine Lesta Pickering (IJ); Meade
John Russell Piper (ME); Emporia
Shirley Alice Pohlenz (HE); Freeport
Irma Lucile Popp (HE); Marion
Gerald Gorman Porter (GS); Dellvale
Walter H. Porter (AA); Council Grove
Ethan Potter (MI); Peabody
*Patricia Potter (PE); Feabody
John William Prager (MI);
Irvington, N. J.
Anthony Joseph Prasnika (VM);
Mulberry
Louis Arthur Prchal (ME); Omaha, Neb.
Roland D. Preusch (IJ); Healy
Hubert Glen Priddy (ME); North Topeka
Alma Pressgrove Proudfit (HE&A);
Tecumseh
Vinton Wylie Puckett (BA&A); Manhattan
Norbert Laverne Raemer (MI); Herkimer
Emy Lou Ragland (HE); Hutchinson
*Ruth Jane Rahn (HE); Arkansas City
Harold Edward Rall (Ag); Menlo
*James Lynne Ramsey (EE); Uniontown
Ruth Arline Ramsey (IM&D); Nortonville
Emma Belle Randall (HE); Ashland
DeVere Frank Ratliff (VM); Portis
Emily Jane Rawson (HE); Wamego
*Robert Richard Read (BA&A); Parsons
Edward Anthony Reed (Ag); Lyons
Eleanor Edith Reed (HE&N); Circleville
*Jane Ellen Reed (IM&D); Coffeyville
Wilbur Bernell Reed (ChE); Marysville
Helen Florence Reiman (HE); Byers
Marie Katherine Reinhardt (HE); Russell
Melvin Ransom Reust (BA); Frankfort
Glenn Meredith Revell (ArE); Chase
Jay Reynolds (VM); Parsons
*Frances Audrey Rice (GS); Parsons
Mildred Joyce Rice (HE); Alma
John Hartman Rickenbacker (BA);
Turlock, Cal.
*Theodore Kenneth Riggs (ME); Hays
*Charles Watson Riley (GS); Manhattan
Oliver Virgil Riley (EE); Stafford
*David Earl Rintoul (IJ); Garden City
*Max Orville Roberts (AA); Chanute
Robert Hugh Roberts (ME); Wellington
Mary Lou Robinson (HE&N); Kansas City
Ralph Raymond Robinson (PE); Wilsey
Lois Haroldine Roessler (HE);
Medicine Lodge
Joseph Samuel Rogers (Ag); Horton
Marjorie Jane Rogers (IJ); Manhattan
Raymond Ruben Rokey (Ag); Sabetha
Virginia Elizabeth Roller (HE); Circleville
Sylvia Frances Roper (IJ); Manhattan
William David Ross (Ar); Coffeyville
*Boyd LaMar Rostine (ME); Hutchinson
Donald Lee Rousey (ME); Horton
Eugene Elroy Ruff (CE-1; GS-2); Russell
John B. Rush (ChE); Haviland
Francis Joseph Ryan (EE);
Waterbury, Conn.
Joyce Carmel Sahlberg (HE&N); Wichita
Ivan Wilbur Salts (AE); Mayetta
LeRoy Francis Sanderson (ME); Hamilton
James Glenn Sanford (BA); Salina
Harold Jay Santner (BA&A); Gaylord
Lorraine Sawyer (HE); Kensington
Norris Elwood Sayre (BA); Ensign
Marguerette Annabeth Schlotzhauer (HE);
Bucyrus
Frances Maxine Schmidt (MuE); Lorraine
Clarence Wilbur Schmitz (GS); Alma
*Philip Davis Schnelle (ChE); Pleasanton
Clara Isabel Schnellbacher (HE); Colby
Robert Edward Schreiber (EE);
Garden City
Clarence William Schulze, Jr. (Ag);
Blue Springs, Mo.
Lloyd Joseph Schurr (BA&A); Wamego
Glenn Orville Schwab (AE); Gridley
Daniel Ralph Scott (GS); Garfield
Margaret Lenore Scott (HE&N); Louisville
Robert De Scott (ChE); Manhattan
*Jane Seaman (IJ); Salina
Evelyn Margaret Seeberger (GS); Hanover
*Ernest Louis Semersky (MI); Toledo, Ohio
*Robert Lowe Servis (ChE); Girard
*Frank Earl Sesler, Jr. (EE); Kansas City
Ben Shambaugh, Jr. (VM); Ottawa
*Catherine Adele Sharp (HE); Hutchinson
Mary Ellen Shaver (HE&A); Salina
Robert Ulrick Shaw (IA); Topeka
Richard Alan Shea (VM); Kansas City
Leander Raymond Sherlock (GS); Wamego
Tasker Bryan Sherrill (GS); Republic
Grant Burks Sherwood (GS); Independence
Gladine Tiny Shirley (IM&D); Perry
Jonny Dale Shoemaker (IJ); Centralia
Charles Otho Shumaker (ChE); Wichita
Virginia G. Siebert (HE); Pretty Prairie
Ernest Allen Siegel (VM);
San Francisco, Cal.
Raymond Lee Sigg (AA); Soldier
Claredon Hickman Sigley (ME); Canton
Marjorie Elizabeth Simmons (HE);
Barnard
Robert Ralph Singleton (Ag); Kansas City
Henry Augustine Sirridge (ME); Topeka
Joseph Ellis Skaggs (MI); Leavenworth
Margaret Smies (HE); Courtland
Floyd William Smith (Ag); Shawnee
*James Bernard Smith (ChE); Chanute
James Joseph Smith (Ag); Axtell
*Marjorie Hortense Smith (HE);
Hutchinson
Dean Waldron Snow (IJ); Neodesha
Frederick Robert Snyder (PE);
Junction City
Vervyle Edwin Snyder (PE); Mayetta
Gene Lowell Solt (BA&A); Waterville
Edith Margaret Southard (HE); Stockton
Reed Clement Sparks (BA); Wichita
Lawrence Eldon Spear (ME); Mission
*Vivian Marguerite Speas (HE); Sterling
Nadine Alfreda Spellman (HE); Salina
*Maxine Lee Standley (HE); Garden City
*Clyde Earl Stanley (ME); Kansas City
Herbert Dean Stauffer (ME); Grenola
Elizabeth Harriet Steele (HE); Waterville
Floyd Owen Steele (VM); Halstead
Robert Charles Stephens (AA); Manhattan
Lenora Jeanne Stephenson (HE); Larned
*Margaret Rose Stevick (HE);
Nowata, Okla.
Helen Jean Steuart (HE);
Colorado Springs, Colo.

* Matriculated 1940-'41.

JUNIORS—*Concluded*

- Ross Merrit Stewart (ChE); Wilburton
 Kemp Graham Stiles (GS); Topeka
 *John Milton St. John (ME); Wichita
 Ray Elmer Stokley (BA); Manhattan
 *Margaret Frances Stone (GS);
 Iolani School, T. H.
 Helen Jean Stout (GS); Kansas City, Mo.
 Marshall L. Stover (PE); Manhattan
 Nita Mae Stricklin (HE); Webster
 Monroe Carl Suderman (ChE); Hillsboro
 Elver Henry Swart (GS); Seneca
 Dorothy Jean Swingle (GS); Manhattan
 Lenora Jean Taddiken (HE); Morganville
 Jeanne Marie Tarvin (GS); Marysville
 *Harriet Jane Taubeneck (HE); Neodesha
 Delbert Gail Taylor (Ag); Meade
 *Dorothy Louise Taylor (BA); Kansas City
 Glenn Watson Taylor (Ag); Lebo
 Ocie Alice Taylor (HE); Tribune
 Robert Crowley Tedrow (CE);
 Kansas City, Mo.
 Margaret Ruth Teel (IM&D); Oskaloosa
 Joye Jean Teeple (IM&D); Manhattan
 Joyce Jacqueline Terrass (HE); Alma
 John Otis Thisler (IJ); Chapman
 Glen Junior Thomas (GS); Riley
 *Charles Duane Thompson (Ag);
 Westphalia
 Keith Lewis Thompson (Ag); Wichita
 Roy Arthur Thompson (IJ); El Dorado
 Wilma May Thompson (HE); Almena
 Max Eugene Timmons (AA); Fredonia
 Melvin Kenneth Todd (EE); Kansas City
 Raymond Dwayne Topham (AA); Wichita
 Theodore J. Torkelson (EE); Everest
 Leland Oscar Townley (EE); Kirwin
 Dorothy Jean Triplett (GS); Humboldt
 Florence Ada Truan (HE); Hays
 *Carl Leonard Tucker (ME); Minneola
 Robert Emmett Turkleson (ChE); Troy
 Howard Robert Turtle (ME); Quinter
 Wilbur David Van Aken (BA); Lyons
 *Howard Dean Van Cleave (BA);
 Kansas City
 *Barbara Jeanne Vandaveer (HE);
 Hutchinson
 Rosemarie Van Diest (HE); Prairie View
 Chester Edwin Van Voorhis (BA); Bucklin
 *Paul Irving Veach (BA); Fairview
 Clyde Maurice Venneberg (AA);
 Havensville
 *Beulah Fern Venning (HE); Grenola
 *Neil Allwin Vestal (EE); Arcadia
 Carl Joseph Voelker (VM); Manhattan
 Hansvon Unwerth (ME);
 Kansas City, Mo.
 Anna Dean Wagaman (HE); Manhattan
 Rachael Phebe Wagaman (HE); Emporia
 *Grant Wyckliffe Waggoner (CE);
 Baxter Springs
 Robert Earl Wagner (Ag); Garden City
 Paul John Waifer (ME); Great Bend
 Frederic Barber Walker, Jr. (VM);
 Santee, Cal.
 *Robert Hewitt Walker (CE); Kansas City
 *Virgil Raymond Walker (EE);
 Smith Center
 Gerald William Walrafen (Ar); Topeka
 John Austin Walters (CE); Manhattan
 Marjorie Wanamaker (HE); Barnes
 Arlin Bruce Ward (MI); Manhattan
 Oliver Howard Wardlow (ME); Topeka
 Guy Edward Warner, Jr. (EE); Bucklin
 Robert Glenn Waters (BA); Junction City
 *Irvin Andrew Waterstreet, Jr. (Ar);
 Mission
 Bruce Cornell Watson (VM); Shawnee
 Edmund Lee Weber (ChE); Kansas City
 *Leo Russell Webster (BA); Hutchinson
 Dean Keats Weckman (Ag); Holton
 Bernard Morris Weiner (VM);
 Irvington, N. J.
 *LaVerne Ida Welk (GS); Pratt
 Richard Gale Wellman (Ag); Sterling
 Francis Wempe (Ag); Frankfort
 William Wempe (VM); Frankfort
 Leo Theodore Wendling (AE); Halstead
 *James Francis Werbke (ME); Kansas City
 William Joseph Werts (Ag); Smith Center
 Gordon West (IJ); Manhattan
 *Kent Loren West (AA); Cedarvale
 Robert Wilson West (CE); Manhattan
 Roger West (VM); Manhattan
 William Earl West (GS); Hiawatha
 *Francis Edwin Westermann (ME);
 Kansas City
 Pierce Uhlmont Wheatley (MI); Gypsum
 Gertrude Eunice Wheeler (MuE);
 Manhattan
 Francis Everett White (ME); Emporia
 Irene White (GS); Kingsdown
 Vivian Esther White (HE); Delphos
 Frank Wellington Wichser (MI);
 Beardstown, Ill.
 Charles Joseph Widman (Ag); Mead, Neb.
 *Margaret Nancy Wiley (HE); El Dorado
 Ray Franklin Wilkie (ME); Topeka
 Paul Halbert Wilkins (MI); Walnut
 Charles Homer Williams (BA); Marysville
 Glenn Lawrence Williams (IJ); Manhattan
 *James Joe Williams (ChE); Lyons
 Nellie Lou Willis (HE); Manhattan
 *Robert Louis Willis (CE); Parsons
 *Francis Vesper Willmeth (AE); Beloit
 Louise Joyce Willmeth (HE); Troy
 Frank Ance Wilson (Ag); Maplehill
 *Martin Lewis Wing (EE); Iuka
 Shirley Maycele Wing (IM&D); Columbus
 Mary Elizabeth Wingfield (HE); Horton
 Harland Clark Wingrave (BA); Severy
 *Jill Ann Winters (GS); Coffeyville
 Wallace Wayne Wittenberger (ME);
 Marysville
 Vernon Winfield Woestemeyer (Ag); Bethel
 Lucille Nell Wolford (BA); Eskridge
 Helen Iona Woodward (HE); Topeka
 *Kittie Marie Woodman (HE);
 Independence
 Milton Maurice Woodrick (GS); Scott City
 Harold Duane Woods (ChE); Greensburg
 *Emily Irene Wray (HE); Lawrence
 George Carl Wreath (Ag); Manhattan
 Jean Frances Wright (MuE); Manhattan
 Paul Lee Wright (Ar); Osawatomie
 Leo Gerald Yeo (PE); Manhattan
 Ben York (Ag); Manhattan
 *George William Yost (AE); Vassar
 Burnetta Lucile Young (HE); Cheney
 Robert Yunghans (Ag); Piper
 Dorothy Mae Zerbe (HE); Salina

* Matriculated 1940-'41.

SOPHOMORES

- Lawrence Leonard Alden (GS); Manhattan
 Jean Frances Alford (IM&D);
 Kansas City, Mo.
 Floyd William Allen (CE);
 Michigan Valley
 Robert Ray Allen (IC); Burlingame
 Paul L. Allison (CE); Delphos
 Robert T. Anderson (CE); Salina
 Chester Laroy Andres (EE); Newton
 Mary Margaret Arnold (IJ); Manhattan
 Wilbur Eldon Ashton (Ag); Manhattan
 Ralph Marion Atchison (BA&A);
 Leavenworth
 George William Atkinson (VM);
 Hutchinson
 Alice Louene Attwood (HE); Smith Center
 Merritt Charles Atwell (Ag); Utica
 Joanne Marie Aubel (HE); Manhattan
 William Bruce Bachelor (EE); Belleville
 Floyd Arnold Bacon (Ag); Sylvan Grove
 *Amelia Huntington Baird (HE);
 Kansas City
 Martha Baird (IJ); Manhattan
 Shirley Louise Baker (HE&N); Hutchinson
 Robert Crary Baldrige (IC); Topeka
 *Elizabeth Ballinger (GS); Junction City
 Sybil Janice Bangs (IM&D); Merriam
 Merlin Jasper Banker (Ag); Salina
 Jacob William Banks (BA); Atchison
 Earl Clair Barb (EE); Hamilton
 Patti Barnard (IJ); Kansas City
 L. Kenneth Barnes (ME); Fontana
 Frank Henry Barnhart (GS); Fort Riley
 Violet L. Base (HE); Sedgwick
 William John Bassler (Ag);
 Valley Stream, N. Y.
 Reva Jean Baxter (BA&A); Onaga
 Jay Clarence Bayha (AA); Kismet
 Margaret June Bayless (HE); Wakarusa
 Virginia Bransford Baylies (HE);
 Fort Riley
 Ralph Gordon Beach (SH); Marysville
 Harmond Paul Bear (ME); Abilene
 Charles Raymond Beardmore (ArE);
 Concordia
 Kermit Edwin Beary (AA); Edson
 Larry Beaumont (BA); El Dorado
 Floyd Edwin Beaver (Ag); Olathe
 *Rodney Claire Beaver (EE); Ottawa
 Neil D. Beckenhauer (VM); Delavan
 *Barbara Jean Beechley (HE&A); Joliet, Ill.
 *Edith Mae Beesley (HE); Gove
 Patricia A. Beezley (HE); Girard
 *Bruce Lee Behymer (Ag); Wichita
 Patricia Jean Bell (IM&D); Perry
 Wendell Dean Bell (EE-1; BA&A-2);
 Silver Lake
 Harold LeRoy Bellairs (MI); Wakeeney
 *Ralph Jr. Bemis (ME); Plainville
 Henry A. Bender (VM); Topeka
 John Daniel Bender (EE); Highland
 David Bendersky (ME); Nassau, N. Y.
 Max Bernard Benne (Ag); Morrowville
 *Leroy Eugene Bennett (ME); Mankato
 Dale Vernon Berger (MuE); Abilene
 Ordo Frank Berges (CE); Onaga
 Denzil Wallace Bergman (GS); Manhattan
 Jane Muir Betz (IM&D); Enterprise
 Herbert W. Beyer (CE); Sabetha
 Clifford Duane Beyler (VM); Harper
 Freeman E. Biery (AA); Stockton
 *Alden Henry Biggs (PVM); Potwin
 Jack DeWayne Bigham (Ag); Muncie
 Lloyd Calvin Billings (Ag); McLouth
 Clara Jane Billingsley (MuE); Belleville
 Floyd H. Bjurstrom (Ag); Alma, Neb.
 Herschel E. Blackburn (ME); Alma
 *Merrill Emmett Blackman (ArE);
 McPherson
 Margaret Mae Blaylock (IM&D);
 Mankato
 Alan Gail Blecha (GS-1; Ag-2);
 Manhattan
 David J. Blevins (ME); Manhattan
 *Adzianna Mary Blochlinger (GS);
 Concordia
 Roy Victor Blood (EE); Garnett
 Robert Chaffee Blount (ChE); Jetmore
 Sarah Elizabeth Bonecutter (HE);
 Smith Center
 Winifred Caroline Boomer (HE&A);
 Kansas City
 *Betty Jeanne Boone (HE); Manhattan
 Warren Boring (PE); Kansas City
 Don R. Borthwick (IC); Beeler
 Jean Evelyn Botkin (HE); Harper
 Lucy Mae Botkin (IM&D); Harper
 Marjorie Agnes Botkin (HE&A); Harper
 Jess W. Boughton (CE); Salina
 Barbara Lee Bower (IJ); Manhattan
 Johnette Bradley (GS); Wellington
 Nathan Austin Bramlett (EE); Silver Lake
 *Grace Louise Brandner (IM&D); Leoti
 Gale Eugene Breed (AA); Manhattan
 *Dorothy Lucile Bressler (HE); Wamego
 Arthur Gordon Brewer (BA); Winfield
 Louise Josephine Brockelman (HE); Holton
 J. Marvin Brokaw (AA); Manhattan
 *Rex Lee Brouillard (CE); Moran
 Almira Josephine Brown (HE);
 Junction City
 Dean William Brown (Ag); Circleville
 *Glen Max Brown (GS); Bird City
 *Lyman Milton Brown (Ag); Blue Mound
 Margaret Lucille Brown (GS); Miltonvale
 Mary Kathleen Brown (GS);
 Kansas City, Mo.
 Sealy Mark Brown (BA&A); Manhattan
 Thomas Ragan Brown (ME); Manhattan
 *Mary Jane Brunsworth (GS);
 Junction City
 Morris Eugene Buckman (MI); Olathe
 Ben B. Buehler (ME); Bushton
 Alma Hope Buffington (HE); Marquette
 Rex Burden (BA); Chase
 Lester Harlan Burkert (VM); Valley Falls
 Wilfred E. Burnham (PE); St. Francis
 *Blanche Irene Burris (HE); Spring Hill
 *June Frances Burton (HE&A); Topeka
 Edward George Buss (Ag); Holton
 Burson George Busset (VM); Manhattan
 *Margaret Ruth Buzzard (HE); Fort Scott
 Max Warren Cables (MuE); Concordia
 Joan Cosette Callais (GS); Haven
 *Mary Beach Callan (HE); Victoria, Tex.
 Frank Paul Campbell (GS); Manhattan
 George Frederic Campbell (CE); Wichita
 Thomas Clark Campbell (VM);
 Laurel, Neb.
 Hugh Louis Caraway (PVM);
 Shreveport, La.
 Janette Claire Carlsen (IM&D);
 Manhattan
 Ray Eugene Carr (ChE); Kansas City
 Merry Carroll (IJ); Kansas City
 Dale Hill Carter (ME); Louisburg
 Pat E. Carter (ME); Manhattan
 *Harry Robert Cash (ChE); Garnett
 Ward Cavender (BA); Abilene
 Janet Isabell Chamberlin (IM&D);
 Hiawatha
 Mary Jane Chase (HE); Lyons
 Ivan Lee Cheney (CE); Abilene
 Brainerd Glenn Cherry (PVM);
 Redwood Falls, Minn.

* Matriculated 1940-'41.

SOPHOMORES—Continued

- Marian Alice Cherry (IM&D);
Redwood Falls, Minn.
Loren Blaine Childers (ChE);
Cawker City
Harry Earl Chiles (PVM); Edison
Ruth Chitty (GS); Bigelow
Grace Eleanor Christiansen (IJ); Columbus
Phillip Harlan Christophersen (PE);
Manhattan
Faye Clapp (IJ); Manhattan
Jack Kenneth Clark (BA); Manhattan
Marvin Brown Clark (Ag); Belvue
Glen Edwin Cline (ArE); Fredonia
Gordon Dwain Cloepfil (ME); Hunter
Albert Swift Coates, Jr. (VM);
Kansas City
Barbara Ruth Cocherell (IM&D);
Denver, Colo.
*Mary Maxine Cole (PE); Wichita
Patricia Collard (IJ); Leavenworth
Margaret Leslie Collins (MuE);
Manhattan
Warren E. Collins (PVM);
West Point, Neb.
Valdine Oral Combs (PVM); Almena
Neel Leon Conley (PVM-1; Ag-2);
Wellington
Martha W. Connet (GS); Manhattan
Keith LeRoy Cook (ME); Liberal
Frank Thomas Cookinham (ME); Topeka
M. Lorane Havelly Cooley (HE);
Junction City
Norman Eugene Cooley (BA); Newton
Betty Adeline Coon (MuE); Meade
Jack Cornwell (Ag); St. John
James Harry Cowie (IJ); Herington
*June Estelle Cox (IJ); Lyons
Catherine LaVonne Coxsey (GS);
Leavenworth
Lowell Elton Crabb (EE); Colby
Thomas Arthur Craig (ChE); Belvue
*Otis Everett Cross (ME); Burrton
*Jack Evans Crupper (ME); Hutchinson
Mary Agatha Cummings (GS); Concordia
*James Sylvester Cunningham (Ag);
El Dorado
Roy George Currie (Ag); Manhattan
George Walter Curtis (Ag); Toronto
Wilmer Dague (EE); Topeka
*Paul Willard Dahlsten (Ag); Marquette
Mary Elizabeth Dane (IM&D); Manhattan
Evelyn Mae Dannar (HE); Wichita
Edwin Speight Darden (ArE); Manhattan
Marjorie Gladys Davies (HE); Lebo
*Carl Raymond Davis (CE); Parsons
Clara Lou Davis (IJ); Manhattan
Helen Dorothy Davis (HE); Wamego
Mildred Elizabeth Davis (HE); Topeka
Edith Margaret Dawley (HE); Manhattan
Nelson Woodrow Dayhoff (CE); Abilene
Dorothy Helen Deal (HE); Westfield, N. J.
Keith C. Deck (ME); Circleville
Dan D. Depew (ArE); Neodesha
Walter Neil Detrich (BA&A); Chapman
Gladys Lova Devore (HE); Haddam
Melvin Howard Dewees (AA); Greenleaf
Paul Franklin DeWeese (IJ); Cunningham
Dwain Edward DeWitt (IA); Ogden
Dane Odo Dexter (Ag); Frankfort
*Roberta Amory Dexter (IM&D-1; GS-2);
Columbus, Ga.
Junior Charles Diehl (GS); Manhattan
LeRoy Ernest Dietrich (VM); Wichita
*Alfred Coult Dille (EE); Merriam
Donald Leo Dimond (MuE); Manhattan
Norma Jean Diven (BA); Smith Center
Charlotte Baenen Dixon (IJ);
Junction City
George Lafayette Doak (AA); Stockton
Gilbert Reid Dodge (BA&A); Dighton
Glen Francis Doel (ME); Topeka
Harold Raymond Domoney (ArE); Downs
Vernon Merle Domoney (BA); Downs
Dennis Ralph Donahue (VM);
Bonner Springs
*David Rumbough Donaldson (ChE);
Fort Riley
James Doner (BA&A); Seward
*Nancy Rudd Donnelly (IJ); Stafford
Darcy Doryland (BA); Manhattan
Carl Junior Downing (AA); Wichita
Lee Warren Doyen (Ag); Rice
Helen Frances Drake (IM&D); Corbin
*Frederick Prescott Drew (GS);
E. Dedham, Mass.
Lois Evelyn Droegemeier (HE); Geneseo
*Carrie Jean Drummond (IM&D); Elmdale
Dorothy Vera Duckers (PE); Wetmore
Harry G. Duckers (Ag); Netawaka
Anna Elizabeth Dueser (GS); Chase
Esther Tabea Dumler (HE); Gorham
William Emanuel Dumler (Ag); Hoisington
Merrill Edwin Dunn (BA&A); Topeka
Audrey Jean Durland (ArE); Manhattan
Daniel Durniak (Ag); Germantown, N. Y.
James Francis Eagan (MI); Axtell
John Dean Easter (Ag); Abilene
Norman Curtis Eatinger (Ag); Raymond
Karl Frederic Eberle (CE); Kansas City
Kenneth Floyd Eicher (ME); Brewster
Jacqueline R. Eidson (BA); Manhattan
William Dean Elliott (VM); Elmo
Thomas Jay Ellis, Jr. (ME); Topeka
Virginia Ann Elmer (HE); Chicago, Ill.
*Lonnie Ernest Emerson (CE); Coldwater
Mary Louise Emery (HE); Manhattan
Beth Kathleen Emmert (IJ); Manhattan
Esther Eileen English (HE); Belpre
Francis R. Dean Engwall (ME);
Jamestown
Glenys Marie Ericksen (HE); Manhattan
Oscar Erickson (PE); Neodesha
Robert Nathaniel Erickson (VM);
Manhattan
*Warren Howard Etter (Ag); Independence
Armstead Joseph Evans (ChE);
Valley Falls
L. Maxine Ewing (HE); Sabetha
Everett E. Fager (ME); Miller
Wallace Aurie Fager (BA&A); Wakarusa
Gerald Nelson Farley (CE); Corning
Byron W. Farnsworth (EE); Manhattan
Robert Gene Farris (GS); Cheney
Betty Ann Faubion (IM&D); Manhattan
Vincent Gerld Feeny (EE); Elmo
*Virginia Louise Feller (GS); Leavenworth
*Bernard George Fickel (Ag); Chanute
*Doris Jeanne Fieth (HE); Enterprise
Arthur Edward Fillmore (ArE); Augusta
Leon Dean Findley (EE); Kiowa
*James LeeRoy Firestone (EE); Ottawa
Madeline Fisher (IM&D); Caldwell
*Robert Daniel Fittell (GS); Beloit
John Holbert Fitzgerald (Ag); Silver Lake
Harry James Flatte (AA); Lancaster
Naomi Marie Flentie (HE); Centralia
Robert Both Fleske (ME); Albert
Thomas Jesse Fletcher (ME); Horton
Robert Carl Floersch (BA&A); Manhattan
John Matthew Folz (ChE); Marysville
Daniel Hugh Forbes (BA); Wichita
Marjorie Lee Force (IM&D); Wheaton
Virginia Maye Ford (IM&D); Manhattan
William James Foster (PVM);
Kearny, N. J.
*John Ed Frazier (Ag); Drexel, Mo.
*Sam Friesen (AE); Colby

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SOPHOMORES—Continued

- John Paul Froom (BA&A); Vermillion
 William Albert Frusher (ME); Jetmore
 Harley Milton Fry (ME-1; Ag-2);
 Miltonvale
 Robert Dale Gahagen (IJ); Manhattan
 *Sidney Galinko (GS); Brooklyn, N. Y.
 Wilma Gantenbein (IM&D); Elmo
 Edwin Frederick Garbe (Ag);
 Valley Stream, N. Y.
 *Floyd Garrelts (ME); McPherson
 Scott Harold Gasche (ME); Hartford
 Virginia Jane Gates (HE); Goff
 Anita Maxine Gatrost (IM&D); Eskridge
 Wilford Eugene Gault (EE); Glen Elder
 Nathan J. Geering (CE); Vesper
 Norma Adele Gellart (GS); Abilene
 Frank Leroy Gentry (CE); Manhattan
 Mary Lou Genung (IJ); Fort Branch, Ind.
 Philip Woodbury George (Ag); Lebo
 *Mabel Sarah German (BA); Salina
 Lyman Earl Gessell, Jr. (ChE); Manhattan
 *David Cabell Gilkeson (GS);
 Rochester, N. Y.
 John James Gilkeson (MI); Larned
 *Ellis Victor Gish (CE); Palco
 *James Harvey Glenn (ChE-1; IC-2);
 Amarillo, Tex.
 Shirley Rose Glens (HE); Dighton
 Richard George Gleue (Ag); Le Roy
 Edgar N. Glotzbach (GS); Paxico
 Wayne Lawrence Godsey (MI); Netawaka
 *Otto Herold Goellert (BA); Colby
 Martha Olive Goheen (HE); Manhattan
 William Arnold Gonser (ArE);
 Leavenworth
 James Harold Goodell (ME-1; GS-2);
 Kansas City, Mo.
 *Edwin Everett Gordon (AA); Hill City
 Peter Earl Gory (VM); Hoisington
 *Bernard Stanford Gould (GS);
 Gashland, Mo.
 Francis Henry Gould (EE); Dodge City
 Marjorie Gould (MuE); Manhattan
 Virginia Frances Gould (IM&D); Beloit
 Rex DeMonte Grauerholz (BA&A); Esbon
 *Margaret Louise Gray (IM&D); Peabody
 *Betty Lou Green (GS); Jewell
 D. Marvin Green (ME); Leoti
 James Michael Green (ArE); Manhattan
 David Walter Gregory (VM); Cheney
 *Raymond Leonard Gribben (EE); Salina
 *Rachel Elizabeth Griffin (HE); Merriam
 *Sara Mae Griffin (HE); Hutchinson
 Gordon L. Griffith (EE-1; GS-2); Bogue
 Kenneth Edward Griffith (Ag); Larned
 Clayton Bronaugh Griffiths, Jr. (VM);
 Santa Barbara, Cal.
 Dean Rollin Gross (GS); Russell
 Harold William Grote (Ag); Manhattan
 *Janora Ann Grove (HE); Newton
 James Gordon Groves (ChE); McPherson
 Robert Ellis Guilfoil (PVM); Kansas City
 Lyle Woodrow Gunter (EE); White City
 Gerald Guss (VM); Burlingame
 Merlin Dewayne Gustafson (GS);
 Randolph
 Francis Burdette Gwin (Ag); Leoti
 *Madge Mary Haas (HE&A-1; GS-2);
 Junction City
 Albert William Hackerott, Jr. (Ag);
 Bloomington
 Ernest Donald Hadsell (IJ); Manhattan
 John Henry Haerberle (GS); Clearwater
 Betty Jean Hale (IM&D); Mankato
 Gail L. Haley (HE); Abilene
 Donna Ruth Hall (HE); Powhattan
 Hubert Hall (CE); Turner
 James Wayne Hamburg (GS); Marysville
 *Betty Jeanne Hamlet (ArE); Coffeyville
 *James Robert Hamm (ME); Humboldt
 Elmer R. Hammett (EE); Manhattan
 *Clara Alvena Hampl (IM&D); Luray
 Robert Thomas Handel (VM); Napa, Cal.
 William A. Hanly (GS); Manhattan
 Edith Elsie Hanna (HE); Manhattan
 Ruth Cornelia Hanson (HE); Olsburg
 Margaret Barkley Hardenbrook (HE);
 Alta Vista
 George Harner (GS); Memphis, Tenn.
 LaVerne Collins Harold (Ag); Parker
 *Adrienne Edna Harper (HE); Vermillion
 Marjorie Harper (IM&D); Frankfort
 Genevieve Jean Harris (HE); Havensville
 *Harry Clifford Harris, Jr. (ChE); Parsons
 Paul Eugene Harrison (EE); Gridley
 Eleanor June Harsh (HE&A); Argonia
 Wilbur Wynn Hart (AA); Mayetta
 John Robert Hartman (SH); Hoxie
 Dorothy Elaine Hartsook (HE); Ashland
 *Berniece Alpheus Haight (HE); Moscow
 Earl Jerry Havel (Ag); Cuba
 Daryl Warren Hawkins (EE); Cedarvale
 Alfred Simpson Hawkinson (BA);
 McPherson
 *Eldon Maurice Hawks (ME); Nickerson
 *James Winston Hearn (ME); Wichita
 *Wayne Charles Hedden (EE); Colby
 *Richard Carl Hedrick (ME); Hutchinson
 *Burns Edward Hegler (EE); Arkansas City
 Kenneth Eugene Hein (EE); Rose Hill
 Eldon L. Heinschel (ME); Smith Center
 *Otto Vern Heinsohn (ME); Wichita
 Donald C. Hejtmanek (BA&A); Topeka
 Edward John Hellmer (CE); Olpe
 Herman Delford Heltzel (MuE); Atchison
 *Dennis Arlo Hemmer (CE); Bushton
 Russell Preston Hemphill (IC); Greensburg
 *Elinor Mae Hendrix (GS); Aliceville
 Robert Wayne Hentzler (VM); Topeka
 Roger Alberm Herrick (ArE); Topeka
 Harry Hershey, Jr. (CE); Westmoreland
 Sevilla Hershey (HE); Eskridge
 Jack Heter (AA-1; BA-2); Sterling
 Kenneth Dean Hewson (EE); Larned
 Junior William Hicks (BA&A); Herington
 Walter Hicks (Ag); Valley Stream, N. Y.
 Marion Ralph Hildman (BA); Mayetta
 Lawrence Andre Hill (PVM); Horton
 *Margaret Elizabeth Hill (IJ); Belleville
 Phoebe Lahr Hillmon (HE); Manhattan
 *Margaret Alene Hinshaw (IM&D); Topeka
 Doris Marie Hiser (GS); Manhattan
 Wilbur Floyd Hiser (EE); Manhattan
 Gordon Elmer Hoath (AA); Anthony
 Lawrence Leland Hobson (BA-1; ME-2);
 Kingman
 Josephine Agnes Hoch (HE); Wilson
 Dora Mae Hoffman (IJ); Haddam
 Emily Sarah Hofsess (HE&A); Partridge
 *Rhea Eleanor Holgate (IM&D); Kinsley
 Harry Richard Holmes (ME); St. George
 Virginia June Holmes (GS); Manhattan
 *Carl Duane Holt (ME); Great Bend
 Virginia Hoover (GS); Abilene
 Dewi Augustus Hopkins (ArE); Topeka
 Anna M. Horn (HE); Horton
 Dorothy May Horstick (HE); Richmond
 *Lura Elizabeth Horton (IJ); Topeka
 *Betty Alice Hosmer (HE); San Diego, Cal.
 Clarence B. Hostetler (VM); Harper
 Lois Aileen Hostinsky (GS); Manhattan
 Florence Louise Houghton (HE); Tipton
 Max Sherman Houston (GS); Colby
 Daniel Frederick Howe (AA); Stockdale
 Arthur Eugene Hudson (ME); Nashville
 Lawrence Keith Hudson (ChE); Wilsey

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SOPHOMORES—Continued

- Fred M. Huey (BA); Louisville
Edward Barrett Huff (PE); Marysville
A. Bernice Hughes (HE&N); Olathe
Harry Keith Hughes (Ag); Salina
F. Neal Hugos (PE); Manhattan
Janice Fern Hunt (HE); Blue Rapids
*Earl Sidney Hunter (ME); Iola
Alfred Carl Huttig (MI); Johnson
*Lavonne Hyle (HE); Madison
Theda Fayne Inslee (HE); Isabel
Charles A. Jacobi (Ag-1; GS-2);
Salem, Ore.
Joseph Edward Jagger (Ag); Minneapolis
Jack Edward James (IJ); Mayetta
Everett Edward Janne (CE-1; SH-2);
Wilson
*Ramon Aquilon Jaranilla (BA);
Junction City
Melvin LeRoy Jarvis (ME); Salina
Walker John Jelinek (ArE); Beloit
Ruth Elizabeth Jenkins (IM&D);
Manhattan
Samuel Oliver Jewett (ME); Dighton
*Charlotte Ann Johannes (HE); Willis
Berneice B. Johansen (HE&A); Holyrood
James Edward Johns (EE); Topeka
Jimmie Lincoln Johns (MI); Manhattan
Dorolyn Johnsmeyer (IJ); Topeka
Arnold Vivian Johnson (ArE); Salina
Louis Bruce Johnson (EE); Liberal
Malvin Gilbert Johnson (Ag); Moran
Marianna Johnson (HE-1; GS-2); Potwin
Milo L. Johnson (GS); Topeka
Neil Theodore Johnson (ME); Topeka
*Robert Stanley Johnson (ChE); Emporia
Dorothy Marie Johnstone (IM&D);
Wichita
*Fred Samuel Jones (EE); Gridley
*Judith Jones (BA); Kansas City
Keith Gordon Jones (Ag); Penalsosa
*Leonard Clarence Jones (ME); Jetmore
Paul Harrison Jorgenson (CE-1; GS-2);
Manhattan
W. W. Justus (GS); Hill City
Don Louis Kastner (ME); Manhattan
Frank William Kaul (ME); Holton
Paul Leo Kelley (AA); Solomon
*Arthur Louis Kelly (ChE-1; IC-2);
Derby
*Orla Cormack Kemper (HE); Emporia
Donald Dexter Kempton (ME-1; GS-2);
Hiawatha
*Geneva Fern Kennedy (HE&N);
Manhattan
John Thomas Kennedy (AA); Blue Mound
Edith Helen Kessler (HE); Newton
Abdul-Rahim Mousa Khalaf (Ag);
Jerusalem, Palestine
Raymond Lloyd Kieffer (ArE); Wichita
Clara Belle Kientz (HE); Manhattan
Charles Edward Kier (Ag); Mankato
Gerald I. Kier (BA&A); Mankato
Donald Ross Kimball (GS); Lane
Kenneth Kimbell (VM); Caney
Milton George Kingsley (EE); Formoso
Robert Nay Kirk (BA); Topeka
*Vern Samuel Kirkendall (BA&A); Oberlin
Joe Eldon Kirkpatrick (BA); Bogue
Wilma Margaret Kjellin (HE); Garrison
Gerald Wilbert Klema (BA&A); Wilson
*Jane Margaret Klingner (HE); Chanute
Lyle Herman Knapp (ME); Topeka
John Harold Knoche (AA); Paola
Ralph William Knoche (VM);
Adrain, Minn.
Robert Wolfe Kohn (ChE); Atchison
Roy Wayne Koons (BA); Sharon Springs
*Foster Clinton Kordisch (GS);
Kansas City
Walter John Kornelsen (ME); Cimarron
Wilbur Stephen Kraisinger (AA); Timken
*John Wesley Kraus (Ag); Hays
Norman Leroy Kruse (Ag); Barnes
Helen Kunkel (HE&N); Waverly
Charles Evans Lacey (ChE); Belleville
*Robert Louis Lair (ChE); Newton
Charles William Lamer, II (BA); Hays
S. Willis Lamer (BA); Hays
Paul Albert Lamont (ME); Turon
*Flora Evelyn Lancaster (ChE);
Yates Center
Charlotte Lucy Lander (IJ); Coffeyville
*Nicholas Landiak (Ag); Andover, N. J.
Virginia Ethel Landes (HE); Abilene
*Edgar Rudolph Lane, Jr. (ChE); Parsons
Philip Roscoe Lane (PE); Manhattan
Thomas Purcell Lanman (BA); Larned
Herschel Rex Larkin (BA&A); Manhattan
Marion Joseph Larkin (PE); Seneca
June Marguerite Larrick (HE); Topeka
Elsie Florene Larson (HE); Madison
Eloise Lear (BA); Hiawatha
*Donald Eugene Leavitt (PE); Iola
*Anabel Lee Ledington (HE); Wathena
*Frances Eldora Lehman (IM&D);
Deer Creek, Okla.
*Robert Andrews Leonard (AA);
Blue Mound
Evalyn Leota Levin (HE); Kensington
*Ruth Gertrude Lewerenz (HE&N);
Lincolnvill
George Willis Lewis (Ag); Conway Springs
Katharine Sophia Lienhardt (MuE);
Manhattan
Dean Thomas Lill (PE); Mount Hope
*Harriet Lucinda Lillibridge (HE);
Hutchinson
Irene Eleanor Limper (HE-1; MuE-2);
Manhattan
Fred Ray Lindsey, Jr. (ME);
Scotia, N. Y.
Edward Clarence Lininger (BA);
Governors Island, N. Y.
Joanne Linn (IJ); Marysville
Leta Marie Linville (HE); Chase
Bill Bishop Little (ME); Wichita
John M. Palmer Little, Jr. (ME); Wichita
*Munson Woodford Little (BA);
Kansas City
Maryanna Lock (HE); Mayetta
Dan Benoit Loeb (ChE); Junction City
Bernice Evangeline Long (GS); Manhattan
Harry Lott, Jr. (ChE-1; IC-2);
Valley Falls
Kenneth Barrett Lucas (CE); Manhattan
Marion Rebecca Lucas (HE); Hoisington
Nolan Albert Ludwig (VM); Parsons
*Walter Benedict Lukens (Ag);
Middletown, N. Y.
Donald Wesley Lunt (VM);
Yankee Hill, Cal.
David Arthur Lupfer (ChE); Larned
Harry Oliver Lytle, Jr. (BA&A);
Junction City
*Marjorie Marie McAninch (HE);
Neodesha
Velma Lou McCall (HE); Wakeeney
Johnny McCammon (MI); Americus
Donley Valerious McCarty (Ag); Ashland
Verle O. McClellan (BA); Wichita
Margaret Ann McClymonds (IJ);
Lincoln, Neb.
Jerome Ed McConnell (ChE); Salina
*William Gilbert McCoy (CE); Partridge

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SOPHOMORES—Continued

- Joseph G. McDonald (EE); Topeka
 Wesley William McDowell (ME);
 Garfield
 Arthur Wendell McFadden (BA);
 Mullinville
 Noel Gabriel McGrath (GS); Greenleaf
 Mervin Ross McKinsey (AA); Soldier
 John Francis McKown (ChE); Udall
 Ernest Lowe McLain (ME); Kansas City
 Betty R. McLeod (HE); Manhattan
 *Martin Eugene McMahon (ChE); Beattie
 William Ray McMillan (Ag); Quenemo
 *Jack Attkisson McNally (Ag); Iola
 Keith E. McNeal (ME); Kansas City, Mo.
 Bonnie Jean McRill (BA&A); Peabody
 Robert Edmund McVay (Ag);
 Junction City
 Merten Francis MacGregor (ME);
 Waterbury, Conn.
 John William Machin (EE); Wamego
 Margaret Gardiner Mack (IJ); Manhattan
 Wayne Hendrix MacKirdy (GS);
 Manhattan
 Chester Lyle Macredie (ChE); Wichita
 Alan Joseph Madsen (IJ); Corbin
 Clifford Dale Makalous (EE-1; BA-2);
 Cuba
 *Robert Roy Manning (Ag); Olathe
 Virgil Lawrence Marák (EE); Everest
 Grant C. Marburger (ChE); Lyons
 Shirley Hugh Marlow (MuE); Manhattan
 Vivian Faye Marlow (HE); Meade
 Ann Marie Marshall (BA); Manhattan
 *Byron Charles Martin (BA); Kansas City
 *Herbert Hudson Martin (ME); Altamont
 John Everett Martin (IA); Lyons
 Kathleen Verna Martin (HE); Lewis
 Tom Martin (ChE); Topeka
 Harold Zephania Mason (BA); Vermillion
 Claude Lois Matthaei (HE); Washington
 Claude W. Matthews (GS); Great Bend
 Phyllis Luella Mattson (HE); Assaria
 *Thayne Orvle Mauch (EE); Ness City
 *Dorothy Marie Maurin (HE); Kansas City
 Alvin Henry Meier (Ag); Hanover
 *Leonard Arthur Mercer (AA); Garden City
 George Hamlin Merrill (PVM); Manhattan
 Ralph Leonard Messer (VM); Lawrence
 Gilbert Joseph Meyer (AA); Lillis
 *Wilbert Henry Meyers (ChE); Salina
 *Charles William Miller (SH);
 Arkansas City
 Edsel Leo Miller (ChE); Manhattan
 Helen Gertrude Miller (HE); Manhattan
 Kenneth Comer Miller (BA); Cullison
 *Leo Miller (Ag); Brooklyn, N. Y.
 Ralph Leone Miller (GS); Manhattan
 Rufus Arnold Miller (PVM); Hiawatha
 Ward McClellan Miller (ME); Syracuse
 Roy Edward Milleret (PVM); Kansas City
 Hall B. Milliard (MI); Manhattan
 Carroll R. Mills (VM); Blaine
 Marian Jeanette Moeller (HE&A);
 Hiawatha
 Willard Ames Monahan, Jr. (EE);
 Leavenworth
 *Helene Mae Monfort (HE); Iola
 Earl Lawrence Montgomery (VM); Parsons
 Edwin Louis Moody (BA&A); Onaga
 Avis Marie Moore (IM&D);
 Cottonwood Falls
 Walter A. Moore (Ag); Dresden
 *Lawrence William Morgan (ME);
 Manhattan
 Dale Newton Morlan (AE); Courtland
 Margaret Bel Morphey (HE); Herington
 Olin Wayne Morris (VM); St. Paul
 Orpha Katherine Morris (HE); Riley
 Neil A. Morton (Ag); Green
 George Edward Mount (IA); Weskan
 Thula Mae Muchow (HE&A); Topeka
 Gladys Lucille Mudge (HE); Eskridge
 Fred Hartman Mueller (BA); Topeka
 Joe A. Murphree (EE); Manhattan
 Mabel Lois Murphy (IM&D); Manhattan
 Roger Gregg Murphy (AA); Norton
 Channing Wayne Murray (GS);
 Manhattan
 Jack Leon Mustard (ME); Abilene
 Bill John Myers (VM); Bethel
 Donald Kinett Myers (EE); Topeka
 Robert Chambers Myers (ME);
 Junction City
 Thora Dagny Mykland (HE); Chapman
 Marjorie Ellen Nace (IJ); Dwight
 John Richard Nash (PVM); Lakin
 *John Padgett Neal (GS); Greenleaf
 Charles Franklin Neece (EE); Kansas City
 Allan Bakewell Neely (Ag); Minneapolis
 Arthur William Neff (GS); Ulysse
 Betty Maurine Nelson (HE&N); Alma
 Robert Kenneth Nelson (VM);
 Chicago, Ill.
 *Walter Paul Nelson (IC); Concordia
 Lila Ellen Neubauer (HE&A); Manhattan
 *James Alvie Newbery (ArE); Lyons
 Lloyd Edward Newcomer (EE); Russell
 *Lester Leroy Newkirk (CE); Kansas City
 John Porter Newman (VM); Manhattan
 Mac Donald Newsom (CE); Scott City
 Virginia Ann Nichols (HE); Topeka
 James M. Nielson (AA); Marysville
 John William Nininger (EE-1; IC-2);
 Olathe
 Russell Bernard Nixon (BA); Manhattan
 Mildred Esther Noble (IM&D); Oberlin
 Drusilla Marie Norby (HE); Pratt
 Marcile Mary Norby (HE); Cullison
 Jack Olmsted Nutter (BA); Morrowville
 Bob O. Obenland (GS); Clay Center
 *Max Dean O'Dell (CE); Wichita
 Max Frederick Oelschlaeger (CE);
 Enterprise
 Charles Offen (BA); Topeka
 Ray Dan Offutt (ME); Wichita
 Marjorie Louise Oliver (HE); Hamilton
 Julia Viola Olson (HE); Inman
 *Henry Emmett O'Neill (MuE); Manhattan
 Wilford Russel Oney (ChE); Manhattan
 Dean Hauer Orem (AA); Meade
 Effie Mav Orr (HE); Kanona
 Robert Leo Osborne (Ag); Rexford
 Cordon U. Osburn (EE); Chapman
 Edward John Otto, Jr. (IC); Riley
 Carl Benjamin Overlev (Ag); Belle Plaine
 Lucille Iva Owen (HE); Edson
 William Henry Packer (IJ); Manhattan
 Geraldine Carol Paddock (IJ); Oberlin
 Eunice Eleanor Paden (HE); Topeka
 Betty Louise Paine (HE&N); Hutchinson
 Hermagene Palenske (IM&D); Alma
 Earl Albert Palmberg (AE); Meriden
 Ina Ernestine Palmer (IM&D); Sabetha
 Kenneth Elwood Palmer (ChE); Murdock
 Jeanne Eileen Parcels (HE&N); Hiawatha
 *Loris Nelson Parrish (CE); Dunlap
 Anna Helen Parsons (GS); Wamego
 *Gail Parsons (GS); Hiawatha
 Margaret Hila Parsons (HE); Manhattan
 Rodney Lewis Partch (AA); Bird City
 Fred Pasamanick (PVM); Brooklyn, N. Y.
 James Ernest Paterson (IC); Norton
 David Junior Patterson (ChE); Marysville
 Mary Jean Peak (IM&D); Manhattan
 *Alice Gertrude Pearson (HE); Olsburg
 Milton Pelischek (BA); Manhattan

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SOPHOMORES—Continued

- Marian Frances Penley (GS); Manhattan
 Lowell H. Penny (Ag); Lawrence
 Dale Eugene Percival (Ag); Beverly
 Earl Ellis Perkins (CE); Belleville
 Charles Ross Perry (GS); St. George
 *Ada Elmeda Persons (HE&N); El Dorado
 Leo William Peterman (AA); Beattie
 Merrill Daniel Peterson (GS); Manhattan
 Raymond Gustave Peterson (IC);
 Enterprise
 Ronald Thorton Peterson (EE); Courtland
 John Richard Petford (AA); Saffordville
 Blanche Eleanor Petracek (IM&D);
 Jennings
 William James Peycke, Jr. (EE);
 Alta Vista
 Marian Francis Pfrimmer (HE&N);
 Oberlin
 Harlan Ralph Phillips (Ag); Manhattan
 Donald Phinney (ChE); Russell
 *Betty Kay Pierce (BA); Wichita
 *May Louise Pierce (IM&D); Fort Riley
 Helen Irene Pierpoint (HE&A); Benedict
 Mary Alice Pile (IC); Liberal
 Edwin M. Pincomb (BA); Overland Park
 *Jack Chester Pitney (AA); Neodesha
 Anna Adaline Poole (HE); Manhattan
 George Christian Potter (IC);
 Bennington, Vt.
 Richard John Powell (GS);
 Kansas City, Mo.
 Emmett Wayne Pratt (AE); Colby
 Bernice Louella Pribbeno (BA);
 Sharon Springs
 James S. Prideaux (MI); Manhattan
 Rex LeRoy Pruett (GS); Culver
 Earl Carleton Pugh (PVM); Salina
 William Kay Quick (ME); Beloit
 Clarence Alfred Quigley (ME); Great Bend
 Dale William Rake (Ag); Tecumseh
 Robert Fielding Randle (AA); Riley
 Dorothy Ratliff (IM&D); Manhattan
 Betty Jane Reed (BA); Topeka
 Charles Ewing Reed (IC); Manhattan
 John Robert Reed (EE); Salina
 *John Holmgren Reese (MI);
 Brigham, Utah
 Lois Vivian Reeves (HE); Almena
 Norma Jane Reid (GS-1; HE-2); Topeka
 Marvin Emor Reinecke (ME); Great Bend
 Ruth Remick (SH); Wichita
 Marvin Robert Repstine (PE); Atchison
 Kenneth E. Rice (EE); Greensburg
 Wallace F. Richardson (EE); Kingman
 Mary Ellen Richter (HE); Dodge City
 *Pauline Jean Rickabaugh (HE&N); Lyons
 Francis Raymond Rickard (BA);
 Manhattan
 Jane Louise Riddell (HE); McPherson
 Marie Veronica Rizek (HE); Belleville
 Paul Morrison Roach (ME); Manhattan
 Arthur Donald Robb (VE); Wamego
 David Dow Robb (EE); Belleville
 John Morris Roberts (ChE); Hoisington
 Claire Milton Robertson (ME); Holton
 William Bruce Robertson (Ag); Barnard
 Leonard Gale Robinson (AA); Viola
 Lois Mary Robinson (IJ); La Crosse
 Margaret Ellen Robson (GS); Waverly
 Nicholas B. Robson (MI); Salina
 Fern Irene Roelfs (IM&D); Bushton
 Lila Faye Rogers (IM&D); Glasco
 Richard Dean Rogers (BA); Manhattan
 Ronald Keith Roffling (MuE);
 Bennington
 Saul Rosen (ME); Fitchburg, Mass.
 Robert R. Rosenfeld (ArE); Bronx, N. Y.
 Norman Ray Ross (ME); Manhattan
 *Lorin George Roth (EE);
 Kansas City, Mo.
 Charles H. Roy (Ag); Overland Park
 *Albert LaVern Rues (PE); Parker
 Jess Wayne Ruf (VM); Arkansas City
 Darrell Arden Russel (Ag); Canton
 *Clarence Leroy Ryser (GS); Haddam
 Pat H. Sauble (Ag); Newton
 *Lewis Allen Schafer (Ag); Jewell
 Kent N. Schaffer (EE); Manhattan
 Charles Frederick Scheibler (BA&A);
 Salina
 Barbara Anne Schenk (HE);
 Kansas City, Mo.
 Warren Schlaegel (MI); Olathe
 Louise Rosella Schlicher (HE&N); Hoxie
 Bernard Paul Schlim (ME); New Almelo
 Barbara Schmidt (HE); Junction City
 Esta Wilma Schneider (IM&D);
 Manhattan
 Edwin Andrew Schoen (AA-1; PVM-2);
 Lenora
 Dorothy Avis Schoepfel (IM&D);
 Hoisington
 *Harold Schraer (Ag); Brooklyn, N. Y.
 Earl Robert Schrieber (BA&A); Ransom
 *Mary Franciska Schroller (GS); Marysville
 *Glen Perry Schultness (AA); McFarland
 *Mary Helen Schulz (HE); Sterling
 Mary Lou Schuricht (BA); Osborne
 Charles B. Schwab (Ag); Morrowville
 Roger Leathon Scillian (BA); Onaga
 Lucille Marie Scofield (IM&D); Perry
 Marguerite Eliza Seal (HE); Wakefield
 James Harris Sealy (ArE); Pratt
 Ansel Burton Searles (IC); Wetmore
 Lorrain Oscar Seebree (VM); Kansas City
 Edward George Seufert (Ag); Tonganoxie
 John William Sexson (EE); Weskan
 Lloyd Dale Sexton (EE); Solomon
 Frank Leslie Seymour (IJ); El Dorado
 Jean M. Shane (IJ); Junction City
 Mildred Adele Shannon (HE); Hiawatha
 Shirley Anne Shaver (HE&A); Salina
 Ann Ella Shaw (HE); Belleville
 Max Sherman Sheehy (VM); Belle Plaine
 Aline Bernice Sheeley (HE); Emporia
 Elizabeth Mae Sherlock (IJ); Manhattan
 *Leslie Harold Sherman (Ag); Toronto
 Nadine Shields (GS); Council Grove
 George Edward Short (VM); Concordia
 Glenn LeRoy Shriver (AA); Lake City
 DeArline LaVere Shull (PE); Kansas City
 Wilma Jean Shull (HE); Manhattan
 Everett Otto Siegle (ME); Princeton
 William James Simic (VM);
 Superior, Neb.
 Lynn Howard Simons (SH); Garnett
 Elizabeth Jeanne Sirridge (GS); Topeka
 Kemble Urban Sitterley (ChE);
 Kansas City
 Harold Milton Skalla (ME); Blue Rapids
 *Roberta Jane Slater (HE); Saffordville
 Loran Alvin Slaughter (BA&A);
 Manhattan
 *Robert Maxwell Slentz (ME); Chase
 *Caleb William Smick (GS); Manhattan
 *Alice Virgene Smith (HE);
 Kansas City, Mo.
 Dalbert Oliver Smith (Ag); Macksville
 Glenn McKinnis Smith (EE); Uniontown
 James Taylor Smith (BA); Wichita
 Jean Frances Smith (HE); Manhattan
 *Lucille Smith (IJ); Kansas City
 Robert J. Smith (BA); Manhattan
 Richard Martin Smoll (ME); Wichita

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SOPHOMORES—Continued

- Neal Wanner Snow (ChE); Neodesha
Eugene Edward Snyder (GS);
Junction City
- *Harold Alfred Snyder (AA); Winfield
John Christopher Sobba (ME); Fowler
Wilbur Wayne Soeken (AA); Claflin
Donald Dean Sollenberger (CE);
Manhattan
- Joseph H. Somers (EE); Topeka
Elliott Calvin Sorensen (IA); Manhattan
Eugene F. Spaun (ArE); Atchison
Marietta Gertrude Spencer (IM&D);
Leavenworth
- Ralph Norman Spencer (VM);
Leavenworth
- Gloria Marie Spiegel (HE); Topeka
Charles Eldon Springer (CE); Stockdale
- *Jean Marie Sramek (HE); McDonald
- *Robert Stafford (GS); El Dorado
Helen Esther Stagg (HE); Manhattan
M. Marguerite Stagg (HE); Manhattan
Helen Stallard (IM&D); Topeka
- *John Ralph Stallings, Jr. (CE); Frankfort
- *Dorothy Mae Stark (HE); Hiawatha
Wayne Robert Starr (ChE-1; BA-2);
Hiawatha
- Jay Wayne Staton (CE); Wichita
- *Mahlon Roy Stauffer (EE); Newton
Ray V. Stauffer (ChE); Onaga
George Eldon Stein (Ag); Smith Center
- *Alice Jane Sterns (IJ); Hiawatha
Carol Margaret Stevenson (IM&D);
Oberlin
- *Bill Maze Stevick (IJ); Topeka
Beth Stewart (MuE); Wamego
Clarence Elden Stewart (BA&A); Hartford
- *Elletha Marguerite Stewart (HE-1; IJ-2);
Hutchinson
- Robert Hilmar Stewart (ChE); Wellington
Lou Stine (HE&N); Glasco
Barbara Elma Stinebaugh (HE&N);
Princeton
- Cora Jane Stinson (HE&N); Princeton
Thomas Edward Stockebrand (AA);
Yates Center
- Beth Rosalie Stockwell (HE&A);
Manhattan
- Edward Donald Stoddard (VM);
Manhattan
- *Robert Eugene Stomp (ArE); Chanute
Clyde Roe Stratton (CE);
Greeneville, Tenn.
- Lee Monroe Stratton (IJ); Topeka
Wilma May Stroup (HE); Bushong
- *Robert Franklin Strowig (GS); Abilene
Floyd Jay Stryker (BA); Blue Rapids
Donald Alvin Stuewe (IC); Alma
Clanton Tillman Suiter (EE); Otis
Dorothy May Summers (GS); Manhattan
Julian Sundgren (Ag); Falun
- *Treva Maxine Sutton (HE&A); Burrton
- Ernest Earl Swanson, Jr. (EE);
Kansas City
- James Robert Swenson (ChE);
Crowley, Colo.
- Melvin John Swenson (VM); Concordia
William Alcid Swin (EE); Wichita
Robert Turner Syler (EE); Hutchinson
Jay Carlyle Symns (VM); Hutchinson
Wiley Bevis Tanner (PVM); St. John
- *Rex Robert Taylor (ME); Hillsboro
Allan George Teague (Ag); La Harpe
Wilbur Bevard Tendick (Ag); Kismet
John Harvey Tennery (VM); Belle Plaine
- *Emily Jane Theye (HE); Emporia
Roy Corley Thomas (VM); Parsons
Jack Russell Thomasson (IJ); Belleville
Melvin Moore Thompson (Ag); Cheney
- Victor Carl Thompson (Ag); Ozwakie
Maurice Earl Tjaden (CE); Clearwater
Merrill Wayne Toburen (IC); Manhattan
Elwin Todd (MI); Quinter
Lewis Keith Tolson (Ag); Johnson
David Eugene Totten (ME); Clifton
Patricia Annabelle Townley (HE); Abilene
Delbert L. Townsend (AA);
Danbury, Neb.
- Monte Monroe Trimble (VM);
Kansas City
- James Justin Trindle (CE); Hugoton
Carl Norman Turner (IA); Manhattan
William Dick Turner (AA); Manhattan
- *Viola Elsie Twiehaus (IM&D);
Independence, Mo.
- Marcella Rae Ulrey (IM&D);
West Mineral
- *Ernest A. Unruh (GS); Newton
James Alva Upham (Ag); Junction City
Roy Walter Upham (VM); Junction City
Duane Urbom (IJ); McDonald
- *Marilyn Lucile Utermohlen (IM&D);
Kansas City
- Josephine Vancil (HE); White Water
Morris A. Van Daele (Ag); Olathe
Lawrence Matthew Vanderwilt (EE);
Solomon
- Margaret Jean Van Horn (HE); Larned
Phyllis Doris Van Meter (IJ); Ada
Marian Roberta Vann (HE); Carbondale
Robert Edward Van Scoyoc (BA);
Manhattan
- Edna Mae Vantuyl (HE); Burns
James Henry Vavroch (AE); Oberlin
John William Vawter (Ag); Oakley
George Brinton Vincent (AA); Ottawa
Theodore Charles Vining (ME); Horton
Frank Lee Wachholz (GS); Anthony
Page Paschal Wagner, Jr. (CE);
Webster Groves, Mo.
- Joyce Korine Wagoner (GS); Blue Rapids
Donald Glenn Wallace (GS); Hill City
Robert LaVern Wallace (AA); Colby
Mary Elizabeth Walters (HE&A);
Manhattan
- Theodore Parker Walton (IA); Manhattan
Judith Elizabeth Ward (GS); Belleville
- *Viola Hopkins Ward (HE&A); Manhattan
John William Waring (ME); Salina
Dale Martin Warren (PVM); Fort Scott
Leon Arthur Warta (CE); Ellsworth
James Wesley Watkins (PE); Manhattan
- *Lois Fern Watkins (IM&D); Wichita
Glenn Weatherby (ChE); Neodesha
Allen Nystrom Webb (IC); Manhattan
Lowell Madison Webb (VM); Beverly
- *Helen Katherine Weber (HE);
Montgomery
- Maurice John Weckerling (ME);
Manhattan
- Barbara Mary Weigand (HE);
Manhattan
- Ruth Louise Weigand (IJ); Topeka
- *John Robert Weir (Ag); Geuda Springs
- *Dean Elledge Wells (ME); Parsons
Uldene Edna Wells (HE); Centralia
Ada Elizabeth Wendland (IM&D);
Randolph
- Max Miller Wenrich (Ag); Oxford
- *Mary Jean West (GS); Hartford
Percival Thomas Westmacott (BA); Chase
Benjamin Brunner Weybrew (GS);
Wamego
- Norman Vincent Whitehair (AA); Abilene
Charles Elmer Whiteman (VM);
Carrollton, Ill.
- Howard Elmer Whiteside (ChE); Neodesha

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SOPHOMORES—*Concluded*

- *Virgil Howard Whitsitt (IJ); Phillipsburg
 *Mary Jane Wick (BA); Hutchinson
 Bernice Doris Wiggins (SH); Lawrence
 Betty Lou Wiley (HE); Tonganoxie
 George Theodore Wilkie (ChE); Topeka
 Lysle Max Wilkins (VM); Delphos
 Earle Ellwood Wilkinson (AE); Quinter
 John J. Williams (BA); Pawnee Rock
 Nancy Williams (IJ); Topeka
 Donald Wayne Willis (ArE); Manhattan
 Mary Marjorie Willis (IJ); Newton
 Carol Buchanan Wilson (HE); Little River
 Jack Harlan Wilson (AA); Burrton
 *Joseph Frederick Wilson (ChE);
 Springfield, Mo.
 Maurice Wayne Wilson (IA); Atlanta
 Ord Lee Wineland (AA); Alton
 Buford Dale Winters (VM); Parsons
 Howard DeWayne Woertendyke (EE);
 Colby
 Esther Virginia Wolf (HE); Gardner
 *Frank Edward Wolf (Ag);
 New York, N. Y.
 Richard August Wolgast (GS); Alta Vista
 Donald Roy Wood (Ag); Trousdale
 Dale Woolsey (AA); Parker
 Waldron Carl Workman (GS); Belleville
 Robert Paul Worthman (VM);
 Lincoln, Neb.
 Margaret Esther Wunsch (IJ); Topeka
 Virginia Fern Yapp (IM&D); Manhattan
 *Maxine Odell Zimmerman (HE);
 Belle Plaine
 *Ruth Helena Zimmerman (HE);
 Manhattan
 Elva May Zubler (HE); Sabetha
 Jack Eugene Zumbrum (EE); Enterprise

FRESHMAN

- *Robert McMillan Abbey (IJ); Macksville
 *Roman Adolphus Abt (Ag);
 Medicine Lodge
 *Ruth Evelyn Achelpohl (HE); Argonia
 *William Robert Adam (EE); Dunlap
 *John Harold Adams (GS); Atchison
 *John Martin Aiken (Ag); Moran
 *Dorothy Ferne Akright (HE); Holton
 *Dorothy Moss Albertson (GS); Miltonvale
 *Ruth Jeannette Alexander (IM&D); Everest
 *Clarence Edison Allen (EE); Atchison
 *William Allen, Jr. (ME); Salina
 Austin Gilligan Alm (VM); Manhattan
 *Lloyd George Alvey (Ag); Kansas City
 *Alice Gertrude Anderson (HE);
 Kansas City, Mo.
 *Arnold Theodore Anderson (BA);
 Manhattan
 *Audrey Louise Anderson (IM&D); Gypsum
 Clair Sherman Anderson (CE); Clyde
 *Donald Finney Anderson (PVM-1; Ag-2);
 Americus
 Eugene Elria Anderson (VM); Greenleaf
 *Gordon Sidney Anderson (ME);
 Brooklyn, N. Y.
 *Keith Anderson (PVM); Beverly
 *Nels A. Anderson, Jr. (ME); Topeka
 *Robert Arthur Anderson (BA); Partridge
 Ruby Nadine Anderson (HE);
 Kansas City, Mo.
 *Wallace Richard Anderson (AA); Greenleaf
 Arthur Allen Appleton (GS); Manhattan
 *Archie Edward Armstrong (GS); Seneca
 *John Wesley Arnold (GS); Chillicothe, Ill.
 Merle James Ashton (PE); Salina
 Robert Claude Atkins (VM); Parsons
 *Fideliah Gale Ault (HE); Belvue
 *Jean Adele Babcock (HE&N); Manhattan
 *Arlo Harne Bailey (AA); Salina
 *James Leighton Baird (GS); Hiawatha
 Richard Kelly Baird (IJ); Hunter
 *Orville Cantril Baker (AE); Almena
 *Gertrude Virginia Ball (HE); McFarland
 *Jessie May Ball (GS); Oneida
 *Louis Alvan Ball (BA); Kansas City, Mo.
 *Iva Lee Ballard (HE&A); Topeka
 Paul Elden Ballinger (ME); Norton
 *John Charles Banbury (AA); Plevna
 *Alice Mae Banks (HE); Bonner Springs
 Robert Vernon Barber (BA&A);
 Manhattan
 *Rosemary Barclay (HE); Wakefield
 *Charles Edward Bardshar (VM);
 Mount Hope
 *Carl Atlee Barger (ME); Brewster
 *Glenn Clark Barngrover (ArE); Kingman
 *Richard Barrett (BA); Pratt
 *John Walter Barrier (ME); Chase
 *H. James Bartels (ChE); Inman
 *Robert Denver Bauer (ChE);
 Junction City
 *Verl Wilbert Baumann (AE-1; Ag-2);
 Atchison
 *James Owen Baxter (ME); Pomona
 *Burke Benjamin Bayer (Ag); Manhattan
 *Charles Dean Beard (ME); Neodesha
 *Eunice Marcelle Beckman (HE); Topeka
 *Elizabeth Ann Beckwith (HE&A-1; PE-2);
 Hiawatha
 *Samuel Edward Beckwith (EE); Hiawatha
 *Roy William Beem (Ag); Meriden
 *Verna Frances Beil (HE); Bavaria
 *Virginia Frances Bell (HE); Osborne
 *Carnot Edmund Bellinger (ChE);
 Junction City
 *Lloyd Alan Bennett (BA&A);
 Conway Springs
 *Barbara Lucile Benton (IJ); Kansas City
 *Charles Kermit Bentson (Ag); Wichita
 Leo Grant Berg (VM); Harper
 *Eleanor Maxine Berger (HE); Halstead
 *Zeno Joe Berger (ME); San Diego, Cal.
 *Winifred Louise Bergmann (HE); Axtell
 *Joseph Leo Bettinger (ME);
 Rochester, N. Y.
 *Elmer Clarence Betts (AA); Topeka
 *Maurice Bewley, Jr. (Ag); New Albany
 *Berend Gustav Bicker (Ag); Dunlap
 *Edith Marie Biggs (BA); Levant
 Warren Paul Bilderback (EE);
 Nortonville
 *Ronald Glenn Billings (MI); Topeka
 *Julius Binder (Ag); Hays
 *Phillip Hudson Bircher (AE); Kanopolis
 George J. Bird (Ag); Manhattan
 *John William Bishop (AA); Minneapolis
 *Mary Margaret Bishop (IM&D); Haddam
 *Constance Anne Blackburn (HE); Wichita
 *DeWitt Gordon Blackburn (IJ);
 Arkansas City
 *Doris Dea Blackburn (HE&N); Hill City
 *William Oliver Blake (EE); Oak Hill
 *John Louis Herbert Blaker (ME);
 Kansas City
 *Martin Lowell Blaser (Ag); Waterville
 *LeRoy Blattner (GS); Rozel
 *Marian Frances Bliesner (IM&D);
 Lawrence
 *Elias Bloom (AE); Brooklyn, N. Y.
 *Henry Albert Boettcher (GS); Hanover
 *David Edward Bogart (AA); Beverly

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FRESHMEN—Continued

- *Leo Edward Bohn (PVM); Alma
 *Clarence Junior Bolz (AA); Hoyt
 Howard Clare Bond (GS);
 San Leandro, Cal.
 *Robert Clair Boobar (PVM); Manhattan
 *Verna Lucille Book (HE); Chapman
 *Howard Robert Bootman (EE);
 Kansas City, Mo.
 *William Henry Borland, Jr. (GS);
 Clay Center
 *John Joseph Bortka (PE); Kansas City
 *Thelma Marie Bouck (HE); Manhattan
 *Wanda Fae Bowden (IM&D); Hope
 *Don Raymond Bowers (VM); Downs
 *Glenn Edwin Bowers (AA); Manhattan
 *Kenneth Charles Bowers (Ag); Manhattan
 *Dale Emerson Bowyer (Ag); Manchester
 *Raymond Elmer Boxberger (GS-1; CE-2);
 Russell
 Gordon Frank Boy (Ag); Raymond
 *Arleta Ruth Boyer (IJ) Manhattan
 *Eldon Boyington (BA&A); Goodland
 *Edward Charles Brann (GS); Wichita
 *Bettie Jeanne Brass (HE&A-1; GS-2);
 Wilmore
 *Adell Warren Brecheisen (VM); Welda
 *Benedict Francis Brenner (PVM-1; AA-2);
 Bazine
 *Donald J. Brenner (ChE); Clay Center
 *Harry Cody Brenner, Jr. (MI); Havensville
 *Gail Keith Brensing (ChE); Mullinville
 *Donna Lorraine Brewer (HE); Minneapolis
 *Grace Eleanor Brooks (GS); Tescott
 *Wilma Louise Brooks (GS); Green
 *Buster Brown (ME); Minneapolis
 *Charles Warren Brown (Ag); Fall River
 *Edith Elaine Brown (HE); Atwood
 *Elizabeth Ann Brown (HE); Sylvan Grove
 *Floyd Emil Brown (VM); Wichita
 Francis Hoyt Brown (VM); Manhattan
 Gordon Michael Brown (Ag); Lawrence
 *John Pershing Brown (BA); Wamego
 *Kenneth Claud Brown (GS); Horton
 *Ruth Irene Brown (HE&N); Manhattan
 *Dorothy May Browning (HE); Garnett
 *Charles Albert Brownrigg (IC); Welda
 *Charles Gilbert Bruna (Ag); Bremen
 Eugene Clifford Brunner (Ag); Oneida
 Robert Bruce Brunson (Ag); Leavenworth
 Ellen Clara Brush (HE); Wichita
 Bruce Keith Bryan (GS); Manhattan
 *William Boyd Bryson (EE); Kansas City
 *Guy Ray Buchanan (AE); Little River
 *Richard Irwin Buchli (VM); Kansas City
 *Frederick Herbert Budden, Jr. (ME);
 Manhattan
 *Earl William Bumbaugh (IJ);
 Junction City
 *Roland O. Burke (PE); St. Francis
 *Forrest Donald Burnett (IA); Turon
 *Onan Calvin Burnett (PVM-1; PE-2);
 Topeka
 *John Robert Burns (VM); Manhattan
 *William Herbert Bush (IJ); Frankfort
 *Norman Ward Butcher (IJ); Coldwater
 *Elizabeth Cadwell (HE); Marquette
 *Maurice David Cahill (Ag); Lucas
 *Jose Luis Calderon (GS);
 Canovanas, P. R.
 *Raul Rolando Calderon (Ag);
 Canovanas, P. R.
 *Dwain James Caldwell (ME); Manhattan
 James Charles Caldwell (GS);
 Fort Riley
 *Charles Ames Caler (IJ); Geneseo
 *Homer Kay Caley (AA); Manhattan
 *Lawton Pascal Caley (EE); Manhattan
 *Charles Leo Callaghan (ME); Merriam
 Robert James Callahan (ME); Manhattan
 *Herbert David Campbell (EE); Beverly
 *John William Campbell (ChE);
 Smith Center
 Robert Duncan Campbell (VM);
 Junction City
 *Richard Maurice Canfield (ME); Munden
 *Thomas Allen Cantwell (PVM-1; AA-2);
 Haven
 *Richard Nelson Carlgren (BA); Concordia
 *Robert Frederick Carlgren (GS);
 Concordia
 *Edith Viola Carlson (HE); McPherson
 *Fred Alvin Carrier (PVM); Topeka
 *Mina Jean Carris (HE); Topeka
 *Ray Burman Carris (PVM); Topeka
 *Marcella Rosina Carter (HE);
 Morrowville
 Victor B. Carter (Ag); Fairview
 *Dale Ringwalt Carver (CE); Oakley
 *Freda Mae Case (HE); St. Joseph, Mo.
 *Robert Dudley Casey (ME); Delphos
 Donald Max Casselman (ME);
 Conway Springs
 *Doris Katherine Cassity (GS); Clifton
 *Juan Loza Castillo (PE); Spearville
 *Mary Margaret Cawood (HE); Wetmore
 *Philip Dean Cazier (PVM); Wakarusa
 *Noel M. Cessna, Jr. (GS); Manhattan
 *Harvey Casper Chadbourne (EE);
 Leavenworth
 *Lawrence Marcus Chain (AA); Haven
 *Glen George Chaloupka (PVM); Narka
 *Lawrence Allen Chambers, Jr. (ArE);
 Independence, Mo.
 *Albert Delos Chapin (IJ); Glasco
 *Douglas Scott Chapin (IC); Manhattan
 *Mary Elizabeth Charlson (HE&N);
 Manhattan
 Maurice E. Chase (Ag); Effingham
 *Joe Burbank Chilen (AA); Miltonvale
 *Thelma Louise Christiansen (HE);
 Columbus
 *Robert Warren Christmann (CE);
 Kirkwood, Mo.
 *Robert D. Chubb (Ag); Baxter Springs
 *Paul Leroy Cibolski (BA); Manhattan
 *Charles William Clark (IC);
 Kansas City, Mo.
 *Floyd Hinton Clark (GS); Burdick
 *Lloyd Elwood Clark (ME); Olathe
 *Lorraine Agnes Clark (HE); Alta Vista
 *Max Clark (CE); Logan
 *Neville Jeanne Clark (IM&D); Salina
 *Ruth Maxine Clark (HE); Paxico
 *Elizabeth Aileen Clarke (PE); Winfield
 *Louise Clayton (HE); Kansas City, Mo.
 *Anthony Gerard Clementi (PE);
 Brooklyn, N. Y.
 *Eugene Francis Close (AA); Solomon
 *Doris Lerene Clow (HE); Goodland
 *William Henry Cochrane (PE); Salina
 Roger Bragg Coffman (VM); Overbrook
 *Seymour Cohen (Ag); Brooklyn, N. Y.
 *Betty Catherine Colburn (IM&D); Riley
 *Charles Buford Colburn (ChE); Manhattan
 *Robert Eugene Cole (EE); Smith Center
 *Thomas James Coleman (ChE-1; IC-2);
 Wichita
 *Franklin Eugene Colle (Ag); Sterling
 *Margaret Ann Collings (IM&D);
 Kansas City, Mo.
 *Virginia Ione Collings (HE&N);
 Kansas City, Mo.
 *Glenn Albert Collins (Ag); Sedgwick
 *Jaime A. Colon (PVM); Coamo, P. R.
 *Wayne Oliver Coltrain (Ag); Neodesha
 *Willard Manley Colvin (ME);
 Idaho Springs, Colo.
 *Ronald Edmond Conrad (PE); Clay Center

FRESHMEN—Continued

- *Keith Wayne Constable (GS); Salina
Mary Charles Contompasis (PE);
Schenectady, N. Y.
- *Leo Roy Conwell (EE); Emporia
John Daniel Cook (AA); Abilene
Raymond H. Cook (VM); Courtland
- *Lloyd Almerion Coons (Ag); Columbus
*Matilda Jeanette Coons (GS); Canton
*Elnora Dean Cooper (HE); Stafford
*Paul William Cooper (GS); Hazelton
Richard Elbert Cooper (Ag); Columbus
- *Wesley Eugene Copeland (EE);
Kansas City
- *Harry Gilbert Corby, Jr. (ME-1; BA-2);
Merriam
- *Lorraine Ruby Corke (HE); Studley
*Raleigh James Cossaart (EE); Narka
- *Earl Wayne Couch, Jr. (CE-1; GS-2);
Osawatomie
- *Don A. Coulter (BA); South Haven
*Elvin Elroy Coulter (AA); Dresden
- *Dale Eteyl Covert (BA); El Dorado
*Robert Morton Cowger (AA); Topeka
- *Harold Leon Cox (AA); Anthony
*John Adam Crabb (ME); Topeka
*Marion Joan Cramer (IJ); Gardner
- *Leslie Bryce Crawford (PVM);
Dodge City
Walter Ivan Crawford (PVM); Overbrook
- *Ellen Elisabeth Crippen (HE); Manhattan
*John Boren Criswell (GS); Selden
Norman LeRoy Crook (ME); Ogden
- *Charles Rush Cross (BA); Lewis
*Lois Marie Crotts (HE); Turon
- *Chesney Guild Crouch (PVM);
Kansas City, Mo.
- *Russel John Cummings (AA); Satanta
*Helen Rosalie Dahl (MuE); Manhattan
Cleo M. Daily (HE); Alma
Chester E. Dale (Ag); Coldwater
- *Maurice Daniels (EE); Kansas City
Roy Vaden Daniels (ME); Smith Center
- *Lois Mathilda Danielson (HE); Burdick
Vance Leroy Darland (Ag); Codell
- *Nadine May Darling (BA&A); Manhattan
*Donald Dean Davis (ME); Abilene
- *Leota Isabelle Davis (HE&N); Clay Center
*Rufus William Davis (AA); Wamego
- *Wilbur Merle Davis (AE); Belleville
*Harold Leroy Davison (ME); Leavenworth
- *Gerald Eugene DeBacker (MI); Delia
*Sidney Burton DeBaun (Ag); Wakarusa
- *Don Max Debler (GS); Marysville
*Wilma Ione Deckard (HE); Valley Falls
- *Robert Courtland Dennison (EE); Salina
*William Jule DesJardins (CE);
Clay Center
- *Clayton Maurice Dewhirst (PVM-1;
AA-2); Beverly
- *Amma Marjorie Dexter (HE); Washington
*Frank Anthony Diamond (BA);
Manhattan
- *Margaret Joyce Dickhut (IM&D);
Scott City
- *Doris Anna Dickinson (HE&N);
Manchester
- *Helen Ruth Dieter (IJ); Longford
Melvin Leonard Dietrich, Jr. (VM);
Newton
- *Richard Eugene Dietrich (EE);
Junction City
Curtis Dietz (AA); Esbon
- *Dean Milton Dildine (ME); Delphos
*Lue Junior Dill (Ag); Goodland
- *Brinton Marlo Dirks (MI); Moundridge
*Guy Melvin Disney (ME); Bennington
- *Charles Henry Doherty (Ag); Soldier
Edwin Scott Donovan (BA&A); Manhattan
- *Helen Elizabeth Dowling (HE); Ogden
*Bruce Charles Downs (CE); Wichita
Donald James Doyle (BA); Lakin
- *Walter Edwin Draheim (MI); Manhattan
*Margaret Ruth Drake (IM&D); Topeka
- *Betty Jan Drayer (GS); Manhattan
*Maxine Jane Dreyer (HE); Topeka
*Douglas Henry Drips (MI); Haddam
- *Marion Jo Drown (HE&N); Manhattan
*Bernita Corrine Duffey (GS); Manhattan
*Jackson Gilbert Dunbar (Ag);
Cleveland, Ohio
Lawrence Arthur Duncan (AA); Lucas
- *George Horace Dutton (MI); Concordia
*Kenneth Leon Dwyer (ME); Topeka
- *William Davidson Ebright (ArE);
Emporia
- *Martha Rosa Eck (HE); Galva
*David John Eckert, Jr. (ME); Topeka
- *John Fearing Eckhart (IJ); Alma
*Mary Ellen Edde (HE); Page City
- *Lauren Fremont Edgar (ME); Manhattan
*Charles Wesley Edgerton (MI); Wichita
- *Charles Staley Edwards (ME); Richmond
*Ray Newton Edwards (BA); Manhattan
- *Jean Elizabeth Egbert (BA); Meade
*Erma LeVerne Ehrsam (HE); Bern
- *Erskin Randels Eickmann (PVM);
Chester, Neb.
- *Joseph Eisenbach, Jr. (Ag); Onaga
*Robert Samuel Ekblad (ArE); Manhattan
- *Homer Richard Elling (MI); Manhattan
*Elden Morgan Elliott (ME); Valley Falls
- *Viva Lu Elliott (GS-1; HE&N-2); Elmo
*Jeanne Phyllis Elmer (HE); Chicago, Ill.
- *Hester Fay Elmore (HE); McCracken
*Ruth Mae Emig (HE); Abilene
- *Robert Lesslie Emmingham (Ag); Vliets
*Esther Wagoner Emmons (HE); Lenora
- *Martha Elizabeth Emmons (HE&N);
Manhattan
- *William Richard Engelland (BA); Sterling
Francis Imogene England (HE); Coldwater
- *Lyle Leroy Engle (AA); Abilene
*Robert Ivan Engle (ME); Madison
- *Robert Gene Engler (AE); Chapman
*Charles William Erickson (MI); Topeka
Grace Eskeldson (IM&D); Ramona
- *Jean Elaine Estep (HE-1; GS-2);
Garden City
- *Virginia Maxine Estey (IM&D); Langdon
*Mary Kathryn Eubanks (HE); Holton
- *Eugene Everett Euwer (Ag); Goodland
*Hortense Rhea Everett (HE); Kansas City
- *Merl Winston Everhart (AA); Gypsum
*Cecil LaVerne Evestone (Ag); Leavenworth
- *Clara Jo Fair (HE); Topeka
*Wayne Taylor Falkenstien (ME); Onaga
- *Robert LaVern Fanshier (Ag); Great Bend
*Paul Byram Farrar (EE); Norwich
- *Leonard Patrick Farrell (ME); Manhattan
*Douglas J. Faulconer (IJ); Clay Center
- *Jane Ellen Faulkner (HE); Belleville
*Betty Jean Fee (HE&A); Cunningham
- *Newton Fehr (BA); Kansas City, Mo.
*Mary Henrietta Ferguson (HE);
Manhattan
- *Louis Anthony Ferro (Ag);
Kansas City, Mo.
- *Henry John Fichtner (EE); Topeka
*Barbara Mae Field (HE); Kinsley
- *Dorothy Lee Fieth (HE&N); Enterprise
*Rufus Payton Fimple (PE-1; MI-2);
Sterling
- *Richard Albert Fincham (Ag); Pratt
*Willard James Finegan (MI); Edson
- *Zelma Marie Finn (GS); Great Bend
*Don Keith Fisher (ME); Alta Vista

* Matriculated 1940-'41.

FRESHMEN—Continued

- *Solon D. Fisher (ChE); Kansas City
 *Jack Monroe Fiskin (ME); Mount Hope
 *John Warren Fitzsimmons (MI); Macksville
 *Esther Louise Flippo (IM&D); Abilene
 *Robert Joseph Flipse (Ag); Oakley
 *William Edwin Flory (Ag); Valley Falls
 Leslie Orval Foelschow (VM); Manhattan
 *Theda Rowena Folañd (GS); Almena
 *Edwin Ray Force (AA); Onaga
 *Elizabeth Ann Forster (HE); Wichita
 *Myron Theodore Foveaux (ChE); Junction City
 *Lloyd Melvin Fraker (BA); Manhattan
 *George Alfred Fredrickson (Ag); Concordia
 *Mary Elizabeth French (HE); Topeka
 *Robert Orin French (ChE); Hanover
 *Juanita Ruth Frey (HE); Elmdale
 *Leon Grantham Frey (GS); Smith Center
 *Floyd Leland Frisbie (Ag); McDonald
 *Frederick James Frost (ME); Augusta
 Harriet Mildred Fulghem (HE); Manhattan
 *Leslie Eugene Fullen (IC); Salina
 *Alice Louise Fuller (M); Courtland
 *John Robinson Fuller (BA&A); Salina
 *Joseph Frederick Fulton (PVM); Webber
 William Howard Funk (ME); Abilene
 *Catherine Furse (IM&D); Manhattan
 *Thomas Claude Galbraith (Ag); Cottonwood Falls
 *Howard Franklin Gant (AA); Medicine Lodge
 *Fred Marvin Gardner (ME); Muncie
 *Wyatt Raymond Gardner (AE); Delia
 *Leo John Garvert (PVM); Plainville
 Earl John Garvin (GS); Manhattan
 Douglas Edmund Gary (IJ); Larned
 *Richard Leon Gaston (Ag); Powhattan
 *George Herman Gatz (Ag); Newton
 *Paul Gatzoulis (VM); Kansas City
 *Blane Eugene Gauss (CE); Weskan
 *George Armstrong Geer (ME); Leavenworth
 *Merrill Gene Geiser (SH); Topeka
 *Ina Miriam Gelpman (IM&D); Kansas City, Mo.
 Nina Virginia Gemmell (HE&A); Manhattan
 *Robert Francis Gentry (PVM); Topeka
 *Donald Edward Gerard (CE); Salina
 George Jacob Gerber (PVM); Kingman
 *Ethel Irene Gerherick (HE); Topeka
 *Dayton Odell Gerlach (ME); Edgerton
 *William Bradley Gerlach (GS); Manhattan
 Frederick Clark Germann (Ag); Manhattan
 *Orville Edward Gernand (PVM); Goff
 *Loren Harold Gibson (GS-1; CE-2); Atlanta
 *Verle Keith Giddings (ME); Manhattan
 *Martha Jean Gilbert (IM&D); Topeka
 *Robert Edwin Gilchrist (Ag); Coldwater
 *Marguerite Marie Gilek (HE&N); Anthony
 *Lou Emma Gilliland (IM&D); Mayetta
 *Jack Harris Gilman (ME); Topeka
 *James Todd Gilmore (PVM); Atchison
 *Malvin Franklin Glad (BA&A); Weskan
 *Betty Jo Glanville (GS); Kansas City
 *John Snell Glass, Jr. (ME); Manhattan
 *Joseph Edward Glavinich (ChE); Kansas City
 *George Arie Glick (PVM); Deerfield
 *Rita Marie Glotzbach (HE); Paxico
 *Virginia Esther Glotzbach (IM&D); Wamego
 *Wilfrid Otto Glotzbach (GS); Paxico
 *Dene Constantine Gober (BA); Kansas City, Mo.
 *Norman Finley Goeken (Ag); Edmond
 *Gerald Dean Goetsch (Ag); Sabetha
 *Anna Mae Gold (HE); Goff
 *Wayne Leslie Good (Ag); McCune
 William Robert Goodwin (BA); Mound City
 *Margaret Jane Gordon (HE); Manhattan
 *Corlis Dell Goyen, Jr. (Ag); Cunningham
 *Eyleen Graham (HE); Syracuse
 *Norman Lee Graham (EE); Colby
 *Roy Max Grandfield (GS); Manhattan
 *Herman Manuel Grant (AE); Bronx, N. Y.
 *Melbadine Greathouse (BA); Wellington
 *Richard Louis Green (EE); Westmoreland
 *Virginia Lee Green (PE); Kansas City
 *Jack Norton Greer (BA&A); Winfield
 *Leighton Henry Grier (EE); Mount Hope
 Paul E. Griffin (BA); Manhattan
 *William James Griffing (PVM); Manhattan
 *William Paul Griffith (MI); Larned
 James William Grinter (AE); Williamstown
 *Joe Richard Grisham (BA); El Dorado
 *Don Porter Grutzmacher (EE); Onaga
 *David Henry Gruver (ME); Augusta
 *Carl Wesley Gugler (GS); Woodbine
 *Joseph Emmet Vincent Guilfoil (VM); Kansas City
 *Mildred Lucile Gunkel (HE); Neosho Rapids
 *William Robert Guthrie (ChE); Kansas City
 *Ruth Genevieve Gwin (IM&D); Leoti
 *Harold Leroy Hackerott (Ag); Alton
 *William Doyle Hadley (Ag); Alton
 *Edwin Thomas Hagen (EE); Topeka
 *Harold Monroe Haines (PVM); Winfield
 Gordon E. Hair (ME); Wichita
 *Luther Leon Halbrook (ChE-1; GS-2); Neodesha
 Milton C. Hall Jr. (IJ); Leavenworth
 *Ronald Hall (ME); Topeka
 Leslie Eshond Ham (AA); Marysville
 *Daniel Adam Hamer (ME); Madison
 *Jack LaMar Hamilton (BA); Hutchinson
 *Marvin Eugene Hamilton (Ag); Mankato
 Stanley D. Hammett (IC); Blue Rapids
 H. Melvil Hanna (CE); Winfield
 *Frank Edward Hannigan, Jr. (ME); Hoisington
 *William Frederick Hanser (MI); Collinsville, Ill.
 *Elna Louise Hanson (HE); Olsburg
 *Harvey Harris Harakawa (ME); Honolulu, T. H.
 *Harriet Alice Harbeck (GS); Abilene
 Randall Olin Harbour (ME); Osage City
 *Oda Doris Harlow (HE); Vesper
 *Keith Earl Harmon (BA&A); Salina
 Warren G. Harris (VM); Havensville
 *Ralph Raymond Harrison (ME); Marysville
 *Robert Henry Harvey, Jr. (ChE); Achison
 *Faye Ella Hatcher (IM&D); Satanta
 *Willa Joyce Havely (HE); Topeka
 Laird Vincent Hawley (EE); Belpre
 *Henry Merlin Hays (EE); Topeka
 *Leo Harold Headrick (PE); Kansas City
 *John Blagg Healy (PVM); Junction City
 Clarence Gard Heath (PE); Leoti
 *Harold David Heise (GS); Scranton
 *Lesslie Dean Henderson (ME); Lucas
 *Maryellen Henderson (HE); Kansas City, Mo.
 *Ruth Irene Henderson (IM&D); Almena
 Keith Donald Henrikson (VM); Manhattan

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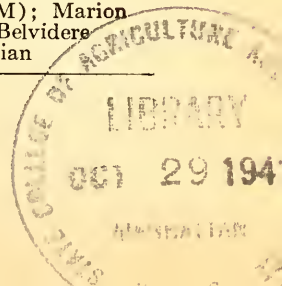
FRESHMEN—Continued

- *William Henry, Jr. (Ag); Leocompton
 *Donald Allen Henshaw (PVM); Herington
 *Richard Dean Hensley (ME); Salina
 *Loren Edward Hermes (CE); Great Bend
 *Elaine Hershey (BA); Eskridge
 *Marilyn Louise Hershey (HE); Westmoreland
 James Sterling Hervey (VM); Belle Plaine
 *James Thomas Heter (ME); Sterling
 *George Hetland, Jr. (EE); Manhattan
 *Arthur Nathan Hibbs (MI); Easton
 Warren George Hicks (EE); Moline
 *Robert Lewis Higgins (GS); Norton
 *John Loren Higham (ME); Wichita
 *Robert Donald Hilgendorf (IJ); Lincoln
 *Eugene Melvin Hill (IJ); Westmoreland
 *Ray Hill, Jr. (GS); Fort Riley
 *James Glen Hillabrant (CE); Washington
 James Anson Hiller (ME); Salina
 *Jack Nesbit Hillis (BA); Kansas City
 *Alberta Marie Hineman (HE); Dighton
 Kalo Albert Hineman (VM); Dighton
 Richard E. Hineman (VM); Dighton
 *Lois Verona Hodgson (IJ); Little River
 Marlian Charles Hodson (Ag); Argonia
 *George Francis Hoferer (ArE); Wamego
 *Raymond Franklin Hoffman (AH); Brockport, N. Y.
 *Vernon Cornelius Hoffman (Ag); Winchester
 John Henry Hoins (VM); Leavenworth
 *Cleve Carroll Holland (BA&A); Wichita
 Orvin Hugh Holler (VM); Conway
 *Helen Maxine Hollis (HE); Manhattan
 *Loren Ivar Holm (Ag); Dwight
 *Bruce Holman (PE); Pownhattan
 *Madison Llewellyn Holroyd, Jr. (GS); Cedarvale
 *Vlasta Holsan (HE); Summerfield
 *Harriet Elizabeth Holt (HE); Ellsworth
 *Charles Sherman Holtz (BA); Manhattan
 *Dorothy Louise Hoodlet (IM&D); Argonia
 *Lillian Maxine Hoover (HE); Manhattan
 *Vincent Joseph Hoover (ChE); Greenleaf
 *Ava Carol Hoppes (HE&N); Caldwell
 Albert Edward Horner (IJ); Salina
 *Jack Leslie Horner (GS); Minneapolis
 *Don Orem Hosler (MI); Wamego
 *Thomas D. Hotchkiss (ChE); Burlingame
 *Charles Frederick Houghton (PVM); Leavenworth
 *Raymond Lou Houser (ME); Grainfield
 *Roger Jim Houser (CE-1; PVM-2); Grainfield
 *Claude Melvin Howard, Jr. (ArE); Kansas City
 *Virginia Louise Howenstine (HE&A); Manhattan
 *John Franklin Hudelson (PVM); Pomona
 *Henry Ray Hudgens (PVM); Anthony
 *James Calvin Hudson (ME); Atchison
 *Lois Marie Hudson (HE); Nashville
 *Charles Andrew Huff (EE); Burlington
 *Helen Catherine Hughes (MuE); Wamego
 *June Elouise Hughes (HE-1; PE-2); Topeka
 *Mark Hotchkiss Hulings (ME); Effingham
 *Richard Perry Humes (EE); Salina
 *Lena Lavone Humphrey (HE); Hoisington
 *Charles Moritz Hund (GS-1; Ag-2); Paxico
 *Harold Harding Hundley (Ag); Clay Center
 *Florienne Hunt (HE); Blue Rapids
 *Donald Devere Hunter (BA); Skiddy
 *Lloyd Lyle Hunter (PVM); Skiddy
 Robert Austin Huser (AA); Deerfield
 *Francis Kent Hutchens (BA); Tampa
 *Billy James Hutton (ME); Carbondale
 *Charles Dewey Iddings (ME); Dorrance
 *Claude Benedict Immenschuh (PVM); Manhattan
 *Max Henry Immenschuh (IJ); Manhattan
 *Donald Franklin Irwin (Ag); Fairview
 *Jess Gail Irwin (GS); Wilsey
 Loyd Scott Irwin (PVM); Wilsey
 Raymond Warren Irwin (PVM); Wilsey
 Lloyd Linell Isaacson (VM); Osage City
 *Mary Frances Iseley (HE); Wichita
 *Jeanne Jaccard (IJ); Manhattan
 S. Lester Jackson (VM); Parker
 *Charles Vincent Jakowatz (EE); Kansas City
 *Stephen Kelly James (ChE); Blue Rapids
 *William Collins Jamison (VM); Kansas City
 Frank William Jedlicka (EE); Ness City
 Betty Laming Iseley (HE); Kansas City, Mo.
 *Evelyn Ruth Jenkins (HE); Manhattan
 Dorothy Maxine Johnson (IM&D); Macksville
 *Harold Dean Johnson (Ag); Scandia
 *Maryjean Johnson (IM&D); Ellsworth
 *Maurice Lorraine Johnson (ME); Jamestown
 Raymond Ernest Johnson (PE); Manhattan
 *Walter Francis Johnson (PVM); Ottawa
 *Wendell Elmer Johnson (ME); Dwight
 William Edwin Johnson (BA); Sterling
 *Jack Ferbert Johnston (ChE); Topeka
 *Mary Louise Johnston (IJ); Manhattan
 *Howard James Johnstone (Ag); Wamego
 *Charles Stuart Jones (Ag); Columbus
 *Lee Thomas Jones (PE); Pretty Prairie
 *Phyllis Jones (IJ); Sedan
 *Donald Hugh Jorn (PVM); Oberlin
 *Harold LaVern Kalousek (AG); Kansas City
 *Lawrence Francis Kaminski (PE); Kansas City
 Emil Richard Kaspar (EE); Wilson
 *Elizabeth Jane Keeley (MuE); Beloit
 *Richard Moore Keith (Ag); Burlington
 *Robert Edgar Keith (ArE); Manhattan
 *Robert Nevins Kendall (ME); Manhattan
 *Francis David Kennedy (EE); Norton
 *James George Kenney (ChE); Kansas City
 *Nettie Arline Kepple (IM&D); Culver
 *Dale Franklin Kern (ME); Robinson
 Russell L. Kershner (VM); Manhattan
 Loren Eugene Kier (ME); Salina
 *Lloyd Eldon Kile (ChE); Wellington
 *John Patrick Kilkenny (CE); Manhattan
 *Fred Eugene Kimple (AA); Lyons
 *Wilbur Warren Kindschi (GS); Garden City
 Neville Clair King (ME); Cottonwood Falls
 *Willard Joseph King (BA); Potwin
 *Arthur Keith Kingsley (EE); Formoso
 *A. Leonard Kirchner (EE); Marion
 *John Morris Kirgis (GS); Beloit
 *Frank Edward Kirk (BA); Kansas City
 *Leta Marilyn Kirk (HE&A); Cottonwood Falls
 *Betty Lou Kirkman (IM&D); Plainville
 *Elsie Rae Kirkpatrick (IC); Wamego
 *Elmer Levi Kistler, Jr. (GS); Manhattan
 *Erich Walter Kitzman (PE); Menasha, Wis.
 *James Samuel Kline (BA); Marion
 *Robert William Kloppenberg (ChE-1; Ag-2); Hanover
 *Stanley Milos Knedlik (GS); Hanover

FRESHMEN—Continued

- *Dale Alpheus Knight (AA); Manhattan
 *Jeanne Margaret Knisell (IJ); Overland Park
 *Doris Mae Knuth (MuE); Herington
 *Alfred Joseph Koch (Ag); Sharon Springs
 *William Robbins Koger (IJ); Belvidere
 *Fred Baylis Kohl (PE); Kansas City, Mo.
 *Robert Theodor Kordisch (Ag); Kansas City
 *Doris Matilda Kottmann (HE-1; MuE-2); Ellsworth
 *Kathryn Mae Kramer (IM&D); Manhattan
 *Robert Earl Krause (ChE-1; BA-2); McPherson
 *Ruth Elaine Krenter (GS); Marion
 *Max Allen Krey (GS); Zenith
 *Ralph Earl Krey (ChE); Zenith
 *William Albert Krusor (GS-1; CE-2); Topeka
 *Lloyd Eugene Kuhnmuensch (Ag); Clayton, Mo.
 William Kurman (PVM); Woodbine, N. J.
 *Warren Joseph Kurtenbach (Ag); Herington
 *Ellen Elaine Kurtz (HE&A); Wellington
 *Robert Joseph Lacerte (ChE-1; BA&A-2); Collyer
 *Shirley June Lacy (GS); Everest
 *Willomae Lagasse (HE); Rice
 *Dean Eugene Lake (GS); Manhattan
 Otho Perry Lamb (CE); Elsmore
 Jack Duncan Lamont (VM); Manhattan
 *John G. Lancaster (GS); Minneapolis
 *Jack Dean Lander (GS); Lindsborg
 *Ivan Cayley Landis (IA); St. George
 *Jack Evans Landreth (EE); Wellington
 *Charles Richard Lanphere (EE); Osawatomie
 *Kenneth Gibson Lantz (ME); Madison
 *James Otto Larsen (Ag); Scandia
 Clarence Lloyd Larson (BA&A); Netawaka
 Gertrude Phyllis Larson (HE); Tescott
 *Paul Oscar Larson (ME); Lindsborg
 *Edward LaSalle (EE); Kansas City
 Gordon Edward Latta (GS); McDonald
 *Walter Lawrence Laue (ChE); Lyndon
 *William Lee Lawless (GS); Belle Plaine
 *John Henry Leach (GS); Arkansas City
 *Clarence Fred LeClerc (AA); Lyons
 *James Edward Leker (ChE-1; BA-2); Manhattan
 *Alice Lorene Leland (HE); Manhattan
 *Glen Dale Lesh (EE); Garnett
 *Rex Ernest Leuze (ChE); Sabetha
 *Evelyn Mae Lewis (HE&N); Clyde
 *John Reid Lewis (ME); Mansfield, Pa.
 *Gerald Ray Lewman (BA); Topeka
 *Lawrence Nicholas Liebl (BA); Claflin
 *John Henry Lindau (GS-1; ME-2); Lincolnville
 *Alfred Ernest Lindholm (ME); Cheney
 *Richard Dale Lipsey (Ag); Le Roy
 *Leo Victor Loewen (Ag); Peabody
 *Virgel Eugene Loftin (BA); Atchison
 *Hollis Burton Logan (ChE); Clay Center
 *Florence Luella Long (BA); Hoyt
 Joe G. Loriaux (AH); Herington
 *Rae Ruth Loriaux (BA); Herington
 *Robert Joseph Lorson (ME); Chapman
 *Joseph McCrea Lort (GS); Denver, Colo.
 *Floyd Lee Lotker (ChE); Oberlin
 *Cloral L. Lovell, Jr. (Ag); Manhattan
 *Alyce Ann Lowe (HE); Topeka
 *Lucille Pauline Luckey (HE); Woodston
 Martin Phillip Ludwig (EE); Clements
 William Valjean Lumb (VM); Manhattan
 *Warren Leonard Lungstrum (EE); Hays
 *Lowell Orlando Luther (ME); Great Bend
 *William Henry Luttgen (ME); Wichita
 *Edward Paul Lyons (MI); Merriam
 *John Albert McCall (AA); Lebanon
 Robert Everett McCann (EE); Hardtner
 Jennie Marie McCaslin (HE); Hoyt
 *Victor Hilbish McClanahan (EE-1; PE-2); Lewis
 Arlan Wilbur McClurkin (VM); Clay Center
 Vinton Ira McCormick (PE); Manhattan
 *Ralph Samuel McCrea (Ag); Richmond
 *Letha Letty McDill (HE); Jewell
 *Twila Mae McDill (HE); Jewell
 *Donald Dean McDonald (GS); Satanta
 *Philip Le McDonald (EE); Satanta
 Terrence Eugene McDonald (VM); Kansas City
 *Phyllis Deane McFarland (Ar); Topeka
 *Joan Therese McKenna (HE); Kingman
 *Irven Lloyd McLaughlin (EE); Manhattan
 *Laurel Daisy McLeod (HE); Manhattan
 *John James McLinden, Jr. (Ag); Cedar Point
 *Willard Lyle McMahan (VM); Rossville
 *Lorreta Eileen McMahon (HE-1; GS-2); Anthony
 *Ethel Marie McMichael (HE&N); Penalosa
 *Max Alexandra McMillan (ME); Formoso
 *Edgar Francis McNeil (PE); Effingham
 *Justin Wayne McNish (Ag); Morrowville
 *John Piper McVeigh (ME); Kansas City
 *Donald Dale McWilliams (Ag); Quinter
 *Max Grant Mabie (GS-1; ChE-2); Green
 *James Samuel Machen (ME); Abilene
 *Ann Lucy Mackey (HE); Lenox, Mass.
 *LaVina Lemyra Mackie (HE); Maplehill
 *R. Kendall MacKirdy (GS); Manhattan
 *Evelyn Ann Magill (HE); Fanwood, N. J.
 *Jean Lorraine Major (HE); Kansas City
 *Victoria Majors (HE); Manhattan
 *Raymond Farrell Maldoon (ChE); Marysville
 *John Ellis Mangelsdorf (GS); Honolulu
 *Wilbur Dean Mansfield (CE); Lucas
 *John B. Markey (ME); Wichita
 *Adolph Casimer Markiewicz (ME); Schenectady, N. Y.
 *Margery Lee Marshall (HE); Topeka
 *Margaret Anne Massengill (GS); Caldwell
 *John Robert Massey (Ag); Sun City
 *Robert Edward Mathewson (Ag); Hiawatha
 *David Leonard Matthew, Jr. (ME); Concordia
 *Paul Raymond Mattson (AH); Topeka
 *Clair LaVerne Mauch (CE); Ness City
 Leon Edwin Mauk (IJ); Lyons
 *Robert Max Mauser (GS); Lyons
 *Jack Carroll Maxwell (ChE); Macksville
 *Ruth Mary Meacham (HE); Lorraine
 *Martha Jean Meekel (IM&D); Topeka
 *Mary Louise Melcher (HE); Ottawa
 William Hugh Meredith (VM); Lincoln
 Norman Rockwell Meriweather (GS); Chetopa
 *Harold Alexander Mersky (PVM); Woodbine, N. J.
 *Louis Johnstone Mertz (EE); Kansas City
 *Gail Vern Meskimen (CE); Onaga
 *Louis Messerli, Jr. (ME); Turon
 *Dorothy Nelle Meyer (PE); Riley
 *Robert B. Michael (PVM); Hiawatha
 William Burhl Miesse, Jr. (VM); Marion
 *Billy Joan Millar (HE&N); Belvidere
 *Calvin B. Miller (ChE); Midian

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FRESHMEN—Continued

- *Franklin Xaverius Miller (AA);
La Crosse
- *Henry Julian Miller, Jr. (ME); Merriam
- *Jack Wesley Miller (ME); Olathe
- *James Wolford Miller (IJ); Manhattan
- *Malcolm Blair Miller (GS); Lyons
- *Mary Alice Miller (IM&D); Wathena
- Max M. Miller (Ag); Newton
- *Melvin Eugene Miller (PE); Greenleaf
- *Merle Eugene Miller (IA); Great Bend
- *Robert Ray Miller (PVM);
Hollywood, Cal.
- *Vance Vernon Miller (CE); Salina
- *Barbara Anne Millhauht (IJ); Wichita
- Eugene Russell Mingle (EE); Oakley
- Russell Galbraith Minnis (VM);
Manhattan
- Kenneth Peter Mitchell (VM); Axtell
- *Marian Jean Mitchell (HE); Minneapolis
- *Archie Lee Mizell (AA); Manhattan
- *Sanford Kenneth Moats (ME); Mission
- *Robert Wilson Moellinger (ME); Wichita
- *Leonard Wesley Mohny (VM); Sawyer
- *Robert Emmett Monahan (GS); Marysville
- *Carol C. Montgomery (Ag); Sabetha
- *Mary Ann Montgomery (IJ); Salina
- *Philip Donald Montgomery (GS);
Riverside, Ontario, Canada
- *Robert Louis Montgomery (ME); Topeka
- *Adrian Earl Moody (PE); Norton
- Robert Beckwith Moody (VM); Greeley
- *Darrel Herman Moore (GS-1; ME-2);
Bison
- Ellen Lucille Moore (HE); Manhattan
- *Gerald Frank Moore (ME); Bazine
- Morris P. Morgensen (SH); Junction City
- *Luella Morrison (IJ); Pratt
- Myrus Cletus Morton (PV); Toronto
- *William John Moseley, Jr. (EE); Topeka
- *Joseph Richard Moses (GS-1; EE-2);
McLouth
- *Maxine Lois Moss (HE-1; BA-2); Lincoln
- *Robert Leonard Muchow (ME); Topeka
- Melville Rhodes Mudge (GS); Eskridge
- *Norbert Otto Mueller (BA&A); Netawaka
- *Kenneth King Muirhead (BA); Dresden
- *Mary Patti Muller (GS); Manhattan
- John Ward Mullinix (Ag); Kansas City
- *Dorothy Ruth Muma (HE&A); Maize
- *Alfred Alexander Munroe, Jr. (AA);
Douglass
- *Charles James Murphy (Ag); Abilene
- *Helen Nadine Murphy (HE&A);
Wellington
- *John Austin Murphy (EE); Detroit
- *George Benjamin Murray (BA&A);
Lincoln
- Hiram Clawson Mussett (Ag);
Leavenworth
- *Maxine Lorraine Myers (IM&D);
Junction City
- Richard B. Myers (PVM); Bethel
- *Catherine Ann Nabours (GS); Manhattan
- *Ardis Elaine Nash (IJ); Lyons
- *Leo Gene Neal (GS); Belleville
- *David Findley Neil (ME); Topeka
- *Albert Nathaniel Nelson, Jr. (PVM);
Chicago, Ill.
- *Corrine Blenda Nelson (HE); Marion
- *Ernest Otis Nelson (CE); Scandia
- *John H. Nelson, Jr. (AA); Minneapolis
- *Robert Roy Nelson (ME); Manhattan
- *George Saunders New (Ag); Leavenworth
- *Ada Irene Newell (HE); Stafford
- *Beth Kathleen Newell (HE); Stafford
- C. Eugene Newell (ME); Wellington
- *Grace Kathleen Newell (HE); Stafford
- *William Clare Newlin (ME); Lewis
- *Katherine Jane Newman (IM&D);
Manhattan
- *Stewart ArDesart Newman (EE); Topeka
- Juanita May Nicholas (HE); Manhattan
- *Raymond Thomas Nichols (AA);
Lecompton
- *Sue Jean Nickerson (HE); Bushton
- *Edward Charles Niemann (AA);
Nortonville
- Norman Frederick Niemeier (EE);
Manhattan
- *John William Nolan (IJ); Lillis
- *Reginald Vincent Nollette (BA);
Monument
- *Max Elliott Nordyke (CE); Wichita
- *Lillian Marie Nottorf (IM&D); Abilene
- LaVerne Robert Novak (AA); Herington
- *Grover Pleasant Nutt, Jr. (PE); Waverly
- *Berniece Maelinda Nuttelman (HE);
Great Bend
- *Lela Ruth Nye (HE&N); Manhattan
- *Fayne Higgins Oberst (VM); Conway
- *Lester Francis Oborny (ME); Marion
- *Raymond Levert Ochsner (AE); Tribune
- *Gladys Louise Oerke (HE); Caldwell
- *Fred Ben Ogilvie (VM); Manhattan
- *Vern Hugh Ohler (PVM); Leavenworth
- Gladys Marguerite Oliver (HE); Madison
- *Jessie Ellen Oliver (HE); Maplehill
- *Randall Eugene Oliver (ME); Madison
- *Robert Milton Oliver (PE); Neodesha
- *Richard Olney (VM); Manhattan
- *Dorothy Elizabeth Olsen (MuE); Whiting
- *Norris Dean Olson (Ag); Collyer
- Oscar Myron Olson (BA); Russell
- *Theodore William Olson (ChE); Axtell
- *William James O'Neill (BA&A);
Manhattan
- *Alvin Guy Ontjes (ME); Frederick
- *Athena Maebell Oshay (HE); Olmitz
- *Helen Olive Osthoff (HE); Columbus
- *Paula Marie Osthoff (IC); Clayton
- *Alvin Jesse Otte (AE); Cawker City
- *Carl Francis Pache (GS); Home
- *Oren William Page (Ag); Olathe
- *Fredric Francis Junior Palmer (BA);
Manhattan
- *Frederick Neill Palmer (MI); Manhattan
- *Marjorie Jeanne Palmer (MuE); Abilene
- *Mary Palmer (IJ); Kansas City
- *Thomas Mitsch Palmer (ME); Hope
- *Clair Kern Parcel (Ag); Coldwater
- *Charles Henry Parizo (Ag-1; BA-2);
Manhattan
- *Richard Bordeaux Parker (ChE);
Leavenworth
- *William Homer Parmely (Ag); Le Roy
- Donald Clyde Parr (IJ); Medicine Lodge
- *Harley V. Parr (ME); Topeka
- *Frank Alfred Parrella (GS);
Flushing, N. Y.
- *Virginia Blanche Parsons (HE);
Manhattan
- Frank Elmer Patten (AA); Atwood
- *Leroy Benjamin Patterson (ChE);
Marysville
- *Merle Wayne Patterson (ChE);
Junction City
- *Ruby Juanita Paul (BA&A); Abilene
- *William Vanzile Payne (PE); Manhattan
- *Herman Charles Peak (BA); Manhattan
- *Harry Ash Pearce (ChE-1; GS-2);
Moline
- *Margaret Maude Pearce (GS); Manhattan
- *Leo Dale Peddicord (Ag); Wamego
- *Perry Cushman Peine (CE); Manhattan
- *William Barton Pennington (ME); Topeka

* Matriculated 1940-'41.

FRESHMEN—Continued

- *Clarence Monroe Penticuff (VM);
Kansas City
- *Chester Evan Peters (BA); Valley Falls
- *Donald Eugene Peters (PE); Edson
- *Florence Adelyn Peterson (HE&N);
Kansas City
- *Duane Russell Peterson (Ag); Bridgeport
- *Florence Peterson (GS); Manhattan
- *Harvey Carl Peterson, Jr. (PVM);
Linwood
- *Karl Andrew Peterson (ME); Tonganoxie
- *Kenneth Peterson (Ag); Vesper
- *Lloyd Evan Peterson (ArE); Tescott
- *Loyd Edwin Peterson (ME); Kinsley
- *Nobel Kieth Peterson (GS); Garrison
- *Robert Benton Peugh (ME); Hoisington
- *William Joseph Pfrehn (GS); Moline
- *Charles Richard Philbrick (ChE); Lincoln
- *James William Phillips (CE-1; BA-2);
Cedar Point
- *William Maurice Phillips (Ag); Walton
- *Robert Cooper Pickett (Ag); Manhattan
- Phil E. Pierce (EE); Marion
- *Elizabeth Leota Piper (HE&N); Salina
- *Carl Leonal Pitts (ME); Wellington
- *Donald William Pitts (MI);
Indianapolis, Ind.
- *Ralph Edward Popp (ME); Marion
- Robert Lee Poppenhouse (VM);
Manhattan
- Dean Henry Porter (VM); Mount Hope
- *Edward Brigham Porter (ChE); Iola
- *James Arner Porter (PVM); Fredonia
- John Jefferson Porter (VM); Selma
- *William Charles Porterfield (AA); Topeka
- Edward Charles Potter, Jr. (ME); Oswego
- *Gwenneth Gertrude Praeger (HE); Claflin
- *Mary Theresa Pratt (HE); Hoxie
- *Robert Hugh Pratt (BA); Eskridge
- *Wayne Wilbur Prichard (EE-1; BA-2);
Kansas City
- *Peggy Jean Proffitt (HE); Chase
- Robert Lee Pyles (VM); Kansas City
- *Cleta Margaret Railsback (HE);
Manhattan
- *LeRoy Verne Ramage (EE); Lyons
- *Helen Keller Ramsour (HE); Junction City
- *Mary Catherine Randell (GS-1; HE&N-2);
Marysville
- *William Hays Ransopher (ME-1; IJ-2);
Clyde
- *Walter DeLeon Ratliff (GS); Oskaloosa
- *Olive Grace Read (HE); Topeka
- *Wanda Elinor Rector (MuE); Lincoln
- *William Robert Rector (ME);
Leavenworth
- *Dale Allen Redmond (PE); Topeka
- *Elizabeth Nan Reed (BA); Lyons
- *John Brice Reed (EE-1; GS-2); Larned
- *Luella Elizabeth Reed (HE); Circleville
- *Stewart Dean Reed (ChE-1; BA-2);
Topeka
- *Virginia Ilene Reed (HE&A); Manhattan
- *Robert John Reese (GS-1; ChE-2);
Elmdale
- *Marshall Perry Reeve (VM); Garden City
- *Helen Kathleen Reeves (HE); Everest
- *Patricia Kay Reffer (HE);
New York, N. Y.
- *Eldon Melvin Reichart (Ag); Arrington
- *James Albert Reid (ME); Clyde
- *Esther Louise Reinking (IJ-1; HE&N-2);
Tescott
- *Margaret Mae Reissig (HE-1; IJ-2);
Topeka
- *Loretta Irene Reist (HE&N); Seneca
- *Reuben Charles Repstine (Ag); Cummings
- *Donald Paul Richards (IJ); Manhattan
- *Paul Warren Richardson (EE);
Cawker City
- *Elizabeth Richmond (HE); Mission
- *Jane Rebecca Riddle (HE&A);
Kansas City, Mo.
- *Arley Warren Riffel (ME); Stockton
- *Lydia Jean Rigel (HE) Green
- *Harold Marvin Riley (AA); Holton
- *John Lewis Riling (VM); Lawrence
- *Patrick Warren Riney (ME); Junction City
- *Mary Lou Rinner (HE&N); Topeka
- *Arthur Dana Robb (GS); Topeka
- *Charles Elmer Roberts (EE); Topeka
- *Katherine Cecelia Roberts (HE); Wichita
- *Wilma Harriet Robinson (HE&N);
Nashville
- Merrill Dean Rockhold (VM); Herington
- *Betty Jane Roe (GS); Manhattan
- *John B. Rogers (ArE); Manhattan
- *Maurice Allen Rogers (ME); Osborne
- *Elaine Alvira Rohrer (HE&N-1; GS-2);
Abilene
- *Ned Wilson Rokey (AE-1; Ag-2);
Sabetha
- *Michael Harris Roller (Ag); Circleville
- *Jack James Rollins (ME); Americus
- Hautesse Etoile Rondeau (VM);
Great Bend
- *Victor Kenneth Roper (GS); Barnes
- *Jack Henry Ross (ME); Wellington
- *Carl Ivan Roth (Ag);
Valley Cottage, N. Y.
- *Martin Leonard Roth (PVM);
New York, N. Y.
- *Ernest Willis Rothfelder (GS); Axtell
- *Bernard Henry Rottinghaus
(GS-1; EE-2); Corning
- Almon L. Rowe (Ag); Manhattan
- Joseph Raymond Rowlen (ME); Eskridge
- *Bryan Junior Rowley (ME); Topeka
- *Peter Sturges Ruckman (IJ); Topeka
- *John Harrison Rudolph (ME); Atchison
- *Wayne Leonard Ruppert (IJ); Atchison
- Edwin Francis Rutschmann (EE);
Maplehill
- Robert Ray Rutter (GS); Udall
- *Virginia Ellen Saathoff (IM&D);
Manhattan
- Robert Frank Sager (GS); Manhattan
- Henry Carl Sand (ME); Fort Riley
- Winston N. Sanders (VM); Miller
- *Dallas Adell Sanderson (BA); Hamilton
- *Vernon Kenzo Sato (ME); Kalahio, Hawaii
- *Rebecca Josephine Sauble (HE&N);
Newton
- *Duane Leon Sawhill (ChE); Glasco
- *Dorothy Jean Sawtell (IJ); Junction City
- *John Edward Saylor (Ag); Manhattan
- *Gerald Martin Schadegg (ArE); Eureka
- John Hardig Schafer (AE); Perry
- *Arden Lamont Scheib (ME); Lyons
- *John Livingston Scheleen (ME);
Manhattan
- *Robert Martin Scheloski (PVM);
Kansas City
- *Clarence Edward Schermbeck (Ag);
Leavenworth
- *Billy Eugene Schmidt (ArE); Sedgwick
- *Clarence Lavon Schmidt (ME); Lorraine
- *Joan Fredericka Schmidt (HE); Lyons
- *Jo Ann Schmidt (BA); Junction City
- *Darren Bryce Schneider (EE); St. Francis
- Raymond Clinton Schneider (ArE);
Manhattan
- *Laura Schoeneman (HE); Kingman
- Robert Cooley Schoepel (GS); Hoisington
- *Rose Anne Scholz (HE); Frankfort
- *Paul Henry Schroeder (PE); Lorraine
- *Arthur William Schultz (PVM); Durham

FRESHMEN—Continued

- *Wayne Frederick Schultz (AE); Trousdale
 Billy Gene Schulz (IJ); Greensburg
 Nettie Arlene Schump (GS); Herington
 *Frank August Schwandt (GS); Onaga
 *Joseph Albert Schwartzman (ArE);
 Bronx, N. Y.
 *Kenneth Russell Scoby (Ag); Morrill
 *Melvin Frank Scoby (Ag-1; PVM-2);
 Fairview
 *Dorothy Louise Scollick (HE); Ottawa
 *James Richardson Scott (ME); Manhattan
 *Ridge Lavan Scott (ChE); Kansas City
 *Virginia Lee Scott (GS-1; HE-2); Topeka
 *Wilbur Albright Scott (Ag); Bloom
 Royal Charles Seal (Ag); Wakefield
 John Whitney Sears (BA); Wichita
 *Frances Elaine Seaton (HE&A);
 Kansas City, Mo.
 *Sarah Frances Seaton (HE); Manhattan
 *Chester Orvis Sebert (Ag);
 Kansas City, Mo.
 *Gabe Alfred Sellers, Jr. (EE); Manhattan
 *Jeanne Sellon (ArE); Westfield, N. J.
 *Viola Elizabeth Setter (HE&N);
 Burlington
 *Claude Alfred Seward (GS); Grigston
 *George Wilford Seymour (ChE);
 El Dorado
 *Donald Eugene Shaffer (IA); Wichita
 *Donald Lewis Shaffer (ChE); Kinsley
 Clarence LeRoy Shandy (Ag); Wakefield
 Charles Kenneth Shane (VM); Manhattan
 *Harry Edward Shank (Ag); Bazine
 *Hermine Veta Shapiro (HE); Topeka
 Leo Shapiro (ME); Bronx, N. Y.
 *Carl Junior Shapley (ArE); Wichita
 *James David Sharpe (GS); Council Grove
 *James Herman Shaver (Ag); Goodland
 *Martin Dale Sheldon (ME); Cunningham
 *Roy Lee Sherrell (BA); Lincoln
 *Leo Charles Shoemaker (ME); Pomona
 *Lourie Ione Shoffner (HE); Kipp
 *Allen Baer Shopmaker (PVM);
 Kansas City
 Roy Raymond Shriver (Ag); Gardner
 *Doris Margaret Shull (GS); Kansas City
 *Harlan Reynold Shuyler (Ag); Bethel
 *Clifford Paul Sickles (PE); Winfield
 *Wesley Blaine Sidesinger (ME); Colby
 *LeRoy Oliver Sidfrid (PVM); Topeka
 *Cecil Robert Siebert (AE); Pretty Prairie
 *Virginia Doris Sitterley (IC); Manhattan
 *Leroy Martin Slaybaugh (ArE); Topeka
 *Robert Franklin Sloan (CE); Formoso
 *Betty Ruth Smith (HE&N); Topeka
 *Edward Cox Smith (CE); Fort Riley
 *Ivan Riley Smith (ChE); Emporia
 *Joe Morris Smith (ChE); Neodesha
 *Lloyd Thomas Smith (ME); Great Bend
 *Max A Smith (IJ); Randall
 *Olive Maxine Smith (HE); Kansas City
 *Phil Roger Smith (IC); Manhattan
 Ray Thomas Smith (BA); Fontana
 *Walter Henry Smith (Ag); Shawnee
 *Ruth Elaine Small (IM&D); Wichita
 *Neil Harrison Smull (ArE); Bird City
 *Edwin Snapp (BA); Belleville
 Harvey James Snapp (AA); Belleville
 *Mary Ruth Snell (HE); Summerfield
 *Dorothy May Snyder (HE&A); Hutchinson
 *Warren Clarence Snyder (ME); Topeka
 *Charles James Sobers (GS-1; AA-2);
 Oneida
 *Homer Edward Socolofsky (ChE); Marion
 *Winifred Arlee Soderberg (HE);
 Manhattan
 *Robert Richard Spangler (BA); Belleville
 *Edwin Wilson Spearing (CE); Columbus
 *John William Spencer (Ag); Whiting
 *Carl Lester Sperry (GS); Marysville
 *Nan Louise Sperry (HE&N);
 Overland Park
 *Earl John Splitter (VM); Frederick
 *Marion David Spoelstra (ME);
 Prairie View
 *Fred Calvin Sprague (AA); Lincoln
 *Harold Ellsworth Staadt (ChE); Ottawa
 *Julia Edna Stacey (GS); Longford
 *Laura Alta Stacey (GS); Longford
 *Mary Zoe Stahl (IM&D); Wichita
 *Cletus Francis Stallbaumer (EE);
 Frankfort
 *Margaret Anna Stanley (IJ); Wichita
 *Dale Francis Starr (Ag); Soldier
 *Donald Barnes Starr (IC); Valley Falls
 *Arthur Eugene Stearns (ArE); Kingman
 *Raymond Edward Stein (PE-1; MI-2);
 Miltonvale
 *Charles Frederick Stenzel (GS); Marion
 *Edward George Stenzel (ME); Marion
 *Frank Taylor Stephens (ME); Topeka
 *Howard William Stephenson (GS);
 Clements
 *Leland Lloyd Stephenson (PVM);
 Independence
 *Jay Rex Stevens (ME-1; GS-2); Lincoln
 *Betty Mae Stewart (PE-1; HE-2);
 Eskridge
 Boyd Harold Stewart (ME); Manhattan
 *Dorothy Nevilyn Stewart (IM&D);
 White City
 *Jeral Dean Stewart (SH); Wellington
 *Lester Ellis Stewart (AA); Waterville
 *Stella Mary Stewart (GS); Topeka
 *Melvin Junior Stiefel (Ag); Gypsum
 *Helen Margaret Stinebaugh (HE&N);
 Princeton
 *Delores Adelia Stohs (GS); Junction City
 *Albert Hendrix Stone, Jr. (GS);
 Honolulu, T. H.
 C. Eugene Stone (EE); Emporia
 Kirk Stonebraker (VM); Leavenworth
 Kenneth Paul Storey (Ag); Mulvane
 *Elmer Henry Strathman (PVM); Seueca
 *Mary Carola Stratton (HE&N);
 Celina, Ohio
 *David Foster Strohm (M); Manhattan
 *Helen Floy Strom (IM&D); Dwight
 *Robert Samuel Stuart (ChE); Nickerson
 *Merle Edwin Stubbs (PVM); Sterling
 *Charles Delbert Stumpff (PVM); De Soto
 *Mary Lea Sturgeon (HE); Sterling
 *Virginia Lee Suddarth (GS); Great Bend
 *Betty Jo Sullivan (PE); Manhattan
 *Charles Wayne Sundgren (GS); Hays
 *Marjorie Jane Swan (HE); Manhattan
 *Fay Sophia Swanson (HE&N);
 Sharon Springs
 *Irene Charlotte Swanson (HE); Manhattan
 *Wayne Alvin Tallman (ME); Lewis
 *John Horatio Tasker, Jr. (Ag); Caney
 *Bernard Taub (Ag); Brooklyn, N. Y.
 *James Donald Taylor (BA&A); Kinsley
 James Lewis Taylor (ME); Paola
 *June Leona Taylor (GS); Manhattan
 Thomas Richard Taylor (Ag); Great Bend
 William Allan Taylor (EE); Colby
 Howard Earl Teagarden (ME); Manhattan
 *Wallis Leroy Teeter (EE); McPherson
 *Chester Floyd Templer (ME); Moline
 *Donald Ross Teply (MI-1; BA-2);
 Hanover
 *Verda Rose Tessendorf (HE); Onaga
 William M. Thies, Jr. (VM); Marion

FRESHMEN—Continued

- *Roma Maxine Thom (HE&N); Oakley
 *Emme Louise Thomas (HE); Hartford
 *Glenn Stone Thomas (Ag); Medicine Lodge
 *Foy Nelson Thompson (ME); Harper
 Loren Walter Thompson (GS); Harper
 Sivert Theodore Thompson (AE); Delia
 *Gearld Jack Thouvenelle (IC); Lucas
 *Ralph Lawrence Tichenor (AA); Russell
 John Waldo Tillman (Ag); Topeka
 *Donald Lee Timma (IC); Manhattan
 *Earl August Toburen (ChE); Manhattan
 *Nanette Leeman Todd (GS); Fort Riley
 *Annabelle Toepffer (HE); Manhattan
 *Clovis Mirtell Travis (EE); Luray
 *Otto Henry Trechter, Jr. (ChE); Hoisington
 *Robert Talbot Trotter (ME); Topeka
 *Jack Irvin Truttman (EE); Atchison
 *Gerald Myers Tucker (BA&A); Winfield
 Arthur Nellis Tunison (AA); Olathe
 *Terrence Bazzil Turner (ArE); Colby
 Dean Albert Umberger (ME); Rozel
 *Robert Dewey Underwood (CE-1;
 BA&A-2); St. Marys
 *Gerard Aubrey Unrein (EE); Hays
 *Gordon William Vacura (VM); Kansas City
 *Herbert Donald Vanderlip (MI);
 Manhattan
 *Marjorie Marie Vanecek (M); Omaha, Neb.
 *Ruth Marie VanPetten (HE); Washington
 *Philip Alexander VanWinkle (IJ);
 Manhattan
 *Roberta VanWormer (PE); Osborne
 *Rex Rolland Vass (GS); Glasco
 *Rufus Lloyd Vawter (ME); Coffeyville
 *Don Carlton Vickers (ME); Abilene
 *Harold Benton Vicory (GS); Greenleaf
 *Wallace Dean Vilven (PE); Wamego
 *John Dickinson Vogler (ChE); Herkimer
 *George Dewey Volkel (EE); Lenora
 *Harold Roy Volkman (EE); Lyons
 *George Theodore Volsky (EE);
 Pittsfield, Mass.
 Warren Wakeman (Ag); Wathena
 *Howard Waldene Walker (EE);
 Smith Center
 *Phyllis Margaret Walker (HE); Tecumseh
 *Ray Ronald Walker (PVM); Clyde
 *Roy Harold Walker, Jr. (ME); Manhattan
 *Fay Aleen Wallace (GS); Tecumseh
 *Gene Allison Walters (ChE); Kinsley
 *Kenneth Lyle Walters (AE); Holton
 *Galen Warren Wampler (GS); Minneapolis
 *Doris Louise Wanamaker (IM&D);
 Blue Rapids
 *Robert Rowan Wandt (EE); Norton
 *Wayne Howard Ward (Ag); Elmdale
 *Raymond Edward Warner (EE); Abilene
 *Barbara Ann Washler (IJ); Penaloza
 *Edwin Joseph Wassmer (IC); Garnett
 *Beth Virginia Watt (HE); Harper
 *Edward Lee Weaver (AA); Wichita
 *Kenneth Benjamin Weaver (Ag);
 Mullinville
 *Meredith Earldene Webb (IJ); Neodesha
 *Howard Orville Weber (VM); Kansas City
 *Laymon Weddle, Jr. (Ag); El Monte, Cal.
 *Max Corwin Weeks (AA); Topeka
 *Robert Muzzy Weible (ME); Coffeyville
 *Glenn Arthur Weir (Ag); Hazelton
 *Annette Bertha Weissbeck (HE); Meriden
 Harry Edmond Welch (PE); Marysville
 *Nesis Lacey Welling (IM&D); Paradise
 *Donald Emerson Wells (Ag); Manhattan
 *Dwight Baird Wells (PE); Jewell
 *Rex Irving Wells (EE); Syracuse
 *Vera Louise Wells (BA); Wichita
 *Winfred Jefferson Wells (Ag); Louisburg
 *John Wayne Welty (IC); Hill City
 Charles Maurice Wempe (VM); Seneca
 Leo Ralph Wempe (VM); Frankfort
 *Frank David Werner (EE); Junction City
 *Edith Jean Werts (PE); Smith Center
 *Merrill Harmon Werts (PVM);
 Smith Center
 *Wesley Hargitt Wertz (Ag); Quinter
 Richard Gibson West (PE);
 New Haven, Conn.
 *Donald Duane Westbrook (ArE);
 Lincolnville
 *Frederick Thomas Westhusin (Ag); Codell
 Dorothy Louise White (HE-1; BA-2);
 Greensburg
 *Evelyn Marie White (IM&D); Effingham
 *Frank Leonard White, Jr. (PVM); Delphos
 *Helen Louise White (HE&N); Manhattan
 Leah M. White (HE&A); Topeka
 *Marjorie Loyne White (HE); Soldier
 Wilbur Wellington White (VM); Delphos
 *John Gordon Whiteside (CE); Hutchinson
 *John Carey Whitnah (GS); Manhattan
 Keith Matthew Whitney (PE); Agra
 *Kenneth Clyde Whittier (ME); Muscotah
 *Lothar Clemens Wichmann (ChE);
 McPherson
 *Eugenia Lee Wick (HE&N); Hunter
 *William Keith Wieland (Ag); Stockton
 *Raymond Lee Wilcox (EE); Garnett
 *Alvin Frederick Wilken (ME); Bazine
 Allen Stanley Williams (BA); Alma
 *Bernard Alfred Williams (EE); Geneseo
 *Earl Eugene Williams (PVM); Dodge City
 *Edred Blaine Williams (ChE); Belleville
 *Wendell Hudson Williams (BA); Fredonia
 *Richard Waldron Willis (EE); Sedan
 *Warren Wesley Willis (EE); Kirwin
 Amos Wilson (VM); Manhattan
 *Betty May Wilson (GS); Valley Center
 *Dorothy Lillian Wilson (HE); Lawrence
 *Ethel Josephine Wilson (HE); Quenemo
 *James Allen Wilson (CE); Winfield
 Robert Frazier Wilson (Ag); Quenemo
 *Robert Lee Wilson (ChE); Wellington
 *Robert Raymond Wilson, Jr. (EE);
 Council Grove
 *Edward Nelson Winchester (PVM); Kinsley
 *Leland Stanley Winetroub (ME);
 Leavenworth
 Andrew Clare Winter (ME); Manhattan
 *Harold Rex Winter (BA); Hoisington
 Robert Wayne Winter (PE); Hoisington
 *Romola Ilene Winter (IM&D); Sublette
 *James Richard Winzer (AE-1; Ag-2);
 Leon
 Ellis Rex Wise (AA); Conway Springs
 *Leslie Junior Wise (Ag); Des Moines, Iowa
 *Robert Gray Wissman (VM); Parsons
 *Aletha Adeline Wood (HE); Mayetta
 *Chester Blain Wood (Ag); Trousdale
 Margery Wood (BA); Omaha, Neb.
 *Robert Gordon Wood (Ag);
 Kansas City, Mo.
 *Ernest Emerson Woods, Jr. (BA);
 Kansas City, Mo.
 *Hattie Belle Woods (HE); Manhattan
 *Emily Maurine Woodward (HE&A);
 Manhattan
 *Roger Louis Woolley (PE); Osborne
 *Neal Eugene Worley (SH); Emporia
 *Charles Arthur Worthington (Ag);
 Leocompton
 *Alma Grace Worwag (HE-1; BA-2);
 Sabetha
 Donald Dean Wright (ArE); Abilene
 *Emory Metz Wright (GS); Salina
 Robert James Wright (GS); Manhattan

* Matriculated 1940-'41.

FRESHMEN—*Concluded*

- | | |
|--|---------------------------------------|
| Robert Lewis Wright (Ag); Holton | Louis Clifton Zacharias (ME); Onaga |
| *Donald Schul Wyatt (AE); Minneola | *Michael George Zeleznak (ChE); |
| *Robert Creston Yapp (Ag); Manhattan | Kansas City |
| *Foster William Yeager (MI); Manhattan | *Kenneth Charles Zimmerman, Jr. (VM); |
| *Chester Paul Yenawine (ME); Manhattan | Manhattan |
| *Ellen Margaret Yeo (HE); Manhattan | *John Hubert Zimmerman (ME); |
| *Harold Deane Yokum (PVM); Iola | Manhattan |
| *Hazel Belle York (HE&N); Dunlap | *Thomas James Zouzas (BA); Ellsworth |
| Jack Seymour Young (Ag); Clearwater | |

SPECIAL STUDENTS

- | | |
|---|---|
| *James Vernon Andrews (GS); Manhattan | Daniel Claire Marshall, Jr. (GS); |
| Ellis Keating Boldra (ME); Manhattan | Manhattan |
| Marie Louise Brewer (GS); Great Bend | Dale Martin (Ag); Mount Hope |
| Marvin Lester Chindberg (IA); McPherson | *Alex Molnar (GS); Manhattan |
| *Esther Lea Coberly (GS); Gove | Richard Carl Nethaway (GS); Salina |
| Ellen Doyle Cramer (GS); Gardner | *Edmund Ash Piper (ME); Manhattan |
| John Francis Cramer (GS); Gardner | *Dale LeeRoy Robeson (IA); Summerfield |
| *Charles R. Davies (GS); Manhattan | *LaDean Joyce Sage (GS); Kansas City |
| Margaret Mary DeDonder (GS); | *Doris Yarrow Salter (HE); Wakefield |
| St. Marys | Marjorie Maxine Segrist (GS); Manhattan |
| Augustus R. Douthitt (GS); Winfield | Virginia Lee Sheets (GS); Topeka |
| Rollin Woodrow Dunahugh (GS); | *Alice Carey Silverthorne (HE); Manhattan |
| Manhattan | *Robert Emerson Stewart (IA); Manhattan |
| *Thelma Ratts Franklin (GS); Manhattan | John Frederick Stoskopf (GS); Hoisington |
| Mabyn Belle Fuller (HE); Manhattan | Raymond Edward Streeter (IA); |
| *Lester Lewis Gerlach (GS); Manhattan | Hutchinson |
| Wyndon Vernus Hurlock (IA); St. Francis | Guido von-Mayrhauser (Ag); |
| Roscoe Everett Jenkins (Ag); Manhattan | Kansas City, Mo. |
| Emil William Karl (GS); Detroit | *Alfred Emerson Webb (GS); Manhattan |
| *Florence Rollins Koger (HE); Belvidere | Chase C. Wilson, Jr. (Ag); Mulvane |
| *Fayette Lusk (HE); Butler, Mo. | *Opal Ethel Yeager (HE); Manhattan |
| *Byron Lee McCall (GS); El Dorado | Kenneth W. M. Yoon (GS); |
| *Fred R. McClanahan (GS); Green | Honolulu, T. H. |

SUMMER SCHOOL STUDENTS

Nine-week Summer School

MAY 29 TO JULY 27, 1940

GRADUATE STUDENTS

- Paul Edmond Allison; Lincoln
 Helen Rose Anderson; Thayer
 Hilding A. Anderson; Cleburne
 Howard Julius Anderson; Eureka
 Mae E. Anderson; Concordia
 Arthur Balzer; Whitewater
 Alvin Kornelius Banman; Hillsboro
 Viola Frances Barron; Kensington
 Esther Alba Baxter; Manhattan
 Stella Lucille Beil; Bavaria
 Lawrence Raymond Berg; Manhattan
 Lee Ella Blake; Kansas City
 Neva Charlene Bloomenshine; Mulvane
 Bernard Benjamin Bohren; Manhattan
 Mary Caroline Boyer; Philadelphia, Pa.
 Charles H. Bratt; Nebraska City, Neb.
 Augustin Wilber Breeden; Manhattan
 Gerald James Brown; Manhattan
 Paul W. Brown; Manhattan
 Loma E. Bruner; Bolivar, Mo.
 Edwin George Brychta; Blue Rapids
 Burnill Howard Buikstra; Cawker City
 Edward Erle Buller; Inman
 Billy Boone Bunger; Topeka
 Oran Frank Burns; Norton
 Frank Sherman Burson; Manhattan
 Jean Durand Burt; Manhattan
 Marion John Caldwell; Manhattan
 Marjorie Willis Call; Manhattan
 Bula M. Carlson, Manhattan
 Charles Otis Carter; Morrowville
 Merrill Levern Carter; Wamego
 Margaret Bessie Cassity; Clifton
 Albert Ross Challans; Halstead
 Paul Raymond Chilen; Solomon
 Mildred Louise Christy; Hartford
 Helen Thompson Clark; Valley Center
 Helen Beth Coats; Topeka
 Christine Helen Coleman; Pine Bluff, Ark.
 Zelia S. Coleman; Marshall, Tex.
 Betty Ruth Conley; Cozad, Neb.
 *Orville Wesley Connett; Peoria, Ill.
 Nelle May Cook; Chapman
 Hildred Ann Cooper; Lyons
 *Majel Muriel Coopridier; Wichita
 Muriel Marie Corrigan; Effingham
 Morris S. Cover, Manhattan
 Mabel Coverdill; Emporia
 Golda Mildred Crawford; Manhattan
 Vada Faye Crawford; Little River
 †Minerva Marie Cron; Alamo, Tex.
 Vesla Mae Crouch; Houston, Tex.
 Earl Gilbert Darby; Manhattan
 *Lucile Florence Dauner; Junction City
 Aubrey E. Davidson; Miltonvale
 Lorraine Smith Davis; Manhattan
 Marguerite Rose Davis; Independence
 †George Thomas Dean; Abilene
 John Wesley DeMand; Lincolnville
 Jean Frances DeYoung; Manhattan
 Clifford E. Duncan; St. Francis
 Mary Elizabeth Dunlop; Detroit
 M. W. Dutton; Colby
 Thomas Richard Edgerton; Manhattan
 Florence Elizabeth Edwards; Manhattan
 Karl Drechsel Edwards; Manhattan
 Pauline Elizabeth Eiler; Oberlin
 Maxine Elliott; Wichita
 Ruth Trousdale Ellison; Ogden
 Elbert Lee Eshbaugh; Manhattan
 Elizabeth Katherine Eslinger; Manhattan
 Hurna Isabel Estep; Belvue
 Walter Theodore Federer; Cheyenne, Wyo.
 Mabel L. Foy; Hutchinson
 Virgil George Fulmer; La Harpe
 Betty Lane Gage; Manhattan
 Alice Chapman Gaston; Downs
 Beulah B. Germann; Fairview
 Henry Isely Germann; Oneida
 John R. Gibbens; Dodge City
 Ernest Constance Goforth; Keats
 Amy H. Goldsmith; Manhattan
 Charles M. Good; Plevna
 Mabel Lillian Good; Kensington
 Geraldine Wilhelmina Gosch; Norwich
 Josie Margaret Griffith; Manhattan
 Albert Wendell Grundmann;
 Salt Lake City, Utah
 Virginia Kay Haggart; Topeka
 Albert Alexander Haltom; Benedict
 Florence Marie Hammett; Manhattan
 Romola Kathryn Hammons; Eureka
 Elmer Floyd Hampl; Luray
 John Franklin Hanson; Dwight
 Mary Juanita Haraway; Topeka
 Meade Cecil Charles Harris, Jr.; Topeka
 Lawrence William Hartel; Manhattan
 Wilda M. Hay; Belleville
 Joseph Milo Haynes; Sterling
 Hazel Ruth Heikes; Wakefield
 Marjorie McCall Hemphill; Manhattan
 Raymond Mayme Hilton; Omaha, Neb.
 Virgil Vester Hinds; Manhattan
 Kenneth Bert Hoover; Detroit
 Louis John Horn; Horton
 Hattie Reynolds Howard; Gary, Ind.
 Lloyd D. Hunt; Attica
 Renna Regina Hunter; Topeka
 C. Roy Jaccard; Manhattan
 D. B. Jantz; Marion
 Maggie Lorenc Jeffrey; Elmdale
 Nilar Lebeth Jewel; Kansas City
 Edgar Abner Johnson; Fort Collins, Colo.
 Geneva Johnson; Marysville
 Julian Almon Johnson; Buhler
 Mary Margaret Johnson; Wichita
 Dale V. Jones; Herington
 Gladys Naomi Jones; Kansas City
 Oscar Edward Jones; Kansas City
 Mary Christine Jorgenson; Manhattan
 Mary Margaret Keller; Clyde
 Agnes Clara Kelly; Bucyrus
 Russell Anthony Kern; Junction City
 Glenn Walter Kerr; Rossville
 Marlys King; Attica
 Sophia Theodora Kirkpatrick; Easton
 Glenn Charles Klingman; Chappell, Neb.
 Leo Kobler; Penokee
 Rufus Alexander Koerting; Lincoln, Neb.
 Marvin Koger; State College, N. Mex.
 George Robert Kramer; Mankato
 Earl McKee Kroth; Denison

* Matriculated 1940-'41.

‡ Also pursuing graduate study.

GRADUATE STUDENTS—*Concluded*

- Rosella Frances Kroth; Denison
 Harold Le Roy Kugler; Manhattan
 Sara Louise Lawrence; Wichita
 Edward Lyle Leland; Manhattan
 Dorothy Merle Lerew; Portis
 Maron Jessie Lorimer; Olathe
 Mary Catherine McBride; Leavenworth
 Albert Leon McCauley; Medicine Lodge
 Max Elton McCluggage; Manhattan
 L. E. McCutchen; Kingman
 Frederick Lee McDonald; Horton
 Velma Maysle McGaugh; Garden City
 Helen Ruth McKenzie; Solomon
 Orrin J. Marcy; Hay Springs, Neb.
 Helen Geneva Marshall; Clifton
 Rachel Martens; Manhattan
 Arthur James Mattis; Valley Falls
 Edna Estella Maxwell; Manhattan
 Roy Webster Maze; Alma
 Ella Jane Meiller; Manhattan
 Anna Lora Miller; Salina
 Elsie Lee Miller; Manhattan
 Kenneth William Miller; Manhattan
 Merna Beatrice Miller; Kansas City
 Alice Carol Mitchelson; Baxter Springs
 Signe Irene Monson; Osnabrock; N. Dak.
 Tom Allen Montgomery; Hill City
 Dorothy Jeanne Morris; Winfield
 Eula Frances Morris; Yates Center
 Margery B. Morris; Topeka
 Helen Augusta Mundell; Nickerson
 Kermit Beard Myers; Centralia
 Ben A. Neill; Sharon Springs
 Joe W. Newman; Manhattan
 Dorothy Emma Nichols; McCune
 William Alexander Nixon; Lewis
 Leo Vaughn Nothstine; Mancelona, Mich.
 Lloyd Ollie Nothstine; Caledonia, Mich.
 Harold Nyquist; McPherson
 Bernice Ruth O'Brien; Manhattan
 Dorothy Mae Oldroyd; Arkansas City
 Angela Lillian Oliva; Kensington
 Harry B. Olson; Cuba
 Maxine LaVara Orr; Junction City
 Merton Louis Otto; Manhattan
 John William Paden; Macksville
 Cecil H. Pankratz; Whitewater
 Rosemary Parisa; Lansing
 Claude Kingsford Paul; Fairview
 Ralph Edward Peterson; Manhattan
 Leonard Milton Pike; Goddard
 Helen Louise Pool; Manhattan
 Joseph Curtis Prentice; Manhattan
 Rhoda Putzig; Sylvan Grove
 Constance Elizabeth Rankin; McPherson
 Leonard James Rawson; Wamego
 Addison Doyle Reed; Manhattan
 Viva B. Reed; Sharon
 Harold G. Regier; Hillsboro
 Charles Edward Reitz; Riley
 Leon Merle Reynard; Manhattan
 Harold Duane Richardson; Prairie View
 Stephen James Roberts; Manhattan
 Jayne Glenn Robinson; Houston, Tex.
 Mary Elizabeth Rust; Manhattan
 Steve Ryan; Lillis
 Paul A. Schoonhoven; Manhattan
 William George Schrenk; Manhattan
 Lawrence Curtis Schubert; Hutchinson
 Louis C. Schwanke; Alma
 Eunice Lorena Schweiter; Wichita
 Robert Paul Seidel, Jr.; Morrowville
 M. Gene Shelden; El Dorado
 Willard J. Sherar; Latham
 Rowena Hammons Sherrill; Brownell
 Lee Edward Shirley; Lucas
 Karl G. Shoemaker; Manhattan
 Homer Albert Shoop; St. John
 Mildred Minnie Siek; Hope
 Paul Maurice Simpson; Salina
 Sister Mary Donato Bisette; Concordia
 Sister Benedict Joseph Shorten; Concordia
 *Sister Mary Catherine Floersch; Leavenworth
 *Sister Rose Ellen O'Neil; Leavenworth
 Blaine E. Sites; Salina
 Robert Fred Sloan; Manhattan
 Walter William Smirl; Wilsey
 Edna Marie Smith; Kingman
 Genevieve Margaret Smith; Chicago, Ill.
 Hester S. Smith; Manhattan
 Sylvia Faye Smith; Maplehill
 Mary L. Smull; Manhattan
 Morton Smutz; Manhattan
 W. G. Speer, Jr.; Manhattan
 Annie Margaret Spiker; Manhattan
 Frieda May Steckel; Virgil
 Charlesanna Dorothea Stewart; Hutchinson
 S. Roger Stewart; Manhattan
 J. D. Strickland; Lubbock, Texas
 Hilmar C. Stuart; Garrison
 Charles Raymond Stumbo; Manhattan
 Leroy Franklin Stutzman; Petersburg, Ind.
 Pauline Julia Stutzman; Attica
 John Bennett Sutherland; Burlingame
 Raymond Shields Tanner; St. John
 Robert Edward Tate; Downs
 Harriet Cordelia Taylor; Parsons
 Norma Edith Thompson; Valley Falls
 Thomas Radford Thomson; Alameda, Cal.
 †Harold L. Thuma; Palmer, Alaska
 J. W. Truax; Lyons
 Wilbur V. Unruh; Inman
 Margaret Varns; Ellsworth
 Earl Wagner; Newton
 John Allen Wagoner; Hugoton
 Marie H. Walt; Wellington
 Arthur W. Waltner; Moundridge
 Anne E. Washington; Manhattan
 Orla Virgil Washlor; Palmdale
 Arlene L. Waterson; Dighton
 Winifred Ruth Weaver; Wichita
 Doris E. Whitney; Phillipsburg
 Agnes Mary Wiens; Newton
 Elizabeth Martha Wiggins; Lawrence
 Ernest Sherman Wild; Wilsey
 John Calvin Williams; Kansas City
 C. Peairs Wilson; Manhattan
 Mildred Evelyn Wilson; Great Bend
 †Ralph Ernest Wilson; Paxico
 Edith Mabelle Woods; Kensington
 James Kelly Woods; Burden
 Lloyd Lander Woods; Wichita
 Nellie Harriette Wright; Pine Bluff, Ark.
 Nelson Jones Wright; Wamego
 Helen Iams Wroten; Beattie
 Georgette Helen Zakoura; Osawatomie
 Catherine Eva Zink; Lincoln

* Matriculated 1940-'41.

† Also pursuing graduate study.

UNDERGRADUATE STUDENTS

Clarence Leaman Abell; Oakley
 Harry Thomas Adamson; Clay Center
 M. Kathleen Ahearn; Manhattan
 Eugene Alford; Arkansas City
 Margaret Ellen Alsop; Manhattan
 Christine I. Amthauer; Dwight
 LaVerne Anna Anderson; Clay Center
 Maxine L. Angelo; Miltonvale
 Orven Harry Armstrong; Garden City
 Maude Arnold; Frankfort
 Robert Claude Atkins; Parsons
 Ellita Bernice Atwell; Utica
 Ruth Margaret Aushman; North Topeka
 Gladys Irene Babb; Manhattan
 Mary Ann Bair; Wamego
 Lillian Mae Barker; Louisburg
 L. Kenneth Barnes; Fontana
 Orville Curtis Barnes; Topeka
 L. Florence Bartholow; Coffeyville
 Lafe Bauer, Broughton
 Edwin Howard Beach; Marysville
 Larry Beaumont; El Dorado
 Alma A. L. Becker; Hartford
 William Daniel Beeby; Topeka
 Maurice Wayne Beichley; Longford
 Albert Herman Belz; Afton, Mo.
 Henry A. Bender; Coffeyville
 William Goddard Bensing; Manhattan
 Dorothy May Benson; Marysville
 Denzil Wallace Bergman; Manhattan
 Leo R. Best; Allen
 John Richard Bicknell; Parsons
 Lucy Evelyn Bigelow; Manhattan
 Carroll Gould Blanden; Greeley
 Edna Florence Blaser; Marysville
 Lola Hilda Blaser; Marysville
 David J. Blevins; Manhattan
 Adzianna Mary Blochlinger; Concordia
 Betty Boehm; Kansas City, Mo.
 Ralph A. Boehner; Glen Elder
 Ellis Keating Boldra; Manhattan
 Howard C. Bond; San Leandro, Cal.
 Warren Harvey Boomer; Portis
 William S. Bork; Miltonvale
 Wilma Irene Bottom; Havensville
 Mary Elizabeth Brabb; Alta Vista
 James T. Bradley; Sedan
 Gale E. Breed; Havensville
 Maxine Eleanor Breen; Delphos
 J. Marvin Brokau; Manhattan
 Travis Epps Brooks; Salina
 Arlo Allen Brown; Almena
 Eleanor Kathryn Brown; Wheaton
 Mary Margaret Brown; Wheaton
 Sara Davidson Brown; Manhattan
 Veronica Anne Brown; Wheaton
 Wilma Alene Brown; Mildred
 Virgil Richard Bryan; Navarre
 Allen Eugene Bryant; Agenda
 Joe Bryske; Mankato
 Carroll LaRhue Buck; Welda
 Ben B. Buehler; Bushton
 Rosemary Buser; Baileyville
 Wilma Hortense Cade; Manhattan
 Helen Caldwell; Clifton
 Tarlton Aura Caldwell; Manhattan
 Leslie James Callahan; Manhattan
 A. B. Cameron; Smith Center
 Emma Jean Camp; Bucyrus
 Ruth Pearl Campbell; Lakin
 Rosalie Adaline Cantrell; Manhattan
 Lillie Martin Carleton; Abilene
 Mary Elizabeth Carroll; Axtell
 Marcella Rosina Carter; Morrowville
 Mary Ellen Carter; Morrowville
 Clifford Erle Case; Coldwater
 Lee R. Cashman; Centralia
 Howard Wendell Channell; Kansas City
 Walter Eugene Chappell; Chanute
 William Edward Charlson; Manhattan
 Marjorie Ruth Chase; Beattie
 Helen Meredith Childers; Cawker City
 Jack Kenneth Clark; Manhattan
 Louise Irene Clark; Frankfort
 Margaret Wilma Clark; Manhattan
 Emma Grace Claycamp; Goff
 Ernest Wendell Coates; Woodbine
 Margaret Leslie Collins; Manhattan
 James Dennison Colt; Manhattan
 Margaret Ruth Conner; Corning
 Norma Elizabeth Cook; Monument
 Georgena Maie Coonrod; Barnes
 LaVon Helen Cornelius; Beattie
 Joe Correll; Manhattan
 Lucy Mildred Coulter; Willis
 Susie Lenora Coursey; Brookfield, Mo.
 Agatha N. Crawshaw; Maplehill
 Myrtle Pauline Cress; Manhattan
 Edna M. Dailey; Manhattan
 Edwin Speight Darden; Manhattan
 Robert Darnes; Sublette
 Clara Lou Davis; Manhattan
 Ileene Geneveive Davis; Marysville
 Lail K. Dawley; Manhattan
 Wayne Xavier Deaver; Sabetha
 Helena Gertrude DeCock; Chiles
 Rosalie Mary DeCock; Chiles
 Evelyn Irene Deschner; Beloit
 Lucy Rachel Dickson; Leonardville
 Mary Beatrice Dickson; Washington
 Max R. Diller, Alma
 R. Geraldine Diller; Alma
 Richard Dilley; Topeka
 Donald Leo Dimond; Manhattan
 Jean Berniece Dimsdale; Kansas City
 John Saylor Doak; Olathe
 Thello Clarence Dodd; Linn
 Theodore Orice Dodge; Dighton
 Clara Etta Dodson; Wakefield
 Harold Raymond Domoney; Downs
 Dennis Ralph Donahue; Bonner Springs
 Murlin Stuart Dorei; White Cloud
 Darcy Doryland; Manhattan
 Ruth E. Douglas; Coffeyville
 Edward Merrill Downer; Manhattan
 Joyce Lenore Dryden; Stockton
 Robert Frederick Dundon; Junction City
 Iona Marie Dunlap; Keats
 James J. Dunlop; Detroit
 Walter E. Dwy; Waterbury, Conn.
 Marcella Rose Eagan; Axtell
 John Page Earle; Washington
 Everett James Eastman; Independence
 Carol LaVon Easton; Home
 Velma S. Eberhart; Westmoreland
 Howard Clayton Eberline; Manhattan
 Martha Rosa Eck; Moundridge
 Ileen Evelyn Edmonds; Clay Center
 Ruth Edwards; Junction City
 William Dean Elliott; Elmo
 Leo Austin Ellis; Havensville
 Atha Lucille Emmot; Goff
 Helen Louise Ensign; Garrison
 Alice Rosalind Ettinger; Kirkwood, Mo.
 Kendall Evans; Amarillo, Tex.
 Mary Lou Evert; Republic
 Viola Emma Falk; Alta Vista
 Jean Elaine Falkenrich; Manhattan
 James M. Fallis; Luray
 Rachel Louise Featheringill; Independence
 Elizabeth Anne Ferrier; Seneca
 Helen Virginia Ferrier; Altamont
 Vivian Louise Finley; Hiawatha
 Dean Lewis Fisher; Mankato
 George Howard Fittell; Beloit
 Don Edwin Fleming; Ottawa
 Lynette Herring Fleming; Ozawkie
 Naomi Marie Flentie; Centralia
 Horton Fletcher; Council Grove

UNDERGRADUATE STUDENTS—Continued

- Reed Charles Fleury; Manhattan
 Inus Alice Flinn; Westmoreland
 Thalia Frances Follmer; Buffalo
 Sarah Lovina Fowler; El Dorado
 William Larry Fowler; Wakeeney
 Lorene Margaret Fraser; Concordia
 Phyllis L. Franenfelder; Broughton
 Lawrence Dale Freel; Goff
 George W. French; Augusta
 Evalyn Mae Frick; Larned
 Anne Fry; Morrill
 Mary Woolfolk Frye; Kansas City
 Evelyn Dorothy Fuller; Courtland
 Ethel Mae Funkhouser; Manhattan
 Francis Adolph Gabbert; Corning
 Freddie Joe Galvani; Pittsburg
 Alva Rodell Gardner; Pomona
 Bertram Wallace Gardner, Jr.; Carbondale
 Opal Garlow; Concordia
 Scott Harold Gasche; Hartford
 David Murray Gates; Manhattan
 Selma Geisler; Alma
 Lester Lewis Gerlach; Manhattan
 Luanita Cleo Germann; Fairview
 Lyman Earl Gessell; Manhattan
 Guy Edgar Gibson, Jr.; Kensington
 Selena Maudie Gieber; Linn
 Anna Marie Glenn; Winchester
 James LeRoy Gould; Manhattan
 Marjorie Gould; Manhattan
 Opal Margaret Grace; Cawker City
 Alice Elizabeth Grandfield; Manhattan
 Edna M. Granell; Clay Center
 Maurice Alfred Grant; Scott City
 Julia Louise Green; Iola
 Mary Jean Grentner; Junction City
 Eugenia Louise Grob; Randolph
 Raymond Harry Groth; Bushton
 Emory Allen Groves; Burlingame
 Warren Gerald Grubb; Phillipsburg
 Geraldine Gundy; Manhattan
 Gerald Gurss; Burlingame
 Mildred Joyce Gurtler; Summerfield
 Mary Alice Guy; Longford
 Dorothy Regena Haberthier; Wichita
 Iva Louise Hafenstein; Alma
 † Thomas Benton Haines; Manhattan
 Alvin Floyd Halbrook; Leadington, Mo.
 Donna Ruth Hall; Powhattan
 Hazel Frances Haller; Alma
 Harold John Hamilton; Corning
 Kenneth Blaine Hamlin; Manhattan
 Meda Mae Hampton; Clyde
 Edith Elsie Hanna; Manhattan
 Dora Martha Hannawald; Pratt
 Velma Mae Hanshaw; Morrowville
 Ernest Owen Harris; Havensville
 Genevieve Jean Harris; Havensville
 Sidney Lloyd Harry; Home City
 Wilton Eugene Harry; Home City
 Eleanor June Harsh; Argonia
 Paul Clement Hauber; Kansas City
 Otto Ambrose Hauck; Jackson Heights, N. Y.
 Carl Helm; Chanute
 Sherman Nelson Helm; Abilene
 Georgia W. Hemphill; Clay Center
 Robert Wayne Hentzler; Topeka
 Laura E. Herr; Abilene
 James Sterling Hervey; Belle Plaine
 Jean Heusted; McFarland
 Lawrence Andre Hill; Horton
 Doris Marie Hiser; Manhattan
 Marcella Genevieve Hobbie; Tipton
 H. Virginia Holbert; Manhattan
 Herbert D. Hollinger; Chapman
 Arthur Vernon Holman; Wichita
 Don F. Holshouser; Dwight
 Anna Marie Holtman; Leonardville
 Charles Sherman Holtz; Manhattan
 Julia Janes Hoover; Kansas City
 Marcella Arlidene Horner; Haviland
 Dorothy May Horstick; Richmond
 Alice Ida Hossfeld; Willis
 Clarence B. Hostetler; Harper
 Helen Pansy Hostetter; Manhattan
 Twila P. Howard; Colby
 Dorothy Elizabeth Howat; Wakeeney
 Daniel Frederick Howe; Stockdale
 Agnes Wesley Hoy; Beloit
 Gerald A. Hoyt; Thayer
 Marjorie Janice Huff; Marysville
 Alice Claire Hummel; Kanopolis
 Rebecca Jean Hummel; Kanopolis
 Charles Calvin Hunter; Ottawa
 Estella Hutter; Neodesha
 Verland Thomas Jahnke; Wodbine
 J. Frances James; Manhattan
 Jack Wilton Jeakins; El Dorado
 Jo Ann Jefferson; Garnett
 Helen Janie Jennings; Manhattan
 Ralph V. Jennings; Arnold
 Verna Alice Johnson; Leonardville
 Alvin M. Johnston; Emporia
 Dorothy Marie Johnstone; Wichita
 Betty Jean Jones; Salina
 Jake Roderick Jones; Bradhead, Wis.
 Anna Margaret Jueneman; Hanover
 Virginia Doris Justis; Hollenberg
 Jean M. Kallenberger; Edna
 John Pershing Kane; Rock Creek
 Julia Ellen Karrigan; Bala
 Dorris Mae Kastner; Manhattan
 Doretta Henrietta Katz; Centralia
 Martina Christine Keating; Wheaton
 Neva Lucille Keene; Norton
 Richard McClanahan Keith; Manhattan
 Alma Mary Keller; Bremen
 Lillian Mae Keller; Bremen
 Mary Elizabeth Kelley; Atwood
 James Merlin Kendall; Dwight
 Robert N. Kendall; Manhattan
 Charles Alvin Kennedy; Kansas City
 Keturah Kennedy; Neodesha
 Anna Mae Kern; Hiawatha
 Eleanor Constance Kershner; Paola
 Clara Mae Kiefer; Oak Hill
 Gerald I. Kier; Mankato
 Irma Viola Kietzman; Alta Vista
 Doris Chung Sook Kim; Haina Honokaa, T. H.
 Marjorie Ruth Kimball; Manchester
 Kenneth E. C. Kimbell; Caney
 Anthony Kimmi; Everest
 Leroy King; Hesston
 Leona Eleanor Kjellberg; Vliets
 Austin Foster Klous; Tulia, Texas
 Lyle Herman Knapp; Topeka
 Dorothy May Knus; Neodesha
 Hildegard Charlotte Knopp; Kansas City
 Eleanor Catherine Kohake; Seneca
 Fred Baylis Kohl; Kansas City, Mo.
 Margaret Francis Kohl; Furley
 Laura L. Kubin; McPherson
 Elward E. Kinze; Garrison
 Henry Fred Kupfer; Kansas City, Mo.
 Irene Mary Laceky; Beaumont, Texas
 Joe Lenins Lacey; Hoxie
 Coralee Laming; Tonganoxie
 John Henry Larkins; Burlington
 Carl Ernest Latschar; Manhattan
 Henry S. C. Lau; Arkansas City
 Marjorie Ruth Lee; Manhattan
 Eunice May Lefebure; Havensville
 Gordon Grigsby Lill; Mount Hope
 Lenora Winifred Lilliman; Miltonvale
 Irene Eleanor Limper; Manhattan
 Wendell Hubbard Link; Emporia

† Also pursuing graduate study.

UNDERGRADUATE STUDENTS—Continued

- Elvira Marie Linkugel; Bremen
 Marie Anne Linkugel; Bremen
 Leta Marie Linnville; Chase
 Vera M. Locke; Lebanon
 Dudley Randolph Londeen; Abilene
 Helen M. Loofbourrow; Scandia
 Marian Rebecca Lucas; Hoisington
 William Valgean Lumb; Manhattan
 Lucile Alice Lund; Manhattan
 Arlene Minnie Luthi; Wakefield
 Agnes Lucile McCawley; Hollenberg
 Irene Margaret McCawley; Hollenberg
 Sterling A. McCollum; Manhattan
 Raedine McCulley; La Harpe
 Luella Ann McDonald; Bremen
 Marybelle McDonald; Bremen
 Terrence Eugene McDonald; Kansas City
 John Gerald McEntyre; Topeka
 Marjorie Lucille McGrew; Coffeyville
 Beatrice Cozette McGuire; Morland
 Robert G. McKay; Winfield
 Noel LeRoy McKee; Havensville
 Martha Roseline McKenna; Kingman
 Doris McKinsey; Soldier
 Paul Edwin McManis; Manhattan
 Gerald Orestes McMaster; Eskridge
 John D. McNeal; Boyle
 Helen McVay; Hill City
 Lois Jeanette Mace; Willis
 Al Eugene Makins; Abilene
 Melvin Wayne Marcoux; Havensville
 Ethel Mae Marcy; Fall River
 Hazel Marguerite Marlow; Manhattan
 Shirley H. Marlow; Manhattan
 †Helen Rowena Marshall; Wheaton, Ill.
 H. Eugene Martin; Manhattan
 Marlin W. Martin; Hutchinson
 Norma Elizabeth Martin; Chapman
 Dwight Murray Mason; Manhattan
 V. Evelyn Matson; Miltonvale
 Betty Lou Maupin; Silver Lake
 Lester Lee Mehaffey; Farmington
 Anna Mae Meier; Hanover
 Raymond L. Meisenheimer; Hiawatha
 Gertrude Lucille Mensch; Independence
 Flora K. Merrill; Wathena
 George Hamlin Merrill; Manhattan
 Ralph L. Messer; Lawrence
 David Francis Mickey; Junction City
 Kathryn Louise Millard; Zenda
 Doris Louise Miller; Winfield
 Joan Miller; Milford
 Olive Agnes Miller; Mahaska
 Robert Dunlap Miller; Junction City
 Roger Gray Miller; Kansas City
 Thelma Ferne Miller; Longford
 Helen Geneva Mills; Home
 Eudora Minor; Marshall, Mo.
 Marian Jeanette Moeller; Hiawatha
 Fiona Grace Monaghan; Trousdale
 Virginia Belle Monahan; Leavenworth
 Earl Atlas Moody; Kansas City
 Frieda Faye Moore; Dresden
 Helen Marguerite Moore; Muscotah
 Isabel Moore; Alta Vista
 William Dennis Moran; Weir
 Ruthe Eileen Morrow; Larned
 Marcine Aline Morsch; Clifton
 Alice Sarah Moyer; Centralia
 Alvin Edgar Mulanax; Enterprise
 George Alfred Mullen, Jr.; McCune
 Mary Patti Muller; Manhattan
 Shirley Elizabeth Murphy; Emporia
 Channing Wayne Murray; Manhattan
 Evelyn Victoria Nagel; Wichita
 Harold Francis Neaderhiser; Milford
 Wanda Davidson Neaderhiser; Milford
 James Thomas Neill; Miltonvale
 Ciella Eleanor Nelson; McPherson
 Elva Ann Nelson; Concordia
 Ethel Bell Nelson; Manhattan
 Faye Elizabeth Nelson; Corning
 Janey L. Nelson; Corning
 †Junior A. Nelson; Gypsum
 Robert W. Nelson; Leavenworth
 Lila Ellen Neubauer; Manhattan
 Robert Walter Neve; Enterprise
 Lloyd Edward Newcomer; Russell
 Katherine Jane Newnan; Manhattan
 Evelyn Ney; Dorrance
 Chester Dale Nielson; Manhattan
 Dorothea Marie Nielson; Marysville
 Robert S. Nixon; Virgil
 Beryl Edith Noland; Lenora
 Genevieve Annette Nordell; Clyde
 Ruby Etta North; McCracken
 Mabel Ruth O'Brien; Muscotah
 Dorothy Ruth O'Loughlin; Lakin
 Frances Marie Olsen; Clay Center
 Ruth L. Olsen; Wakefield
 Mary Marie Olson; Dwight
 Tom R. O'Neill; Clifton
 Ruby Marie Opfer; Hanover
 Annabelle Osborn; Soldier
 Leo Benedict Osterhaus; Marysville
 Leonard Ray Ottman; Barnes
 Henry Otto; Manhattan
 Lindell C. Owensby; Manhattan
 Everett Oyster; Paola
 George VanNoy Packer; Manhattan
 Peggy Paddock; Manhattan
 Charles Henry Parizo; Manhattan
 Mary Edwina Parry; Clay Center
 James W. Paustian; Manhattan
 Eleanor Kathleen Pavlich; Axtell
 Neva Esther Payne; Clyde
 Ellen Peak; Manhattan
 Iris Irene Pearce; Oak Hill
 Grace Eva Peck; Dighton
 Lloyd Lyman Peck; Dighton
 Merle Duff Peck; Jewell
 Jessie Adeline Pelham; Spartanburg, S. C.
 James Lindsey Pennington; Manhattan
 Charles Ross Perry; St. George
 Carl Adolph Peterson; Kansas City, Mo.
 Harlan Ralph Phillips; Manhattan
 Will Musil Pishney; Leonardville
 Mavis Lucille Plattner; Sabetha
 Sylvia Beryl Plymire; Beloit
 Lola Evelyn Potter; Wakefield
 Louis Arthur Prcchal; Omaha, Neb.
 Donald Calvin Pricer; Hill City
 Earl Carleton Pugh; Salina
 Alberta Lounell Pullins; Council Grove
 Robert Howard Pyle; Wellington
 Louis Earl Raburn; Manhattan
 Iverne B. Ramsay; Beloit
 Kenneth Willard Randall; Haddam
 Robert B. Rathbone; Manhattan
 Giovanna Jane Reardon; Liberty
 Joseph James Redmond; Lillis
 Nyla Frances Reed; Selden
 Wilbur Bernell Reed; Marysville
 Anna Rose Mary Reilly; St. Marys
 Dale Relihan; Lebanon
 Virgil Frederick Renz; Randolph
 Mildred Theresa Rettele; Seneca
 Melvin Ransom Reust; Frankfort
 Opal Elnora Rhoads; Goodland
 Cleo Carl Rice; Lost Springs
 Corrine Virginia Richard; Miltonvale
 Wallace F. Richardson; Kingman
 Alma Florence Richey; Miltonvale
 Louise Margaret Rieder; Lenexa
 Lola Irene Riggs; Welda
 Blanche Florence Ring; Marysville
 Dorothy Marie Roberts; Glen Elder
 William Bruce Robertson; Barnard

‡ Also pursuing graduate study.

UNDERGRADUATS STUDENTS—*Concluded*

Ralph Raymond Robinson; Wilsey
 Jane Roderick; Manhattan
 Elizabeth Louise Roeder; Seneca
 L. Haroldine Roessler; Medicine Lodge
 Marjorie Jane Rogers; Manhattan
 Violet Rogers; Blue Mound
 Bueford Talmage Roper; Atchison
 Richard S. Roper; Atchison
 Earl William Rose; White Cloud
 Clara Marie Roth; Green
 Helen Elizabeth Roth; Green
 Almon L. Rowe; Manhattan
 George Richard Rugger; Topeka
 Frances Lillian Ruhl; Hiawatha
 Jean Marie Ruscoe; Wakefield
 Monica M. Ryan; Blaine
 Joyce Carmel Sahlberg; Wichita
 Marie Anna Sainer; Bison
 Moutrie Wilbur Salter; Wakefield
 Bonnie Letha Sanders; Lamar
 Alice Mary Santner; Gaylord
 Ruth Elouise Santner; Gaylord
 Ruth Dorine Sare; Republic
 Lorraine Sawyer; Kensington
 Norris E. Sayre; Ensign
 Melvin Eugene Scanlan; Agra
 Kent N. Schaffer; Lucas
 Maude I. Schane; Onaga
 Marguerite Mary Scheier; Manhattan
 Marcine E. Scheurer; Gypsum
 Anna Kathryn Schmitz; Marysville
 Viola Margaret Schooley; Green
 Mary Franciska Schroller; Marysville
 Lola Margaret Schultz; Cawker City
 Ruth Norma Schultz; Cawker City
 Elmer William Schwartz; Hoisington
 David Ralph Scott; Garfield
 Emily Alberta Seaburg; Manhattan
 James Harris Sealey; Pratt
 William Bain Sellers; Winfield
 Freda Elena Seth; Parkerville
 John Victor Sette; Corona, N. Y.
 Margaret Alma Sewing; Kansas City
 Hugh Shade; Rantoul
 Mildred Adele Shannon; Hiawatha
 O. Deborah Sharp; Great Bend
 Rose Ellen Sharp; Riley
 Charles Junior Sheetz; Topeka
 Goldie Mae Sheldon; Corbin
 Dorothy Jane Sherrard; Wellington
 Kenneth Sherrill; Brownell
 Tasker Bryan Sherrill; Republic
 Gladine T. Shirley; Perry
 Joseph C. Short; Topeka
 Francis B. Shoup; Udall
 Luella Velva Siek; Hope
 Geraldine Iva Sigg; Soldier
 Marjorie Elizabeth Simmons; Barnard
 Wilbert Homer Simpson; Bala
 Agnes Shaffer Sims; Waldo
 H. Lyman Singer; Parker
 Ralph Murray Skinner; Topeka
 George Sklar; Manhattan
 Alice Lamborn Sloan; Leavenworth
 Beth Arleen Smith; Bloomington
 Carolyn Elizabeth Smith; Manhattan
 Hattie Alice Smith; Highland
 Phil Roger Smith; Manhattan
 Dan Arnold Snyder; Wilburton
 Francis James Sonntag; Hill City
 Verna Pauline Spellman; Green
 Virginia Delores Spencer; Jefferson City, Mo.
 Melba B. Spiker; Whiting
 Evelyn Ruth Sprecher; Junction City
 Marjorie Jean Spurrier; Kingman
 Harry Earnest Stanfield; Wichita
 Rollin Max Starosta; Pomona
 Genevieve Cecelia Staten; Ogden
 Mary Marguerite Staten; Ogden
 Herbert Dean Stauffer; Grenola
 Richard Blaine Stauffer; Delphos
 Pauline Emma Stein; Miltonvale
 Alice Sterling; Morganville
 John Murry Stevenson; Hutchinson
 Kathleen B. Stewart; Stockton
 Raymond Stewart; Manhattan
 Robert Hilmer Stewart, Jr.; Wellington
 Kenneth Paul Storey; Mulvane
 Althea Hermeria Strasen; Alma
 Joseph Jacob Straub; Wathena
 Mailand Rainey Strunk; Kansas City
 Dorothy May Summers; Manhattan
 R. Lyle Surtees; Wichita
 Irene Charlotte Swanson; Manhattan
 Robert Vernon Swanson; Waterbury, Conn.
 Ava Rice Tanner; St. John
 Lloyd Andrew Taylor; Herington
 Howard Earl Teagarden; Manhattan
 Lloyd C. Teas; Manhattan
 Robert Lansdowne Teeter; McPherson
 Chester Floyd Templer; Moline
 Charles Lloyd Terpening; Morrowville
 Lorene Helen Terpening; Morrowville
 Margaret Anne Thomas; Baxter Springs
 Ruth Anna Thomas; Clay Center
 Daniel Max Thompson; Almena
 Merrill Wayne Thompson; Lebanon
 Henry Albert Thurstin; Chanute
 Mina Fay Tillman; Topeka
 Gwendolyn LaVerne Tinklin; Atchison
 LaVerne Ruth Topliff; Jewell
 Hazel Marie Torgeson; Kelso
 Arthur William Torluemke; Oberlin
 David Salem Totah; Victoria, Tex.
 Monte Monroe Trimble; Kansas City
 Lois Belle Turner; Manhattan
 Donald R. Tutcher; Overbrook
 D. Dean Urquhart; Wamego
 Roberta Viola Vawter; Oakley
 William Wafler; Council Grove
 Keith Wallingford; Manhattan
 Joe Harrison Walser; Manhattan
 Dixon Irving Wands; Manhattan
 Evelyne Elnora Ward; Langdon
 Etta E. Warner; Glasco
 Robert Buchanan Washburn; Manhattan
 Robert Glenn Waters; Junction City
 Allen Nystrom Webb; Manhattan
 Lowell M. Webb; Beverly
 Helen Katherine Weber; Liberty
 Janet C. Wells; Belleville
 Johnnie Edward Wenger; Powhattan
 Roma Mae Wenger; Sabetha
 Donald Hamilton Wetmore; Wichita
 R. Byron White, Jr.; Neodesha
 Vivian Esther White; Delphos
 Howard Elmer Whiteside; Neodesha
 Esther Irene Wiedower; Spearville
 Minnie Mildred Wilkes; Belleville
 Frances M. Wilkins; Chapman
 Margaret Stella Wilkins; Lebanon
 Frances Imogene Willhof; Green
 Charles Homer Williams; Marysville
 Pearl Margaret Williams; Olsburg
 Mary Marjorie Willis; Newton
 Helen Marie Witt; Bison
 Fern Opal Wohler; Barnes
 Lavone Myra Wolf; Manchester
 Donald Roy Wood; Trousdale
 Helen Iona Woodard; Topeka
 Blanche Woodward; Frankfort
 Jean Frances Wright; Manhattan
 Ray Edmond Wright; Osawatomie
 Winnivere Button Wright; Manhattan
 Doris Maxine Yarrow; Clay Center
 DePhayne Aileen Young; Westmoreland
 Nellie Leone Yount; Bazine
 Mildred Margaret Zach; Morrowville
 Edward B. Zahn; Miltonvale
 Joseph B. Zahn; Miltonvale
 Maxine Odell Zimmerman; Belle Plaine
 Susan Luella Zimmerman; Simpson

Four-week Summer School

JULY 1 TO JULY 27, 1940

GRADUATE STUDENTS

Wilbur Leo Alvey; Oxford	Harry Earl Molzen; Attica
Ernest Raymond Ausherman; Topeka	Harold Hawley Munger; Manhattan
Walter Worth Babbit; Baldwin	Lillie Mae Paley; Waco, Tex.
James Lister Baird; Berryton	Edward M. Parrish; Dalton, Mo.
M. C. Barrows; Wakefield	R. Glenn Raines; Mound City
Joseph Oscar Brown; Wakeeney	Willard Malcolm Reid; Monmouth, Ill.
Oren Emery Campbell; Paola	Harry Weber Schaper; Delphos
Marvin Oliver Castle; Holton	Elmer Philip Schrag; Fredonia
Elery Lowe Collins; Chanute	Fred Henry Schultis; Great Bend
Clifford Charles Eustace; Wakefield	Clark Bernard Stephenson; La Harpe
Irving Bennett Hawk; Alma	Warren Edward Stone; Bazine
Norman W. Hildwein; Hanover	George Washington Stricklin; Webster
Travis Berkley Howard; New Madrid, Mo.	*Karolyn M. Wagner; Seattle, Wash.
James Lawrence Jacobson; Horton	Merle Alfred Webb; Parker
J. Willis Jordan; Clifton	Demosthenes White; Wharton, Tex.
Nathan Mossell Lee; Quindaro	Paul Henry Wilson; McCune

AUGUST PERIOD (In Absentia)

Paul R. Chilen; Solomon	George Lee Smith; Prairie View, Tex.
Orrin J. Marcy; Hay Springs, Neb.	

* Matriculated 1940-'41.

Students by States, Foreign Countries and Kansas Counties

STATE

Arkansas	1	Massachusetts	7	Pennsylvania	7
Arizona	1	Michigan	6	Rhode Island	2
California	20	Minnesota	6	South Carolina	1
Colorado	9	Missouri	97	South Dakota	3
Connecticut	8	Montana	1	Tennessee	3
District of Columbia...	3	Nebraska	31	Texas	18
Georgia	2	New Jersey	16	Utah	4
Illinois	21	New Mexico	5	Vermont	2
Indiana	8	New York	44	Virginia	1
Iowa	3	North Carolina	2	Washington	3
Kansas	4,524	North Dakota	2	Wisconsin	5
Kentucky	1	Ohio	5	Wyoming	3
Louisiana	1	Oklahoma	6		
Maryland	2	Oregon	2	Total	4,886

FOREIGN COUNTRIES

Alaska	1	Hawaii	7	Total	16
Canada	1	Palestine	1		
China	2	Puerto Rico	4	Grand total	4,902

KANSAS COUNTIES

Allen	30	Greenwood	31	Pawnee	29
Anderson	26	Hamilton	5	Phillips	19
Atchison	45	Harper	29	Pottawatomie	110
Barber	16	Harvey	43	Pratt	24
Barton	50	Haskell	5	Rawlins	14
Bourbon	12	Hodgeman	6	Reno	97
Brown	67	Jackson	56	Republic	62
Butler	62	Jefferson	39	Rice	73
Chase	26	Jewell	40	Riley	702
Chautauqua	7	Johnson	50	Rooks	24
Cherokee	15	Kearny	10	Rush	14
Cheyenne	12	Kingman	32	Russell	31
Clark	12	Kiowa	15	Saline	86
Clay	75	Labette	44	Scott	6
Cloud	68	Lane	15	Sedgwick	153
Coffey	23	Leavenworth	55	Seward	12
Comanche	15	Lincoln	28	Shawnee	204
Cowley	48	Linn	17	Sheridan	11
Crawford	21	Logan	9	Sherman	14
Decatur	20	Lyon	47	Smith	43
Dickinson	127	McPherson	50	Stafford	30
Doniphan	17	Marion	40	Stanton	3
Douglas	17	Marshall	118	Stevens	4
Edwards	23	Meade	11	Sumner	52
Elk	8	Miami	26	Thomas	26
Ellis	12	Mitchell	34	Trego	7
Ellsworth	27	Montgomery	54	Wabaunsee	69
Finney	13	Morris	47	Wallace	16
Ford	29	Morton	5	Washington	76
Franklin	35	Nemaha	72	Wichita	8
Geary	88	Neosho	31	Wilson	33
Gove	12	Ness	23	Woodson	12
Graham	16	Norton	38	Wyandotte	157
Grant	2	Osage	26		
Gray	3	Osborne	30	Total	4,524
Greeley	5	Ottawa	38		

Record of Enrollment and Degrees Conferred, 1863-1941

YEAR.	Summer school.....	Housekeepers' short course.....	Dairy Mfg. short course.....	Dairy short course.....	Farmers' short course.....	Apprentice.....	Special.....	Preparatory.....	Subfreshman.....	Vocational school.....	Freshman.....	Sophomore.....	Junior.....	Senior.....	Graduate.....	Counted twice.....	Net total.....	Graduated.....	Advanced degrees...
1863-'64								92			14						106		
1864-'65								91			14	8		1			114		
1865-'66								99			21	3	5				127		
1866-'67								118			11	7	1	5			142	5	
1867-'68								103			6	5					115		1
1868-'69								137			10	10	2		1		160		
1869-'70								119			10	12	1				142		
1870-'71								118			13	5	4	5			145	5	5
1871-'72								129			20	11	3	5	2	2	168	3	1
1872-'73																	173	2	1
1873-'74								137			24	14	3	6			184	5	
1874-'75								103			26	10	2	2			143	2	1
1875-'76																	238	5	
1876-'77																	232	9	1
1877-'78								75			42	23	5	5			152	4	
1878-'79								1			89	16	12				214	9	2
1879-'80								1			166	61	35	11	2		276	7	2
1880-'81								6			178	48	24	9	2		267	8	
1881-'82								5			227	50	19	11			312	9	2
1882-'83								4			241	60	30	12			347	12	3
1883-'84								2			255	92	26	18	2		395	17	
1884-'85								2			271	71	36	16	5		401	14	1
1885-'86								1			273	91	35	24	4		428	21	2
1886-'87											303	100	44	24	10		481	21	5
1887-'88											305	92	46	27	2		472	22	1
1888-'89											266	103	41	28	7		445	25	1
1889-'90								1			307	105	63	28	10		514	27	2
1890-'91											343	135	50	53	12		593	52	2
1891-'92											336	139	62	37	10		584	35	
1892-'93											339	110	66	43	29		587	39	9
1893-'94											275	141	72	42	25		555	39	6
1894-'95								5			276	108	89	64	39		572	57	3
1895-'96								3			353	121	67	71	32		647	66	5
1896-'97								6	67		321	163	69	62	46		734	55	8
1897-'98				6		9	15	77			316	174	77	82	57	10	803	69	10
1898-'99			26		35	40	110				306	177	92	65	40	21	871	53	10
1899-1900		24		57	47	50	32	162			376	163	109	69	27	22	1,094	58	3
1900-'01		47		72	109	79	23	318			348	183	80	74	40	52	1,321	60	9
1901-'02		41		66	125	87	19	298			396	206	120	65	32	59	1,396	52	3
1902-'03		63		38	123	78	36	342			471	229	141	86	24	57	1,574	55	
1903-'04		17	51		16	122	72	33	443		403	206	161	114	20	36	1,605	102	1
1904-'05		15	88		24	99	12	30	500		289	198	122	117	26	43	1,462	107	2
1905-'06		18	92		28	118		46	598		373	214	145	110	30	64	1,690	96	4
1906-'07		18	134		23	179		48	144	511	411	269	149	133	24	88	1,937	119	5
1907-'08		29	188		26	173		42	134	528	450	357	202	148	26	82	2,192	116	4
1908-'09		25	168		18	197		42	134	521	491	381	243	171	28	86	2,308	139	12
1909-'10		22	152	4	111	124		87	89	453	456	417	286	170	26	70	2,305	144	2
1910-'11		31	160	9	26	285		107		364	533	412	288	248	34	59	2,407	205	2
1911-'12		94	160			280		85		580	337	461	288	261	44	81	2,523	230	6
1912-'13		282	175	11		289		129		654	444	432	355	268	55	166	2,928	230	4
1913-'14		370	149	12		223		112		658	516	431	324	327	64	159	3,027	283	8
1914-'15		472	127	18		199		120		560	575	368	383	321	48	200	3,089	223	6
1915-'16		536	85	17		207		175		484	605	454	305	401	76	219	3,314	341	18
1916-'17		586	103	14		228		191		422	693	471	378	282	68	279	3,339	197	13
1917-'18		481	84		8	119		135		231	483	349	294	238	36	190	2,406	216	17
1918-'19		519	25	5		160		400		216	810	322	254	201	34	144	2,991	167	7
1919-'20		415	57	3		117		362		224	894	400	297	273	44	167	3,376	260	11
1920-'21		604	30	10		96		278		280	878	602	318	273	42	294	3,395	249	14
1921-'22		820	19	10		59		173		297	931	628	422	296	125	813	3,560	272	28
1922-'23		884	19	8		55		83		220	1004	656	460	401	118	457	3,626	341	31
1923-'24		978	12	7		43		57		167	1160	657	458	413	171	475	3,812	342	43
1924-'25		1120	14	14		55		54		47	1391	679	467	347	185	486	4,031	335	53
1925-'26		947	12	11		41		29			1494	725	512	344	182	384	4,019	341	51

RECORD OF ENROLLMENT AND DEGREES CONFERRED, 1863-1940—CONCLUDED

YEAR.	Summer school.....	Housekeepers' short course.....	Dairy Mfg. short course.....	Dairy short course..	Farmers' short course.....	Apprentice.....	Special.....	Preparatory.....	Subfreshman.....	Vocational school...	Freshman.....	Sophomore.....	Junior.....	Senior.....	Graduate.....	Counted twice....	Net total.....	Graduated.....	Advanced degrees..
1926-'27...	959	.....	18	.....	52	.....	71	.....	19	.....	1311	854	509	411	179	300	4,083	357	77
1927-'28...	966	.....	20	.....	57	.....	88	.....	7	.....	1039	819	584	500	167	418	3,878	428	70
1928-'29...	920	.....	18	.....	51	.....	57	.....	9	.....	1084	743	584	537	197	321	3,879	461	84
1929-'30...	902	.....	13	.....	59	.....	70	.....	9	.....	1128	787	581	554	432	548	3,987	469	91
1930-'31...	995	.....	24	.....	52	.....	50	.....	7	.....	1077	790	605	528	506	589	4,045	424	91
1931-'32...	1059	.....	12	.....	29	.....	54	.....	.....	.....	933	752	633	572	572	688	3,928	486	119
1932-'33...	995	.....	.....	.....	.....	.....	72	.....	.....	.....	666	596	552	590	518	630	3,359	523	118
1933-'34...	655	.....	.....	.....	.....	.....	61	.....	.....	.....	707	558	520	522	327	422	2,928	423	70
1934-'35...	722	.....	.....	.....	.....	.....	52	.....	.....	.....	1081	616	548	557	316	456	3,436	470	52
1935-'36...	989	.....	.....	.....	.....	.....	69	.....	.....	.....	1330	820	660	574	391	572	4,261	478	72
1936-'37...	917	.....	.....	.....	.....	.....	64	.....	.....	.....	1326	947	774	623	440	634	4,457	521	90
1937-'38...	890	.....	.....	.....	.....	.....	67	.....	.....	.....	1297	972	810	787	409	537	4,695	637	92
1938-'39...	911	.....	.....	.....	.....	.....	61	.....	.....	.....	1246	959	864	855	463	559	4,800	720	86
1939-'40...	920	.....	.....	.....	.....	.....	61	.....	.....	.....	1306	958	926	871	490	622	4,910	710	79
1940-'41...	935	.....	.....	.....	.....	.....	40	.....	.....	.....	1284	969	905	900	524	655	4,902	.....	.....

† Figures above this column include neither graduate students in summer session, nor undergraduate students pursuing graduate work.



College Registration 1940-'41

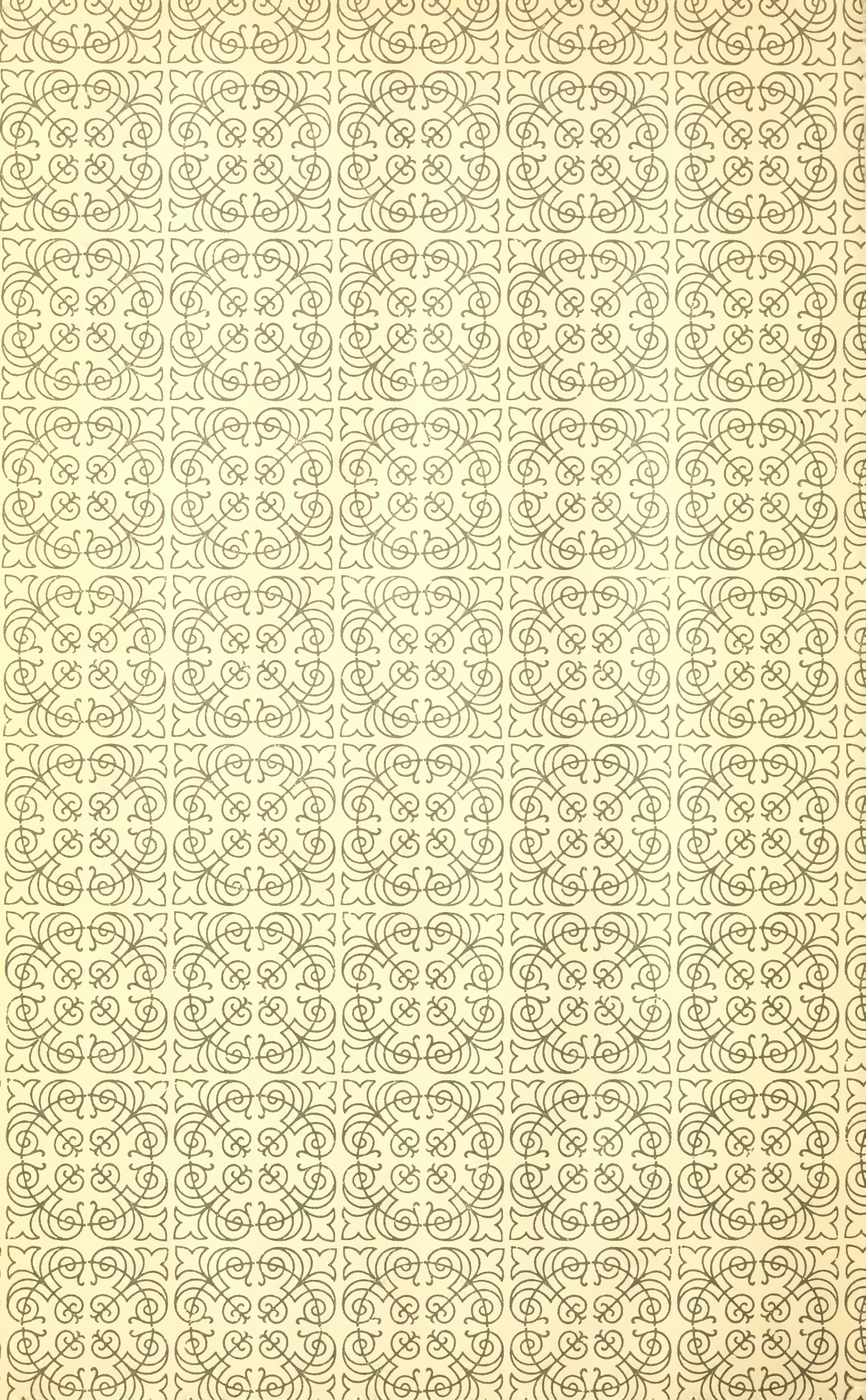
THE DIVISIONS.	Men.	Women.	Total.
The Division of Agriculture	793	4	797
Graduate students.....	59	1	60
Seniors.....	175	1	176
Juniors.....	161	.....	161
Sophomores.....	160	2	162
Freshmen.....	234	.....	234
Special students.....	4	.....	4
The Division of Veterinary Medicine	229	1	230
Seniors.....	61	.....	61
Juniors.....	55	.....	55
Sophomores.....	49	.....	49
Freshmen.....	64	1	65
The Division of General Science	945	393	1,338
Graduate students.....	98	35	133
Seniors.....	163	69	232
Juniors.....	160	92	252
Sophomores.....	192	96	288
Freshmen.....	317	93	410
Special students.....	15	8	23
The Division of Home Economics	915	915	
Graduate students.....	.....	41	41
Seniors.....	.....	187	187
Juniors.....	.....	198	198
Sophomores.....	.....	227	227
Freshmen.....	.....	256	256
Special students.....	.....	6	6
The Division of Engineering and Architecture	1,195	5	1,200
Graduate students.....	50*	.....	50
Seniors.....	246	.....	246
Juniors.....	252	.....	252
Sophomores.....	265	3	268
Freshmen.....	375	2	377
Special students.....	7	.....	7
Totals.....	3,162	1,318	4,480
Counted twice.....	127	33	160
Net totals.....	3,035	1,285	4,320
The Summer Schools (1940)	441	494	935
Totals.....	3,476	1,779	5,255
Counted twice.....	209	144	353
Net grand totals.....	3,267	1,635	4,902
The Division of Graduate Study	327	197	524
Graduate students in regular session.....	160	68	228
Graduate students in summer schools.....	165	138	303
Counted twice.....	45	18	63
Net in summer schools only.....	120	120	240
Graduate students in absentia (included in above figures).....	18	8	26
Undergraduate carrying graduate work.....	47	9	56

Degrees Conferred in the Year 1940

DIVISION AND CURRICULUM (OR MAJOR STUDY).	Men.	Women.	Total.
Division of Agriculture (B. S.)	140	2	142
Agriculture.....	124	2	126
Milling Industry.....	16	.....	16
Division of Engineering and Architecture (B. S.)	160	1	161
Agricultural Engineering.....	10	.....	10
Architecture.....	4	1	5
Architectural Engineering.....	5	.....	5
Chemical Engineering.....	27	.....	27
Civil Engineering.....	39	.....	39
Electrical Engineering.....	35	.....	35
Industrial Arts.....	3	.....	3
Mechanical Engineering.....	37	.....	37
Division of General Science (B. S.)	115	79	194
General Science.....	33	36	69
Business Administration.....	46	12	58
Industrial Chemistry.....	8	2	10
Industrial Journalism.....	15	11	26
Music Education.....	5	11	16
Physical Education.....	8	7	15
Division of Home Economics.....	.....	155	155
Home Economics.....	.....	146	146
Home Economics and Nursing.....	.....	9	9
Division of Veterinary Medicine (D. V. M.)	58	.....	58
Veterinary Medicine.....	58	.....	58
Total of undergraduate degrees.....	473	237	710
Division of Graduate Study (M. S.)	55	24	79
Agricultural Economics.....	4	.....	4
Agricultural Engineering.....	2	.....	2
Agronomy.....	7	.....	7
Animal Husbandry.....	4	.....	4
Applied Mechanics.....	3	.....	3
Art.....	.....	2	2
Bacteriology.....	1	.....	1
Botany and Plant Pathology.....	2	.....	2
Chemistry.....	5	1	6
Chemical Engineering.....	2	.....	2
Child Welfare and Euthenics.....	.....	1	1
Clothing and Textiles.....	.....	6	6
Dairy Husbandry.....	1	.....	1
Economics and Sociology.....	2	.....	2
Education.....	8	.....	8
Electrical Engineering.....	1	.....	1
English.....	.....	2	2
Entomology.....	2	.....	2
Food Economics and Nutrition.....	.....	3	3
General Home Economics.....	.....	2	2
Geology.....	1	.....	1
History and Government.....	.....	1	1
Industrial Arts.....	1	.....	1
Institutional Management.....	.....	4	4
Machine Design.....	1	.....	1
Mathematics.....	2	.....	2
Milling Industry.....	2	.....	2
Public Speaking.....	1	.....	1
Zoology.....	3	2	5
Total of degrees conferred in 1940.....	528	261	789







CONTINUATION

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Alan Winkler
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