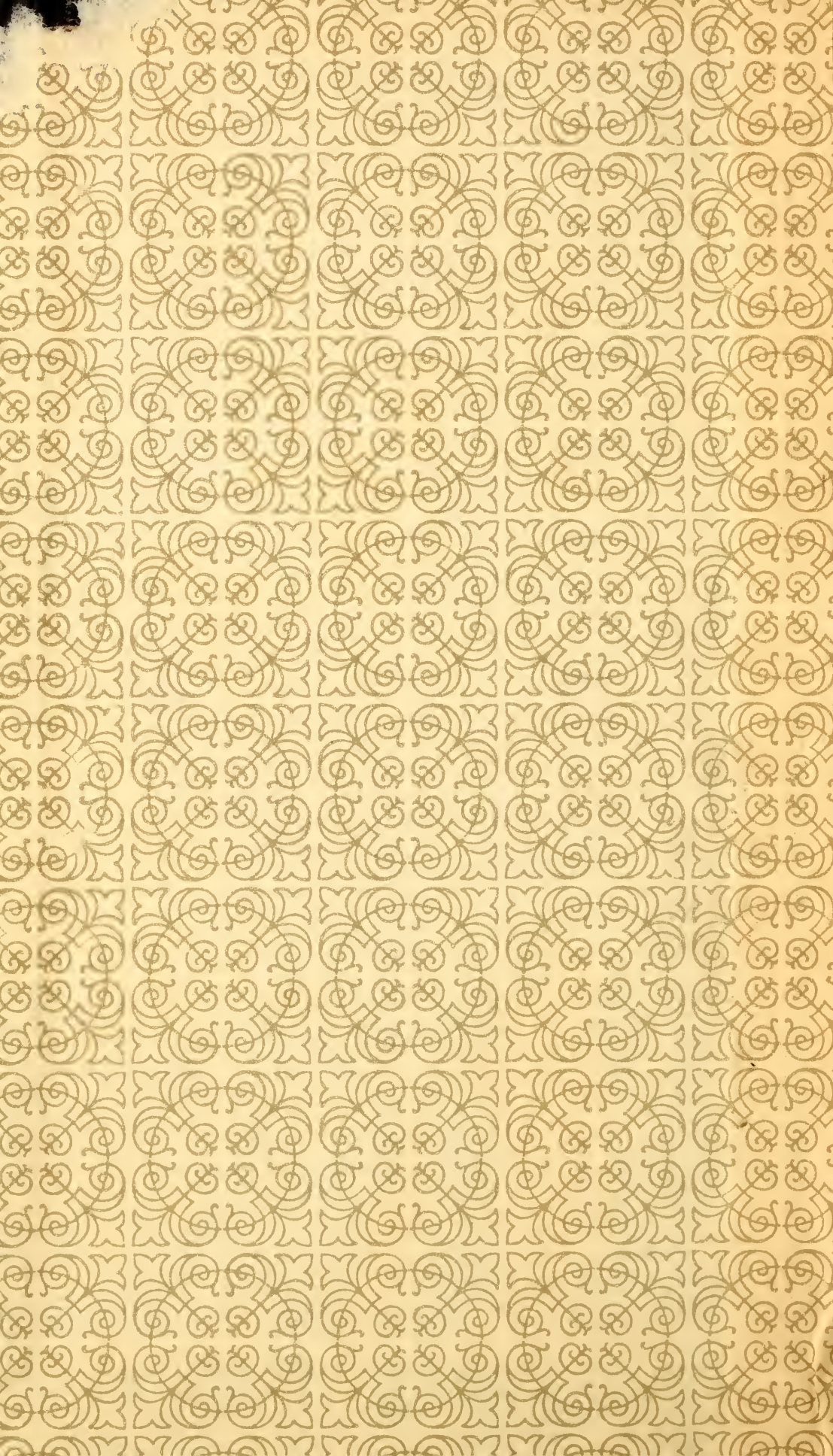

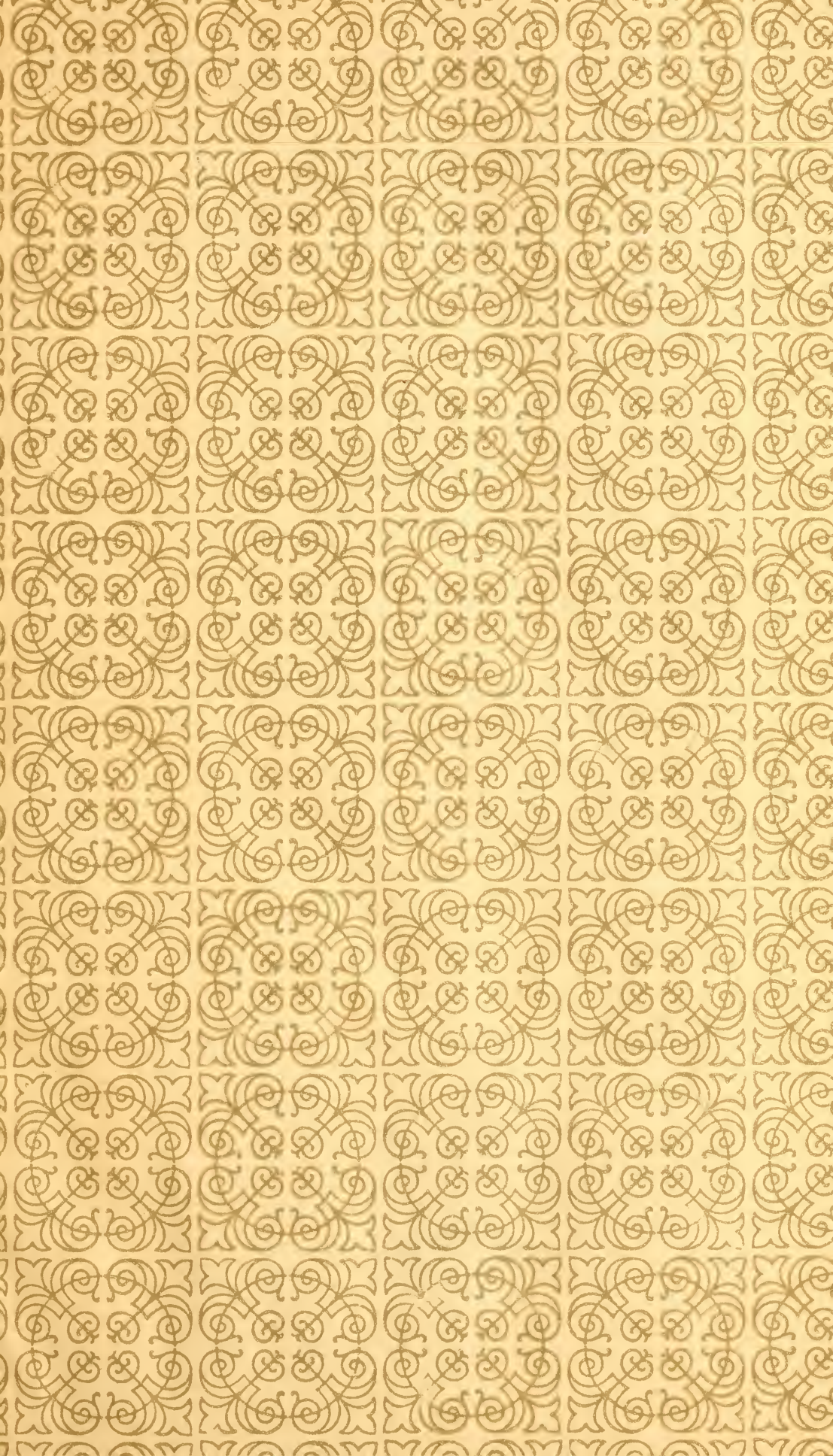

KANSAS STATE COLLEGE BULLETIN

Vol. XXVII July 1, 1943 No. 3

Complete Catalogue Number

Eighteenth Session
1942-1943

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Announcements for Session
of 1943-1944

Kansas State College
of Agriculture and Applied Science
Manhattan, Kansas

Published by the College

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Kansas State College Bulletin

Volume XXVII July 1, 1943 Number 3

Complete Catalogue Number

EIGHTIETH SESSION

1942-1943

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, 1943
19-7528

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Kansas State College Bulletin

Volume XXVII | January 1, 1943 | Number 1

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THE COLLEGE CALENDAR

SUMMER SCHOOL, 1943

May 31 and June 1, Monday and Tuesday.—Registration of students for eight-week and sixteen-week Summer Sessions begins at 7:45 a. m.
May 31, Monday.—Examinations for students deficient in entrance subjects, 8 a. m. to 5 p m.
June 2, Wednesday, to July 27, Tuesday.—First eight-week Summer Session.
June 7 to 12, Monday to Saturday.—4-H Club Round-up.
June 26, Saturday.—Scholarship deficiency reports to students and deans are due.
June 26, Saturday.—Examinations to remove conditions.
July 5, Monday.—Holiday (Independence Day).
July 27, Tuesday.—Eight-week deficiency reports to students and deans are due not later than 6 p. m.
July 28, Wednesday, to September 18, Saturday.—Second eight-week Summer Session.
August 3, Tuesday.—Reports of all grades for first eight-week Summer Session are due in registrar's office.
September 20, Monday.—Scholarship deficiency reports to students and deans are due not later than 6 p. m.
September 25, Saturday.—Reports of all grades for sixteen-week and second eight-week Summer Sessions are due in registrar's office.

FIRST SEMESTER, 1943-1944

September 25, Saturday.—Assigners meet with committee on schedule at 2 p. m. in W 115, and with deans at 3 p. m.
September 27, Monday.—Registration and assignment of freshmen.
September 27 to 29, Monday to Wednesday.—Freshman induction exercises.
September 27, Monday.—Examinations for students deficient in entrance subjects, 8 a. m. to 5 p. m.
September 28 and 29, Tuesday and Wednesday.—Registration and assignment of all students except freshmen.
September 30, Thursday.—Classes meet according to schedule beginning at 8 a. m.
September 30, Thursday.—Opening convocation at 11 a. m.
October 30, Saturday.—Scholarship deficiency reports to students and deans are due.
November 25, Thursday.—Thanksgiving Day, holiday.
November 27, Saturday.—Mid-semester scholarship deficiency reports to students and deans are due.
December 23, 1943, Thursday, at 12 m., to January 1, 1944, Saturday, at 6 p. m.—Christmas vacation.
January 29, Saturday.—First semester closes at 12 m.
January 29, Saturday.—Semester scholarship deficiency reports to students and deans are due not later than 6 p. m.
February 5, Saturday.—Reports of all grades for first semester are due in registrar's office.

SECOND SEMESTER, 1943-1944

January 31 and February 1, Monday and Tuesday.—Registration and assignment of all students.
January 31, Monday.—Examinations for students deficient in entrance subjects, 8 a. m. to 5 p. m.
February 2, Wednesday.—Classes meet according to schedule beginning at 8 a. m.
February 8 to 11, Tuesday to Friday.—Farm and Home Week.
February 16, Wednesday.—Founder's Day. The College was located at Manhattan on February 16, 1863.
February 26, Saturday.—Examinations to remove conditions.
March 4, Saturday.—Scholarship deficiency reports to students and deans are due.
April 1, Saturday.—Mid-semester scholarship deficiency reports to students and deans are due.
April 10, Monday.—Easter Monday, holiday.
May 20, Saturday.—Second semester ends at 12 m.
May 20, Saturday.—Alumni Day. Business meeting at 2 p. m.; banquet at 6 p. m.
May 21, Sunday.—Eighty-first annual Commencement at 8 p. m.
May 22, Monday.—Semester scholarship deficiency reports to students and deans are due not later than 6 p. m.
May 27, Saturday.—Reports of all grades for second semester are due in registrar's office.

SUMMER SCHOOL, 1944

May 29 and 30, Monday and Tuesday.—Registration of students for the eight-week and sixteen-week Summer Sessions begins at 7:45 a. m.
May 29, Monday.—Examinations for students deficient in entrance subjects, 8 a. m. to 5 p. m.
May 31, Wednesday, to July 25, Tuesday.—First eight-week Summer Session.
June 5 to 10, Monday to Saturday.—4-H Club Round-up.
June 24, Saturday.—Examinations to remove conditions.
June 24, Saturday.—Scholarship deficiency reports to students and deans are due.
July 4, Tuesday.—Independence Day, holiday.
July 25, Tuesday.—Eight-week scholarship deficiency reports to students and deans are due.

July 26, Wednesday, to September 16, Saturday.—Second eight-week Summer Session.
August 1, Tuesday.—Reports of all grades for first eight-week Summer Session are due in registrar's office.
September 18, Monday.—Scholarship deficiency reports to students and deans are due.
September 23, Saturday.—Reports of all grades for sixteen-week and second eight-week Summer Sessions are due in registrar's office.

FIRST SEMESTER, 1944-1945

September 23, Saturday.—Assigners meet with committee on schedule at 2 p. m. in W 115, and with deans at 3 p. m.
September 25, Monday.—Registration and assignment of freshmen.
September 25 to 27, Monday to Wednesday.—Freshmen induction exercises.
September 25, Monday.—Examinations for students deficient in entrance subjects, 8 a. m. to 5 p. m.
September 26 and 27, Tuesday and Wednesday.—Registration and assignment of all students except freshmen.
September 28, Thursday.—Classes meet according to schedule beginning at 8 a. m.

REGISTRATION AND ASSIGNMENT SCHEDULES

Nichols Gymnasium

The following tabulation shows the schedule of hours for registration and assignment of students for the college year 1943-'44, arranged according to the initial letters of their last names:

SUMMER SESSIONS 1943

SCHEDULE FOR ALL STUDENTS

Monday, May 31, 1943

Hours	*Initial letters*
7:45 to 8:30 a. m.	Wa-Wi
8:30 to 9:15 a. m.	Wj-Wy, J, N, O
9:15 to 10:00 a. m.	M
10:00 to 10:45 a. m.	I, K, V, Y
12:00 to 12:45 p. m.	Ha-Hol
12:45 to 1:30 p. m.	Hom-Hy, R, X, Z
1:30 to 2:15 p. m.	S
2:15 to 3:00 p. m.	D, O, U

Tuesday, June 1, 1943

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 4:00 p. m.	Special students and any students who failed to report during the period provided for their group.

FIRST SEMESTER

SCHEDULE FOR FRESHMEN STUDENTS

Monday, September 27, 1943

College Auditorium, 7:30 a. m.

General Meeting for All Freshmen

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

SCHEDULE FOR ALL OTHER STUDENTS

Tuesday, September 28, 1943

Hours	*Initial letters*
7:45 to 8:30 a. m.	Ba-Bra
8:30 to 9:15 a. m.	Bre-By, L
9:15 to 10:00 a. m.	C
10:00 to 10:45 a. m.	E, G, Q
12:00 to 12:45 p. m.	A, F
12:45 to 1:30 p. m.	P, T
1:30 to 2:15 p. m.	S
2:15 to 3:00 p. m.	D, O, U

WEDNESDAY, SEPTEMBER 29, 1943

7:45 to 8:30	a. m.	Ha-Hol
8:30 to 9:15	a. m.	Hom-Hy, R, X, Z
9:15 to 10:00	a. m.	M
10:00 to 10:45	a. m.	I, K, V, Y
12:00 to 12:45	p. m.	Wa-Wi
12:45 to 1:30	p. m.	Wj-Wy, J, N
1:30 to 4:00	p. m.	Special students, and any students who failed to report during the period provided for their group.

SECOND SEMESTER

SCHEDULE FOR ALL STUDENTS

MONDAY, JANUARY 31, 1944

Hours		*Initial letters*
7:45 to 8:30	a. m.	Wa-Wi
8:30 to 9:15	a. m.	Wj-Wy, J, N
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 3:00	p. m.	Hom-Hy, R, X, Z

TUESDAY, FEBRUARY 1, 1944

7:45 to 8:30	a. m.	A, F
8:30 to 9:15	a. m.	P, T
9:15 to 10:00	a. m.	C
10:00 to 10:45	a. m.	E, G, Q
12:00 to 12:45	p. m.	Ba-Bra
12:45 to 1:30	p. m.	Bre-By, L
1:30 to 4:00	p. m.	Special students and any students who failed to report during the period provided for their group.

The Board of Regents

Name and address	Term expires December 31
Fred M. Harris, *Chairman,* Ottawa	1944
Drew McLaughlin, Paola	1942
Grover Poole, Manhattan	1942
Mrs. Elizabeth Reigart, Baxter Springs	1942
Willis N. Kelly, Hutchinson	1943
Lester McCoy, Garden City	1944
W. T. Markham, Topeka	1945
Oscar S. Stauffer, Topeka	1945
Mrs. Elizabeth Haughey, Concordia	1945

Hubert Brighton, Topeka, *Secretary of the Board of Regents*
Frank E. Milligan, Topeka, *Business Manager*

Administrative Officers* of the College

President	F. D. Farrell
College Historian	J. T. Willard
Dean of the School of Agriculture, and Director of the Agricultural Experiment Station	L. E. Call
Dean of the School of Engineering and Architecture, and Director of the Engineering Experiment Station	R. A. Seaton
Dean of the School of Arts and Sciences	R. W. Babcock
Dean of the School of Home Economics, and Director of the Bureau of Research in Home Economics	Margaret M. Justin
Dean of the School of Veterinary Medicine	R. R. Dykstra
Dean of the Division of College Extension	H. J. Umberger
Dean of the Graduate School	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
Acting Superintendent of Maintenance	R. F. Gingrich

* Also included in the general alphabetical list.

Officers of Administration, Instruction and Research*

On September 30, 1942

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., 1933. Wathena, Kan.

JAMES EDWARD ACKERT, Dean of Graduate School (1931); Professor of Zoölogy (1913, 1918); Parasitologist, Agricultural Experiment Station (1913).
A. B., University of Illinois, 1909; A. M., ibid., 1911; Ph. D., ibid., 1913. F 101.

JOHN HAROLD ADAMS, Professor of Physical Education (1940); on leave, Sept. 1, 1942.
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); deceased, Dec. 4, 1941.
A. B., Oskaloosa College, 1921. S 102A.

CORAL KERR ALDOUS, Assistant Professor of Child Welfare and Euthenics (1940, 1941).
B. S., Utah State Agricultural College, 1912; M. A., Columbia University, 1940. C 214.

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.

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* 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., Speech)
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.

James Forrest Allen, Instructor in Chemistry (1941).
A. B., Berea College, 1934; M. A., University of Kentucky, 1937. W 212.

James Sircom Allen, Associate Professor of Physics (1939); on leave, Sept. 1, 1942.
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 Alsop, Associate Professor of History and Government (1923, 1941).
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 Edmund Anderson, Instructor in Milling Industry (1932, 1933); Assistant Milling Technologist, Agricultural Experiment Station (1933).
B. S., K. S. C., 1932; M. S., ibid., 1933. E Ag 101A.

Kling Leroy Anderson, Associate Professor of Pasture Improvement (1936; July 1, 1942); Associate Agronomist, Agricultural Experiment Station (1936; July 1, 1942).
B. S., University of California, 1936; M. S., K. S. C., 1938. E Ag 206A.

Mildred Eugene Anderson, Assistant Professor and District Home Demonstration Agent (1941); resigned, Jan. 31, 1942.
B. S., University of Illinois, 1935; M. S., ibid., 1940. EA 101.

Arthur Clinton Andrews, Assistant Professor of Chemistry (1926, 1938); on leave July 1, 1942.
B. S., University of Wisconsin, 1924; M. S., K. S. C., 1929; Ph. D., University of Wisconsin, 1938. W 20.

Edwin Lee Andrick, Capt., Inf., U. S. A.; Assistant Professor of Military Science and Tactics (1941).
B. S., K. S. C., 1931; M. S., K. S. C., 1936. N 102.

Morris Albin Arneson, Graduate Research Assistant in Agronomy (July 1, 1942).
B. S., University of Wisconsin, 1941. Plant Res. Lab. 114.

Leah Ascham, Associate Professor of Food Economics and Nutrition (1926, 1941); Food Economist, Agricultural Experiment Station (1941).
A. B., Ohio Northern University, 1903; B. S., Ohio State University, 1918; Ph. D., Yale University, 1929. C 107A.

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); Swine Specialist, Agricultural Experiment Station (1926).
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 School of Arts and Sciences (1930).
A. B., University of Missouri, 1912; A. M., University of Wisconsin, 1916; Ph. D., ibid., 1924. A 122B.

EDGAR SYDNEY BAGLEY, Assistant Professor of Economics (1940, 1941); on leave July 1, 1942.
B. A., University of Southern California, 1935; M. A., ibid., 1937. W Ag 308.

HARRY CHARLES BAIRD, Assistant Professor of Agricultural Extension; District Agent, Division of College Extension (1920, 1941).
B. S., K. S. C., 1914. EA 101.

CLARENCE POTTER BAKER, Instructor in English (1937, 1940); on leave Sept. 1, 1942.
B. S., Haverford College, 1933; A. M., Harvard University, 1936. A 223.

GLADYS BAKER, Instructor and Head Cataloguer, College Library (1935, 1938).
B. L. S., University of Illinois, 1924. L 202.

AUGUST IRVIN BALZER, Associate Entomologist, Bureau of Entomology and Plant Quarantine, U.S.D.A. (Sept. 1, 1942).
B. S., K. S. C., 1926; M. S., ibid., 1935. 1204 Fremont.

DOROTHY BARFOOT, Professor and Head of Department of Art (1930, 1935).
A. B., State University of Iowa, 1922; A. M., Columbia University, 1928. A 221A.

HAROLD NATHAN BARHAM, Associate Professor of Organic Chemistry (1929, 1932); Industrial Chemist, Agricultural Experiment Station (1938).
A. B., Bethany College, 1921; M. S., Ohio State University, 1922; Ph. D., University of Kansas, 1928. W 23.

MARK ALFRED BARMORE,[1] Chemist, Bureau of Plant Industry, U. S. D. A.; Cereal Chemist, Agricultural Experiment Station (1938, Apr. 15, 1942).
A. B., Whittier College, 1927; M. A., Stanford University, 1929; Ph. D., ibid, 1931. E Ag 102.

JANE WILSON BARNES, 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); Pomologist, Agricultural Experiment Station (1941).
B. S., K. S. C., 1895; M. S., ibid., 1911. D 104.

ELLEN MARGARET BATCHELOR, Assistant in Home Economics, Division of College Extension (1917; July 10, 1942).
B. S., K. S. C., 1911. EA 105.

ARTHUR ESCO BATE, JR., Industrial Research Fellow, Graduate Research Assistant in Chemical Engineering (July 1, 1942).
B. S. in Ch. E., Denver University, 1942. XX 3C.

JAMES CHARLES BATES, Assistant Professor of Botany (1935, 1941).
A. B., University of Kansas, 1927; A. M., ibid., 1934; Ph. D., ibid., 1935. D 204.

LAURA FALKENRICH BAXTER, Associate Professor of Home Economics Education (1927, 1941).
B. S., K. S. C., 1915; M. S., ibid., 1930. G 103A.

MABEL GERTRUDE BAXTER, Continuations Assistant, College Library (1916, 1918).
L 101.

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

Edward Geoffrey Bayfield, Professor and Head of Department of Milling Industry (1939); Cereal Technologist, Agricultural Experiment Station (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); resigned, May 12, 1942.
B. S., K. S. C., 1935; M. S., ibid., 1938. W 31.

H. Ernest Bechtel, Associate Professor of Dairy Husbandry (1939); Associate Dairy Husbandman, Agricultural Experiment Station (1939).
B. S., Pennsylvania State College, 1931; M. S., Michigan State College, 1933; Ph. D., ibid., 1935. W Ag 106.

Glenn Hanse Beck, Assistant Professor of Dairy Husbandry (1936; July 1, 1942); Assistant Dairy Husbandman, Agricultural Experiment Station (1940); on leave October 1, 1941, to June 14, 1942.
B. S., University of Idaho, 1936; M. S., K. S. C., 1938. W Ag 106.

Russell James Beers, Instructor in Chemistry (1935); resigned, May 31, 1942.
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); resigned, June 30, 1942.
B. S., K. S. C., 1932. EA 202B.

Ballard Keller Bennett, Herdsman, Department of Dairy Husbandry (1940); resigned, Sept. 12, 1942.
B. S., Oklahoma Agricultural and Mechanical College, 1938. Dairy Barn.

Alma Maxine Tingle Benedict, Graduate Assistant in Child Welfare and Euthenics (1941).
B. S., Ohio University, 1938. 311 N. Fourteenth.

William Edward Bergmann, (Temporary) Instructor in Architecture (Mar. 3, 1942); resigned August 22, 1942.
B. Arch., University of Minnesota, 1941. E 223.

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, Assistant Professor of Agriculture, Department of Home Study, Division of College Extension (1936, 1941).
B. S., Fort Hays Kansas State College, 1930; M. S., K. S. C., 1936. A 5C.

Charles John Birkeland, Research Assistant in Horticulture (1939, 1941); Assistant Pomologist, Agricultural Experiment Station (1941).
1941); Assistant Pomologist, Agricultural Experiment Station (1941).
B. S., Michigan State College, 1939; M. S., K. S. C., 1941. D 110A.

Herman Albert Biskie, Instructor in Agricultural Economics, Division of College Extension; Fieldman, Farm Management Association No. 4 (Mar. 1, 1942).
B. S., University of Nebraska, 1917. Holton, 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); Assistant Poultry Husbandman, Agricultural Experiment Station (1939).
B. S., University of Illinois, 1937; M. S., State College of Washington, 1940; Ph. D., K. S. C., 1942.

Mary Elsie Border, Assistant Professor in Junior Extension; Assistant State Club Leader, Division of College Extension (1929, 1940).
B. S., Ohio State University, 1926; M. A., Columbia University, 1939. A 111A.

A. Russell Borgmann, Research Assistant in Dairy Husbandry (1941; June 1, 1942).
B. S., Colorado State College, 1941. W Ag 106.

Ruth Therese Botz, Assistant Extension Editor, Division of College Extension (1941).
B. S., University of Wisconsin, 1939. EA 306B.

William Raymond Brackett, Associate Professor of Physics (1919, 1923).
A. B., University of Colorado, 1905. W 318.

James Conger Braddock, (Temporary) Instructor in Zoölogy (Sept. 1, 1942).
A. B., Williams College, 1935; Ph. D., University of Chicago, 1942. F 113.

Lola Mae Bradshaw-Gibson, Assistant to the Dean, Division of College Extension (1941); resigned, Nov. 30, 1941.
A 109.

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); resigned, Aug. 31, 1942.
B. S. in C. E., University of Nebraska, 1927; M. S., K. S. C., 1933. E 209.

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.

Gerald James Brown, Instructor in Agricultural Economics, Division of College Extension (1936, 1939); Fieldman, Farm Management Association No. 2 (1936, 1941).
B. S., K. S. C., 1936. Hutchinson, Kan.

Hale H. Brown,[4] Instructor in Vocational Education (1937); on leave.
B. S., K. S. C., 1928; M. S., ibid., 1937. G 103B.

Mary Viola Brown, Laboratory Technician, Department of Student Health (1936); on leave, July 1 to July 12, 1942.
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.

Joseph Junior Bryske, Industrial Research Fellow, Graduate Research Assistant in Chemistry (1941; Sept. 1, 1942).
B. S., K. S. C., 1941. W 121.

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

Harry Ray Bryson, Associate Professor of Entomology (1924; July 1, 1942); Associate Entomologist, Agricultural Experiment Station (1924; July 1, 1942).
B. S., K. S. C., 1917; M. S., ibid., 1924. F 204.

Dorothy G. Buechel, Head Dispensary Nurse, Department of Student Health (1940).
R. N., Wesley Hospital, 1936. A 217.

Burnill Howard Buikstra, (Temporary) Instructor in Mathematics (1940); resigned, May 31, 1942.
B. S., K. S. C., 1933; M. S., ibid., 1941. 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.

Linus H. Burton, (Temporary) Instructor in Landscape Gardening, Division of College Extension (1941).
B. S., K. S. C., 1939. EA 202.

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, Associate Professor of Geology and Paleontology (1930, 1941); on leave, Sept. 1, 1942.
B. S., University of Chicago, 1927; Ph. D., ibid., 1940.

Marion John Caldwell, Instructor in Chemistry (1932, 1934).
B. S., K. S. C., 1931; M. S., ibid., 1933. W 212.

Leland Everett Call, Dean of School 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, Assistant Professor and Head of Circulation Department, College Library (1927).
A. B., Eureka College, 1912; B. L. S., University of Illinois, 1924. L.

James Kirker Campbell, Col., Inf., U. S. A.; Professor of Military Science and Tactics (1937, 1941).
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, Instructor in Agricultural Engineering (Oct. 1, 1941).
B. S., K. S. C., 1938. E 217.

Walter William Carlson, Professor and Head of Department of Shop Practice (1912, 1917); Industrial Engineer, Engineering Experiment Station (1913).
B. S., K. S. C., 1908; M. E., ibid., 1916. S 211.

WILLIAM WHITE CARVER, (Temporary) Instructor in Architecture (Sept. 1, 1942).
B. Arch., Cornell University, 1936. E 223.

RALPH BOYD CATHCART, Assistant Professor of Animal Husbandry (1935, 1937); Animal Husbandman, Agricultural Experiment Station (1936); on leave, July 1, 1942.
B. S., K. S. C., 1933; M. S., University of Nebraska, 1934. E Ag 6A.

WILBUR JOHN CAULFIELD, Associate Professor of Dairy Husbandry (1927, 1940); Assistant Dairy Husbandman, Agricultural Experiment Station (1927).
B. S., University of Minnesota, 1924; M. S., Pennsylvania State College, 1926. W Ag 107.

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); resigned, Aug. 15, 1942.
B. S., K. S. C., 1932. EA 306B.

JOSEPH RUDOLPH CHELIKOWSKY, Assistant Professor of Geology (1937; July 1, 1942).
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); Agronomist, Agricultural Experiment Station (1939).
B. S., K. S. C., 1914; M. S., ibid., 1934. E Ag 201A.

PEARL JEANNETTE CLARK, Postmistress (1940; July 1, 1942).
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, 1940).
B. S., K. S. C., 1931. N 109.

MAYNARD HENRY COE, Professor and State Club Leader, Division of College Extension (1922, 1927).
B. S., University of Minnesota, 1917. A 111B.

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.

DORIS COMPTON, Extension Specialist in Recreation (1937, 1941).
B. S., Northwestern University, 1937, A. M., University of Southern California, 1941. EA 101B.

LAURENCE LARUE COMPTON, Associate Professor of Soils, Division of College Extension (1930, 1941).
B. S., K. S. C., 1930; M. S., ibid., 1940. EA 202B.

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1. In coöperation with the U. S. Department of Agriculture.
2. In coöperation with the Kansas State Highway Department.

Leon D. Conkling, (Temporary) Instructor in Civil Engineering (Sept. 1, 1942).
C. E., Cornell University, 1900. E 220.

Robert Warren Conover, Professor of English (1915, 1920).
A. B., Wesleyan University, 1911; A. M., ibid., 1914. K 203.

Elizabeth La Rue Conrad, (Temporary) Instructor in Chemistry (Sept. 1, 1942).
B. A., Carleton College, 1931; M. A., Smith College, 1933; Ph. D., State University of Iowa, 1935. W 310.

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, 1940).
B. S., K. S. C., 1925; M. S., ibid., 1932. EA 201.

Lloyd Marion Copenhafer, Assistant Professor of Landscape Gardening, Division of College Extension (1938, 1940); on leave.
B. S., K. S. C., 1933; M. S., ibid., 1936. EA 202.

Esther Margaret Cormany, Associate Professor of Clothing and Textiles (1936, 1941).
B. S., K. S. C., 1926; M. S., ibid., 1932. C 219.

Charles Meclain Correll, Professor of History and Government (1922, 1934).
B. S., K. S. C., 1900; Ph. B., University of Chicago, 1907; Ph. M., ibid., 1908. F 211.

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 (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); Sheep Specialist, Agricultural Experiment Station (1930).
B. S., Oklahoma Agricultural and Mechanical College, 1923; M. S., Iowa State College, 1925. E Ag 8A.

William Wesley Crawford, Associate Professor of Civil Engineering (1923; Jan. 1, 1942).
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.

Wilma Hilt Crawford, (Temporary) Instructor in Physics (Feb. 12, 1942).
B. S., University of Nebraska, 1932; M. S., K. S. C., 1937. W 201.

Cornelia Williams Crittenden, Associate Professor of Modern Languages (1926, 1929).
A. B., University of Nebraska, 1918; A. M., ibid., 1926. A 224.

Don Elbert Crumbaker, Assistant in Agronomy, Bindweed Experiment Field (Feb. 1, 1942).
B. S., K. S. C., 1941. Canton, Kan.

3. In coöperation with the Kansas Agricultural Experiment Station.

John Clayton Crupper, Jr., Forest Nurseryman, Fort Hays Branch Agricultural Experiment Station (1940); resigned, July 31, 1942.
B. S., Colorado State College, 1939. Hays, Kan.

Martha Rebecca Cullipher, Instructor and Assistant Reference Librarian (1928, 1941).
A. B., Indiana University, 1926; B. S. in L. S., University of Illinois, 1928; M. S., Columbia University, 1939. L 201.

Earl Gilbert Darby, Instructor in Shop Practice (1941).
B. S., K. S. C., 1923. S 108B.

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, School of Veterinary Medicine (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.

Charles DeForest Davis, Associate Professor of Farm Crops (1921, 1939); Associate Agronomist, Agricultural Experiment Station (1939).
B. S., K. S. C., 1921; M. S., ibid., 1926. E Ag 305A.

Elizabeth Hamilton Davis, Assistant Professor and 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 and Head of Department of English (1913, 1921).
A. B., Indiana University, 1909; A. M., Columbia University, 1913. K 204A.

Wilmer Esla Davis, Professor of Plant Physiology (1909, 1927); deceased, Jan. 17, 1942.
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); on leave, Sept. 19, 1942, to June 30, 1943.
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.

Thomas Dean, Herdsman, Department of Animal Husbandry (1931).

Samuel Wesley Decker, Associate Professor of Horticulture (1937); Olericulturist and Florist, Agricultural Experiment Station (1941).
B. S., K. S. C., 1924; M. S., University of Illinois, 1927. D 12.

Robert Courtland Dennison, Radio Operator, Division of College Extension (1941).
EA 306B.

2. In coöperation with the Kansas State Highway Department.

Grace Emily Derby, Associate Professor and Associate Librarian, College Library (1911, 1918).
A. B., Western College for Women, 1905. L 205.

Edward Robert DeZurko, Instructor in Architecture (Sept. 1, 1942).
B. S. in Ed., University of Illinois, 1939; B. S. in Arch., ibid., 1940; M. S. in Arch., Columbia University, 1942. E 223.

Rose Geraldine Diller, Class Reserves Assistant in Library (1938); resigned, Aug. 31, 1942.
L 1.

Paul Lawrence Dittemore, Editor, Agricultural Experiment Station (1939; July 1, 1942); Assistant Professor of Journalism (1939; July 1, 1942).
B. S., K. S. C., 1932. E Ag 105.

Raymond Joseph Doll, Assistant Professor of Agricultural Economics (1935; Oct. 1, 1941); Farm Management, Agricultural Experiment Station (1935); on leave August 1, 1942.
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); resigned, Jan. 24, 1942.
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; Ph. D., State University of Iowa, 1942. M 105.

Lester Henry Drayer, Chief Engineer, Heat and Power Department (1916, 1927).
PP 105.

Donald Pendleton Duncan, Instructor in Forestry, Department of Horticulture (1941); State Forester (1941); Forester, Agricultural Experiment Station (1941); resigned, June 30, 1942.
B. S. F., University of Michigan, 1937; M. S., ibid., 1939. D 110A.

Merrill Augustus Durland, Professor of Machine Design (1919, 1928); Assistant Dean, School 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 School of Veterinary Medicine (1919); Professor of Surgery (1911, 1913); Veterinarian, Agricultural Experiment Station (1919).
D. V. M., Iowa State College, 1905. V 105.

Robert Phillip Ealy, Graduate Assistant in Horticulture (1941); on leave Sept. 1, 1942.
B. S., Oklahoma Agricultural and Mechanical College, 1941. D 110 A.

Hal Field Eier, Instructor in Agricultural Engineering, Division of College Extension (1934, 1935); resigned, June 15, 1942.
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.

VERA MAY ELLITHORPE, Assistant Professor of Home Management, Division of College Extension (1939; July 1, 1942).
B. S., K. S. C., 1935; M. S., ibid., 1939. EA 101B.

OTTO HERMAN ELMER, Associate Professor of Botany (1927, 1937); Associate Plant Pathologist, Agricultural Experiment Station (1927).
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 (1940).
B. S. in C. E., University of Wisconsin, 1937. E 117.

ANDREW BRIAN ERHART, Assistant in Agronomy in charge of the Southwest Kansas Experiment Fields (1934, 1936).
B. S., K. S. C., 1933. Meade, Kan.

THOMAS MARION EVANS, Instructor in Physical Education and Athletics (Sept. 1, 1942).
B. S., K. S. C., 1930; M. S., University of Michigan, 1941. N 107.

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.

GUSTAVE EDMUND FAIRBANKS, First Lt., C. A. C., Res., U. S. A.; Assistant Professor of Military Science and Tactics (1941).
B. S., K. S. C., 1941. N 102.

WILLIAM LAWRENCE FAITH, Professor and Head of Department of Chemical Engineering (1933, 1939); Chemical Engineer, Agricultural Experiment Station (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); Pathologist, Agricultural Experiment Station (1929).
D. V. M., K. S. C., 1926; M. S., ibid., 1934. Vet. Research Lab.

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, Assistant Professor in Home Furnishings, Division of College Extension (1939, 1941).
B. S., Oklahoma Agricultural and Mechanical College, 1933; M. S., ibid., 1936. EA 101B.

FRANK DAVID FAULKNER, (Temporary) Instructor in Mathematics (1940); resigned, May 31, 1942.
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, Instructor in Mechanical Engineering (1939, 1941); resigned, Jan. 27, 1942.
B. S., University of Illinois, 1938. E 104.

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.

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1. In coöperation with the U. S. Department of Agriculture.
3. In coöperation with the Kansas Agricultural Experiment Station.

FREDERICK CHARLES FENTON, Professor and Head of Department of Agricultural Engineering (1928); Agricultural Engineer, Agricultural Experiment Station (1929).
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.

GEORGE ALBERT FILINGER, Associate Professor of Pomology (1931, 1937); Associate Pomologist, Agricultural Experiment Station (1931, 1941).
B. S., K. S. C., 1924; M. S., ibid., 1925; Ph. D., Ohio State University, 1931. D 107.

KARL FREDERICK FINNEY,[1] Associate Chemist, 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.

WILLIAM DAVID FITCH, Instructor in Music (1941); resigned May 31, 1942.
B. S. in Mus. Ed., K. S. C., 1935. M 105.

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); Clothing and Textiles, Agricultural Experiment Station (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, Maj., C. A. C., Res., U. S. A., Assistant Professor of Mechanical Engineering (1929, 1934); on leave. Assistant Professor of Military Science and Tactics (1940).
B. S., K. S. C., 1929; M. S., ibid., 1933; M. S., M. I. T., 1937. N 102.

EUSTACE VIVIAN FLOYD, Professor of Physics (1911, 1921).
B. S., Earlham College, 1903. W 204.

VERNON DANIEL FOLTZ, Associate Professor of Bacteriology (1927, 1941); 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.

ERIC BEAUMONT FOWLER, Graduate Research Assistant, Agricultural Experiment Station (Aug. 26, 1942).
B. S., K. S. C., 1942. E Ag 204A.

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.

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); Assistant Plant Physiologist, Agricultural Experiment Station (1936).
A. B., DePauw University, 1925; A. M., University of Nebraska, 1926; Ph. D., University of Chicago, 1939. D 103.

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

EDWIN JACOB FRICK, Professor of Medicine (1919, 1926); Head of Department of Surgery and Medicine (1935).
D. V. M., Cornell University, 1918. VH 203.

ROY FRED FRITZ, Assistant Entomologist, Agricultural Experiment Station (1939); resigned, June 15, 1942.
B. S., K. S. C., 1937; M. S., ibid., 1939. Garden City, Kan.

HAROLD FRY, Instructor in Machine Design (1940); resigned, July 6, 1942.
B. S. in E. E., Colorado State College, 1937. S 201A.

JOSEPH FRY, Instructor in Machine Design (Sept. 1, 1942).
B. S., Colorado State College, 1933. S 201A.

HOLLY CLAIR FRYER, Associate Professor of Mathematics (1940; July 1, 1942); Statistician, Agricultural Experiment Station (July 1, 1942).
B. S., University of Oregon, 1931; M. S., Oregon State College, 1933; Ph. D., Iowa State College, 1940. X 117.

MANFORD W. FURR, Professor of Civil Engineering (1917, 1927); deceased, Nov. 16, 1941.
B. S., Purdue University, 1913; C. E., ibid., 1925; M. S., K. S. C., 1926. E 122.

PERCY LEIGH GAINEY, 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); on leave, Sept. 1, 1942.
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); Taxonomist and Ecologist, Agricultural Experiment Station (1919).
A. B., University of Illinois, 1910; Ph. D., University of Michigan, 1912. D 301A.

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

MOLLY GEDDES, Technician in Food Economics and Nutrition (Oct. 1, 1941); resigned, Aug. 31, 1942.
B. S., University of Minnesota, 1941. C 11.

OSCAR STRAND GELLEIN Instructor in Economics (1939, 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.

FREDERICK L. GERKE, (temporary) Instructor in Civil Engineering (Oct. 1, 1941); resigned, May 31, 1942.
B. S., Iowa State College, 1936. E 124.

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.

2. In coöperation with the Kansas State Highway Department.

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.

Lester Odell Gilmore, Associate Professor of Dairy Husbandry, Division of College Extension (1939); resigned, Sept. 25, 1942.
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); Acting Superintendent of Maintenance (1933; July 1, 1942).
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); resigned, Mar. 10, 1942.
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.

Arthur Leonard Goodrich, Jr., Associate Professor of Zoölogy (1929; July 1, 1942).
B. S., College of Idaho, 1928; M. S., University of Idaho, 1929; Ph. D., Cornell University, 1938. F 303.

Mary Graham, (Temporary) Instructor and Assistant Cataloguer, College Library (Sept. 8, 1942).
A. B., Tarkio College, 1933; B. S. in L. S., University of Illinois, 1942. L 202.

Clarence Owen Grandfield,[1] Associate Agronomist, U. S. D. A.; Forage Crops, Agricultural Experiment Station (1927).
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, Assocate Professor of Chemical Engineering (1937, 1941); Industrial Utilization of Farm Products, Agricultural Experiment Station (1939); on leave, June 1, 1942.
B. S., University of Washington, 1926; M. S., Carnegie Institute of Technology, 1927; Ph. D., University of Pittsburgh, 1930. XX 105B.

Tom Greer, Herdsman, Department of Animal Husbandry (1917).

Wilbert Greer, Superintendent of Poultry Farm (Mar. 11, 1942).
B. S., K. S. C., 1941. Poultry Farm.

Paul Wilson Griffith, Instructor in Agricultural Economics, Division of College Extension; Fieldman, Farm Management Association No. 1 (1935, 1941).
B. S., K. S. C., 1934. Clay Center, Kan.

Waldo Ernest Grimes, Professor and Head of Department of Economics and Sociology; Agricultural Economics, Agricultural Experiment Station (1913, 1936).
B. S., K. S. C., 1913; Ph. D., University of Wisconsin, 1923. W Ag 311A.

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.

Myrtle Annice Gunselman, Associate Professor of Household Economics (1926, 1937); Household Economist, Agricultural Experiment Station (1935).
B. S., K. S. C., 1919; A. M., University of Chicago, 1926. T 204.

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

PAUL N. GUSTAFSON, Instructor in Applied Mechanics (1940, 1941); resigned, Aug. 12, 1942.
B. C. E., Ohio University, 1940. E 117.

HOWARD JAMES HAAS,[1] Junior Agronomist, Division of Dry-land Agriculture, U. S. D. A. (1937); resigned, July 16, 1942.
B. S., K. S. C., 1936. Garden City, Kan.

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, 1933); Physical Chemical Investigations in Meat, Agricultural Experiment Station (1937).
B. S., University of Illinois, 1919; M. S., ibid., 1921; Ph. D., ibid., 1922. W 205.

LAWRENCE FENER HALL, Associate Professor of Vocational Education (1929, 1941).
B. S., K. S. C., 1923; M. S., ibid., 1927. G 103B.

MINA G. HALL, (Temporary) Instructor in Chemistry (Sept. 1, 1942).
B. S. University of Nebraska, 1928; M. S., State University of Iowa, 1929; Ph. D., ibid., 1931. W 310.

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.

DOROTHY MAY HAMER, Social Director, Van Zile Hall (1941).
A. B., University of Illinois, 1921; M. A., Columbia University, 1927. A 118B.

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

EARL DAHL HANSING, Instructor in Botany (1940); Assistant Plant Pathologist, Agricultural Experiment Station (1940).
B. S., University of Minnesota, 1933; M. S., K. S. C., 1937; Ph. D., Cornell University, 1941. D 205.

JOHN WILLARD HANSON, College Physician and Head of Department of Student Health (1940; Sept. 1, 1942).
B. A., University of Minnesota, 1930; M. D., ibid., 1934. A 208.

MURVILLE JENNINGS HARBAUGH, Associate Professor of Zoölogy (1929; July 1, 1942).
A. B., University of Montana, 1926; A. M., ibid., 1930; Ph. D., University of Nebraska, 1942. F 113.

LEONARD BEATH HARDEN, Instructor in Agricultural Economics, Division of College Extension; Fieldman, Farm Management Association No. 4 (1928, 1939); resigned, February 28, 1942.
B. S., K. S. C., 1926. Holton, Kan.

MARY THERESA HARMAN, Professor of Zoölogy (1912, 1921); Zoölogical Collaborator, Agricultural Experiment Station (1940).
A. B., Indiana University, 1907; A. M., ibid., 1909; Ph. D., ibid., 1912. F 115.

CHARLES HAL HARNED, (Temporary) Instructor in Geology (Sept. 1, 1942).
B. S., K. S. C., 1938; M. S., ibid., 1940. F 3.

JOHN O. HARRIS, Instructor in Bacteriology (Sept. 1, 1942).
B. S., K. S. C., 1939; M. S., University of Hawaii, 1941. V 103.

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

MARGARET BALLARD HARRIS, Graduate Assistant in Child Welfare and Euthenics (Sept. 1, 1942).
B. S., K. S. C., 1937. 311 N. 14th.

VIDA AGNES HARRIS, Associate Professor of Art (1927; 1941).
B. S., K. S. C., 1914; A. M., University of Chicago, 1927. A 206A.

JEWELL GILBERT HARRISON, Nurseryman, Fort Hays Branch Experiment Station (Sept. 1, 1942). Hays, Kan.

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); resigned, May 31, 1942.
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.

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.

ROBERT EMMETT HAUKE, Instructor in Bacteriology (July 1, 1942).
D. V. M., K. S. C., 1942. V 203.

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.

JANE HAYMAKER, Technician in Food Economics and Nutrition (Sept. 14, 1942).
B. S., K. S. C., 1942. C 11.

HENRY MILES HEBERER, Professor of Speech (1925, 1941).
A. B., University of Illinois, 1922; A. M., Stanford University, 1938. N 303.

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.

AGATHA HERMON, Nurse, Department of Student Health (1940); resigned, Nov. 20, 1941.
R. N., Halstead Hospital, 1939. CH.

HELEN DUMOND HERREN, Instructor in Food Economics and Nutrition (Sept. 1, 1942).
A. B., Baldwin-Wallace College, 1922; M. A., University of Chicago, 1928. C 107B.

EARL HOWARD HERRICK, Professor of Zoölogy (1935, 1941); 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); Clothing and Textiles, Agricultural Experiment Station (1927).
B. S., K. S. C., 1900; M. S., ibid., 1926. C 203.

ELMER GEORGE HEYNE,[1] Junior Agronomist, U. S. D. A.; Plant Breeder, Agri-

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

cultural Experiment Station (1936, 1938).
B. S., University of Nebraska, 1935; M. S., K. S. C., 1938. E Ag 303.

JOHN CLIFFORD HIDE, Associate Professor of Soils (1935; July 1, 1942); Assistant Agronomist, Agricultural Experiment Station (1937).
B. S., 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 Speech (1920, 1922).
B. S., Iowa State College, 1910; J. D., University of Chicago, 1917. G 205B.

RANDALL CONRAD HILL, Professor of Sociology (1929, 1935); Rural Sociology, Agricultural Experiment Station (1929, 1935).
B. S., K. S. C., 1924; M. S., ibid., 1927; Ph. D., University of Missouri, 1929. W Ag 307B.

RAYMONA MAYME HILTON, Instructor in Institutional Management (1939, 1941); resigned, May 31, 1942.
B. S., University of Nebraska, 1937. T 201A.

LORA VALENTINE HILYARD, Assistant Professor of Clothing and Textiles, Division of College Extension (1930; July 1, 1942).
B. S., K. S. C., 1930. EA 101B.

JULIAN ADAIR HODGES, Professor of Agricultural Economics (1923, 1941); Farm Management, Agricultural Experiment Station (1923, 1936).
B. S., in Agr., University of Kentucky, 1917; M. S., ibid., 1923; Ph. D., Harvard University, 1938. W Ag 309.

RAYMOND WILLIAM HOECKER, Instructor in Agricultural Economics (Oct. 1, 1941).
B. S., Iowa State College, 1936; M. S., Cornell University, 1939; Ph. D., ibid., 1941. W Ag 301.

MARY ELIZABETH HOFF, Assistant Professor and Head of Documents Department, College Library (1928).
A. B., Friends University, 1925; B. S. in L. S., University of Illinois, 1928. L 101.

JAMES MAYNARD HOLECEK, Instructor in Mechanical Engineering (Sept. 1, 1942). E 104.

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); Assistant Agronomist, Agricultural Experiment Station (1937).
B. S., K. S. C., 1937. E Ag 202A.

THOMAS R. HOLMES, Lt.-Col., Inf., U. S. A.; Associate Professor of Military Science and Tactics (1938); resigned, Aug. 11, 1942.
B. S., St. John's College, 1917; Graduate, Infantry School, 1927. N 102.

INA EMMA HOLROYD, Assistant Professor of Mathematics (1900, 1929).
B. S., K. S. C., 1897; 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); Professor of Economics and Sociology (1929, 1941).
A. B., Colgate University, 1909; Ph. M., University of Chicago, 1910; B. D., ibid., 1911; Ph. D., ibid., 1914. A 118D.

ALBERT HORLINGS, Assistant Professor of Industrial Journalism and Printing (Jan. 22, 1942).
B. A., University of Minnesota, 1934; M. A., University of Hawaii, 1936. K 103C.

Abram Eldred Hostetter, Instructor in Shop Practice (1930; Sept. 1, 1942).
B. S., McPherson College, 1925; M. S., K. S. C., 1932; Ph. D., ibid., 1938. S 105.

Harold Howe, Professor of Agricultural Economics (1925, 1934); Land Economist, Agricultural Experiment Station (1925).
B. S., K. S. C., 1922; M. S., University of Maryland, 1923; Ph. D., University of Wisconsin, 1937. W Ag 307B.

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 Dean, School of Arts and Sciences (1930, 1941); Associate Professor of Physics (1930, 1941).
B. S., Kansas State Teachers College, Pittsburg, 1923; M. S., K. S. C., 1930. A 122A; W 38.

Eugene Harvey Huffman, (Temporary) Instructor in Chemistry (1940); resigned, October 15, 1941.
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.

Raymond H. Hughes, Assistant Physician, Department of Student Health (1941); on leave, Sept. 21, 1942.
B. S., K. S. C., 1933; M. S., ibid., 1934; M. D., University of Chicago, 1938. A 215.

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); resigned, May 31, 1942.
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); Geneticist, Agricultural Experiment Station (1919).
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, Assistant Professor of Agricultural Economics, Division of College Extension (1922, 1936).
B. S., K. S. C., 1926. EA 301.

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); on leave, Sept. 1, 1942, to June 30, 1943.
Graduate, American Conservatory of Music, 1921; B. Mus., ibid., 1929. N 301D.

Dolf Jesse Jennings, (Temporary) Instructor in Zoölogy (1940); resigned, July 31, 1942.
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 (1940); resigned, May 21, 1942.
B. S., K. S. C., 1937. N 102.

Ella Marie Johnson, Assistant Professor of Home Economics Education (1941).
B. S., University of Minnesota, 1926; M. A., Columbia University, 1941. G 107.

J. Harold Johnson, Assistant Professor in Junior Extension (1927; July 1, 1942); Assistant State Club Leader, Division of College Extension (1927, 1935); on sabbatical leave, Oct. 1, 1941, to June 15, 1942.
B. S., K. S. C., 1927; M. A., George Washington University, 1942. A 111A.

John Alexander Johnson, Assistant in Milling Research (1940, 1941); Assistant Baking Technologist, Agricultural Experiment Station (1941).
B. S., North Dakota Agricultural College, 1940; M. S., K. S. C., 1942. E Ag 111.

Richard Charles Johnson, Instructor in Farm Forestry, Division of College Extension (1940, 1941).
B. S., Michigan State College, 1937. EA 202.

Charles Otis Johnston,[1] Pathologist, U. S. D. A.; Cereal Rust Investigations, Agricultural Experiment Station (1919).
B. S., K. S. C., 1918; M. S., ibid., 1924. D 204.

Rodney William Johnston, Industrial Research Fellow, Graduate Research Assistant in Chemical Engineering (1941).
B. Sc. in Ch. E., University of Nebraska, 1941. XX 3C.

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.

Rudard Artaban Jones, Assistant Professor of Architecture (1940).
B. S. in Arch. E., University of Illinois, 1936; M. S. in Arch. E., ibid., 1939; Architect, State of Illinois, 1939. E 223.

Aimison Jonnard, Instructor in Chemical Engineering (1941).
B. S., K. S. C., 1938; M. S. in Ch. E., Columbia University, 1939. XX 105B.

Louis Mark Jorgenson, 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 School of Home Economics (1923); Head of Department of Home Economics, Agricultural Experiment Station.
B. S., K. S. C., 1909; B. S. in Educ., Teachers College, Columbia University, 1915; Ph. D., Yale University, 1923. C 104.

Juanita I. Kahler, Assistant in Institutional Management (1941).
B. S., University of Colorado, 1941. T 201A.

Rosamond Kedzie, Assistant Professor of Art (1938, 1941).
B. S., Michigan State College, 1906; M. A., University of California, 1937. A 205.

Edgar Talbert Keith, Professor of Industrial Journalism and Printing (1912, 1925).
B. S., K. S. C., 1912. K 101.

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

Leone Bower Kell, Associate Professor of Child Welfare and Euthenics (1927, 1938).
B. S., K. S. C., 1923; M. S., ibid., 1928. C 214.

Althea Leonore Keller, (Temporary) Instructor in Household Economics (Nov. 1, 1941); resigned, July 25, 1942.
B. S., K. S. C., 1935; M. S., ibid., 1938. T 203.

Warren Ferdinand Keller,[1] Agent, Bureau of Plant Industry, U. S. D. A.; Research Miller, Agricultural Experiment Station (1941).
B. S., K. S. C., 1935. E Ag 102.

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 202.

Lenore Kent, Instructor in Child Welfare and Euthenics (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 Illionis, 1922; M. S., K. S. C., 1927. E 121.

Alice Day Kimball, Technician in Veterinary Pathology and in the Agricultural Experiment Station (1935).
B. S., K. S. C., 1935. V 209.

Mary Kimball, First Assistant to the Register (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, Assistant Professor of Botany (1929, 1941).
B. S., North Dakota Agricultural College, 1926; M. S., K. S. C., 1931. D 202.

Philip George Kirmser, (Temporary) Instructor in Applied Mechanics (Jan. 15, 1942).
B. Ch. E., University of Minnesota, 1939. E 117.

Charles Howard Kitselman, Professor of Pathology (1919, 1933); Pathologist, Agricultural Experiment Station (1933); on leave.
V. M. D., University of Pennsylvania, 1918; M. S., K. S. C., 1927. V 211.

Edwin Albert Kline, (Temporary) Instructor in Animal Husbandry (Sept. 1, 1942).
B. S., K. S. C., 1942. E Ag 3.

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.

Russell Charles Klotz, (Temporary) Instructor in Animal Husbandry (Sept. 1, 1942).
B. S., K. S. C., 1942. E Ag 6A.

Kathleen Knittle, Assistant Dean of Women (1931, 1941).
B. S., K. S. C., 1923; M. A., Columbia University, 1938. A 118B.

Fritz Gustave Knorr, Instructor in Physical Education and Athletics (Sept. 1, 1942).
B. S., K. S. C., 1932. N 107.

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

LESTER HENRY KOENITZER, Associate Professor of Applied Mechanics (1929; July 1, 1942).
B. S., Iowa State College, 1926; M. S., ibid., 1929; C. E., ibid., 1930. E 14.

HILLIER KRIEGHBAUM, Associate Professor of Industrial Journalism (1938, 1941); on leave, January 21 to May 31, 1942; resigned, May 31, 1942.
B. A., University of Wisconsin, 1926; M. S., Northwestern University, 1939. K 103C.

DONALD G. KUNDIGER, (Temporary) Instructor in Chemistry (Oct. 16, 1941); resigned, May 31, 1942.
Ph. D., University of Wisconsin, 1942.

BERNICE LYDIA KUNERTH, Assistant Professor of Food Economics and Nutrition (1932, 1939); Food Economist and Nutritionist, Agricultural Experiment Station; resigned, June 30, 1942.
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); resigned, Mar. 31, 1942.
B. S., Iowa State College, 1933. S 209.

RUSSELL LAMAN, Instructor in English (1935); on leave, Sept. 1, 1942.
B. S., K. S. C., 1931; M. S., 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, Professor of Psychology (1925, 1941); on leave, Sept. 1, 1942.
B. S., K. S. C., 1925; M. S., ibid., 1926; Ph. D., Stanford University, 1934. G 108.

FRANCIS C. LANNING, Instructor in Chemistry (Sept. 1, 1942).
B. S., University of Denver, 1930; M. S., ibid., 1931; Ph. D., University of Minnesota, 1936. W 304.

MENDEL ELMER LASH, Associate Professor of Chemistry (1929, 1941).
A. B., Ohio State University, 1920; M. S., ibid., 1922; Ph. D., ibid., 1928. W 308.

RALPH RICHARD LASHBROOK, Associate Professor of Industrial Journalism (1934, 1938).
B. S., K. S. C., 1929; M. S., University of Wisconsin, 1942. K 206.

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.

HENRY S. C. LAU, Industrial Fellow, Graduate Research Assistant in Chemistry (Sept. 1, 1942).
B. S., K. S. C., 1942. W 23.

HILMER HENRY LAUDE,[1] Professor of Farm Crops (1920, 1931); Agronomist, Agricultural Experiment Station (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.

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

THOMAS DOYLE LETBETTER, Instructor in Accounting (1938).
B. B. A., University of Texas, 1933. W Ag 206.

CLARENCE FLAVIUS LEWIS, Associate Professor of Mathematics (1929, 1926).
A. B., University of Denver, 1913; M. S., K. S. C., 1925. X 104.

GERTRUDE ELISE LIENKAEMPER, Instructor in Clothing and Textiles (1941).
B. S., Oregon State College, 1921; M. A., University of Washington, 1938. C 201A.

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.

GRACE B. LINDQUIST, Secretary, Department of Student Health (April 16, 1942).
A 216.

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.

ROGER P. LINK, Assistant Professor of Veterinary Physiology (1935, 1941).
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.

CHARLES HOWARD LOCKHART, Instructor in Zoölogy (1940); on leave, Sept. 1, 1942.
B. S., K. S. C., 1934; M. S., ibid., 1938. F 113.

GLENN WESLEY LONG, 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.

THOMAS HENRY LORD, Instructor in Bacteriology (1941); on leave, Sept. 1, 1942.
B. S., Massachusetts State College, 1936; M. S.; University of Illinois, 1938; Ph. D., ibid., 1941. V 103B.

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. V 107; EA 205.

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.

David Leslie Mackintosh, Associate Professor of Animal Husbandry (1921, 1935); Meat Specialist, Agricultural Experiment Station (1923); on leave, July 1, 1942.

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); resigned, Dec. 31, 1941.

B. A., Wesleyan University, 1914. N 102.

Rachel Marks, Secretary of the Young Women's Christian Association (Sept. 1, 1942).

A. B., Emory and Henry College, 1932; M. A., Scarritt College, 1939. A 112.

Hubert Whatley Marlow, Assistant Professor of Chemistry (1925, 1932); on leave, July 1, 1942.

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 (1940); resigned, May 31, 1942.

B. A., Maryville College, 1928; M. A., University of Alabama, 1929; Ph. D., Indiana University, 1934; LL. B., Woodrow Wilson College, 1939. S 105.

Albert E. Martin, Jr., Assistant Physician, Department of Student Health (June 1, 1942).

M. D., University of Kansas, 1937. A 215.

James William Martin, Assistant Professor of Agricultural Engineering (1940; Oct. 1, 1941); Farm Machinery, Agricultural Experiment Station (1925).

B. S. in E. E., K. S. C., 1933; B. S. in Ag. E., ibid., 1938; M. S., Iowa State College, 1939. E 216.

Karl Harold Martin, Assistant Professor of Electrical Engineering (1941; July 1, 1942).

A. B., Northern State Teachers College of Michigan, 1930; A. M., University of Michigan, 1932. E 22.

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); Dairy Husbandman, Agricultural Experiment Station (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); on leave.

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, Assistant Postmistress (1911; July 1, 1942).

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.

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 Agri., ibid., 1918. E Ag 8C.

WALTER RAYBURN MCCLURE, Lt. Col., Inf., U. S. A.; Associate Professor of Military Science and Tactics (Aug. 11, 1942).
A. B., University of Oregon, 1913. N 102.

FRANK JAMES MCCORMICK, Assistant Professor of Applied Mechanics (1939, 1940).
B. S., Iowa State College, 1927; M. S., ibid., 1931. E 135.

DON MCCOY, Graduate Assistant in Chemistry (Sept. 1, 1942).
B. S., McPherson College, 1942. W 121.

JOHN HENRY MCCOY, Instructor in Agricultural Economics (1940); Land Economics, Agricultural Experiment Station (1940); resigned, July 1, 1942.
B. S., K. S. C., 1940. W Ag 310.

ELIZABETH MCCRACKEN, Instructor in Botany (1938, 1939); resigned, May 31, 1942.
B. A., Wellesley College, 1929; M. A., ibid., 1932; Ph. D., University of California, 1937. D 202.

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.

CHARLOTTE OPAL MCGRATH, Nurse, Department of Student Health (1941).
R. N., Halstead Hospital, 1939. CH.

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.

VIRGIL KEITH MCMAHAN, (Temporary) Instructor in Pathology (1941); Assistant in Agricultural Experiment Station (1941).
D. V. M., K. S. C., 1941. VH 51B.

EVA MYRTLE MCMILLAN, Associate Professor of Food Economics and Nutrition (1930, 1939); Assistant Dean, School 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.

WATSON LONGAN MCMORRIS, Lt. Col., C. A. C., U. S. A.; Associate Professor of Military Science and Tactics (Dec. 1, 1941).
L. L. B., National University, 1907; B. C., Coast Artillery School, 1929. N 102.

CALVIN J. MEDLIN, (Temporary) Assistant Professor of Journalism (1941; Sept. 14, 1942); Graduate Manager of Student Publications.
B. S., K. S. C., 1920; M. S., ibid., 1941. K 105D.

HENRY JOHN MEENEN,[1] Research Assistant in Agricultural Economics (1940, 1941); Farm Management, Agricultural Experiment Station (1940, 1941); resigned, July 31, 1942.
B. S., K. S. C., 1940. W Ag 310.

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

EDGAR PAUL HUBERT MEIBOHM, (Temporary) Instructor in Chemistry (1941); resigned, May 31, 1942.
B. S., Guilford College, 1936; M. S., University of North Carolina, 1939. W 308.

ELLA JANE MEILLER, Instructor in Food Economics and Nutrition (1937).
B. S., K. S. C., 1932; M. S., University of Wisconsin, 1937. C 103.

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, School of Arts and Sciences (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.

HELEN EVELYN MERTZ, Assistant in Animal Husbandry (1941).
E Ag 9.

ALVA ERNEST MESSENHEIMER, (Temporary) Instructor in Machine Design (Sept. 28, 1942).
B. S., K. S. C., 1924. S 201A.

WILLIAM HAROLD METZGER, Associate Professor of Soils (1926, 1935); Associate Agronomist, Agricultural Experiment Station (1932); deceased, July 7, 1942.
B. S., Purdue University, 1922; M. S., K. S. C., 1937; Ph. D., Ohio State University, 1931. E Ag 207A.

ELLA M. MEYER, Assistant Professor and District Home Demonstration Agent, Division of College Extension (1932, 1940).
B. S., K. S. C., 1907. EA 101.

EDWIN CYRUS MILLER, Professor of Plant Physiology (1910, 1919); Plant Physiologist, Agricultural Experiment Station (1911).
A. B., Lebanon College, 1906; A. B., Yale University, 1907; Ph. D., ibid., 1910. D 102.

ELSIE LEE MILLER, Instuctor in Food Economics and Nutrition (1941).
B. S., K. S. C., 1934; M. S., ibid., 1941. C 107C.

JOHN ORVILLE MILLER, Instructor in Plant Pathology, Division of College Extension (1935, 1936).
B. S., K. S. C., 1934. EA 202.

JOYCE W. MILLER, (Temporary) Assistant Professor, Department of Shop Practice (1940).
B. S., K. S. C., 1933. S 110A.

LUCY EMSLIE FARMAN MILLER, Housekeeper, College Hospital, Department of Student Health (1937).
B. S., K. S. C., 1912. CH.

MERNA BEATRICE MILLER,[3] Instructor in Institutional Management (1939, 1940).
B. S., K. S. C., 1932; M. S., ibid., 1941. T 102.

CLIFFORD MERRILL MOELLER, Instructor in Civil Engineering (1939); on leave.
B. S., University of Nebraska, 1936. E 220.

MAURICE CHARLES MOGGIE, Associate Professor of Education (1933, 1941).
B. S., K. S. C., 1929; M. S., ibid., 1931. G 102A.

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3. In coöperation with the Kansas Agricultural Experiment Station.

CONRAD STEPHEN MOLL, Assistant Professor of Physical Education for Men (1929, 1937); on leave, June 1, 1942.
Graduate, Concordia College, Fort Wayne, Ind., 1918; B. P. E., George Williams College, 1925, M. S., K. S. C., 1933. N 107.

GEORGE MONTGOMERY, Professor of Agricultural Economics (1925, 1941); Marketing, Agricultural Experiment Station (1925).
B. S., K. S. C., 1925; M. S., ibid., 1927. W Ag 301C.

RUTH MONTGOMERY-SHORT, Assistant College Physician (1938); resigned, April 30, 1942.
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 (1940).
A. B., University of Kansas, 1917; M. A., Columbia University, 1928. A 118B.

LEO ALBERT MOORE, Assistant Professor of Shop Practice (1935, 1941).
B. S., K. S. C., 1925; M. S., ibid., 1940. S 101A.

MARIA MORRIS, Associate Professor of Art (1925, 1941).
B. S., K. S. C., 1911; Graduate, New York School of Fine and Applied Art, 1924; M. S., K. S. C., 1927. A 205.

REED FRANKLIN MORSE, Associate Professor of Civil Engineering (1929; Jan. 1, 1942).
A. B., Cornell College, 1921; B. S., Iowa State College, 1923; M. S., K. S. C., 1933; Ph. D., Cornell University, 1941. E 122.

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, School of Agriculture (1923).
E Ag 106.

JEPTHA 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 Dean, School of Agriculture (1937; July 1, 1942); 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, Instructor and Assistant Cataloguer, College Library (1929, 1938); resigned, Aug. 31, 1942.
B. S., K. S. C., 1921; B. S. in L. S., University of Illinois, 1937. L 202.

DONALD FARNHAM MUNRO, Associate Professor of Modern Languages (1940); on leave, Sept. 1, 1942.
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, 1940).
B. S., Acadia University, 1927; Ph. D., University of Michigan, 1930. X 104.

Irma Arlee Murphey, Graduate Assistant in Institutional Management (Sept. 1, 1942).
B. S., K. S. C., 1930. Van Zile Hall.

Erma Martz Murray, Secretary of the Young Women's Christian Association (1939); resigned, June 30, 1942.
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, Assistant Professor of Home Management, Division of College Extension (1930, 1941).
B. S., K. S. C., 1929; M. S., Cornell University, 1939. EA 101B.

Harold Edwin Myers, Professor of Soils (1929; July 1, 1942); Agronomist, Agricultural Experiment Station (1929, 1937).
B. S., K. S. C., 1928; M. S., University of Illinois, 1929; Ph. D., University of Missouri, 1937. E. Ag 207A.

Hugh Garry Myers, Agent, Bureau of Plant Industry, U. S. D. A. (July 16, 1942).
B. S., K. S. C., 1938; M. S., University of Kentucky, 1941. Garden City, Kansas.

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); resigned, June 30, 1942.
B. S., Monmouth College, 1934; M. S., University of Illinois, 1935. W 212.

Leonard Fay Neff, Assistant Professor and District Supervisor, Division of College Extension (1939).
B. S., Purdue University, 1922. EA 101.

Carl Albert Nelson, Instructor in Physical Education and Athletics (Sept. 1, 1942).
A. B., Bethany College, 1926; M. A., University of Colorado, 1938. Stadium.

Frank Eugene Nelson, Associate Professor of Bacteriology (1937; July 1, 1942); Dairy Bacteriologist, Agricultural Experiment Station (1937).
B. S., University of Minnesota, 1932; M. S., ibid., 1934; Ph. D., Iowa State College, 1936. V 103A.

Russell Nelson, Instructor in Dairy Husbandry (1941); Assistant Dairy Husbandman, Agricultural Experiment Station (1941); resigned, May 31, 1942.
B. S., K. S. C., 1941. W Ag 106.

Margaret Alice Newcomb, Associate Professor of Botany (1925, 1941).
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.

Marjorie Burton Noell, Instructor in Child Welfare and Euthenics (1938, 1940).
B. S., Iowa State College, 1933. 311 N. Fourteenth.

Elva Lavina Norris,[5] Seed Analyst, Department of Agronomy (1938); Seed Analyst, Agricultural Experiment Station (1938).
A. B., Nebraska Wesleyan University, 1915; A. M., University of Wisconsin, 1924; Ph. D., University of Nebraska, 1938. E Ag 307A.

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

WILLIAM WALLACE O'DONNELL,[1] Graduate Research Assistant in Milling Industry, Agricultural Experiment Station (1941).
B. Sc., Ohio State University, 1941. 207 N. Fourteenth.

HAZEL M. OLNEY, Nurse, Department of Student Health (1941).
R. N., Missouri Methodist Hospital at St. Joseph, 1931. CH.

ALLEN LESLIE OLSEN, Instructor in Chemistry (1935); on leave, June 1, 1942.
B. A., St. Olaf College, 1929; M. S., University of Nebraska, 1931; Ph. D., ibid., 1934. W 310.

MERTON LOUIS OTTO, Instructor in Agricultural Economics (1934, 1939); Land Utilization, Agricultural Experiment Station (1934).
B. S., K. S. C., 1921; M. S., ibid., 1942. W Ag 310.

CAROL LEE OWSLEY, Class Reserves Assistant in Library (1941; Sept. 1, 1942).
B. S., K. S. C., 1932. L 1.

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, Professor of Entomology (1926, 1941); Associate Entomologist, Agricultural Experiment Station (1926).
A. B., University of Texas, 1922; A. M., ibid., 1924; Ph. D., Ohio State University, 1926. F 302.

JOSEPH DOMINIC PARENT, (Temporary) Associate Professor of Chemical Engineering (June 1, 1942).
B. S., Catholic University of America, 1929; M. S., Renssalaer Polytechnic Institute, 1931; Ph. D., Ohio State University, 1933. XX 105B.

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 and Head of Department of History and Government (1927; Sept. 1, 1942).
A. B., Northwestern University, 1917; A. M., ibid., 1922; Ph. D., Yale University, 1938. F 214.

FRANKLIN LEONARD PARSONS, Assistant Professor of Agricultural Economics (1935); Marketing, Agricultural Experiment Station (1935).
B. S., K. S. C., 1932; M. S., ibid., 1934. W Ag 301B.

BUEL ROREX PATTERSON, 1st Lieut., Cav., U. S. A.; Instructor in Physical Education (1933, 1937); on leave Sept. 1, 1942. Assistant Professor of Military Science and Tactics (May 25, 1942).
B. S., Oklahoma Agricultural and Mechanical College, 1934. N 102.

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, General Engineer (1913; July 1, 1942).
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.

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

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); on leave, Jan. 25, 1942.
B. S., K. S. C., 1933; M. S., ibid., 1936. A 223.

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); Milling Technologist, Agricultural Experiment Station (1927).
B. S. in F. M. E., K. S. C., 1924; M. S., ibid., 1930; F. M. E., ibid., 1935. V 103.

HENRY JAMES PEPPLER, Instructor in Bacteriology (1939); on leave, Sept. 1, 1942.
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.

DOROTHY HELEN PETERS, Instructor and Assistant Loan Librarian (1941).
B. S. in Ed., K. S. T. C. of Emporia, 1940. L.

MILFRED JOHN PETERS, Capt., Inf., U. S. A.; Assistant Professor of Military Science and Tactics (1935, 1940).
B. S., K. S. C., 1934. N 102.

EARL HERMAN PETERSON, Associate Professor of English (1939, 1940).
A. B., University of Colorado, 1923; M. A., State College of Washington, 1928; Ph. D., University of Illinois, 1940. S 205.

HELEN I. PETERSON, (Temporary) Instructor in Mathematics (Sept. 1, 1942).
B. S., K. S. C., 1940. W 103.

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); resigned, May 31, 1942.
B. S., Michigan State College, 1930; M. S., ibid., 1933; Ph. D., State University of Iowa, 1935. W 33.

LEO PETRI, Technician and Instructor in Zoölogy (1941); Zoölogical Technician, Agricultural Experiment Station (1941); on leave, July 1, 1942.
A. B., Peru State Teachers College, 1937; M. A., University of Nebraska, 1941. F 105.

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, 1939; Diploma, Institut de Phonetique of University of Paris, 1939. A 229.

HAZEL ELIZABETH TAYLOR PFUETZE, Secretary, Department of Education (1925). G 102.

FLORENCE EMMA PHILLIPS, Instructor in Clothing and Textiles, Division of College Extension (1941); resigned, Feb. 10, 1942.
B. S., K. S. C., 1936. EA 101B.

LUCILE PHILLIPS, Head Nurse, Department of Student Health (1938, 1940).
R. N., Kansas City General Hospital, Kansas City, Missouri, 1938. CH.

William Francis Pickett, Professor and Head of Department of Horticulture (1917, 1938); Horticulturist, Agricultural Experiment Station (1938); State Forester (July 1, 1942).
B. S., K. S. C., 1917; M. S., ibid., 1923; Ph. D., Michigan State College, 1935. D 110B.

Wilfred Harold Pine, Assistant Professor of Agricultural Economics (1934, 1938); Farm Management, Agricultural Experiment Station (1934).
B. S., K. S. C., 1934; M. S., ibid., 1938. W Ag 309.

Clarence Andrew Pippin, Instructor in Mechanical Engineering (1937); on leave, Oct. 1 to Dec. 31, 1941; resigned, May 31, 1942.
B. S., University of Illinois, 1936; M. S., K. S. C., 1941. 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.

Charles M. Platt, (Temporary) Instructor in Journalism (1941); resigned, July 1, 1942.
B. S., K. S. C., 1938; M. S., ibid., 1941. K 206.

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 of History and Government (1903); Head of Department of History and Government, 1903-1942.
A. B., Baker University, 1896; A. M., University of Kansas, 1898. F 206.

Leon Reed Quinlan, Professor of Horticulture (1927, 1931); Ornamental Horticulturist, Agricultural Experiment Station (1941).
B. S., Colorado Agricultural College, 1929; M. L. A., Harvard University, 1925. D 8.

George Ellsworth Raburn, Professor of Physics, Emeritus (1910, 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, School of Home Economics (1939).
B. S., K. S. C., 1924; M. S., ibid., 1928. C 112.

Mable I. Ratts, (Temporary) Instructor in Mathematics (Sept. 1, 1942).
B. S., K. S. C., 1923. X 103.

Lawrence Reed, Assistant to the Superintendent, Fort Hays Branch Agricultural Experiment Station (1934).
B. S., K. S. C., 1933. Hays, Kan.

Roger Eli Regnier, Assistant Professor of Junior Extension; Assistant State Club Leader, Division of College Extension (1934; July 1, 1942).
B. S., K. S. C., 1924; M. S., ibid., 1932. A 111A.

Louis Powers Reitz, Associate Professor of Agronomy (1939); Associate Agronomist, Agricultural Experiment Station (1939).
B. S., K. S. C., 1930; M. S., University of Nebraska, 1937. E Ag 304C.

Thomas Russell Reitz, Associate Professor of Farm Crops, Division of College Extension (July 1, 1942).
B. S., K. S. C., 1927. EA 301.

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.

Ashton Price Renwick, Industrial Research Fellow, Graduate Research Assistant in Chemical Engineering (July 1, 1942).
B. S. in Ch. E., Missouri School of Mines and Metallurgy, 1942. XX 102.

Ada Rice, Professor of English (1899, 1927).
B. S., K. S. C., 1895; M. S., ibid., 1912. A 202.

Walter Roach, Assistant Professor of Speech (1941).
B. A., State University of Iowa, 1926; M. A., University of Wisconsin, 1941. G 205A.

Jules Henry Robert, Professor of Applied Mechanics and Hydraulics (1916, 1925).
B. S., University of Illinois, 1914. E 112.

Mary Eilleen Roberts, Instructor and 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); resigned, June 30, 1942.
D. V. M., Cornell University, 1938. VH 202.

Virginia M. Robertson, Secretary, Department of Student Health (1937); resigned, Apr. 15, 1942.
A 216.

Mott Luther Robinson, Assistant Professor of Agricultural Extension; District Supervisor, Division of College Extension (1923, 1941).
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, Instructor in Industrial Journalism (1940, 1941).
A. B., Florida State College for Women, 1930. K 103B.

Lee Miles Roderick, Professor and Head of Department of Pathology (1938); Pathologist, Agricultural Experiment Station (1938).
D. V. M., Ohio State University, 1915; M. S., North Dakota State College, 1922; Ph. D., University of Chicago, 1926. V 210.

Cornelius Redwine Rogers, Graduate Assistant in Entomology (Jan. 26, 1942).
A. B., Southwestern College, 1935. F 215C.

Max Fenton Rogers, Instructor in Machine Design (Sept. 1, 1942).
B. S., K. S. C., 1939. E 209.

Frederick George Roth, Instructor in Architecture (1941); resigned, Aug. 18, 1942.
B. Arch., University of Minnesota, 1940. E 223.

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, Professor of History and Government (1938, 1941).
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 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 306.

LAWRENCE HENRY SCHOENLEBER, Assistant Professor of Agricultural Engineering (1941); Agricultural Experiment Station (1941).
B. S., University of Nebraska, 1928; M. S., Iowa State College, 1929. E 216.

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.

MARVIN L. SCHREIBER, Industrial Fellow, Graduate Research Assistant in Chemistry (Sept. 1, 1942).
A. B., University of Kansas, 1942. W 37.

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, 1940).
B. S., K. S. C., 1933; M. S., ibid., 1939. EA 201.

ARNOLD EDWARD SCHUMACHER, Assistant Professor of Poultry Husbandry (1941); Nutritionist, Agricultural Experiment Station (1941).
B. S., Pennsylvania State College, 1936; M. S., Cornell University, 1939; Ph. D., ibid., 1940. W Ag 210.

WILLIAM HENRY SCHUTTE, Instructor in Physical Education (1940); on leave, Sept. 1, 1942.
B. S., University of Idaho, 1933. Stadium.

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

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 School 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; Sc. D., Northeastern University, 1942. E 115.

VIRGIL FRANKLIN SECREST, (Temporary) Military Property Custodian (1940). N 104.

ANNABELL LETA SEEFELDT, Nurse, Department of Student Health (Jan. 1, 1942).
R. N., Jane C. Stormont Hospital, 1939. CH.

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2. In coöperation with the Kansas State Highway Department.

GABE ALFRED SELLERS, Professor of Metallurgy and Metallography (1919, 1928); on leave, June 23 to Aug. 31, 1942; resigned, Aug. 31, 1942.
B. S., K. S. C., 1917; M. S., ibid., 1929. S 105.

HARNER SELVIDGE, Associate Professor of Electrical Engineering (1938, 1941); on leave.
S. B., Massachusetts Institute of Technology, 1932; S. M., ibid., 1933; M. S., Harvard University, 1934; D. Sc., ibid., 1937. E 22.

ERNEST LOUIS SEMERSKY, Graduate Research Assistant in Milling (July 1, 1942).
B. S., K. S. C., 1942. E Ag 101A.

ALFRED O. SHAW, Associate Professor of Dairy Husbandry (1939, 1940); Associate Dairy Husbandman, Agricultural Experiment Station (1935); resigned, Feb. 28, 1942.
B. S., University of Idaho, 1932; M. S., ibid., 1932; Ph. D., Pennsylvania State College, 1935. W Ag 108A.

LESLIE M. SHAW, Instructor in Shop Practice (1941).
B. S., K. S. C., 1939. S 115.

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.

KARL GARDNER SHOEMAKER, Instructor in Agricultural Economics, Division of College Extension (1936, 1939).
B. S., K. S. C., 1936. EA 201.

CLARA MAGDALENE SIEM, Assistant to Dean and Director, Division of College Extension (1920; July 1, 1942).
A 109B.

DANIEL TELL SIGLEY, Associate Professor of Mathematics (1938, 1940).
A. B., University of Kansas, 1927; A. M., ibid., 1928; Ph. D., University of Illinois, 1932. X 118.

RALPH EDWARD SILKER, Instructor in Organic Chemistry (1941).
B. A., University of Dubuque, 1927; M. S., State University of Iowa, 1931; Ph. D., ibid., 1934. W 211.

WILLIAM LAWRENCE SIPPEL, Instructor in Surgery and Medicine (July 1, 1942).
B. S., University of Maryland, 1937; V. M. D., University of Pennsylvania, 1940; M. S., Cornell University, 1942. V 202.

EARL LEROY SITZ, Associate Professor of Electrical Engineering (1927; July 1, 1942).
B. S. in E. E., Iowa State College, 1927; M. S., K. S. C., 1932. E 24.

GOLDA SITZ, (Temporary) Instructor in Mathematics (Sept. 1, 1942).
B. S., Iowa State College, 1926. X 102.

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 Agronomy in charge of North Central Kansas Experiment Fields (1938; Feb. 1, 1942).
B. S., K. S. C., 1938. Belleville, Kan.

JACOB J. SMALTZ, Instructor in Shop Practice (1940).
B. S., Bradley Polytechnic Institute, 1939. S 106.

ARTHUR BOURNE SMITH, Professor and College Librarian (1911).
Ph. B., Wesleyan University, 1900; B. L. S., University of Illinois, 1902. L 106.

Elmer Harold Smith, (Temporary) Instructor in Agricultural Engineering, Division of College Extension (Nov. 20, 1941).
B. S., K. S. C., 1930. E 131.

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, Assistant Professor of Institutional Management (1939, 1941); Manager of Cafeteria (1939, 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.

Charles Raymond Socolofsky, Instructor in Physical Education and Athletics (Sept. 1, 1942).
B. S., K. S. C., 1938. Stadium.

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; Agricultural Experiment Station (1931).
B. S., K. S. C., 1923; M. S., ibid., 1928. Insectary.

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, Professor of Accounting (1926, 1941).
A. B., University of Kansas, 1920; M. B. A., ibid., 1926; C. P. A., ibid., 1942. W Ag 206.

Margaret Lewis Stewart, Graduate Assistant in Institutional Management (Feb. 1, 1942); resigned August 31, 1942.
B. S., Kansas State College, 1937.

Thomas Bruce Stinson, Superintendent, Tribune Branch Agricultural Experiment Station (1924).
B. S., K. S. C., 1924. Tribune, Kan.

Harold Earl Stover, Maj., C. A. C., U. S. A.; Instructor in Agricultural Engineering, Division of College Extension (1936); on leave. Associate Professor of Military Science and Tactics (1940).
B. S., K. S. C., 1929. N 102.

Charles William Stratton, Associate Professor of Music (1927, 1941).
B. Mus., K. S. C., 1926; M. S., ibid., 1933. M 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.

ANNA MARIE STURMER, Associate Professor of English (1920, 1926).
A. B., University of Nebraska, 1917; A. M., ibid., 1920. A 203.

FRANCIS JOSEPH SULLIVAN, Instructor in Machine Design (1938); on leave, Dec. 15, 1941.
B. S. in M. E., Harvard University, 1936; M. S., K. S. C., 1941. S 201A.

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; Associate Cereal Technologist, Agricultural Experiment Station (1906).
A. B., Carleton College, 1899; M. Agr., University of Minnesota, 1905; Ph. D., Cornell University, 1922; Sc. D., Carleton College, 1940. W Ag 9.

EMERY CARLTON SWANSON (Temporary) Assistant in Milling Industry (1941; Sept. 1, 1942).
B. S., University of Minnesota, 1941. E Ag 111.

VERNE S. SWEEDLUN, Associate Professor of History and Government (1941).
A. B., Bethany College, 1923; M. A., University of Kansas, 1929; Ph. D., University of Nebraska, 1940. F 211.

MARY B. SWYERS, Stenographer, Office of the Vice-President (1920).
A 121.

DELOS CLIFTON TAYLOR, Maj., C. A. C., Res., U. S. A.; Assistant Professor of Applied Mechanics (1931, 1940); on leave. Assistant Professor of Military Science and Tactics (1940).
B. S., K. S. C., 1925; M. S., ibid., 1937. N 102.

LOWELL WILLIAM TAYLOR, Graduate Assistant in Chemistry (1941).
B. A., Kansas Wesleyan University, 1940. W 121.

EARL HICKS TEAGARDEN, Assistant Professor of Agricultural Extension, District Agent, Division of College Extension (1929, 1934).
B. S., K. S. C., 1920. EA 101.

RUSSELL I. THACKREY, Professor and Head of Department of Industrial Journalism and Printing (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); on leave, Sept. 1, 1942.
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); Assistant Pathologist, Agricultural Experiment Station (1936, 1937).
D. V. M., Michigan State College, 1929. VH 201.

WILLIAM H. THOMPSON, (Temporary) Instructor and Technician in Zoölogy (Sept. 1, 1942).
B. S., University of Oklahoma, 1936. F 105.

THOMAS R. THOMSON, (Temporary) Instructor in Chemistry (Sept. 1, 1942).
B. S., University of California, 1939; M. S., K. S. C., 1940. W 20.

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

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.

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.

Frances Leonard Timmons,[1] Associate Agronomist, Bureau of Plant Industry, U. S. D. A.; in charge of Noxious Weed Control Investigations, Fort Hays Branch Agricultural Experiment Station (1928, 1935).
B. S., K. S. C., 1928; M. S., ibid., 1932. Hays, Kan.

Thelma Tincher, Instructor in Education (1941).
B. S., University of Nebraska, 1934; M. Sc., ibid., 1941. G 106.

Jessie Pelham Traulsen, Graduate Assistant in Zoölogy (Jan. 21, 1942); resigned, June 30, 1942.
B. S., K. S. C., 1941.

W. Lowell Treaster, Assistant Extension Editor (Aug. 31, 1942).
B. S., K. S. C., 1930. EA 306B.

Wilson Tripp, Associate Professor of Mechanical Engineering (1936; July 1, 1942).
B. S., University of California, 1930; M. S., ibid., 1933. E 105.

William Chilton Troutman, Associate Professor of Speech (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); on leave.
D. V. M., K. S. C., 1936. V 203.

Harry John Charles Umberger, Dean and Director, Division of College Extension (1911, 1919).
B. S., K. S. C., 1905. A 109A.

Wilbur Victor Unruh, (Temporary) Instructor in Mathematics (Sept. 1, 1942).
A. B., Bethel College, 1939. X 104.

Gladys Ellen Vail, Professor of Food Economics and Nutrition (1927; July 1, 1942); Food Economist, Agricultural Experiment Station (1941).
A. B., Southwestern College, 1924; M. S., University of Chicago, 1927; Ph. D., University of Minnesota, 1939. C 118.

Lawrence Warren Van Meir, Graduate Research Assistant in Agricultural Economics (Sept. 1, 1942).
B. S., University of Illinois, 1942. W Ag 308.

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, 1940).
Diploma, Iowa State College, 1904; B. S., K. S. C., 1929.

Phillip Harris Vardiman, (Temporary) Instructor in Bacteriology (1941); resigned, June 30, 1942.
D. V. M., K. S. C., 1939. V 203.

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

JAUNITA FRANCES VILANDER, Assistant to the Vice-President (1941). A 121A.

ROBERT PHILLIP WAGERS, Assistant Professor of Pathology (1937, 1939); on leave, July 1, 1942.
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); resigned, Oct. 31, 1941.
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, (Temporary) Instructor in Art (1939; Oct. 1, 1941).
B. A., State College of Washington, 1936. A 221B.

CHARLES WAGONER, Assistant Chemist, Agricultural Experiment Station (July 1, 1942).
B. S., McPherson College, 1938; M. S., K. S. C., 1940. W 31.

JOHN A. WAGONER, Industrial Research Fellow, Graduate Research Assistant in Chemistry (1940).
B. S., Kansas State Teachers College, Pittsburg, 1939; M. S., K. S. C., 1941. W 23.

CARROL KRAMER WARD, Associate Professor of Economics and Sociology (1935, 1940).
B. S., University of Kansas, 1930; M. B. A., ibid., 1937. W Ag 307A.

JOSEPH EVANS WARD, Jr., Instructor in Electrical Engineering (1940).
B. S. in E. E., University of Texas, 1937; M. S., University of Illinois, 1940. E 19.

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.

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); Geneticist, Agricultural Experiment Station (1923).
A. B., Indiana University, 1914; A. M., ibid., 1917; Ph. D., Columbia University, 1923. W Ag 209.

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, Assistant Professor of Architecture (1939, 1941); on leave, March 1, 1942.
B. S., University of Illinois, 1937; M. S., ibid., 1939; Architect, State of Illinois, 1938. E 223.

ARTHUR D. WEBER, Professor of Animal Husbandry (1931); Beef Cattle Specialist, Agricultural Experiment Station (1931).
B. S., K. S. C., 1922; M. S., ibid., 1926; Ph. D., Purdue University, 1940. E Ag 13.

THELMA MAHESSA WEBER, Instructor in Food Economics and Nutrition (1941); resigned, May 31, 1942.
B. S., Northeast Missouri State Teachers College, 1928; S. M., University of Chicago, 1941. C 107C.

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

NORMAN COATES WEBSTER, Assistant Professor of Speech (1937, 1941).
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.

LEON ELBERT WENGER,[1] Assistant Agronomist, 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.

BEULAH DOROTHEA WESTERMAN, Assistant Professor of Food Economics and Nutrition (1941; July 1, 1942).
B. S., University of Missouri, 1919; M. S., University of Chicago, 1923; Ph. D., University of Illionis, 1928. C 108A.

JOSEPH ARTHUR WEYBREW, Assistant Chemist, Agricultural Experiment Station (July 1, 1942).
B. S., K. S. C. 1938; M. S., ibid., 1939; Ph. D., University of Wisconsin, 1942. W 33.

GERTRUDE ALICE WHEELER, Secretary to the Assistant Dean, School of Agriculture (1925).
E Ag 105.

STUART ESTES WHITCOMB, Assistant Professor of Physics (Sept. 1, 1942).
B. S., Antioch College, 1934; M. S., Syracuse University, 1936; Ph. D., Ohio State University, 1939. W 320.

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, Professor of Civil Engineering (1918; Jan. 1, 1942).
B. S., K. S. C., 1903; C. E., ibid., 1918; M. S., ibid., 1927. E 122.

ROBERT G. WHITE, Instructor in Agricultural Engineering, Division of College Extension (July 10, 1942).
B. S., K. S. C., 1934; M. S., University of Georgia, 1942. E 131.

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.

HENRY EVERT WICHERS, Professor of Rural Architecture (1924, July 1, 1942).
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, 1940).
B. S., K. S. C., 1929; M. A., Columbia University, 1938. EA 101B.

DONALD ALDEN WILBUR, Associate Professor of Entomology (1928, 1941); Associate Entomologist, Agricultural Experiment Station (1928, 1941).
B. S., Oregon State College, 1925; A. M., Ohio State University, 1927. F 304D.

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

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.

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 Agri., 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.

IRMEL LOUISE WILLIAMS, Instructor in Physical Education (1940).
B. S., University of Nebraska, 1935. N 3.

JENNIE WILLIAMS, Associate Professor of Child Welfare and Euthenics; Director of Nursing Education (1932, 1939).
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.

LUTHER EARLE WILLOUGHBY, Associate Professor of Farm Crops, Division of College Extension (1917, 1926).
B. S., K. S. C., 1912; B. S. in Agr., ibid., 1916. EA 202B.

HELEN MILDRED WILMORE, Instructor in Food Economics and Nutrition (1941); resigned, May 31, 1942.
B. S., K. S. C., 1929; M. S., ibid., 1941. C 107B.

CHARLES PEAIRS WILSON, Assistant Professor of Agricultural Economics (1938; Oct. 1, 1941).
B. S., K. S. C., 1938; M. S., ibid., 1940. W Ag 301C.

MANNIE RAY WILSON, Associate Professor of Shop Practice (1936); on leave.
B. S., K. S. C., 1925. S 110A.

EDWARD JOSEPH WIMMER, Professor of Zoölogy (1928, 1941).
A. B., University of Wisconsin, 1925; A. M., ibid., 1927; Ph. D., ibid., 1928. F 114.

LAURA I. WINTER, (Temporary) Assistant Professor and District Home Demonstration Agent Leader, Division of College Extension (1925, 1939).
Cornell University, 1916. EA 101.

CHARLES WISSEMAN, Assistant in Zoölogy (Oct. 1, 1942).
B. A., Southern Methodist University, 1941. F 112.

JOE NATE WOOD, Associate Professor of Machine Design (1936; Sept. 1, 1942).
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.

WALTON C. WOODS, Assistant Physician, Department of Student Health (1941).
A. B., University of Kansas, 1937; M. D., ibid., 1940. A 209.

EARL BOOTH WORKING, Professor of Milling Industry (1923, 1939); Cereal Chemist, Agricultural Experiment Station (1923).
A. B., University of Denver, 1917; A. M., ibid., 1919; Ph. D., University of Arizona, 1922. E Ag 111.

IRWIN IRA WRIGHT, Maintenance Engineer (Dec. 8, 1941).
B. S., K. S. C., 1926. PP 4.

HARRY DASHIELL YOUNG, Associate Chemist, Bureau of Entomology and Plant Quarantine, U. S. D. A. (1934).
B. S., University of Nebraska, 1908. 1204 Fremont.

HERMAN WILSON ZABEL, Instructor in Chemical Engineering (1941).
B. S., K. S. C., 1935; M. S., Columbia University, 1936. XX 105B.

JAMES WALTER ZAHNLEY,[5] Associate Professor of Farm Crops (1915, 1921); Associate Agronomist, Agricultural Experiment Station (1921).
B. S., K. S. C., 1909; M. S., ibid., 1926. E Ag 308.

ADELBERT HENRY ZINK, (Temporary) Instructor in Mechanical Engineering (1941); resigned, May 31, 1942.
B. S. in M. E., Michigan State College, 1937. E 104.

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

Standing Committees of the Faculty

Admission: Jessie McD. Machir, L. M. Jorgenson, Ina Holroyd, A. B. Cardwell, H. L. Ibsen, George A. Dean, W. T. Stratton, S. A. Nock.

Advanced Credit: S. A. Nock, Mary Kimball, R. R. Dykstra, C. W. Mullen, L. E. Hudiburg, M. A. Durland.

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, 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, S. A. Nock, Frank L. Myers, Alpha Latzke, J. H. Robert, C. W. Mullen, R. P. Link.

Catalogue: S. A. Nock, I. V. Iles, J. O. Faulkner, E. T. Keith, Fritz Moore.

College Defense Council: L. E. Conrad, L. E. Call, J. K. Campbell, Margaret Justin, J. W. Hanson, G. R. Pauling, R. F. Gingrich, R. I. Thackrey.

Community Chest Executive: F. L. Parrish, H. T. Hill, Helen Moore, F. D. Farrell, A. A. Holtz, Jessie McD. Machir, Rachel Marks.

Control: I. V. Iles, Margaret M. Justin, L. E. Conrad, 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, LeVelle Wood, R. I. Thackrey.

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, F. L. Parrish.

Honorary Degrees: R. W. Babcock, Margaret M. Justin, L. E. Call, L. E. Conrad, L. M. Roderick.

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, Ella Jane Meiller.

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, Dwight Williams.

Schedule of Classes: A. E. White, W. T. Stratton, Linn Helander, W. E. Grimes, Martha S. Pittman, R. W. Babcock, J. K. Campbell.

Scholastic Eligibility: Helen Moore, Emma Hyde, R. M. Kerchner, Gladys E. Vail, W. M. McLeod, F. W. Atkeson, R. I. Thackrey.

Selection of Veterinary Students: R. R. Dykstra, S. A. Nock, J. H. Burt, E. J. Frick, L. M. Roderick.

Selective Service: C. H. Scholer, A. D. Weber, A. B. Cardwell, Herman Farley.

Student Health: L. E. Conrad, L. D. Bushnell, Helen Moore, M. F. Ahearn, J. W. Hanson, Bessie Brooks West.

Student Honors: R. F. Morse, R. W. Conover, B. L. Remick, A. B. Cardwell, W. F. Pickett, Martha S. Pittman.

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, J. E. Ackert.

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, the sciences 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, School of Arts and Sciences, 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. School 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. School of Engineering and Architecture.

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. Graduate School.

Farm Machinery Hall. Erected, 1873.

Heat, Power, and Service Building. Erected, 1928.

Horticulture Barn. Erected, 1917.

Illustrations Hall. Erected, 1876.

Infirmary. 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 Sci-

ence, 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 nutrition 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. School 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. School 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 schools 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 and Accounting (4 years)
- Dairy Manufacturing (4 years)
- Dietetics and Institutional Management (4 years)
- Floriculture and Ornamental Horticulture (4 years)
- Home Economics (4 years)
- Home Economics and Art (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 Adaptation (1 year)

English, 3 Units; Algebra, 1½ Units; Geometry, 1 Unit; Science, Physical or Biological, 1 Unit, for

- General (4 years)
- Milling Industry (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)
- Industrial Technology (2 years)
- Landscape Design (4 years)
- Mechanical Engineering (4 years)
- Physical Science (4 years)

The above curriculums were formulated on the assumption that high-school subjects named will be offered for admission.

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, the Curriculum in Landscape Design, the Curriculum in Milling Industry, or the Curriculum in Physical Science, 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 student deficient in advanced high school algebra, who chooses a curriculum for which it is prerequisite will, if necessary, be assigned to a five hour course in college algebra instead of to the regular three hour course. A student deficient in solid geometry, who chooses a curriculum for which it is prerequisite will, if necessary, be assigned to a two hour course in solid geometry. For the extra hours he may be allowed elective credit toward graduation except in the curriculums in the School of Engineering and Architecture.

A student deficient in the required unit of high school science will be held for four hours of college physical or biological science in addition to any science required by his college curriculum. He may be allowed elective credit toward graduation on such science except in the curriculums in the School of Engineering and Architecture.

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	English, three to four units Journalism, one-half or one unit Public speaking, one-half or one unit
GROUP II Foreign Languages	French, one to four units German, one to four units Greek, one to four units Latin, one to four units Spanish, one to four units
GROUP III Mathematics	Elementary algebra, one or one and one-half units Plane geometry, one unit Advanced algebra, one-half unit Solid geometry, one-half unit Plane trigonometry, one-half unit
GROUP IV Natural Science	*Botany, one-half or one unit *Chemistry, one unit *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 History and Social Sciences	American history, one unit Civics, one-half or one unit 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 ..... Normal Training Subjects	Higher arithmetic, one-half unit Methods and management, one-half unit *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 ..... Industrial Subjects	*Agriculture, one-half to four units *Drawing, one-half or one unit *Forging, one-half or one unit *Home Economics, one-half to four units *Printing, one-half, one, or two units *Woodwork, one-half, one, or two units
GROUP VIII ..... Commercial Subjects	Bookkeeping, one-half or one unit Commercial geography, one-half unit 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 school in which his major work is to be done, and the dean

* 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.

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 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 before 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. 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, 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 sixteen 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 resident 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 school 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 at the end of each semester and of the first eight-week summer session.

DEGREES

The following degrees are conferred on completion of four-year curriculums:

- Bachelor of Science
- Bachelor of Science in Agriculture (Agriculture; Agricultural Administration; Dairy Manufacturing; Floriculture and Ornamental Horticulture; Landscape Design)
- 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; Dietetics and Institutional Management)
- 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, 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 school 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 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, the student-union 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 for the sixteen-week summer session, or $20 for each eight-week summer session, is charged residents of Kansas: nonresidents pay $75 and $50, respectively.

STUDENT-HEALTH FEE. Undergraduate students pay a student-health fee of $5 a semester, or $2 for each eight-week summer session, or $4 for the sixteen-week summer session, for which they get the services of the Department of Student Health. Graduate students carrying not fewer than ten hours during a semester or not fewer than six hours in summer school may receive the same services if they pay the student-health fee at the time of registration.

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 summer every student, graduate or undergraduate, pays a student-activity fee of $1, plus tax, for each eight-week session, or $2 plus tax for the sixteen-week session.

STUDENT UNION FEE. In accordance with a vote by the student body and with section 4 of chapter 364 of the Kansas Session Laws of 1941, each student pays a student union fee of $5 a semester or $2 for each eight-week summer session, or $4 for the sixteen-week summer session. The fund so collected is to be used to provide a student union building.

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

	New Students	*Old Students*
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
Student Union (one semester)	5.00	5.00
Totals	$52.50	$42.50

FOR NONRESIDENTS OF KANSAS

	New Students	*Old Students*
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
Student Union (one semester)	5.00	5.00
Totals	$112.50	$92.50

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. Charges 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.

Curriculum	*First semester*	*Second semester*
Agricultural Administration	$20.00	$11.00
Agricultural Engineering	15.50	16.00
Agriculture	20.00	11.00
Applied Music (not incl. sheet music and private lessons)	5.75	5.75
Architectural Engineering	13.00	14.00
Architecture	6.50	7.50
Business Administration	3.75	3.75
Business Administration and Accounting	3.75	3.75
Chemical Engineering	15.50	16.50
Civil Engineering	14.00	13.00
Dairy Manufacturing	19.50	15.00
Dietetics and Institutional Management	17.75	13.00
Electrical Engineering	15.50	18.50
Floriculture and Ornamental Horticulture	18.00	9.50
General	17.25	17.25
General, Preveterinary	17.75	13.00
Home Economics	17.75	13.00
Home Economics and Art	17.75	13.00
Home Economics and Nursing	17.00	12.75
Industrial Arts	18.00	17.50
Industrial Chemistry	13.75	13.75
Industrial Journalism	15.50	6.75
Industrial Technology	16.00	18.00
Landscape Design	18.00	9.50
Mechanical Engineering	15.50	15.50
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
Physical Science	13.75	13.75
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 $4 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 transcript 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 $6 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

Aptitude tests are designed to ascertain what features of the student's 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. No student is advanced in classification until he has completed these tests.

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 or dean 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 school 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 reassignment; 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 reassignment.

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 seventh and eighth weeks or the fifteenth and sixteenth 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 school 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 semester hour, by the dean of the school 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 reported every week 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.

At the end of each week, instructors send signed reports of absences for the week 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 (see College Calendar); students who are to be graduated at the close of the semester take their examinations earlier, usually at the regular hour 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 school 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. No examination to make up deficiencies in college entrance requirements will be given to students who have entered on the fourth semester of work in this institution.

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 student. 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 per cent 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, except that grades below passing of students withdrawing from College during the seventh and eighth weeks or the fifteenth and sixteenth weeks of a semester are recorded as midsemester or semester grades. 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 school in which their major work lies, until the requirement in points is met.

HONORS

In each school 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 in this institution, combining the work of the freshman and sophomore years.

Similarly, at 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 in 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

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 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:

Subject	*A semester*	*Total*
Orchestra	½	4
Band	½	4
Choral Ensemble	½	4
Debate	2	4
Oratorical Contest	2	4
Kansas State Collegian journalism	1	4
Agricultural Student journalism	1	4
Kansas State Engineer 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.

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.

WAR TRAINING AT K. S. C.

The College is participating in the national defense training program as authorized by Congress and administered by the U. S. Office of Education. The purpose of this program is to offer short courses of college grade in an effort quickly to supply the urgent need for trained help in industry and government which is required to carry on the rapidly expanding defense program.

There are no restrictions as to age, color, or sex, but there are certain definite educational and experience requirements, depending on the course.

Practically all the courses cover a period of twelve weeks, requiring about thirty-six hours a week of class and laboratory work with about twelve hours of outside preparation a week.

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 only 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 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 School of Agriculture, and *The Kansas State Engineer* is published by students in the School 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 disabled 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 men's adviser, 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. No applications will be accepted 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 (sixteen 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.

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.

OTHER RELIGIOUS ORGANIZATIONS

The Religious Federation of Kansas State College is composed of representatives of the College Y. M. C. A. and Y. W. C. A., and students in all church groups that wish to coöperate. Each fall the Federation sponsors Christian Affirmation Week, and during the year it fosters four union meetings of all the coöperative groups. It also promotes many activities of the member groups.

There are thirteen recognized religious organizations for College students sponsored by various Manhattan churches.

HONOR SOCIETIES

Pi 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.

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, 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 School of Agriculture are members. The objectives of the association are to encourage and support agricultural activities, to correlate the work of various clubs and other organizations of students within the school; and, in general, to have leaders elected and authorized to speak for the student body of the school at all times.

Departmental clubs of the school 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 school 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 School 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 School 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 School 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 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, K. S. C. Alumni Association.

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 $88,500, 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 membership 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 30, 1942, the following alumni have completed payments for life membership: Charles W. Adcock, K. L. Backus, J. Glenn Barnhart, C. Wilson Blackburn, Betty Bonnell, Pauline M. Borth, Walter V. Buck, Russell C. Buehler, Wesley L. Burgan, Daphyne Smith Cauble, J. C. Christensen, Herbert W. Clutter, Merle and Nellie Hunt Converse, Arthur H. Costain, Jr., Floyd E. Davidson, F. A. Dawley, J. C. DeVault, Richard K. Dickens, John Dietrich, Opal Endsley Dowdall, Dean L. Dutton, Oleve Manning Erickson, Lewis S. Evans, Autumn Fields, Ogden W. Greene, Kenneth D. Grimes, Ralph L. Gross, W. Carlton Hall, Clifford L. Harding, Harry E. Hershey, Frank A. Hetzke, Kenneth M. Hill, Ruth Hofsess, Pius Hostetler, George Hutcherson, Clifton Jackson, Ralph S. Jennings, Sylvester H. Keller, Pauline Kennett, Doris Kittell, William H. Koenig, Velma Koontz, Helen Latta, Melvin A. Lindahl, Daniel G. Lynch, Roy H. McKibben, Helen Macan, Emma Storer Marx, Arnold A. Mast, H. D. Oliver Miller, Lee T. Morgan, Myrtle M. Morris, Grayson Murphy, Floyd R. and Marion Sanders Oliver, Charles H. Olson, Leroy and Mary (Hull) Paslay, Dwight Patton, Laurence A. Peck, Carl Pettyjohn, Allen G. Philips, Louise Reed, S. Helen Roberts, Grant A. Salisbury, Norma Sayre, Luke M. Schruben, Ebur Schultz, Emma Shepek, Mac and Mae Siefkin Short, Damaris Sipes, Ray L. Smith, J. Arlie Stewart, Howard R. Stover, Achsa Johnson Sykes, Andrew B. Symns, Lloyd C. Teas, J. Elwyn Topliff, Harden H. Tubbs, Edna Greever Van Tuyl, Harold P. Walker, W. J. Walker and W. A. Wunsch. This list brings the total of paid up life members to 1,164.

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:

Frances M. Allen Memorial. $1,000, given by E. A. Allen, '87, in memory of his wife.

J. Chester Allen, '82, Memorial. $1,000, given by E. A. Allen, '87, in memory of his brother.

Ethel Arnold, '18, Memorial. $26, contributed by her students.

Clara F. Castle, '94, Memorial. $100.

Arthur F. Corlett Memorial. $100, given by his sister, Christine M. Corlett, '91.

Kary C. Davis, '91, Memorial. $500, given by his widow, Fanny Waugh Davis, '91.

Albert Dickens, '93, Memorial. $1,967.70, contributed by friends, alumni, and faculty members.

Rebecca Dubbs, '29, Memorial. $1,200, to assist students who are graduates of any high school in Ness, Lane, Scott, Wichita, Greeley, or Gove counties.

Jacob Lund, '83, Memorial. $70.

Dan H. Otis, '92, Memorial. $500.

Ruth Stokes Sears, '92, Memorial. $500, given by her husband, Fred C. Sears, '92.

C. H. Stiles, f.s. '81, Memorial. $50, given by his widow, Nellie Cottrell Stiles, '87.

Samuel and Eleanor Thackrey Memorial. $756.75, given by their descendants.

E. C. Trembly, '95, Memorial. $50.

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.

Venus Kimble Wilson, '08, Memorial. $400, given by her husband, Bruce Wilson, '08.

E. A. Allen, '87, $100, on the fiftieth anniversary of his graduation.

Vilona Cutler, '17, Endowment Membership. $1,000, a loan to relatives of the donor and, upon repayment, to other students.

Albert Deitz, '85, $136.76.

J. U. Higinbotham, '86, and Mrs. Higinbotham. $1,000.

Nellie Sawyer Kedzie, '87, Unit. $801.60, contributed by friends and former students.

Dr. J. H. Oesterhaus, '01, $100.

William Volker Fund. $2,000. $1,000, given by William Volker and $1,000, by H. W. Luhnow, '17.

Lydia Gardiner Willard Fund. $500, given by her husband, J. T. Willard, '83.

OTHER UNITS IN THE ALUMNI LOAN FUND

Ag Fair Unit. $850, a temporary loan from the Ag Fair Board for aid to students in the School of Agriculture.

Cosmopolitan Club. $750, for foreign members of the Comopolitan Club.

4-H Club. $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.

Future Farmers Unit. $180, from high school vocational agriculture students and teachers.

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.

Kansas Potato Show Incorporation. $477.17, for graduate students whose research problem is on some phase concerning the production, marketing or use of Irish potatoes or sweet potatoes.

Kansas State Horticultural Society. $500, for students in the Department of Horticulture.

Klod and Kernel Klub Unit. $700, for students in the Department of Agronomy.

Manhattan Chamber of Commerce. $3,023.72.

Phi Kappa Phi. $150, for members or pledges of Phi Kappa Phi.

Sigma Delta Chi. $150, for students in Industrial Journalism.

Topeka Home Economics Club Unit. $100, for students in Home Economics graduated from any high school in Shawnee County.

Classes:

Class of 1916, $200.00	Class of 1937, $438.19
Class of 1923, $76.16	Class of 1939, $45.26
Class of 1926, $9.13	Class of 1940, $15.82
Class of 1927, $3.10	Class of 1941, $66.49
Class of 1935, $57.50	Class of 1942, $57.93.
Class of 1936, $111.50	Riley County Alumni Unit, $6.08

Contributions to the Chimes Fund, at present used in the Alumni Loan Fund:

Class of 1919, $721.61	Class of 1931, $686.72
Class of 1922, $106.39	Class of 1932, $781.78
Class of 1929, $781.49	Class of 1938, $139.10
Class of 1930, $750.40	Architectural Unit, $20.00

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 six 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.

Edward and Sophie Secrest Memorial, $4,000, available to men and women.

E. A. Wharton Bequest, $5,000, available to men and women.

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.

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. Winners of these scholarships must enroll in the School of Agriculture. Application for these scholarships is made through the county agent.

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 someone 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 Graduate School.

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 School of Arts and Sciences 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 School of Arts and Sciences in Kansas State College.

Phi Beta Kappa. $10; to the highest ranking eight-semester senior in the general curriculum.

Quill Club. $10; for the best short story in the annual contest.

Omicron Nu Scholarship Award. $10; to the highest ranking freshman in the School of Home Economics.

Prizes in Veterinary Medicine

Dr. N. D. Harwood, '18. $7.50 and $7.50; to second-year students ranking highest in anatomy and in physiology.

Dr. Benjamin F. Pfister, '21, and Dr. Earl F. Hoover, '24. $10 and $5; to third-year students ranking highest in therapeutics.

Dr. O. M. Franklin, '12. $10 and $5; to fourth-year students ranking highest in pathology.

Dr. C. W. Bower, '18. $10 and $5; to fourth-year students leading in work in small animal clinic.

Kansas Veterinary Medical Association. $15 and $10; as prizes in general proficiency; to fourth-year students.

MEDALS

Block and Bridle Club. Gold, silver, and two bronze; for stock judging.

Student Dairy Club. Gold, silver, and bronze; for dairy judging.

Alpha Zeta. To the agricultural student ranking highest in scholarship in the freshman year.

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 Hanson
Assistant Physician Montgomery-Short
Assistant Physician Woods
Assistant Physician Hughes
Assistant Physician Martin
Consulting Radiologist G. M. Tice
Head Dispensary Nurse Buechel
Head Hospital Nurse Phillips
Nurse McGrath
Nurse Olney
Nurse Hermon
Nurse Seefeldt
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 an eight-week summer session, 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 Cullipher
Assistant Loan Librarian Peters
Head Cataloguer Baker
Assistant Cataloguer Graham
Documents Cataloguer Roberts
Continuations Assistant Baxter
Class Reserves Assistant Owsley

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, 1942, the Library contained 133,660 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.

School Libraries. School 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 department concerned. They are under the direction of the librarian and are accessible to all students at regular hours.

The Graduate School

James Edward Ackert, *Dean*

ADMISSION

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.

Correspondence regarding admission to graduate study should be addressed to the Dean of the Graduate School, 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.

REGISTRATION

Students who have been admitted to graduate study register, obtain their assignments from the dean of the Graduate School, 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 school 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 an hourly basis, provided that they do not enroll for more than ten hours during a semester, nor more than six hours during an eight-week summer session.

ASSIGNMENTS

Not more than sixteen hours, including research, may be assigned in a single semester, nor more than nine hours during the eight-week summer school. Students holding graduate assistantships may not be assigned to more than twelve hours, including thesis, in one semester.

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 each semester and of the first eight-week summer session. Candidates for advanced academic degrees are required to be present at commencement exer-

* See section headed Fees, under General Information.

† Graduate students may have the student-activity benefits by paying the regular student-activity fee.

‡ See section headed Grades, under General Information.

cises 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*. Applications for this privilege should be made to the Dean of the Graduate School.

GENERAL REQUIREMENTS FOR THE DEGREES MASTER OF SCIENCE AND DOCTOR OF PHILOSOPHY

Candidates for the degrees 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.

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:

School of Agriculture:
- Agricultural Economics
- Agronomy
- Animal Husbandry
- Dairy Husbandry
- Horticulture
- Milling Industry
- Poultry Husbandry

School of Arts and Sciences:
- Bacteriology
- Botany and Plant Pathology
- Chemistry
- Economics and Sociology
- Education*
- English
- Entomology
- Geology
- History and Government
- Industrial Journalism
- Mathematics
- Modern Languages
- Physics
- Psychology
- Speech
- Zoölogy

School of Engineering:
- Agricultural Engineering
- Applied Mechanics
- Architecture
- Chemical Engineering
- Civil Engineering
- Electrical Engineering
- Machine Design
- Mechanical Engineering
- Shop Practice and Industrial Arts

School of Home Economics:
- Art
- Child Welfare and Euthenics
- Clothing and Textiles
- Food Economics and Nutrition
- General Home Economics
- Household Economics
- Institutional Management

School of Veterinary Medicine:
- Anatomy and Physiology
- Pathology

* In graduate work in education, major emphasis is placed upon rural and vocational education.

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 eight-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 Graduate School. 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 school in which the major work is offered is a member ex officio.

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 Graduate School. 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 depart-

ments or schools 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 tenative 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 Graduate School 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 bond acceptable to the Graduate Council. 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 Graduate School.

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 an hourly 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 Graduate School.

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 a semester nor satisfy the residence requirement for the master's degree in less than two semesters and one eight-week summer school.

Graduate assistantships, paying a salary fixed each year usually are maintained as follows:

Subject	*Number*
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
Physics	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.

Subject	*Number*
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:

Subject	*Number*
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 Graduate School.

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 Graduate School, 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 schools of the College offer graduate work in the summer school. In only a few departments, however, can a student complete requirements for the Master's Degree without spending one or two semesters in residence. For information about these cases, one should address the Dean of the Graduate School.

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, 1943

May 31 and June 1, Monday and Tuesday.—Registration of students for eight-week and sixteen-week Summer Sessions begins at 8 a. m.
June 12, Saturday.—Preliminary reports on Masters' theses are due.
June 15, Tuesday.—Lecture on Thesis Preparation. 4:00 p. m. F 102.
June 30, Wednesday.—Doctors' theses are due.
July 2, Friday.—Masters' examinations may begin. Abstracts of thesis due one week before examination.
July 17, Saturday.—Masters' theses approvals are due.
July 24, Saturday.—Final copies of Masters' theses are due.
July 27, Tuesday.—Last day for Masters' examinations.

FIRST SEMESTER, 1943-1944

September 28 and 29, Tuesday and Wednesday.—Registration and assignment of graduate students.
November 27, Saturday.—Mid-semester scholarship deficiency reports to students and deans are due.
December 4, Saturday.—Programs of Study are due from candidates for the Master's Degree in 1944.
January 29, Saturday.—First semester closes at 12 noon.

SECOND SEMESTER, 1943-1944

January 31 and February 1, Monday and Tuesday.—Registration and assignment of graduate students.
February 15, Tuesday.—Lecture on Thesis Preparation. 4:00 p. m. F 102.
March 10, Friday.—Preliminary reports on Masters' theses are due.
April 11, Tuesday.—Masters' examinations may begin. Abstracts of thesis due one week before examination.
April 22, Saturday.—Doctors' theses are due.
May 6, Saturday.—Masters' theses approvals are due.
May 13, Saturday.—Final copies of Masters' theses are due.
May 16, Tuesday.—Last day for Masters' examinations.
May 21, Sunday.—Eighty-first annual commencement at 8:00 p. m.

SUMMER SCHOOL, 1944

May 29 and 30, Monday and Tuesday.—Registration of students for eight-week and sixteen-week Summer Sessions begins at 8 a. m.
June 10, Saturday.—Preliminary reports on Masters' theses are due.
June 13, Tuesday.—Lecture on Thesis Preparation. 4:00 p. m. F 102.
June 28, Wednesday.—Doctors' theses are due.
June 30, Friday.—Masters' examinations may begin. Abstracts of thesis due one week before examination.
July 15, Saturday.—Masters' theses approvals are due.
July 22, Saturday.—Final copies of Masters' theses are due.
July 25, Tuesday.—Last day for Masters' examinations.

The School 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 school 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 four-year Curriculum in Landscape Design leads to the degree of Bachelor of Science in Landscape Design.

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 School of Agriculture and the head of the department in which the student majors.

A student may major not only in any department in the School 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 School of Agriculture. Students in dairy manufactures, landscape design, or floriculture and ornamental

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 School 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 AGRICULTURAL ADMINISTRATION WITH PROFESSIONAL TRAINING IN JOURNALISM

Students wishing to enter journalism as a profession, with extensive work in agriculture, may combine work leading to a degree in agriculture by pursuing the Curriculum in Agricultural Administration. The student will take 30 hours of work in the Department of Industrial Journalism, leading to a certificate in journalism, and at the same time he will meet the professional requirements of the American Association of Schools and Departments of Journalism.

Electives of such students must be approved by the head of the Department of Agricultural Economics, the head of the Department of Industrial Journalism, and the Dean of the School of Agriculture. Such students will in general elect courses in journalism as outlined under the Curriculum in Industrial Journalism in the School of Arts and Sciences.

Students preparing for the field of agricultural journalism are expected to start such work in their sophomore year, and are encouraged to participate in the activities of professional journalistic organizations on the same basis as students pursuing the Curriculum in Industrial Journalism.

Those not expecting to make journalism a career may take minor work in journalism and at the same time major in any of the departments in the School of Agriculture.

PRETHEOLOGICAL COURSES

In coöperation with various theological seminaries, Kansas State College offers an opportunity for students who are preparing for the rural ministry to carry elective courses in the school of agriculture and in other schools of the college which may be accepted as pretheological courses in a seminary.

Any person desiring to enter the rural ministry should acquaint himself with the requirements of the seminary of his choice. Special attention should be given to any language requirements.

Among the suggested electives that may be taken at Kansas State College would be courses in agricultural economics, economics, English literature, history and government, philosophy, psychology, rural sociology, sociology, and public speaking.

Persons desiring to prepare for the field of rural ministry will enter the Curriculum in Agricultural Administration. They should use the name of this curriculum in filling out information blanks in anticipation of enrollment in Kansas State College.

CURRICULUM IN LANDSCAPE DESIGN

The Curriculum in Landscape Design is planned for students who wish to become draftsmen for professional landscape firms and various other private and public agencies. Special emphasis is given to plant materials, planting design, and the rendering of landscape plans. Those completing the curriculum are eligible to receive the degree of Bachelor of Science in Landscape Design.

CURRICULUM IN FLORICULTURE AND ORNAMENTAL HORTICULTURE

This curriculum gives training to those who wish to enter one of the several fields of floriculture. There is opportunity to become trained for the improvement of greenhouse and other floricultural plants and for the growing and selling of flowers. Emphasis is placed on the utilization of flowers in floral arrangements.

Those taking Ornamental Horticulture receive training in Landscape Design with particular reference to the production and use of landscape materials.

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 School 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 school 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. 126,	2(2-0) *and*	Chemistry II Rec., Chem. 103	3(3-0)
Lvstk. Ju., An. Husb. 127	1(0-3)*or*	El. of Dairying, Dairy Husb. 101	3(2-3)*or*
El. of Dairying, Dairy Husb. 101	3(2-3)	El. of An. Husb., An. Husb. 126,	2(2-0)*and*
Freshman Lect. Gen. Agr. 102	1(2-0)	Lvstk. Ju., An. Husb. 127	1(0-3)
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)*or*	Farm Crops, Agron. 102	2(2-0)*and*
Plant Physiology I,[3] Bot. 208	3(3-0)	Farm Crops Lab., Agron. 103	2(0-6)*or*
Soils, Agron. 130	4(3-2, 1)*or*	Soils, Agron. 130	4(3-2, 1)
Farm Crops, Agron. 102	2(2-0)*and*	General Zoölogy, Zoöl. 105	5(3-6)
Farm Crops Lab., Agron. 103	2(0-6)	Infantry IV, Mil. Sc. 104	1(1-2)
Farm Poult. Pro., Poult. 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)*or*	Gen. Econ. Entomology, Ent. 203.	3(2-3)
Agr. Microbiology, Bact. 105[4]	3(2-3)	Agr. Microbiology, Bact. 105[4]	3(2-3)*or*
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. §

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* 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. Sometime 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 School of Agriculture, designating the department of the school 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:

	Semester hours
MAJOR ELECTIVES These electives may be taken in any one of the departments of the School of Agriculture. In certain cases also a science department outside of the division may be selected for a major department; *e. g.*, Chemistry, Entomology, Bacteriology.	12
MINOR AGRICULTURAL ELECTIVES These electives may be taken from one or more departments, but must directly strengthen the student's preparation in agriculture.	9
MINOR NONAGRICULTURAL ELECTIVES These electives must be chosen from one or more of the following departments: English, Education, Economics and Sociology, History and Government, Mathematics, Modern Languages.	6
GENERAL ELECTIVES 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.	19

All electives must be officially approved before assignment, by both the Dean of the School 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 School 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.

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. 126,	2(2-0)*and*	Chemistry II Rec., Chem. 103	3(3-0)
Lvstk. Ju., An. Husb. 127	1(0-3)*or*	El. of Dairying, Dairy Husb. 101	3(2-3)*or*
El. of Dairying, Dairy Husb. 101	3(2-3)	El. of An. Husb., An. Husb. 126,	2(2-0)*and*
Freshman Lect., Gen. Agr. 102	1(2-0)	Lvstk. Ju., An. Husb. 127	1(0-3)
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 Chem., (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. 102	2(2-0)*and*	Farm Crops, Agron. 102	2(2-0)*and*
Farm Crops Lab., Agron. 103	2(0-6)	Farm Crops Lab., Agron. 103	2(0-6)
Infantry III, Mil. Sci. 103	1(1-2)	Farm Poult. Pro., Poult. 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 1, 2, 3, 4, 5, 6*	*Hours in field 7*
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
Totals	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 School of Agriculture and the head of the Department of Economics and Sociology.

* Four meetings each semester.

Curriculum in Dairy Manufacturing

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)	Chemistry II Rec., Chem. 103	3(3-0)
El. of Dairying, Dairy Husb. 101	3(2-3)	Chemistry II Lab., Chem. 104	2(0-6)*or*
Freshman Lect., Gen. Agr 102	1(2-0)	Dy. Cattle Judg., Dairy Husb. 105,	2(0-6)
Infantry I, Mil. Sc. 101	1(1-2)	El. of An. Husb., An. Husb. 126,	2(2-0)*and*
Phys. Education M, Phys. Ed. 103,	R(0-2)	Lvstk. Ju., An. Husb. 127	1(0-3)
Agr. Seminar,[1] Gen. Agr. 103	R	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	Total	16

SOPHOMORE

First Semester		Second Semester	
Dairy Inspec., Dairy Husb. 106	2(1-3)	Farm Crops, Agron. 102	2(2-0)*and*
General Algebra Math. 108	5(5-0)	Farm Crops Lab., Agron. 103	2(0-6)
Farm Poult. Pro., Poult. Husb, 101,	2(1-3)	Milk Production, Dairy Husb. 108,	3(3-0)
Gen. Microbiology, Bact. 101	3(1-6)	Dairy Bacteriology, Bact. 111	3(1-6)
Organic Chem., (Agr.) Chem. 125,	3(3-0)	Economics I, Econ. 101	3(3-0)
Infantry III, Mil. Sc. 103	1(1-2)	Prin. of Feeding, An. Husb. 152	3(3-0)
Phys. Education M, Phys. Ed. 103	R(0-2)	Infantry IV, Mil. Sc. 104	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

JUNIOR

First Semester		Second Semester	
Genetics, An. Husb. 221	3(3-0)	Market Milk, Dairy Husb. 116	3(2-3)
Cond. & Pwd. Milk, Dairy Husb. 128	3(2-3)*or*	Ice Cream Mkg., Dairy Husb. 130,	3(2-3)*or*
Prin. of Accounting, Econ. 136	3(3-0)	Cheese Making, Dairy Husb. 135	3(2-3)
Agr. Seminar,[1] Gen. Agr. 103	R	Agr. Seminar,[1] Gen. Agr. 103	R
Elective	10	Elective	10
Total	16	Total	16

SENIOR

First Semester		Second Semester	
Butter Making, Dairy Husb. 110	3(2-3)	Ice Cream Mkg., Dairy Husb. 130,	3(2-3)*or*
Bact. of Butter Cult., Bact. 235	1(0-3)	Cheese Making, Dairy Husb. 135	3(2-3)
Cond. & Pwd. Milk, Dairy Husb. 128	3(2-3)*or*	Dairy Seminar, Dairy Husb. 202	1(1-0)
Prin. of Accounting, Econ., 136	3(3-0)	Agr. Relationships, Gen. Agr. 105,	R(1-0)
Agr. Seminar,[1] Gen. Agr. 103	R	Agr. Seminar,[1] Gen. Agr. 103	R
Elective	9	Elective	12
Total	16	Total	16

1. Four meetings each semester.

Curriculum in Floriculture and Ornamental Horticulture

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. Botany II, Bot. 105	3(1-6)
Chemistry I, Chem. 101	5(3-6)	Chem. II Rec., Chem. 103	3(3-0)
Engg. Drawing, Mach. Des. 101	2(0-6)	Gen. Geology, Geol. 103	3(3-0)
Library Methods, Lib. Ec. 101	1(1-0)	G. H. Constr. & Mgt., Hort. 127	3(3-0)
Freshman Lect., Gen. Agr. 102	1(2-0)	Infantry II, Mil. Sc. 102 (men)	1(1-2)
Infantry I, Mil. Sc. 101 (men)	1(1-2)	Phys. Ed. M, Phys. Ed. 103	R(0-2)*or*
Phys. Ed. M, Phys. Ed. 103	R(0-2)*or*	Phys. Ed. W, Phys. Ed. 151	R(0-3)
Phys. Ed. W, Phys. Ed. 151	R(0-3)	Agr. Seminar, Gen. Agr. 103	R
Agr. Seminar,[1] Gen. Agr. 103	R		
Total	15 or 16	Total	15 or 16

SOPHOMORE

First Semester		Second Semester	
Land. Gardening, Hort. 125	3(3-0)	El. of Hort., Hort. 107	3(2-3)
Plant Propagation, Hort. 101	3(2-3)	Org. Chemistry (Agr.), Chem. 125,	3(3-0)
Plant Pathology I, Bot. 205	3(2-3)	Genetics, An. Husb. 221	3(3-0)
Soils, Agron. 130	4(3-2, 1)	Economics I, Econ. 101	3(3-0)
Tax. Bot. Flrg. Plts., Bot. 225	3(1-6)	Writ. & Oral Sales., Engl. 123	3(3-0)
Infantry III, Mil. Sc. 103 (men)	1(1-2)	Infantry IV, Mil. Sc. 104 (men)	1(1-2)
Phys. Ed. M, Phys. Ed. 103	R(0-2)*or*	Phys. Ed. M, Phys. Ed. 103	R(0-2)*or*
Phys. Ed. W, Phys. Ed 151	R(0-3)	Phys. Ed. W, Phys. Ed. 151	R(0-3)
Agr. Seminar, Gen. Agr. 103	R	Agr. Seminar, Gen. Agr. 103	R
Total	16 or 17	Total	15 or 16

JUNIOR

First Semester		Second Semester	
Plant Materials I, Hort. 102	3(2-3)	Plant Materials II, Hort. 103	3(2-3)
Plant Physiology I, Bot. 208	3(3-0)	Plant Phys. III, Bot. 211	3(3-0)
Comm. Flori. I, Hort. 140	3(2-3)	Planting Design, Hort. 228	2(0-6)*or*
Plant Genetics, Agron. 208	3(3-0)	Bus. Mgt., Econ. 126	2(2-0)
Prin. of Actg., Econ. 136	3(3-0)	Lit. of Hort., Hort. 208	2(2-0)*or*
Electives [2]	2	Pub. Speaking, Sp. 107	2(2-0)
Agr. Seminar, Gen. Agr. 103	R	Agr. Jour., Ind. Jour. 160	3(2-3)
		Electives	3
		Agr. Seminar, Gen. Agr. 103	R
Total	17	Total	16

SENIOR

First Semester		Second Semester	
Lands. Design I, Hort. 238	3(1-6)	Spraying, Hort. 207	3(2-3)
Forest Nurs. Pract., Hort. 120	3(2-3)	Plant Ecology, Bot. 228	2(2-0)
Floral Arrgt. I, Hort. 135	2(1-3)	Bus. Mgt., Econ. 126	2(2-0)*or*
Hort. Seminar, Hort. 235	1(1-0)	Planting Design, Hort. 228	2(0-6)
Gen. Econ. Ent., Ent. 203	3(2-3)	Pub. Speaking, Sp. 107	2(2-0)*or*
Electives	4	Lit. of Hort., Hort. 208	2(2-0)
Agr. Seminar, Gen. Agr. 103	R	Hort. Seminar, Hort. 235	1(1-0)
		Agr. Relationships, Gen. Agr. 105	R(1-0)
		Electives	5
		Agr. Seminar, Gen. Agr. 103	R
Total	16	Total	15

Suggested Electives

Floriculture		*Ornamental Horticulture*	
Meteorology, Phys. 146	3(3-0)	Freehand Drawing I, Arch. 112	2(0-6)
Floral Arrgt. II, Hort. 136	2(1-3)	Domestic Arch., Arch. 124	2(2-0)
Comm. Flori. II, Hort. 141	3(2-3)	Theo. Lands. Des., Hort. 243	2(2-0)
Veg. Garden., Hort., 133	3(2-3)	Pencil Rend. & Sketch., Arch. 116,	2(0-6)
Hort. Cash Crops, Hort. 214	2(2-0)	Silviculture, Hort. 119	3(2-3)
Modern Language	.....	Lands. Constr., Hort. 227	3(2-3)

Total credits: Women, 125; men, 129.

1. Four meetings each semester.
2. All students not offering one unit of high school physics for entrance must include three hours of Agricultural Physics in their electives.

Curriculum in Landscape Design[1]

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. Botany II, Bot. 105	3(1-6)
Chemistry I, Chem. 101	5(3-6)	Chem. II Rec., Chem. 103	3(3-0)
Hist. of Arch. I, Arch. 154A	2(2-0)	Hist. of Arch. II, Arch. 157A	2(2-0)
Library Methods, Lib. Ec. 101	1(1-0)	Gen. Geology, Geol. 103	3(3-0)
Freshman Lect., Gen. Agr. 102	1(2-0)	Current Hist., Hist. 126	1(1-0)
Infantry I, Mil. Sc. 101 (men)	1(1-2)	Infantry II, Mil. Sc. 102 (men)	1(1-2)
Phys. Ed. M, Phys. Ed. 103	R(0-2)*or*	Phys. Ed. M, Phys. Ed. 103	R(0-2)*or*
Phys. Ed. W, Phys. Ed. 151	R(0-3)	Phys. Ed. W, Phys. Ed. 151	R(0-3)
Agr. Seminar,[2] Gen. Agr. 103	R	Agr. Seminar, Gen. Agr. 103	R
Total	15 or 16	Total	15 or 16

SOPHOMORE

First Semester		Second Semester	
Lands. Gardening, Hort, 125	3(3-0)	Plane Trig., Math. 101	3(3-0)
Freehand Draw., Arch. 112	2(0-6)	Freehand Draw. II, Arch. 113	2(0-6)
Arch. Proj. I, Arch. 108	3(0-9)	Plant Ecology, Bot. 228	2(2-0)
Soils, Agron. 130	4(3-2, 1)	Agr. Journalism, Ind. Jour. 160	3(2-3)
Tax. Bot. Flrg. Plts., Bot. 225	3(1-6)	Economics I, Econ. 101	3(3-0)
Infantry III, Mil. Sc. 103 (men)	1(1-2)	El. of Hort., Hort. 107	3(2-3)
Phys. Ed. M, Phys. Ed. 103	R(0-2)*or*	Infantry IV, Mil. Sc. 104 (men)	1(1-2)
Phys. Ed. W, Phys. Ed. 151	R(0-3)	Phys. Ed. M, Phys. Ed. 103	R(0-2)*or*
Agr. Seminar, Gen. Agr. 103	R	Phys. Ed. W, Phys. Ed. 151	R(0-3)
		Agr. Seminar, Gen. Agr. 103	R
Total	15 or 16	Total	16 or 17

JUNIOR

First Semester		Second Semester	
Theo. Lands. Des., Hort. 243	2(2-0)*or*	Planting Design, Hort. 228	2(0-6)*or*
Lands. Constr., Hort. 227	3(2-3)	Civic Art. Hort. 223	3(1-6)
Plant Materials I, Hort. 102	3(2-3)	Plant Materials II, Hort. 103	3(2-3)
Surveying I, Civ. Engg. 102	2(0-6)	Sur. III, Civ. Engg. 151, 155	3(2-3)
Pencil Rend. & Sketch, Arch. 116	2(0-6)	Arch. Proj. II, Arch. 109	3(0-9)
El. of Arch. I, Arch. 106A	3(0-9)	Water Color I, Arch. 118	2(0-6)
Europe Since 1870, Hist. 212	3(3-0)	Electives [3]	3
Agr. Seminar, Gen. Agr. 103	R	Agr. Seminar, Gen. Agr. 103	R
Total	15 or 16	Total	16 or 17

SENIOR

First Semester		Second Semester	
Lands. Design I, Hort. 238	3(1-6)	Lands. Design II, Hort. 246	3(1-6)
Lands. Constr., Hort. 227	3(2-3)*or*	Civic Art, Hort. 223	3(1-6)*or*
Theo. Lands. Des., Hort. 243	2(2-0)	Planting Design, Hort. 228	2(0-6)
Silviculture, Hort. 119	3(2-3)	Gen. Econ. Ent., Ent. 203	3(2-3)
Forest Nursery Prac., Hort. 120	3(2-3)	Agr. Relationships, Gen. Agr. 105	R(1-0)
Plant Pathology I, Bot. 205	3(2-3)	Electives	7
Electives	2	Agr. Seminar, Gen. Agr. 103	R
Agr. Seminar, Gen. Agr. 103	R		
Total	16 or 17	Total	15 or 16

Suggested Electives

Spraying, Hort. 207	3(2-3)	Hist. Arch. III, Arch. 158A	2(2-0)
Water Color II, Arch. 119	2(0-6)	Hist. Arch. IV, Arch. 160A	2(2-0)
El. of Arch. II, Arch. 107A	3(0-9)	Lit. of Hort., Hort. 208	2(2-0)
Highway Engg. I, Civ. Engg. 231	2(2-0)	Hort. Probs., Hort. 244	.....
Dom. Arch., Arch. 124	2(2-0)	Hort. Seminar, Hort. 235	1(1-0)
Hist. Pt. & Sc., Arch. 179	3(3-0)	Sur. IV, Civ. Engg. 156, 157	3(2-3)

Total credits for the degree Bachelor of Science in Landscape Design: Women, 125; men, 129.

1. See, Entrance to College, Requirements for.

2. Four meetings each semester.

3. All students not offering one unit of high school physics for entrance must include three hours of Agricultural Physics in their electives.

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] Mill. Ind. 218	R	Phys. Education M, Phys. Ed. 103,	R(0-2)
		Milling Seminar,[1] Mill. Ind. 218	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] Mill. Ind. 218	R	Milling Seminar,[1] Mill. Ind. 218	R
Elective [2]	5	Elective [2]	6
Total	16	Total	16

JUNIOR [4]

First Semester		Second Semester	
Mkt. Grading Cereals, Agron. 115,	3(1-4, 2)	The Qualities of Wheat and Flour, Mill. Ind. 212	3(3-0)
Economics I, Econ. 101	3(3-0)	Milling Seminar,[1] Mill. Ind. 218	R
Milling Seminar,[1] Mill. Ind. 218	R	Elective [2]	13
Elective [2]	10		
Total	16	Total	16

SENIOR

First Semester		Second Semester	
Milling Seminar,[1] Mill. Ind. 218	R	Milling Seminar,[1] Mill. Ind. 218	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.

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)
Extem. Speech I, Sp. 106	2(2-0)*or*	Money and Banking, Econ. 116	3(3-0)
Public Speaking, Sp. 107*	2(2-0)	Business Law I, Hist. 163	3(3-0)
Extem. Speech II, Sp. 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. 123	3(3-0)	Economics II, Econ. 104	3(3-0)
Accounting I, Econ. 133	3(2-3)	Business Org. & Fin., Econ. 215	3(3-0)
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.

1. One meeting each month in addition to Agricultural Seminar.

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 School 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.

* For juniors and seniors.

Electives for Students in Milling Technology

MAJOR ELECTIVES

Gen. Org. Chem., Chem. 122	5(3-6)	Mech. of Materials I, Ap. Mech. 212	4(4-0)
Plane Anal. Geometry, Math. 110,	4(4-0)	Flour Mill. Constr., Mill. Ind. 203,	3(0-9)
Calculus I, Math. 114	4(4-0)	Steam and Gas Engineering C, Mech. Engg. 120, 125	3(2-3)
Calculus II, Math. 115	4(4-0)	Elec. Engg. C, Elec. Engg. 102, 106,	3(2-2, 1)
Applied Mechanics, Ap. Mech. 202,	4(4-0)	Oxyacetylene Welding, Shop 171,	1(0-2, 1) *or*
Des. Geom., Mach. Des. 106	2(0-6)	Arc Welding, Shop 172	1(0-2, 1) *or*
Mechanism, Mach. Des. 121	3(3-0)	Sheet Metal Work, Shop 173	3(0-6)
Mach. Drawing I, Mach. Des. 111,	2(0-6)		
Mill. Tech. I, Mill. Ind. 201	2(0-6)		
Mill. Tech. II, Mill. Ind. 202	2(0-6)		
Mill. Prac. II, Mill. Ind. 111	3(1-6)	Total	47 or 48

MINOR ELECTIVES: A total of 17 or 18 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. 207	4(1-6, 3)
Calculus I, Math. 114	4(4-0)	Colloidal Chemistry, Chem. 213	2(2-0)
Biochemistry, Chem. 231	5(3-6)	Adv. Wheat and Flour Testing, Mill. Ind. 210	2(0-6)
Quan. Anal., Chem. 241	5(1-12)	Chemical Microscopy, Chem. 245	1(0-3)
Gen. Microbiology, Bac. 101	3(1-6)		
Wheat, Flour Test., Mill. Ind. 205,	3(0-9)		
Physical Chemistry I, Chem. 206	5(3-6)		
		Total	52

MINOR ELECTIVES: A total of 14 hours of minor electives completes the work of the curriculum.

Agricultural Economics

Section of

ECONOMICS AND SOCIOLOGY

Professor GRIMES
Professor HOWE
Professor HILL
Professor HODGES
Professor MONTGOMERY
Assistant Professor PARSONS
Assistant Professor PINE
Assistant Professor DOLL
Assistant Professor WILSON
Instructor OTTO
Instructor HOECKER

Work in economics and sociology is offered in the schools of agriculture and arts and sciences. The more general courses are listed in the arts and sciences 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.

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* 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.

112. Farm Accounting. 3(2-3); I and II. Prerequisite: Econ. 101. Pine, Doll.
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.
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.

218. Land Economics. 3(3-0); I. Prerequisite: Econ. 101. Howe.
Relation of population to land supply; land tenure, ownership, and valuation.

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. 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 degree.

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
Professor Myers
Associate Professor Zahnley
Associate Professor Reitz
Associate Professor Mullen
Associate Professor Davis
Associate Professor Hide
Associate Professor Anderson
Assistant Hollembeak
Seed Analyst Norris

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

102. Farm Crops. 2(2-0); I and II. Prerequisite: Bot. 101. Davis. To be taken concurrently with Agron. 103, provided both courses are taken at this institution.

Economic significance of important grain and forage crops.

103. Farm Crops Laboratory. 2(0-6); I and II. Prerequisite: Bot. 101. Davis. To be taken concurrently with Agron. 102.

A study of identification, grading, and judging of forage and grain 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. Offered in 1944-'45 and in alternate years thereafter. 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.

203. Pasture Improvement I. 3(3-0); 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 1943-'44 and alternate years thereafter. Zahnley.
Recent investigation 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. 203 and 208. Offered in 1944-'45 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. Prerequisite: Chem. 101 and Geol. 103. Throckmorton, Myers, Hide.
Fundamental principles underlying the fertility and 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. Hide.
Influence of soil-forming agencies on soil characteristics and methods of classifying soils. 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.
A study of the fundamentals of soil fertility with major emphasis on chemical, physical, mineralogical, and biological processes.

249. Methods of Soil Investigation. 2(0-6); I. Prerequisite: Agron. 130 and Chem. 103. Myers.
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 Cox
Professor Bell
Professor Ibsen
Professor Aubel
Assistant Mertz
Instructor Kline
Instructor Klotz

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

126. Elements of Animal Husbandry. 2(2-0); I and II. Staff.
A survey of the field of animal husbandry, with special emphasis on the importance of livestock as a major phase of agriculture.

127. Livestock Judging. 1(0-3); I and II. Staff.
A study of type, conformation, and quality of different breeds and classes of livestock, including practice in judging. 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 or Bot. 208 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. Klotz. One field trip.

168. Meats. 3(2-3); I and II. Prerequisite: An. Husb. 125. Kline.
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. Kline.
Selecting, cutting, and curing meats; grading carcasses, uses of the various cuts. At least one field trip. Charge, $1.

188. Animal Husbandry Practicums. 2(0-6); II. Staff. Manual phases of livestock management. Charge, 50 cents.

189. Feeds and Feedings. 3(3-0); II. Prerequisite: Chem. 125 and Anat. 131. 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 or 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.
The principles of nutrition underlying satisfactory feeding practices.

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. Prerequsite: 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. 152 or 172 or 189; senior or graduate standing. McCampbell.
Factors influencing success in the production of purebred livestock. 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. Kline.
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-weeks SS. Prerequisite: An. Husb. 125, Agron. 101, Poult. 101, Dairy Husb. 101, and one year's teaching experience. Cox, Zahnley, Schumacher, Beck, 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.

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
Assistant Professor Beck

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 1944.) 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, $3.

104. Dairy Cattle Judging for Veterinary Students. 1(0-3); I. Bechtel. Charge, 50 cents.

105. Dairy Cattle Judging. 2(0-6); II. Prerequisite: Dairy Husb. 101. Beck. Charge, 50 cents.

106. Dairy Inspection. 2(1-3); I. Prerequisite: Dairy Husb. 101. Caulfield.

Advanced work in testing dairy products and testing for adulteration; 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. Charge, 50 cents.

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. Beck.
Continuation of Dairy Husb. 105; visits to some of the best farms in the state. Charge, 50 cents.

128. Condensed and Powdered Milk. 3(2-3); I. Prerequisite: Dairy Husb. 101 and Bact. 101. Offered in 1943-'44 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 1944-'45 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 1943-'44 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, $3.

141. Advanced Dairy Products Judging. 1 (0-3); I. Martin. Continuation of Dairy Husb. 140. Charge, $3.

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. Charge, 50 cents.

207. Feeding and Management of Dairy Cattle. 3(2-3); II. Prerequisite: Dairy Husb. 108 and An. Husb. 152. Offered in 1944-'45 and alternate years thereafter. Bechtel.

Laboratory.—Includes fitting of animals for show and sale. Charge, $2.

214. Dairy Cattle Breeding and Selection. 3 (2-3); II. Prerequisite: Dairy Husb. 108. Offered in 1943-'44 and alternate years thereafter. Beck.
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. Charge, $2.

216. Dairy Production Problems. Credit to be arranged: I and II. Prerequisite: Dairy Husb. 101, 105, and 108, and An. Husb. 152. Atkeson, Bechtel.
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 1944-'45 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.

Dairy Mechanics. See Agr. Engg. 202.

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 Neff

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. Neff.
Problems of organization, administration, and supervision of state extension work. Designed for persons interested in county agent or other types of extension work. For juniors and seniors only.

Horticulture

Professor Pickett
Professor Barnett
Professor Quinlan
Associate Professor Filinger
Associate Professor Decker
Assistant Professor Abmeyer
Research Assistant Birkeland
Student Assistant Campbell

Instruction offered in the Department of Horticulture includes general horticulture, landscape design, vegetable gardening, floriculture, pomology, and forestry.
Thorough preparation for those interested in professional or commercial fruit growing or vegetable growing is provided through available groups of electives in the curriculum in agriculture.
The four-year Curriculum in Landscape Design leads to the degree Bachelor of Science in Landscape Design and is intended for students who wish training in design and drafting. The four-year Curriculum in Floriculture and Ornamental Horticulture is intended for those who wish to become florists or nurserymen with emphasis on the production and use of landscape materials.
The horticultural farm, the campus, the greenhouses, and research laboratories provide plant materials and equipment for instructional and research use.

COURSES IN GENERAL HORTICULTURE

FOR UNDERGRADUATE CREDIT

101. Plant Propagation. 3(2-3); I. Prerequisite: Bot. 101 and 105. Barnett.
Principles and practice of propagating horticultural plants.

Laboratory.—Laboratory and field work in the multiplication of horticultural plans. Charge, $2.

107. Elements of Horticulture. 3(2-3); I, II, and SS of 1944. Prerequisite: Bot. 101 and 105. Staff.
Principles and practices in the several phases of horticulture.

Laboratory.—Study of horticultural plants, including identification, propagation, pruning, spraying, transplanting, cover crops, fruit varieties, etc. Charge, $2.50.

FOR GRADUATE AND UNDERGRADUATE CREDIT

207. Spraying. 3(2-3); II. Prerequisite: Junior or senior classification, 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 1944-'45 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. Cannot be taken for more than three credit hours.

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 design.

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 design. 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. 101 and 105. Pickett.
Management and utilization of woodlots and tree belts. Charge, $2.

119. Silviculture. 3(2-3); I. Prerequisite: Bot. 101 and 105. Pickett.
Ecology of the forest; regions, types. Charge, $2.

120. Forest Nursery Practice. 3(2-3); I. Prerequisite: Bot. 101 and 105. Pickett.
Tree seed; planting practice; regeneration. Charge, $2.

COURSES IN LANDSCAPE DESIGN

FOR UNDERGRADUATE CREDIT

102. Plant Materials I. 3(2-3); I. Prerequisite: Bot. 105. Quinlan.
Perennials and annuals for general ornamental planting; planting plans. Charge, $1.

103. Plant Materials II. 3(2-3); II. Prerequisite: Hort. 102. Quinlan.
Trees, shrubs, vines for ornamental planting; planting plans and reports. Charge, $1.

125. Landscape Gardening. 3(3-0); I and SS. Quinlan.
An introductory course in the fundamental principles of landscape design.

FOR GRADUATE AND UNDERGRADUATE CREDIT

223. Civic Art. 3(1-6); II. Prerequisite: Hort. 243. Offered in 1943-'44 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, and 155. Offered in 1944-'45 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 1944-'45 and alternate years thereafter. Quinlan.
The use of plants in landscape composition. Perspective and elevational sketches and plans. Charge, $1.

238. Landscape Design I. 3(1-6); I. Prerequisite: Hort. 103 and 125. Quinlan.
Elementary designing of the home grounds; country estates, special garden; sketch problems. Charge, $1.

243. Theory of Landscape Design. 2(2-0); I. Prerequisite: Hort. 125. Offered in 1943-'44 and alternate years thereafter. Quinlan.
The economic and esthetic theory of design; taste, character, historic style, and composition; natural elements in design; planting design.

246. Landscape Design II. 3(1-6); II. Prerequisite: Hort. 103, 238, and 243. Quinlan.
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. 101 and 105. Barnett. Filinger.
Growing, harvesting, and marketing small fruits. Charge, $2.

111. Systematic Pomology. 3(2-3); I. Prerequisite: Hort. 107. Filinger.
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. Filinger.
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 1943-'44 and alternate years thereafter. Barnett.
Botany, geography, and culture of subtropical fruits.

205. Advanced Pomology. 3(2-3); I. Prerequisite: Hort. 111. Pickett, Filinger.
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, $3.

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, $3.

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 or concurrent: Mill. Ind. 101 and Mach. Des. 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. Deposits, $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(½-0); 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
Assistant Professor Schumacher
Assistant Bohren
Farm Superintendent Greer

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, Schumacher, 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. Schumacher.
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 1943-'44 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 1944 and alternate years thereafter. Schumacher.
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 1943-'44 and alternate years thereafter. Schumacher.
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. and Phys. 202.

206. Poultry Problems. Credit to be arranged; I, II, and SS. Prerequisite: Poult. Husb. 101; consult instructors. Payne, Warren, Schumacher.
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, Schumacher.
Investigations which may form the basis of a master's or doctor's thesis.

The Agricultural Experiment Station

Leland Everett Call, *Director*

The Kansas Agricultural Experiment Station was organized under the provision 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 amounts now to approximately $50,000 annually. 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 quantites 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 School of Engineering and Architecture

Roy Andrew Seaton, *Dean*

The School 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 school. 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.

By the selection of proper electives, the four-year curiculum in Industrial Arts may lead to the degree of Bachelor of Science in Industrial Arts and also qualify the graduate for the three-year Kansas State Teachers' certificate, valid in any high school or other public school in the state, and renewable for life. The curriculum has the necessary amount of chemistry and physics to meet the same requirements for teaching physical science. Five additional hours of mathematics will qualify for Class "A" high schools in Kansas.

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.

TWO-YEAR CURRICULUM IN INDUSTRIAL TECHNOLOGY

The aim of the two-year curriculum in Industrial Technology is to provide assistance to those young people, both men and women, who wish to prepare for service in industrial production but who are unable to undertake a four-year curriculum.

All of the courses listed in this curriculum are of college grade, and, therefore, the requirements for entrance are the same as for the four-year curriculums in engineering.

At the completion of the two-year curriculum in Industrial Technology, the student will be awarded a certificate showing that he has successfully completed the curriculum.

ENGINEERING AND ARCHITECTURE IN THE SUMMER SCHOOL

The school 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 Analytic Geom., Math. 110,	4(4-0)
Plane Trigonometry, Math. 101	3(3-0)	Agr. Mach. and Con., Agr. Engg. 122	2(1-3)
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)
Oxyacetylene Welding, Shop 171	1(0-2, 1)	Foundry Production, Shop 161	1(0-3)
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. Educ. M, Phys. Ed. 103	R(0-2)	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)	Mechanics of Mat. I, Ap. Mech. 212, 220	5(4-3)
Field and Power Mach., Agr. Engg. 111	4(2-6)	Farm Motors, Agr. Engg. 225	4(2-6)
Engg. Thermo., Mech. Engg. 208	4(4-0)	Farm Crops, Agron. 101	4(2-6)
Public Speaking, Sp. 107	2(2-0)	Economics I, Econ. 101	3(3-0)
Metals and Alloys, Shop 165	2(2-0)	Technical Reports, Engl. 215	1(1-0)
Machine Tool Work I, Shop 170	2(0-6)	Engg. Assembly, Gen. Engg. 105	R
Engg. Assembly, Gen. Engg. 105	R		
Total	18	Total	17

SENIOR

First Semester		Second Semester	
Farm Structures, Agr. Engg. 203	4(2-6)	Mod. Farm and Home Equipment, Agr. Engg. 210	3(2-3)
Soils, Agron. 130	4(3-2, 1)	Land Reclamation, Agr. Engg. 245,	4(2-6)
Hydraulics, Ap. Mech. 230, 235	4(3-3)	Elec. Engg. C, Elec. Engg. 102, 106	3(2-2, 1)
Highway Engg. I, Civil Engg. 231,	2(2-0)	Farm Organization, Agr. Econ. 106,	3(2-3)
Amer. Ind. History, Hist. 105	3(3-0)	Elective†	5(-)
Engg. Assembly, Gen. Engg. 105	R	Engg. Assembly, Gen. Engg. 105	R
Inspection Trip, Agr. Engg. 140	R		
Total	17	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 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 Analytic 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)	Arch. Projections II, Arch. 109	3(0-9)
Arch. Projections I, Arch. 108	3(0-9)	Freehand Drawing I, Arch. 112	2(0-6)
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. Educ. M, Phys. Ed. 103	R(0-2)	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 Sketch., Arch. 116	2(0-6)
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)	Mechanics of Mat. I, Ap. Mech. 212, 220	5(4-3)
Bldg. Materials and Construction, Arch. 187A	3(3-0)	Working Drawings, Arch. 191	3(0-9)
Architectural Design I, Arch. 142	3(0-9)	Architectural Design II, Arch. 144,	3(0-9)
Hist. of Arch. I, Arch. 154A	2(2-0)	Hist. of Arch. II, Arch. 157A	2(2-0)
Foundations, Civil Engg. 121	2(2-0)	Water Color I, Arch. 118	2(0-6)
Law for Engineers, Hist. 167	2(2-0)	Illumination A, Elec. Engg. 116	2(2-0)
Public Speaking, Sp. 107	2(2-0)	Engg. Assembly, Gen. Engg. 105	R
Engg. Assembly, Gen. Engg. 105	R		
Total	18	Total	17

SENIOR

First Semester		Second Semester	
Stress Analysis I, Civil Engg. 202	4(4-0)	Des. of Framed Struc., Civil Engg. 246	3(0-9)
Architectural Design III, Arch. 145,	5(0-15)	Reinforced Concrete Design, Civil Engg. 257, 258	4(2-6)
Hist. of Arch. III, Arch. 158A	2(2-0)	Hist. of Arch. IV, Arch. 160A	2(2-0)
Stress Analysis I Lab., Civil Engg. 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†	3(-)	Elective†	3(-)
Engg. Assembly, Gen. Engg. 105	R	Engg. Assembly, Gen. Engg. 105	R
Inspection Trip, Arch. 199	R		
Total	18	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		Second Semester	
College Algebra,* Math. 104	3(3-0)	Plane Trigonometry, Math. 101	3(3-0)
College Rhetoric I, Engl. 101	3(3-0)	College Rhetoric II, Engl. 104	3(3-0)
Arch. Projections I, Arch. 108	3(0-9)	Arch. Projections II, Arch. 109	3(0-9)
El. of Arch. I, Arch. 106A	3(0-9)	El. of Arch. II, Arch. 107A	3(0-9)
History of Arch. I, Arch. 154A	2(2-0)	History of Arch. II, Arch. 157A	2(2-0)
Freehand Drawing I, Arch. 112	2(0-6)	Freehand Drawing II, Arch. 113	2(0-6)
Artillery I, Mil. Sc. 113 (men)	1(1-2)	Artillery II, Mil. Sc. 114 (men)	1(1-2)
Engg. Lectures, Gen. Engg. 101	R	Engg. Lectures, Gen. Engg. 101	R
Phys. Educ. M, Phys. Ed. 103	R(0-2)*or*	Phys. Educ. M, Phys. Ed. 103	R(0-2)*or*
Phys. Educ. W, Phys. Ed. 151	R(0-3)	Phys. Educ. W, Phys. Ed. 151	R(0-3)
Total	16 or 17	Total	16 or 17

SOPHOMORE

First Semester		Second Semester	
General Physics I, Phys. 102	4(3-3)	General Physics II, Phys. 103	4(3-3)
Economics I, Econ. 101	3(3-0)	Applied Mech. A, Ap. Mech. 102	3(3-0)
Architectural Design I, Arch. 142	3(0-9)	Architectural Design II, Arch. 144,	3(0-9)
Building Mat. and Con., Arch. 187A	3(3-0)	Working Drawings, Arch 191	3(0-9)
History of Arch. III, Arch. 158A	2(2-0)	History of Arch. IV, Arch. 160A	2(2-0)
Pencil Sketch., Arch. 116	2(0-6)	Water Color I, Arch. 118	2(0-6)
Artillery III, Mil. Sc. 115 (men)	1(1-2)	Artillery IV, Mil. Sc. 116 (men)	1(1-2)
Engg. Assembly, Gen. Engg. 105	R	Engg. Assembly, Gen. Engg. 105	R
Phys. Educ. M, Phys. Ed. 103	R(0-2)*or*	Phys. Educ. M, Phys. Ed. 103	R(0-2)*or*
Phys. Educ. W, Phys. Ed. 151	R(0-3)	Phys. Educ. W, Phys. Ed. 151	R(0-3)
Total	17 or 18	Total	17 or 18

JUNIOR

First Semester		Second Semester	
Str. of Mat. A, Ap. Mech. 116, 121,	4(3-3)	Theory of Structures I, Arch. 192,	4(2-6)
French I, Mod. Lang. 151	3(3-0)	French II, Mod. Lang. 152	3(3-0)
Architectural Design III, Arch. 145,	5(0-15)	Architectural Design IV, Arch. 147,	5(0-15)
Life Drawing I, Arch. 121	2(0-6)	Life Drawing II, Arch. 123	2(0-6)
Hist. of Painting and Sculpture, Arch. 179	3(3-0)	Building Equipment, Arch. 188	2(2-0)
		Public Speaking, Sp. 107	2(2-0)
Engg. Assembly, Gen. Engg. 105	R	Engg. Assembly, Gen. Engg. 105	R
Total	17	Total	18

SENIOR

First Semester		Second Semester	
Architectural Design V, Arch. 254,	7(0-21)	Architectural Design VI, Arch. 257,	7(0-21)
Theory of Structures II, Arch. 194A,	5(3-6)	Theory of Structures III, Arch. 196,	4(2-6)
Law for Engineers, Hist. 167	2(2-0)	Professional Practice, Arch. 195	2(0-6)
Elective†	3(-)	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, 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 Analytic 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. Engg. 201	2(2-0)	Quan. Analysis, Chem. 241	5(1-12)
Mechanism, Mach. Des. 121	3(3-0)	Artillery IV, Mil. Sc. 116	1(1-2)
Artillery III, Mil. Sc. 115	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	18	Total	18

JUNIOR

First Semester		Second Semester	
Applied Mechanics, Ap. Mech. 202,	4(4-0)	Mechanics of Mat. I, Ap. Mech. 212, 220	5(4-3)
Phys. Chemistry I, Chem. 206	5(3-6)	Phys. Chemistry II, Chem. 272	3(3-0)
Org. Chemistry I, Chem. 266	5(3-6)	Org. Chemistry II, Chem. 267	4(2-6)
Industrial Stoichiometry, Chem. 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	18

SENIOR

First Semester		Second Semester	
Unit Operations II, Chem. Engg. 225	4(3-3)	Chem. Engg. Plant Design, Chem. Engg. 245	4(3-3)
Chem. Engg. Thermodynamics, Chem. Engg. 231	5(5-0)	Unit-Process Lab., Chem. Engg. 240	2(0-6)
Chem. Tech., Chem. Engg. 236	4(4-0)	Elec. Engg. C, Elec. Engg. 102, 106,	3(2-2, 1)
Elective†	3(-)	Heat Power Engg. B, Mech. Engg., 210	4(4-0)
Engg. Assembly, Gen. Engg. 105	R	Heat Power Lab., Mech. Engg. 206,	1(0-3)
Inspection Trip, Chem. Engg. 150,	R	Elective†	3(-)
		Engg. Assembly, Gen. Engg. 105	R
Total	16	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)	Chemistry E-II, Chem. 108	4(3-3)
College Algebra,* Math. 104	3(3-0)	Plane Analytic Geom., Math. 110	4(4-0)
Plane Trigonometry, Math. 101	3(3-0)	Amer. Ind. History, Hist. 105	3(3-0)
College Rhetoric I, Engl. 101	3(3-0)	College Rhetoric II, Engl. 104	3(3-0)
Engg. Drawing, Mach. Des. 101	2(0-6)	Descriptive Geom., Mach. Des. 106,	2(0-6)
Surveying I, Civ. Engg. 102	2(0-6)	Artillery II, Mil. Sc. 114	1(1-2)
Artillery I, Mil. Sc. 113	1(1-2)	Engg. Lectures, Gen. Engg. 101	R
Engg. Lectures, Gen. Engg. 101	R	Phys. Educ. M, Phys. Ed. 103	R(0-2)
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)	Engg. Physics II, Phys. 106	5(4-3)
Calculus I, Math. 114	4(4-0)	Calculus II, Math. 115	4(4-0)
Surveying II, Civ. Engg. 111	2(0-6)	Surveying III, Civ. Engg. 151, 155,	3(2-3)
Economics I, Econ. 101	3(3-0)	Metals and Alloys, Shop 165	2(2-0)
Mach. Drawing I, Mach. Des. 111,	2(0-6)	C. E. Drawing, Civ. Engg. 125	2(0-6)
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	17

JUNIOR

First Semester		Second Semester	
Applied Mechanics, Ap. Mech. 202,	4(4-0)	Mechanics of Mat. I, Ap. Mech. 212, 220	5(4-3)
Engg. Geology, Geol. 102	4(3-3)	Hydraulics, Ap. Mech. 230, 235	4(3-3)
Surveying IV, Civ. Engg. 156, 157,	3(2-3)	Foundations, Civ. Engg. 121	2(2-0)
Highway Engg. I, Civ. Engg. 231	2(2-0)	Drain. and Irrig. I, Civ. Engg. 161,	2(2-0)
Steam and Gas Engg. C, Mech. Engg. 120	2(2-0)	Railway Engg. I, Civ. Engg. 145	2(2-0)
Water and Sewage Bact., Bact. 125,	2(0-6)	Heat Power Lab., Mech. Engg. 206,	1(0-3)
Engg. Assembly, Gen. Engg. 105	R	Hwy. and Airport Materials Lab., Ap. Mech. 250	1(0-3)
		Engg. Assembly, Gen. Engg. 105	R
Total	17	Total	17

SENIOR

First Semester		Second Semester	
Stress Analysis I, Civ. Engg. 202	4(4-0)	Reinforced Concrete Design, Civ. Engg. 257, 258	4(2-6)
Astr. and Geod., Civ. Engg. 211, 216	4(2-6)	Design of Framed Structures, Civ. Engg. 246	3(0-9)
Water Supply, Civ. Engg. 220	2(2-0)	Elec. Engg. C, Elec. Engg. 102, 106	3(2-2, 1)
Sewerage, Civ. Engg. 225	2(2-0)	Law for Engineers, Hist. 167	2(2-0)
Stress Analysis I Lab., Civ. Engg. 205	2(0-6)	Technical Reports, Engl. 215	1(1-0)
Soil Mechanics, Ap. Mech. 290	2(0-6)	Elective†	5(-)
Public Speaking, Sp. 107	2(2-0)	Engg. Assembly, Gen. Engg. 105	R
Engg. Assembly, Gen. Engg. 105	R		
Inspection Trip, Civ. Engg. 180	R		
Total	18	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 Electrical 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 Analytic Geom., Math. 110,	4(4-0)
Plane Trigonometry, Math. 101	3(3-0)	Elec. Mach. & Construction, Elec. Engg. 112	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)	Desc. Geometry, Mach. Des. 106	2(0-6)
Forging and Heat Treating, Shop 150	1(0-2, 1)	Arc Welding, Shop 172	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. Educ. M, Phys. Ed. 103	R(0-2)	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)
Amer. Ind. History, Hist. 105	3(3-0)	Economics I, Econ. 101	3(3-0)
Mechanism, Mach. Des. 121	3(3-0)	Mach. Drawing I, Mach. Des. 111,	2(0-6)
Surveying I, Civ. Engg. 102	2(0-6)	Principles of Electronics, Elec. Engg. 120	2(2-0)
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	18	Total	17

JUNIOR

First Semester		Second Semester	
Applied Mechanics, Ap. Mech. 202,	4(4-0)	Mechanics of Mat. I, Ap. Mech. 212	4(4-0)
Bus. Engl. and Sales., Engl. 125	3(3-0)	Public Speaking, Sp. 107	2(2-0)
Machine Tool I, Shop 170	2(0-6)	Metals and Alloys, Shop 165	2(2-0)
D. C. Machinery Rec., Elec. Engg. 207	4(4-0)	A. C. Circuits, Elec. Engg. 209	4(4-0)
Electrodynamics, Elec. Engg. 201	2(2-0)	Elec. Meas. Rec., Elec. Engg. 227,	2(2-0)
Differential Equations, Math. 121	2(2-0)	Elec. Meas. and Electronics Lab., Elec. Engg. 229	2(0-4, 2)
Engg. Assembly, Gen. Engg. 105	R	D. C. Machinery Lab., Elec. Engg. 208	2(0-4, 2)
		Engg. Assembly, Gen. Engg. 105	R
Total	17	Total	18

SENIOR

First Semester		Second Semester	
A. C. Mach. I, Elec. Engg. 210, 211,	5(3-4, 2)	A. C. Mach. II, Elec. Engg. 212, 213	5(3-4, 2)
Engg. Thermo., Mech. Engg. 208	4(4-0)	Heat Power Engg. A, Mech. Engg. 204	3(3-0)
Wire Commun. I, Elec. Engg. 244,	3(3-0) *or*	Heat Power Lab., Mech. Engg. 206,	1(0-3)
Pub. Util. Managt., Elec. Engg. 290,	3(3-0)	(x) Elective†	8(-)
(x) Elec. Mach. Des., Elec. Engg. 270	1(0-3)	Engg. Assembly, Gen. Engg. 105	R
Mechanics of Materials Lab., Ap. Mech. 220	1(0-3)		
(x) Technical Reports, Engl. 215	1(1-0)		
(x) Elective†	3(-)		
Engg. Assembly, Gen. Engg. 105	R		
Inspection Trip, Elec. Engg. 190	R		
Total	18	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.

(x) In the Communications Option, courses marked (x) are replaced by:

First Semester		Second Semester	
Wire Communication I Lab., Elec. Engg. 245	1(0-2, 1)	Ultra-High-Frequency Techniques, Elec. Engg. 257, 258	4(3-2, 1)
Radio Communication I, Elec. Engg. 252, 253	4(3-2, 1)	Radio Communication II, Elec. Engg. 255, 259	4(3-2, 1)

Curriculum in Industrial Arts

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 Trigonometry, Math. 101	3(3-0)
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)
Sheet Metal Work, Shop 173	2(0-6)	Surveying I, Civ. Engg. 102	2(0-6)
Wood Turning, Shop 135	2(0-6)	Foundry Production, Shop 161	1(0-3)
Artillery I, Mil. Sc. 113	1(1-2)	Farm Blacksmithing I, Shop 157	1(0-3)
Engg. Lectures, Gen. Engg. 101	R	Artillery II, Mil. Sc. 114	1(1-2)
Phys. Education M, Phys. Ed. 103,	R(0-2)	Engg. Lectures, Gen. Engg. 101	R
		Phys. Education M, Phys. Ed. 103,	R(0-2)
Total	17	Total	17

SOPHOMORE

First Semester		Second Semester	
General Physics I, Phys. 102	4(3-3)	General Physics II, Phys. 103	4(3-3)
Gen. Psychology, Educ. 184	3(3-0)	Educ. Psychology, Educ. 109	3(3-0)
Mach. Drawing I, Mach. Des. 111,	2(0-6)	Mach. Drawing II, Mach. Des. 118,	2(0-6)
Mechanism, Mach. Des. 121	3(3-0)	Metals and Alloys, Shop 165	2(2-0)
Woodwork I, Shop 121	2(0-6)	Farm Carpentry, Shop 147	3(1-6)
Arc Welding, Shop 172	1(0-2, 1)	Wood and Metal Fin., Shop 122	2(0-6)
Elec. Mach. and Const., Elec. Engg. 112	2(0-6)	Artillery IV, Mil. Sc. 116	1(1-2)
Artillery III, Mil. Sc. 115	1(1-2)	Engg. Assembly, Gen. Engg. 105	R
Engg. Assembly, Gen. Engg. 105	R	Phys. Education M, Phys. Ed. 103,	R(0-2)
Phys. Education M, Phys. Ed. 103,	R(0-2)		
Total	18	Total	17

JUNIOR

First Semester		Second Semester	
Economics I, Econ. 101	3(3-0)	Labor Economics, Econ. 234	3(3-0)
Principles of Accounting, Econ. 136,	3(3-0)	Bus. Engl. and Sales, Engl. 125	3(3-0)
Educ. Sociology, Educ. 239	3(3-0)	Ap. Mechanics A, Ap. Mech. 102	3(3-0)
Public Speaking, Sp. 107	2(2-0)	Gas Engines and Tractors, Agr. Engg. 130	3(2-3)
Woodwork II, Shop 126	2(0-6)	Machine Tool Work I, Shop 170	2(0-6)
Farm Blacksmithing II, Shop 158	1(0-3)	Elective†	3(-)
Metallography I, Shop 262	1(0-3)	Engg. Assembly, Gen. Engg. 105	R
Elective†	3(-)		
Engg. Assembly, Gen. Engg. 105	R		
Total	18	Total	17

SENIOR

First Semester		Second Semester	
Business Law I, Hist. 163	3(3-0)	Business Law II, Hist. 164	3(3-0)
Extemp. Speech II, Sp. 108	2(2-0)	Amer. Ind. History, Hist. 105	3(3-0)
Technical Reports, Engl. 215	1(1-0)	Credits and Collections, Econ. 223,	2(2-0)
Str. of Mat. A, Ap. Mech. 116, 121,	4(3-3)	Elec. Engg. C, Elec. Engg. 102, 106	3(2-2, 1)
Steam and Gas Engg. C., Mech. Engg. 120	2(2-0)	Heat Power Lab., Mech. Engg. 206,	1(0-3)
Machine Tool Work II, Shop 192	2(0-6)	Elective†	5(-)
Oxyacetylene Welding, Shop 171	1(0-2, 1)	Engg. Assembly, Gen. Engg. 105	R
Elective†	3(-)		
Engg. Assembly, Gen. Engg. 105	R		
Inspection Trip, Shop 194	R		
Total	18	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)

* 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 Analytic 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)	Surveying I, Civ. Engg. 102	2(0-6)
Oxyacetylene Welding, Shop 171	1(0-2, 1) *or*	Forging and Heat Treating, Shop 150	1(0-2, 1)
Arc Welding, Shop 172	1(0-2, 1)	Artillery II, Mil. Sc. 114	1(1-2)
Artillery I, Mil. Sc. 113	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)	Mach. Drawing II, Mach. Des. 118,	2(0-6)
Machine Tool Work I, Shop 170	2(0-6)	Metals and Alloys, Shop 165	2(2-0)
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)	Mechanics of Mat. I, Ap. Mech. 212, 220	5(4-3)
Eng. Thermodynamics, Mech. Engg. 208	4(4-0)	Hydraulics Lab., Ap. Mech. 235	1(0-3)
Economics I, Econ. 101	3(3-0)	Option (see next page)	11(-)
Metallography I, Shop 262	1(0-3)	Engg. Assembly, Gen. Engg. 105	R
Pub. Speaking, Sp. 107	2(2-0)		
Option (see next page)	4(-)		
Engg. Assembly, Gen. Engg. 105	R		
Total	18	Total	17

SENIOR

First Semester		Second Semester	
Elec. Engg. M-I, Elec. Engg, 237, 238	5(4-2, 1)	Elec. Engg. M-II, Elec. Engg. 242, 243	4(3-2, 1)
Mech. Engg. Lab. I, Mech. Engg. 242	2(0-6)	Mach. Design I Rec., Mach. Des. 204	3(3-0)
Option (see next page)	11(-)	Technical Reports, Engl. 215	1(1-0)
Engg. Assembly, Gen. Engg. 105	R	Option (see next page)	9(-)
Inspection Trip, Mech. Engg. 180	R	Engg. Assembly, Gen. Engg. 105	R
Total	18	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

Technical Option

JUNIOR

First Semester		Second Semester	
Differential Equations for Engineers, Math. 121	2(2-0)	Hydraulics, Ap. Mech. 230	3(3-0)*or*
Elective†	2(-)	Fluid Mech., Ap. Mech. 231	3(3-0)
		Heat Transfer and Fluid Flow, Mech. Engg. 251	4(3-3)
		Elective†	4(-)
Total	4	Total	11

SENIOR

First Semester		Second Semester	
Heat Power Engg., Mech. Engg. 214	4(3-3)	Power Plant Design, Mech. Engg. 218	2(0-6)
Air Conditioning, Mech. Engg. 228,	3(2-3)	Mech. Engg. Lab. II, Mech. Engg. 243	2(0-6)
Mech. of Materials II, Ap. Mech. 213	2(2-0)	Machine Design I Lab., Mach. Des. 205	2(0-6)
Elective†	2(-)	Elective†	3(-)
Total	11	Total	9

Industrial Option

JUNIOR

First Semester		Second Semester	
Elective†	4(-)	Hydraulics, Ap. Mech. 230	3(3-0)*or*
		Fluid Mech., Ap. Mech. 231	3(3-0)
		Heat Power Engg. A, Mech. Engg. 204	3(3-0)
		Machine Tool Work II, Shop 192	2(0-6)
		Elective†	3(-)
Total	4	Total	11

SENIOR

First Semester		Second Semester	
Industrial Management, Shop 246	3(3-0)	Mech. Engg. Lab. II, Mech. Engg. 243	2(0-6)
Time and Motion Study, Shop 250,	2(1-3)	Machine Design I Lab., Mach. Des. 205	2(0-6)
Air Conditioning, Mech. Engg. 228,	3(2-3)	Factory Design, Shop 255	2(0-6)
Mech. of Materials II, Ap. Mech. 213	2(2-0)	Elective†	3(-)
Elective†	1(-)		
Total	11	Total	9

Aeronautical Option

JUNIOR

First Semester		Second Semester	
Differential Equations for Engineers, Math. 121	2(2-0)	Fluid Mech., Ap. Mech. 231	3(3-0)
Elective†	2(-)	Heat Transfer and Fluid Flow, Mech. Engg. 251	4(3-3)
		Internal Combustion Engines, Mech. Engg. 240	2(2-0)
		Elective†	2(-)
Total	4	Total	11

† Electives are to be chosen with the advice and approval of the head of the department and the dean.

SENIOR

First Semester		Second Semester	
Heat Power Engg., Mech. Engg. 214	4(3-3)	Airplane Des. and Const., Mach. Des. 260	3(1-6)
Aerodynamics, Mach. Des. 250, 251,	4(3-3)	Aeronautical Engg. Lab., Mech. Engg. 246	2(0-6)
Air Conditioning, Mech. Engg. 228,	3(2-3)	Airplane Stress Analysis, Ap. Mech. 286	4(3-3)
Total	11	Total	9

Petroleum Production Option

JUNIOR

First Semester		Second Semester	
General Geology, Geol. 103	3(3-0)	Hydraulics, Ap. Mech. 230	3(3-0)*or*
Elective†	1(-)	Fluid Mech., Ap. Mech. 231	3(3-0)
		Historical Geology, Geol. 203	4(3-3)
		Elective†	4(-)
Total	4	Total	11

SENIOR

First Semester		Second Semester	
Petroleum Geol., Geol. 223	4(3-3)	Petroleum Production II, Mech. Engg. 271	3(2-3)
Petroleum Production I, Mech. Engg. 270	3(3-0)	Mech. Engg. Lab. II, Mech. Engg. 243	2(0-6)
Heat Power Engg. A, Mech. Engg. 204	3(3-0)	Machine Design I Lab., Mach. Des. 205	2(0-6)
Elective†	1(-)	Elective†	2(-)
Total	11	Total	9

Two-Year Curriculum in Industrial Technology

FIRST YEAR

Chemistry E-I, Chem. 107	4(3-3)	Chemistry E-II, Chem. 108	4(3-3)
College Algebra A, Math. 107	5(5-0)	Plane Trigonometry, Math. 101	3(3-0)
College Rhetoric I, Engl. 101	3(3-0)	College Rhetoric II, Engl. 104	3(3-0)
Engg. Drawing, Mach. Des. 101	2(0-6)	Mach. Drawing I, Mach. Des. 111,	2(0-6)
Foundry Production, Shop 161	1(0-3)	Arc Welding, Shop 172	1(0-2, 1)
Forging & Heat Treatment, Shop 150	1(0-2, 1)	Oxyacetylene Welding, Shop 171	1(0-2, 1)
		Desc. Geom., Mach. Des. 106	2(0-6)
Artillery I, Mil. Sc. 113 (men)	1(1-2)	Artillery II, Mil. Sc. 114 (men)	1(1-2)
Engg. Lecture, Gen. Engg. 101	R	Engg. Lectures, Gen. Engg. 101	R
Phys. Educ. M, Phys. Ed. 103	R(0-2)*or*	Phys. Educ. M, Phys. Ed. 103	R(0-2)*or*
Phys. Educ. W, Phys. Ed. 151	R(0-3)	Phys. Educ. W, Phys. Ed. 151	R(0-3)
Total	16 or 17	Total	16 or 17

SECOND YEAR

General Physics I, Phys. 102	4(3-3)	Gen. Physics II, Phys. 103	4(3-3)
Appl. Mech. A, Ap. Mech. 102	3(3-0)	Str. of Mat. A, Ap. Mech. 116	3(3-0)
Mechanism, Mach. Des. 121	3(3-0)	Str. of Mat. A, Lab., Ap. Mech. 121	1(0-3)
Machine Drawing II, Mach. Des. 118	2(0-6)	Elec. Mach. & Const., Elec. Engg. 112	2(0-6)
Metals & Alloys, Shop 165	2(2-0)	Industrial Control, Shop 182	2(2-0)
Machine Tool Work I, Shop 170	2(0-6)	Machine Tool Work II, Shop 192	2(0-6)
Gages and Measurements, Shop 180,	1(0-3)	Elements of Heat Power, Mech. Engg. 131	2(2-0)
Artillery III, Mil. Sc. 115 (men)	1(1-2)	Metallography I, Shop 262	1(0-3)
		Artillery IV, Mil. Sc. 116 (men)	1(1-2)
Phys. Educ. M, Phys. Ed. 103	R(0-2)*or*	Phys. Educ. M, Phys. Ed. 103	R(0-2)*or*
Phys. Educ. W, Phys. Ed. 151	R(0-3)	Phys. Educ. W, Phys. Ed. 151	R(0-3)
Total	17 or 18	Total	17 or 18

Agricultural Engineering

Professor Fenton
Assistant Professor Schoenleber
Assistant Professor Martin
Instructor Carleton

FOR UNDERGRADUATE CREDIT

101. Farm Buildings. 3(2-3)*; II, and SS on alternate years. Fenton.
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, II and SS. Schoenleber, Carleton.
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. Martin.
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. Carleton, 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. Martin, assistants.
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. Fenton, Martin.
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.

202. Dairy Mechanics. 3(2-3); II. Staff.
Installation, adjustment and operation of dairy plant equipment; boilers, engines, motors, pumps, refrigeration machinery; water supply, waste disposal. Charge, $2.

203. Farm Structures. 4(2-6); I. Prerequisite: Ap. Mech. 212. Fenton.
Design of farm structures; details and materials of construction; specifications and estimates.

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* 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.

† Electives are to be chosen with the advice and approval of the head of the department and the dean.

205. Agricultural Engineering Problems. Credit to be arranged; I, II, and SS. Prerequisite: Permission of instructors. Fenton, Martin.
Problems in the design, construction, or application of machinery or power in agriculture, structures, modern conveniences, rural electrification.

210. Modern Farm and Home Equipment. 3(2-3); II. Prerequisite: Ap. Mech. 230 and 235. Fenton, Carleton.
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: Agri. Engg. 225 or equivalent. Martin.
Research studies relating to tractor construction and operation.

225. Farm Motors. 4(2-6); II. Prerequisite: Phys. 106, Math. 114, and Mech. Engg. 208. Martin, 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. Schoenleber.
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. Schoenleber.
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, Martin.
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
Associate Professor Koenitzer
Assistant Professor Taylor
Assistant Professor Jones
Assistant Professor McCormick
Instructor Eppler
Instructor Gustafson
Instructor Kirmser
Research Assistant Munger

FOR UNDERGRADUATE CREDIT

102. Applied Mechanics A. 3(3-0); II. Prerequisite: Math. 101 and Phys. 102. Jones.
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. Jones.
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. Jones.
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.

212. Mechanics of Materials I Recitation. 4(4-0); 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 and shear in beams; design of beams; stresses in columns and hooks.

213. Mechanics of Materials II Recitation. 2(2-0); I. Prerequisite: Ap. Mech. 212. Staff.
An extension of Applied Mechanics 212 with special reference to the needs of students in Mechanical Engineering.

220. Mechanics of Materials Laboratory. 1(0-3); I, II, and SS. Prerequisite or concurrent: Ap. Mech. 212. 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.

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 and Airport Materials Laboratory. 1(0-3); I and II. Prerequisite: Ap. Mech. 220. Koenitzer, Gustafson.
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. 212. 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. 212. Scholer, McCormick.
The elastic energy theory applied to trusses, frames, beams, and curved beams.

269. Applied Elasticity. 3(3-0); II. Prerequisite: Ap. Mech. 212 and Math. 201. McCormick.
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 and Airport 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.

286. Airplane Stress Analysis. 4(3-3); II. Prerequisite: Math. 121 and Ap. Mech. 212. McCormick.
Analysis of stress and stability problems in the structural elements of airplanes.

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
Professor Wichers
Assistant Professor Jones
Assistant Professor Wasserman
Instructor Roth
Instructor DeZurko
Instructor Carver
Instructor Bergman

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. Carver.
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. Carver.
A continuation of Arch. 106A. Charge, $1.

108. Architectural Projections I. 3(0-9); I and II. Wichers.
Fundamental principles and problems in projection, intersections, and development.

109. Architectural Projections II. 3(0-9); I and II. Wichers.
Architectural shades and shadows and perspective drawing. 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 Sketching. 2(0-6); I, II, and SS. Prerequisite: Arch. 112. Helm, Carver.

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. DeZurko.
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, Carver.

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. Carver.
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. DeZurko.

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. DeZurko.
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. DeZurko.
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. Jones.
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. Jones.
A study of plumbing, sanitation systems, and mechanical equipment of buildings.

191. Working Drawings. 3(0-9); II. Prerequisite: Arch. 142 and 187A. Wichers.
Preparing working drawings for a residence.

192. Theory of Structures I. 4(2-6); II. Prerequisite: Ap. Mech. 116 and 121. Jones.
Mathematical and graphical solutions of stresses in framed structures under static loading; practical problems in the design of wood, steel, and masonry construction; occasional inspection trips to buildings under construction.

194A. Theory of Structures II. 5(3-6); I. Prerequisite: Arch. 192. Jones.
A continuation of Theory of Structures I.

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. Jones.
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, Jones.
Under direct supervision of some member of the departmental staff, study of specific architectural problems.

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
Professor Greene
Associate Professor Parent
Instructor Jonnard
Instructor Zabel
Graduate Research Asst. Bate
Graduate Research Asst. Renwick

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. Jonnard, Zabel.
Manufacture, use, and properties of metallic and nonmetallic materials of construction.

205. Industrial Stoichiometry. 2(2-0); I. Prerequisite: Chem. 241. Greene, Zabel, Parent.
Problems involving heat, material, and economic balances.

220. Unit Operations I. 4(3-3); II. Prerequisite: Chem. 206 and Math. 115. Greene, Jonnard.

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. Parent, Jonnard.
A study of unit operations, including filtration, evaporation, humidification and drying, absorption, distillation, and crystallization. Deposit, $10.

231. Chemical Engineering Thermodynamics. 5(5-0); I, II, and SS. Prerequisite: Chem. Engg. 220. Faith, Parent.
Thermodynamics applied to chemical engineering processes.

232. Advanced Chemical Engineering Thermodynamics. 3(3-0); II. Prerequisite: Chem. Engg. 231. Greene.

236. Chemical Technology. 4(4-0); I, II, and SS. Prerequisite: Chem. 206 and 267. Zabel.
Applications of physical chemistry, unit operations, and economics to the chemical process industries.

240. Unit-process Laboratory. 2(0-6); II. Prerequisite or concurrent: Chem. Engg. 236. Faith.
Investigation of the important unit processes. Deposit, $10.

245. Chemical Engineering Plant Design. 4(3-3); II. Prerequisite: Chem. Engg. 225. Greene, Parent.
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, Zabel.
Graphical methods and dimensional analysis applied to chemical engineering problems.

265. Distillation. 3(3-0); I or II. Prerequisite: Chem. Engg. 225. Jonnard. Advanced study of distillation.

270. Absorption and Extraction. 3(3-0); I or II. Prerequisite: Chem. Engg. 225. Jonnard.
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. Greene.
I: Properties of hydrocarbon mixtures, cracking, polymerization, hydrogenation, separation by distillation.
II: Design and operation of plants, refinery economics, natural gasoline plants.

290. Process Development. 2(2-0); I or II. Prerequisite: Chem. Engg. 220. Faith.
Principles involved in the development of a chemical process from laboratory to completed plant.

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
Professor White
Associate Professor Crawford
Associate Professor Morse
Instructor Moeller
Instructor Gerke
Instructor Conkling

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. 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.
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. White.
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. 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

202. Stress Analysis I. 4(4-0); I, II, and SS. Prerequisite: Ap. Mech. 212. Conrad, Morse.
The fundamental principles of stresses in determinate structures with an introduction to deflections and secondary stresses, rigid frames and space framework.

* In the case of any of the engineering courses, one course number is used for the recitation and another for the laboratory part of the course.

205. Stress Analysis I Laboratory. 2(0-6); I and SS. Prerequisite or concurrent: Civ. Engg. 202. Conrad, Morse.
Graphic statics and design of simple roof trusses in timber and steel.

208. Stress Analysis II. 3(3-0); I and SS. Prerequisite: Civ. Engg. 202. Conrad.
Theory of statically indeterminate structures, secondary stresses, and stressed-skin structures; stresses in continuous, movable, cantilever, suspension and steel-arch bridges, rigid and space frames.

211, 216. Astronomy and Geodesy. 4(2-6); I and SS. Prerequisite: Civ. Engg. 151 and 155 and Math. 115. Frazier, Morse.
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, collections, 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. White.
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. 202. Conrad, Frazier.
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. 202 and 231. Conrad.
Primarily a study of methods, equipment, construction costs, and economy in design.

256. Reinforced Concrete Arches. 3(3-0); II and SS. Prerequisite: Ap. Mech. 212. Conrad.
Various types of reinforced concrete arches adapted for use in bridges, buildings, and dams; computation of stresses; arrangement of details.

257, 258. Reinforced Concrete Design. 4(2-6); I, II, and SS. Prerequisite: Ap. Mech. 212. Frazier, Morse.
A study of the characteristics of concrete as a building material and the design of reinforced concrete structures.

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.

272, 273. Highway Engineering II. 4(2-6); II and SS. Prerequisite: Civ. Engg. 156, 157, and 231. Frazier, White.
Highway legislation, administration; highway and airport planning, drainage, layouts and economics.

Laboratory.—Reconnaissance and location surveys for highways, streets and airports; completing engineering plans, profiles, designs and estimates therefrom. Charge, $2.

276. Highway Economics. 3(3-0); I and SS. Prerequisite: Civ. Engg. 231. Frazier.
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.
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 Jorgenson
Associate Professor Sitz
Associate Professor Selvidge
Assistant Professor Martin
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: Phy. 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. Kloeffler.
The fundamental principles of electronics.

190. Inspection Trip. R; I. Prerequisite: Senior classification. Kloeffler.
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; prerequisite or concurrent: Elec. Engg. 209. Ward.
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. Ward.
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, 245. Wire Communication I. 4(3-2, 1); I and II. Prerequisite: Elec. Engg. 209. Kloeffler, Martin.
Principles of wire communication; telephone and telegraph switching systems, line loading, repeaters, and carrier currents.

Laboratory.—Laboratory measurements as applied to wire communication networks. Charge, $1.50.

248, 249. Wire Communication II. 3(2-2, 1); II. Prerequisite: Elec. Engg. 209 and 244. Martin.
Transmission problems, networks, wave filters.

Laboratory.—Measurements as applied to wire communication networks. Charge, $1.50.

252, 253. Radio Communication I. 4(3-2, 1); I and II. Prerequisite: Elec. Engg. 120 and 209. Martin.

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, 259. Radio Communication II. 4(3-2, 1); I and II. Prerequisite: Elec. Engg. 252 and 253. Martin.

Radio-frequency amplifiers and oscillators, modulation; application to transmitter circuits; antennas and wave propagation.

Laboratory.—Experiments on modulation, demodulation, impedance matching, and antenna measurements. Charge, $1.50.

256. Industrial Electronics. 2(2-0); I. Prerequisite: Elec. Engg. 120 and 209. Martin.

The fundamental principles of electronics and their application to the type of tubes and circuits used in industry.

257, 258. Ultra-high-frequency Techniques. 4(3-2, 1); I and II. Prerequisite: Elec. Engg. 120, 209, 244, 245, 252, 253, and concurrent with 255 and 259. Martin.

Principles of radio communication with emphasis on microwaves and the application of electron tubes in trigger, sweep, and pulse-forming circuits.

Laboratory.—Experiments on the generation and application of microwaves outlined in Elec. Engg. 257.

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); II. Prerequisite: Econ. 101 and Elec. Engg. 209. Kloeffler.

The problems of depreciation, finance, rates, and public regulation in gas, electric, and telephone properties.

FOR GRADUATE CREDIT

301. Advanced Electrical 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 252. Martin.

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
Assistant Professor Wood
Instructor Sullivan
Instructor Fry
Instructor Rogers
Instructor Messenheimer

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.

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.

103. General Drawing. 3(1-6); I, II, and SS. Staff.
Technical sketching and mechanical drafting; graphic and pictorial drawing of building plans and mechanical equipment; blueprint reading; charts and graphs; and reproduction of drawings. Inexpensive set of instruments required.

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.

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. 212 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 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.

260. Airplane Design and Construction. 3(1-6); II. Prerequisite: Mach. Des. 250 and Ap. Mech. 212. Pearce.
The structure and rigging of aircraft, the design directive of a small plane, the general layout and weight analysis.

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
Associate Professor Tripp
Assistant Professor Flinner
Instructor Pippin
Instructor Matting
Instructor Zink
Instructor Fearn
Instructor Holecek

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: Phys. 102 or 105. Staff.
Steam boilers, steam engines, steam turbines, internal combustion engines, and auxiliaries.

135. Air Conditioning A. 3(3-0); II. Prerequisite: Phys. 102 or 105. 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

204. Heat Power Engineering A. 3(3-0); I and II. Prerequisite: Mech. Engg. 208. Staff.

Power-plant equipment, fuels and combustion.

206. Heat Power Laboratory. 1(0-3); I and II. Prerequisite: Mech. Engg. 120; or prerequisite or concurrent: Mech. Engg. 204 or 210. Staff.

Laboratory course in power-plant equipment for non-mechanical engineering students. Charge, $2.

208. Engineering Thermodynamics. 4(4-0); I and II. Prerequisite: Math. 115. 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.

210. Heat Power Engineering B. 4(4-0); II. Prerequisite: Chem. Engg. 231. Staff.

Same as Mech. Engg. 204, except that some material on Engineering Thermodynamics has been added.

214. Heat Power Engineering. 4(3-3); I. 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.

218. Power-plant Design. 2(0-6); II. Prerequisite: Mech. Engg. 214. Helander.

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.

221. Refrigeration. 2(2-0); I. Prerequisite: Mech. Engg. 208. Mack.

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. 208. Mack.

Psychrometry; heat transmission; air-conditioning equipment and systems; design problems.

230. Advanced Thermodynamics. 2(2-0); I. Prerequisite: Mech. Engg. 208. Helander.

240. Internal Combustion Engines. 2(2-0); II. Prerequisite: Mech. Engg. 208. Brainard.

242. Mechanical Engineering Laboratory I. 2(0-6); I and II. Prerequisite or concurrent: Mech. Engg. 204 or 214. Staff.
Laboratory course in power-plant equipment for mechanical engineering students. Charge, $4.

243. Mechanical Engineering Laboratory II. 2(0-6); I and II. Prerequisite: Mech. Engg. 242. Staff.
Power generating equipment, fans, air-conditioning equipment, internal combustion engines, steam engines, turbines, and auxiliaries. Students are required to organize and conduct tests and to submit complete reports. Charge, $4.

246. Aëronautical Engineering Laboratory. 2(0-6); II. Prerequisite: Mech. Engg. 214. Staff.
Aircraft engines, propellers, engine accessories, and instruments. Charge, $4.

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.

260. Advanced Power-plant Engineering. Credit to be arranged. Prerequisite: Mech. Engg. 218. 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 Aiman
Assistant Professor Moore
Assistant Professor Miller
Instructor Hostetter
Instructor Marsh
Instructor Grant
Instructor Shaw
Instructor Ladd
Instructor Smaltz
Instructor Darby

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. Miller.
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. Miller.
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 forge 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, Shaw.

(*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. Hostetter, Shaw.

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, Darby.

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. Lynch, Moore.

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. Lynch, Moore.

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 templets, 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. Miller.

Babbitting, 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.

180. Gages and Measurements. 1(0-3); I, II, and SS.

Systems of measurements and the use of various types of gages and devices for checking industrial products.

182. Industrial Control. 2(2-0); I, II, and SS.

Supervisory and administrative problems essential in the control of industrial production.

192, 193. Machine Tool Work II and III. 2(0-6) and 1(0-3), respectively; I, II, and SS. Prerequisite: Shop 170. Jones, Darby.

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 senior standing. 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.

250. Time and Motion Study. 2(1-3); I. Prerequisite: Junior standing in engineering. Smaltz.
The principles and practice of time and micro-motion analysis of work in the shop for the purpose of setting standards of performance and of improving methods of production. Charge, $2.50.

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. Hostetter.
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. Hostetter.
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. Hostetter.
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. Miller.
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 March 24, 1910, by the Board of Regents 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 School of Engineering and Architecture and from other scientific departments whose work is directly related to the work of this school, and others employed especially for the work of the station.

Among the investigations now being carried on are: Road materials resources of Kansas, *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; cutting edges of tillage implements; tractor fuels; television apparatus; 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; 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 and extraction as a chemical engineering unit operations; new sources of concrete aggregates; scattering of ultra-short radio waves; and flood control in the lower Cottonwood river valley.

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. Forty-one 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 School of Arts and Sciences

Rodney Whittemore Babcock, *Dean*

In the land-grant colleges, of which this institution is one, the classical studies 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 school of the College to give this basic, scientific, and cultural training.

GENERAL CURRICULUM

The general curriculum 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.

Students who plan to go into agricultural journalism and want more training in agriculture than is available through the electives and options in the Curriculum in Industrial Journalism should enter the Curriculum in Agricultural Administration and take work leading to a degree in agriculture, at the same time taking the professional work of 30 hours required in the Curriculum in Industrial Journalism. Students who complete their work under this plan will be given a certificate to the effect that they have met the requirements of the American Association of Schools and Departments of Journalism, for professional work in journalism. (See Curriculum in Agricultural Administration.)

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 School of Engineering and Architecture.

CURRICULUMS IN MUSIC

A four-year Curriculum in Music Education is offered, with specialization in voice, instrument, or public-school band or orchestra. Students who complete this curriculum are awarded the degree of 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.

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.

CURRICULUMS IN PHYSICAL EDUCATION

The theoretical and practical instruction given in these curriculums prepares students for the teaching of physical and health education and the coaching of 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 and 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 PHYSICAL SCIENCE

The curriculum in Physical Science offers specialized training in geology, mathematics, and physics. The student selects one of these subjects as his major field. Sufficient elective work is provided for basic supporting courses and for thorough preparation in the special field chosen.

General Curriculum

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)
Modern England, Hist. 211	3(3-0)	Europe Since 1870, Hist. 212	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)	Found. of Am. Republic, 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, Sp. 107	2(2-0)	Elective‡	6(-)
English Proficiency, Engl. 169	R		
Elective‡	6(-)		
Total	15	Total	15

SENIOR

First Semester		Second Semester	
Elective‡	15(-)	Elective‡	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 General Curriculum

The following arrangement is prepared for students who wish to enter the School 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)
Extem. Speech I, Sp. 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 General Curriculum 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. The work of two further years leading to a bachelor's degree is available and advised.

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)	Immunology, Bact. 229	5(3-6) *or*
Bact. of Hum. Dis., Bact. 206	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		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)
Plane Trigonometry, Math. 101	3(3-0)	Plane Anal. Geom., Math. 110	4(4-0)
Engg. Drawing, Mach. Des. 101	2(0-6)	Library Methods, Lib. Ec. 101	1(1-0)
Artillery I, Mil. Sc. 113 (men)	1(1-2)	German I, Mod. Lang. 101	3(3-0)
Ind. Chem. Seminar, Chem. 133	R	Artillery II, Mil. Sc. 114 (men)	1(1-2)
Phys. Ed., M or W	R	Ind. Chem. Seminar, Chem. 133	R
		Phys. Ed., M or W	R
Total	16 or 17	Total	16 or 17

SOPHOMORE

First Semester		Second Semester	
Quant. Anal. A, Chem. 250	3(1-6)	Quant. Anal. B, Chem. 251	3(1-6)
German II, Mod. Lang. 102	3(3-0)	Scientific German, Mod. Lang. 137,	4(4-0)
Calculus I, Math. 114	4(4-0)	Calculus II, Math. 115	4(4-0)
Engg. Physics I, Phys. 105	5(4-3)	Engg. Physics II, Phys. 106	5(4-3)
Artillery III, Mil. Sc. 115 (men)	1(1-2)	Artillery IV, Mil. Sc. 116 (men)	1(1-2)
Ind. Chem. Seminar, Chem. 133	R	Ind. Chem. Seminar, Chem. 133	R
Phys. Ed., M or W	R	Phys. Ed., M or W	R
Total	15 or 16	Total	16 or 17

JUNIOR

First Semester		Second Semester	
Economics I, Econ. 101	3(3-0)	Organic Chemistry II, Chem. 267	4(2-6)
Organic Chemistry I, Chem. 266	5(3-6)	Inorg. Preparations, Chem. 202	2(0-6)
Physical Chemistry I, Chem. 206	5(3-6)	Adv. Inorg. Chem., Chem. 207	3(3-0)
Elective†	4(-)	Phys. Chem. II Rec., Chem. 272	3(3-0)
Ind. Chem. Seminar, Chem. 133	R	Phys. Chem. II Lab., Chem. 273	2(0-6)
English Proficiency, Engl. 169	R	Elective†	3(-)
		Ind. Chem. Seminar, Chem. 133	R
Total	17	Total	17

SENIOR

First Semester		Second Semester	
Amer. Govt., Hist. 151	3(3-0)	Chem. Tech., Chem. Engg. 236	4(4-0)
Ind. Chem. Analysis, Chem. 261	3(1-6)	Prob. in Chemistry, Chem. 270	3(-)
Elective†	10(-)	Hist. of Chemistry, Chem. 208	1(1-0)
Inspection Trip, Chem. 132	R	Elective†	8(-)
Ind. Chem. Seminar, Chem. 133	R	Ind. Chem. Seminar, Chem. 133	R
Total	16	Total	16

Summary.—Men: Physical education, two years required; military science, 4 hours; chemistry, 47 hours; engineering, 6 hours; other prescribed subjects, 51 hours; electives, 25 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		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 Geology, Geol. 103	3(3-0)
Modern Language	3(3-0)	Modern Language	3(3-0)
Library Methods, Lib. Ec. 101	1(1-0)	Option*	6(-)
General Psychology, Educ. 184	3(3-0)	Infantry II, Mil. Sc. 102 (men)	1(1-2)
Infantry I, Mil. Sc. 101 (men)	1(1-2)	Industrial Journalism Lecture	R
Industrial Journalism Lecture	R	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	
Elem. Journalism, Ind. Jour. 150	2(2-0)	Ind. Writing, Ind. Jour. 157	3(1-6)
Graphic Arts Survey, Ind. Jour. 103	2(2-0)	Economics I, Econ. 101	3(3-0)
Typography Lab., Ind. Jour. 104	1(0-3)	English Literature, Engl. 172	3(3-0)
Biological Science	5(-)	Extem. Speech I, Sp. 106	2(2-0)
Modern Language	3(3-0)	Current History, Hist. 126	1(1-0)
Option*	2(-)	Option*	3(-)
Infantry III, Mil. Sc. 103 (men)	1(1-2)	Infantry IV, Mil. Sc. 104 (men)	1(1-2)
Industrial Journalism Lecture	R	Industrial Journalism Lecture	R
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	
News. and Mag. Writing, Ind. Jour. 167	2(2-0)	Pub. Inf. Methods, Ind. Jour. 183	2(2-0)*or*
History and Ethics of Journalism, Ind. Jour. 273	3(3-0)	Rural Press, Ind. Jour. 181	2(2-0)*or*
Prin. of Adv., Ind. Jour. 178	4(4-0)	Radio Writing, Ind. Jour. 162	2(2-0)
American Literature, Engl. 175	3(3-0)	Editing, Ind. Jour. 166	2(0-6)
Option*	3(-)	English Elective	3(3-0)
Industrial Journalism Lecture	R	Elective and Option*	8(-)
English Proficiency, Engl. 169	R	Industrial Journalism Lecture	R
Total	15	Total	15

SENIOR

First Semester		Second Semester	
Cont. Affairs I, Ind. Jour. 253	3(3-0)	Cont. Affairs II, Ind. Jour. 255	3(3-0)
Adv. Reporting, Ind. Jour. 228	3(2-3)*or*	American Government, Hist. 151	3(3-0)
Jour. for Women, Ind. Jour. 170	3(3-0)	Elective and Option*	9(-)
Elective and Option*	9(-)	Industrial Journalism Lecture	R
Industrial Journalism Lecture	R		
Total	15	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.

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* 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 School of Arts and Sciences, 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 1 (applied science), group 2 (home economics), group 3 (agriculture), group 4 (drawing and art), group 5 (manual and industrial arts), group 6 (printing), and group 7 (radio). The ten-hour option in social science may be selected from group 8.

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	½(1-0)	Orch. Instruments II, Mus. 151B	½(1-0)
Choral Ensemble, Mus. 194	½(0-2)	Choral Ensemble, Mus. 194	½(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(½-3)	Piano, Mus. 161	1(½-3)
Voice, Mus. 156	1(½-3)	Voice, Mus. 156	1(½-3)
Orch. Instr. III, Mus. 151C	½(1-0)	Orch. Instr. IV, Mus. 151D	½(1-0)
Choral Ensemble, Mus. 194	½(0-2)	Choral Ensemble, Mus. 194	½(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. 111	1(1-0)
Voice or Instrument	2(1-6)	Voice or Instrument	2(1-6)
School Music I, Mus. 138	2(2-0)	School Music II, Mus. 139	2(2-0)
Rad. Mus. Ap. Programs, Mus. 115,	1(1-0)	Pub. Spk. for Teachers, Sp. 138	1(1-0)
Instrumental Conducting, Mus. 134,	1(1-0)	Orch. Instr. VI, Mus. 151F	½(1-0)
Orch. Instr. V, Mus. 151E	½(1-0)	Choral Ensemble, Mus. 194	½(0-2)
Choral Ensemble, Mus. 194	½(0-2)	Educ. Admin., Educ. 210	3(3-0)
Educ. Psychology, Educ. 109	3(3-0)	American Literature, Engl. 175	3(3-0)
Education elective	3(3-0)	Nonmusic elective	2(-)
English Proficiency, Engl. 169	R		
Total	15	Total	15

SENIOR

First Semester		Second Semester	
Voice or Instrument	2(1-6)	Voice or Instrument	2(1-6)
Orch. Instr. VII, Mus. 151G	½(1-0)	Orch. Instr. VIII, Mus. 151H	½(1-0)
Choral Ensemble, Mus. 194	½(0-2)	Choral Ensemble, Mus. 194	½(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		Second Semester	
College Rhetoric I, Engl. 101	3(3-0)	College Rhetoric II, Engl. 104	3(3-0)
Music Major	4(1-12)	Music Major	4(1-12)
Ear Tr. and St. Sing. I, Mus. 105,	2(1-3)	Ear Tr. and St. Sing. II, Mus. 106,	2(1-3)
Harmony I, Mus. 101	2(2-0)	Harmony II, Mus. 102	2(2-0)
Modern Language	3(3-0)	Modern Language	3(3-0)
Orch. Instr. I, Mus. 151A	½(1-0)	Orch. Instr. II, Mus. 151B	½(1-0)
Ensemble, Mus. 183	½(0-2)	Ensemble, Mus. 183	½(0-2)
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	
Music Major	4(1-12)	Music Major	4(1-12)
Music Minor	2(1-6)	Music Minor	2(1-6)
Harmony III, Mus. 103	2(2-0)	Harmony IV, Mus. 104	2(2-0)
Orch. Instr. III, Mus. 151C	½(1-0)	Orch. Instr. IV, Mus. 151D	½(1-0)
Ensemble, Mus. 183	½(0-2)	Ensemble, Mus. 183	½(0-2)
Hist. and Ap. of Mus. I, Mus. 130,	2(2-0)	Hist. and Ap. of Mus. II, Mus. 131,	2(2-0)
Rad. Mus. Ap. Programs, Mus. 115,	1(1-0)	Pub. Spk. for Teacher, Sp. 138	1(1-0)
Modern Language	3(3-0)	Modern Language	3(3-0)
Infantry III, Mil. Sc. 103 (men)	1(1-2)	Infantry IV, Mil. Sc. 104 (men)	1(1-2)
Recital I, Mus. 181A	R	Recital II, Mus. 181B	R
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	
Music Major	4(1-12)	Music Major	4(1-12)
Music Minor	2(1-6)	Music Minor	2(1-6)
Counterpoint, Mus. 109	2(2-0)	Musical Form and Analysis, Mus. 111	1(1-0)
Orch. Instr. V, Mus. 151E	½(1-0)	Orch. Instr. VI, Mus. 151F	½(1-0)
Ensemble, Mus. 183	½(0-2)	Ensemble, Mus. 183	½(0-2)
Choral Conducting, Mus. 133	1(1-0)	General Psychology, Educ. 184	3(3-0)
Phys. for Musicians I, Phys. 121	5(4-3)	Nonmusic elective	4(-)
Recital III, Mus. 181C	R	Recital IV, Mus. 181D	R
English Proficiency, Engl. 169	R		
Total	15	Total	15

SENIOR

First Semester		Second Semester	
Music Major	4(1-12)	Music Major	4(1-12)
Ensemble, Mus. 183	½(0-2)	Orch. Instr. VIII, Mus. 151H	½(1-0)
Orch. Instr. VII, Mus. 151G	½(1-0)	Ensemble, Mus. 183	½(0-2)
Methods and Materials for the Studio, Mus. 149	1(2-0)	Instr. and Orches., Mus. 136	3(3-0)
English Literature, Engl. 172	3(3-0)	American Literature, Engl. 175	3(3-0)
Nonmusic elective	6(-)	Nonmusic elective	4(-)
Recital V, Mus. 181E	R	Recital VI, Mus. 181F	R
		Prac. Teach. of Music, Mus. 187	R
Total	15	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		Second Semester	
Intro. to Phys. Ed., Phys. Ed. 107,	1(1-0)	Phys. Ed. Act. II, Phys. Ed. 138,	2(0-6)
Phys. Ed. Act. I, Phys. Ed. 137..	1(0-3)	Football, Phys. Ed. 126.....	2(1-3)
Basketball, Phys. Ed. 130.....	2(1-3)	General Zoölogy, Zoöl. 105.....	5(3-6)
College Rhetoric I, Engl. 101.....	3(3-0)	College Rhetoric II, Engl. 104....	3(3-0)
Extem. Speech I, Sp. 106.....	2(2-0)	Chemistry II Rec., Chem. 103....	3(3-0)
Chemistry I, Chem. 101.....	5(3-6)	Infantry II, Mil. Sc. 102.....	1(1-2)
Library Methods, Lib. Ec. 101....	1(1-0)	Phys. Ed., M.....	R
Infantry I, Mil. Sc. 101.....	1(1-2)		
Phys. Ed., M.....	R		
Total	16	Total	16

SOPHOMORE

First Semester		Second Semester	
Human Anatomy, Zoöl. 123.....	5(3-6)	Baseball, Phys. Ed. 133.....	2(1-3)
General Psychology, Educ. 184....	3)3-0)	Swimming M, Phys. Ed. 120.....	1(0-3)
Personal Hygiene, Phys. Ed. 119..	2(2-0)	Nat. and Fcn. of Play, Phys. Ed., 145	2(2-0)
Phys. Ed. Act. III, Phys. Ed. 139,	2(0-6)	Kinesiology M, Phys. Ed. 141....	3(3-0)
Current History, Hist. 126.....	1(1-0)	Human Physiology, Zoöl. 221.....	4(3-3)
Hist. of Phys. Ed., Phys., Ed. 143,	2(2-0)	Gen. Microbiology, Bact. 101.....	3(1-6)
Infantry III, Mil. Sc. 103.....	1(1-2)	Infantry IV, Mil. Sc. 104.....	1(1-2)
Phys. Ed., M.....	R	Phys. Ed., M.....	R
Total	16	Total	16

JUNIOR

First Semester		Second Semester	
Community Hygiene, Phys. Ed. 147,	2(2-0)	First Aid and Mas., Phys. Ed. 113,	3(3-0)
Org. and Admin. of Phys. Ed. M., Phys. Ed. 146.....	3(3-0)	Track and Field Sports, Phys. Ed. 140	2(1-3)
Sociology, Econ. 151.....	3(3-0)	Educ. Admin., Educ. 210.....	3(3-0)
Phys. Ed. Act. IV, Phys. Ed. 140,	1(0-3)	Practice Teaching in Phys. Ed., Phys. Ed. 134.....	2(0-6)
Psych. of Child. and Adol., Educ. 250	3(3-0)	Teaching Health, Phys. Ed. 149...	2(2-0)
Elective*	4(-)	Elective*	4(-)
English Proficiency, Engl. 169.....	R		
Total	16	Total	16

SENIOR

First Semester		Second Semester	
Phys. Diagnosis and Prescrip., Phys. Ed. 124.....	3(3-0)	Teach. Partic. in H. S., Educ. 163,	3(3-0)
Physiol. of Exercise, Phys. Ed. 123,	2(2-0)	Public-school Program in Phys. Ed., Phys. Ed. 142.....	2(2-0)
Educ. Psychology, Educ. 109.....	3(3-0)	Educ. Sociology, Educ. 239.....	3(3-0)
Practice Teaching in Phys. Ed., Phys. Ed. 134.....	2(0-6)	Community Recreation, Phys. Ed. 203	2(2-0)
Elective*	5(-)	Elective*	5(-)
Total	15	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)	Extem. Speech I, Sp. 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)	Gen. Technic II, Phys. Ed. 157B	2(1-3)
Gen. Technic I, Phys. Ed. 157A	2(1-3)	Phys. Ed., W	R
Phys. Ed., W	R		
Total	15	Total	15

SOPHOMORE

First Semester		Second Semester	
Human Anatomy, Zoöl. 123	5(3-6)	Kinesiology W, Phys. Ed. 184	2(2-0)
Prin. and Phil. of Phys. Ed., Phys. Ed. 162	3(3-0)	Human Physiology, Zoöl. 221	4(3-3)
Playground Mgmt. and Games, Phys. Ed. 177	3(2-3)	Sociology, Econ. 151	3(3-0)
Gen. Technic III, Phys. Ed. 157c	2(1-3)	English Literature, Engl. 172	3(3-0)
Elective†	2(-)	Gen. Technic IV, Phys. Ed. 157D	2(1-3)
Phys. Ed., W	R	Elective†	1(-)
		Phys. Ed., W	R
Total	15	Total	15

JUNIOR

First Semester		Second Semester	
Health Tchg. in H. S., Phys. Ed. 179	3(3-0)	Psych. of Child. and Adol., Educ. 250	3(3-0)
Embryology, Zoöl. 219	4(3-3)	Educ. Sociology, Educ. 239	3(3-0)
Gen. Technic V, Phys. Ed. 157E	2(1-3)	Gen. Technic VI, Phys. Ed. 157F.,	2(0-6)
Health Exam., Phys. Ed. 174	3(2-3)	Therap. and Mass., Phys. Ed. 175,	3(2-3)
American Literature, Engl. 175	3(3-0)	Elective†	4(-)
Phys. Ed., W	R	Phys. Ed., W	R
English Proficiency, Engl. 169	R		
Total	15	Total	15

SENIOR

First Semester		Second Semester	
Amer. Hist. III, Hist. 203	3(3-0)	Rec. Leadership, Phys. Ed. 191	2(2-0)
Educ. Psychology, Educ. 109	3(3-0)	Organization and Administration of Phys. Ed. W, Phys. Ed. 176	2(2-0)
Ap. Nutr., Foods and Nutr. 121	2(2-0)	Teach. Partic. in H. S. Educ. 163,	3(3-0)
Teach. and Adapt. of Phys. Educ., Phys. Ed. 188	3(3-0)	Gen. Technic VIII, Phys. Ed. 157H	2(1-3)
Gen. Technic VII, Phys. Ed. 157G,	2(1-3)	Educ. Admin., Educ. 210	3(3-0)
Elective†	2(-)	Elective†	3(-)
Phys. Ed., W	R	Phys. Ed., W	R
Total	15	Total	15

Summary.—Physical education, 43 hours; professional education, 18 hours; other prescribed subjects, 47 hours; electives, 12 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)
El. Statistics, Math. 126	3(3-0)	Economics II, Econ. 104	3(3-0)
Valuation Accounting, Econ. 280	3(3-0)	Sociology, Econ. 151	3(3-0)
History elective	3(-)	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, Sp. 107	2(2-0)	Amer. Govt., Hist. 151	3(3-0)
Money and Banking, Econ. 116	3(3-0)	Bus. Org. and Fin., Econ. 215	3(3-0)
Marketing, Econ. 246	3(3-0)	Option*	3(-)
Option*	3(-)	Elective†	6(-)
Elective†	4(-)		
English Proficiency, Engl. 169	R		
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.

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* 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 group 11 of the electives for students in the School of Arts and Sciences.

Curriculum in Business Administration and 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)
Option*	3(-)	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	
El. of Statistics, Math. 126	3(3-0)	Specialized Acctg., Econ. 294	3(3-0)
Money and Banking, Econ. 116	3(3-0)	Adv. Cost Accounting, Econ. 288	2(2-0)
Bus. Org. and Fin., Econ. 215	3(3-0)	Am. Govt., Hist. 151	3(3-0)
Adv. Accounting, Econ. 281	3(3-0)	Public Speaking, Sp. 107	2(2-0)
Option*	3(-)	Elective†	5(-)
English Proficiency, Engl. 169	R		
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)	Tax Accounting, Econ. 286	3(3-0)
Elective†	7(-)	Elective†	8(-)
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.

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* Eight hours of physical or biological science are to be elected in this cirriculum, 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.

Curriculum in Physical 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)
Plane Trigonometry, Math. 101	3(3-0)	Plane Anal. Geometry, Math. 110	4(4-0)
Engg. Drawing, Mach. Des. 101	2(0-6)	General Geology, Geol. 103	3(3-0)
Artillery I, Mil. Sc. 113 (men)	1(1-2)	Library Methods, Lib. Ec. 101	1(1-0)
Phys. Educ., M or W	R	Artillery II, Mil. Sc. 114 (men)	1(1-2)
		Phys. Educ., M or W	R
Total	16 or 17	Total	16 or 17

SOPHOMORE

First Semester		Second Semester	
Calculus I, Math. 114	4(4-0)	Calculus II, Math. 115	4(4-0)
Engg. Physics I, Phys. 105	5(4-3)	Engg. Physics II, Phys. 106	5(4-3)
General Psychology, Educ. 184	3(3-0)	Economics I, Econ. 101	3(3-0)
Elective*	3(-)	Elective*	3(-)
Artillery III, Mil. Sc. 115 (men)	1(1-2)	Artillery IV, Mil. Sc. 116 (men)	1(1-2)
Phys. Educ., M or W	R	Phys. Educ., M or W	R
Total	15 or 16	Total	15 or 16

JUNIOR

First Semester		Second Semester	
German I, Mod. Lang. 101	3(3-0)	German II, Mod. Lang. 102	3(3-0)
Public Speaking, Sp. 107	2(2-0)	Amer. Ind. History, Hist. 105	3(3-0)
Current History, Hist. 126	1(1-0)	Mechanics, Phys. 227†	3(3-0)
Diff. Equations, Math. 201†	3(3-0)	Elective*	7(-)
Elec. and Magnetism, Phys. 251†	3(3-0)		
Elec. and Mag. Lab., Phys. 254†	1(0-3)		
Elective*	3(-)		
Engl. Proficiency, Engl. 169	R		
Total	16	Total	16

SENIOR

First Semester		Second Semester	
Scientific Ger., Mod. Lang. 137	4(4-0)	Elective*	17(-)
Elective*	13(-)		
Total	17	Total	17

Summary.—Men: Physical education, two years required; military science, 4 hours; other prescribed subjects, 80 hours for geology majors, 82 hours for all others; electives, 48 hours for geology majors, 46 hours for all others; total, 132 hours. Women: The same, except no military science; total, 128 hours.

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* Electives are chosen in consultation with the dean of the school and the head of the department in which the major is planned. At least 28 hours of electives must be taken in physics, geology, mathematics, chemistry, and engineering. Students who plan to teach physical and biological sciences in high school should take 12 hours of biological science and may substitute part of this for restricted electives. Senior majors in physics are required to enroll in Colloquium in Physics, Phys. 299.

† Students who major in geology are required to substitute Historical Geology, Geol. 203, 4(3-3), Crystallography and Mineralogy, Geol. 209, 4(2-6), and 2 hours of electives for Math. 201, Phys. 251, Phys. 254, and Phys. 227.

Groups of Electives for Students in the School of Arts and Sciences

1. Applied Science

For industrial option in the Curriculum in Industrial Journalism.

Seed Iden. and Weed Cont., Agron. 105	2(1-3)
Soils, Agron. 130	4(3-3)
General Microbiology, Bact. 101	3(1-6)
Bact. of Hum. Dis., Bact. 206	5(3-6)
General Botany I, Bot. 101	3(1-6)
General Botany II, Bot. 105	3(1-6)
Nature and Dev. of Plants, Bot. 110	3(3-0)
Fruit Crop Diseases, Bot. 202	2(1-3)
Plant Pathology I, Bot. 205	3(2-3)
Plant Ecology, Bot. 228	2(2-0)
Field Crop Diseases, Bot. 241	3(1-6)
Gen. Org. Chemistry, Chem. 122	5(3-6)
Dairy Chemistry, Chem. 254	3(1-6)
Gen. Entomology, Ent. 101	3(3-0)
Hort. Entomology, Ent. 201	2(2-0)
Gen. Economic Ent., Ent. 203	3(2-3)
Staple Crop Ent., Ent. 206	3(2-3)
General Apiculture, Ent. 208	3(2-3)
Human Nutrition, Foods and Nutr. 112	3(3-0)
Ap. Nutr., Foods and Nutr. 121	2(2-0)
General Geology, Geol. 103	3(3-0)
Physiographic Geol., Geol. 110	3(3-0)
Prin. of Geography, Geol. 140	3(3-0)
Historical Geology, Geol. 203	4(3-3)
Economic Geology, Geol. 207	4(3-3)
Cryst. and Min., Geol. 209	4(2-6)
Sedimentary Petrology, Geol. 236	5(3-6)
Vert. Paleontology, Geol. 255	3(3-0)
Micropaleontology, Geol. 256	3(1-6)
El. of Horticulture, Hort. 107	3(2-3)
Small Fruits, Hort. 109	3(2-3)
Farm Forestry, Hort. 114	3(2-3)
Land Gardening I, Hort. 125	3(3-0)
Household Physics, Phys. 108	5(4-3)
Descriptive Physics, Phys. 136	3(3-0)
Des. Astronomy, Phys. 141	3(3-0)
Meteorology, Phys. 146	3(3-0)
Photography, Phys. 151	2(1-3)
General Zoölogy, Zoöl. 105	5(3-6)
Animal Parasitology, Zoöl. 208	3(2-3)
Embryology, Zoöl. 219	4(3-3)
Endocrinology, Zoöl. 247	3(3-0)

2. Home Economics

For industrial option in the Curriculum in Industrial Journalism.

Elementary Design I, Art 101A	2(0-6)
Costume Design I, Art 130	2(0-6)
Principles of Art I, Art 201	3(3-0)
Principles of Art II, Art 202	3(3-0)
Child Guidance I, Child Welf. 201,	3(1-6)
The Family, Child Welf. 216	2(2-0)
Fund. of Clothing, Clo. and Text. 113	2(0-6)
App. Dress Design, Clo. and Text. 114	3(0-9)
Adv. Dress Design, Clo. and Text. 115	3(0-9)
Foods I, Foods and Nutr. 102	5(3-6)
Applied Nutrition, Foods and Nutr. 121	2(2-0)
The House, Household Econ. 107,	3(2-3)
Family Finance, Household Econ. 263	2(2-0)
Econ. Probs. of the Family, Household Econ. 265	2(2-0)
Consumer Buying, Household Econ. 278	3(2-3)

3. Agriculture

For industrial option in the Curriculum in Industrial Journalism.

Farm Crops, Agron. 101	4(2-6)
Soils, Agron. 130	4(3-3)
El. of An. Husb., An. Husb. 125	3(2-3)
Prin. of Feeding, An. Husb. 152	3(3-0)
Genetics, An. Husb. 221	3(3-0)
General Botany I, Bot. 101	3(1-6)
General Botany II, Bot. 105	3(1-6)
Plant Pathology I, Bot. 205	3(2-3)
Field Crop Diseases, Bot. 241	3(1-6)
Gen. Org. Chemistry, Chem. 122	5(3-6)
El. of Dairy., Dairy Husb. 101	3(2-3)
Dairy Cattle Judging, Dairy Husb. 105	2(0-6)
El. of Horticulture, Hort. 107	3(2-3)
Farm Poultry Prod., Poult. Husb. 101	2(1-3)

4. Drawing and Art

For industrial option in the Curriculum in Industrial Journalism.

Freehand Drawing I, Arch. 112	2(0-6)
Freehand Drawing II, Arch. 113	2(0-6)
Pen. Rend. and Sketch., Arch. 116,	2(0-6)
Still-life Drawing, Arch. 117	2(0-6)
Water Color I, Arch. 118	2(0-6)
Water Color II, Arch. 119	2(0-6)
Life Drawing I, Arch. 121	2(0-6)
Life Drawing II, Arch. 123	2(0-6)
Domestic Architecture, Arch. 124	2(2-0)
Apprec. of Arch., Arch. 125	3(3-0)
Clay Modeling, Arch. 133	2(0-6)
Pen and Ink Drawing, Arch. 134	2(0-6)
Block Prints, Arch. 137	2(0-6)
Commercial Illus. I, Arch. 165	2(0-6)
Commercial Illus. II, Arch. 170	2(0-6)
Hist. Paint. and Sculp., Arch. 179,	3(3-0)
Adv. Freehand Drawing, Arch. 201,	Cr. Ar.
Etching, Arch. 217	2(0-6)
Oil Painting, Arch. 230	Cr. Ar.
Elementary Design I, Art 101A	2(0-6)
Elementary Design II, Art 101B	2(0-6)
Design in Crafts, Art 102	2(0-6)
Intermediate Design, Art 103	2(0-6)
Advanced Design, Art 105	2(0-6)
Weaving, Art 106	2(0-6)
Pottery, Art 109	2(0-6)
Interior Decoration I, Art 113	2(0-6)
Interior Decoration II, Art 115	2(0-6)
Interior Decoration III, Art 117	2(0-6)
Drawing I, Art 120	2(0-6)
Drawing II, Art 121	2(0-6)
Lettering, Art 127	2(0-6)
Costume Design I, Art 130	2(0-6)
Costume Design II, Art 134	2(0-6)
Costume Design III, Art 138	2(0-6)
Principles of Art I, Art 201	3(3-0)
Principles of Art II, Art 202	3(3-0)
Costume Illustration, Art 212	2(0-6)
Problems in Design, Art 217	Cr. Ar.
Problems in Interior Decoration, Art 232	Cr. Ar.
Historic Textiles Design, Art. 233	2(2-0)
Problems in Costume Design, Art 235	Cr. Ar.
Art of the S. W. Indians, Art 242,	2(2-0)
Arts of Mexico, Art 244	2(2-0)
Art of Prim. People, Art 246	2(2-0)

5. Manual and Industrial Arts

For industrial option in the Curriculum in Industrial Journalism.

Farm Building, Agric. Engg. 101	3(2-3)
Farm Mach., Agr. Engg. 108	3(2-3)
Gas Eng. and Tract., Agric. Engg. 130	3(2-3)
Surveying I, Civ. Engg. 102	2(0-6)
Engg. Drawing, Mach. Des. 101	2(0-6)
Des. Geom., Mach. Des. 106	2(0-6)
Mach. Draw. I, Mach. Des. 111	2(0-6)
Ele. Crafts for Teachers, Shop 118,	2(0-6)
Reed Furn. Const., Shop 119	2(0-6)
Woodwork I, Shop 121	2(0-6)
Wood and Metal Fin., Shop 122	2(0-6)
Woodwork II, Shop 126	2(0-6)
Woodwork III, Shop 131	2(0-6)
Woodturning, Shop 135	2(0-6)
Woodwork IV, Shop 139	2(0-6)
Farm Carpentry, Shop 147	3(1-6)
Forging, Shop 150	1(0-3)
Farm Blacksmithing I, Shop 157	1(0-3)
Farm Blacksmithing II, Shop 158,	1(0-3)
Foundry Production, Shop 161	1(0-3)
Metals and Alloys, Shop 165	2(2-0)
Machine Tool Work I, Shop 170	2(0-6)
Oxyacetylene Welding, Shop 171	1(0-3)
Arc Welding, Shop 172	1(0-3)
Sheet Metal Work, Shop 173	2(0-6)
Farm Shop Methods, Shop 175	3(1-6)
Machine Tool Work II, Shop 192,	2(0-6)
Machine Tool Work III, Shop 193,	1(0-3)
Adv. Shop Practice, Shop 261	Cr. Ar.
Metallography I, Shop 262	1(0-3)

6. Printing

For industrial option in the Curriculum in Industrial Journalism.

Ad Typog. I, Ind. Jour. 108	2(0-6)
Ad Typog. II, Ind. Jour. 111	2(0-6)
Ad Typog. III, Ind. Jour. 112	2(0-6)
Job Comp. I, Ind. Jour. 114	2(0-6)
Job Comp. II, Ind. Jour. 118	2(0-6)
Job Comp. III, Ind. Jour. 120	2(0-6)
Press Work I, Ind. Jour. 122	2(0-6)
Press Work II, Ind. Jour. 126	2(0-6)

7. Radio Broadcasting

For industrial option in the Curriculum in Industrial Journalism.

Radio Writing, Ind. Jour. 162	2(2-0)
Radio Advertising, Ind. Jour. 179	3(3-0)
Broadcasting Station Practice, Ind. Jour. 180	1(0-3)
Broadcast Musical Programs, Mus. 119	2(3-0)
Hist. and Apprec. of Music I, Mus. 130	2(2-0)
Hist. and Apprec. of Music II, Mus. 131	2(2-0)
Survey of Broadcasting, Sp. 162	1(1-0)
Broadcasting Inf. Programs, Sp. 163	2(2-0)
Radio Speech, Pub. Spk. 166	1(0-3)
Radio Program Participation, Sp. 168	1(0-3)
Adv. Phonetics, Sp. 201	4(3-3)
Radio Program Production, Sp. 231	2(1-3)
Radio Continuity I, Sp. 243	3(3-0)
Radio Continuity II, Sp. 244	3(0-9)

8. Social Science

For social science option in the Curriculum in Industrial Journalism.

Economics I, Econ. 101	3(3-0)
Economics II, Econ. 104	3(3-0)
Money and Banking, Econ. 116	3(3-0)
Business Management, Econ. 126	2(2-0)
Economic Systems, Econ. 210	2(2-0)
Public Finance, Econ. 214	3(3-0)
Bus. Org. and Fin., Econ. 215	3(3-0)
Investments, Econ. 222	3(3-0)
Credits and Coll., Econ. 223	2(2-0)
International Trade, Econ. 224	2(2-0)
Prin. of Trans., Econ. 230	3(3-0)
Labor Economics, Econ. 234	3(3-0)
Property Insurance, Econ. 242	2(2-0)
Life Insurance, Econ. 244	2(2-0)
Marketing, Econ. 246	3(3-0)
Market Adm., Econ. 247	3(3-0)
Problems in Econ., Econ. 248	Cr. Ar.
Sociology, Econ. 151	3(3-0)
Social Pathology, Econ. 258	3(3-0)
Com. Org. and Lead., Econ. 267	3(3-0)
Adv. Sociology, Econ. 273	3(3-0)
Hist. Soc. Thought, Econ. 277	3(3-0)
Problems in Sociology, Econ. 279	Cr. Ar.
Amer. Ind. History, Hist. 105	3(3-0)
Surv. West. Civ. I, Hist. 106	3(3-0)
Surv. West. Civ. II, Hist. 107	3(3-0)
Cont. World Hist., Hist. 125	2(2-0)
Current History, Hist. 126	1(1-0)
Surv. Am. Hist. I, Hist. 127	3(3-0)
Surv. Am. Hist. II, Hist. 128	3(3-0)
Cont. Govts., Hist. 154	3(3-0)
Business Law I, Hist. 163	3(3-0)
Business Law II, Hist. 164	3(3-0)
Farm Law, Hist. 175	2(2-0)
Fdns. Amer. Rep., Hist. 201	3(3-0)
Amer. Exp. and Sect., Hist. 202	3(3-0)
New Amer. Nation, Hist. 203	3(3-0)
Amer. Agr. History, Hist. 205	2(2-0)
Amer. Pol. Parties, Hist. 206	2(2-0)
Latin America, Hist. 208	3(3-0)
World Cultures I, Hist. 209	3(3-0)
World Cultures II, Hist. 210	3(3-0)
Modern England, Hist. 211	3(3-0)
Europe Since 1870, Hist. 212	3(3-0)
Russia and Soviet Union, Hist. 213,	3(3-0)
History of the Home, Hist. 225	3(3-0)
British Empire, Hist. 226	2(2-0)
Amer. Dip. Hist., Hist. 228	2(2-0)
History of Religions, Hist. 231	2(2-0)
Far East, Hist. 236	3(3-0)
Hist. Amer. Pol. Thgt., Hist. 249,	3(3-0)
Comp. Govt., Hist. 252	2(2-0)
City Govt., Hist. 253	3(3-0)
International Law, Hist. 256	2(2-0)
Govt. and Business, Hist. 260	2(2-0)
Problems in Hist. and Govt., Hist. 270	Cr. Ar.
Land Law, Hist. 276	2(2-0)

9. Personnel Management

Economics II, Econ. 104	3(3-0)
Business Management, Econ. 126	2(2-0)
Prin. of Accounting, Econ. 136	3(3-0)
Business Organization and Finance, Econ. 215	3(3-0)
Labor Economics, Econ. 234	3(3-0)
Social Pathology, Econ. 258	3(3-0)
Com. Org. and Lead., Econ. 267	3(3-0)
Advanced Sociology, Econ. 273	3(3-0)
Stat. Meth. App. to Educ., Educ. 223	3(3-0)
Prin. of Guidance, Educ. 230	3(3-0)
Vocational Education, Educ. 241	3(3-0)
Mental Tests, Educ. 260	3(3-0)
Technic of Mental Tests, Educ. 261	3(1-6)
Psych. of Adv. and Selling, Educ. 265	3(3-0)
Social Psychology, Educ. 270	3(3-0)
Psych. of Personnel Mgmt., Educ. 273	3(3-0)

10. Social Welfare Work

Personal Health, Child Welf. 101,	2(2-0)
Child Guid. I, Child Welf. 201	3(1-6)
Child Guid. II, Child Welf. 206	3(3-0)
Family Health, Child Welf. 211	3(3-0)
The Family, Child Welf. 216	2(2-0)
Clo. for Ind., Clo. and Text. 103	4(1-9)
Clo. Select., Clo. and Text. 110	2(2-0)
Economics I, Econ. 101	3(3-0)
Economics II, Econ. 104	3(3-0)
Sociology, Econ. 151	3(3-0)
Rural Sociology, Econ. 156	3(3-0)
Labor Economics, Econ. 234	3(3-0)
Social Pathology, Econ. 258	3(3-0)
Com. Org. and Lead., Econ. 267	3(3-0)
Advanced Sociology, Econ. 273	3(3-0)
General Psychology, Educ. 184	3(3-0)
Psychology of Childhood and Adolescence, Educ. 250	3(3-0)
Abnormal Psychology, Educ. 254	3(3-0)
Social Psychology, Educ. 270	3(3-0)
Psych. and Pers. Mgmt., Educ. 273,	3(3-0)
Foods I, Foods and Nutr. 102	5(3-6)
The House, Household Econ. 107	3(2-3)
Home Mgmt., Household Econ. 116,	3(1-6)
Heredity and Eugenics, Zoöl. 216	2(2-0)

11. Special Business Electives

Investments, Econ. 222	3(3-0)
Credits and Coll., Econ. 223	2(2-0)
International Trade, Econ. 224	2(2-0)
Prin. of Trans., Econ. 230	3(3-0)
Labor Economics, Econ. 234	3(3-0)
Property Insurance, Econ. 242	2(2-0)
Life Insurance, Econ. 244	2(2-0)
Problems in Econ., Econ. 248	Cr. Ar.
Social Pathology, Econ. 258	3(3-0)
Pop. and Human Ecology, Econ. 259	2(2-0)
Family and Society, Econ. 260	2(2-0)
Com. Org. and Lead., Econ. 267	3(3-0)
Adv. Sociology, Econ. 273	3(3-0)
Hist. Soc. Thought, Econ. 277	3(3-0)
Advanced Accounting, Econ. 281	3(3-0)
Tax Accounting, Econ. 286	3(3-0)
Cost Accounting, Econ. 287	3(3-0)
Adv. Cost Accounting, Econ. 288	2(2-0)
Govt. Accounting, Econ. 289	2(2-0)
Auditing, Econ. 291	3(3-0)
C. P. A. Problems, Econ. 292	3(3-0)
Spec. Acctg., Econ. 294	3(3-0)
Psych. of Adv. and Selling, Educ. 265	3(3-0)
Writ. and Oral. Sales., Engl. 123	3(3-0)
Adv. Prob. in Coml. Corr., Engl. 223	3(3-0)
International Law, Hist. 256	2(2-0)
Govt. and Business, Hist. 260	2(2-0)
Land Law, Hist. 276	2(2-0)
Prin. of Adv., Ind. Jour. 178	4(4-0)
Math. of Finance, Math. 150	3(3-0)

Bacteriology

Professor Bushnell
Professor Gainey
Associate Professor Foltz
Associate Professor Nelson
Instructor Twiehaus
Instructor Peppler
Instructor Lord
Instructor Hauke
Instructor Harris

For a minor, the following courses should be completed: 101 or 102, 206, 229, and 222, or 240, or 242.

For a major, in addition to the minor, the following courses should be completed: At least 13 hours subsequent to the minor courses.

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.

102. Bacteriology I. 5(3-6); I, II, and SS. Prerequisite: Chem. 103 or 110. Staff.

General characters of microörganisms, methods of cultivation of bacteria and closely related organisms. Deposit, $8.

105. Agricultural Microbiology. 3(2-3); I and II. Prerequisite: Chem. 103. Staff. Deposit, $4.

For students in the School 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, Twiehaus.

Fundamentals of bacteriology as applied to veterinary medicine. Deposit, $8.

116. Pathogenic Bacteriology II. 4(2-6); I. Prerequisite: Bact. 111. Bushnell, 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 microörganisms.

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. Bacteriology of Human Diseases. 5(3-6); I. Prerequisite: Bact. 101. Bushnell, Foltz.

Pathogenic bacteria and their effect upon human health and diseases. Deposit, $8.

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* 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, Vardiman.
Methods of control of poultry diseases. Deposit, $3.

222. Physiology of Microörganisms. 3(3-0); I. Prerequisite: Bact. 101 or 111 and Chem. 122. Nelson.
Chemistry and physics of microbial processes.

225. Bacteriological Technic. 3(0-9); I. Prerequisite: Bact. 101 or 111. Gainey.
Technic of laboratory manipulation; fundamental experiments and special experiments selected according to the interest of the student. Deposit, $5.

229. Immunology. 5(3-6); II. Prerequisite: Bact. 206. 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. 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 Haymaker
Professor Gates
Associate Professor Elmer
Associate Professor Newcomb
Assistant Professor Frazier
Assistant Professor Kingsley
Assistant Professor Bates
Instructor Hansing

For a minor, the following courses should be completed: Nine credit hours of courses in the 200 group, in addition to 101 and 105.

For a major, in addition to the minor, the following courses should be completed: Ten or more credit hours in the 200 group, subsequent to the minor courses.

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 alternate years. 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, Hansing.
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 alternate years. 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. 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 alternate years. Frazier.
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, physiology, taxonomy, and diseases of plants. Charge, $2.

217. Botanical Microtechnic. 3(1-6); II. Prerequisite: Bot. 101 and 105. Offered in alternate years. 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. Deposit, $5.
Work is offered in:
Anatomy. Newcomb.
Cytogenetics. Newcomb.
Cytology. Newcomb.
Ecology. Gates.
Microtechnic. Bates.
Morphology. Kingsley.
Mycology. Hansing.
Pathology. Melchers, Haymaker, Elmer, Hansing.
Physiology. Miller, Frazier.
Taxonomy. Gates.

241. Field Crop Diseases. 3(1-6); II. Prerequisite: Bot. 205. Offered in alternate years. 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 alternate years. 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. Staff.
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 alternate years. 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 alternate years. Newcomb.
Chromosome structure, mechanics, and behavior; their significance for problems of genetics, evolution, and the origin of species. Charge, $3.

FOR GRADUATE CREDIT

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.
Cytogenetics. Newcomb.
Cytology. Newcomb.
Ecology. Gates.
Microtechnic. Bates.
Morphology. Kingsley.
Mycology. Hansing.
Pathology. Melchers, Haymaker, Elmer, Hansing.
Physiology. Miller, Frazier.
Taxonomy. Gates.

Chemistry

Professor King
Professor Hughes
Professor Brubaker
Professor Colver
Professor Perkins
Associate Professor Van Winkle
Associate Professor Barham
Associate Professor Lash
Assistant Professor Hall
Assistant Professor Harriss
Assistant Professor Whitnah
Assistant Professor Marlow
Assistant Professor Smits
Assistant Professor Shenk
Assistant Professor Conrad
Assistant Professor Andrews
Instructor McDowell
Instructor Caldwell
Instructor Dorf
Instructor Olsen
Instructor Schrenk
Instructor Silker
Instructor Allen
Instructor Lanning
Instructor Hall
Instructor Conrad
Instructor Thomson
Graduate Assistant Taylor
Graduate Assistant McCoy

For a minor, the following courses should be completed: 101, 103, 104, 122 or 220, and 250 or 251.

For a major, the student should enroll in the Curriculum in Industrial Chemistry.

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.

133. Industrial Chemistry Seminar. R; I and II. Staff.
Special topics for undergraduates in the Curriculum in Industrial Chemistry.

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.

206. Physical Chemistry I. 5(3-6); I. Prerequisite: Chem. 241 and Math. 115. Students from other schools may enroll without Math. 115. 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. Lash.
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. King.
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 methods for the preparation of colloids.

218. Chemical Thermodynamics I. 3(3-0); II. Prerequisite: Chem. 206 and Math. 115. Andrews.
Thermodynamics particularly applicable to chemistry, the first and second laws of thermodynamics and their application.

219. Chemical Thermodynamics II. 3(3-0); II. Prerequisite: Chem. 218. Andrews.

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. 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 to 5 hours; 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.

238. 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.

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. McDowell.
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.

252. Chemistry of Soils and Fertilizers. 2(0-6); I. Prerequisite: Chem. 250. Perkins. Deposit, $10.

253. Chemistry of Crops. 2(0-6); II. Prerequisite: Chem. 122 and 250. Perkins. 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. Weybrew.
Chemical and biological determination of vitamins. Deposit, $10.

259. Instrumental Methods in Chemical Analysis. 3(2-3). Prerequisite: Chem. 206. Shenk.
Application of the spectograph, 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.

261. Industrial Chemical Analysis. 3(1-6); I. Prerequisite: Chem. 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.

264. Food Technology. 3(3-0); I. Prerequisite: Chem. 122 or 125 or 220 or 266. Smits.
Chemical composition, production, consumption, statistics, and treatment of food material.

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, Silker. Deposit, $10.

267. Organic Chemistry II. 4(2-6); II. Prerequisite: Chem. 266. Colver, Silker. Deposit, $10.

268. Dairy Chemistry. 2(2-0); I. Prerequisite: Chem. 122 and 250. Whitnah.

269. Special Topics in Organic Chemistry. 2(2-0); I, II, and SS. Prerequisite: Chem. 267. Colver, Barham, Silker.
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.
Analytical Chemistry.
Biochemistry.
Chemical Utilization of Farm Products.

Food Chemistry.
General and Physical Chemistry.
Industrial Chemistry.
Organic Chemistry.

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 Recitation. 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.

273. Physical Chemistry II Laboratory. 2(0-6); II. Prerequisite: Chem. 272 or concurrent registration. Shenk. Deposit, $10.

275. Chemistry Seminar. R; I and II. Staff.

276. Chemical Literature. 2(2-0); I and II. Prerequisite: Chem. 267. McDowell.

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. Silker.
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.
Analytical Chemistry.
Biochemistry.
Chemical Utilization of Farm Products.
Food Chemistry.
General and Physical Chemistry.
Industrial Chemistry.
Organic Chemistry.

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
Professor Stewart
Professor Holtz
Professor Hodges
Professor Montgomery
Associate Professor Thompson
Associate Professor Ward
Assistant Professor Parsons
Assistant Professor Pine
Assistant Professor Doll
Assistant Professor Wilson
Assistant Professor Bagley
Instructor Letbetter
Instructor Long
Instructor Gellein
Instructor Otto
Instructor Hoecker

Work in economics and sociology is offered in the schools of Arts and Sciences 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. A candidate, in order to be admitted to the examination, must have completed 60 semester hours of college work, or in lieu thereof submit evidence of the completion of five years of public accounting experience approved by the Board of Examiners, in addition to the completion of a four-year high-school course or its equivalent.

The examination is given in auditing, accounting, and business law, and is held in May and November of each year. The questions are supplied by the American Institute of Accountants.

A candidate who passes the examination must furnish evidence of having had three years of public accounting experience satisfactory to the Board of Examiners before the certificate is granted.

COURSES IN ECONOMICS

For a minor, the following courses should be completed: 101, 104, 133 or 136, 151, and six additional hours.

For a major, in addition to the minor, the following courses should be completed: 116, 246, and 12 additional hours 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. Bagley.
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); I and SS. Prerequisite: Econ. 134 or 136 and 215. Bagley.
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. Bagley.
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, 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 a major, in addition to the minor, the following courses should be completed: 234, 258, and 12 additional hours in sociology.

FOR UNDERGRADUATE CREDIT

(For Econ. 156, see agricultural section.)

151. Sociology. 3(3-0); I, II, and SS. Prerequisite: Sophomore standing. Hill, Long.
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. Long.
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. 256, 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 a major, in addition to the minor, the following courses should be completed: 134, 280, and 12 additional hours in accounting.

FOR UNDERGRADUATE CREDIT

(For Econ. 112, see agricultural section.)

133. Accounting I. 3(2-3); I, II, and SS. Staff.
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. Staff.
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. Staff.
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. Letbetter.
Advanced course in accounting theory; content and analysis of accounting statements.

281. Advanced Accounting. 3(3-0); I and SS. Prerequisite: Econ. 280 or concurrent registration. Letbetter, Gellein.
Application of accounting principles to partnerships, corporations with subsidiaries and branches, companies in financial difficulties.

286. Tax Accounting. 3(3-0); II. Prerequisite: Econ. 280 or concurrent registration. Stewart.
Accounting problems in income, sales, social security, and other taxes.

287. Cost Accounting. 3(3-0); I and SS. Prerequisite: Econ. 134. Gellein.
Allocation of production costs to determine financial results and guide the management of business enterprises.

288. Advanced Cost Accounting. 2(2-0); II. Prerequisite: Econ. 287. Gellein.
Standard, distribution, and estimated costs and miscellaneous items.

289. Governmental Accounting. 2(2-0); I. Prerequisite: Econ. 280. Stewart.
Federal, state, and municipal accounts, and accounts for public institutions.

291. Auditing. 3(3-0); I. Prerequisite: Econ. 280 and consent of instructor. Stewart.
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.
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. 280 or concurrent registration. Letbetter, Gellein.
Specialized statements, foreign exchange, estates and trusts, bank accounting, and stock brokerage.

COURSES IN TYPEWRITING AND SHORTHAND

FOR UNDERGRADUATE CREDIT

140. Typewriting I. Class and laboratory, 8 or 10 hours with additional practice; 2 or 3 credits. SS.
The technique of touch typewriting, care of the machine, and skill in operation. Charge, $5.

141. Typewriting II. Class and laboratory, 8 or 10 hours with additional practice; 2 or 3 credits. SS. Prerequisite: Econ. 140 or its equivalent.
Continuation of Typewriting I. Charge, $5.

145. Shorthand I. Class and laboratory, 8 or 10 hours with additional practice; 2 or 3 credits. SS.
Introduction to Gregg shorthand.

146. Shorthand II. Class and laboratory, 8 or 10 hours with additional practice; 2 or 3 credits. SS. Prerequisite: Econ. 145 or its equivalent. Continuation of Shorthand I.

Education

Professor Holton
Professor Peterson
Professor Williams
Professor Strickland
Professor Rust
Professor Davidson
Professor Alm
Professor Langford
Associate Professor Hall
Associate Professor Baxter
Associate Professor Moggie
Assistant Professor Brown
Assistant Professor Johnson
Instructor Tincher

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.
Psychology of the learner and the learning process.

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 elementary grades.

114. General Methods for Elementary Teachers. 4(4-0); SS.
A refresher course for teachers who wish to renew a certificate for teaching in elementary schools.

115. Methods of Teaching High-School Aeronautics. 4(4-0); SS.
A refresher course which includes objectives and principles related to aeronautics; methods of classroom presentation.

129. Teaching Participation in Music. 1 to 4 hours. I, II, and SS. Prerequisite: Educ. 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.

ALYSIS

	Industrial Chemistry.....			Totals.....		Counted twice.....		Net Grand Totals.....		
	M.	W.	.	M.	W.	M.	W.	M.	W.	Total.
Undergr										
Senic	17	1	..	477	244	4	.....	473	244	717
Junic	16	.....	..	359	230	2	.....	357	230	587
Soph	18	5	..	457	278	10	8	447	270	717
Fresh	21	1	..	927	326	8	11	919	315	1,234
Speci	.....	.....	..	12	9	.....	.....	12	9	21
	72	7	..	2,232	1,087	24	19	2,208	1,068	3,276
Summer s	24	3		603	437	504	174	99	263	362
Tota	96	10	..	2,835	1,524	528	193	2,307	1,331	3,638
Graduat										
In re	.....	.....	..	72	48	2	4	72	48	120
In su	.....	.....		67	74	22	7	45	67	112
In ab	.....	.....	..	9	1	9	1	.....	.....	.....
Unde	.....	.....	..	16	5	.....	.....	16	5	21
	.....	.....	..	164	128	33	12	133	120	253
	96	10		2,999	1,652	561	205	2,440	1,451	3,891
Coun	20	3		.....	.....	.....	.....	21	9	30
	76	7		.....	.....	.....	.....	2,419	1,442	3,861
	83									

† I

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

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109. Educational Psychology. 3(3-0); I, II, and SS. Prerequisite: Educ. 184 and junior standing. Moggie.
Psychology of the learner and the learning process.

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 elementary grades.

114. General Methods for Elementary Teachers. 4(4-0); SS.
A refresher course for teachers who wish to renew a certificate for teaching in elementary schools.

115. Methods of Teaching High-School Aeronautics. 4(4-0); SS.
A refresher course which includes objectives and principles related to aeronautics; methods of classroom presentation.

129. Teaching Participation in Music. 1 to 4 hours. I, II, and SS. Prerequisite: Educ. 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.

ANALYSIS OF REGISTRATION, 1942-1943

CLASSIFICATION.	Agriculture		Agricultural Administration		Dairy Manufacturing		Milling Industry		Specialized Horticulture		Landscape Design		Floriculture and Ornamental Horticulture		Veterinary Medicine		General Science		Industrial Journalism		Business Administration		Business Administration and Accounting		Physical Science		Industrial Chemistry		Physical Education		Music		Home Economics		Home Economics and Art		Dietetics and Institutional Management		Home Economics and Nursing		Agricultural Engineering	
	M.	W.	M.	W.	M.	W.	M.	W.	M.	W.	M.	W.	M.	W.	M.	W.	M.	W.	M.	W.	M.	W.	M.	W.	M.	W.	M.	W.	M.	W.	M.	W.	W.	W.	W.	W.	W.	W.	M.	M.	W.	M.
UNDERGRADUATES:																																										
Senior	62	...	27	1	11	4	1	...	100	...	28	35	10	21	28	3	11	1	5	1	17	1	3	5	...	6	121	12	37	...	6	3	1	5	24	33	38	...	1	59	...	...
Junior	33	...	17	...	11	...	...	...	1	...	28	42	7	14	24	6	7	3	6	...	16	...	6	3	...	1	100	5	41	15	6	4	...	12	40	23	43	...	4	71	...	...
Sophomore	56	...	17	3	7	1	...	1	48	1	†30	37	9	21	17	15	7	3	7	...	18	5	10	12	2	6	96	16	46	19	9	3	...	5	58	30	38	1	2	73	...	...
Freshman	100	1	23	1	12	...	2	4	67	1	‡169	58	23	30	41	13	19	4	11	3	21	1	16	6	4	9	116	18	36	24	12	2	5	10	61	76	81	...	2	170	1	...
Special	1	...	...	...	...	...	...	...	...	...	*10	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total in regular session	252	1	84	5	41	5	3	5	216	2	271	177	49	86	110	37	44	11	29	4	72	7	35	26	6	22	436	51	160	58	33	12	6	32	183	162	200	1	9	373	1	1
Summer schools, 1942	55	...	18	...	13	2	2	...	133	1	62	214	16	15	28	5	7	...	...	...	24	3	6	4	2	5	125	11	41	12	5	7	1	7	30	32	54	...	1	82	...	...
Totals	307	1	102	5	54	7	5	5	349	3	333	391	65	101	138	42	51	11	29	4	96	10	41	30	8	27	561	62	201	70	38	19	7	39	233	194	251	1	10	455	1	1
GRADUATES:																																										
In regular session	22	...	...	...	...	...	...	...	4	...	**47	28	...	...	...	...	...	...	...	...	...	...	...	...	...	...	22	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
In summer schools	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
In absentia	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Undergraduates carrying graduate work	6	...	...	...	...	...	...	...	...	...	3	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals	28	...	...	...	...	...	...	...	4	...	50	33	...	...	...	...	...	...	...	...	...	...	...	...	...	...	22	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Grand totals	335	1	102	5	54	7	5	5	353	3	383	424	65	101	138	42	51	11	29	4	96	10	41	30	8	27	583	62	201	70	38	19	7	39	233	194	251	1	10	455	1	1
Counted twice	45	...	14	...	6	1	2	...	132	1	41	26	11	10	22	1	6	...	...	...	20	3	5	3	1	3	75	9	34	9	4	7	...	6	44	27	43	...	1	63	...	...
Net grand totals	290	1	88	5	45	6	3	5	221	2	342	398	54	91	116	41	45	11	29	4	76	7	36	27	7	24	508	53	167	61	34	12	7	33	189	167	208	1	9	392	1	23
Group totals	291								223		740		145		157		56		33		83		63		31							19					209				393		27

CLASSIFICATION.	Architecture		Architectural Engineering		Chemical Engineering		Civil Engineering		Electrical Engineering		Industrial Arts		Mechanical Engineering		General Engineering and Architecture		Summer Schools, 1942		Totals		Counted twice		Net Grand Totals		
	M.	W.	M.	M.	M.	M.	M.	M.	M.	W.	M.	M.	M.	W.	M.	W.	M.	W.	Total.	M.	W.	M.	W.	M.	W.	Total.
UNDERGRADUATES:																										
Senior	3	1	5	24	33	38	...	1	59	...	...	...	...	...	...	...	...	...	...	477	244	4	...	473	244	717
Junior	4	...	12	40	23	43	...	4	71	...	...	...	...	...	...	...	...	...	...	359	230	2	...	357	230	587
Sophomore	2	...	5	58	30	38	1	2	73	...	...	...	...	...	...	...	...	...	...	452	278	10	8	447	270	717
Freshman	2	5	10	61	76	81	...	2	170	1	...	...	...	...	...	...	...	...	...	927	326	8	11	919	315	1,234
Special	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	12	9	...	...	12	9	21
Total in regular session	7	1	6	32	183	162	200	1	9	373	1	1	1	...	...	...	...	...	2,232	1,087	24	19	2,208	1,068	3,276
Summer schools, 1942	7	1	7	30	32	54	...	...	1	82	...	...	...	...	...	...	603	437	1,040	603	437	594	174	99	263	362
Totals	19	7	30	233	194	251	1	10	455	1	1	1	...	...	...	...	...	...	2,835	1,524	528	193	2,307	1,331	3,638
GRADUATES:																										
In regular session	...	...	...	...	...	...	...	...	...	...	...	...	...	...	15	3	...	...	72	48	2	4	72	48	120
In summer schools	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	67	74	141	67	74	22	7	45	67	112
In absentia	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	9	1	9	1	...	...	...
Undergraduates carrying graduate work	...	...	...	...	...	...	...	...	...	...	...	...	...	...	7	...	...	...	...	16	5	...	...	16	5	21
Totals	...	...	...	...	...	...	...	...	...	...	...	...	...	...	22	3	...	...	...	164	128	33	12	133	120	253
Grand totals	19	7	39	233	194	251	1	10	455	1	23	4	670	511	1,181	2,099	1,652	501	205	2,440	1,464	3,891				
Counted twice	...	...	6	44	27	43	...	1	63	...	...	...	3	...	3	...	...	...	...	24	9	30				
Net grand totals	12	7	33	189	167	208	1	9	392	1	23	4	667	511	1,178	...	...	...	...	2,419	1,442	3,861				
Group totals	19					209			393		27															

† Includes 0 preveterinary students. ‡ Includes 80 preveterinary students. * Includes 5 soldiers. ** Includes 15 soldiers.

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. Charge, 25 cents.

133. Methods of Teaching for Dietetic Students. 3(3-0); I and II. Prerequisite: Educ. 184, Foods and Nutr. 112, and Inst. Mgt. 101 or Foods and Nutr. 202. Rust.

Principles of teaching applied to selection, organization, and development of subject matter for individuals and courses taught by dietitians. Charge, 25 cents.

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. Staff.

Supervised teaching carried on in the home economics classes of the Manhattan high school. Charge, 25 cents.

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. 184. Moggie.

Organization, sponsorship, and educational values of school publications, athletics, assembly programs, student council, home room, clubs, classes, dramatics, and musical organizations in the junior and senior high school, with special emphasis on the small and rural high school situations.

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.
Sampling, organization and representation of data, selection and computation of appropriate statistics, interpretation of results, and research methods. Students may work with data from field of major interest.

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.

231. Supervision of Home Projects. 1 or 2 hours; I, II, and SS. Prerequisite: Educ. 132 and junior standing. Johnson.
Philosophy of home projects and the technic in their use to sustain classroom instruction.

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. Charge, 25 cents.

234. Methods in Adult Homemaking Classes. 1 to 3 hours; SS. Prerequisite: Educ. 132 and 184 or equivalent. Rust, Johnson.
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. Mental Hygiene. 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.

151. Psychology of Effective Study. 2(1-3); I and II. Prerequisite: Consent of the dean of the School of Home Economics. Moggie.
Diagnosis of individual difficulties and application of remedial measures.

* From the staff of the Department of Home Study.

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, II, and SS. Prerequisite: Educ. 184. Alm.

Maladjustment of personality, behavorial 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.

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 observation 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 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 Activitives. 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

For a minor, the following courses should be completed: 172, 175, 181, and two courses selected from 219, 220, 232, and 243.
For a major, in addition to the minor, the following courses should be completed: 21 hours from courses in the 200 group, excepting 215, 223, 252, and 255.
Twelve hours of a modern language are strongly recommended.

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. Children's Literature. 3(3-0); SS. Staff.
Planned to meet the needs of teachers of rural and grade schools.

169. English Proficiency. R; I and II.
An examination to demonstrate proficiency in written English.

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

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.

252. Children's Readings. 3(3-0); II. Prerequisite: Engl. 172. Elcock, Aberle.
Literature for children; selection of books for children; training in story telling. For students of child guidance and camp counseling.

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
Professor Painter
Associate Professor Wilbur
Associate Professor Bryson
Assistant Lamerson

For a minor, the following courses should be completed: 101 or 203, and five or six additional credit hours in the 200 group.
For a major, in addition to the minor, the following courses should be completed: At least ten credit hours in the 200 group.

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. 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. Charge, $1.

117. Milling Entomology. 2(2-0); II. 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, $2.50.

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, $2.50.

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 orders of insects; taxonomic literature; use of catalogues. Charge, $2.50.

218. Taxonomy of Insects II. 3(0-9); II. Prerequisite: Ent. 217. Painter.
Intensive study of a selected group of insects. Charge, $2.50.

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, $2.50.

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 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 alternate years. 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
Associate Professor Byrne
Assistant Professor Chelikowsky
Instructor Harned

For a minor, the following courses should be completed: 103, 110, 203, and 209.
For a major, in addition to the minor, the following courses should be completed: 215, 220, 230, and seven additional hours. The student should enroll in the Curriculum in Physical Science.

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.

204. Aerial Phototopography. 3(1-6); I. Prerequisite: Geol. 102 or 103.
Interpretation and use of aerial photographs; conical perspective; oblique mapping methods; characteristics of vertical photographs; stereoscopic contouring methods; and adjustment of geologic, cultural, and topographic detail. 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.

245. Applied Geology. 3(3-0). Prerequisite: Geol. 230. Staff.
Geology applied to the science of engineering, particularly highway engineering. 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. Micropaleontology. 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. Prequisite: 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 Parrish
Professor Iles
Professor Correll
Professor Price
Professor Williams
Professor Sageser
Associate Professor Alsop
Associate Professor Sweedlun

COURSES IN HISTORY

For a minor, the following courses should be completed: 106, 107, 127, 128, and 151.
For a major, in addition to the minor, the following courses should be completed: Ten additional hours from the 200 group.

FOR UNDERGRADUATE CREDIT

105. American Industrial History. 3(3-0); I, II, and SS. Staff.
Development of American economic growth from colonial beginnings to the present; manufacturing, commerce, finance, labor, and agriculture.

106. Survey of Western Civilization I. 3(3-0); I, II, and SS. Parrish.
Civilizations of Europe and the Near East to 1300 A.D.

107. Survey of Western Civilization II. 3(3-0); I, II, and SS. Parrish, Correll.
Civilizations of Europe and the Near East from 1300 A.D. to the present. Continuation of Hist. 106.

125. Contemporary World History. 2(2-0); I, II, and SS. Staff.
Concurrent registration with Hist. 126 not permitted. World developments since 1930.

126. Current History. 1(1-0); I, II, and SS. May not be taken more than four semesters for credit. Staff.

127. Survey of American History I. 3(3-0); I, II, and SS. Staff.
Social, economic, political, and international development of the American nation from the establishment of European colonies through the Civil War.

128. Survey of American History II. 3(3-0); I, II, and SS. Staff.
Continuation of Hist. 127. The industrial revolution, immigration, imperialism, and the changed national and international setting.

FOR GRADUATE AND UNDERGRADUATE CREDIT

201. Foundations of the American Republic. 3(3-0); I, II, and SS. Price, Sweedlun.
Origins of American democracy and development of the American nation through the War of 1812, including the industrial, social, constitutional, and political growth with the European background. Charge, $1.

202. American Expansion and Sectionalism. 3(3-0); I, II, and SS. Price, Sweedlun.
A study of the West; cultural phases; political and constitutional issues; importance of personal leaders; development of sectionalism from 1812 to 1876, including Kansas; causes and effects of the Civil War. Charge, $1.

203. The New American Nation. 3(3-0); I, II, and SS. Sageser, Price.
Recent and contemporary history. Problems of the new nation from the Civil War to the present. Charge, $1.

205. American Agricultural History. 2(2-0); I, II, and SS. Sageser.
European background and Indian beginnings; colonial period; westward expansion into the prairie and great plains areas; distinctive American developments in machinery, livestock, and types of farming.

208. Latin America. 3(3-0); I, II, and SS. Sweedlun.
Spanish and Portuguese conquest and colonization in America; the colonial system; rise and development of the Latin American nations.

209. World Cultures I. 3(3-0); I and SS. Prerequisite: Junior standand; when taken for graduate credit, six hours of college history. Parrish.
Economic, social, intellectual, and artistic aspects of the cultures of primitives, and early Egyptians, Mesopotamians, and Indians; foundational cultural attainments of the Hebrews, Indians, Iranians, Chinese, and Europeans.

210. World Cultures II. 3(3-0); II and SS. Prerequisite: Junior standing; when taken for graduate credit, six hours of college history. Parrish.
History of the major living cultural traditions; the science, art, philosophy and religion of the Semites, Indians, Iranians, Chinese, and European-Westerners; history of the interaction of European and Asiatic urban cultures.

211. Modern England. 3(3-0); I, II, and SS. Prerequisite: When taken for graduate credit, six hours of college history. Correll.
Political, economic, and cultural history of modern and contemporary Britain.

212. Europe Since 1870. 3(3-0); I, II, and SS. Prerequisite: When taken for graduate credit, six hours of college history. Parrish, Correll.
History of the political, social, economic, and international developments.

213. Russia and the Soviet Union. 3(3-0); I, II, and SS. Prerequisite: When taken for graduate credit, six hours of college history. Correll.
Imperial Russia and the new regime since the Revolution of 1917.

225. History of the Home. 3(3-0); II. Alsop.
History of marriage and the family from primitive times to the present; marriage customs, position of women, child training; the modern home, recent changes and tendencies.

226. British Empire. 2(2-0); II and SS. Correll.
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. Sageser.
Development of American foreign policy and international relations from 1763 to the present.

231. History of Religions. 2(2-0); I and SS. 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.

236. Far East. 3(3-0); I, II, and SS. Parrish.
Modern and contemporary China, Japan, and Korea. Internal developments and foreign relations since the days of the first peace treaties with Western Powers.

249. History of American Political Thought. 3(3-0); II and SS. Prerequisite: When taken for graduate credit, six hours of college history. Sageser, Sweedlun.
Theories and conceptions underlying the development of the American system of government, attention being directed to the views of publicists and statesmen.

250. Seminar in History and Government. 2 to 5 hours; I, II, and SS. Staff.

270. Problems in History and Government. Credit to be arranged; I, II, and SS. Staff.
Work is offered in:

American History. Sageser, Sweedlun.
European History. Correll, Parrish.
Asiatic History. Parrish.
Government and Law. Iles, Williams.

290. Historical Method and Bibliography. 2(2-0); I and SS. Sageser.
Survey of historical works; methods in writing history, historical articles or theses. Required of graduate majors in history.

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 the department. Staff.
Work is offered in:

American History. Sageser, Sweedlun.
European History. Correll, Parrish.
Asiatic History. Parrish.
Government and Law. Iles, Williams.

COURSES IN GOVERNMENT

FOR UNDERGRADUATE CREDIT

151. American Government. 3(3-0); I, II, and SS. Iles, Williams.
State and national government, with emphasis on constitutional principles and on functional activity.

154. Contemporary Governments. 3(3-0); I, II, and SS. Iles.
Survey of the leading contemporary national governments.

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.

107. 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 alternate years. 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

206. American Political Parties. 2(2-0); I. 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.

252. Comparative Government. 2(2-0); I or II, and SS. Iles, Williams.
Principal democracies, including comparisons with the government of the United States; principal dictatorships of Europe.

253. City Government. 3(3-0); II. Iles, Williams.
Government and administration of American cities.

256. International Law. 2(2-0); I. Sageser, Sweedlun.
Nature and scope of international law; factors which contribute 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 alternate years. 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 Lashbrook
Assistant Professor Horlings
Assistant Professor Dittemore
Assistant Professor Medlin
Instructor Rockwell

For a major, the student should enroll in the Curriculum in Industrial Journalism.

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 and meet other requirements established by the department faculty.

COURSES IN PRINTING

FOR UNDERGRADUATE CREDIT

103. Graphic Arts Survey. 2(2-0); I and II. Prerequisite: Sophomore standing and concurrent registration in Ind. Jour. 104. Amos.
History and art of printing; typography of advertisements and head display; principles of effective makeup. Journalism fee charged.

104. Typography Laboratory. 1(0-3); I and II. Prerequisite: Sophomore standing and concurrent registration in Ind. Jour. 103. Amos.
Typesetting, proofreading, correction of forms, as a background for journalism. Journalism fee charged.

108. Ad Typography I. 2(0-6); I and II. Prerequisite: Ind. Jour. 104. Amos.
Principles of display and design as applied to advertisements. Journalism fee charged.

111. Ad Typography II. 2(0-6); I and II. Prerequisite: Ind. Jour. 108. Amos.
Continuation of Ind. Jour. 108. Journalism fee charged.

112. Ad Typography 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. 104. 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. Horlings, Rockwell.
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, Horlings.
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. Horlings, Rockwell.
Principles of journalism in the treatment of industrial subjects. Journalism fee charged.

160. Agricultural Journalism. 3(2-3); I and II. Lashbrook, Dittemore.
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. Journalism fee charged.

166. Editing. 2(0-6); I, II, and SS. Prerequisite: Ind. Jour. 157. Lashbrook, Horlings. Journalism fee charged.

167. Newspaper and Magazine Writing. 2(2-0); I, II, and SS. Prerequisite: Ind. Jour. 157 or consent of instructor. Horlings, Rockwell.
Feature articles; underlying principles applied to writing on agricultural and other industrial subjects. Journalism fee charged.

170. Journalism for Women. 3(3-0); I and SS. Prerequisite: Ind. Jour. 150. Rockwell.
News and feature writing for women's pages and women's magazines; consideration of specialized fields for the woman writer. Journalism fee charged.

178. Principles of Advertising. 4(4-0); I and II. Prerequisite: Junior standing. 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); II and SS. Prerequisite: For students in Curriculum in Industrial Journalism, Ind. Jour. 178; for other students, Sp. 162. Heberer.
Broadcasting station management, principles and practice in radio advertising. Journalism fee charged.

180. Broadcasting Station Practice. 1(0-3); I, II, and SS. Prerequisite: Ind. Jour. 162. Thackrey, Lashbrook. Journalism fee charged.
News gathering, writing, and broadcasting over radio station KSAC.

181. Rural Press. 2(2-0); II. Prerequisite: Ind. Jour. 150. Lashbrook, Horlings.
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); I and SS. Prerequisite: Ind. Jour. 157. Lashbrook.
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); II 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: Senior standing or consent of instructor. Concurrent registration with Hist. 126 not permitted. Thackrey, Lashbrook, Horlings.
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, senior standing; for others, consent of instructor. Concurrent registration with Hist. 126 not permitted. Thackrey, Lashbrook, Horlings.
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. Rockwell.
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. Journalism fee charged.

270. Advanced Magazine Writing and Editing. 2(2-0); I, II, and SS. Prerequisite: Ind. Jour. 167. Horlings, Rockwell.

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: Junior standing. Thackrey. Journalism fee charged.

278. Journalism Surveys. 2(0-6); II. Prerequisite: Ind. Jour. 166. Staff.

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. Journalism fee charged.

282. Column Conducting. 2(2-0); II. Prerequisite: Engl. 104. Davis.

287. Current Periodicals. 3(3-0); II. Prerequisite: Engl. 104. Staff. Journalism fee charged.

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. Journalism fee charged.

289. Newspaper Management. 2(2-0) I. Prerequisite: Ind. Jour. 178. Medlin.

Relations of departments of a newspaper to one another, costs, statistics, advertising news, and business methods in publishing. Journalism fee charged.

295. Problems in Industrial Journalism. Credit to be arranged; I, II, and SS. Prerequisite: Consent of instructor. Staff. Journalism fee charged.

Work is offered in:

Advertising. Keith.
Agriculture. Lashbrook, Dittemore.
Contemporary affairs. Horlings.
Current newspapers and periodicals. Horlings, Rockwell.
High-school journalism. Thackrey, Medlin.
History and ethics. Thackrey.
Home economics. Rockwell.
News photography. Lashbrook.
Public opinion. Thackrey.
Radio. Lashbrook, Rockwell.
Science. Horlings.

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. Journalism fee charged.

Work is offered in:

Advertising. Keith.
Agriculture. Lashbrook, Dittemore.
Contemporary affairs. Horlings.
Current newspapers and periodicals. Horlings, Rockwell.
High-school journalism. Thackrey, Medlin.
History and ethics. Thackrey.
Home economics. Rockwell.
News photography. Lashbrook.
Public opinion. Thackrey.
Radio. Lashbrook, Rockwell.
Science. Horlings.

Library Economics

Associate Librarian Derby
Reference Librarian Davis
Assistant Reference Librarian Cullipher

FOR UNDERGRADUATE CREDIT

101. Library Methods. 1(1-0); I and II. Derby, Davis, Cullipher.

110. School Library Management and Book Selection. 3(3-0); SS. Prerequisite: Senior standing.
Organization and administration; methods and aids in book selection and ordering; and reading guidance.

111. Reference. 3(3-0); SS. Prerequisite: Senior standing.
Basic reference works, pamphlets and clipping collections, periodicals, and teaching the student to use the library.

112. Classification and Cataloguing. 2(2-0); SS. Prerequisite: Senior standing.
Principles and methods of classification; cataloguing and listing of materials.

Mathematics

Professor Stratton
Professor Remick
Professor White
Associate Professor Hyde
Associate Professor Lewis
Associate Professor Munro
Associate Professor Sigley
Associate Professor Fryer
Assistant Professor Janes
Assistant Professor Mossman
Assistant Professor Holroyd
Assistant Professor Daugherty
Instructor Unruh
Instructor Ratts
Instructor Peterson
Instructor Sitz

For a minor, the following courses should be completed: 101, 104, 110, 114, and 115.
For a major in mathematics, in addition to the minor, the following courses should be completed: 102, 201, and two courses chosen from the 200 group.
For a major in statistics, in addition to the minor, the following courses should be completed: 126, 201, 265, and 266.

FOR UNDERGRADUATE CREDIT

100. Intermediate Algebra. 0(3-0); I, II, and SS. Prerequisite: One unit of high-school algebra. Staff.
Noncredit review of elementary algebra; topics preparatory to Math. 104, 107, or 108.

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.

109. Spherical Trigonometry and Navigation. 3(3-0); I, II, and SS. Prerequisite: Math. 101. Sigley.
Methods used in piloting, dead-reckoning, and radio navigation. Fundamentals of spherical trigonometry and application to celestial navigation.

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. 108. Fryer.
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.

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.

231. Higher Mathematics for Engineers 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. Higher Mathematics for Engineers II. 3(3-0); II. Prerequisite: Math. 115. Babcock.
Continuation of Math. 231; including ordinary and partial differential equations; vector analysis; probability; curve fitting.

233. Fourier's Series. 3(3-0); II. Prerequisite: Math. 201. White, Munro, Sigley.

234. 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.

240. Higher Algebra. 3(3-0); I, II, and SS. Prerequisite: Math. 115. Stratton, Munro, Sigley.
Material selected from Bocher's Higher Algebra.

241. Theory of Equations. 3(3-0); I. Prerequisite: Math. 115. Staff.

253. 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.

254. 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.

260. Statistics. 3(3-0); II. Prerequisite: Math. 126. White, Fryer.
Random sampling, frequency curves, correlation theory, curve fitting, significant differences, and analysis of variance; practice with data from biology, economics, and agronomy.

261. Statistical Methods. I 3(3-0); I. Prerequisite: Junior standing. 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.

262. Statistical Methods II. 3(3-0); II. Prerequisite: Math. 261 or consent of instructor. Fryer.
Further study of analysis of variance; technic and applications of covariance, multiple and curvilinear regression, and introduction to designing of experiments.

263. Statistical Methods Laboratory. 1(0-3); I and II. Prerequisite: Math. 261 or concurrent registration. Fryer.
Use of computing machines in dealing with experimental statistics. Charge, $2.

264. Sampling Methods. 3(3-0); II. Prerequisite: Math. 261. Fryer.
Design, mechanics, and analysis of sampling investigations in the fields of economics and biology; stratification; estimation of population values; accuracy of sampling estimates.

265. Probability and Statistics I. 3(3-0); I. Prerequisite: Math. 115. Fryer.
Basic probability and distribution theory used in biology, chemistry, and physics; mathematical expectation; normal, binomial, Poisson, and other distributions; Gamma and Beta functions; applications.

266. Probability and Statistics II. 3(3-0); II. Prerequisite: Math. 265. Fryer.
Regression method of least squares; curve-fitting; applications in analysis of variance and covariance; estimation of population parameters.

298. History of Mathematics. 3(3-0); I, II, and SS. Prerequisite: Math. 110. Staff.

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 I. 3(3-0); I. Prerequisite: Math. 201. Stratton, Munro.

302. Theory of Functions of a Complex Variable II. 3(3-0); II. Prerequisite: Math. 301. Stratton, Munro, Sigley.

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 Geometery. 3(3-0); II. Prerequisite: Math. 254. 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 Campbell, Inf., U. S. A.
Associate Professor McClure, Inf., U. S. A.
Associate Professor McMorris, CAC., U. S. A.
Assistant Professor Stover, CAC., U. S. A.
Assistant Professor Taylor, CAC., U. S. A.
Assistant Professor Flinner, CAC., U. S. A.
Assistant Professor Andrick, Inf., U. S. A.
Assistant Professor Peters, Inf., U. S. A.
Assistant Professor Fairbanks, CAC., U. S. A.
Assistant Professor Patterson, Cav., 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 $1 a 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 and solid color 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 $4 is required of each basic-course student. The deposit will be refunded when the complete uniform is returned to the department in good condition.

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 subsistance at the rate of 25 cents a day, provided he agrees to complete the Advanced Course, including a special service school. The special service school referred to is without expense to the student. Clothing and subsistence will be furnished and he will be paid at the rate of $50 a month.

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 schools is: Agriculture, 6; Engineering and Architecture, 8; Arts and Sciences, 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 School of Engineering and Architecture or in the curriculums in Industrial Chemistry, Physical Science, and Milling Industry).

101. Infantry I. 1(1-2); I. Patterson.
Leadership; orientation in military fundamentals; military discipline, courtesies and customs of the service; national defense act and R. O. T. C.; military history and policy; rifle marksmanship; general military organization; weapons.

102. Infantry II. 1(1-2); II. Prerequisite: Mil. Sc. 101. Patterson.
Leadership; military organization; map reading; military sanitation and first aid.

103. Infantry III. 1(1-2); I. Prerequisite: Mil. Sc. 102. Andrick.
Leadership; tactical training of infantry soldiers; characteristics of infantry weapons, automatic rifle.

104. Infantry IV. 1(1-2); I and II. Prerequjsite: Mil. Sc. 103. Andrick.
Leadership; scouting and patrolling; combat principles; technique of rifle fire.

ADVANCED COURSE, INFANTRY

(For students not in the School of Engineering and Architecture or in the curriculums in Industrial Chemistry, Physical Science, and Milling Industry.)

109. Infantry V. 3(2-3); I. Prerequisite: Mil. Sc. 104. Peters.
Leadership; aerial photograph reading; combat training; defense against chemical warfare.

110. Infantry VI. 3(2-3); II. Prerequisite: Mil. Sc. 109. Peters.
Leadership; weapons; marksmanship; administration; care and operation of motor vehicles.

111. Infantry VII. 3(2-3); I. Prerequisite: Mil. Sc. 110. McClure.
Leadership; military history and policy; military law; property, emergency procurements and funds; methods of instruction; infantry signal communications; combat training; anti-aircraft defense.

112. Infantry VIII. 3(2-3); II. Prerequisite: Mil. Sc. 111. McClure.
Leadership; combat orders; tanks; anti-tanks defense; attack, defense and security; combat intelligence; Officers' Reserve Corps Regulations.

BASIC COURSE, COAST ARTILLERY

(For students in the School of Engineering and Architecture and in the curriculums in Industrial Chemistry, Physical Science, and Milling Industry.)

113. Artillery I. 1(1-2); I. Taylor, Flinner, Fairbanks.
Leadership; military fundamentals; military sanitation and first aid; coast artillery weapons and materiel; military discipline, courtesies, and customs of the service.

114. Artillery II. 1(1-2); II. Prerequisite: Mil. Sc. 113. Taylor, Flinner, Fairbanks.
Leadership; organization of the army; organization of the coast artillery; military discipline, courtesies, and customs of the service; coast artillery ammunition, weapons and materiel; rifle marksmanship.

115. Artillery III. 1(1-2); I. Prerequisite: Mil. Sc. 114. Taylor, Flinner, Fairbanks.
Leadership; basic gunnery; fire-control and position-finding for seacoast artillery; basic gunnery for anti-aircraft artillery; rigging; map reading.

116. Artillery IV. 1(1-2); II. Prerequisite: Mil. Sc. 115. Taylor, Flinner, Fairbanks.
Leadership; identification of aircraft; operation and maintenance of coast artillery motor transportation; characteristics of naval targets; interior guard duty.

ADVANCED COURSE, COAST ARTILLERY

(For students in the School of Engineering and Architecture and in the curriculums in Industrial Chemistry, Physical Science, and Milling Industry.)

117. Artillery V. 3(2-3); I. Prerequisite: Mil. Sc. 116. Stover.
Leadership; administration; aerial photograph reading; defense against chemical warfare; fire-control and position-finding for seacoast artillery; coast artillery signal communications; anti-aircraft artillery; basic gunnery.

118. Artillery VI. 3(2-3); II. Prerequisite: Mil. Sc. 117. Stover.
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. McMorris.
Leadership; mess management; military law; orientation; field-fortifications for coast artillery; gunnery; fire-control and position-finding for AA automatic weapons; property, emergency procurement, and funds.

120. Artillery VIII. 3(2-3). II. Prerequisite: Mil. Sc. 119. McMorris.
Leadership; military history and policy; combat orders and solution of map problems; technic and elementary tactics for seacoast and anti-aircraft artillery; mechanization; Officers' Reserve Corps; position-finding and control; anti-aircraft searchlights.

Modern Languages

Professor Moore
Professor Limper
Associate Professor Crittenden
Associate Professor Pettis
Associate Professor Munro

For a minor, 15 hours in a single language should be completed.

For a major, in addition to the minor, 15 hours in the language chosen, or 12 hours and six hours in a second language.

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 and II. Prerequisite: Mod. Lang. 102 or equivalent. Munro, Moore.

138. Advanced Scientific German. 2(2-0); II. Prerequisite: Mod. Lang. 137. Munro, Moore.

140. Scientific Russian I. 3(3-0); I and SS. Prerequisite: Six hours of foreign language or equivalent. Munro.

141. Scientific Russian II. 3(3-0); II and SS. Prerequisite: Mod. Lang. 140. 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, Moore.

194. Spanish Composition and Conversation. 3(3-0); II. Prerequisite: Mod. Lang. 181. Crittenden, Munro.

FOR GRADUATE AND UNDERGRADUATE CREDIT

209. Schiller. 3(3-0); I or II. Prerequisite: Mod. Lang. 112 or equivalent. Moore.

213. Goethe. 3(3-0); I or II. Prerequisite: Mod. Lang. 209 or equivalent. Moore.

215. German Drama. 3(3-0); I or II. Prerequisite: Eighteen hours of college German or equivalent. Moore, Munro.

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, Moore.

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, Munro.
Spanish. Crittenden, Munro, Moore.

Music

Professor Lindquist
Associate Professor Sayre
Associate Professor Downey
Associate Professor Stratton
Assistant Professor Hartman
Assistant Professor Painter
Assistant Professor Jefferson
Assistant Professor Martin
Assistant Professor Pelton
Assistant Professor Jesson
Assistant Professor Grossmann

For a minor, the following courses should be completed: 101, 102, 130, 133, 143, 151, 156 (2 hours), 161 (2 hours), and 194 (1 hour).

For a major, a student should enroll in one of the curriculums in music.

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-part 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: Sp. 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 Appreciatlon 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. 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. ½(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.

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.

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. ½(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. ½(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. ½(0-2); I and II. Weekly rehearsals. Membership, by competitive tryouts, is open to the entire student body. Downey.

198. Band. ½(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	$35.00	$30.00*	$25.00†
Piano	35.00	30.00*	25.00†
Organ	35.00	30.00*	25.00†
Violin	35.00	30.00*	25.00†
Violoncello	35.00	30.00*	25.00†
Other orchestral instruments	35.00	30.00*	25.00†
One lesson each week for a semester:			
Voice	17.50	15.00*	12.50†
Piano	17.50	15.00*	12.50†
Organ	17.50	15.00*	12.50†
Violin	17.50	15.00*	12.50†
Violoncello	17.50	15.00*	12.50†
Other orchestral instruments	17.50	15.00*	12.50†

Piano rent, one hour daily—$3 a semester.
Piano rent, two hours daily—$5 a semester.
Organ rent, one hour daily—$10 a semester.

*† Fees for grade-school or high-school students; thirty-minute and twenty-minute lessons, respectively.

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
Instructor Nelson
Instructor Socolofsky
Instructor Evans
Instructor Knorr
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.

For a major, a student should enroll in one of the Curriculums in Physical Education.

COURSES IN PHYSICAL EDUCATION FOR MEN

FOR UNDERGRADUATE CREDIT

A deposit of $4 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.
Activities offered: Boxing, corrective gymnastics, floorwork, golf, handball, swimming, tennis, and wrestling. Deposit.

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: Zoöl. 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: Zoöl. 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 or 2 hours; 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: Zoöl. 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, maintenace, and defense of public health.

149. Teaching Health. 2(2-0); I. Prerequisite: Phys. Ed. 119, Zoöl. 123 and 221. Moll.

FOR GRADUATE AND UNDERGRADUATE CREDIT

203. Community Recreation. 2(2-0); II and SS. Prerequisite: Phys. Ed. 145. 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. 113, Fund. of Clothing.

FOR UNDERGRADUATE CREDIT

151. Physical Education W. R(0-3); I, II, and SS. Staff.
Activities offered: Archery, baseball, basketball, bowling, fieldball, folk and tap dancing, golf, hockey, individual and Danish gymnastics, modern dancing, recreational sports, rifle, soccer, social dancing, swimming, and tennis. Deposit.

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. Williams.
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 begining and intermediate swimming; one-half semester of archery. Saum.
Methods of teaching swimming and archery. Deposit.

162. Principles and Philosophy of Physical Education. 3(3-0); I. 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.

174. Health Examinations. 3(2-3); 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.

175. Therapeutics and Massage. 3(2-3); II. Prerequisite: Phys. Ed. 174, 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.

177. Playground Management and Games. 3(2-3); I. Williams.
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.

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.

181. Health and Safety Education W. 2(2-0); SS.
Organization of material pertaining to health and hygiene; safety and accident prevention; as recommended for the schools of Kansas.

184. Kinesiology W. 2(2-0); II. Prerequisite: Zoöl. 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.
Organization of physical education material for a progressive program in elementary, junior and senior high schools; teaching methods to achieve desired aims of education.

191. Recreational Leadership W. 2(2-0); II. Prerequisite: Phys. Ed. 182. Maytum.
Principles and methods of organizing communities for leisure activities.

COURSES IN PHYSICAL EDUCATION FOR MEN AND WOMEN

159. First-aid. 2(2-0); I, II, and 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. Not open to students in the curriculums in Physical Education.

198. Group Recreation. 2(1-3); SS.
Selection and organization of recreation for men and women, for class, noonhour, or extracurricular activities. Deposit.

FOR GRADUATE AND UNDERGRADUATE CREDIT

298. Problems in Physical Education. Credit to be arranged. Prerequisite: Variable, depending upon problem chosen. Washburn, Saum.

Physics

Professor Cardwell
Professor Raburn
Professor Floyd
Professor McMillen
Associate Professor Brackett
Associate Professor Lyon
Associate Professor Chapin
Associate Professor Allen
Associate Professor Hudiburg
Assistant Professor Maxwell
Assistant Professor Avery
Assistant Professor Whitcomb
Instructor Crawford
Student Assistant Griffith
Student Assistant Lancaster

For a minor, the following courses should be completed: 102, 103 (or 105, 106), 243, 244, 251, and 254.

For a major, in addition to the minor, the following courses should be completed: 220, 227, 238, 239, and 270. The student should enroll in the Curriculum in Physical Science.

FOR UNDERGRADUATE CREDIT

102. General Physics I. 4(3-3); I, II, and SS. Prerequisite: Math. 101. Staff.
Mechanics, heat, and sound. Charge, $4.

103. General Physics II. 4(3-3); I, II, and SS. Prerequisite: Phys. 102. Staff.
Magnetism, electricity, and light. Charge, $4.

105. Engineering Physics I. 5(4-3); I, II, and SS. Prerequisite: Math. 101. Staff.
Mechanics, heat, and sound for technical students. Charge, $4.

106. Engineering Physics II. 5(4-3); I, II, and SS. Prerequisite: Phys. 105. Staff.
Magnetism, electricity, and light for technical students. Charge, $4.

108. Household Physics. 5(4-3); I, II, SS. Avery, Hudiburg.
Lectures and demonstrations in which the laws and principles involved in household appliances are explained and illustrated. Charge, $4.

112. Introduction to General Science. 3(3-0); SS. Staff.

121. Physics for Musicians I. 5(4-3); I. 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). 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); I, II, and SS. 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. Brackett, Maxwell.
Nonmathematical explanations and experimental demonstrations of selected principles in physics.

141. Descriptive Astronomy. 3(3-0); I and II. Babcock.

146. Introductory Meteorology. 3(3-0); I and II. Hudiburg.
Weather-phenomena and principles of forecasting; climatic factors; relation of weather studies to agriculture, general science, and physiography.

151. Photograhpy. 2(1-3); I, II, and SS. Hudiburg, Chapin.
Chemical and physical principles involved in photography; practice in making good negatives and prints. Deposit, $6.

FOR GRADUATE AND UNDERGRADUATE CREDIT

201. Laboratory Technic and Apparatus Design. 1 or 2 hours.
Prerequisite: Phys. 103 or 106. Hudiburg.
Glass blowing and shopwork designed to meet the needs of the individual student. Charge, $3.

205. Applied X Ray. 3(2-3). Prerequisite: Phys. 103, 106, or 108. 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.

206. Synoptic Meteorology. 3(3-0); I, II, and SS. Prerequisite: Math. 115, Phys. 103 or 106, and 146.

210. Astronomy. 3(3-0). 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). Prerequisite: Phys. 103 or 106. Cardwell, Lyon.
Theory of the field work in gravitational, magnetic, electrical, seismic, radioactive, and temperature surveys.

218. Geophysics II. 3(1-6). 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). 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). 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 or 2 hours. Prerequisite: Phys. 227 or concurrent registration. Cardwell, McMillen. Charge, $3.

238. Heat. 3(3-0). Prerequisite: Math. 115 and Phys. 103 or 106. Whitcomb.

239. Heat Laboratory. 1(0-3). Prerequisite: Phys. 238 or concurrent registration. Whitcomb. Charge, $3.

240. Sound. 3(3-0). Prerequisite: Math. 115 and Phys. 102 or 105. Floyd, Chapin.

243. Light. 3(3-0). Prerequisite: Math. 114 and Phys. 103 or 106. Cardwell, Chapin.

244. Light Laboratory. 1(0-3). Prerequisite: Phys. 243 or concurrent registration. Cardwell, Chapin. Charge, $3.

251. Electricity and Magnetism. 3(3-0). Prerequisite: Math. 115 and Phys. 103 or 106. Lyon.
Electricity and magnetism by methods of the calculus.

254. Electricity and Magnetism Laboratory. 1 or 2 hours. Prerequisite: Phys. 251 or concurrent registration. Lyon. Charge, $3.

265. Electric Oscillations and Waves. 3(3-0). Prerequisite: Phys. 251. Lyon.
Radiation field theory and radio circuits.

266. Electric Oscillations and Waves Laboratory. 2(0-6). Prerequisite: Phys. 265 or concurrent registration. Lyon. Charge, $3.

270. Atomic Physics. 3(3-0). Prerequisite: Math. 115 and Phys. 103 or 106. Cardwell, McMillen, Lyon.
Contemporary theories and problems.

297. Problems in Physics. Credit to be arranged. Prerequisite: Phys. 103 or 106. Staff.
Work is offered in:

Electricity. Lyon, Allen.
Electronics. Cardwell, Allen.
Light. Cardwell.
Photography. Hudiburg, Chapin.
Sound. Floyd, Chapin.
Spectroscopy. McMillen, Whitcomb.

299. Colloquium in Physics. R. 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). Prerequisite: Math. 201 and Phys. 103 or 106. Allen.

390. Research in Physics. Credit to be arranged. Prerequisite: At least two courses in this department. Staff.
Work is offered in:

Electricity. Lyon, Allen.
Electronics. Cardwell, Allen.
Light. Cardwell.
Photography. Hudiburg, Chapin.
Sound. Floyd, Chapin.
Spectroscopy. McMillen, Whitcomb.

Speech

Professor Hill
Professor Heberer
Associate Professor Troutman
Assistant Professor Webster
Assistant Professor Roach

For a minor, the following courses should be completed: 101, 106 or 107, 108, 110, 121, 150, 165, and 207.

For a major in general speech, in addition to the minor, the following courses should be completed: 102, 126, 138, 152, 208, 222, 225, and 290 (2 or more hours).

For a major in radio speech, in addition to the minor, the following courses should be completed: 162, 167, 168, 231, 233, 243, 244, and 290 (variable credit).

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: Sp. 101. Troutman, Webster.
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 Sp. 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 Sp. 106. Staff.
Practical public speaking of the extempore type. Charge, $1.

108. Extempore Speech II. 2(2-0); I, II, and SS. Prerequisite: Sp. 106 or 107. Staff.
Sp. 106 continued, with special attention to illustrative material.

110. Elements of Phonetics. 2(2-0); I. Roach. Charge, $1.

121. Argumentation and Debate. 2(2-0); II. Prerequisite: Sp. 106 or 107. Webster.

123. Intercollegiate Debate I. 2(2-0); I and II. Prerequisite: Sp. 121. Webster.
Open only to members of the intercollegiate debate squads.

124. Intercollegiate Debate II. 2(2-0); I and II. Prerequisite: Sp. 123. Webster.
Open only to members of the intercollegiate debate squads.

126. Parliamentary Procedure. 1(1-0); II. Hill.

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 or 2 hours; I, II, and SS. Prerequisite: Junior standing. Roach.

150. Development of the Theater I. 2(2-0); I. Troutman, Roach.
The theater to the end of the nineteenth century.

152. Development of the Theater II. 2(2-0); II. Troutman, Roach.
The modern and the contemporary theater.

162. Survey of Broadcasting. 1(1-0); I and II. Prerequisite: Sp. 106 or 107. Heberer.
Survey of radio industry; social importance of broadcasting. Radio fee charged.

165. Radio Speech. 2(1-3); I and II. Prerequisite: Consent of instructor. Heberer.
Training in voice and diction for broadcasting. Radio fee charged.

167. Broadcasting Informative Programs. 3(3-0); I and II. Prerequisite: Sp. 106 or 107. Heberer.
Radio fee charged.

168. Radio Program Participation. 1(0-3); I and II. Prerequisite: Sp. 165 and consent of instructor. May not be taken for more than four semesters for credit. Heberer, Webster. Radio fee charged.

FOR GRADUATE AND UNDERGRADUATE CREDIT

201. Advanced Phonetics. 4(3-3); II. Prerequisite: Sp. 101, 106, 107, and 110. Roach.

207. Dramatic Production I. 2(1-3); I, II, and SS. Prerequisite: Sp. 102. Roach.
Theory of and practice in fundamentals of acting and direction. Charge, $1.

208. Dramatic Production II. 2(0-6); I, II, and SS. Prerequisite: Sp. 207. Roach.
Projects in direction and stagecraft. Charge, $1.

222. Advanced Debate. 2(2-0); I. Prerequisite: Sp. 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: Sp. 106 or 107. Hill, Troutman.
Planning, building, and presenting nonradio public programs.

231. Radio Program Production I. 2(1-3); I and II. Prerequisite: Mus. 119 and Sp. 162 and 163. Heberer.
Production and direction of radio programs. Radio fee charged.

233. Radio Program Production II. 2(0-6); II. Prerequisite: Sp. 231 and consent of instructor. Heberer.
Continuation of Sp. 231. Radio fee charged.

243. Radio Continuity I. 3(3-0); I. Prerequisite: Sp. 163. Heberer.
Planning and construction of radio programs. Radio fee charged.

244. Radio Continuity II. 3(0-9); II. Prerequisite: Sp. 243. Heberer.
Continuation of Sp. 243. Radio fee charged.

290. Problems in Speech. Credit to be arranged; I, II, and SS. Prerequisite: Sp. 108 or 163. Staff.
Work is offered in:

Debate. Webster.
Oatory. Hill.
Phonetics. Roach.
Radio. Heberer.
Theater. Heberer, Roach.

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.
Oatory. Hill.
Phonetics. Roach.
Radio. Heberer.
Theater. Heberer, Roach.

305. Clinical Problems in Defective Speaking. 4(2-6); II. Prerequisite: Sp. 101, 106 or 107, 108, and 201. Hill, Roach.

Student Health

Professor Hanson

FOR UNDERGRADUATE CREDIT

101. Preventive Medicine and Public Health. 2(2-0); I and II. Prerequisite: Sophomore standing. Hanson.
Communicable diseases and their control; factors involved in healthful living.

Zoölogy

Professor Nabours
Professor Ackert
Professor Harman
Professor Herrick
Professor Wimmer
Associate Professor Harbaugh
Associate Professor Goodrich
Instructor Ameel
Instructor Lockhart
Instructor Petri
Instructor Braddock
Instructor Thompson
Assistant Stebbins
Assistant Wisseman

For a minor, the following courses should be completed: 105 and nine hours in the 200 group.
For a major, in addition to the minor, the student should complete at least ten credit hours in the 200 group.

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.
Ecology. Harbaugh.
Endocrinology. Herrick.
Game Management. Harbaugh.
Heredity. Nabours.
Histology. Lockhart, Goodrich.
Ornithology. Goodrich.
Parasitology. Ackert.
Physiology. Wimmer.
Protozoölogy. Ameel.
Zoölogical Technic. Petri, Ameel.

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 or 2 hours; I, II, and SS. Prerequisite: Zoöl. 105. Petri, Ameel.

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 parastism.

210. Invertebrate Zoölogy. 3(1-6)); I and SS. Prerequisite: Zoöl. 105. Goodrich. Charge, $3.

Essentials of structure, function, classification, and phylogeny of the invertebrates.

214. Cytology. 4(2-6); I. Prerequisite: Zoöl. 105. Harman.

Cells, chromosomes, and heredity. Charge, $3.

216. Heredity and Eugenics. 2(2-0); I. Prerequisite: Zoöl. 105. Nabours.

Human inheritance and the interactions of nature and heredity.

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, Lockhart, Ameel.

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.

A study of the nature and mechanism of living matter. 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.

228. Human Parasitology Recitation. 3(3-0); II. Prerequisite: Zoöl. 105. Ackert.

229. Human Parasitology Laboratory. 1(0-3); II. Prerequisite: Zoöl. 105. Ackert. Charge, $3.

240. Taxonomy of Parasites. 2(1-3); II and SS. Prerequisite: Zoöl. 208 or 218. Ackert. Charge, 2.

244. Bird Study. 3(2-3); II, or 2(1-3); SS. Prerequisite: Zoöl. 105. Goodrich. Charge, $2.
Lecture, laboratory and field studies in identification and adaptations of birds.

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. 105 and consent of instructor. Herrick.

248. Applied Zoölogy. 3(3-0); I and SS. Prerequisite: Zoöl. 105. Harbaugh.
Wildlife propagation, management and control.

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.
Ecology. Harbaugh.
Endocrinology. Herrick.
Game Management. Harbaugh.
Heredity. Nabours.
Histology. Lockhart, Goodrich.
Ornithology. Goodrich.
Parasitology. Ackert.
Physiology. Wimmer.
Protozoölogy. Ameel.

The School of Home Economics

MARGARET M. JUSTIN, *Dean*

The objectives of the program in home economics are not merely to increase the student's stock of information, but to stimulate interest in continued study or research, to develop 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 education in home economics includes the study of the scientific principles underlying the sanitary requirements of the home; food and nutrition; textiles and home furnishings; the wise expenditure of time, money, and energy. It also includes study of the principles underlying the practice of physical and mental health; the preparation of appetizing, nutritious food; the application of artistic standards to the selection and construction of clothing and to the home; the guidance of children, and an understanding of family relationships. 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.

The three four-year curriculums in this school 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 knowledge is fundamental in the administration of the home, courses in the sciences are given as a foundation for education 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 student's dean. This choice of electives will be made during the first semester of the sophomore year.

This curriculum is recommended to those who desire a general education 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.

CERTIFICATE FOR TEACHING HOME ECONOMICS

The student who desires to secure the degree of Bachelor of Science, and to qualify 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. 240	3(1-6)
Prin. of Secondary Educ., Educ. 236,	3(3-0)	Applied Dress Design, Clo. and Text. 114	3(1-8)
Vocational Educ., Educ. 241	3(3-0)	School Food Service, Inst. Mgmt. 221	3(2-3)
Methods of Teach. Home Economics, 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 37 hours of possible electives allowed in the Curriculum of Home Economics. The remaining 10 hours of electives are to be selected from among nontechnical courses outside the School 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.

Completion of this Curriculum in Home Economics with these electives entitles the individual to the three-year certificate, renewable for life, issued by the State Board of Education and to the Vocational Homemaking certificate issued by the State Board of Vocational Education.

CURRICULUM IN HOME ECONOMICS AND ART

The courses in this curriculum give background for professional work in art and for teaching art.

CURRICULUM IN DIETETICS AND INSTITUTIONAL MANAGEMENT

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 experience for the management of the food unit of various types of institutions. 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. 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 instruction and practical experience in nursing are given. Upon completion of the work at the hospitals, the student presents her application for graduation to the registrar of Kansas State College.

HOME ECONOMICS IN THE SUMMER SCHOOL

In addition to the regular instruction in home economics, the school 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)	Elementary Design II, Art 101B	2(0-6)*or*
Foods I, Foods and Nutr. 102	5(3-6)*or*	Design in the Crafts, Art 102	2(0-6)
Gen. Psychology, Educ. 184	3(3-0)*and*	Gen. Psychology, Educ. 184	3(3-0)*and*
Personal Health, Child Welf. 101	2(2-0)	Personal Health, Child Welf. 101	2(2-0)*or*
H. E. Fresh. Lectures, Gen. H. E. 131	R(1-0)	Foods I, Foods and Nutr. 102	5(3-6)
Phys. Educ. W, Phys. Ed. 151	R(0-3)	H. E. Fresh. Lectures, Gen. H. E. 131	R
		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)*or*
Foods II, Foods and Nutr. 107	3(1-6)*and*	Human Physiology, Zoöl. 221	4(3-3)
Current History, Hist. 126	1(1-0)*or*	Fundamentals of Clothing, Clo. and Text. 113	2(1-5)*and*
Costume Design I, Art 130	2(0-6)*and*	Costume Design I, Art 130	2(0-6)*or*
Fundamentals of Clothing, Clo. and Text. 113	2(1-5)	Foods II, Foods and Nutr. 107	3(1-6)*and*
Economics I, Econ. 101	3(3-0)*and*	Current History, Hist. 126	1(1-0)
Interior Decoration I, Art 113	2(0-6)*or*	Household Physics, Phys. 108	5(4-3)*or*
Household Physics,† Phys. 108	5(4-3)	Economics I, Econ. 101	3(3-0)*and*
H. E. Lectures, Gen. H. E. 133	R	Interior Decoration I, Art 113	2(0-6)
Phys. Educ. W, Phys. Ed. 151	R(0-3)	H. E. Lectures, Gen. H. E. 133	R
Home Projects, Gen. H. E. 140	R	Phys. Educ. W, Phys. Ed. 151	R(0-3)
Total	17	Total	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)
Applied Dress Design, Clo. and Text. 114	3(1-8)	Elective	10(-)
Family Finance, Hshld. Econ. 263,	2(2-0)	H. E. Lectures, Gen. H. E. 133	R
Elective‡	5(-)		
H. E. Lectures, Gen. H. E. 133	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. Senior Lectures, Gen. H. E. 134	R(1-0)
H. E. Lectures, Gen. H. E. 133	R		
Total	16	Total	15

Number of hours required for graduation, 126.

* 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 preparation 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 and Art*

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)	Elementary Design II, Art 101B	2(0-6)
Foods I, Foods and Nutr. 102	5(3-6)*or*	Gen. Psychology, Educ. 184	3(3-0)*and*
Gen. Psychology, Edu. 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. Fresh. Lectures, Gen. H. E. 131	R(1-0)	H. E. Fresh. Lectures, Gen. H. E. 131	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	
Eng. Literature, Engl. 172	3(3-0)	American Literature, Engl. 175	3(3-0)
Gen. Zoölogy,† Zoöl. 105	5(3-6)	Drawing II, Art 121	2(0-6)
Survey of Western Civilization I, Hist. 106	3(3-0)	Foods II, Foods and Nutr. 107	3(1-6)
Costume Design I, Art 130	2(0-6)	Human Physiology, Zoöl. 221	4(3-3)
Fund. of Clothing, Clo. and Text. 113	2(1-5)	Interior Decoration I, Art 113	2(0-6)
Drawing I, Art 120	2(0-6)	Textiles, Clo. and Text. 116	3(2-3)
H. E. Lectures, Gen. H. E. 133	R	H. E. Lectures, Gen. H. E. 133	R
Phys. Educ. W, Phys. Ed. 151	R(0-3)	Phys. Educ. W, Phys. Ed. 151	R(0-3)
Home Projects, Gen. H. E. 140	R		
Total	17	Total	17

JUNIOR

First Semester		Second Semester	
Human Nutr., Foods and Nutr. 112,	3(3-0)*or*	Applied Dress Design, Clo. and Text. 114	3(1-8)
Applied Nutr., Foods and Nutr. 121,	2(2-0)	Design in the Crafts, Art 102	2(0-6)
Intermediate Design, Art 103	2(0-6)	Historic Textile Design, Art 233	2(2-0)
Costume Design II, Art 134	2(0-6)	Advanced Design, Art 105	2(0-6)
Lettering, Art 127	2(0-6)	Elective	6(-)
Interior Decoration II, Art 115	2(0-6)	H. E. Lectures, Gen. H. E. 133	R
The House, Household Econ. 107	3(2-3)		
Elective‡	1 or 2(-)		
H. E. Lectures, Gen. H. E. 133	R		
Home Projects, Gen. H. E. 140	R		
Total	15	Total	15

SENIOR

First Semester		Second Semester	
Child Guidance I, Child Welf. 201,	3(2-3)	Interior Decoration III, Art 117	2(0-6)*or*
Principles of Art I, Art 201	3(3-0)	Costume Design III, Art 138	2(0-6)
Elective	9(-)	Principles of Art II, Art 202	3(3-0)
H. E. Lectures, Gen. H. E. 133	R	Elective	10(-)
		H. E. Senior Lectures, Gen. H. E. 134	R(1-0)
Total	15	Total	15

Number of hours required for graduation, 124.

* Students preparing to teach home economics will need to take a few additional hours in order to qualify for the three-year Kansas state teacher's certificate and the Vocational Home-making certificate.

† General Botany I and II may be taken as an option for General Zoölogy by students who are not preparing to teach. The necessary adjustment will be 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 Dietetics and Institutional Management

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, Edu. 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. Fresh. Lectures, Gen. H. E. 131	R(1-0)	H. E. Fresh. Lectures, Gen. H. E 131	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)
Foods II, Foods and Nutr. 107	3(1-6)	Fund. of Clothing, Clo. and Text. 113	2(1-5)
Interior Decoration I, Art 113	2(0-6)	Sociology, Econ. 151	3(3-0)
Economics I, Econ. 101	3(3-0)	Household Physics,* Phys. 108	5(4-3)
H. E. Lectures, Gen. H. E. 133	R	H. E. Lectures, Gen. H. E. 133	R
Phys. Educ. W, Phys. Ed. 151	R(0-3)	Phys. Educ. W., Phys. Ed. 151	R(0-3)
Home Projects, Gen. H. E. 140	R		
Total	16	Total	17

JUNIOR

First or Second Semester		First or Second Semester	
Human Nutr., Foods and Nutr. 112,	3(3-0)	Biochemistry, Chem. 231	5(3-6)
General Micro., Bact. 101	3(1-6)	Inst. Cookery, Inst. Mgmt. 101	4(1-9)
Meats, H. E. An. Husb. 176	1(0-3)	Inst. Food Buying, Inst. Mgmt. 103	2(2-0)
Clothing Selection, Clo. and Text. 110	2(2-0)*or*	Inst. Furnishings and Equipment, Inst. Mgmt. 105	2(2-0)
Textiles, Clo. and Text. 116	3(2-3)	Elective	3(-)
Current History, Hist. 126	1(1-0)	H. E. Lectures, Gen. H. E. 133	R
Elective†	5 or 6(-)		
H. E. Lectures, Gen. H. E. 133	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)	Child Guidance I, Child Welf. 201,	3(2-3)
Meth. of Teaching for Dietetic Students, Educ. 133	3(3-0)	Dietetics for Abn. Conditions, Foods and Nutr. 205	2(1-3)
Expr. Cookery, Food and Nutr. 255	2(0-6)	Tea Room Mgmt., Inst. Mgmt. 225	3(0-9)*or*
Organ. and Admin. of Inst., Inst. Mgmt. 206	3(3-0)	Field Work in Nutr., Foods and Nutr. 215	3(2-3)
Elective	2(-)	Food Econ. and Nutr. Seminar, Food and Nutr. 251	2(2-0)
H. E. Lectures, Gen. H. E. 133	R	Inst. Accounting, Econ. 293	2(1-3)
		Elective	4(-)
		H. E. Senior Lectures, Gen. H. E. 134	R(1-0)
Total	14	Total	16

Number of hours required for graduation, 125.

* 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		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)
Foods I, Foods and Nutr. 102	5(3-6)	Economics I, Econ. 101	3(3-0)
Gen. Psychology, Educ. 184	3(3-0)	Personal Health, Child Welf. 101	2(2-0)
H. E. Fresh. Lectures, Gen. H. E. 131	R(1-0)	Extemp. Speech I, Sp. 106	2(2-0)
Phys. Educ. W, Phys. Ed. 151	R(0-3)	H. E. Fresh. Lectures, Gen. H. E. 131	R
		Phys. Educ. W, Phys. Ed. 151	R(0-3)
Total	16	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)
Foods II, Foods and Nutr. 107	3(1-6)	Gen. Microbiology, Bact. 101	3(1-6)
Current History, Hist. 126	1(1-0)	Elective*	6(-)
Sociology, Econ. 151	3(3-0)	H. E. Lectures, Gen. H. E. 133	R
H. E. Lectures, Gen. H. E. 133	R	Phys. Educ. W, Phys. Ed. 151	R(0-3)
Phys. Educ. W, Phys. Ed. 151	R(0-3)		
Home Projects, Gen. H. E. 140	R		
Total	15	Total	16

JUNIOR

First Semester		Second Semester	
Human Anatomy, Zoöl. 123A	5(3-6)	Child Guidance I, Child Welf. 201,	3(2-3)
Biochemistry, Chem. 231	5(3-6)	The Family, Child Welf. 216	2(2-0)
Dietetics, Foods and Nutr. 202	4(3-3)	Abn. Psychology, Educ. 204	3(3-0)
H. E. Lectures, Gen. H. E. 133	R	Elective	7(-)
Elective	2(-)	H. E. Senior Lectures, Gen. H. E. 134	R(1-0)
Total	16	Total	15

SENIOR

(Replaced by two and one-half years at University of Kansas Hospitals)
(Equivalent to 31 college hours)

Theoretical Work	Practical Work
Professional Adjustments I and II	Medicine
Nursing Arts I and II	Surgery (including operating room)
Materia Medica	Pediatrics
Medical Nursing (including specialties)	Nursery
Surgical Nursing (including specialties)	Obstetrics
Dietotherapy	Dispensary
Obstetrical Nursing	Tuberculosis
Pediatric Nursing	Public Health
Principles of Public Health Nursing	
Principles of Public Hygiene and Sanitation	
Social Aspects of Nursing	

Number of hours required for graduation, 124.

* See footnote regarding electives under Curriculum in Home Economics.

Groups of Electives for Students in the School of Home Economics

The groups given below are selected with a view to preparing 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 Welfare

Sociology, Econ. 151	3(3-0)
Social Pathology, Econ. 258	3(3-0)
Family Relationships, Child Welf. 240	2(2-0)
Field Work in Nutr., Foods and Nutr. 215	3(2-3)
Heredity and Eugenics, Zoöl. 216	2(2-0)
Child Guidance I, Child Welf. 201,	3(2-3)
Seminar in Child Welfare and Euthenics, Child Welf. 226	1 or 2
Mental Tests, Educ. 260	3(3-0)
Parent Guidance, Child Welf. 231,	3(3-0)
Psych. of Childhood and Adolescence, Educ. 250	3(3-0)
Child Guidance II, Child Welf. 206,	3(3-0)
Problems in Child Welfare and Euthenics, Child Welf. 221	1 to 5
Nutr. of Dev., Foods and Nutr. 210,	2(2-0)
Psych. of Excep. Children, Educ. 266	3(3-0)
Consumer Buying, Hshld. Econ. 278,	3(2-3)
Econ. Prob. of the Family, Hshld. Econ. 265	2(2-0)
Social Psychology, Educ. 270	3(3-0)

Costume Design

Hist. of Costume, Clo. and Text. 225	2(2-0)
Adv. Dress Design, Clo. and Text. 115	3(1-8)
Clothing Econ., Clo. and Text. 201,	3(3-0)
Costume Illustration, Art 212	2(0-6)
Problems in Costume Design, Art 235	2(0-6)
Oral English, Engl. 232	3(3-0)
Survey of Western Civilization II, Hist. 107	3(3-0)
Weaving, Art 106	2(0-6)
The Arts of Mexico, Art 244	2(2-0)
Art of Primitive People, Art 246	2(2-0)
Art of Southwest Indians, Art 242,	2(2-0)
Elem. Journalism, Ind., Jour. 150	2(2-0)
Journalism for Women, Ind. Jour. 170	3(3-0)
Ind. Writing, Ind. Jour 157	3(1-6)
Radio Writing, Ind. Jour. 162	2(2-0)
Sociology, Econ. 151	3(3-0)
World Cultures II, Hist. 210	3(3-0)
Extem. Speech I, Sp. 106	2(2-0)
Pottery Design, Art 109	2(0-6)

Interior Decoration

Domestic Architecture, Arch. 124	2(2-0)
The Family, Child Welf. 216	2(2-0)
Landscape Gardening, Hort. 125	3(3-0)
Problems in Design, Art 217	2(0-6)
Problems in Interior Dec., Art 232,	4(0-12)
Oral English, Engl. 232	3(3-0)
Pottery Design, Art 109	2(0-9)
Survey of Western Civilization II, Hist. 107	3(3-0)
Elem. Journalism, Ind. Jour. 150	2(2-0)
Journalism for Women, Ind. Jour. 170	3(3-0)
Ind. Writing, Ind. Jour. 157	3(1-6)
Radio Writing, Ind. Jour. 162	2(2-0)
Sociology, Econ. 151	3(3-0)
The Arts of Mexico, Art. 244	2(2-0)
Art of Primitive People, Art 246	2(2-0)
Art of Southwest Indians, Art 242,	2(2-0)

Home Service and Food Demonstration Work

Public Speaking, Sp. 107	2(2-0)
Extem. Speech II, Sp. 108	2(2-0)
Oral English, Engl. 232	3(3-0)
Elem. Journalism, Ind. Jour. 150	2(2-0)
Journalism for Women, Ind. Jour. 170	3(3-0)
Editing, Ind. Jour. 166	2(0-6)
Prin. of Advertising, Ind. Jour. 178,	4(4-0)
Broadcasting Station Practice, Ind. Jour. 180	1(0-3)
Photography, Phys. 151	2(1-3)
Sociology, Econ. 151	3(3-0)
Methods of Teaching H. E., Educ. 132	3(3-0)
Field Work in Nutr., Foods and Nutr. 215	3(2-3)
Exp. Cookery, Foods and Nutr. 255,	2(0-6)
Problems in Foods, Foods and Nutr. 245	1(-)
Inst. Cookery, Inst. Mgmt. 101	4(1-9)
Meats, H. E., An. Husb. 176	1(0-3)
Home Mgmt., Hshld. Econ. 240	3(1-6)
Hshld. Equipment I, Hshld. Econ. 203	2(0-6)
Hshld. Equipment II, Hshld. Econ. 205	2(0-6)
Problems in Hshld. Econ., Hshld. Econ. 243	1 to 3
Consumer Buying, Hshld. Econ. 278	3(2-3)
Econ. Prob. of the Family, Hshld. Econ. 265	2(2-0)

Research in Nutrition

Pathogenic Bact. I, Bact. 111	4(2-6)
Pathogenic Bact. II, Bact. 116	4(2-6)
Bact. Technic, Bact. 225	3(0-9)
Chem. I, Chem. 101	5(3-6)
Org. Chem. I, Chem. 218	4(2-6)
Org. Chem. II, Chem. 219	4(2-6)
Biochemistry, Chem. 231	5(3-6)
Biochem. Analysis, Chem. 237	2(0-6)
Quant. Anal. A, Chem. 250	3(1-6)
Sanitary and Food Bacteriology, Bact. 242	3(1-6)
Quant. Anal. B, Chem. 251	3(1-6)
Plane Trig., Math. 101	3(3-0)
Col. Alg., Math. 104	3(3-0)
Plane Analytical Geom., Math. 110,	4(4-0)
Calculus I, Math. 114	4(4-0)
Calculus II, Math. 115	4(4-0)
German I, Mod. Lang. 101	3(3-0)
German II, Mod. Lang. 102	3(3-0)
Scientific German, Mod. Lang. 137,	4(4-0)

Biological Technician

Bact. of Human Diseases, Bact. 206,	5(3-6)
Immunology, Bact. 229	5(3-6)
Physiol. of Microörganisms, Bact. 222	3(3-0)
Bact. Tech., Bact. 225	3(0-9)
Biochemistry, Chem. 231	5(3-6)
Pathological Chem., Chem. 235	2(2-0)
Biochem. Analysis, Chem. 237	2(0-6)
Quant. Anal. A, Chem. 250	3(1-6)
Quant. Anal. B, Chem. 251	3(1-6)
Human Physiol., Zoöl. 221	4(3-3)*or*
Embryol., Zoöl. 219	4(3-0)
Principles of Parasitology, Zoöl. 209,	2(2-0)
Comparative Anatomy of Vert., Zoöl. 246	4(2-6)
Special Histology, Path. 252	3(0-9)

Homemaking

Child Guidance I, Child Welf. 201,	3(2-3)
Sociology, Econ. 151	3(3-0)
Com. Organization, Econ. 267	3(3-0)
Problems in Foods, Foods and Nutr. 310	1 to 3
Home Mgmt., Household Econ. 240,	3(1-6)
World Classics I, Engl. 280	3(3-0)
Nutr. of Dev., Foods and Nutr. 210	2(2-0)
Consumer Buying, Hshld. Econ. 278,	3(2-3)
Child Guidance II, Child Welf. 206	3(3-0)
Principles of Art I, Art 201	3(3-0)
Advanced Dress Design, Clo. and Text. 115	3(1-8)
Meats, H. E., An. Husb. 176	1(0-3)
Hist. of Engl. Literature, Engl. 181,	3(3-0)
Psyc. of Childhood and Adolescence, Educ. 250	3(3-0)
Econ. Prob. of the Family, Hshld. Econ. 265	2(2-0)
Sanitary and Food Bacteriology, Bact. 242	3(1-6)

Social Welfare Work

Child Guidance I, Child Welf. 201,	3(2-3)
Sociology, Econ. 151	3(3-0)
Com. Organization, Econ. 267	3(3-0)
Field Work in Nutrition, Foods and Nutr. 215	3(2-3)
Econ. Prob. of the Family, Hshld. Econ. 265	2(2-0)
Consumer Buying, Hshld. Econ. 278,	3(2-3)
Parent Guidance, Child Welf. 231,	3(3-0)
Prevent. Med. and Pub. Health, Stud. Health 101	2(2-0)
Survey of American History II, Hist. 128	3(3-0)
Psychol. of Childhood and Adolescence, Educ. 250	3(3-0)
Child Guidance II, Child Welf. 206,	3(3-0)
Labor Economics, Econ. 234	3(3-0)
Social Pathology, Econ. 258	3(3-0)
Am. Diplomatic History, Hist. 228,	2(2-0)
Probs. in Child Welfare and Euthenics, Child Welf. 221	1 to 5
Soc. Psychology, Educ. 270	3(3-0)
Mental Ttests, Educ. 260	3(3-0)
Family Relationships, Child Welf. 240	2(2-0)

Textiles

College Algebra, Math. 104	3(3-0)
General Physics I, Phys. 102	4(3-3)
General Physics II, Phys. 103	4(3-3)
Plane Trigonometry, Math. 101	3(3-0)
Clothing Econ., Clo. and Text. 201,	3(3-0)
Plane Analytical Geom., Math. 110,	4(4-0)
Calculus I, Math. 114	4(4-0)
Calculus II, Math. 115	4(4-0)
Consumer Buying, Hshld. Econ. 278,	3(2-3)
Econ. Prob. of the Family, Hshld. Econ. 265	2(2-0)
Physical Chemistry I, Chem. 206,	5(3-6)
Qual. Organ. Analysis, Chem. 224,	2(0-6)
Probs. in Clo. and Text., Clo. and Text. 215	1 to 3
Human Physiology, Zoöl. 221	4(3-3)
Statis. Meth. Ap. to Educ., Educ. 223	3(3-0)
Bact. Problems, Bact. 270	1 to 4
Adv. Textiles, Clo. and Text. 205,	3(1-6)
Exp. Textiles, Clo. and Text. 312,	2 to 5

Journalism

Elementary Journalism, Ind. Jour. 150	2(2-0)
Journalism for Women, Ind. Jour. 170	3(3-0)
Newspaper and Magazine Writing, Ind. Jour. 167	2(2-0)
Editing, Ind. Jour. 166	2(0-6)
Principles of Advertising, Ind. Jour. 178	4(4-0)
Industrial Writing, Ind. Jour. 157,	3(1-6)
Radio Writing, Ind. Jour. 162	2(2-0)
Rural Press, Ind. Jour. 181	2(2-0)
Public Information Methods, Ind. Jour. 183	2(2-0)

Teaching Home Economics

See "Certificate for Teaching Home Economics."

Art

Professor Barfoot
Associate Professor Everhardy
Associate Professor Harris
Associate Professor Morris
Assistant Professor Darst
Assistant Professor Kedzie
Instructor Stalder
Instructor Holland
Instructor 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, and related phases of the department's work.

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 bookbinding, 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.

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* 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 I. 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.

121. Drawing II. 2(0-6); I and II. Prerequisite: Art 120. Staff.
A continuation of Art 120. Charge, $2; deposit, 25 cents.

127. Lettering. 2(0-6); I, II, or SS. Prerequisite or concurrent: Art 101B. Staff.
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 101B. 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 the vocational home economics program. 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.

306. Problems in Advanced Design. Credit to be arranged; I, II, and SS. Prerequisite: Consult instructors. Staff.
Individual research problems which deal with the various phases of design may be chosen by the student with the aid of the instructor. Charge to be arranged with instructor.

Child Welfare and Euthenics

Professor Roy
Associate Professor Kell
Associate Professor Williams
Assistant Professor Raffington
Assistant Professor Aldous
Instructor Burton, Noell
Instructor Kent
Graduate Assistant Tingle, Benedict
Graduate Assistant Harris

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 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, $1.

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, $2. Additional charge for lunches, $2.

206. Child Guidance II. 3(3-0); II. Prerequisite: Child Welf. 201. Aldous. Guidance principles applied to the needs of adolescents. Charge, $1.

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, $1.

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, $1.

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; I, II, or SS. 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, $1.

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
Associate Professor Cormany
Assistant Professor Fletcher
Instructor Howe
Instructor Gilmore
Instructor Lienkaemper
Graduate Assistant Sloop

The Department of Clothing and Textiles offers courses designed to furnish essential knowledge concerning clothing and textile problems. 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

110. Clothing Selection. 2(2-0); I and II. Cowles, Gilmore.

Selection of clothing with self-analysis as a basis; budgeting and buying procedures. Designed for students not planning to take Clo. and Text. 114 or those not majoring in home economics.

113. Fundamentals of Clothing. 2(1-5); I, II, and SS. Staff.

Discussion and Laboratory.—A study and use of commercial patterns and principles of garment construction. Charge, $1; deposit, 25 cents.

114. Applied Dress Design. 3(1-8); I, II, and SS. Prerequisite: Clo. and Text. 113 and Art 130. Staff.

Discussion and Laboratory.—Application of design principles to dress. Development of foundation pattern; flat pattern designing; construction of wool or rayon garment; wardrobe planning and buying procedures. Charge, $3; deposit, 25 cents.

115. Advanced Dress Design. 3(1-8); I, II, and SS. Prerequisite: Clo. and Text. 114. Staff.

Discussion and Laboratory.—Social significance of fashion; application of design to dress. Designs draped in cotton and then completed in suitable material. Charge, $4.50; deposit, 25 cents.

116. Textiles. 3(2-3); I, II, and SS. Prerequisite: Chem. 122; Phys. 108 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, $2.50; deposit, 25 cents.

FOR GRADUATE AND UNDERGRADUATE CREDIT

201. Clothing Economics. 3(3-0); I or II, and SS. Prerequisite: 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.

212. Problems in Clothing Design. 2(1-5); I, II, and SS. Prerequisite: Clo. and Text. 115. Latzke, Cormany, Howe.

Discussion and Laboratory.—Design as related to the coat or suit; techniques of tailoring developed; construction of coat or suit. Charge, $2; 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. Lienkaemper.

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, Cormany.

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 Profesor McMillan
Associate Professor Ascham
Assistant Profesor Browning
Assistant Professor Westerman
Instructor Mullen
Instructor Meiller
Instructor Herren
Instructor Stewart
Instructor Miller
Technician Haymaker

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.

Instruction is provided for teachers of foods, dietitians, and for commercial, extension, and research workers.

FOR UNDERGRADUATE CREDIT

102. Foods I. 5(3-6); I, II, and SS. Staff.
Elementary nutrition, principles of food preparation, and food economics. Practice in food preparation and meal service. Charge, $6; 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, $5; deposit, $1.

112. Human Nutrition. 3(3-0); I, II, SS. 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. Staff.
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, School 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.—Calories, protein, mineral, and vitamin values; diets for infants, children, and adults. Charge, $5; 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 for 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 adolscence.

215. Field Work in Nutrition. 3(2-3); I and II. Prerequisite: Foods and Nutr. 202. Browning.

‡ Students from other schools desiring to elect Food and Nutr. 112 may substitute an equivalent number of hours in other sciences for these requirements.

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 simple experiments in nutrition. Charge to be arranged with instructor.

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.
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.

COURSES IN HOME ECONOMICS EDUCATION*

Professor Rust
Associate Professor Baxter
Assistant Professor Johnson
Instructor Tincher

FOR UNDERGRADUATE CREDIT

132. Methods of Teaching Home Economics. 3(3-0); I, II, and SS. Rust, Baxter, Johnson.
See Department of Education, School of Arts and Sciences.

133. Methods of Teaching for Dietetic Students. 3(3-0); I and II. Prerequisites: Educ. 184, Foods and Nutr. 112, Inst. Mgmt. 101 or Foods and Nutr. 202. Rust.
See Department of Education, School of Arts and Sciences.

160. Teaching Participation in Home Economics. 3(-); I, II, and SS. By appointment. Rust, Baxter, Johnson.
See Department of Education, School of Arts and Sciences.

FOR GRADUATE AND UNDERGRADUATE CREDIT

231. Supervision of Home Projects. 1 or 2 hours; I, II, and SS. Prerequisite: Educ. 132 and junior standing. Johnson.
See Department of Education, School of Arts and Sciences.

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* The ten courses named here are given by the Department of Education for the School of Home Economics. The staff is appointed coöperatively by that department and the School of Home Economics.

232. Teaching Subjects Related to Home Economics. 1 to 3 hours; I, II, and SS. Prerequisite: Educ. 184 and 132. Rust, Johnson.
See Department of Education, School of Arts and Sciences.

234. Methods in Adult Homemaking Classes. 1 to 3 hours; SS. Prerequisite: Educ. 132 and 184 or equivalent. Johnson.
See Department of Education, School of Arts and Sciences.

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 School of Home Economics. Justin, Rust.
See Department of Education, School of Arts and Sciences.

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, School of Arts and Sciences.

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, School of Arts and Sciences.

318. Seminar in Home Economics Education. 2 or 3 hours; II and SS. Prerequisite: Educ. 160 and experience in teaching home economics. Rust, Johnson, and visiting instructors.
See Department of Education, School of Arts and Sciences.

Household Economics

Professor Lindquist
Associate Professor Gunselman
Assistant Professor Agan
Assistant Professor McKinney
Instructor Barnes
Instructor ————

Through the courses in the Department of Household Economics an opportunity is offered for studying the effect of social and economics forces on the home and its management. The phases presented for study include housing, home management, equipment, family finance, consumption, and related economic problems. Graduate students preparing to become advisers in home management houses, specialists and consultants in home management, teachers, homemakers, and research workers in these fields find suitable courses in this department.

FOR UNDERGRADUATE CREDIT

107. The House. 3(2-3); I, II, and SS. Prerequisite: Foods and Nutr. 102; Phys. 108 recommended. Agan, McKinney, Barnes.
A consideration of dwellings, their environments, plans, furnishings, and equipment, which will promote effective utilization of family resources.
Laboratory.—The choice, use and care of certain furnishings and equipment for the home. Charge, $1.

FOR GRADUATE AND UNDERGRADUATE CREDIT

203. Household Equipment I. 2(0-6); I and SS. Prerequisite: Phys. 108; 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; Hshld. Econ. 107. Lindquist, McKinney, Barnes.

The application of principles taught in basic home economics courses and their relation to satisfying family life.

Laboratory.—Opportunity is provided for experience in group living and management in home management houses operating on two different income levels. The period of residence is 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, Barnes.
Financial problems involved in the effective management of the family's resources.

265. Economic Problems of the Family. 2(2-0); II and SS. Prerequisite: Econ. 101; Hshld. Econ. 263 recommended. Lindquist, Gunselman.
Study of income and factors determining cost of living. Insurance, annuities, investments; credit and borrowing.

278. Consumer Buying. 3(2-3); 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 types of protection, including legislation.
Workshop and field trip.

280. Seminar in Home Management. 1 to 3 hours. I, II, and SS. Prerequisite: Senior or graduate standing. Lindquist.
A review of literature and trends in management; 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 which may form the basis for the Master's thesis.

General Home Economics

Dean Justin
Assistant Dean McMillan
Assistant Professor Raffington
Assistant Professor Johnson

For Undergraduate Credit

131. Home Economics Freshman Lectures. R (meetings by appointment). Staff, student counselors, and invited speakers.
Freshmen meet weekly during the fall semester and monthly during the spring semester for orientation and guidance. Charge, 75 cents.

133. Home Economics Lectures. R. (meetings by appointment). Staff.
Upperclass students attend Interest Groups and special meetings during the year. Programs are presented by members of the faculty and speakers from outside. These groups are sponsored by the Home Economics Club. Charge, 75 cents.

134. Home Economics Senior Lectures. R (meetings by appointment). Justin and staff.

Seniors meet weekly during the spring semester. Juniors in the nursing curriculum take Senior Lectures. The opportunities and responsibilities of the home economist are presented, and means for professional growth and personal advancement of women are stressed. Charge, 75 cents.

135. Guidance of Freshman. 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, School of Home Economics, and others.

Instruction in counseling techniques employed in freshman orientation in the School 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 schools with junior or senior standing need to complete only one. Supervision of Home Projects, Educ. 231, may be substiuted for one Home Project, if desired. Johnson.

Institutional Management

Professor West
Associate Professor Wood
Assistant Professor Smull
Instructor Miller
Assistant Kahler
Graduate Assistant Murphy

Courses in this department provide preparation 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 foods 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.

221. School Food Service. 3 (2-3); 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. Charge, $2.

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.

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 laboratoies of the School 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 schools 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.
*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.
*The effect of finishes on the service qualities of the synthetic fabrics and fabrics of the natural fibers.
*Coefficient of absorption of textile materials.
Parents' attitudes and practices in relation to their children.
Case studies of children and adults.
Principles of guidance based on situational analysis.
Studies of factors affecting the expenditures for family living.

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* The investigations starred are being supported in part by funds from the Agricultural Experiment Station.

The School 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 School of Veterinary Medicine.

The College is authorized to require each nonresident of Kansas filing an application for selection as a student in the School 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 School of Arts and Sciences. 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.

Due to war-time conditions an accelerated curriculum, permitting a student to get the degree D.V.M. in three years, is offered in the School of Veterinary Medicine to those students who wish to select this curriculum and have the necessary qualifications. Students wishing to avail themselves of this offer must consult the Dean of the School of Veterinary Medicine during their freshman year.

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. 126	2(2-0)	Path. Bact. I, Bact. 111	4(2-6)
Livestock Judging, An. Husb. 127	1(0-3)	Infantry IV, Mil. Sc. 104	1(1-2)
Gen. Org. Chemistry, Chem. 122	5(3-6)	Phys. Educ. M, Phys. Ed. 103	R(0-2)
Medical Botany, Bot. 126	2(1-3)		
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. 104	1(0-3)	Dairy Inspec. for Veterinary Students, 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. 181	5(5-0)
Dis. of Small Animals, Surg. 186	2(2-0)	Obst. and Breed. Dis., Surg. 130	5(5-0)
Surgical Exercises, Surg. 112	1(0-3)	Poultry Diseases, Bact. 217	2(2-0)
Meat Hygiene, Path. 217	3(3-0)	Med. Econ. and Law, Surg. 191	2(2-0)
Pathology IV, Path. 214	3(2-3)	Clinics IV, Surg. 147	4(0-12)
Clinics III, Surg. 144	4(0-12)	Clinical Path. II, Path. 226	R(0-12)
Clinical Path. I, Path. 225	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
Assistant Professor 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.

COURSES IN ANATOMY AND PHYSIOLOGY

FOR UNDERGRADUATE CREDIT

131. Anatomy and Physiology. 3(2-3); I. Adapted to students majoring in Animal Husbandry. Link.

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* 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, respeetively.

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.

Pathology

Professor Roderick
Professor Kitselman*
Associate Professor Farley
Assistant Professor Thompson
Assistant Professor Whitlock
Assistant Professor Wagers‡
Instructor McMahan†
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.

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* On military leave.
† Temporary.
‡ On military leave, June 1, 1942—.

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. 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.
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.
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.
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. Thompson, McMahan.
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, Kimball, Thompson.
Pathological technic; collecting, fixing, hardening, embedding in celloidin and paraffin, also freezing and sectioning of tissues; methods of preserving gross specimens; practice in postmortem 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.

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 antihog-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.

Surgery and Medicine

Professor Frick
Professor Frank
Professor Dykstra
Instructor Moore
Instructor Sippel

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 antisepsis, 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. Moore.

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. Sippel.

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, Moore.

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

H. J. C. Umberger, *Dean and Director*

Extension Publicity and Information

Extension Editor Longsdorf, Program Director, in Charge
Extension Editor Scheel
Assistant Extension Editor Treaster
Assistant Extension Editor Botz

The Division of College Extension offers the benefits of the College to Kansas farm people. It is active in every county. 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 all.

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. 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.

Extension Schools

In Agriculture and Home Economics

Professor WILLIAMS in Charge

Professor LUMB, Veterinary Medicine
Professor KELLY, Entomology
Assoc. Prof. AMSTEIN, Horticulture
Assoc. Prof. ELLING, Animal Husbandry
Assoc. Prof. LINN, Dairy Husbandry
Assoc. Prof. ———— Dairy Husbandry
Assoc. Prof. WILLOUGHBY, Agronomy
Assoc. Prof. COMPTON, Agronomy
Assoc. Agronomist REITZ
Asst. Prof. MOXLEY, Animal Husbandry
Asst. Prof. SEATON, Poultry Husbandry
Asst. Prof. HALBROOK, Poultry Husbandry
Asst. Prof. CLEAVINGER, Agronomy
Asst. Prof. GRIFFITH, Agricultural Economics
Asst. Prof. MATHER, Agricultural Economics
Asst. Prof. COOLIDGE, Agricultural Economics
Asst. Prof. JACCARD, Agricultural Economics
Asst. Prof. SCHRUBEN, Agricultural Economics
Asst. Prof. COPENHAFER,* Landscape Gardening
Instructor BURTON, Landscape Gardening
Instructor BURSON, Agricultural Economics
Instructor SHOEMAKER, Agricultural Economics
Instructor BROWN, Agricultural Economics
Instructor JOHNSON, Forestry
Instructor MILLER, Plant Pathology
Instructor BISKIE, Agricultural Economics

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-day 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 the 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, agricultural planning, and farm forestry. This phase of the work of the Extension specialist is 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 home 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 state, 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 Prof. Turner, Field Agent
Asst. Prof. Blecha, District Agent
Asst. Prof. Baird, District Agent
Asst. Prof. Teagarden, District Agent
Asst. Prof. Robinson, District Supervisor
Asst. Prof. Glover, District Supervisor
Asst. Prof. Neff, District Supervisor

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 organiza-

tion and management, and production problems, such as soil management, erosion control, cropping systems, crop pests, adapted crop varieties, and livestock management. On the other hand, it includes coöperative financing, cooperative marketing of farm products, and agricultural adjustment procedure.

The first county agricultural 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, Norris-Doxey, and Bankhead-Jones acts.

On October 1, 1942, there were 103 county agricultural agents and 39 assistant county agricultural agents. Ten of the assistant county agricultural agents were coöperating with soil conservation associations, nineteen served as testers for dairy herd improvement associations, and ten were being trained in various counties under the leadership of county agricultural agents.

Home Economics

Professor Smurthwaite, State Home Demonstration Leader, in Charge

DISTRICT AGENTS

Asst. Prof. Batchelor†
Asst. Prof. Meyer
Asst. Prof. Winter‡
Asst. Prof. Anderson

SPECIALISTS IN HOME ECONOMICS

Asst. Prof. Wiggins, Clothing and Textiles
Asst. Prof. Allen, Foods and Nutrition
Asst. Prof. Fletcher, Foods and Nutrition
Asst. Prof. Myers, Home Management
Asst. Prof. Farris, Home Furnishings
Asst. Prof. Hilyard, Clothing and Textiles
Instructor Martin, Home Health and Sanitation
Asst. Prof. Ellithorpe, Home Management
Instructor Compton, Recreation
Asst. in Home Economics Batchelor‡

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, 1942, 46 counties had home demonstration agents, and ten assistant home demonstration agents were being trained in the various counties under the leadership of county home demonstration agents.

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† On leave.
‡ Temporary.

Boys' and Girls' 4-H Club Work

Professor Coe, State Club Leader
Asst. Prof. Border, Junior Extension
Asst. Prof. Johnson, Junior Extension
Asst. Prof. 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 valuable 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 on 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 statewide roundups, camps, and conferences are arranged. On October 1, 1942, eight county club agents were employed.

Engineering Extension

Professor Ward, Architecture, in Charge
Instructor Warner, Architecture
Instructor White, Agricultural Engineering.
Instructor Stover,† Agricultural Engineering
Instructor Ferguson, Agricultural Engineering
Instructor Smith, 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- and two-day schools.

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† On leave.

Home Study

Professor GEMMELL, in Charge
Professor FLEENOR, Education
Professor PATTISON, Mechanical Engineering
Assoc. Prof. BILLINGS, History and Government
Assoc. Prof. SCHALL, English
Asst. Prof. 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 that 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 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 is 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 who are 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. Aggressive students who do not wish to have their progress retarded by vacations 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, making 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 sug-

gestions 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 accompaning 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.

The department spares no effort 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.

EXAMINATIONS

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, or less, semester hours of credit, with $3 additional for each added hour of work; for nonresidents of the state, there is an initial enrollment fee of $15 for a course of three, or less, semester hours of credit 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, there is 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 that 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 that 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	½
PCA	2.	Elementary Agriculture II	20	½
		DRAWING		
PCD	3.	Shop Mechanical Drawing I	20	½
PCD	4.	Shop Mechanical Drawing II	20	½
		ENGLISH		
PCE	1C.	Grammar and Composition (first year)	20	½
PCE	2L.	Literature (first year)	20	½
PCE	3C.	Composition (second year)	20	½
PCE	4L.	Literature (second year)	20	½
PCE	5C.	Composition (third year)	20	½
PCE	6L.	Literature (third year)	20	½

		HISTORY AND CIVICS	*Number of assignments*	*Unit H. S. credit*
PCH	1.	Ancient History I	20	½
PCH	2.	Ancient History II	20	½
PCH	3.	Modern History I	20	½
PCH	4.	Modern History II	20	½
PCH	5.	American History I	20	½
PCH	6.	American History II	20	½
PCH	7.	Community Civics	20	½
PCH	8.	Constitution of United States	20	½
PCH	9.	World History I	20	½
PCH	10.	World History II	20	½
		MATHEMATICS		
PCM	1.	Algebra I	20	½
PCM	2.	Algebra II	20	½
PCM	3.	Algebra III	20	½
PCM	4.	Plane Geometry I	20	½
PCM	5.	Plane Geometry II	20	½
PCM	6.	Solid Geometry	20	½
PCM	7.	Bookkeeping	20	½
		SCIENCE		
PCS	1.	Physical Geography	20	½
PCS	2.	Botany	20	½
PCS	4.	Physiology	20	½
PCS	5.	General Science	20	½
PCC	1.	Commercial Geography	20	½
PCC	2.	Elementary Economics	20	½
PCC	3.	Elementary Sociology	20	½
PCC	4.	Elementary Psychology	20	½

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 Graduate School.

Educ. 249. Problems in Extension Education. Credit to be arranged. Prerequisite: Econ. 151 or CS 3, and Educ. 184 or CP 8. 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

SCHOOL OF AGRICULTURE

Course No.		AGRONOMY	*Assignments*	*Semester hours of credit*
CA	3.	Farm Crops	16	2
		ANIMAL HUSBANDRY		
CL	2.	History of Breeds	16	2
		HORTICULTURE		
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
		POULTRY HUSBANDRY		
CPP	1.	Farm Poultry Production	8	1

SCHOOL OF ENGINEERING

Course No.		*Assignments*	*Semester hours of credit*
	MACHINE DESIGN		
CE 2.	Engineering Drawing	16	2
CE 6.	Machine Drawing I	16	2
CE 4.	Mechanism	24	3
CE 11.	Descriptive Geometry	16	2
	CIVIL ENGINEERING		
CE 1.	Highway Engineering I	16	2
	SHOP PRACTICE		
CE 7.	Metals and Alloys	16	2
	AGRICULTURAL ENGINEERING		
CE 3.	Gas Engines and Tractors	16	2
	MECHANICAL ENGINEERING		
CE 9.	Steam Turbines	16	2

SCHOOL OF ARTS AND SCIENCES

	ECONOMICS AND SOCIOLOGY		
CEc 1.	Economics	24	3
CS 2.	Rural Sociology	24	3
CS 3.	Sociology	24	3
CS 4.	Community Leadership	16	2
	EDUCATION (PROFESSIONAL)		
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
CP 19.	Essentials of Reading	24	3
	ENGLISH		
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
	JOURNALISM		
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

Degrees Conferred

In the Year 1942

Seventy-ninth Annual Commencement

May 25, 1942

DEGREES CONFERRED

Division of Graduate Study

MASTER OF SCIENCE

*Montee Robert Baker, B. S., University of Nebraska, 1940; Lincoln, Neb.
Esther Flagg Barnes, B. A., State College of Washington, 1940; Burbank, Cal.
Harle Virgle Barrett, B. S., Oklahoma Agricultural and Mechanical College, 1940; Topeka.
Stella Lucille Beil, B. S., Kansas State College of Agriculture and Applied Science, 1939; Bavaria.
James Percy Chapman, B. S., Kansas State College of Agriculture and Applied Science, 1932; Manhattan.
*Charles Burton Crook, B. S., Kansas State College of Agriculture and Applied Science, 1938; Ogden.
*Merritt Ira Darrow, B. S., Michigan State College of Agriculture and Applied Science, 1940; Leslie, Mich.
*Thomas Richard Edgerton, B. S., Kansas State College of Agriculture and Applied Science, 1939; Oak Park, Ill.
Frank David Faulkner, B. S., Kansas State Teachers College, Emporia, 1940; Severy.
Charles Robison Friede, A. B., Hope College, 1940; Washington, D. C.
*Ernal Powell Galbraith, B. S., Utah State Agricultural College, 1940; Blanding, Utah.
*George Vernon Goodding, B. S., University of Nebraska, 1940; Lincoln, Neb.
John Alexander Johnson, Jr., B. S., North Dakota Agricultural College, 1940; Manhattan.
*John Hall Lonnquist, B. S., University of Nebraska, 1940; Lincoln, Neb.
Darrel Seymour Metcalfe, B. S., University of Wisconsin, 1941; Arkansaw, Wis.
Elsie Lee Miller, B. S., Kansas State College of Agriculture and Applied Science, 1934; Manhattan.
Homer Samuel Myers, B. S., Kansas State College of Agriculture and Applied Science, 1942; Salina.
Eugene Franklin Oakberg, B. S., Monmouth College, 1940; New Windsor, Ill.
Raymond August Olson, B. S., Bethany College, 1940; Lindsborg.
Merton Louis Otto, B. S., Kansas State College of Agriculture and Applied Science, 1921; Manhattan.
*John Kenneth Patterson, B. S., University of Nebraska, 1940; North Platte, Neb.
Frank Edgar Rickel, B. S., Kansas State College of Agriculture and Applied Science, 1941; Manhattan.
Stephen James Roberts, D. V. M., Cornell University, 1938; Manhattan.
Sister Mary Donata Bissette, B. S., Marymount College, 1939; Concordia.
Andrea Jean Surratt, B. S., Monmouth College, 1940; Springfield, Ill.
Karolyn Margaret Wagner, B. A., State College of Washington, 1936; Seattle, Wash.
*Thomas Aloysius Weldon, B. S., Purdue University, 1940; Aurora, Ind.
James Kelly Woods, B. S., Kansas State College of Agriculture and Applied Science, 1939; Burden.

DOCTOR OF PHILOSOPHY

Albert Wendell Grundmann, B. A., 1937; M. A., 1939, University of Utah, Salt Lake City, Utah.
Edgar Martin, B. S., Kansas State College of Agriculture and Applied Science, 1919; M. S., University of Wisconsin, 1925; Manhattan.

Honorary Degrees

MASTER OF FAMILY LIFE

Mary Alice Vail Waugh, B. S., Kansas State College of Agriculture and Applied Science, 1892; Homemaker, Amherst, Mass.

DOCTOR OF SCIENCE

Edmund Ray Secrest, B. S., Kansas State College of Agriculture and Applied Science, 1902; Director, Ohio Agricultural Experiment Station, Wooster.

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* In absentia.

Division of Agriculture

BACHELOR OF SCIENCE IN AGRICULTURE

Howard Rowles Anderson, Partridge
Robert E. Arbuthnot, Morrowville
Ralph Edward Barker, Douglass
John Earls Barrick, Manhattan
Donald Earl Bertholf, Spivey
Floyd Harris Bjurstrom, Alma, Neb.
Dwight Duane Blaesi, Abilene
Darrell Ray Bozarth, Liberal
Gilbert Branda, Wilson
Acton Richard Brown, Sylvan Grove
Arlo Allen Brown, Almena
Dale Edward Brown, Manhattan
James Donald Bulger, Cherryvale
*Howard Leon Carnahan, Parsons
Dean Robert Cassity, Clifton
James Francis Cavanaugh, Dodge City
*Lloyd Waugh Compton, Effingham
*Riley Tieman Crow, Independence, Mo.
Carl Bertil Danielson, Lindsborg
Max Lawrence Dawdy, Washington
Leonard Austin Deets, South Haven
Calvin Arthur Doile, Emporia
*Vernon Eugene Eberhart, Turon
*Theodore Max Ehlert, Neodesha
Richard Lewis Evans, Jr., Hutchinson
Jack Byron Fields, Manhattan
Raymond Elmer Fincham, Waterville
James Robert Foster, Jr., Effingham
Dave John Goertz, Hillsboro
Meyer Ben Goldfarb, Newark, N. J.
Norman Jay Griffith, Clayton
William Donald Guy, Liberty
Raymond Daniel Harrington, Syracuse
Ernest Owen Harris, Havensville
Sherman Nelson Helm, Abilene
Clesson Leigh Hines, Kanorado
Oliver Conrad Jackson, Jr., Elsmore
Scott Winfield Kelsey, Topeka
*Mary Evelyn Kennedy, Lawrence
Murray Luther Kinman, Manhattan
Carlton Miller Kinzler, Sturgis, Mich.
Orville Kenneth Kirkpartrick, Bucklin
*Harvey Ruben Kopper, Ingalls
Theodore William Levin, Agra
*Robert David McClure, Highland Park, Ill.
Julius Henry Mai, Tribune
Kenneth Edwin Makalous, Cuba
Frank Lucius Marcy, Milford
Harold Raymond Melia, Bucklin
Richard G. Merryfield, Minneapolis
Joseph William Mudge, Burlington
George Alfred Mullen, Jr., McCune
Warren B. Nelson, Manhattan
Oscar Woodrow Norby, Pratt
Harold Elof Peterson, Bridgeport
Roger Neil Phillips, Manhattan
Walter Haucke Porter, Council Grove
*Eugene Curtis Roe, Glendale, Ariz.
Joseph Samuel Rogers, Horton
Raymond Ruben Rokey, Sabetha
*Raymond Lee Sigg, Soldier
Floyd William Smith, Shawnee
Robert Charles Stephens, Randolph
Robert Earl Wagner, Garden City
Dean Keats Weckman, Holton
Richard Gale Wellman, Sterling
Francis Russel Wempe, Frankfort
*Cecil Monroe Wenkheimer, Hutchinson
William Joseph Werts, Smith Center
George Carl Wreath, Manhattan

BACHELOR OF SCIENCE IN MILLING INDUSTRY

James Franklin Aiken, Moran
*David Franklin Crews, Manhattan
Donald Kenneth Dubois, Burlingame
Harry Harold Dunlay, Liberal
William Otho Edmonds, Dallas, Tex.
Edward Himes Elling, Manhattan
*George Howard Fittell, Beloit
Donald Edwin Fleming, Ottawa
William Gibbens Kelly, Hutchinson
Elward Earl Kunze, Garrison
Edward Walter Morrison, Jr., Denton, Tex.
Homer Samuel Myers, Salina
Ethan Potter, Peabody
John William Prager, Irvington, N. J.
Norbert Laverne Raemer, Herkimer
William Joseph Ratliff, Manhattan
Ernest Louis Semersky, Toledo, Ohio
Frank Wellington Wichser, Beardstown, Ill.
Paul Halbert Wilkins, Walnut

Division of Engineering and Architecture

BACHELOR OF SCIENCE IN AGRICULTURAL ENGINEERING

*Donald Ernest Cleland, Eskridge
*John Springer Eaton, Hutchinson
Walter Richard Meyer, Tombstone, Ariz.
Glenn Orville Schwab, Gridley

BACHELOR OF SCIENCE IN ARCHITECTURE

Carol Byron Lewis, Salina
William David Ross, Coffeyville

BACHELOR OF SCIENCE IN ARCHITECTURAL ENGINEERING

Loren Dean Eshelman, Abilene
Mont John Green, Manhattan
LeRoy Lyman Hughes, Topeka
Harold Eugene Keltner, Hoisington
*Ralph Eldon Sechler, Hutchinson
*Harold Wertz Underhill, Jr., Wichita

BACHELOR OF SCIENCE IN CHEMICAL ENGINEERING

*Warren Harlan Acker, Junction City
*Carl Ellsworth Alleman, Kansas City
Oscar Benjamin Brumback, El Dorado
Robert Edward Deatz, Hutchinson
Edward Luther Gustafson, Jr., Lindsborg
Frank Albert Hetzke, Moundridge
Murlin Thomas Howerton, Newton
*William Thomas Keogh, New York, N. Y.
Hugo Adolph Koester, Herington
William Edward Lacy, Kansas City
Rector Philip Louthan, Simpson
Harold Aley Magnus, Arkansas City
Benjamin Eric Olson, Manhattan
*Wallace Edward James Rankin, Manhattan
*John B. Rush, Haviland
Robert DeForest Scott, Manhattan
Monroe Carl Suderman, Hillsboro
Edmond Lee Weber, Kansas City

* In absentia.

BACHELOR OF SCIENCE IN CIVIL ENGINEERING

Philip Frank Bennett, Eskridge
Joseph Loren Blattner, Rozel
Paul Gilbert, Jr., Pawnee Rock
Robert Albert Gilles, Kansas City
Neil David Gillmore, Hutchinson
Harold Francis Leckron, Abilene
John Gerald McEntyre, Topeka
Burt Randolph MacKirdy, Manhattan
Audwin Joseph Martin, Norwich
Arthur Fred Meeks, Kansas City
*Clarence Charles Compton, Atchison
Ray Charles Dunlay, Jr., Parsons
Norman Lynn Noble, Johnson
Dennis Gordon O'Neill, Ransom
*Vinson Leroy Rambo, Wichita
*John Parke Ransom, Homewood
Victor Dale Stockebrand, Yates Center
William L. Sutherland, Robinson
Robert Crowley Tedrow, Kansas City, Mo.
James Harley Wilkes, Ulysses

BACHELOR OF SCIENCE IN ELECTRICAL ENGINEERING

Robert Warren Annis, Gypsum City
William Perry Bell, Silver Lake
Clarence Bernard Brown, Kansas City
Robert Myron Brown, Natoma
Joseph Bruington, Jr., Kansas City
Roy Dell Call, Manhattan
Lyle Murphy Carson, Dennis
*Thomas Riley Church, Minneola
Robert Donald Dahlin, Kansas City
William Harrison Dunham, Wichita
*Howard Clayton Eberline, Manhattan
George J. Fetters, Topeka
*William Roy Ford, Frankfort
Eugene Hicks Hall, Amoret, Mo.
Kenneth Blaine Hamlin, Manhattan
Don Franklin Holshouser, Dwight
John Kenneth Lewis, Arlington, Va.
*Percy Herbert McKinley, Kansas City
*Donald Edward Miltner, Wichita
*Willis E. Moore, Goff
Oliver Virgil Riley, Stafford
Francis Joseph Ryan, Waterbury, Conn.
Jack Winfred Warner, Clay Center

BACHELOR OF SCIENCE IN INDUSTRIAL ARTS

Max Morris Burger, Randall
Alge Peterson, Jr., Overland Park

BACHELOR OF SCIENCE IN MECHANICAL ENGINEERING

Alvin Wayne Acker, Severance
*Walter Alfred Adams, Leavenworth
Charles Cornelius Anderson, Emporia
Benson Floyd Bachus, Abbyville
Arthur Calvin Barney, South Haven
James Marston Bowyer, Jr., El Dorado
Harold Henderson Bozarth, Eskridge
*William Graham Chester, Kansas City, Mo.
Kenneth Willard Colwell, Emporia
Max Raymond Colwell, Centralia
Gerald N. Doughty, Moran
*Jack Edwin Downs, Wichita
Richard Eugene Dreyer, Newton
Everett James Eastman, Independence
*Floyd Greer Foley, Norton
*Robert Newton Gist, Washington, D. C.
William August Hagen, Manhattan
Gorman Earl Hunt, Leavenworth
Thomas Page Jackson, Kansas City
Lorraine Lawrence Johnson, Concordia
Richard John Kilian, Chapman
Edward Earl Kirkham, Topeka
*Thomas Fredrick Kropf, Wamego
*Leo Raymond Leggitt, Russell
Ernest Eber Lewis, Mansfield, Pa.
*Barney Lee Limes, La Harpe
John Donnely McClurkin, Clay Center
Arthur Douglas McGovern, Schenectady, N. Y.
Paul Leonard Mealy, Summerfield
Thomas Francis Morrey, Coffeyville
Bruce Henderson Mosbacher, Wichita
Phillip Samuel Myers, Formoso
Raymond Lawrence Nelson, Wichita
Harold Sylvester Novak, Ottawa
*John Patrick Nulty, Jewell
Richard Henry Ogle, Scotia, N. Y.
*Duane Marshall Patterson, Kansas City
John Russell Piper, Emporia
Boyd LaMar Rostine, Hutchinson
LeRoy Francis Sanderson, Hamilton
Henry Augustine Sirridge, Topeka
Clyde Earl Stanley, Kansas City
John Milton St. John, Wichita
James Harold Eugene Summers, Pittsburg
*Hobart Tipton, Paola
Cornelius John Vanderwilt, Solomon
James Harvey Walker, Emporia
Francis Everett White, Emporia
Wallace Wayne Wittenberger, Marysville

Division of General Science

BACHELOR OF SCIENCE

Leonard Herman Akes, Dennis
Lueva Ellinor Alsop, Wamego
Jean Elizabeth Bishop, Whitewater
Benjamin Raleigh Bryant, Garnett
Margaret Marion Burton, Manhattan
Robert Alfred Carpenter, Oswego
Marilynn Grace Carr, Kansas City, Mo.
Doris Lillian Chapin, Manhattan
Ruth Mary Cole, Winfield
Betty Jeanne Daniel, Ellinwood
Catherine Eileen Detrich, Chapman
James John Dunlop, Detroit
Lyle Harris Edelblute, Manhattan
Oscar S. Fent, Newton
Eric Beaumont Percivel Fowler, Milbank, S. Dak.
Rosalie Cantrell Frick, Manhattan
Elizabeth Anne Glidden, Osborne
Charles Jerome Glotzbach, Paxico
Janet Goodjohn, Leavenworth
Ardyce Louise Hanson, Garrison
Ferne Corinne Hill, Salina
Vaughan Henry Howard, Mt. Vernon, N. Y.
June Delore Hull, Dodge City
Wilbur Fred Jones, Wichita
Philip Gibbs Kaul, Holton
Raymond Orville Keltner, Hoisington
Edwin Albert Kline, Mentor

* In absentia.

Virginia Holbert Leidler, Manhattan
*William Richard McGrew, Coffeyville
Doris Marjorie McGugin, Kansas City, Mo.
Dorothy Margaret McGugin, Kansas City, Mo.
Minerva Shelton Marlow, Manhattan
Lois Lorraine Morgan, Manhattan
Jean Murphy, Abilene
Channing Wayne Murray, Manhattan
Robert Kirkland Nabours, Manhattan
Richard William Nordeen, Manhattan
*Jewel Martin Ogden, Frederick
Helen Lenore Reder, Blue Rapids
Ellen King Robertson, Wichita
Eugene Elroy Ruff, Russell
Clarence Wilbur Schmitz, Alma
Evelyn Margaret Seeberger, Hanover
Marjorie Jean Spurrier, Kingman
Norman Camp Stiles, Topeka
*Elver Henry Swart, Seneca
*Dorothy Jean Swingle, Manhattan
Dorothy Jean Triplett, Iola
LaVerne Ida Welk, Pratt
Irene White, Kingsdown
Milton Maurice Woodrick, Scott City
George William Yost, Vassar

BACHELOR OF SCIENCE IN BUSINESS ADMINISTRATION

Sylvia Louise Bergling, Ludell
Marian Frances Boomer, Kansas City
Donald Wayne Brown, Paradise
Wayne Edward Brown, Manhattan
Joseph Bruington, Jr., Kansas City
Barbara Jean Campbell, Lakin
*Lawrence Roy Davidson, Manhattan
Virginia Rosamond Delano, Hutchinson
*Marvle Dale Dietz, Esbon
Jane Ann Douglass, Wichita
Harry Leslie Eddy, Topeka
Lucille Elizabeth Elmore, McCracken
Raymond Keith Eshelman, Sedgwick
Eugene Broadie Foncannon, Ashland
*Gerald Bowen Gibson, Kensington
Harvey Harlan Hefner, Gove
Robert Henry Hellener, Wichita
Martha Ellen Hemphill, Chanute
Mary Jean Hickle, Wichita
Jack Lewis Horacek, Topeka
Warren Thomas Hornsby, Topeka
Susan Merilla Johnson, Potwin
Jacob Roderick Jones, Brodhead, Wis.
*Roger Dean Lehman, Protection
Marjory Anne Lindgren, Dwight
Mary Margaret McNeal McCollister, Edna
*Bernard Carlton Nash, Lakin
Arnold Linn Peterson, McPherson
Robert Richard Read, Jr., Parsons
Harold Jay Santner, Gaylord
Reed Clement Sparks, Wichita
Charles Homer Williams, Marysville
Lucille Nell Wolford, Eskridge

BACHELOR OF SCIENCE IN INDUSTRIAL CHEMISTRY

Benjamin Stockwell Baldwin, Anthony
Lawrence Vincent Haff, Coffeyville
Henry S. C. Lau, Arkansas City
Donald Dale McCollister, Pittsburg
William Roger West, Manhattan

BACHELOR OF SCIENCE IN INDUSTRIAL JOURNALISM

Geralee Ames, Arkansas City
Gladys Ema Lou Bireline, Lewis
Mary Katherine Cantrell, Oil Hill
Alma Deane Fuller, Courtland
William Bandt Hall, Phillipsburg
Dorothy Mariann Harper, Topeka
Maccie Field Lattimore, Topeka
Betty Jean Merrill, Ellis
Mary Belle Morris, Chapman
Frederick Mac Parris, Norton
Maxine Lesta Pickering, Meade
Robert Bordner Rathbone, Manhattan
Marjorie Jane Rogers, Manhattan
Sylvia Frances Roper, Manhattan
Jane Seaman, Salina
Dean Waldron Snow, Neodesha
Margaret Jeane Walker, Manhattan
Glenn Lawrence Williams, Manhattan

BACHELOR OF SCIENCE IN MUSIC EDUCATION

Mary Kathleen Ahearn, Manhattan
Elizabeth Louise Brewer, Minneapolis
Clara Marie Darby, Morrowville
Geraldine Gundy, Manhattan
*Norris J. McGaw, Topeka
Arlene Venita Mayer, Alta Vista
Frances Maxine Schmidt, Lorraine
Jean Frances Wright, Manhattan

BACHELOR OF SCIENCE IN PHYSICAL EDUCATION

Donald Dwight Adee, Manhattan
Bernice Grace Bale, Clay Center
Marie Hunt Baylies, Fort Knox, Ky.
Marcene Irene Brose, Clay Center
*Leo Edward Cross, Burrton
*Clarence Richard Curtis, Lenora
Hiram Benjamin Dickson, Admire
Perry Chauncey Emmons, Lenora
Barbara Ruth Enlow, Silver Spring, Md.
Bettie Fogelstrom, Junction City
Patricia Potter, Peabody
Frederick Robert Snyder, Junction City
Veryle Edwin Snyder, Mayetta

BACHELOR OF MUSIC

Geraldine Gundy, Manhattan
Richard McClanahan Keith, Manhattan
*Elmer Keith Wallingford, Manhattan

* In absentia.

Division of Home Economics

BACHELOR OF SCIENCE IN HOME ECONOMICS

Martha Louise Alexander, Hutchinson
Mary Ann Bair, Wamego
Alma Amalie Lydia Becker, Hartford
Dorothy Grace Beezley, Girard
Marjorie Jane Benson, Sabetha
Frances Irene Bishop, Emporia
Gladys Lucile Boone, Toronto
Esther May Boys, Linwood
Esther Brown, Partridge
Sara Davidson Brown, Manhattan
Cornelia Lee Burtis, Hymer
Freda Lenore Butcher, Coldwater
Maude Elaine Carson, Clay Center
Cora Margaret Chapman, Scotia, N. Y.
Ruth Ellen Clarke, Plainville
Lorraine Florence Clements, Havensville
Marjorie Jean Courter, Severy
Florine Elizabeth Craig, Kansas City
Edna Marguerite Dailey, Manhattan
Jane Elizabeth Daily, Ashland
Daisy Davis, Beloit
Martha Lorraine DeMand, Lincolnville
Ethel Dorothy Denio, Woodston
Glennys Ethel Doll, McPherson
Joyce Lenore Dryden, Stockton
*Olivia Alfleda Dunham, Jewell
Anbeth Lee Enns, Newton
Winifred Jane Enns, Inman
Dorothy Rachel Erickson, Manhattan
*Madalene Graves Estey, Clifton
Jean Elaine Falkenrich, Manhattan
Mary Pauline Feder, El Dorado
Helen Virginia Ferrier, Altamont
Helen Mae Frasier, Sharon Springs
Nancy Katharine Gentry, Salina
Gloria Ann Gish, El Dorado
Edythe Elaine Goodwin, Gypsum
Virginia Alberta Goodwin, Hiawatha
Blanche Marie Greene, Manhattan
Mary Elizabeth Griswold, Manhattan
Alberta Groves, Midian
Wilma Maye Hannah, Beloit
Catherine Aretta Hardin, Rosendale, Mo.
Jane Haymaker, Manhattan
Clara Elizabeth Hellmer, Olpe
Etta May Hodgson, Harveyville
Josephine Ann Hoover, Greenleaf
*Marcella Arlidene Horner, Haviland
Eula Merna Hudson, Wilsey
Louise Grace Hunt, Blue Rapids
Betty Elaine Hutchinson, Goddard
Jeanne Frances James, Manhattan
Alice Marie Johnson, Olsburg
Dorothy Ruth Johnson, Manhattan
Mary Lucile Johnson, Osage City
Marjorie Patricia Jones, Omaha, Neb.
Gladys June Jorden, Goff
Dorris Mae Kastner, Manhattan
Virginia Alta Keas, Chanute
Frances Eugenia Keller, Clyde
*Irene Pearl Kenneck, Wichita
Margaret Belle Kerr, Hackensack, N. J.
Marjorie Vivien Kimsey, Barnard
Helen Eunita King, Hutchinson
Caroline Kiser, Clayton, N. Mex.
Doris Charlotte Klaumann, Belleville
Laura Lee Kubin, McPherson
Floreine Edith Langenegger, Burns
Marjorie Ruth Lee, Manhattan
Helen May Loofbourrow, Scandia
Arlene Minnie Luthi, Wakefield
Hazel Juanita McAninch, Stockdale
Frieda Lenore McNickle, Zenith
*Helen Marjorie McVey, Hill City
Lois Jeanette Mace, Willis
Alice Magdalene Magers, Parker
Mildred Marie Major, Wilson
Ethel Marie Melia, Ford
Eevelyn Elnora Mitchell, Topeka
Beatrice Marie Montgomery, Hazelton
Dorothy Mae Montgomery, Sabetha
Imogene Gale Myers, Sharon Springs
*Erma Mildred Neelly, Hopewell
Shirley Frances Newacheck, El Dorado
Mary Evelyn Nielson, Atchison
Zoe Elizabeth Oliver, Junction City
Anna Bernice Olson, Manhattan
Peggy Louise Paddock, Manhattan
*Marie Forceman Pallesen, Denver, Colo.
Martha Ann Pattison, Manhattan
Doris Elaine Paustian, Manhattan
Martha Marie Payne, Manhattan
Helen Catherine Perkins, Kansas City
Irene Grace Peterschmidt, El Dorado
Shirley Alice Pohlenz, Freeport
Irma Lucille Popp, Marion
Alma Pressgrove Proudfit, Manhattan
Ruth Arline Ramsey, Nortonville
Emma Belle Randall, Ashland
*Charlotte Cockerill Reed, Frankfort
Helen Florence Reiman, Byers
Mildred Joyce Rice, Alma
*Virginia Elizabeth Roller, Circleville
Orel Dale Rundle, Axtell
Margaret Elizabeth Salser, Wichita
Lorraine Sawyer, Kensington
Annabeth Marguerette Schlotzhauer, Bucyrus
Elizabeth Bell Sheets, Osborne
Virginia G. Siebert, Pretty Prairie
Marjorie Elizabeth Simmons, Barnard
Irene Eloise Sloan, Stratford, Tex.
Blanche LaVaughn Stacy, Byers
Lenora Jeanne Stephenson, Larned
Rosalie Syres, Hutchinson
Lenora Jean Taddiken, Morganville
Joye Jean Teeple, Manhattan
Joyce Jacqueline Terrass, Alma
Wilma May Thompson, Almena
Rosemarie Van Diest, Prairie View
Anna Dean Wagaman, Manhattan
Rachael Phebe Wagaman, Emporia
Helen Katherine Weber, Liberty
Nellie Lou Willis, Manhattan
Louise Joyce Willmeth, Troy
Shirley Maycele Wing, Columbus
Helen Iona Woodward, Topeka
Kittie Marie Woodman, Independence
Dorothy Mae Zerbe, Salina

BACHELOR OF SCIENCE IN HOME ECONOMICS AND NURSING

Esther Ruth Cassity, Clifton
Edith Marie Crist, Brewster
Mary Agnes Doverspike, Cottonwood Falls
Martha Barbara Roots, Manhattan
Lola Christine Whitney, Phillipsburg
*Annie Gertrude Lancaster Wichser, Hutchinson

* In absentia.

Division of Veterinary Medicine

DOCTOR OF VETERINARY MEDICINE

Francis George Ahrendes, Miltonvale
Wayne Leroy Appleton, Manhattan
Maurice Ball, Newport, R. I.
Waldemar Theodore Berner, Santa Rosa, Cal.
Ralph Willard Blazier, Junction City
James Eugene Corke Bright, Arlington, N. J.
Allen Lee Brite, Manhattan
Ralph Arthur Bruce, Prescott
John Dale Cady, Arlington, Neb.
Hugh Port Callaway, Grand Pass, Mo.
Arthur Adam Case, Manhattan
Donald Keith Christian, Manhattan
George Teddy Dalziel, San Mateo, Cal.
William Elsworth Daseler, Oroville, Cal.
George Edwards Dillenbeck, Poultney, Vt.
Keith Warnell Downey, Appleton, Wis.
Leslie Ruel Edrington, Manhattan
John Edward Fieser, Norwich
Jack Elbert Fox, Kansas City
John Pershing Garrett, Carterville, Mo.
William Samuelson Gaston, Axtell
Richard John Gorman, East Hartford, Conn.
Kenneth Max Gould, Broken Bow, Neb.
Freeman Milton Hall, Kansas City
Robert Emmett Hauke, Newton
George Pendleton Hickman, Venice, Cal.
Quentin Ellsworth Jeppesen, Garden City, Minn.
William Pitner Johnson, Manhattan
Arthur Durward Kirk, Scott City
James William Knox, Overland Park
Robert Byron Lank, Shreveport, La.
Don Malcolm Liebengood, Kentland, Ind.
Leland Leroy Linn, Clyde
Clarence Alvin Love, Coffeyville
Edward James Peter McDonald, Peabody, Mass.
Roderick Elvyn MacRae, Evanston, Ill.
Edward Jay Mahler, Salinas, Cal.
*Orval Henry Meinecke, Marysville
Robert Clark Mossman, Manhattan
Conrad Lundsgard Nelson, Oklahoma City, Okla.
Anthony Joseph Prasnikar, Mulberry
Frank DeVere Ratliff, Portis
Jay Reynolds, Parsons
Ben Shambaugh, Jr., Ottawa
Richard Allan Shea, Kansas City
Ernest Allen Siegel, San Francisco, Cal.
Floyd Owen Steele, Manhattan
Carl Joseph Voelker, Manhattan
Frederic Barber Walker, Jr., Santee, Cal.
Bruce Cornell Watson, Shawnee
Bernard Morris Weiner, Irvington, N. J.
William Walter Wempe, Frankfort
William Roger West, Manhattan

* In absentia.

COMMISSIONS AWARDED

SECOND LIEUTENANT, OFFICERS' RESERVE CORPS

Loren Edward Amerine (CAC)
†Clarence Lafayette Ash (CAC)
Wilbur Eldon Ashton (Inf)
Benjamin Stockwell Baldwin (CWS)
Robert Verle Behrent (CAC)
William Royce Bixler (CAC)
Joseph Loren Blattner (CAC)
Harry Phillips Bouck (AC)
James Marston Bowyer (CAC)
Donald Wayne Brown (AC)
Francis Hoyt Brown (Inf)
Robert Myron Brown (AC)
Benjamin Raleigh Bryant (Inf)
†Charles Floyd Burket (CAC)
John Carl Campbell (CAC)
Lyle Patton Carmony (Inf)
Max Raymond Colwell (CAC)
Harry Hunt Converse (CAC)
Keller Cordon (CAC)
William Paul Deam (Inf)
Robert Matthew Dunlap (AC)
Donald Kent Duwe (CAC)
Dale Hamlin Dyer (Inf)
James Francis Eagan (CAC)
Harry Leslie Eddy (AC)
Perry Chauncey Emmons (Inf)
George J. Fetters (SC)
*Elbridge Gerry Fish (Inf)
William Halpin Fitzsimmons (CAC)
†William Roy Ford (CAC)
James Robert Foster (Inf)
†Paul Louis Furbeck (CAC)
Charles Jerome Glotzbach (Inf)
*Kenneth Herbert Graham (Inf)
Harold John Hamilton (CAC)
John Harvey Hancock (Inf)
Ernest Owen Harris (Inf)
Corby Lee Hart (Inf)
Robert Henry Hellener (Inf)
Robert Lester Higginbottom (CAC)
Thaine Robert High (Inf)
Wilber Glen Hole (SC)
Leonard Ralph Hoover (CAC)
Vaughn Henry Howard (Inf)
Donald Munro Hunt (Inf)
Charles Calvin Hunter (CAC)
Ralph Vincent Jennings (CAC)
Melvin Louis Johnson (SC)
Wilbur Fred Jones (Inf)
Raymond Orville Keltner (CAC)
*William Gregg King (CAC)
Herschel Rex Larkin (Inf)
†Jack Conroy Leonard (Inf)
Hal Arthur Lund (AC)
John Gerald McEntyre (CAC)
Robert Beitzel McIntire (Inf)
Burt Randolph MacKirdy (CAC)
†Robert Drury Manly (Inf)
Audwin Joseph Martin (CAC)
Bob Glenn Miller (CAC)
Marion Andlauer Miller (AC)
Willard Ames Monahan (AC)
Donald George Moss (CAC)
*Donald Lee Munzer (Inf)
Donald Orion Neubauer (CAC)
Benjamin Eric Olson (CAC)
George Norman Olson (CAC)
Aubrey Glen Park (CAC)
Richard Lewis Peters (CAC)
Roger Neil Phillips (Inf)
†Richard John Powell (Inf)
John William Prager (CWS)
John Hartman Rickenbacker (CAC)
Raymond Ruben Rokey (Inf)
Eugene Elroy Ruff (CAC)
Clarence Leroy Ryser (Inf)
LeRoy Francis Sanderson (AC)
Clarence Wilbur Schmitz (Inf)
Clarence William Schulze (Inf)
Glenn Orville Schwab (CAC)
Frederick Robert Snyder (Inf)
Veryle Edwin Snyder (CAC)
Reed Clement Sparks (Inf)
Lawrence Eldon Spear (AC)
Norman Camp Stiles (Inf)
Glen Junior Thomas (Inf)
Max Eugene Timmons (Inf)
Melvin Kenneth Todd (CAC)
Robert Emmett Turkleson (CAC)
William Dick Turner (CAC)
Howard Robert Turtle (AC)
Arlin Bruce Ward (Inf)
†Jack Winfred Warner (CAC)
William Joseph Werts (Inf)
Pierce Uhlman Wheatley (Inf)
Ray Franklin Wilkie (CAC)
†Kenneth Won Marn Yoon (Inf)

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* Commissioned at end of summer camp, 1941.

† Requirements for commission completed January 24, 1942.

(CAC)—Coast Artillery Corps. (Inf)—Infantry.

(CWS—Chemical Warfare Service. (AC)—Air Corps.

(SC)—Signal Corps.

Eighteenth Annual Summer School Commencement

July 24, 1942

DEGREES CONFERRED

Graduate School

MASTER OF SCIENCE

Charles Henry Adams, B. S., Kansas State College of Agriculture and Applied Science, 1941; Wilsey.
Lee Ella Blake, B. S., Kansas State College of Agriculture and Applied Science, 1928; Kansas City.
August Russell Borgmann, B. S., Colorado State College of Agriculture and Mechanic Arts, 1941; Longmont, Colo.
Dean Eugene Braden, B. S., Kansas State College of Agriculture and Applied Science, 1939; Junction City.
Joseph Oscar Brown, B. S., Kansas State College of Agriculture and Applied Science, 1920; Wakeeney.
Charles Loyd Cassel, B. S., Kansas State College of Agriculture and Applied Science, 1928; Culver.
George Wilson Cochran, B. S., Kansas State College of Agriculture and Applied Science, 1941; Topeka.
Veola Mae Crouch, B. S., Houston College for Negroes, 1936; Houston, Tex.
Marguerite Rose Davis, A. B., University of Kansas, 1930; Independence.
Franklin Elmer Eldridge, B. S., University of Idaho, 1941; Payette, Idaho.
Viola Barron Eyestone, B. S., Kansas State College of Agriculture and Applied Science, 1934; Kensington.
Ernest Constant Goforth, A. B., Southwestern College, 1936; Keats.
Albert Alexander Haltom, B. S., Kansas State College of Agriculture and Applied Science, 1926; Lafontaine.
Irene Wassmer Hartman, B. S., Kansas State College of Agriculture and Applied Science, 1938; Garnett.
Maggie Lorene Jeffrey, B. S., Kansas State College of Agriculture and Applied Science, 1927; Elmdale.
Rodney William Johnston, B. S., University of Nebraska, 1941; Central City, Neb.
Richard McClanahan Keith, B. S., Kansas State College of Agriculture and Applied Science, 1942; Manhattan.
Colter Adiel Landis, B. S., Kansas State College of Agriculture and Applied Science, 1940; St. George.
*William Alan Lunsford, A. B., Miami University, 1940; Hamilton, Ohio.
John Henry McCoy, B. S., Kansas State College of Agriculture and Applied Science, 1940; Manhattan.
Roy Webster Maze, A. B., College of Emporia, 1938; Alma.
Dorothy Emma Nichols, B. S., Kansas State Teachers College, Pittsburg, 1928; Pittsburg.
*Claude Kingsford Paul, B. S., Oklahoma Agricultural and Mechanical College, 1939; Fairview, Okla.
Mila Margaret Pishney, B. S., Kansas State College of Agriculture and Applied Science, 1933; Cleburne.
Harold Duane Richardson, B. S., Kansas State College of Agriculture and Applied Science, 1932; Long Island.
*Elmer John Rollins, B. S., Kansas State College of Agriculture and Applied Science, 1941; Glen Elder.
Ralph Emanuel Samuelson, B. S., Kansas State College of Agriculture and Applied Science, 1941; Manhattan.
Hazel Marie Scott, B. S., Kansas State College of Agriculture and Applied Science, 1938; Manhattan.
*Raymond Eugene Seltzer, B. S., University of Illinois, 1940; Elmwood, Ill.
Genevieve Margaret Smith, B. S., Lewis Institute, 1936; Chicago, Ill.
Edward Siemantel Stickley, B. S., Washburn Municipal University of Topeka, 1940; Topeka.
Harriet Cordelia Taylor, A. B., Southwestern College, 1927; Parsons.
Doris Elaine Whitney, B. S., Fort Hays Kansas State College, 1939; Phillipsburg.

DOCTOR OF PHILOSOPHY

Bernard Benjamin Bohren, B. S., University of Illinois, 1937; M. S., State College of Washington, 1940; Olney, Ill.
Reynold George Dahms, B. S., 1933; M. S., 1935, Oklahoma Agricultural and Mechanical College, Lawton, Okla.
Herbert Frank Haas, B. S., 1938; M. S., 1940, Kansas State College of Agriculture and Applied Science, Manhattan.

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* In absentia.

School of Agriculture

BACHELOR OF SCIENCE IN AGRICULTURE

Charles Thomas Baxter, Circleville
Freeman Elmer Biery, Stockton
Samuel Peter Breiner, Savonburg
*Walter Eugene Chappell, Chanute
Elton Arthur Endacott, Manhattan
Vernon Victor Geissler, Durham
Ray Albert Keen, Topeka
Russell Charles Klotz, Saffordville
John Alexander Marten, Winfield
Max Orville Roberts, Chanute
James Joseph Smith, Axtell
Delbert Gail Taylor, Meade

BACHELOR OF SCIENCE IN MILLING INDUSTRY

Arlin Bruce Ward, Manhattan

School of Engineering and Architecture

BACHELOR OF SCIENCE IN AGRICULTURAL ENGINEERING

Marion Andlauer Miller, Topeka

BACHELOR OF SCIENCE IN CHEMICAL ENGINEERING

Leo Russell Best, Bushong
Philip Davis Schnelle, Coffeyville

BACHELOR OF SCIENCE IN ELECTRICAL ENGINEERING

*Loren Edward Amerine, Great Bend
Wilber Glen Hole, Topeka
*Kenneth McEntire, Pittsburg
Otto Fredrick Oberhelman, Jr., Manhattan

BACHELOR OF SCIENCE IN MECHANICAL ENGINEERING

Clarence Lafayette Ash, Wetmore
Beverly Ross Chapin, Wichita
Robert Matthew Dunlap, Liberal
Lloyd Burton Greer, Pittsburg
Eugene Booth Mills, Wichita
Raymond Lee Mussatto, Burlingame
*Theodore Kenneth Riggs, Hays

School of Arts and Sciences

BACHELOR OF SCIENCE

Lee Richard Cashman, Centralia
Natalie Evelyn Chavey, Clyde
Violet Hazel Farmer, Fredonia
*William Page Folck, Junction City
Avery M. Garton, Jr., Chanute
William Ewers Guy, Kansas City
Elinor Mae Hendrix, Aliceville
Doris Marie Hiser, Manhattan
Kenneth LeeRoy Lohmeyer, Bern
David Earl Rintoul, Garden City
Helen Jean Stout, Kansas City, Mo.

BACHELOR OF SCIENCE IN BUSINESS ADMINISTRATION

Floyd Ernest Kirkland, Junction City
Leo Benedict Osterhaus, Marysville
Leo Russell Webster, Dodge City

BACHELOR OF SCIENCE IN INDUSTRIAL CHEMISTRY

Joseph Benedict Hoover, Greenleaf
Wilbur Bernell Reed, Marysville

BACHELOR OF SCIENCE IN INDUSTRIAL JOURNALISM

Mary Patricia Collard, Leavenworth
Charlotte Baenen Dixon, Junction City
Terryll Dougherty, Manhattan
Kendall Wayne Evans, Berkeley, Cal.
*Frances Lillian Ruhl, Hiawatha
Nancy Marie Snyder, Hutchinson
Gordon B. West, Manhattan
Nila Stewart West, Hutchinson

BACHELOR OF SCIENCE IN MUSIC EDUCATION

George Robert Darnes, Sublette
Eunice Wheeler Justus, Manhattan
Arlabel Rosemary Stewart, Hutchinson

BACHELOR OF SCIENCE IN PHYSICAL EDUCATION

*Margery Lawrence, Topeka
Marjorie Lucille McGrew, Coffeyville

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* In absentia.

School of Home Economics

BACHELOR OF SCIENCE IN HOME ECONOMICS

Nita Mae Stricklin Biery, Stockton
Grace Louise Brandner, Leoti
Josephine Ann Breit, St. Joseph, Mo.
Teloir Marie Brown, Ashland
Carroll LaRhue Buck, Welda
Gloria Jane Danielson, St. Francis
Bettie Irene Garrison, Waverly
Geraldine Marie Giffin, Spring Hill
Genevieve Jean Harris, Manhattan
Julia Janes Hoover, Kansas City
Robin Joan Jefferis, Lewis
Orla Cormack Kemper, Kiowa
*Jean Elizabeth Kessler, Excelsior Springs, Mo.
Margaret Smies Kitterman, Courtland
Frances Eldora Lehman, Deer Creek, Okla.
Mildred Josephine Lewis, Dodge City
Helene Mae Monfort, Iola
Freda Evelyn Mumaw, Onaga
Mary Marie Olson, Dwight
Lois Vivian Reeves, Almena
Marie Katherine Reinhardt, Russell
Lois Haroldine Roessler, Medicine Lodge
Mary Ellen Shaver, Salina
Shirley Spohn, Conway
Margaret Rose Stevick, Nowata, Okla.
*Circea Ruth Margaret Teel, Oskaloosa
Marjorie May Wanamaker, Barnes
Wilma Jeanne Wedell, Topeka
Margaret Nancy Wiley, El Dorado

Honors

PHI KAPPA PHI

1941-1942

Graduate School

John Alexander Johnson, Jr.
Dale Vincent Jones
Calvin J. Medlin
Raymond William Morrison
Clarence Andrew Pippin
Hilmar Clinton Stuart

School of Agriculture

Howard Leon Carnahan
Donald Edwin Fleming
Murray Luther Kinman
Harvey Reuben Kopper
Homer Samuel Myers
Oscar Woodrow Norby
Raymond Ruben Rokey
Floyd William Smith
Robert Earle Wagner
George Carl Wreath

School of Engineering and Architecture

Robert Warren Annis
James Marston Bowyer, Jr.
Joe Bruington, Jr.
George J. Fetters
Don Franklin Holshouser
Leroy Lyman Hughes
Edward Earl Kirkham
Arthur Douglas McGovern
Marion Andlauer Miller
Phillip Samuel Myers
Dennis Gordon O'Neill
Glenn Orville Schwab
John Milton St. John
Wallace Wayne Wittenberger

School of Arts and Sciences

Barbara Jean Campbell
Ruth Mary Cole
Aubrey Thornton Edwards
Charles Jerome Glotzbach
Philip Gibbs Kaul
Raymond Orville Keltner
Reva Alma King
Helen Virginia Holbert Leidler
Doris Marjorie McGugin
Dorothy Margaret McGugin
Arnold Linn Peterson
Patricia Potter
Marjorie Jane Rogers
Frances Lillian Ruhl
Marjorie Jean Spurrier
Dorothy Jean Triplett
Keith Wallingford

School of Home Economics

Dorothy Grace Beezley
Marjorie Jean Courter
Martha Lorraine DeMand
Helen Virginia Ferrier
Jane Haymaker
Betty Elaine Hutchinson
Beatrice Marie Montgomery
Shirley Ann Pohlenz
Irma Lucille Popp
Helen Florence Reiman
Margaret Elizabeth Salser
Rachael Phebe Wagaman
Louise Joyce Willmeth

School of Veterinary Medicine

Donald Keith Christian
Quentin Ellsworth Jeppeson
William Roger West
Frederick Barber Walker, Jr.

SENIOR HONORS

1942

In each school 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.

School of Agriculture

HIGH HONORS

*Raymond Ruben Rokey
Donald Edwin Fleming
Homer Samuel Myers
George Carl Wreath

HONORS

*Floyd William Smith
Warren B. Nelson
Howard Leon Carnahan
*Oscar Woodrow Norby
Harvey Ruben Kopper
Leonard Austin Deets
*Murray Luther Kinman
Russell Charles Klotz

School of Engineering and Architecture

HIGH HONORS

*James Marston Bowyer, Jr.
James Harley Wilkes
Phillip Samuel Myers

HONORS

Edward Earl Kirkham
Robert Warren Annis
Oliver Virgil Riley
*Glenn Orville Schwab
John Gerald McEntyre
LeRoy Lyman Hughes
Joseph Bruington, Jr.
Norman Lynn Noble
John Donnely McClurkin
Marion Andlauer Miller

School of Home Economics

HIGH HONORS

*Irma Lucille Popp
*Shirley Alice Pohlenz
Louise Joyce Willmeth
*Dorothy Grace Beezley

HONORS

*Beatrice Marie Montgomery
Alma Pressgrove Proudfit
Margaret Elizabeth Salser
Rachael Phebe Wagaman
*Helen Florence Reiman
Betty Elaine Hutchinson
Martha Lorraine DeMand
Lola Christine Whitney
Dorothy Mae Montgomery
*Nita Mae Stricklin Biery
Mildred Josephine Lewis
Orla Cormack Kemper

School of Arts and Sciences

HIGH HONORS

*Marjorie Jean Spurrier
*Philip Gibbs Kaul
*Richard McClanahan Keith
Dorothy Margaret McGugin

HONORS

James John Dunlop
*Charles Jerome Glotzbach
Dorothy Jean Triplett
Ruth Mary Cole
Clarence Wilbur Schmitz
*Elmer Keith Wallingford
*Marjorie Jane Rogers
*Raymond Orville Keltner
Doris Marjorie McGugin
Natalie Evelyn Chavey
Margery Lawrence
Lce Richard Cashman

School of Veterinary Medicine

HIGH HONORS

*Donald Keith Christian

HONORS

Quentin Ellsworth Jeppesen
William Roger West
Arthur Adam Case
Richard Allan Shea

---

* Awarded sophomore honors.

SOPHOMORE HONORS
1942

In each school of Kansas State College, honors are awarded to not more than five percent of the sophomore class having the highest standing in scholarship during their freshman and sophomore years.

School of Agriculture

Brinton Marlo Dirks
Walter Henry Smith
Dale Alpheus Knight
Chester Blain Wood
Harold Leroy Hackerott
Robert Cooper Pickett
Harold Marvin Riley
Ned Wilson Rokey

School of Engineering and Architecture

Rex Ernest Leuze
Darren Bryce Schneider
Donald Dean Davis
Raymond Farrell Maldoon
Myron Theodore Foveaux
William Robert Kimel
Joseph Gerald McDonald
Raymond Edward Warner
George Hetland, Jr.
Don Porter Grutzmacher
Loyd Edwin Peterson
Richard Wilson Carlgren
Lloyd Wayne Weller

School of Home Economics

Elaine Friesen
Emma Louise Thomas
Jean Adele Babcock
Margery Elizabeth Shideler
Marjorie Loyne White
Nan Louise Sperry
Virginia Maxine Estey
Helen Olive Osthoff
Harriet Elizabeth Holt
Katherine Ann Jones

School of Arts and Sciences

Elinor Ruth Stoll
Charles Sherman Holtz
Donald Paul Richards
Rex Leroy Pruett
Margaret Anne Massengill
Virginia Frances Bell
Douglas Scott Chapin
Virginia Lee Suddarth
Elaine Alvira Rohrer
Virginia Lee Green
Nanette Leeman Todd
Donald Lee Timma
Chester Evan Peters

School of Veterinary Medicine

Earl John Splitter
William Matthew Thies, Jr.
Kenneth Peter Mitchell

GENERAL INDEX

19-5572

LIST OF STUDENTS

EIGHTIETH SESSION

1942-1943

(297)

LIST OF STUDENTS **

Students Pursuing Graduate Work in Regular Session

GRADUATE STUDENTS

Gladys Grove Adams; Manhattan
Robert Lee Armstrong; Wichita
Morris Albin Arneson; Manhattan
Ellen Margaret Batchelor; Manhattan
*Arthur Esco Bate, Jr.; Denver, Colo.
Alma Tingle Benedict; Montpelia, Ohio
Adzianna Mary Blochlinger; Concordia
August Russell Borgmann; Longmont, Colo.
Dorothy Swingle Branson; Manhattan
Joseph J. Bryske; Mankato
Frank Sherman Burson; Manhattan
Margaret Kirby Burtis; Manhattan
Linus Homer Burton; Manhattan
†Albert Baker Cameron; Wilson
*Carol Lois Campbell; Baldwin City
Walter Monroe Carleton; Manhattan
Ralph Boyd Cathcart; Manhattan
Ralph Clayton Chartier; Concordia
Glenn Paul Clasen; Fort Riley
Zelia Simington Coleman; Marshall, Tex.
Laurence Larue Compton; Manhattan
Morris Seifert Cover; Manhattan
Sheldon Frank Crook; Kalamazoo, Mich.
Earl Gilbert Darby; Manhattan
Paul Lawrence Dittemore; Manhattan
John Frederick Eppler; Manhattan
Thomas Marion Evans; Manhattan
Robert Stanley Ewing; Easthampton, Mass.
Elizabeth Ann Faubion; Manhattan
Everett Leroy Fieldler; Wamego
Nelda Carson Flinner; Manhattan
John Joseph Forstchen; East Orange, N. J.
Eric Beaumont Fowler; Manhattan
†Harold Robert Fox; Wichita
Alma Deane Fuller; Courtland
Dora Eloise Gilmore; Chetopa
†Eldon W. Graber; Pretty Prairie
*Mary Graham; Sterling
Carl R. Gray; Neodesha
Alberta Groves; Midian
Dorothy Belle Gudgell; Edmond
William Evers Guy; Kansas City
John Orville Harris; Manhattan
Margaret Louise Harris; Topeka
Vida Agnes Harris; Manhattan
Viola Grace Hart; Topeka
Jurdon Ralph Henderson; Wylie, Tex.
*Helen Constance Hilbert; Corning, N. Y.
*Mary Elizabeth Hoff; Manhattan
James Maynard Holecek; Burns
Phyllis Burtis Howard; Manhattan
*†Travis Berkley Howard; New Madrid, Mo.
Chester L. Hursh; Minneapolis, Minn.
John Alexander Johnson; Manhattan
Aimison Jonnard; Manhattan
Juanita Isabel Kahler; Elkhart
*Jeune B. Kirmser; Manhattan
Russell Charles Klotz; Manhattan
Fritz G. Knorr; Manhattan
Henry S. C. Lau; Arkansas City
†*Maron Jessie Lorimer; Olathe
*Dan McCoy; McPherson
Florence E. McKinney; Manhattan
Virgil Keith McMahan; Manhattan
Friedrich Edward Meenen; Manhattan
William Arthur Meier; Wyandotte, Mich.
Ella Jane Meiller; Manhattan
Herbert Dalton Michael; St. John
*George Russell Moore; Manhattan
Maria Morris; Manhattan
Thomas Raymond Munmey; Hamilton
Irma Arlee Murphey; Manhattan
John Alden Myers; Akron, Ohio
Kenneth Glen Nelson; Story City, Iowa
William Wallace O'Donnell; Manhattan
Merton Louis Otto; Manhattan
*James Harold Paullus; De Soto, Mo.
*Lenore Osborne Paullus; De Soto, Mo.
Helen Isabel Peterson; Manhattan
Jonnie Morris Peterson; Manhattan
Warren Schrade Peterson; Park Ridge, Ill.
Betty Kay Pierce; Wichita
Guilbert Lowell Piper; Racine, Wis.
*Lucille Carroll Polk; Manhattan
*Ashton Price Renwick; Kansas City, Mo.
Jane Rockwell; Manhattan
Cornelius Redwine Rogers; Lake City
†Earl William Rose; White Cloud
*Marvin LeRoy Schreiber; Yates Center
William George Schrenk; Manhattan
Mary Franciska Schroller; Marysville
Ernest Louis Semersky; Toledo, Ohio
Robert Pasquale Serafino; Stamford, Conn.
Leslie Maurice Shaw; Manhattan
Karl Gardner Shoemaker; Manhattan
Morris Shovers; Racine, Wis.
*William Lawrence Sippel; Manhattan
*Sister Mary de Pazzi Wynn; Manhattan
Frieda A. Sloop; Lyndon
Edna Blanton Smith; Manhattan
Charles William Stratton; Manhattan
Emery Carlton Swanson; Manhattan
†Lot Forman Taylor; Clay Center
Lowell William Taylor; Salina
Gwendolyn L. Tinklin; Atchison
Jessie Pelham Traulsen; Manhattan
*Rhea Hunt Ulhstad; Manhattan
*Wilbur Victor Unruh; Manhattan
*Lawrence Warren Van Meir; Sheffeld, Ill.
Charles E. Wagoner; Manhattan
Evelyn Lucille Stener Wagoner; Manhattan
John Allen Wagoner; Manhattan
*Margaret Anne Ward; Manhattan
LaVerne R. Weekly; Girard
*Mary Magdalene Windhorst; Manhattan
Charles Louis Wisseman, Jr.; Dallas, Tex.
Bertha Snyder Wonder; Manhattan
†Lloyd Lander Woods; Wichita
*Catherine Stanard Wright; Manhattan
Doris Kim Yoon; Manhattan

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* Matriculated 1942-'43.

† In absentia.

** May 26, 1942, to May 23, 1943.

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; ArE, architectural engineering; BA, business administration; BA&A, business administration and accounting; CE, civil engineering; ChE, chemical engineering; D&IM, dietetics and institutional management; DM, dairy manufacturing; EE, electrical engineering; F&OH, floriculture and ornamental horticulture; G, general; HE, home economics; HE&A, home economics and art; IA, industrial arts; IC, industrial chemistry; IJ, industrial journalism; M, applied music; MuE, music education; ME, mechanical engineering; MI, milling industry; PE, physical education; PS, physical science; PVM, preveterinary medicine; SH, specialized horticulture; and VM, veterinary medicine.

SENIOR

Maynard Lynn Abrahams (Ag); Wayne
Jean Frances Alford (HE); Kansas City, Mo.
Dorothy Jean Amos (HE); Manhattan
Dorothy Elaine Hartsook Anderson (HE); Ashland
Eugene Elria Anderson (VM); Greenleaf
Mary Bernice Anderson (MuE); Manhattan
Van Keith Anderson (CE); Osage City
Sue Frances Armstrong (HE); Topeka
Mary Margaret Arnold (IJ); Manhattan
John Mitchell Atherton (ME); Waterbury, Conn.
Robert Claude Atkins (VM); Parsons
George William Atkinson (VM); Hutchinson
Ruth Margaret Ausherman (HE); Topeka
Jack Shupe Austin (ME); Wilmore
Ernestine Mary Baker (BA); Topeka
James Culbertson Baker (ME); El Dorado
Robert Crary Baldridge (IC); Emporia
Sybil Janice Bangs (D&IM); Merriam
Jacob William Banks (BA); Atchison
Earl Clair Barb (EE); Hamilton
Patti Barnard (IJ); Kansas City
Glenn Clark Barngrover (Ar); Wichita
†Willard Marshall Barry (AA); Manhattan
H. James Bartels (IC); Inman
Ralph Gordon Beach (SH); Marysville
Charles Raymond Beardmore (ArE); Concordia
Neil Dwane Beckenhauer (VM); Manhattan
Barbara Jean Beechley (HE&A); Joliet, Ill.
Edith May Beesley (HE); Gove
Patricia Anne Beezley (D&IM); Girard
Virginia Frances Bell (G); Osborne
Wendell Dean Bell (BA&A); Silver Lake
George Robert Belt (EE); Lane
Henry A. Bender (VM); Coffeyville
David Bendersky (ME); Nassau, N. Y.
Thomas Ragan Benton (Ag); Olathe
Leo Grant Berg (VM); Harper
Denzil Wallace Bergman (G); Manhattan
Jack Lowell Berkey (ME); Kansas City
Clifford Duane Beyler (VM); Harper
Ray Richard Biege (ME); Hutchinson
Lloyd Calvin Billings (AA); Nortonville
Clara Jane Billingsley (MuE); Belleville
Wayne Bland (BA); Fort Scott
Margaret May Blaylock (D&IM); Mankato
David Jesse Blevins (ME); Manhattan
Adzianna Mary Blochlinger (G-1; Grad-2); Concordia
Marie Veronica Rizek Bonebrake (HE); Belleville
Winifred Caroline Boomer (HE&A); Kansas City
Thomas Harold Boosinger (ME); Wichita
James Otis Bordner (CE); Kansas City
Marjorie Agnes Botkin (HE&A); Harper
Barbara Bouck (G); Manhattan
Barbara Lee Bower (IJ); Junction City
Beth Sirridge Bowers (G); Manhattan
Don Raymond Bowers (VM); Downs
Dale Emerson Bowyer (Ag); Manchester
Eldon Eugene Boyington (BA&A); Goodland
Charles Thomas Brackney (Ag); Center, Colo.
Eunice Eleanor Paden Branam (HE); Topeka
Adell Warren Brecheisen (VM); Welda
†Gale Eugene Breed (AA); Manhattan
Lester Joseph Brenneis (MI); Hollenberg
Everett Lee Brosius (IC); Wichita
Francis Hoyt Brown (VM); Manhattan
Oral Francis Brunk (Ag); Norcatur
Ruth Nadine Brunkhorst (HE); Sedalia, Mo.
†Wesley Fisher Buchele (AE); Cedarvale
Richard Irwin Buchli (VM); Kansas City
Morris Eugene Buckman (MI); Olathe
Alma Hope Buffington (HE); Marquette
Rex Burden (BA); Chase
Ben Alexandria Burdette (ME); Esbon
Orley Glade Burgess (PE); Arnold
Lester Harlan Burkert (VM); Valley Falls
Clodagh Maurine Burkhead (HE); Utica
Jean Eloise Burnette (G); Parsons
John Robert Burns (VM); Manhattan
Blanche Irene Burris (HE); Spring Hill
Henrion Paul Buser (ME); Wichita
†Edward George Buss (Ag); Holton
Burson George Busset (VM); Manhattan
Martin Eugene Butler (ME); Clayton
Charles Emerson Butts (ChE); Wichita
Margaret Ruth Buzzard (HE); Fort Scott
Cecil Eugene Byers (ME); Ulysses

† In absentia.

SENIOR—*Continued*

Laura Vivia Cadwallader (PE); Corbin
George Frederic Campbell (CE); Wichita
Ronald Wayne Campbell (Ag); Cherryvale
Thomas Clark Campbell (VM); Laurel, Neb.
Hugh Louis Caraway (VM); Shreveport, La.
Janette Claire Carlsen (D&IM); Manhattan
Clara Cecelia Carlson (HE); Lindsborg
Virginia May Carmouche (D&IM); Newton
Madge Eileen Carswell (HE); Alton
Ellen Margaret Carter (HE); El Dorado
*Vinton DeVere Carver (ME); Luray
Mary Margaret Cawood (HE); Wetmore
*Hong Cho Chang (G); Honolulu, Hawaii
Dorothy Marie Johnstone Chartier (D&IM); Concordia
Mary Jane Chase (HE); Lyons
Richard George Checksfield (ChE); Topeka
Ivan Lee Cheney (CE); Abilene
Wilma Rose Gantenbein Childers (HE); Elmo
†Bernice Lorene Christesen (G); Osage City
Grace Eleanor Christiansen (IJ); Columbus
Paul Quintin Chronister (Ag); Abilene
Theodore Davis Cleary (ChE); Ingalls
Howard Eugene Clements (IC); Salina
Martha Mae Cleveland (HE); Wichita
Gordon Dwain Cloepfil (ME); Hunter
Albert Swift Coates, Jr. (VM); Kansas City
Rober Bragg Coffman (VM); Overbrook
Charlotte Harriet Collins (IJ); Fort Worth, Tex.
Margaret Leslie Collins (MuE); Manhattan
Raymond Hollis Cook (VM); Courtland
Warren Boughton Cooper (ME); Gridley
†Warren Harding Corbet (AE); Severance
Arthur John Cordes (BA&A); Meade
†Homer Jack Cornwell (Ag); St. John
Eunice Coski (HE&A); Donnelly, Idaho
Catherine LaVonne Coxsey (G); Leavenworth
Georgine Helen Creo (HE); Queens, N. Y.
Mary Agatha Cummings (G); Salina
Mary Louise Curry (HE&A); Kansas City
George Walter Curtis (Ag); Toronto
†Wilmer Lytle Dague (EE); Topeka
†Orval William Daniels (CE); Bronson
Evelyn Mae Dannar (HE); Wichita
Marjorie Gladys Davies (HE); Lebo
Richard Malcolm Davis (BA&A); Grenola
Dorothy Helen Deal (HE); Westfield, N. J.
Donald Max Debler (BA); Kansas City
Gladys Lova Devore (HE); Haddam
Junior Charles Diehl (G); Manhattan
*Harold Edward Dobrinski (G); Lorraine
Glen Francis Doel (ME); Topeka
Thomas Walter Doeppner (EE); Berlin, Germany
Dennis Ralph Donahue (VM); Bonner Springs
David Rumbough Donaldson (ChE); Clarksville, Tenn.
Ernest Darcy Doryland (BA); Manhattan
Ralph Erwin Douglas (ChE); Coffeyville
Carl Downing (AA); Wichita
Lee Warren Doyen (AA); Rice
Helen Frances Drake (HE); Dexter
Lois Evelyn Droegemeier (HE); Geneseo
Mary Ernestine Droz (HE); Humboldt
Carrie Jean Drummond (HE); Elmdale
Harry Garfield Duckers, Jr. (Ag); Netawaka
†Ann Elizabeth Dueser (G); Chase
Esther Tabea Dumler (D&IM); Gorham
Dorothy Jean Dunbar (HE); Winfield
John Delmont Durham (ME); Kansas City, Mo.
Audrey Jean Durland (Ar); Manhattan
Daniel Durniak (Ag); Germantown, N. Y.
John Dean Easter (Ag); Abilene
Karl Frederic Eberle (CE); Kansas City
Martha Rosa Eck (D&IM); Galva
Richard Ward Eddington (CE); Courtland
Jacqueline Roberta Eidson (BA); Manhattan
Jack Austin Elliott (ME); Plains
William Dean Elliott (VM); Elmo
Jack Jones Elton (ChE); Arkansas City
Lonnie Ernest Emerson (CE); Coldwater
Esther Eileen English (HE); Belpre
Francis Dean Engwall (ME-1; PS-2); Jamestown
Robert Nathaniel Erickson (VM); Orland, Cal.
Leota Isabella Shiels Evans (HE&A); Manhattan
Sarah Maria Ewald (HE); Kansas City, Mo.
Cleora Mary Ewalt (HE); Herington
Cecil LaVerne Eyestone (AA); Leavenworth
Byron Webster Farnsworth (EE); Manhattan
Elizabeth Ann Faubion (D&IM-1; Grad-2); Manhattan
Clancy Carlyle Ferguson (IC); El Dorado
Mary Henrietta Ferguson (HE); Manhattan
Bernard George Fickel (Ag); Chanute
William Glenn Field (EE); Wichita
Leon Dean Findley (EE); Kiowa
Zelma Marie Finn (G); Great Bend
Gerald Keith Fish (AA); Neodesha
Robert Haydn Fisher (G); Belleville
Naomi Marie Flentie (HE); Centralia
Thomas Jesse Fletcher (ME); Manhattan
Robert Carl Floersch (BA&A); Manhattan
Leslie Orval Foelschow (VM); Manhattan
†John Matthew Folz (ChE); Marysville
Marjorie Lee Force (D&IM); Wheaton
Petrena Addington Forsythe (HE); Altoona
Arthur Lloyd Francis, Jr. (Ag); St. John
William Albert Frusher (ME); Ness City
Mabyn Belle Fuller (HE); Manhattan
Robert Dale Gahagen (IJ); Manhattan
Mary Elizabeth Gallaher (G); Graham, Tex.
William Jacob Galle (ChE); Arkansas City
Virginia Jane Gates (HE); Goff
Anita Maxine Gatrost (HE); Eskridge
Paul William Gatzaulis (VM); Kansas City
Wilford Eugene Gault (EE); Glen Elder
Lloyd Reed Gebhart (CE); Culver
Margaret Jean Gehlbach (D&IM); Coffeyville
Max Gelwix (CE); Thayer
Mary Lou Genung (IJ); Ft. Branch, Ind.
Lyman Earl Gessell, Jr. (ChE); Manhattan
Effie Orr Gish (HE); Kanona
Ellis Victor Gish (CE); Palco
*Warren Eugene Gladhart (G); White Cloud
Eldon Dale Gladow (MI); Alma
Edgar Nicholas Glotzbach (BA); Paxico
Wayne Lawrence Godsey (MI); Netawaka
Gordon David Goering (ChE); Pretty Prairie
Martha Olive Goheen (D&IM); Manhattan
Peter Earl Gory (VM); Hoisington
Carl Gray (Ag-1; Grad-2); Neodesha
Margaret Louise Gray (D&IM); Peabody
James Michael Green (ArE); Manhattan
Truman DeRoam Gregory (AA); Woodston
Raymond Leonard Gribben (EE); Salina
Rachel Elizabeth Griffin (HE); Merriam
Gordon Lamar Griffith (PS); Bogue
Clayton Bronaugh Griffiths, Jr. (VM); Santa Barbara, Cal.
*Beatrice Elizabeth Grotey (G); Manhattan
Duane Samuel Grove (BA); Newton
Janora Ann Grove (HE); Newton

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* Matriculated 1942-'43.

† Also pursuing graduate study.

SENIOR—*Continued*

Joseph Emmett Vincent Guilfoil (VM); Kansas City
Gerald Gurss (VM); Burlingame
†Merlin DeWayne Gustafson (G); Randolph
Francis Burdette Gwin (AA); Leoti
Roy Emerson Gwin (Ag); Leoti
Harold Leroy Hackerott (Ag); Alton
William Doyle Hadley (Ag); Alton
Gail Lovene Haley (HE); Erie
James Robert Hamm (ME); Humboldt
Elmer Rollin Hammett (EE); Manhattan
Clara Alvera Hampl (D&IM); Luray
Betty Lou Hancock (IJ); St. Francis
Robert Thomas Handel (VM); Napa, Cal.
†Hugh Carey Hanks, Jr. (EE); Hutchinson
Edith Elsie Hanna (HE); Manhattan
Ruth Cornelia Hanson (G); Olsburg
Harriet Alice Harbeck (G); Abilene
Edwin Harold Harclerode (IC); Iola
Margaret Barkley Hardenbrook (HE); Alta Vista
William Henry Hardy (Ag); Arkansas City
LaVerne Collins Harold (Ag); Parker
Marjorie Harper (D&IM); Frankfort
Warren G. Harris (VM); Manhattan
John Robert Hartman (SH); Hoxie
Donice Averne Hawes (HE); Benton
Daryl Warren Hawkins (EE); Cedarvale
Alfred Simpson Hawkinson (BA); McPherson
James Winston Hearn (ME); Wichita
Burns Edward Hegler (EE); Arkansas City
Otto Vern Heinsohn (ME); Wichita
Donald Clare Hejtmanek (BA&A); Topeka
Edward John Hellmer (CE); Olpe
John Gunion Helm (IJ); Simpson
Dennis Arlo Hemme (CE-1; G-2); Bushton
Royal Clark Hendershot (Ag); Hutchinson
Keith Donald Henrikson (VM); Manhattan
Alma Katheryn Henry (IJ); Everest
Kenneth Hillis Henry (CE); Wichita
Robert Wayne Hentzler (VM); Topeka
Mary Sevilla Hershey (HE); Eskridge
Kenneth Dean Hewson (EE); Larned
Arthur Nathan Hibbs (MI); Easton
Jess William Hicks (BA&A); Herington
Robert Donald Hilgendorf (IJ); Lincoln
Milt Dean Hill (IJ); Kansas City, Mo.
Margaret Elizabeth Hill (IJ); Belleville
Margaret Louise Hill (HE); Topeka
Kalo Albert Hineman (VM); Dighton
Richard Elmar Hineman (VM); Dighton
Margaret Alene Hinshaw (D&IM); Topeka
Gordon Elmer Hoath (Ag); Anthony
Joan Frances Hogue (PE); Hutchinson
John Henry Hoins III (VM); Leavenworth
Mary Helen Schulz Holbert (D&IM); Sterling
Orvin Hugh Holler (VM); Conway
Arthur Herman Holste (AE); Ludell
Charles Sherman Holtz (BA); Manhattan
Donald William Honza (ME); Kansas City
Leonard Ralph Hoover (CE); Manhattan
Lillian Maxine Hoover (G); Manhattan
Betty Alice Hosmer (HE); Kansas City, Mo.
Harold William Hossfeld (EE); Willis
Clarence Beyler Hostetler (VM); Harper
Lois Aileen Hostinsky (G); Manhattan
Florence Louise Houghton (HE); Tipton
Marjorie Goldstein Howard (G); Manhattan
Lawrence Keith Hudson (ChE); Wilsey
Janice Fern Hunt (HE); Blue Rapids
Louis Anthony Hurtig (G); Hanover
Archie Richard Hyle (CE); Madison
Timothy Adolphus Ingram (AA); Independence
George Nelson Inskeep (AA); Manhattan
Theda Fayne Inslee (HE); Isabel
Donald Franklin Irwin (Ag); Fairview
Lloyd Linell Isaacson (VM); Osage City
S. Lester Jackson (VM); Parker
Joseph Edward Jagger (Ag); Minneapolis
Margaret June Bayless Jager (HE); Wakarusa
William Collins Jamison, Jr. (VM); Kansas City
Everett Edward Janne (SH); Wilson
Jo Ann Jefferson (D&IM); Garnett
Dwight Hillis Jenkins (CE); Humboldt
Marion Ann Jensen (D&IM); Hays
Samuel Oliver Jewett (ME); Dighton
Berneice Bernadine Johansen (HE&A); Holyrood
James Lincoln Johns (MI); Manhattan
John Kenneth Johnson (EE); McPherson
Lily Georgene Johnson (HE); Hays
Louis Bruce Johnson (EE); Liberal
Malvin Gilbert Johnson (Ag); Moran
Marianna Johnson (G); Potwin
Romaine Edwin Johnson (IC); Manhattan
Howard James Johnstone (Ag); Wamego
Frank Warren Jones (CE); Manhattan
Keith Gordon Jones (Ag); Penalosa
William Wade Justus (G); Hill City
Neva Lucille Keene (D&IM); Norton
†Paul Leo Kelley (AA); Solomon
Arthur Louis Kelly (IC); Derby
Lacey Lee Kent (CE); Opolis
Edith Helen Kessler (HE); Newton
Clara Belle Kientz (HE); Manhattan
Charles Edward Kier (DM); Mankato
Donald Ross Kimball (G); Lane
Kenneth E. C. Kimbell (VM); Lyons
Eugene Fred Kimple (AA); Lyons
Edward Joffert King, Jr. (EE); Jetmore
Milton George Kingsley (EE); Formoso
Robert Nay Kirk (BA); Topeka
Joseph Eldon Kirkpatrick (BA); Bogue
Daniel Allan Kitchen (AE); Lyndon
Gerald Wilbert Klema (BA); Wilson
Edwin Albert Kline (Ag); Mentor
Jane Margaret Klingner (HE); Chanute
Virginia Carolyn Knauer (BA); Manhattan
Ralph William Knoche (VM); Adrian, Minn.
John Marshall Koger (BA); Cheney
Robert Wolfe Kohn (ChE-1; IC-2); Atchison
Gerald Carl Kolsky (ME); Logan
Leland Thomas Konz (ME); Independence
Glen Millard Koontz (ME); Haven
Donald Ely Kortman (BA&A); Manhattan
John Wesley Kraus (Ag); Hays
*Norman LeRoy Krogstad (G); Enterprise
Norman LeRoy Kruse (Ag); Barnes
William Kurman (G); Woodbine, N. J.
Charles Evans Lacey (ChE); Belleville
Shirley June Lacy (G); Everest
Jack Duncan Lamont (VM); Manhattan
Flora Evelyn Lancaster (PS); Yates Center
Freda Martha Landis (G); St. George
June Marguerite Larrick (D&IM); Topeka
Donald Eugene Leavitt (PE); Iola
Kenneth Benjamin Lebsack (BA); Pretty Prairie
Lee Roy Lennington (CE); Manhattan
Evalyn Leota Boyce Levin (HE); Kensington
June Elaine Light (PE); Liberal
Dean Thomas Lill (PE); Mount Hope
Elizabeth Lillibridge (HE); Hutchinson

* Matriculated 1942-'43.

† Also pursuing graduate study.

SENIOR—*Continued*

Merlin Elmer Line (AA); Sabetha
Harriet Litton (HE); Clyde
Maryanna Lock (HE); Mayetta
Bernice Evangeline Long (G); Manhattan
*Stephen Joseph Loska, Jr. (MI); Chicago, Ill.
Mabel Irene Lovell (HE); Burden
Betty Jeanne Boone Lowman (HE); Manhattan
Robert Lloyd Lucas (EE); Kansas City
Albert Nolan Ludwig (VM); Parsons
William Valjean Lumb (VM); Manhattan
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 (G); Americus
Arlan Wilbur McClurkin (VM); Clay Center
Margaret Ann McClymonds (IJ); Lincoln, Neb.
Mary Ruth McCoy (HE); Manhattan
Dale Frederick McCune (Ag); Stafford
Margaret Ella McCutchan (HE); Lost Springs
Warren Ross McDaniel (ME); Wichita
Joseph Gerald McDonald (EE); Manhattan
Terrence Eugene McDonald (VM); Kansas City
Anne Elizebeth McDuffie (G); Norfolk, Va.
Arthur Wendell McFadden (BA); Mullinville
Clarence Beverly McGee (ME); Kansas City
Ruth Maxine McGinnis (HE); Manhattan
Kathryn Josephine McGrew (D&IM); Humboldt
Mervin Ross McKinsey (AA); Manhattan
John Francis McKown (PS); Udall
Ernest Lowe McLain (ME); Kansas City
Betty Ruby McLeod (HE); Manhattan
Martin Eugene McMahon (ChE); Beattie
Willard Lyle McMahan (VM); Rossville
Mary Rowene McMaster (HE); Eskridge
Mary Anne McNamee (IJ); Cunningham
John Seguine McRae (G); Manhattan
Bonnie Jean McRill (BA&A); Peabody
Merton Francis MacGregor (ME); Waterbury, Conn.
Margaret Gardiner Mack (IJ); Manhattan
Wayne Hendrix MacKirdy (G); Manhattan
Hurst Kreek Majors (IJ); Manhattan
Clifford Dale Makalous (BA); Cuba
Jeanette Agnes Malone (PE); Raymond
Dorothy Evelyn Mangels (D&IM); Kansas City, Mo.
Grant Charles Marburger (ChE); Lyons
Vivian Faye Marlow (HE); Meade
Arthur Edgar Martens (ArE); Buhler
Herbert Hudson Martin (ME); Altamont
John Everett Martin (G); Lyons
Harold Zephania Mason (BA); Vermillion
Claude Willard Matthews (G); Great Bend
Phyllis Luella Mattson (HE); Assaria
Thurmon Adrian Mayhew (G; & Ag); Trousdale
George Wilber Meeker (BA); Garden City
Samuel Joseph Meltzer (ME); Pittsburgh, Pa.
George Lester Mendenhall (ME); Belleville
William Hugh Meredith (VM); Lincoln
Norman Rockwell Meriweather (G); Chetopa
Ralph Leonard Messer (VM); Lawrence
Kenneth Alonzo Messner (BA); Arkansas City
Leonard Milton Meyer (BA); Basehor
Herbert Dalton Michael (EE-1; Grad-2); St. John
William Burhl Miesse (VM); Marion
Edsel Leo Miller (G); Manhattan
Franklin Xaverius Miller (Ag); La Crosse
James Wolford Miller (IJ); Manhattan
Bertrand Hall Milliard (MI); Manhattan
Ben James Mills (ME); Hutchinson
Carroll Renshaw Mills (VM); Blaine
Ray Orville Mills (CE); Coffeyville
Russell Galbraith Minnis (VM); Manhattan
Kenneth Peter Mitchell (VM); Axtell
Marian Jeanette Moeller (HE&A); Hiawatha
Leonard Wesley Mohney (VM); Sawyer
Earl Lawrence Montgomery (VM); Parsons
Edwin Louis Moody (BA); Onaga
Robert Beckwith Moody (VM); Greeley
Mary Jane Moore (HE); Pratt
Walter Ashton Moore (Ag); Dresden
Olin Wayne Morris (VM); Manhattan
Orpha Katherine Morris (HE); Riley
William John Moseley, Jr. (EE); Topeka
Fred Hartman Mueller (BA); Topeka
Kenneth King Muirhead (BA); Jennings
Roger Gregg Murphy (Ag); Norton
Jack Leon Mustard (ME); Abilene
Bill John Myers (VM); Bethel
Donald Kivett Myers (EE); Topeka
Robert Chambers Myers (ME); Junction City
Thora Dagny Mykland (HE&A); Chapman
Ineta Ruth Neel (D&IM); Hutchinson
Allan Bakewell Neely, Jr. (Ag); Minneapolis
Arthur William Neff (G); Ulysses
Robert Kenneth Nelson (VM); Chicago, Ill.
Lester Leroy Newkirk (CE); Kansas City
John Porter Newman (VM); Manhattan
Katherine Jane Newman (HE); Manhattan
Mac Donald Newsom (CE); Scott City
Virginia Ann Nichols (HE); Topeka
Don Elton Nicholson (CE); Moline
Mildred Esther Noble (HE); Oberlin
Drusilla Marie Norby (HE); Pratt
Marcile Mary Norby (HE); Cullison
Fayne Higgins Oberst (VM); McPherson
Max Frederick Oelschlaeger (CE); Manhattan
Fred Benjamin Ogilvie (VM); Manhattan
Marian Ruth Oldham (D&IM); Manhattan
Richard Olney (VM); Manhattan
Earl Leroy Olson (EE); Axtell
Julia Viola Olson (HE); Inman
Robert Leo Osborne (Ag); Rexford
Cordon Udelmer Osburn (EE); Chapman
Leonard Ray Ottman (AA); Barnes
Edward John Otto, Jr. (IC); Riley
Carl Benjamin Overley (Ag); Belle Plaine
Lucille Iva Owen (HE); Edson
Hermagene Palenske (D&IM); Alma
Earl Albert Palmberg (AE); Meriden
Kenneth Elwood Palmer (IC); Kingman
Pete Francis Parhomek (ME); Kansas City
Harriett Ruth Parkhurst (HE); Kinsley
Mary Elizabeth Parkhurst (HE); Kinsley
Edwin Atkins Parks (ChE); Fort Scott
James Robert Parsons (EE); Hiawatha
James Ernest Paterson (IC); Overland Park
Hilton Eugene Patterson (BA&A); Ford
William Henry Patterson (SH); Holton
Mary Jean Peak (D&IM); Manhattan
Alice Gertrude Pearson (HE); Olsburg
Perry Cushman Peine (CE); Manhattan

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* Matriculated 1942-'43.

† Also pursuing graduate study.

SENIOR—*Continued*

†Marian Frances Penley (G); Manhattan
Grace Breeden Pennington (MuE); Manhattan
Lowell Hubert Penny (Ag); Lawrence
Clarence Monroe Penticuff, Jr. (VM); Kansas City
George William Peterkord (ME); Greeley
William James Peycke, Jr. (EE); Alta Vista
Donald Phinney (ChE); Russell
Robert Cooper Pickett (Ag); Manhattan
Betty Kay Pierce (G-1; Grad-2); Wichita
May Louise Pierce (D&IM); Camp Claibourne, La.
Helen Irene Pierpont (HE&A); Benedict
Mary Alice Pile (IC); Liberal
Anna Adaline Poole (HE); Manhattan
Robert Lee Poppenhouse (VM); Manhattan
Henry Dean Porter (VM); Mount Hope
Jerald Gorman Porter (G); Dellvale
John Jefferson Porter (VM); Selma
Marion Edgar Postlethwaite (G); Wichita
Hubert Glen Priddy (ME); Topeka
Rex Leroy Pruett (G); Culver
Arthur William Pryor (ChE); Fredonia
Robert Lee Pyles (VM); Kansas City
Byron White Quinby (VM); Manhattan
Ruth Jane Rahn (HE); Arkansas City
Dale William Rake (Ag); Tecumseh
Harold Edward Rall (Ag); Menlo
James Lynne Ramsey (EE); Uniontown
William Hays Ransopher (Ag); Clyde
Lee Ronald Rarick (ME); Glen Elder
Dorothy Ratliff (HE); Manhattan
Edward Anthony Reed (Ag); Lyons
John Robert Reed (EE); Salina
Marguerite Mary Reel (G); Miltonvale
Marshall Perry Reeve (VM); Garden City
Marvin Emor Reinecke (ME); Great Bend
Richard Earl Remington (IJ); Hutchinson
Kenneth Elmer Rice (EE); Greensburg
Donald Paul Richards (IJ); Manhattan
Jane Louise Riddell (HE); McPherson
Arthur Donald Robb (VM); Manhattan
†Clair Milton Robertson (ME); Holton
William Bruce Robertson (Ag); Barnard
Loma Jane Robley (D&IM); Independence
Merrill Dean Rockhold (VM); Herington
James William Rodgers (ChE); Baxter Springs
Fern Irene Roelfs (D&IM); Bushton
Lila Faye Rogers (HE); Glasco
Richard Dean Rogers (BA); Manhattan
Elaine Alvira Rohrer (G); Abilene
Lou Stine Rokey (HE); Glasco
Ned Wilson Rokey (Ag); Sabetha
Saul Rosen (ME); Fitchburg, Mass.
Lucille May Rosenberger (HE); Greensburg
Robert Rubin Rosenfeld (Ar); New York, N. Y.
Norman Ray Ross (ME); Manhattan
Albert Rues (PE); Parker
Jess Wayne Ruf (VM); Arkansas City
†Darrell Arden Russel (Ag); Canton
Robert Frank Sager (G); Manhattan
Catherine Babbette Savage (G); Parsons
Warren Schlaegel (MI); Olathe
Ralph Robert Schlicht (AA); Claflin
Robert Edward Schreiber (EE); Garden City
Mary Franciska Schroller (G-1; Grad-2); Marysville
Glen Perry Schulthess (AA); Manhattan
James Harris Sealey (ArE); Pratt
Lorrain Oscar Sebree (VM); Kansas City
Earl Vincent Seifert (ME); Parsons
Robert Lowe Servis (ChE); Manhattan
Edward George Seufert (Ag); Tonganoxie
Frank Leslie Seymour (BA); El Dorado
Charles Kenneth Shane (VM); Junction City
Jean McIntyre Shane (IJ); Junction City
Mildred Adele Shannon (HE); Hiawatha
Betty Jeanne Sharp (G); Kansas City
Shirley Anne Shaver (HE&A); Salina
Ann Ella Shaw (HE); Belleville
Max Sherman Sheehey (VM); Belle Plaine
Leander Raymond Sherlock (G); Manhattan
Leslie Harold Sherman (Ag); Toronto
Raymond Henry Shideler (ME); Salina
Nadine Shields (G); Topeka
Arlene Marie Shoemaker (IJ); Kansas City, Mo.
George Edward Short (VM); Concordia
Everett Otto Siegele (ME); Princeton
William James Simic (VM); Superior, Neb.
Roger White Slinkman (EE); Pittsburg
Glenn McKinnis Smith (EE); Uniontown
Larry William Smith (CE); Kansas City
Leland Edgerton Smith (IJ); Manhattan
†Lucille Smith (IJ); Liberal
Marjorie Hortense Smith (HE); Pratt
Robert Junior Smith (BA); Manhattan
Walter Henry Smith (Ag); Shawnee
Richard Martin Smoll (ME); Wichita
Harvey James Snapp (AA); Belleville
Harold Alfred Snyder (AA); Winfield
Vivian Marguerite Speas (HE); Sterling
Marietta Gertrude Spencer (HE&A); Leavenworth
Ralph Norman Spencer (VM); Leavenworth
Gretchen Elizabeth Sperry (D&IM); Fort Riley
Gloria Marie Spiegel (HE); Topeka
Earl John Splitter (VM); Frederick
Wilma Marie Staehli (HE); Abilene
Helen Esther Stagg (HE); Manhattan
Helen Stallard (D&IM); Topeka
John Ralph Stallings (CE); Frankfort
Wayne Robert Starr (BA); Hiawatha
†Alice Jane Sterns (G); Hiawatha
Carol Margaret Stevenson (D&IM); Oberlin
Helen Beth Stewart (MuE); Wamego
Clarence Elden Stewart (BA&A); Hartford
Ross Merritt Stewart (ChE); Wilburton
Thomas Edward Stockebrand (AA); Yates Center
Beth Rosalie Stockwell (HE); Manhattan
Edward Donald Stoddard (VM); Manhattan
Edith Margaret Dawley Stokely (HE); Manhattan
Matilda Straubinger (D&IM); El Dorado
Theresa Irene Strotkamp (IJ); Burns
Marjorie Louise Stucker (G); Ottawa
Donald Alwin Stuewe (ChE); Alma
Mildred Arlene Stutzman (HE); Wakeeney
Clanton Tillman Suiter (EE); Otis
Treva Maxine Sutton (HE); Burrton
Doris Swalwell (G); Kansas City, Mo.
Ernest Earl Swanson, Jr. (EE); Kansas City
Irene Charlotte Swanson (HE); Manhattan
†James Robert Swenson (IC); Crowley, Colo.
Melvin John Swenson (VM); Concordia
Jay Carlyle Symns (VM); Hutchinson
Harriet Jane Taubeneck (HE); Neodesha
Ocie Alice Taylor (HE); Tribune
Rex Robert Taylor (ME); Hillsboro
Howard Earl Teagarden (MI); Manhattan
Emily Jane Theye (HE); Emporia
William Matthew Thies, Jr. (VM); Marion
Catharine Jane Thomas (G); Oswego
Roy Corley Thomas (VM); Parons
†Jack Russell Thomasson (IJ); Belleville
Avis Marie Thompson (HE); Hays

† Also pursuing graduate study.

SENIOR—*Concluded*

Victor Carl Thompson (Ag); Ozawkie
Merrell Wayne Toburen (IC); Manhattan
Elwin Todd (MI); Quinter
Virginia Ruth Toews (D&IM); Inman
Lewis Keith Tolson (Ag); Johnson
Raymond Dwayne Topham (AA); Wichita
David Eugene Totten (ME); Clifton
Patricia Annabelle Townley (HE); Abilene
Delbert Leroy Townsend (AA); Danbury, Neb.
Monte Monroe Trimble (VM); Manhattan
James Justin Trindle (CE); Hugoton
Carl Leonard Tucker (ME); Minneola
Marcella Rae Ulrey (D&IM); West Mineral
James Alva Upham (Ag); Junction City
Roy Walter Upham (VM); Junction City
Dean Urquhart (IA); Manhattan
Marilyn Lucile Utermohlen (HE); Kansas City
Gordon William Vacura (VM); Kansas City
Josephine Vancil (HE); White Water
Margaret Jean VanHorn (D&IM); Larned
Phyllis Doris VanMeter (IJ); Ada
Virginia Cassandra VanMeter (HE); Ada
Mary Ruth Vanskike (HE); Arkansas City
Edna Mae VanTuyl (HE); Burns
James Henry Vavroch (AE); Oberlin
John William Vawter (Ag); Oakley
Merna Dee Vincent (HE); Alden
Grant Wyckliffe Waggoner (CE); Baxter Springs
Page Paschal Wagner, Jr. (CE); Webster Groves, Mo.
Paul John Waibler (ME); Great Bend
Frances Easter Walker (PE); El Dorado
Robert Hewitt Walker (CE); Kansas City
Virgil Raymond Walker (EE); Manhattan
Philip Aloysius Wall (ME); Muncie
Robert LaVerne Wallace (AA); Colby
Glenn Weatherby, Jr. (ChE); Neodesha
Allen Nystrom Webb (IC); Manhattan
Lowell Madison Webb (VM); Beverly
Howard Orville Weber (VM); Kansas City
Olive Lorene Webster (HE); Burrton
Maurice John Weckerling (ME); Manhattan
Max Corwin Weeks (LD); Topeka
Barbara Mary Weigand (HE); Manhattan
Ruth Louise Weigand (IJ); Topeka
Glenn Arthur Weir (Ag); Hazelton
John Robert Weir (Ag); Geuda Springs
Bernard Eugene Weller (Ag); Montezuma
Frank David Werner (PS); Junction City
Mary Jean West (G); Hartford
William Earl West (G); Hiawatha
Francis Edwin Westermann (ME); Kansas City
Wilbur Wellington White (VM); Delphos
Norman Vincent Whitehair (AA); Abilene
Charles Elmer Whiteman (VM); Carrollton, Ill.
Howard Elmer Whiteside (IC); Neodesha
Esther Irene Wiedower (M); Spearville
Betty Lou Wiley (HE); Tonganoxie
Lysle Max Wilkins (VM); Delphos
Nancy Williams (IJ); Topeka
Ray Edward Williams (ME); Parsons
Donald Wayne Willis (ArE); Manhattan
Mary Marjorie Willis (IJ); Newton
Amos Powers Wilson (VM); Manhattan
Chase C. Wilson, Jr. (Ag); Mulvane
*Curtis Wilson (BA); Parsons
Jack Harlan Wilson (AA); Burrton
Mark Francis Wilson (VM); Ashland
Oid Lee Wineland (AA); Alton
Buford Dale Winters (VM); Parsons
Esther Virginia Wolf (HE); Gardner
Donald Roy Wood (Ag); Trousdale
Clyde Woods, Jr. (CE); Kansas City
Charles Arthur Worthington (Ag); Lecompton
Robert Paul Worthman (VM); Lincoln, Neb.
Emily Irene Wray (HE); Lawrence
Paul Lee Wright (Ar); Osawatomie
Margaret Esther Wunsch (IJ); Topeka
Virginia Fern Yapp (HE); Manhattan
Clifford Raymond Yelley (IC); El Dorado
Robert Oscar Yunghans (Ag); Piper
Kenneth Charles Zimmerman, Jr. (VM); Coffeyville
Maxine Odell Zimmerman (HE); Belle Plaine
Jack Eugene Zumbrum (EE); Enterprise

JUNIOR

Paul Milton Ableson (ChE); Wichita
Ruth Evelyn Achelpohl (HE); Argonia
John Harold Adams (G); Atchison
John Martin Aiken (Ag); La Harpe
*Howard Wilber Akers (ME); Centerville
Dorothy Ferne Akright (HE); Holton
*Harry Glen Alleman (ChE); Dennis
Austin Gilligan Alm (G); Manhattan
Raymond Wendell Amos (ChE); Arkansas City
*Ben Eugene Amsler (EE); Kansas City, Mo.
Audrey Louise Anderson (D&IM); Gypsum
Robert Arthur Anderson (BA); Partridge
Wallace Richard Anderson (AA); Greenleaf
James Vernon Andrews (G); Manhattan
Mary Jean Apt (HE); Buffalo.
*Clyde Lester Armstrong, Jr. (IC); Kansas City
Dorothy Maxine Atkin (HE); Pittsfield, Mass.
Merritt Charles Atwell (AA); Utica
Fideliah Gale Ault (HE); Belvue
Betty Jane Babb (HE); Manhattan
Jean Adele Babcock (HE&N); Manhattan
Mildred Jean Babcock (D&IM); Wichita
Charles Virgil Bacon (Ag); Hutchinson
Orville Cantril Baker (AE); Almena
Jessie May Ball (G); Oneida
L. Kenneth Barnes (ME); Osawatomie
Robert Denver Bauer (ChE); Junction City
Burke Benjamin Bayer (Ag); Manhattan
*Everett Kerr Beals (IC); Argonia
Charles Dean Beard (IC); Neodesha
Marcelle Beckman (BA); Topeka
Samuel Edward Beckwith (EE); Hiawatha
Doris Ann Beebe (HE); Lenexa
Verna Frances Beil (PE); Bavaria
Leroy Eugene Bennett (ME); Mankato
Lloyd Alan Bennett (BA); Conway Springs
Charles Kermit Bentson (Ag); Wichita
Eleanor Maxine Berger (HE); Halstead
Winifred Louise Bergmann (HE); Axtell
Marjorie June Bernard (BA); Wellington
Joseph Leo Bettinger (ME); Rochester, N. Y.
Herbert William Beyer (CE); Sabetha
Ronald Glenn Billings (MI); Topeka
Phillip Hudson Bircher (PS); Ellsworth
John William Bishop (BA); Minneapolis
Mary Margaret Bishop (G); Haddam
Leland Merle Bitner (G); Kinsley
Herschel Emerson Blackburn (ME); St. Marys
Jeanne Blackburn (IJ); Hutchinson
Doris Dea Blackman (HE&N); Hill City
Martin Lowell Blaser (AA); Waterville
Elias Bloom (AE); Brooklyn, N. Y.
David Edward Bogart (AA); Beverly
Case Artman Bonebrake (ME); Woodston

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JUNIOR—*Continued*

Howard Robert Bootman (EE); Kansas City, Mo.
Evelyn Ann Magill Borland (G); Fanwood, N. J.
Don Richard Borthwick (BA); Beeler
Wanda Fae Bowden (HE); Hope
Virginia Malee Boyd (D&IM); Stafford
Arleta Ruth Boyer (IJ); Manhattan
*Carl Dean Bradley (G); Brookville
*Nancy Elizabeth Brady (G); Kansas City, Mo.
Bettie Jeanne Brass (G); Wilmore
Robert Winter Brass (Ag); Wilmore
Jean Elaine Estep Brecheisen (G); Garden City
*Robert Harding Bronleewe (IA); Frederick
*Elizabeth Ann Brown (G); Fort Riley
John Pershing Brown (IA); Wamego
Louise Fuller Brown (IJ); Manhattan
Milfred Leverett Brown (ChE); Augusta
Charles Albert Brownrigg (IC); Welda
*Raymond William Bruggeman (CE); Selden
*Leila Mae Bruning (D&IM); Robinson
William Boyd Bryson (EE); Kansas City
Frederick Herbert Budden, Jr. (ME); Manhattan
Elizabeth Cadwell (HE); Marquette
Herbert David Campbell (BA&A); Beverly
John William Campbell (ChE); Smith Center
Richard Wilson Carlgren (IA); Concordia
Marcella Rosina Carter (HE); Morrowville
Dale Ringwalt Carver (CE); Oakley
Lawrence Marcus Chain (AA); Haven
Douglas Scott Chapin (IC); Manhattan
Mary Elizabeth Charlson (HE&N); Manhattan
Royal Raymond Chessmore (EE); Ludell
Joe Burbank Chilen (Ag); Miltonvale
Christ Alex Christ (IA); Kansas City
Robert Warren Christmann (CE); Kirkwood, Mo.
Laurence Richard Clark (EE); Manhattan
Marvin Brown Clark (Ag); Belvue
Max Clark (CE); Logan
Raymond Severo Clark (AA); Iola
Ruth Maxine Clark (HE); Paxico
Clarence Samuel Clay (ME-1; PS-2); Emporia
Louise Clayton (HE); Kansas City, Mo.
Charlotte Anne Clement (G); Topeka
Anthony Gerard Clementi (PE); Brooklyn, N. Y.
Glen Edwin Cline (ArE); Fredonia
*Merle Arthur Cline (G); Hutchinson
*Forrest Loyd Cloud (EE); Kansas City
Seymour Cohen (G); Brooklyn, N. Y.
Charles Buford Colburn (IC); Manhattan
*Patricia Jean Coleman (D&IM); Larned
Margaret Ann Collings (D&IM); Kansas City, Mo.
Oscar Ellsworth Collings (AA); Winona
Virginia Ione Collings (HE&N); Kansas City, Mo.
Wana Lou Collings (HE); Winona
Wayne Oliver Coltrain (AA); Neodesha
*Gerald Wayne Conely (ME); Arkansas City
Mary Martha Conrad (D&IM); Manhattan
Ronald Edmond Conrad (PE); Clay Center
Leo Roy Conwell (CE); Emporia
*Harold Clyde Cook (ArE); Kansas City
*Hurley Dean Cook (IC); Dodge City
*Keith Bryan Cooper (ME); Emporia
Wesley Eugene Copeland (EE); Kansas City
Harry Gilbert Corby, Jr. (BA); Merriam
Lorraine Ruby Corke (HE); Studley
Loretta Lillian Cornelius (HE&A); Hoisington
Raleigh James Cossaart (EE); Narka
Robert Morton Cowger (AA); Topeka
Harold Leon Cox (Ag); Anthony
John Adam Crabb (ME); Topeka
Helen Ruth Craft (HE); Garden City
*Melvin Wilbur Crawford (ME); Altamont
*Madonna Irene Cromwell (G); Vesper
Norman LeRoy Crook (ME); Manhattan
James Wesley Crooks (EE); Manhattan
James Sylvester Cunningham (Ag); El Dorado
*Marjorie Marie Cyphers (D&IM); Fairview
Richard Clayton Danford (EE); Hutchinson
Donald Dean Davis (ME); Abilene
Leota Isabelle Davis (HE&N); Clay Center
*Mary Elaine Davis (HE); Dodge City
Rufus William Davis (AA); Meriden
Wilbur Merle Davis (AE); Belleville
Robert Price Dawley (EE); Manhattan
*Rose Mary Alice DeBruler (G); Hutchinson
Robert Courtland Dennison (EE); Salina
Don Deer Depew (Ar); Neodesha
Helen Ruth Dieter (HE); Longford
Dean Milton Dildine (ME); Delphos
Brinton Marlo Dirks (MI); Moundridge
Richard Arthur Doryland (BA); Manhattan
Helen Elizabeth Dowling (BA); Manhattan
*Mary Eileen Downie (BA); Garden City
Betty Jean Drayer (G); Manhattan
*Marvin Eugene Dungan (BA); Coffeyville
Merrill Edwin Dunn (BA&A); Topeka
*Geneva Lois Durr (IJ); Dighton
John Fearing Eckhart (IJ); Almena
Mary Ellen Edde (HE&N); Page City
Charles Staley Edwards (ME); Richmond
Erma LaVerne Ehrsam (HE); Bern
Robert Samuel Ekblad (ArE); Manhattan
Homer Richard Elling (MI); Manhattan
Robert Clyde Elliott (ME); Wichita
Virginia Ann Elmer (HE); Chicago, Ill.
Hester Fay Elmore (HE); McCracken
Charles Lee Ely (ChE); Ashland
Beth Kathleen Emmert (IJ); Manhattan
Paul Leland Engle (IC); Manhattan
Mary Louise Epp (G); Salina
*Earl Eldon Euler (IC); Wathena
Armstead Joseph Evans, Jr. (ChE); Valley Falls
Hortense Rhea Everett (HE); Kansas City
*Jay Ewing, Jr. (ME); Nickerson
L. Maxine Ewing (IJ); Sabetha
Clara Jo Fair (HE); Topeka
Douglas J. Faulconer (BA); Clay Center
Jane Ellen Faulkner (HE); Belleville
Jean Fee (HE&A); Cunningham
Henry John Fichtner (EE); Topeka
Barbara Mae Field (HE); Kinsley
Solon D. Fisher (ChE); Kansas City
Jack Monroe Fiskin (ME); Mount Hope
*Gordon Morris Fitch (ME); El Dorado
John Warren Fitzsimmons (MI); Macksville
*Doris Flanders (G); Pratt
Robert Both Fleske (ME); Albert
Robert Joseph Flipse (Ag); Oakley
Theda Rowena Foland (G); Almena
Myron Theodore Foveaux (ChE); Junction City
*Eldon Fredyrick Frazey (ChE); Haven
Robert Orin French (ChE); Hanover
Elaine Friesen (D&IM); Inman
Floyd Leland Frisbie (Ag); McDonald
*Beth Adelaide Froning (HE); Geneseo
John Robinson Fuller (ChE); Salina

* Matriculated 1942-'43

JUNIOR—*Continued*

Mary Alice Gasche (D&IM); Hartford
Virginia Nena Gemmell (HE&A); Manhattan
William Bradley Gerlach (G); Manhattan
Harold Loren Gibson (CE); Atlanta
*Charmian Gish (HE); El Dorado
*Evelyn Alexena Gish (D&IM); Denton
Margaret Jane Gordon (HE); Manhattan
Robert Eugene Gorman (ME); Burlington
Corlis Dell Goyen, Jr. (Ag); Cunningham
Eyleen Graham (HE); Syracuse
Norman Lee Graham (EE); Colby
Herman Manuel Grant (AE); Bronx, N. Y.
*Mary Alice Gray (BA); Kansas City
Duane Marvin Green (ME); Leoti
Richard Louis Green (EE); Westmoreland
Virginia Lee Green (PE); Kansas City
*Ethel Isabel Greenhouse (D&IM); Leavenworth
Leighton Henry Grier (EE); Mount Hope
Kenneth Edward Griffith (Ag); Larned
Wava Grigsby (HE); Attica
*Lloyd Dale Grote (EE); Sabetha
Don Porter Grutzmacher (CE); Onaga
David Henry Gruver (ME); Augusta
*Mildred Opal Gull (HE); Hamilton
*Charles Anderson Gurtler (ME); Summerfield
William Robert Guthrie (ChE); Kansas City
Ruth Genevieve Gwin (D&IM); Leoti
*Richard Lowell Haggard (AE); Altamont
Ray Hailey (G); Kansas City, Mo.
Donna Ruth Hall (HE); Powhattan
*Irwin Stewart Hall (ME); Wichita
*Shirley Louise Hall (IJ); Hutchinson
Daniel Adam Hamer (ME); Madison
Ruth Ann Hamilton (G); Topeka
William Frederick Hanser (MI); Collinsville, Ill.
Elna Louise Hanson (HE); Newton
Harvey Harakawa (ME); Honolulu, Hawaii
Oda Dorris Harlow (HE); Vesper
Robert Henry Harvey, Jr. (ChE); Atchison
Donald Eugene Hastings (BA); Jetmore
Willa Joyce Havely (HE); Junction City
*Elizabeth Ann Heckman (G); Independence
Maryellen Henderson (HE); Kansas City, Mo.
Ruth Irene Henderson (D&IM); Almena
Robert Lee Henrickson (Ag); Hays
*Albert Edwin Henry, Jr. (ME); Wichita
*Frederick Joseph Henthorn (EE); Dodge City
Elaine Hershey (BA&A); Eskridge
George Hetland, Jr. (EE); Manhattan
Warren George Hicks (PS); Moline
Eugene Melvin Hill (IJ); Westmoreland
Opal Brown Hill (HE); Manhattan
Ruth Jean Hinchee (HE); Arkansas City
Margaret Ann Hobbs (D&IM); Wichita
Lois Verona Hodgson (IJ); Little River
John James Hoefer (EE); Salina
*Melvin Richard Hoffman (CE); Kansas City
Cecil Ernest Holland (ArE); Manhattan
Bruce Dennis Holman (PE); Powhattan
Harry Richard Holmes (ME); St. George
Vlasta Holsan (HE); Summerfield
Harriet Elizabeth Holt (D&IM); Ellsworth
Dorothy Louise Hoodlet (HE); Argonia
Vincent Joseph Hoover (ChE); Greenleaf
Ava Carol Hoppes (HE&N); Caldwell
Lura Elizabeth Horton (IJ); Manhattan
Max Sherman Houston (G); Colby
Virginia Louise Howenstine (HE&A); Manhattan
John Franklin Hudelson (BA); Pomona
Mark Hotchkiss Hulings (ME); Effingham
*Lois Emily Hull (IJ); Kingman
*Rebecca Jean Hummel (G); Kanopolis
Lena Lavone Humphrey (D&IM); Hoisington
Earl Sidney Hunter (ME); Iola
Alfred Carl Huttig (BA); Wichita
Charles Dewey Iddings (ME); Dorrance
Neil Henry Illian (ME); Parsons
Kenneth Edgar Ireland (CE); Toronto
Mary Frances Isely (HE); Wichita
Ledie Mae Jackson (HE); Carneiro
*Charles Forrest Jacobs (MI); Potwin
*Virginia Louise Jacques (D&IM); Chanute
Charles Vincent Jakowatz (EE); Kansas City
Dorothy Maxine Johnson (HE); Macksville
Harold Dean Johnson (AA); Scandia
Lorraine Elizabeth Johnson (MuE); Manhattan
Milo Larson Johnson (G); Topeka
*Richard Earl Johnson (Ag); Sterling
Judith Jones (G); Kansas City
Katherine Ann Jones (D&IM); Sterling
Paul Harrison Jorgenson (CE); Manhattan
Donald Lewis Kastner (ME); Manhattan
Frank William Kaul (ME); Holton
Robert Edgar Keith (ArE); Manhattan
Charles August Kelley (G); Salina
William Arthur Kells (IC); Emporia
James George Kenney (ChE); Kansas City
Abdul-Rahim Mousa Khalaf (Ag); Jerusalem, Palestine
*Marjorie Allene Kiefer (HE); Plainville
John Patrick Kilkenny (PS); Manhattan
Robert Francis Killough (ChE); Ottawa
William Robert Kimel (ME); Clearwater
Wilbur Warren Kindschi (BA); Garden City
Arthur Keith Kingsley (EE); Formoso
*Ada Ruth Kingston (G); Hoisington
A. Leonard Kirchner (EE); Marion
Leta Marilyn Kirk (G); Cottonwood Falls
Elmer Levi Kistler, Jr. (BA); Manhattan
Stanley Milos Knedlik (G); Hanover
Dale Alpheus Knight (AA); Manhattan
Fred Baylis Kohl (PE); Kansas City, Mo.
Dorothy Irene Kraus (HE); Hays
Ruth Elaine Kreuter (G); Marion
Ralph Earl Krey (ChE); Zenith
Virginia Maye Ford Lamont (HE); Manhattan
*Charles Alfred Langdon (ME); Kansas City
Thomas Purcell Lanman (IJ); Larned
Paul Oscar Larson (ME); Lindsborg
*John Wallace Lathan (AA); Fowler
Walter Lawrence Laue (ChE); Lyndon
John Henry Leach (IJ); Arkansas City
Harold Verne Lear (CE); Salina
James Edward Leker (Ag); Manhattan
*Juliet Molly Leong (D&IM); Honolulu, Hawaii
Rex Ernest Leuze (ChE); Sabetha
Charles Jacob Lewellen (G); Newton
*Maxine Laurine Lindahl (HE); Phillipsburg
John Henry Lindau (ME); Lincolnville
Ernest Alfred Lindholm (ME); Cheney
Joanne Linn (D&IM); Lawrence
Robert Joseph Lorson (ArE); Chapman
Alyce Ann Lowe (HE); Topeka
*Katharine Lunn (HE); Kansas City
*Doris Elizabeth Lupton (D&IM); Cimarron
William Henry Luttgen (ME); Wichita
*Mildred Armetta Lygrisse (HE); Wichita
*Richard Freeman McAdoo (ME); Emporia
*Doris Lucille McCandless (D&IM); Kansas City, Mo.
Marjory Ellen McCollom (D&IM); Kismet
Jerome Edgar McConnell (ChE); Salina
Marjorie Marie McCrory (HE); Hutchinson
Letha Letty McDill (HE); Jewell
Marybelle McDonald (D&IM); Bremen
Philip Le McDonald (ME); Ulysses
John Ewing McFall (ME); Wichita
*Alfred Francis McGahen (CE); Dodge City
*William Eldon McGugin (G); Coffeyville
Laurel Daisy McLeod (HE); Manhattan

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JUNIOR—*Continued*

Ethel Marie McMichael (HE&N); Penalosa
William Howard McVey (ME); Fredonia
Max Grant Mabie (ChE); Green
John William Machin (EE); Wamego
R. Kendall MacKirdy (G); Manhattan
Allen Bush Madsen (G); Corbin
Margaret Elaine Mahoney (D&IM); Linn
Victoria Jane Majors (HE); Manhattan
Raymond Farrell Maldoon (ChE); Marysville
John Ellis Mangelsdorf (IC); Honolulu, Hawaii
Margery Lee Marshall (HE); Topeka
Paul Thomas Martin (ChE); Topeka
Margaret Anne Massengill (G); Caldwell
John Robert Massey (Ag); Sun City
Clair LaVerne Mauch (CE); Ness City
Thayne Orvle Mauch (EE); Ness City
*Anna Jeanne Mayhew (BA&A); Manhattan
Ruth Mary Meacham (HE); Lorraine
Martha Jean Meckel (G); Topeka
*William Patrick Meek (BA); Kansas City
Edith Frances Miller (G); Milford
*Martha Lee Miller (D&IM); Highland
Vance Vernon Miller (CE); Salina
Barbara Ann Millhaubt (G); Wichita
Eugene Russell Mingle (ME); Oakley
Evelyn Teresa Mitchell (HE); Axtell
*Virginia Ann Mitchell (HE); Humboldt
Alex John Molnar (G); Manhattan
Carol C. Montgomery (Ag); Sabetha
Marie Helen Montgomery (D&IM); Hiawatha
Mary Ann Montgomery (IJ); Salina
Bonnie Jean Moon (BA); Dodge City
*Thelma Lucille Moyer (HE); Dodge City
Melville Rhodes Mudge (G); Topeka
Mary Patti Muller (HE&N); Manhattan
Charlie Truce Myers (ME); Marquette
Maxine Lorraine Myers (D&IM); Junction City
Catherine Ann Nabours (G); Manhattan
Corrine Blenda Nelson (HE); Marion
Ernest Otis Nelson (CE); Scandia
John H. Nelson, Jr. (Ag); Minneapolis
Walter Paul Nelson (IC); Concordia
*Franklin William Newacheck, Jr. (ChE); El Dorado
Paul Dwight Newcomer (CE); Alexander
Ada Irene Newell (HE); Stafford
Beth Kathleen Newell (HE); Stafford
Grace Kathleen Newell (D&IM); Stafford
William Clare Newlin (ME); Lewis
Juanita May Nicholas (HE); Manhattan
Raymond Thomas Nichols (AA); Lecompton
Ruth Helen Nichols (HE); Topeka
Sue Jean Nickerson (G); Bushton
Russell Bernard Nixon (BA); Manhattan
*Martin Davis Noland (CE); Wichita
Lester Francis Oborny (ME); Marion
*Helen Christine O'Brien (D&IM); Parsons
Mary Margaret O'Loughlin (HE); Lakin
Charles William Olson (ChE); Manhattan
Norris Dean Olson (MI); Wakeeney
Theodore William Olson (ChE); Manhattan
Frederick Neill Palmer (MI); Manhattan
Kendrick Lowell Palmer (ChE); Murdock
*Clara Belle Paris (HE); Dighton
Richard Bordeaux Parker (G); Fort Leavenworth
William Homer Parmely (Ag); Le Roy
Ethelinda Elizabeth Parrish (G); Manhattan
Anna Helen Parsons (G); Wamego
Virginia Blanche Parsons (HE); Manhattan
Rodney Lewis Partch (AA); Bird City
Le Roy Beniamin Patterson (ChE); Marysville
Merle Wayne Patterson (ME); Junction City
William Vanzile Payne (PE); Manhattan
Margaret Maude Pearce (G); Manhattan
Chester Evan Peters (BA); Manhattan
*Nancy Jean Peterschmidt (PE); El Dorado
Kenneth Peterson (Ag); Vesper
Loyd Edwin Peterson (EE); Kinsley
*Evelyn Mae Phillips (BA&A); El Dorado
William Maurice Phillips (Ag); Sedgwick
Edwin Moats Pincomb (G); Overland Park
Donald William Pitts (MI); Indianapolis, Ind.
*Morris John Pollock (EE); Kansas City
Mary Theresa Pratt (HE); Hoxie
Wayne Wilbur Prichard (BA&A); Kansas City
Peggy Jean Proffitt (HE); Chase
*George Marshall Pyle (CE); Pittsburg
William Kay Quick (ME); Beloit
Helen Keller Ramsour (HE); Junction City
Mary Catherine Randell (HE&N); Marysville
William Robert Rector (ArE); Leavenworth
Elizabeth Nan Reed (BA); Lyons
*Jerald Donald Reed (ChE); Augusta
Luella Elizabeth Reed (HE); Circleville
Stewart Dean Reed (BA); Lindsborg
*Marilyn Lee Reeve (HE); Garden City
Helen Kathleen Reeves (HE); Everest
Eldon Melvin Reichart (Ag); Arrington
Margaret Mae Reissig (IJ); Topeka
Loretta Irene Reist (HE&N); Seneca
Cecile Allison Rexroad (HE); Hutchinson
Paul Warren Richardson (EE); Cawker City
Francis Raymond Rickard (BA&A); Manhattan
Paul Benjamin Ridlon (ME); Coyville
Barbara Jean Riley (G); Wichita
Harold Marvin Riley (AA); Holton
Patrick Warren Riney (ME); Junction City
*Helen Wills Roark (G); Manhattan
Dorothy Dean Robinson (HE); Kansas City, Mo.
John B. Rogers (ArE); Manhattan
*John Deitrich Rogers (ChE); Kansas City
Warren Raymond Rolf (EE); Pratt
Alberta Marie Roller (HE); Altamont
Michael Harris Roller (Ag); Circleville
Victor Kenneth Roper (BA); Barnes
Joseph Raymond Rowlen (ME); Eskridge
*Marjorie Forrest Russell (HE); Jefferson City, Mo.
Virginia Ellen Saathoff (G); Manhattan
LaDean Joyce Sage (G); Kansas City
*Orville Paul Sanders (EE); Labette
Vernon Kenzo Sato (ME); Koloheo, Hawaii
Duane Leon Sawhill (ChE-1; IC-2); Glasco
Norris Elwood Sayre (BA); Manhattan
Twila McDill Schafer (HE); Jewell
Robert Charles Schindling (IJ); Leavenworth
Billy Eugene Schmidt (Ar); Sedgwick
Joan Fredericka Schmidt (D&IM); Lyons
*Robert Edwin Schmitz (BA); Lamar, Colo.
Darren Bryce Schneider (EE); St. Francis
Raymond Clinton Schneider (Ar); Manhattan
Rose Anne Scholz (HE); Frankfort
Paul Henry Schroeder (Ag); Lorraine
*Carl Thomas Schuler (ME); Leavenworth
Wayne Fredrick Schultz (ME); Trousdale
*Jack Carl Schuster (ME); Augusta
Robert Wayne Schwirtz (ChE); Kansas City
Dorothy Louise Scollick (D&IM); Ottawa
Lawrence William Scott (G); Langhorne, Pa.
Ridge Lavan Scott (IC); Kansas City
Sarah Frances Seaton (HE); Manhattan
Walter Philip Sechler (BA); Wichita
*William Richard Setzkorn (CE); Dodge City
George Wilfred Seymour (ChE); El Dorado
Harry Edward Shank (Ag); Bazine
Carl Junior Shapley (ArE); Wichita
James David Sharpe (IJ); Council Grove

* Matriculated 1942-'43.

JUNIOR—*Concluded*

James Herman Shaver (Ag); Goodland
Margery Elizabeth Shideler (HE); Topeka
*Theodore Wheeler Shidler, Jr. (ME); Wichita
*Alice Shinn (G); Ottawa
Olive Grace Read Sidfrid (HE); Topeka
Cecil Robert Siebert (Ag); Pretty Prairie
*Evelyn Jean Siemers (G); Clay Center
*Warren Sies (PS); Lorraine
Richard Theodore Sizemore (ArE); Parsons
*Marjorie Ann Sloan (HE); Selden
*Betty Jean Smith (HE); Tucson, Ariz.
Joe Morris Smith (ChE); Neodesha
Lloyd Thomas Smith (ME); Great Bend
Olive Maxine Smith (HE); Kansas City
Neil Harrison Smull (Ar); Bird City
Reginald Edwin Snapp (IJ); Belleville
Warren Clarence Snyder (ME); Topeka
Homer Edward Socolofsky (G); Manhattan
Joseph Hall Somers (EE); Topeka
Nan Louise Sperry (HE&N); Overland Park
Marion David Spoelstra (ME); Prairie View
Harold Ellsworth Staadt (ChE); Ottawa
Julia Edna Stacey (G); Longford
Laura Alta Stacey (G); Longford
Mary Zoe Stahl (D&IM); Wichita
Cletus Francis Stallbaumer (PS); Frankfort
Raymond Edward Stein (AA); Miltonvale
Betty Mae Stewart (HE); Eskridge
*George Claire Stewart (Ag); Minneapolis
*Keith Gregory Steyer (ChE); Chanute
Helen Margaret Stinebaugh (HE&N); Princeton
Raymond Elmer Stokely (ME); Newton
Albert Hendrix Stone (G); Honolulu, Hawaii
*Doris Kathleen Stowell (D&IM); Russell
Mary Carola Stratton (HE&N); Coldwater, Ohio
*George Edward Streib (ME); Leona
Merle Edwin Stubbs (BA); Sterling
*Mary Anne Studt (IJ); Independence
Virginia Lee Suddarth (G); Great Bend
James Eugene Swafford (EE); Fort Scott
Marjorie Jane Swan (HE); Manhattan
*Orrin Homer Swindler (EE); Pratt
*Raymond Allen Tabberer (EE); Kansas City
Bernard Taub (AE); Brooklyn, N. Y.
Helen Dorothy Davis Taylor (HE); Meriden
James Donald Taylor (BA&A); Kinsley
*Philip Dean Taylor (IC); Salina
Wallis Leroy Teeter (EE); McPherson
Verda Rose Tessendorf (D&IM); Onaga
Emma Louise Thomas (HE); Hartford
*Glen Courtney Thomas (EE); Wichita
Herbert Corzine Thompson (ME); Ellinwood
Sivert Theodore Thompson (AE); Delia
Gerald Jack Thouvenelle (BA); Lucas
Donald Lee Timma (IC); Manhattan
Evelyn Louise Torrence (HE); Baileyville
Otto Henry Trechter, Jr. (ChE); Hoisington
*Maryls Maxine Unger (HE); Wichita
Warren Lewis Vance (ME); Mankato
Herbert Donald Vanderlip (MI); Manhattan
Ruth Marie Van Petten (HE); Washington
Vincent Thomas Van Sickel (ME); Abilene
Harold Benton Vicory (G); Greenleaf
George Dewey Volkel (EE); Lenora
Harold Roy Volkmann (EE); Lyons
Leota Fern Walters (D&IM); Holton
*Neidra Marie Waltz (G); Arkansas City
Lora Belle Ward (HE); Arkansas City
Raymond Edward Warner (EE); Abilene
James Wesley Watkins (PE); Manhattan
Esther Anne Weeks (HE&A); Fort Scott
Helen Louise Weeks (D&IM); Assaria
Lloyd Wayne Weller (CE); Kansas City
Leo Ralph Wempe (VM); Frankfort
Edith Jean Werts (G); Smith Center
Donald Duane Westbrook (ArE); Lincolville
*Phyllis Fenton Wheeler (IJ); Abilene
Marjorie Loyne White (HE); Soldier
*Albert Eugene Whiteside (EE); Fort Scott
John Carey Whitnah (G); Manhattan
*Monna Ruth Whitwam (HE); Wichita
Eugenia Lee Wick (HE&N); Hunter
William Keith Wieland (Ag); Stockton
Raymond Lee Wilcox (EE); Kincaid
Clarence Stanley Williams, Jr. (EE); Humboldt
Frances Antoinette Williams (D&IM); Marion
Betty May Wilson (G); Valley Center
*David Ott Wilson (ME); Wichita
Donald Roy Wilson (ME); Mound Valley
Dorothy Lillian Wilson (HE); Lawrence
Edith Wilson (HE); Carlton
James Allen Wilson (CE); Winfield
Leland Stanley Winetroub (BA&A); Leavenworth
*Byrle Burton Womble (CE); Wichita
Aletha Adeline Wood (D&IM); Mayetta
Chester Blain Wood (Ag); Trousdale
Robert Gordon Wood (Ag); Kansas City, Mo.
Ernest Emerson Woods, Jr. (BA); Kansas City, Mo.
Hattiebelle Woods (HE); Manhattan
Marilyn LaNelle Woods (HE); Clearwater
Foster William Yeager (MI); Manhattan
Ellen Margaret Yeo (G); Manhattan
Michael George Zelenznak (ME); Kansas City
*Ina Belle Zimmerman (D&IM); Whitewater
*Ross Wilton Zimmerman (G); Abbyville

SOPHOMORE

Jane Ackert (PE); Manhattan
Calvin Keith Adam (ChE); Wakefield
*Bruce Berkeley Adams (Ag); Richmond Heights, Mo.
Eugene Adams (VM); Wichita
Spencer Joseph Adams (IC); Manhattan
*Eleanor Ruth Adamson (HE); Coffeyville
Lawrence Edwin Adee (ChE); Belleville
*Myrna Jean Adee (HE); Topeka
Raymond Addison Adee (EE); Wells
Willis Howard Alderman (PS); Lyons
*Dorothy Winn Alexander (BA); Concordia
Lynn Bruce Alford (ME); Kansas City, Mo.
Raymond Dale Allen (Ag); Westmoreland
Eleanor Marie Allison (HE); Kechi
*Elizabeth Ann Allison (G); McPherson
*Frances Jensen Allison (G); McPherson
*John Bernard Amos II (G); Kansas City
Darrel Dean Ancell (ME); Sylvan Grove
*Lucille Christena Anderson (HE); Chanute
Rita Kathryn Anderson (HE); Partridge
Ruby Nadine Anderson (PE); Kansas City, Mo.
William Francis Anderson (IJ); Manhattan
Lois Jean Angstead (G); Manhattan
*Dale Eugene Anstine (ChE); Arkansas City
Richard Ray Appleoff (G); Hiawatha
Arthur Allen Appleton (G); Manhattan
Robert Thurston Babson (Ag); Worcester, Mass.
George Craig Bachman (ChE); Wichita
Lois Irene Bailey (HE); Wichita
Pauline Merle Baldwin (HE); Blue Rapids
Alva Harlan Bandy (CE); Cottonwood Falls

* Matriculated 1942-'43.

SOPHOMORE—*Continued*

Glen Wayne Barb (ME); Lost Springs
*Edwin Clifton Barber (ME); Scott City
Charles Edward Bardshar (VM); Mount Hope
*Norman H. Barker (EE); Pratt
Stanley Irvin Barnett (CE); Morland
Warner James Barry (VM); Kansas City
Lois-jo Ruth Bartell (HE); Topeka
*Theodore Francis Bartle (ChE); Coffeyville
*Dean Cecil Bath (PVM); Marion
James Owen Baxter (ME); Pomona
Charles Harry Bearman (PS); Wamego
Floyd Edwin Beaver (VM); De Soto
Chester Eugene Bebermeyer (AA); Robinson
Robert Elloy Beck (ChE); Manhattan
Paul Arthur Behrent (ArE); Selden
Theresa Ann Bell (BA); Manhattan
Albert Lucien Bellinger (ChE); Junction City
*Leora Evalyn Bentley (HE&A); Shields
Harold Wayne Berggren (Ag-1; G-2); Morganville
Robert Milton Berner (ChE); Clifton
Robert J. Berry (PE); Dodge City
Ferman Jean Bitter (ME); Hoisington
Sally Jean Blake (G); Kansas City
Marjorie Clarra Blakeslee (HE); Muscotah
Eugene Thomas Blattner (ChE); Rozel
Gene Fredrick Bohnenblust (AE); Longford
John Charles Boller (AA); Kansas City, Mo.
Darrell Rudolph Bolliger (ME); Dellvale
Herbert Eugene Book (ChE); Chapman
Howard William Borchardt (F&OH); Leavenworth
Paul Eugene Borg (ME); Marquette
John Joseph Bortka (PE); Kansas City
*Patricia Jane Bosse (G); Ellinwood
John Alan Bradbury (VM); Coffeyville
*Patricia Ann Brainard (HE); Carlyle
Joseph Marshall Braly (ArE); Coldwater
Merle Henry Brehm (BA&A); Hope
*Mary Ann Bremyer (G); McPherson
Donald J. Brenner (ChE); Clay Center
Gail Keith Brensing (ChE); Mullinville
Sidney David Brettschneider (AE); Bronx, N. Y.
Theron Lawrence Brewer (ChE); Great Bend
William Elihu Brock (VM); Manhattan
Irma Elene Brooks (HE&A); Norton
*Betty Jean Brown (HE); Salina
Clyde Ellis Brown (VM); Keats
James Melvin Brown (ChE); Greensburg
*Ada Lou Bruington (D&IM); Kansas City
Jack Randolph Bruner (ME); Burns
Elda Lorraine Bryan (HE); Cimarron
George John Buchholtz (ChE); Olathe
*John Eugene Bukovatz (EE); Kansas City
*Willis Albert Bunch (Ag); Paola
William Hobart Burch (IC); Fowler
Kenneth Burchman (DM); Bronx, N. Y.
*Betty Ann Burgess (BA); Alton
Melvin Sloan Burkhead (Ag); Beloit
Donald Lee Burnett (Ag); La Cygne
Bill Cluff Busenbark (G); Manhattan
Jack LeRoy Byers (BA&A); Jewell
*Luana Jean Byrns (BA&A); Wichita
Betty Jean Caldwell (MuE); Fort Riley
Bonnie Bell Callahan (IJ); Abilene
Starr Archibald Calvert (IC); Kinsley
Robert Duncan Campbell (VM); Junction City
Robert Fredrick Carlgren (AE); Concordia
Helen Josephine Carlson (BA); Randall
Gerald Wesley Carr (G); Wichita
*Francis George Carroll (IJ); Chapman
*Robert Benjamin Castor (BA); Kansas City
Philip Dean Cazier (VM); Manhattan
Margie Marie Cederberg (HE); Manhattan
Kenneth Richard Chapman (MI); Abilene
Gregg Leo Chappell (ME); Topeka
Marian Alice Cherry (D&IM); Redwood Falls, Minn.
Harry Earl Chiles (VM); Topeka
Emma Jean Christiansen (HE); Columbus
George Sumner Clark (IC); Longton
*Samuel Morgan Clark (ChE); McPherson
Donald Joseph Clarkson (CE); Kansas City, Mo.
Milton Alan Clemens (EE); Corning
Doris Lerene Clow (HE); Goodland
Marion Louise Coe (MuE); Manhattan
Otie Genevieve Cole (HE); Washington
*Glover Stewart Colladay, Jr. (ChE-1; PS-2); Hutchinson
*George Francis Collins, Jr. (CE-1; BA&A-2); Leavenworth
*Richard Vincent Collins (ChE-1; PS-2); Salina
Valdine Oral Combs (VM); Almena
Charles Kenneth Condray (ChE); Manhattan
Neel Leon Conley (VM); Wellington
Robert LeVerne Converse (ME); Harveyville
Helen Louise Cook (HE); Dillon
Dorothy Mae Cooley (BA); Wellington
JoAnne Bernice Cooney (IJ); Evanston, Ill.
*Eleanore Evelyn Cooper (HE); Emporia
Elnora Dean Cooper (HE&N); Stafford
*Robert Eagon Cope (ME); Wichita
Kenneth Ray Corke (Ag); Studley
Betty Loraine Courter (HE); Paola
Benn Cowan (CE); Ransom
Doris Mae Craft (HE); Kinsley
Mary Elizabeth Crandall (IJ); Le Roy
Barbara Jean Craven (HE&A); Summerfield
Stanley Marion Crawshaw (PE); Osborne
Richard Monroe Cross (ME); Wilson
Charles Curtis Curry (VM); Arkansas City
Robert Lyman Curry (ChE); Arkansas City
James Russell Curtis (ME); Toronto
Anna Faith Dahm (HE); Fowler
Virginia Jeanne Danielson (D&IM-1; G-2); Clyde
Marian Lee Darby (IJ); Kansas City
*Dora Lee Dauma (D&IM); Scott City
*Roberta Jean Dickinson (HE); Winfield
Beattie Blagg Dickson (ME); Topeka
Richard Eugene Dietrich (EE); Junction City
*Harriet Jane Dillard (D&IM); Hutchinson
Vernon Earrol Doll (ME); Cedarvale
Clara Lois Donovan (HE); Basehor
Julia Whitaker Doryland (D&IM); Manhattan
*George Loren Douglass (ME); Kansas City
Edward Downard, Jr. (BA); Barnes
Dorothy Mae Dreese (HE&N); Council Grove
Merrill Dale Dronberger (ArE); Ellsworth
Lucille Margaret Drown (HE&A); Topeka
Ruth Alice Dryden (HE); Ellsworth
*Marguerite Mildred Duer (HE); Kansas City
*Oliver Earl Duerksen (ME); Newton
Constance Eris Dummermuth (HE); Barnes
James Alfred Dunbar (Ar); Wichita
Clifford E. Duncan (VM); St. Francis
Lawrence Arthur Duncan (Ag); Lucas
*Betty Jo Dunlap (HE); Winfield
Betty Joy Dutton (HE&N); Harlan
Charles Henry Dutton (Ag); Concordia
*Doris Elizabeth Dyal (D&IM); Ashton
*Frank Maynard Dyck (IC); Moundridge
Ailene Frances Chapman Earl (HE&N); Wakefield
Maurine Marian Eaton (BA); Hillsdale
Byron Taylor Eberle (CE); Kansas City
Thurza May Ellis (BA); Topeka

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SOPHOMORE—*Continued*

Harold S. Elmer (G); Manhattan
William Richard Engelland (BA); Sterling
Lyle Leroy Engle (Ag); Abilene
*Anne Marie English (D&IM); Hutchinson
Leroy Glenn Eppinger (BA&A); Norton
William Erickson (G); Leavenworth
Marcia Jean Erskine (PE); Washington, D. C.
Virginia Elizabeth Eskeldson (HE&N); Romona
Mary Kaye Eubanks (HE); Holton
Philip Howard Ewald (ME); Kansas City, Mo.
Nina Evangeline Fair (HE); Alden
Hal Dean Falkenstien (CE); Onaga
Robert LaVern Fanshier (Ag); Great Bend
Margaret Farrant (HE); Frankfort
Isaac Newton Fehr, Jr. (IJ); Kansas City, Mo.
*Oran Eugene Ferguson (CE); Kincaid
Elizabeth Jane Fickel (G); Kansas City, Mo.
Donald Eugene Findley (PS); Kiowa
Donald Lloyd Flentie (AA); Centralia
Virginia Ruth Flook (HE); Canton
*Virginia Elizabeth Folz (G); Marysville
*Gilbert Frank (ME); Garden City
*Doris LaVerne Frazier (HE); Garden City
Phyllis Eileen Frazier (HE); Caldwell
Darlene Virginia Frederick (D&IM); Burrton
*June Virginia Fredrickson (IJ); St. Francis
Leon Grantham Frey (G); Smith Center
Joseph Frederick Fulton (VM); Webber
Karl Milton Funk (PVM); Abilene
William Howard Funk (ME); Abilene
*Athol Edythe Furman (IJ); Clearwater
Marguerite Helen Galloway (D&IM-1; G-2); Wakeeney
Chester Le Roy Garman (EE); Courtland
Chester Dale Garton (IC); Norton
Leo John Garvert (VM); Plainville
Margaret Elizabeth Gates (PE); Manhattan
Thoran Duane Gatterman (Ag); Lewis
*Freida Grace Hardeman Gentry (HE); Leavenworth
Robert Francis Gentry (VM); Topeka
Howard Douglas George (Ag); Lebo
Laurence Harm Gerdes (EE); Sylvan Grove
Orville Edward Gernand (VM); Goff
Shirley Anne Gessell (HE); Manhattan
William Edward Gies (PE); Tecumseh
*Margaret Estelle Giles (HE); Wichita
Jack Harris Gilman (ME); Topeka
James Todd Gilmore (Ag); Atchison
Esther Marie Glatt (HE&N); Enterprise
Faye Jean Gleason (D&IM); Goff
Charles William Glenn (AA); Holton
Ralph Bernard Glotzbach (BA); Paxico
Capdolia Maxine Goernandt (HE); Ames
Wayne Leslie Good (VM); McCune
Lavina Belle Goodman (MuE); Wheaton
Max Gordon (G); Bronx, N. Y.
*Robert Edward Gordon (ChE-1; IC-2); Fort Scott
Margie Ellen Gory (HE); Hoisington
*Rosemary Grady (BA); Chanute
Roy Max Grandfield (VM); Manhattan
Rex Marley Gray (CE); Emporia
Dan Alexander Green (ChE); Mound City
William James Griffing (VM); Manhattan
*Leah Jean Griffith (D&IM); Fort Riley
Lois Marcella Grimm (HE); Milan
Amy Ruth Griswold (G); Manhattan
Dean Rollin Gross (VM); Russell
Loys William Guest (Ag); Manhattan
Robert Ellis Guilfoil (VM); Kansas City
Carl Christian Gunter (G); Colby
Neil Claypool Gustafson (VM); Manhattan
*Berniece Helen Guthals (HE); Elmo
Lucille Mae Hackerott (HE); Bloomington
*Martha Jean Hadley (D&IM); Coldwater
Charles Carson Halbower (IC); Anthony
Charles Franklin Hall (Ag); Springfield, Mass.
William Carlton Hall (VM); Coffeyville
*Richard Frank Hamilton (EE); Hutchinson
Roger Dale Hamilton (AA); South Haven
Lucian Baldust Hammer, Jr. (BA); Claflin
Harriet Leone Hancock (HE&A); St. Francis
Daniel Ross Haney (VM); Manhattan
Frank Edward Hannigan, Jr. (ME); Hoisington
Walter George Harman (ME); Hoisington
Donald Lee Harr (IC); Emporia
*Duane Guy Harris (AA); Bird City
Clifford Junior Hartman (Ag); Hoxie
Faye Ella Hatcher (HE&N); Liberal
*Earl Robert Haury (ChE); Newton
*Marian Collette Hawkes (G); Salina
Marjorie Louise Hawkins (HE); Kansas City
Dean Lee Hawks (Ag); Hiawatha
John Blagg Healy (VM); Junction City
Clarence Gard Heath (PE); Leoti
Nancy Lou Heberer (IJ); Manhattan
Wilda Rae Hedge (D&IM); Hoxie
Harold John Heller (Ag); Hunter
Donald Allen Henshaw (VM); Herington
*Alice Marie Herr (HE); Abilene
Joyce Lee Herres (D&IM); Hoisington
Charles Willard Herrick (Ag); Elmdale
Maynard Deane Hesselbarth (ME); Abilene
Dorothy Elizabeth Hibbs (D&IM); Easton
Bonny Jean Hill (HE); Oakley
Lawrence Andre Hill (VM); Horton
James Glenn Hillabrant (CE); Washington
Alberta Marie Hineman (HE&N); Dighton
John Edward Hirleman (AA); Wichita
Margaret Lorene Hirmon (D&IM); Belleville
Arthur Burgoyne Hiser (ChE); Manhattan
*Donald Clifford Hite (ChE); Arkansas City
Wayne DeVere Hochuli (ME); Holton
Keith Owen Hodgson (ME); Little River
Vernon Cornelius Hoffman (MI); Winchester
John Clinton Hogue (DM); Barnes
Marjorie Mae Holm (HE); Dwight
Daniel Edward Holmes (AE); Lincoln
Mary Joan Holscher (IJ); Manhattan
David Adrian Holtz (Ar); Manhattan
*Mary Anne Holtz (G); Manhattan
Charles Dean Hoppas (Ag); Menlo
*Helen Catherine Horn (HE); Pratt
Charles Frederick Houghton (G); Chicago, Ill.
Twila Merne Howat (HE); Wakeeney
Martin Elmer Howell (BA); Topeka
George Everett Hudiburg (G); Manhattan
James Calvin Hudson (ME); Manhattan
Bonnie Marie Huffington (G); Latham
Wallace Warren Huffman (ME); Havensville
Richard Perry Humes (EE); Salina
James Hulet Hunt (G); Liberal
*Phyllis Jean Hurty (HE); Burrton
Billy James Hutton (EE); Carbondale
Felicia Geraldine Irving (G); Manhattan
*Walter Paul Isaacson (ChE); Hiawatha
Bernard Robert Jacobson (Ag); Waterville
Edward Charles Jacoby (ChE); Rochester, N. Y.
Dean Willis Jamison (Ag); Lenora
Marjorie Helen Janke (HE); Junction City
Robert Joseph Janousek (IA); Ellsworth
Vernon Elroy Janssen (AA-1; G-2); Lorraine
*Mary Katherine Jarrott (D&IM); Hutchinson

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SOPHOMORE—*Continued*

Marvin Acton Jensen (Ag); Vesper
Lawrence Edward Jilka (BA); Salina
Phyllis Maxine Johansen (IJ); Holyrood
*Ann Kathleen Johnson (D&IM); Everest
*Donald Bliss Johnson (ME); Hutchinson
Donald Henry Johnson (EE); Jamestown
*Dora Joan Johnson (D&IM); Winfield
Edgar Burton Johnson (CE); Kansas City
*Lloy Dale Johnson (ME); Viola
Lois Elvera Johnson (MuE); Axtell
Maurice Lorraine Johnson (ME); Jamestown
*Ralph Cecil Johnson (G); Kansas City
Robert William Johnson (Ag); Hutchinson
Walter Francis Johnson (VM); Ottawa
Wayne Elliot Johnson (ME); Manhattan
Wendell Berdette Johnson (PS); Falun
Mary Louise Johnston (HE&A); Manhattan
Phyllis Jean Johnston (HE&A); Manhattan
Dwight Vernon Jones (EE); Penalosa
*John Donald Jones (G-1; ME-2); Wellington
*Mary Jane Jones (IJ); Herington
Ralph John Jones (ChE); Stafford
Leon Edward Jordan (G); Kansas City
Harold LaVern Kalousek (BA); Kansas City
Keith Raymond Kehmeier (BA); St. Francis
Donald Ernest Keith (Ar); Manhattan
Richard Moore Keith (VM); Burlington
*Evelyn Diez Kemmerle (HE); Easton
Nettie Arline Kepple (D&IM); Culver
Warren Eugene Kerbs (IJ); Claflin
Hugh Cleveland Kershner, Jr. (CE); Kansas City
Shirley Imogene Kilmer (IJ); Kirwin
Arthur Raymond King (Ag); Ellis
Lawrence John King (PE); Minneapolis
Ruth Catherine King (G); Enterprise
*William Robert King (ChE); Augusta
Roy Thomas Kinkaid (Ag); Medicine Lodge
Thomas Marshall Kirk (Ag); Scott City
Carroll Francis Kirkendall (ME); Smith Center
Hugh Richard Kirkpatrick (ChE); Bogue
Royden Dale Kirkpatrick (EE); Manhattan
Dorothy Louise Kitselman (G); Manhattan
*Lois Virginia Klemp (PE); Kansas City, Mo.
*Doris May Kloeffler (EE); Manhattan
Richard Gunther Kloss (MI); Mt. Olive, Ill.
Harry Clayton Knappenberger (EE); Kansas City, Mo.
Delbert Deane Knauer (G); Manhattan
*Bernard Wesley Knowles (Ag); Salina
William Robbins Koger (IJ); Belvidere
Margaret Marie Konecny (D&IM); Viola
Foster Clinton Kordisch (VM); Kansas City
Eula Lee Krebs (G); Wichita
*George Julius Krenzin (EE); Preston
*Richard Eugene Lancaster (ME); Yates Center
Ivan Cayley Landis (IA); St. George
Jack Evans Landreth (G); Wellington
John Ephriam Lane (EE); Manhattan
Philip Roscoe Lane (PE); Manhattan
Charles Richard Lanphere (ME); Osawatomie
Betty Jo Larson (HE&A); Wichita
Virginia Elizabeth Larson (D&IM); Wamego
*Grace Eldred Lash (HE); Scandia
John Milton Lawrence (Ag); Winfield
Irene Anna Lehman (HE); Enterprise
Alice Lorene Leland (HE); Manhattan
Raphael Zephyr Letourneau (CE); Aurora
*Esther LaVerne Lewis (G); Home
Margaret Jean Lewis (IJ); Manhattan
Donald Eugene Lindgren (CE); Dwight
Marcelene Rae Linscheid (PE); Hutchinson
*James Milton Logan (EE); Wichita
*Owen Lee Lovan (BA); Salina
Daniel Bruce Lovett (ChE); Larned
Stanley David Luckman (Ag); Bronx, N. Y.
*Keith Berkeley Ludwig (EE); Parsons
Alvin Edward Luehring (ME); Manhattan
Beverly Jean Luke (HE&N); Junction City
Betty Jane Lunger (HE); Summerfield
Leonard Harry McCandless (SH); St. John
Harold Homer McCauley (ME); Stockton
Jeanne Kathleen McClanahan (HE&A); Lewis
Norman Fay McClaren (ChE); Greensburg
William Robert McClean (BA); Kansas City, Mo.
*Ola Marciele McCluggage (HE); Derby
*Peggy Doreene McComas (BA&A); Topeka
Elizabeth Anna McConnell (HE&N); Junction City
*Martha Jane McConnell (D&IM); Burlington
Elton Glenn McCormick (Ag); Cedar
Patricia Louise McCoy (HE&A); Manhattan
William Murray McDonald, Jr. (AA); Bremen
Wilma Jean McDowell (D&IM-1; IC-2); Milford
Ava Marie McKain (HE&N); Glasco
Joan Therese McKenna (HE); Kingman
John Arthur McLain (ME); Kansas City
Margaret Louise McNamee (D&IM); Cunningham
William Norman McNeill (ChE); Syracuse
James Samuel Machen (ME); Abilene
*Mary Evelyn MacQueen (HE); Manhattan
Barbara Jean Magill (G); Topeka
Jack Powell Malin (ChE); Macksville
William Whitten Mall (IJ); Manhattan
Marjorie Lee Manahan (HE); Wellington
Kathryn Florence Mann (HE&N); Burlington
Spiro Gus Manos (ME); Lyons
Wilbur Dean Mansfield (CE); Lucas
Evelyn Mae Manson (HE); Lancaster
Marjorie Jean Marshall (IJ); Manhattan
*Nadine Marshall (MuE); Minneola
Donald Edward Maskill (ArE); Kansas City
Rea Lou Matson (G); Smith Center
Dale Wendell Mattson (BA); Assaria
*Albert Lewis Maxfield (PVM); Kansas City
Marvin Leonard Maxfield (Ag); Syracuse
Jack Carroll Maxwell (ChE); Macksville
Randall Clinton Maydew (CE); Lebanon
Keith Eldon Mead (ME); Quinter
*Robert Gaines Menninger (Ag); Topeka
Audrey Jean Merryfield (D&IM); Minneapolis
Harold Alexander Mersky (PVM); Woodbine, N. J.
Gail Vern Meskimen (CE); Onaga
*Alva Don Messenheimer (EE); Manhattan
Louis Messerli, Jr. (ME); Turon
Dorothy Nelle Meyer (PE); Riley
George Rudolph Meyn (ChE); Hanover
Robert B. Michael (VM); Manhattan
Charles Earl Miller (MuE); Marquette
*Gene Louise Miller (IC); Fort Scott
Henry Julian Miller, Jr. (ME); Merriam
Margaret Grace Miller (G); Syracuse
Mary Alice Miller (D&IM); Wathena
Rex Leon Miller (AA); Deerfield
*Sarah Joanne Miller (HE); Fort Scott
Velma Lorene Miller (BA); Raymond
Roy Edward Milleret (VM); Kansas City
Robert Lee Mingle (ME); Oakley
Sanford Kenneth Moats (ME); Mission
Mary Louise Monroe (BA); Enterprise
Helen Louise Morgan (HE-1; G-2); Alta Vista
Marcus Daniel Morris (VM); Manhattan
Margaret Clea Morris (G); Minneapolis

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SOPHOMORE—*Continued*

Mary Jane Morris (HE&N); Council Grove
*Max Parker Morrison (Ag); Moran
*Mary Freda Morrow (D&IM); Marysville
Joseph Richard Moses (EE); McLouth
Robert Leonard Muchow (CE); Topeka
Wendell Claude Muck (ME); Clay Center
Harry Walter Mudge, Jr. (Ag); Burlington
Wayne Willis Mueller (EE); Sylvan Grove
Dorothy Mae Muetze (IJ); Manhattan
Daniel Albert Muller (ChE); Manhattan
John Austin Murphy (EE); Detroit
Jack Manwarring Muse (MI); Manhattan
Richard Bright Myers (VM); Bethel
Roy Shuji Nagakura (Ag); Hilo, Hawaii
*Joseph Burrows Nathan, Jr. (ChE); Wichita
Alven William Neff (IC); Manhattan
Robert Watson Nelson (ME); Minneapolis
Michael Sidney Newborg (Ag); New York, N. Y.
Rodney Lee Newman (ME-1; G-2); Arkansas City
Eunice Evelyn Niblo (HE); Muscotah
Margaret Joyce Nickerson (HE); Bushton
Delora Pluma Nissen (D&IM); Wichita
Beth Rene Noble (D&IM); Wichita
*Patricia Lee Noble (BA); Wichita
*Ramon Francis Noches (G); Junction City
Lawrence Herman Noller (EE); Topeka
Marian Ober (HE); Minneapolis
Howard Grant O'Connor (IC); Kansas City
Marvin Charles Odgers (AE); Washington
*Patricia Jean O'Loughlin (D&IM); Garden City
David Hedge Olson (EE); Wichita
Donald Joe O'Neal (ME); Colby
*Russell Dean Osterhout (EE); Bluff City
Bill Howard Otten (CE); Wichita
*James Vincent Otto (MI); Riley
*Panfilo Pace (CE); Bridgeport, Conn.
Dale Corwin Pancake (MI); Haddam
*Daniel Paradee (Ag); Columbus
Louise Jean Parcel (HE); Coldwater
Charles Henry Parizo (BA&A); Manhattan
Goldie Maxine Parker (HE); Trousdale
Kenneth Wayne Parker (Ag); Manhattan
Betty Lee Payne (HE&A); Topeka
*Jean Miller Peck (HE); Arkansas City
Delbert Raymond Peel (IC); Garnett
Milton Zacheric Pelischek (BA); Manhattan
Anne Maurine Pence (G); Manhattan
Jack Louis Perkins (ChE); Kansas City
Jay H. Perreten (G); Kansas City
*Martha Ann Peterson (D&IM); Kansas City, Mo.
*Warren Fredrick Pfankuch (G); Logan
Margaret Ann Pfrang (HE); Goff
Byron Blake Phillips (IC); Manhattan
Earl Norton Phillips (Ag); Manhattan
Bernard Thomas Pierce (AE); Manhattan
John Theodore Pierce (EE); Fort Riley
Thelma Elaine Pierce (HE); Marion
Harold Wayne Pierpoint (EE); Benedict
William Lester Pilcher (CE); Burlington
*Donna Louise Pittman (HE); Pierceville
Elizabeth Winifred Ploger (HE&N); Kinsley
Grant Calvin Poole (ME); Manhattan
James Armer Porter, Jr. (VM); Fredonia
Melvin A. Porter (ME); Dellvale
Gwenneth Gertrude Praeger (G); Claflin
Gertrude Annette Prather (D&IM); Oakley
Mina Arlene Pressgrove (HE&A); Topeka
*Charles Mathes Preston (ME); Burdett
*Billy Glenn Price (ChE); Harrisonville, Mo.
*Harold Andrew Pryor (AA); Fredonia
Patricia Louise Putnam (D&IM); Admire
*Robert William Quinlon (ME); Perry
Cleta Margaret Railsback (HE); Manhattan
Harold Homer Ramsour (AE); Junction City
Betty Allys Randall (HE); Climax
Margie Pauline Rasure (HE); Goodland
Ted B. Ratliff (G); Portis
*Benjamin Martin Ray (ChE); Wichita
Robert Chamberlain Reed (VM); Stockton
*Mary Anne Reeves (PE); Ulysses
Marvin Robert Repstine (PE); Manhattan
*Jane Faye Reynolds (D&IM); Iola
Thelma Irene Rice (D&IM); Jennings
Frank Porter Richards (ME); Manhattan
Jack Lowell Rieb (ME); St. Francis
Donald Eugene Riffel (AA); Stockton
Charles Watson Riley (VM); Manhattan
John David Rising (BA); Westfield, N. J.
Anna Lorene Roberts (HE); Manhattan
*Mary Ann Robinson (HE&A); McPherson
Clyde Kitt Rodkey (ChE); Manhattan
Alice Marie Roelfs (IJ); Bushton
Floyd Earl Rolf (AA); Pratt
*Dwight Morley Roloson (EE); El Dorado
Hautesse Etoile Rondeau (VM); Great Bend
Harold William Root (ChE); Chapman
Marjorie Helen Ross (HE); Clifton
Bryce Gilford Russel (EE); Canton
Margery Jean Russell (HE); New Albany
*Daniel Vincent Ryan (ME-1; G-2); Rochester, N. Y.
Robert Roy Santner (CE); Gaylord
Willard Clarence Sargent (ChE); Wichita
Ruth Maxine Sawyer (MuE); Kensington
Mary Lou Scarborough (D&IM); Great Bend
David Eugene Schrimer (Ag); Holton
*Christine Amelia Schmeling (G); Atchison
Barbara Jean Schmidt (PE); Anthony
Robert Adams Schmidt (ChE); Lyons
Mary Louise Schneider (D&IM); Logan
Naomi Margaret Schoeller (BA&A); Logan
Edwin Andrew Schoen (VM); Lenora
Robert Virgil Scholes (PVM); Topeka
*J. P. Scholle (ChE); Coldwater
*Robert Leroy Schrag (EE); Burrton
Ruth Augusta Schubert (HE); Bonner Springs
Leon Schulman (ChE); Brooklyn, N. Y.
Charles Blades Schwab (VM); Morrowville
Melvin Frank Scoby (VM); Fairview
Keith Emerson Seelig (CE); Clifton
Viola Elizabeth Setter (G); Manhattan
*Marion Charles Seyb (IJ); Pretty Prairie
Lawrence Goodwin Shaffer (ChE); Kinsley
*Margaret Wolf Shapley (HE-1; G-2); Manhattan
Robert Emery Shaw (ME); Wichita
Arlene Leota Shields (HE); Wamego
Edith Roberta Shimer (IC); Topeka
Loretta Louise Shockey (PE); Winfield
*Catherine Lucille Shoemaker (G); Kansas City, Mo.
Allen Baer Shopmaker (VM); Kansas City
John Wallace Shupe (CE); Ford
Le Roy Oliver Sidfrid (Ag); Topeka
Harold Leslie Siegele (ChE); Princeton
Ruth Elda Siemer (BA); Oxford
*George Benton Sigsbee (CE); Dodge City
Alexander Frank Silady (CE); Kansas City
Dorothy Maude Simmons (HE); Ashland
Herbert Walton Simmons (IC); Salina
Virginia Doris Sitterley (IC); Manhattan
Ross Douglas Skinner (G); Delphos
Millie Evangeline Small (HE&N); Conway Springs
Darrell Hugh Smith (Ag); Hugoton
Elaine Bessie Smith (BA); Manhattan
Francis Marion Smith (IC); Merriam
Jack Hayden Smith (EE); Lyons
James Ellis Smith (ME); Manhattan
Meryl Edith Smith (G); Colby

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SOPHOMORE—*Concluded*

Patricia Winslow Smith (D&IM); Quinter
Robert Newton Smith (ME); Hutchinson
Lyle Dean Snider (Ag); Talmage
*Keo Lee Snook (G); Ford
Neal Wanner Snow (ChE-1; IC-2); Neodesha
Ruth Elaine Soetter (HE); Wamego
Ahda May Somers (IJ); Galva
Arnold Dean Spencer (Ag); Whiting
Dale Eugene Spencer (BA); Oakley
Harvey George Spencer (ChE); Whiting
Howard Thomas Spencer (Ag); Concordia
Glenn Eugene Springer (ME); Salina
Leland Eugene Stalker (MuE); Kirk, Colo.
Richard Louis Steele (EE); Smith Center
*Lenora Dittmer Steinweg (HE); Manhattan
Edward George Stenzel (CE); Marion
Dale Jess Stephens (ME); Norwich
George Harold Stephens (AA); Cherokee
Everett Southward Stephenson (AE); Wichita
William James Sterling (AA); Hardtner
Charles Richard Stevenson (AA); Manhattan
Charlotte Ann Stevenson (G); Oberlin
Lawrence Grant Stevenson (ChE); Pomona
Margaret Emily Stewart (D&IM-1; BA-2); Kansas City, Mo.
William Gene Stewart (EE); Colby
Evelyn Louise Stockwell (G); Hutchinson
Ernest Kirk Stonebraker (VM); Leavenworth
Elmer Henry Strathman (VM); Seneca
Lee Monroe Stratton (IJ); Topeka
Mary Alice Streator ((D&IM); Denton
Ivan Karl Strickler (Ag); Colony
Leland Ray Studt (EE); Glasco
Charles Delbert Stumpff (VM); De Soto
Betty Jo Sullivan (PE); Manhattan
Beatrice Elizabeth Sundgren (HE&N); Falun
*John William Sutcliffe (PVM); Manhattan
Betty Jane Swan (D&IM); Argonia
Richard Segur Swanson (ArE); Concordia
Margaret Adelaide Swift (HE); Holton
Wiley Bevis Tanner (VM); St. John
Lloyd Byron Tarrant (ME); Stafford
Warren LeRoy Taylor (IJ); Manhattan
Vance Newton Templeton (BA); Logan
*Robert Edward Tenbrink (ME); Spearville
Iantha Alice Terrill (PE); Hutchinson
Everett Dale Thompson (ME); Hunter
Roberta May Townley (HE); Abilene
Robert Gene Tribble (EE); Soldier
Charles Stephen Tripp (CE); Wichita
George Stanley Tuttle (ChE); Lucas
Harry William Tyrrell, Jr. (ME); Columbus
Wayne Hubert Ukena (Ag); Robinson
Robert Dewey Underwood (BA&A); Manhattan
Curtis Jellison Vague (G); Ellsworth
Wilma Irene Vance (HE&A); Kansas City, Mo.
Sibyl Fay Van Leewen (IC); Vesper
Audrey LaVerne VanMetre (HE); Sublette
Leta Ruth VanMetre (G); Sublette
*William Vincent VanSkike (ME); Arkansas City
Leslie Jean Vasconcells (IJ); Ellsworth
Virginia Lee Venning (D&IM); Concordia
Don Carlton Vickers (ME); Abilene
Elmer Vogt (AE); Meade
*Roberta Arletta Vogt (HE); Tribune
*Shelley Eileen Walker (HE); Topeka
*Wayne Raymond Walquist (ChE); Kansas City
*Willis Frank Walsten (Ag); Hutchinson
Gene Allison Walters (ChE); Kinsley
Earlene Elma Warner (D&IM); Glasco
*Glenna LaVern Webster (HE); Burrton
Phyllis Norma Weckerling (G); Manhattan
Ralph William Wedd (ChE); Oak Hill
John Francis Welch (ME); Goff
Alice LaVaughn Wallace Weller (HE); Plains
Lucy Catherine Wells (IJ); Stockton
Rex Irving Wells (CE); Syracuse
Clinton Everett Wendland (G); Randolph
Merrill Harmon Werts (Ag); Smith Center
Wesley Hargitt Wertz (VM); Quinter
*Anne Lewise Wesley (IJ-1; HE-2); Hutchinson
Jay Alfred West (Ag); Nekoma
Elton Ray Weygandt (PS): Manhattan
*Barbara Anne White (G); Topeka
*James Robert White (CE); Kansas City, Mo.
Lou Ida White (HE&N); Effingham
William John White (MI); Liberal
Betty Irene Whitney (G); Manhattan
Kenneth Clyde Whittier (EE); Muscotah
Henry William Wichers (IC); Manhattan
Carmen Koster Wilcox (PE); Minneapolis
*Clyde Preston Wilder, Jr. (Ag); Wichita
Norma Lee Wilkinson (D&IM); Stafford
*Roger Harold Wilkowske (DM); Manhattan
*Arba Eldon Williams (BA); Altamont
Earl Eugene Williams (PE); Dodge City
Edred Blaine Williams (ME); Belleville
Patricia Claire Williams (IJ); Hutchinson
Wendell Hudson Williams (BA&A); Fredonia
Edith Helen Willis (HE); Manhattan
Warren Wesley Willis (EE); Manhattan
Donna Dell Wilson (BA); Manhattan
*Ruth Yvonne Wilson (HE-1; IJ-2); Parsons
Winston Harold Wingerd (IC); Navarre
John Calvin Winters (ChE); Kansas City
Leo Andrew Wirtz (EE); Great Bend
Dale Gust Wolfram (Ag); Whitewater, Wis.
Anabel Wood (HE); Mayetta
*Evelyn Pearl Wood (HE); Mayetta
James Paul Wood (Ag); Clifton
Leonard Eugene Wood (ChE); Burr Oak
Mary Elaine Wood (HE); Overland Park
Galen Irvin Woodward (ME); Richland
Helen Margot Wright (HE&N); Manhattan
Vernon Seever Yaussi (Ag); Hiawatha
Patricia Evelyn Zellner (HE&A); Kansas City
Frances Jean Zibell (D&IM); Holton
*Margaret Ann Zimmerman (HE&N); Whitewater
*Zora Estelene Zimmerman (D&IM); Belle Plaine
Joe Edward Zollinger (ME); Junction City

FRESHMAN

Charles Earl Abbey (BA); Newton
*Ihla Geraldine Dugan Abel (G); Green
*Clemeth Alan Abercrombie (BA); Barnard
*Franklin Alexander Adams, Jr. (EE); Salina
George Earl Adams, Jr. (Ag); Horton
*Harry Stanley Adams (EE); Lewis
*Hilda Charlene Adams (HE&N); Horton
*Milbern Franklin Adams (VM); Elmdale
*Jack Raymond Adee (CE); Gretna
*Carl Emil Adolphson (Ag); Miltonvale
Ralph Gerald Alden (IJ); Manhattan
*Georgiann Alexander (HE); Everest
*Harry Wade Alexander (ME); Wichita

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FRESHMAN—*Continued*

Donald Lee Allen (BA); Overland Park
*Duane Alonzo Allen (AA); Cummings
George Willard Allen (VM); Wichita
*Marion Schnell Allen (IC); Herington
Ralph Edwin Alter (VM); Coffeyville
*Donald Eugene Anderson (Ag); Topeka
Duane Hubert Anderson (G); Manhattan
John Henry Anderson (ChE); Ramona
*Margaret Virginia Anderson (HE); Fort Riley
*William Brady Anderson (G); Newton
*Wilma Agnes Andrist (HE-1; G-2); St. Francis
Wallace Lee Anthony (VM); Clay Center
*Gordon Bragunier Appleby (ChE); Peabody
*Glen Thomas Arganbright (ME); Waterville
Lawrence Norman Armagost (PVM); Kansas City
*John Junior Armstrong (AA); Muscotah
*Maurice Edgar Arnold (ChE); Marysville
*Waitstill Blair Ashbaugh (G); Hanover
*Marion Elizabeth Asher (HE-1; PS-2); Great Bend
*Marian Lee Astle (IJ); Hutchinson
Albert Raymond Auld (ME); Wakefield
Janet Eloise Austin (IJ); Topeka
*Keith LeRoice Bacon (Ag); Minneapolis
*Beverly Ann Bagby (IJ); Coffeyville
*Robert Lewis Baier (CE); Salina
*Gilbert Lee Baker (ME); Holyrood
*Ardis Faye Baldwin (HE); Lyons
*Gerald Aldon Bales (IC); Herington
*Harold Wayne Ballew (G); Elmdale
*James Max Barbee (VM); Sutton, Neb.
*Patricia Elizabeth Barclay (G); Manhattan
*Chester Isaac Bare (G); Protection
*Marguerite Ann Bare (HE); Protection
*Harold Nathan Barham, Jr. (MI); Manhattan
*George Franklin Barker (Ag); Ottawa
Richard Vincent Barker (CE); Holton
*Esther Edith Hamilton Barnes (D&IM); Corning
*Ronald Lloyd Barnes (Ag); Soldier
*John Francis Scott Barr (G); Manhattan
*Phyllis Barr (G); Wichita
*Thomas LeRoy Barton (ME); Wallace
*John Upton Bascom (PS); Manhattan
*Gilbert Martin Basgall (BA&A); Hays
*Stanley Newton Batdorf (PS); Augusta
*George Francis Batten (G); Manhattan
*Keith Gierhart Battin (G); Manhattan
*Margaret Louise Bayer (HE); Manhattan
*Leslie Earl Beams (ChE); Belleville
*Jean Haden Beardmore (CE); Concordia
*A. G. Junior Beck (IJ); Manhattan
*Betty Laura Beem (D&IM); Meriden
*Dean Roland Beer (PVM); Larned
*Harold Beverly Bell (ME); Beverly
*Jack Ferguson Bell (PVM); Perry
*Elma Berniece Benedict (G); Oneida
*Robert Goddard Bensing (EE); Manhattan
Glen Berger (ME-1; BA-2); Burlingame
*Harry Hilbourn Berrier, Jr. (VM); Norborne, Mo.
*Joseph Enos Bert (ChE); Abilene
*Theodore Eugene Besser (ME); Kinsley
*James Robert Betts (ME); Oberlin
*Clarence Alfred Betzen (Ag); Marienthal
*Lorenz Leon Beuschel (PVM); La Cygne
*Betty Lou Bhear (D&IM); Holton
*Emily Elizabeth Biehl (IJ); Belleville
Homer Lynn Bird (AA); Albert
*Irma Eileen Bird (HE); Great Bend
Thaine Gerald Bird (CE); Elk City
*William Louis Bissantz (AA); Sun City
*Eleanor Faye Blackburn (HE&N); Hill City
*Dorothy Louise Blair (MuE); Manhattan
*Loren Francis Blaser (ME); Waterville
*Ernest Edgar Bleam (CE); Oak Hill
*Hugh Ayars Blodgett (BA); Manhattan
*Thaine Quenten Blumer (G); Beattie
Albert Wilton Blythe (Ag); White City
*Lawrence Duane Blythe (PVM); White City
*Benjamin Keith Boam (EE); Topeka
*Kenneth Edward Bohnenblust (ME); Bala
Frances Deloyce Boles (HE&A); Manhattan
*Jewell Rosemary Boles (G); Manhattan
*Ruth Ann Boles (HE); Turon
*William Simmons Boley (PE); Wakarusa
George Metzger Bolton (ME); Manhattan
Virgil Waldeane Bolton (AA); Smith Center
*George Franklin Boone (G); Manhattan
Paul Albert Boone (Ag); Toronto
*Ray Everett Booth, Jr. (IJ); Larned
James Howard Borth (EE); Plains
*Robert Earl Borthwick (AE); Beeler
*Jenelle LaVon Boudreau (IJ); Brewster
*Benjamin Phillip Bowman, Jr. (EE); Linn
*Donald Allison Bowsher (ME); Great Bend
*Elda Eudora Boyer (D&IM); Levant
Rex Allen Boyle (Ag); Spivey
*Billy Bernard Bradley (G); Salina
*Marjory Eileen Bradshaw (ME-1; HE-2); Salina
*Wilbur Warren Bradshaw (Ag); Belvere
Kenneth Wilbur Brainard (AE); Selden
*William Edward Brainerd (ME); Augusta
*Raymond Creth Bramwell (G); Concordia
*Henry Marlin Brand (PVM); Elmo, Mo.
*Silas E. Brandner (ChE); Carlton
*Ralph Edward Breeding (ME); Rolla
*Dennis Maynard Brenner (IJ); Longford
*Melvin Charles Brewer (ME); Concordia
*William Robert Bridgens (ArE); Kansas City
*Betty Lee Bright (HE); Baxter Springs
*Herbert Clair Brillhart (Ag); Perryton, Tex.
Herman Ralph Brinkman (F&OH); Pittsburg
*William Harrison Brookover (PE); Eureka
*Delbert C. Brooks (ME); Great Bend
*Bayard Braden Brown (EE); Sharon
*Beverley Brooks Brown (BA); Clifton
*Irma Maxine Brown (HE); Leon
*Mary Alicia Brown (HE); Manhattan
*Ralph Murry Brown (Ag); Fall River
Ruby Alice Brown (HE); Sylvan Grove
*Van Leen Brown (HE&N); Atwood
*Loyd Lee Brumfield (ME); Jetmore
*Calvin Edward Bruns (ME); Riley
*Marcus David Bryant (BA); Leavenworth
Bruce L. Buchanan (ME); Little River
*Eldon Everett Buckner (EE); Manhattan
*Marjorie Bernice Buehler (PE); Bushton
*John Lawrence Bulkley, Jr. (BA&A); Reading
*Gus Charles Bulleigh (ChE); Wichita
*Elizabeth Jane Bullock (D&IM); Berryton
*Dorothy Jean Bunch (HE); Fredonia
Robert Burcher, Jr. (EE); Kinsley
*William Paul Burk (AE); McDonald
*Gordon Ernest Burns (ME); Pomona
Charles Jay Burson (BA); Manhattan
*Betty Brown Burton (IJ); Manhattan
*Francine Eloise Burton (G); Manhattan
*Verna Lee Butcher (HE); Cimarron
*Margaret Eleanor Butler (D&IM); Hays
*Wilbert John Bruxton (ME); Cherryvale
*Gaylord Junior Campbell (G); Concordia
*Gerald Lee Canfield (EE); Belleville
*Lorain Azel Carl (G); Colby
*Mary Susan Carl (HE); Garden City
*Marjorie Lou Carle (BA); Manhattan

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FRESHMAN—*Continued*

Kenneth Charles Carlson (VM); Manhattan
Robert Beck Carlson (BA); Americus
*Ruth Eileen Carlson (G); Randall
*John Frank Carnes (VM); Henryetta, Okla.
*Jay Harold Carswell (AA); Alton
*Clyde Merle Carver (PE); Miltonvale
*Carroll Milton Casey (ArE); Corning
*Jeanne LaVonne Cassill (D&IM); Washington
*Emery Neal Castle (Ag); Oxford
*John Gary Chaltas (CE); Salina
*Ruth Ella Ann Champion (D&IM); Minden Mines, Mo.
*Wayne Barrett Chapin (PVM); Manhattan
Jim Beatty Chaplin (BA); Kansas City
*David Hugh Chapman (ME); Merriam
George Melvin Chapman (VM); Glasco
*Earl Stanley Chappell (BA); Manhattan
*Philip Racknor Chappell (G); Topeka
*James Leslie Cheatum (ME); Kingman
*James Miles Chenoweth (Ag); Grinnell
Bethyl Beryl Cherry (G); Redwood Falls, Minn.
*Phyllis Nadine Chessmore (D&IM); Atwood
*Alfred Alexander Chill, Jr. (CE); Marion
*Charles Brian Chinn (ChE); Kansas City, Mo.
*Doris Marie Christiansen (HE); Columbus
*Merrill William Christy (ME); Oswego
*Kenneth Richard Church (ME); Dighton
*Patricia Louise Cibolski (G); Manhattan
*William Edward Clair (ME); Bushton
*Betty Margaret Clark (HE); Wheaton
Delbert Dean Clark (VM); Wheaton
*Richard White Clark (ME); Salina
*Robert Alfred Clark (CE); Smith Center
*William Edwin Clarkson (ME); Kansas City, Mo.
*Kenneth Dean Clayton (CE); Council Grove
*David Lee Clifton (IJ); Smith Center
*Harold Deas Clifton (ChE); Fredonia
*Arthur Beryl Cloud, Jr. (IC); Salina
*Clark Coan (IC); Barnes
*David Omer Cochran (ChE); Luray
*Dorothy Edna Cochran (HE&A); Topeka
*Walter Wendell Cochren (ME); Whiting
*Elizabeth Anne Cole (G); Salina
Embert Harvey Coles (VM); Colby
*Sherwood Clark Collins (IJ); Dwight
*Herbert Harrison Combs (ME); Mound Valley
*Stuart Lee Compton (BA); Larned
*Wallace Edward Compton (EE); Muscotah
Carson Emmitt Condry (ME); Herington
*Fordyce Thomas Conkey (EE); Mission
*James Fred Conn (MI); Osborne
*Margaret Montgomery Conrad (G); Hutchinson
*Dorothea Marie Conway (Ar); Topeka
*Creed Hastings Conwell, Jr. (G); Manhattan
*Morley Hinshaw Cook (PVM); Topeka
*Miles Cooley, Jr. (EE); Portis
*Vincent Bruce Coombs (PS); Bentley
Donna Beth Coon (G); Manhattan
*Carolyn Gray Cooney (HE&A); Wilson
Bobbie Dean Cooper (EE); Bluff City
*Katherine Mae Corbin (IJ); Merriam
*George Nelson Cornell (ME); Wichita
*Marjorie Fern Correll (G); Manhattan
*James Richard Cottrell (Ag); Plains
*Earl Wilson Couchman (ME); Wichita
Eldon Eugene Coulson (ME); Wichita
*Dewey Council (MuE-1; ArE-2); Winona
John Dean Cowan (PVM); Smith Center
*Vivian Thompson Cowger (HE); Topeka
*Byron VanNoy Cox, Jr. (EE); El Dorado
*LeRoy Ernest Cox (ME); Hutchinson
*Norman Ellsworth Cox (ME); Merriam
*William Albert Crabb (ME); Belleville
*Ernest Richard Cram (ME); St. Francis
*Howard Arthur Cramer (PVM); Lebo
*Richard Allen Crandall (IJ); Stockdale
Harry Earl Creal, Jr. (IC); Kansas City
*Elvin Dale Crockett (CE); Burdett
*Girdner Forrest Crofoot (Ag); Matfield Green
*Harold Eugene Crotts (PS); Turon
*Lawrence Harvey Culbertson (G); Concordia
*Jack L. Cullen (MuE); Smith Center
*Willis Alfred Cullison (ME); Oberlin
*William Gerard Curtis (Ag); Kearny, N. J.
*Doris Darlene Daetwiler (G); Herington
*Thelma Kathryn Dahl (G); Manhattan
*Vernon Ellison Dalton (BA&A); Junction City
*Charles Dietrich Daneke (ME); Topeka
*Doris Aldean Danielson (HE&N); St. Francis
*Anne Elizabeth Darby (HE); Manhattan
*Mary Jane Darrah (MuE); McPherson
*Clifford Owen Davis (ME); Leavenworth
*Don Albert Davis (Ag); Salina
*Roy Davis, Jr. (CE); Mentor
*Viola Mae Davis (HE); Holcomb
*Donald D. Day (BA); Hutchinson
John Robert Dean (PE); Harveyville
*Wallace Dean Decker (CE); Enterprise
*George Robert Deeds (ME); Little River
*Richard Leo DeFord (AA); Alton
*William Donald DeGeer (ME); McPherson
*William Davis Denholm, Jr. (CE); Tonganoxie
*William Eugene Dennis (Ag); Wellington
*Alden Benjamin Detrixhe (Ag); Ames
William Melvin Dicke (PVM); Paola
*Doris Gene Dickey (HE); Kansas City, Mo.
*George Francis Doan (Ag); Pratt
*Earl Eugene Dockins (Ag); Manhattan
*Hale Arden Dodge (PVM); Dighton
Jack Royce Dodge (ME); Topeka
*Richard William Dole (G); Almena
*Dorothea Mae Doles (PE); Cheney
*Gale Westen Doner (ChE); Salina
*Harriet Viriginia Donley (G); Oxford
*Leonard Harry Donley (G); Kingman
*Lester William Donley (G); Kingman
*Paul Francis Donmyer (ME); Solomon
*Jessie Lee Dorey (HE); Newton
*Dorraine Lucille Dorf (IJ); Manhattan
*Mary Lee Dougherty (MuE); Beattie
Harry Dean Douglas (BA); Burlington
*John Henry Douglass (BA&A); Wichita
Wilbur Hugh Downing (BA&A); Wichita
*Ray Anthony Doyen (AA); Rice
*Robert Lewis Doyle (IC); Wamego
*Donald Warren Drayer (PS); Manhattan
*Mary Marcelline Dressel (HE&A); Lyons
*John Calvin Driver (AA); Quenemo
*Clara Louise Dubbs (G); Ransom
*Dan Wayne Dundon (ME); Junction City
*Margaret Welstead Dunham (HE); Jewell
*Jack William Dunlap (ME); Rochester, N. Y.
*Edward Patrick Dunne (CE); Manhattan
*Calvin Frank Duphorne (ME); Sharon Springs
*Mary Alice Durr (HE&A); Dighton
*Harold Everett Durst (G); Haddam
George Horace Dutton (MI); Concordia
*Charles Lester Duvall (EE); Barnard
*Robert Clair Duwe (EE); Lucas
*Everett Wilson Dykes (PVM); Stafford

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FRESHMAN—*Continued*

*Cowan Chapman Eastham (CE); Colorado Springs, Colo.
*Norma Elaine Eastman (HE&N); Liberal
*Eugene George Eckhart (G); Almena
Walter Roscoe Eddy (CE); Onaga
*Cornelius Clyde Edell (BA); Smith Center
*Rosemary Watson Ehlers (Ar); Kinsley
*Eugene Einsel (ME); Greensburg
William Raymond Ekart (BA&A); Alma
*Mary Maxine Elling (MuE); Manhattan
*Edwin Lovell Elliott (CE); McPherson
*Dale Wesley Ellis (Ag); Havensville
*William Dean Ellis (AE); Kingsdown
*Robert Eugene Enders (ME); Lyons
*Charles Wilbur Engelland (ChE); Sterling
*Rosalee Marie Engelland (G); Sterling
*Betty Ann Engle (HE); Chapman
*Voiland Eugene Engle (Ag); Abilene
*Wesley Dale Ennis (ChE); Hutchinson
Phil Bumgartner Erickson (PVM); Overland Park
*Dale R. Evans (CE); Turon
*Merle Linton Eyestone (Ag); Leavenworth
*Thomas Charles Fagan (IC); Barnes
*Teddy Sam Falen (IJ); Stafford
*Stanley Brown Fansher (Ag); Kansas City, Mo.
*George Harvey Fanshier (EE); Great Bend
*James William Faubion (G); Manhattan
*Clarence Kinney Fellman (PVM); Osage City
Maud Doris Fent (G); Newton
Harold Lee Fenton (Ag); Alton
*Eunice Corrine Ficken (HE); Bison
*Kenneth Morse Fields (ME); Waverly
*Ruth Ann Finley (BA); Cottonwood Falls
*Clare Frances Finn (BA); Great Bend
*William Robert Fisher, Jr. (EE); St. Joseph, Mo.
*Donald Dale Fleckenstein (G); Onaga
*George Thomas Flening, Jr. (ME); Oakley
*Alberta Mary Fleske (HE); Albert
*Robert Murlin Fletcher (ME); Manhattan
*Pauline Marjorie Flook (G); Canton
*Irene Engeline Foelschow (G); Manhattan
*Johanna Marie Folck (HE); Junction City
*Herbert Wilson Ford (G); Manhattan
*Leo Agner Forsberg (PVM); Minneapolis
Darle Franklin Fortmeyer (ME); Ruleton
*Boyd Cecil Fox, Jr. (Ag); Plains
*Robert Norman Fraker (CE); Oberlin
*Ralph Gerald Fraser (ME); Belleville
*Melvin Eugene Frasier (Ag); Sharon Springs
*Robert George Frederick (G); Salina
George Alfred Fredreckson (AA); Concordia
*Barbara Helen French (HE); Hanover
*Jonathan David Friend (VM); Marshall, Okla.
*Ralph Charles Fuhrken (PS); Washington
*Richard Lee Fulcher (ME); Larned
*Robert Loren Fulks (EE); Langdon
Leslie Gene Fullen (Ag); Salina
*Martha Ann Fuller (D&IM); Salina
*Wilmer Myers Fuller (Ag); Courtland
*Marian Louise Funston (G); Frederick
*Herbert Thomas Fuqua (AE); Easton
*Ralph Leon Furst (G); Goff
Howard H. Furumoto (VM); Ninole, Hawaii
*Kenneth Lee Fyler (BA&A); Bison
*Doris Lucile Galloway (HE); Jamestown
*Irvine Edwin Gandee (ME); Junction City
*Milton Lee Gant (AA); Wilsey
Russel Winfield Gard (CE); Salina
*Lee William Garey (BA&A); Downs
Jim Garvie (MI); Manchester
*Thomas Carter Gatie (Ag); Asherville
*Jane Ray Gebhart (G); Salina
*Geraldine Gehrke (D&IM); White City
*Alice Margaret Geiger (IJ); Sabetha
*Margaret Alene Geiger (IJ); Marysville
Ina Miriam Gelphman (D&IM); Kansas City, Mo.
Robert Grant Gentry (BA); Wichita
*Phyllis Lucille George (IJ); New Castle, Pa.
*Leonard Herman Gerhardt (CE); Whiting
*Alfred Harlan Getty (IC); Clayton
*Theodore Junior Gfeller (ME); Chapman
*Harold Eugene Gibb (G); Elmdale
*Doris Shirley Gillan (BA&A); Concordia
*Agnes Elizabeth Glotzbach (HE); Paxico
*William C. Glover (G); Manhattan
*Dennis Donald Goetsch (PVM); Sabetha
Gerald Dean Goetsch (VM); Sabetha
*Thomas Henry Gold (EE); Goff
*Murray Morris Goldfarb (DM); Brooklyn, N. Y.
*Saul Gorin (EE); Norwalk, Conn.
*Rachel Gossard (HE); Altamont
John Edwin Gotti (ME); Culver
*Jack Randall Gould (IJ); Manhattan
*Norbert Sylvester Grady (BA); Downs
*Roy Scott Graham (ME); Altamont
*James Lester Gransberry (EE); Wichita
*Betty Lucille Graper (HE); Colby
*Kenneth Dean Grass (G); Herington
*Robert Trull Gray (CE); Kirwin
*Clarence Raymond Green (AE); Mound City
*Laurenz Stephen Greene (Ag); Beverly
*Leonard Lee Greer (Ag); Sabetha
*Thelma Irene Greer (HE); Galva
*Lee Ralph Gregory (IC); Manhattan
*Robert George Griffin (Ag); Nickerson
*Rosemary Griffin (IJ); Bird City
*Warren Turner Griffith (PS); Bogue
*William Eugene Griffith (ME); El Dorado
*Fred Griffiths, Jr. (PVM); Clay Center
*Patterson Grissom (PVM); Syracuse
Richard Clare Groff (VM); Topeka
*Kirke William Grutzmacher (PVM); Onaga
*Margaret Joanne Guest (G); Manhattan
*Robert William Guipre (EE); Simpson
*Sheila Dorothy Guise (MuE); Brewster
*Jean Edwin Gunther (ME); Soldier
*John Raymond Gurtner, Jr. (ME); Haven
*Gerald Dean Gutzman (G); Almena
*Betty Ann Gwin (HE&N); Leoti
*Howard Dwight Gwin (G); Leoti
*Paul Herbert Gwin (Ag 1; IJ-2); Junction City
*Helen Habr (HE&N); Hanover
*John Marcus Haggard (PVM); Altamont
Harold Monroe Haines (VM); Winfield
*Louis Dean Hale (G); Manhattan
Max Eugene Haley (ME); Bennington
*Enid Josephine Hall (HE); Dodge City
*Guy Vernon Hall (BA); Kansas City
*Robert Freeman Hall (CE); Merriam
*Timothy S. Hamilton (ChE); Barnes
Howard Edwin Hamlin (MI); Manhattan
*Donald Ray Hammerli (ChE); Clay Center
*Lillian Darlene Hampl (HE); Luray
*George Albert Hanson (Ag); Enterprise
*Marion Leon Hanson (IC); Concordia
*Warren Calvin Harbaugh (Ag); Great Bend
*Glen Alan Harbert (PVM); Tulsa, Okla.
*Wilfred Earl Hare (ME); Delphos
*Dale Dorance Harkins (EE); St. Francis

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FRESHMAN—*Continued*

*Gerald Dwight Harp (EE); Wichita
*Harold Elbertson Harper, Jr. (ME); Beardsley
*Clifford James Harris, Jr. (EE); Manhattan
*Myron Arthur Harris (ME); Clayton
*George Albinus Harrison (EE); Melvern
*William Carl Hart (ChE); Wilsey
*Willis Henry Hart (ChE); Newton
*Loyal Merlyn Hartman (EE); Hoxie
Byron Francis Haskins (EE); Manhattan
*Margaret Elizabeth Hassler (HE); Chapman
*Ellen Hastings (BA); Garden City
George Brien Hatch (BA); Marysville
*Edward Hughson Hawkins, Jr. (G); Osawatomie
*William Dwight Hawley, Jr. (G); Newton
*Orin Dean Hazlett (Ag); Delphos
*Mineola Ardonia Hayes (D&IM); Kansas City, Mo.
*Earl Dean Headrick (AE); Kismet
Warren G. Heaton (ChE); Norton
*Eugene Bernard Hebert (IJ); Aurora
*Harold LaVern Hefner (PVM); St. Francis
*Barbara Ann Held (HE-1; BA-2); Clay Center
*William Herbert Heleker (PVM); Topeka
*Barbara Jane Wellington Heller (G); Abilene
*Warren Eliot Heller (Ag); Hunter
*Gilbert Frederick Hellmer (ME); Olpe
*Kenneth Dale Helmick (CE); Salina
*Leona Ruth Helvey (D&IM); Mankato
*Morris Lowell Hemstrom (Ag); Colby
*Wendell Floyd Henby (Ag); Hiawatha
*Miles Leroy Henderson (ME); Wheaton
*James Stephen Hendrix (ChE); Aliceville
Harvey Jerome Hensley (VM); Osborne
*Otto Martin Herde (G); Manhattan
Edwin Joel Herman (CE); Penokee
*James Edward Herres (ChE); Hoisington
*Merle Oliver Herrick (G); Glade
*Jean Halger Herrmann (G); Hanover
*Mary Louise Hertlein (PE); Pratt
*Nancy Louise Herwig (HE&A); Manhattan
*Karl Harold Hester (AA); Kansas City
*Alvin Lewis Hibbs (ChE); Easton
*Emory George Hickert (EE); Jennings
*John Raymond Hildebrand (Ag); Fowler
*Arthur Leroy Hildenbrand (BA&A); Clay Center
*Arthur Meyer Hockett (IC); Hutchinson
*John Robert Hodges (G); Wamego
Patty Irene Hodgson (HE); Little River
*Walter Leonard Hoffman (PS); Enterprise
*Clayton Leroy Hogg (EE); Delphos
*Robert Wallace Holbert (VM); Elburn, Ill.
*Mary Louise Holdren (HE); Lyons
*Lloyd LaVerne Hollern (PVM); Esbon
*Donald Ray Hollis (ArE); Burbank, Cal
*Ellarose Hollis (BA); Manhattan
Helen Maxine Hollis (HE&A); Manhattan
*Raymond Edward Hollis (CE); Salina
*Robert Henry Hollis (EE); Burbank, Cal.
*Mary Lois Holm (HE&A); Olsburg
Willis Ray Holm (AA); Chapman
*Willis John Holmberg (PE); Reading
*Joseph Newton Holt (VM); Manhattan
*Patricia Lee Honderick (D&IM); Bison
*Richard Arthur Hoopman (ChE); Kansas City, Mo.
*Henry Joseph Horgan (BA); Wheaton
*Adam Neil Horst (ME); Madison
*Glenn Alfred Horst (CE); Pomona
*Barbara Houghton (HE); Chicago, Ill.
*Clifford Wayne Houghton (Ag); Tipton
*Billy Rahe Houlton (ME); Hazelton
*Lawrence Jackson Houlton (ME); Abilene
*Mildred Louise Houseworth (HE&A); Harveyville
*Hubert William Hovey (Ag); Grenola
*Barbara Howe (HE&N); Washington, D. C.
*Robert Matthias Howley (ME); Haddam
*Willis Grant Hoyt (G); Junction City
*Derrol Dean Hubbard (CE); Smith Center
Maurice Walter Hull (VM); Oak Hill
*Norman Ernest Hull (G); Kingman
*William Leslie Hunter (G); Merwin, Mo.
*James Marshall Hurst (IC); Manhattan
*John Hutton (ChE); Abilene
Howard Wayne Ihloff (PE); Jetmore
*Roberta Caroline Ince (D&IM); Wamego
*Marguerite Fern Harris Ingle (G); Manhattan
*Johnny Junior Inman (CE); Manhattan
Jess G. Irwin (VM); Wilsey
*Bud Harold Ivan (G); Washington
*Richard Park Jackson (PVM); Kellerton, Iowa
Robert Willard Jackson (ChE); Salina
*Margie Jaedicke (G); Hanover
Julia Amelia Jagger (HE&N); Minneapolis
*Mary Wanda Jagger (HE&A); Minneapolis
*Elden David James (PVM); Shields
*Arlen Wayne Janssen (ME); Lorraine
*Donald Harry Janssen (ChE-1; IC-2); Lorraine
*DeLorn Elwood Jarrett (EE); Culver
*Robert Maxwell Jarrett (VM); Waverly, Ill.
*Byron Marvin Jeffries (Ag); Hiawatha
*Marjorie Elizabeth Jenkins (BA); Kansas City
*Mildred Eva Jenkins (HE); Kansas City
*Keith Edwin Jensen (G); Concordia
Loyce Derald Jernigan (VM); Osage City
*Charles Andrew Johnson (ME); Norcatur
Darlene Eula Johnson (HE); Manhattan
Leonard Donald Johnson (ChE); Norton
*Lewis Le Roy Johnson (ME); Herington
*Marvin Johnson (PVM); Louisburg
*Raymond Logan Johnson (ME); Minneola
*Shirley June Johnson (D&IM); Kinsley
*Walter Edward Johnson, Jr. (ME); Independence, Mo.
*Paul Brewster Johnsten (EE); Peabody
*Kenneth Kermit Johnston (ME); Frankfort
*Marjorie Ruth Johnston (HE); Manhattan
*Elmer David Jones (ChE); Manhattan
*Helen Mildred Jones (HE); Ford
*James Garfield Jones (PVM); Tarkio, Mo.
*Robert Richard Jones (CE); Washington
*Ross Eldon Jones (EE); Scandia
*Wayne Dunton Jones (ME); Minneapolis
*Roland Norbert Junghans (AA); Junction City
*Charles Lee Kaiser (ChE); Junction City
*Jacqueline Lee Kalin (D&IM); Norton
Philip Daniel Karnowski (ME); Paxico
Francis Dean Kaspar (PE); Wilson
*Mary Elizabeth Kassner (HE); Detroit
*William Wayne Katz (MI); Manhattan
*Ora Jean Kays (HE); Eureka
*Warden Franklin Keas (EE); Stockton
*Wayne Eugene Keast (AA); Larned
*Paul Allen Keesee (VM); Holdenville, Okla.
*Doris Jeannette Keil (HE&N); Galatia
*Robert William Keller (PVM); St. Francis
*Ward Albert Keller (ME); Manhattan
*Joseph Michael Kelley (ME); Solomon
*Lawrence Jerome Kelley (BA); Salina
*Doyle Arden Kellogg (ME); Hiawatha
Alva Clark Kelman (VM); Arlington
*Kate Kemper (G); Frankfort
*Jacquelyn Jean Kendall (D&IM-1; G-2); Herington
Orval Kenneth Kendall (VM); White City

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FRESHMAN—*Continued*

*Reba Grace Kennedy (G-1; Ag-2); Waldo
*Catherine Eliza Kenyon (HE); Wakeeney
*Doyle Ervin Kern (PVM); Clay Center
*Hazel Louise Kerr (HE&A); Berwyn, Ill.
*Betty Ann Kessler (HE); Excelsior Springs, Mo.
*John Milton Keyser (EE); Wilson
*Nancy Lorraine Kilham (HE&A); Manhattan
*James Warren Kilian (AE); Junction City
*James Laughlin Kilkenny (ChE); Manhattan
*Billie Rae King (HE); Salina
*Allen Ellis Kintigh (ME); Dellvale
*Virginia Lee Kipp (HE); Manhattan
*David Martin Kiser (PVM); Manhattan
Harold Marcelus Kiser (PE); Delphos
*Samuel Albert Klema (BA&A); Wilson
*Walter Ronald Klopfstein (ME); Wichita
*Mildred Catherine Thompson Klotz (HE); Manhattan
*Archie Douglas Kloxin (ME); Lyons
*Jack Dean Knight (ME); Salina
*Robert Harold Knight (G-1; IA-2); Anthony
*Richard John Knilans (PVM); Janesville, Wis.
*Allen Reed Knopp (G); Chapman
*Elizabeth Anne Knostman (HE); Wamego
Eleanor Elayne Koch (HE&N); Greensburg
*Richard Ellis Koch (PVM); Kinsley
*Delbert Wayne Kolterman (Ag); Havensville
*Robert George Krauss (MuE); Stuttgart
*Kay Kreth (ChE); Salina
*Paul Calvin Krueger (ChE); Newton
*Dean George Krug (CE); Russell
*Richard Sheldon Kubik (Ag); Caldwell
*Robert Paul Kuhn (Ag); Salina
*Sarah Elizabeth Kurtz (HE&N); Hill City
*John Wallace Lacey (Ag); Hoxie
*Donald Lee Lacy (EE); Manhattan
*Mervin Clifford Laman (G); Alma
Norman Francis Laman (G); Concordia
*Martha Ann Lamb (HE&N); Coyville
*Robert Charles Lamb (AE); Macksville
*Helen Doris Lambert (G); Pretty Prairie
*James Bruce Lambert (EE); Kansas City
*Edwin Johnson Lamborn (G); Leavenworth
*Glen Joseph Lamont (ME); Turon
*Benjamin Harrisen Landis (ChE); Abilene
Darrell Wayne Landau (ME); Oberlin
Lorene Anne Lang (D&IM); Cuba
*Eli Amedee Lanoue (EE); Aurora
*Robert Willard Lansdowne (Ag); Parsons
*James Gordon Lareau (ChE); Hutchinson
*Royce Roland Larsen (ME); Belleville
Leland Albert Lathan (VM); Washington
*Paul Eldon Lawrence (Ag); Winfield
*Clare Roland Lawson (ME); Sylvan Grove
*Ross Leonard Laybourn (CE); El Dorado
*William Robert Lear (BA); Hiawatha
*David Warren Leavitt (ME); Kansas City
*Melvin Dale Leckron (CE); Abilene
*John Francis Lednicky (G-1; ME-2); Purcell
*Carl Johnson Lehr (IJ); Augusta
*Hope Elizabeth Leland (HE); Manhattan
*Albert Norval Lembright (PVM); Dodge City
*Carl Fredrick Lentz (IC); Concordia
*Charles Lloyd Lentz (EE); Whiting
*Gus Leondedis (ChE); Kansas City
*Bernard Francis Lesser (CE); Horton
*Herman Paul LeSuer (CE); Augusta
Madge Elizabeth Lewis (HE); Eureka
*William Wayne Lichtenhan (ChE); Dwight
*Lewis Benedict Linden (G); Clayton
*Robert Dean Linn (MI); Manhattan
*Virginia Ann Linn (HE); Manhattan
Robert Paul Litt (PVM); Chicago, Ill.
*John Russell Livergood (ME); Waterville
*Chester Doyle Loe (IJ); Glasco
*David Arthur Long (ME); Abilene
*Margaret Beatrice Long (HE); Byers
*Mary Vivian Long (HE); Ransom
*Thomas Richard Lonnberg (CE); Jetmore
*Jack Loomis (CE); Council Grove
*Louis Bernard Loschke (CE); Kansas City, Mo.
*Doris Charlene Louthan (BA&A); Simpson
*Donald Edwin Love (ME); Topeka
*Donald Gottlob Low (PVM); Kanorado
Ralph Lewis Lowrey (VM); Larned
*LeRoy Charles Loy (Ag); Chapman
*Austin Ernest Luce (ME); Cunningham
*Leonard Irvin Luehring (ChE); Manhattan
Betty Jean Lull (BA); Haddam
*Richard Alan Lund (CE); Manhattan
*John Calvin Lyness (G); Troy
*Richard Noel Lyness (CE); Troy
*Harvey Eugene McAtee (Ag); Lyons
Vincent Alexander McBoyle (ME); Abilene
*Gerald LaVerne McCall (Ag); Humboldt
*Lois McCall (HE); Wakeeney
*Robert Bernard McCarthy (AA); Kansas City, Mo.
*Warren Doyle McCauley (ArE); Stockton
*Larry Eldon McClaughry (PVM); Mound City
*Joseph Freer McCluggage, Jr. (EE); Manhattan
*William Hebert McClure, Jr. (CE); Republic
*John H. McCormick (ChE); Burlington
Wallace Gene McCune (Ag); Minneola
James Benjamin McDonald (ME-1; G-2); Topeka
*Paul Francis McGargle (VM); Manhattan
*Murlin Lee McGown (PVM); McCune
*Harry Benton McGrath (PVM); Beloit
Philip Carl McGuire (PE); Sharon
*Robert Eugene McGuire (G); Pratt
*Marjorie Louise McInteer (G); McPherson
*Helen Ruth McIntosh (G); Manhattan
*John Owen McIntyre (IC); Herington
*George Moffit McKee, Jr. (CE); Colby
*Ivan John McKim (ChE); Salina
*Vera Louise McKinney (D&IM); Coldwater
*Neville Marion McLemore (ME); Wichita
Donald James McMannis (ME); Pratt
*Janet McMillen (HE&N); Minneapolis
John Howard McMillin (PVM); Basehor
*Austin Thomas McMurtray (CE); Wichita
Edgar Francis McNeil (PE); Effingham
*Francis Elmer McNeil (MI); Goff
Cathleen Rebecca McRae (HE&N-1; G-2); Manhattan
*Derrell Eugene McRae (EE); Topeka
*Robert Hansen Mabes (ME); Overland Park
*Mary Ann Machamer (G); Manhattan
James Donald Mack (BA); Lenexa
*David Otis Mackintosh (PVM); Manhattan
Hugh Warring MacLean (ChE); Hutchinson
*Pauline Grace Madden (HE); Auburn
*Paul Pete Maduros (BA); Junction City
*Soterea Maduros (G); Junction City
*Kenneth James Mahoney (PVM); Dorrance
*Mary Frances Makalous (HE); Belleville
*Frederick Howard Mallonee (PE); Fort Dodge
*Harold Edward Mansfield (PVM); Kansas City
Manford Edward Mansfield (VM); McCune

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FRESHMAN—*Continued*

*David Mardiks (EE); Kansas City
*Donald Wayne Maring (EE); Lincoln
*Harley Martin Markley (PVM); Quincy, Ill.
*Mary Louise Markley (HE); Wellington
*Shelton William Marlow (IC); Manhattan
*Claude Everett Marshall (CE); Minneola
Frank Raymond Marshall, Jr. (EE); Burlington
*Francis Harry Martin (EE); Welda
*Alice Jane Martling (IJ); Blue Rapids
Edward Willis Marx (CE); Ellis
*Merle Gilbert Moss (G); Junction City
*Minnie Lee Massey (HE); Sun City
*Walter Albert Mathews (ME); Frankfort
*Harvey Lee Matteson (PVM); Phillipsburg
*Richard Lee Matthew (IC); Concordia
*Larry Duane Maxwell (ME); Manhattan
*Eldon Thomas May (Ag); Oskaloosa
*Eugene Maydew (PE); Lebanon
*Richard Phillip Medlin (ChE); Manhattan
Roger Calvin Medlin (EE); Manhattan
Mark Paul Medved (ME); Kansas City
Kenneth Wayne Mee (ChE); Maplehill
*Chester Frank Meinecke (PVM); Waterville
*Lois Eilene Meisner (D&IM); Manhattan
Harry Ernest Merriman (ME); Salina
*Martin Henry Meyer (G); Palmer
*Robert Keith Meyer (IC); Topeka
*William Ward Michael (Ag); Havana
*Roxanne Mickey (IJ); Kansas City, Mo.
*Clara Margaret Middleton (D&IM); Kansas City
*Maurice Edwin Miles (ChE); Wichita
*Earl Bernard Miller (CE); Manhattan
*Max Byron Miller (LD); Onaga
*Rita Belle Miller (HE); Ransom
*Kathryn Louise Milligan (HE); Manhattan
*Eldwyn Wiley Minks (ME); Stafford
*Norman Arthur Minks (Ag); Greensburg
*Harold Wayne Minter (G); Manchester
*Lester Louis Mische (ME); Trousdale
*Edward Everett Mitchell (Ag); Cimarron
*Sherry Mae Mitzner (IC); Wichita
*Glenn Eldon Mitchum (PE); Mission
*Betty Jane Moate (HE); Smith Center
*Robert William Moffett (G); Concordia
Clyde Ellis Moles (VM); Merriam
Stanley Donald Mollhagen (ME); Lorraine
*Edwin James Montgomery (Ag); Sabetha
*Leon Glenn Montgomery (VM); Parsons
*Max Dale Moody (G); Onaga
*Charles Howard Moore (BA); Atchison
*Samuel Moore, Jr. (CE); Otis
*William Robert Moore (ME); Fredonia
*Kyle LeRoy Moran (Ag); Topeka
*Thomas Raymond Moreen (BA); Salina
*Raymond Richard Moritz (Ar); Junction City
*Dale Marwood Morris (PVM); Russell
James Francis Morrow (VM); Marysville
*Harold Eugene Mosier (ArE); Junction City
Jacob Eugene Mosier (VM); Hoxie
*Patricia Ann Mossman (G); Wichita
*John Abram Mowers (ME); Silver Lake
*Marjorie Jean Mowery (HE); Salina
*Harry Eugene Moyer (G); Riley
*George Joseph Muckenthaler (EE); Paxico
George Alfred Mullen, Jr. (VM); McCune
*Ralph Ervin Mullen (PVM); Clay Center
*Everett Joseph Munding (ME); Rochester, N. Y.
*Catherine Louise Murphy (G); Wellington
*Raymond Dean Musick (EE); Wichita
*Dorothy Francis Myers (G); Frankfort
*Shirley Anne Myers (HE); Leon
*Virginia Naylor (G); Cimarron
*Isabelle Neal (Ar); Salina
*Pauline Patricia Neal (G); Greenleaf
*Gerald Claire Neece (PVM); Leon
*Virginia Helen Needels (MuE); Salina
*Gorman Neel (BA); Kansas City
*Don Neibling Neff (BA); Hiawatha
*Harold Otto Neff (ME); Ulysses
*David Daniel Neher (Ag); Girard
*JoAnn Neibarger (IJ); Tonganoxie
Bruce Francis Neill (Ag); Miltonvale
Hobert Dwight Neill (Ag); Vassar
*Raymond John Nelson (Ag); Manhattan
*William Sander Nelson (AA); Waterville
*Gladys Clare Neubauer (G); Manhattan
*James William Neumann, Jr. (BA); Fredonia
*Fred Morton Nevitt, Jr. (ME); Newton
*Richard Floyd Newcomb (ME); Salina
*Leslie Horace Newell (VM); Madison, Wis.
*Paul Robert Newell (PVM); Manhattan
*Vada Mae Newell (HE&N); Stafford
James Robert Newlin (ME); Hillsboro
*Robert James Newman (MI); Manhattan
Dean Irwin Newton (VM); Salina
*Charles William Nighswonger (PVM); St. Francis
*Orris Wilbourn Nipper (VM); Magnolia, Ark.
*Mary Ruth Nixon (MuE); Virgil
*Robert Beecher Noblitt, Jr. (ME); Neodesha
*Robert Howard Nodurft (EE); Lyons
*Bonnie Marie Noel (HE); Phillipsburg
*Robert Andrew Noll (IJ); St. George
*Dean Louis Oberhelman (ChE); Barnes
*Dorothy Marcelline Ogier (HE); Menlo
*Russell Lee O'Hara (F&OH); Neodesha
*Betty Ann Okerberg (G); Ottawa
*James Willis Oliver (EE); Madison
*Dale Nance Olsen (ME); Kinsley
Jay Richard Olson (VM); Glasco
Louis Warren Olson (G); Marquette
Phillip Humphrey Olsson (MuE); Junction City
*Elizabeth Luella O'Neill (HE); Winchester
*Margaret Elizabeth O'Neill (PS); Kansas City, Mo.
*Calvin Coolidge Orr (Ag); Neodesha
Roger W. Orr (IA); Kanona
*Harmon Lawrence Orsborn (Ag); Wamego
*Fred Edward Orth (PVM); Liberal
*Donald Glen Page (G); Olathe
*Robert Merle Palmer (CE); Topeka
*Ruth Elizabeth Palmer (HE-1; IJ-2); Jewell
*Elizabeth Abigail Parker (HE); Manhattan
*John Kenneth Parsons (EE); Wichita
*John Lawrence Parsons (EE); Manhattan
*Duane Theodore Patterson (ArE); Topeka
Herman Dale Patterson (EE); Lorraine
*Nora Belle Patterson (HE); Manhattan
*Richard Royce Patterson (CE); Ford
*Wendell Allen Patterson (CE); Attica
*Byron Lansing Patton (G); Chase
*Robert Eugene Paul (BA&A); Lyndon
*William Newton Paxton (IJ); Lebo
*Mary Elizabeth Pearce (D&IM); Muncie
*Marion Charles Pearson (G); Clifton
*Manford Elliott Peck III (AE); Salina
Ruth Irene Peck (HE); Greensburg
*Royce Owen Pence (CE); Manhattan
*John William Penry (AA); Silver Lake
*Clifford Dale Peterka (BA); Manhattan
*Dale Duane Peterson (G); Morganville
*Donel LaRue Peterson (ME); Kinsley
Duane Russell Peterson (VM); Bridgeport
Florence Peterson (G); Manhattan
*Frank Ashley Peterson, Jr. (BA); Jamestown

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FRESHMAN—*Continued*

*Keith Peter Peterson (ChE); McPherson
Richard Duane Peterson (PE); Clearwater
*Verlin Howard Peterson (IJ); Clifton
*William Howard Petrich (G); Manhattan
*Robert Kelsey Petro (AA); Topeka
*Robert Lee Pettit (IC); Neodesha
*Curtis William Phillips (ME); Manhattan
Lovella Wondola Phillips (D&IM); Sabetha
*Jesse Ronald Pickard (VM); Thompsonville, Ill.
Robert Earl Pilkington (ME); Emporia
*Robert Joseph Pinkney (Ag); Ford
*Charles Willard Plumb (ME); Wichita
Alfred Nelson Poindexter (VM); Kansas City
*Harold Duane Poland (BA); Barnes
*Clayton Eugene Pollock (ME); Soldier
*Marlan Richards Pollock (ChE); Anthony
*Lillian Jean Pollom (HE&N); Manhattan
*Ralph Jesse Pool (ChE); Norcatur
*Walter Warren Pope (G); Durham
*Patricia Clair Porter (HE); Topeka
*Gerald Lee Pottroff (ME); Waverly
*Rodger Glenn Powell (ME); Kansas City, Mo.
*Robert Henry Prewitt (ChE); Pomona
*Garnet Zane Price (ME); Lebanon
*William Alfred Price (VM); Pittsburg
*Thomas William Prideaux (G); Manhattan
Richard Lee Proffitt (BA); Chase
*Dale Wayne Quackenbush (ChE); McPherson
Jack Holman Quinly (BA); Kansas City
*Priscilla Alice Radke (BA); St. John
*Wilber Dean Ramey (G); Ottawa
*Hal Ramsbottom (Ag); Munden
*Robert Francis Rapp (ME); Norcatur
*Marybelle Ratliff (BA); Manhattan
*Beulah Maxine Anderson Ray (G); Manhattan
*Elizabeth Ann Raymond (IJ); Manhattan
Richard Lyle Rea (CE); Topeka
*Robert Arch Rea (PVM); Topeka
Harry Gaylord Reagor (VM); Manhattan
*Don Hubert Reaugh (EE); Newton
*Paul Celestine Redmond (G); Lillis
*Keith Crittenden Reed (ME); Wichita
Theodore Harold Reed (VM); Norton
*Alice Fern Reeves (HE); Almena
*Vern LaVon Rehmert (ME); Kinsley
*Allen Virgil Reimer (Ag); Newton
*Nelson Chiles Reinhardt (BA); Bison
*Thomas Harold Rewerts (EE); Leoti
*Jay Myers Rexroad (CE); Salina
*Le Roy Wayne Reynolds (CE); Greensburg
*George Alfred Rhodes (CE); Marion
*Warren Glenn Rice (CE); Greensburg
*William Henry Richards (ChE); Manhattan
*Margaret Ann Richardson (HE); Hoxie
*Raymond Wallace Richardson (ME); Cawker City
*Rolin John Richert (ME); Newton
*Ralph Burton Ricklefs (LD); Salina
Joe Junior Ridgway (VM); Oberlin
*Ernest James Riechers (ME); Green
*Alfred Richard Riegg (VM); Ridgefield, N. J.
*Edward Duane Riffel (AA); Stockton
*William Robert Rigler (IC); Wichita
John Lewis Riling (VM); Lawrence
*Elma Jean Risser (HE); Kansas City
*Sarah Griffith Risser (HE); Kansas City
*Robert Emil Ritter (CE); Junction City
*Kenneth Charles Roberson (EE); St. Francis
George Henry Roberts (VM); Cawker City
*Laree Robins (HE); Cimarron
*Buel Calvin Robinson (ME); Augusta
*Marjory Mathilda Roehl (D&IM); Manhattan
*Donald Eugene Roepke (ME); Barnes
*Ethel Elizabeth Rogers (PS); Cedar Bluffs
*Mary Hazel Rogers (PE); Cedar Bluffs
*Clarence Roy Rolls (EE); Thrall
*Robert Frederick Romig (AA); Topeka
*Henri Ebert Rondeau (ME); Great Bend
William Bronson Root (ME); Leavenworth
*Leonard Mitchell Ropfogel (G); Emporia
*Mary Ellen Rose (IJ); Kansas City
*Arthur Raymond Roseberg (VM); Isle, Minn.
*Charles Virgil Rosell (ChE); Leonardville
*Erven Alexander Ross (PVM); McCune
*Chester Arthur Rowland, Jr. (ChE); Marysville
*Daniel Henry Rueb (PVM); St. Francis
*Lewis Jules Rumels (PVM); Wichita
Myron Wayne Rutherford (Ag); Kirwin
*Loren Fredrick Ryniker (IJ); Cheney
*Richard Samuel Sackman (Ag); Olathe
*Edwin Keith Sanderson (ME); Norton
*Ada LoRee Sandy (HE); Goodland
*Blanche Marion Sardou (HE); Topeka
*Maurice James Sawyer (EE); Plainville
William Glen Scanlan (BA&A); Chapman
*Laura Elizabeth Schell (IJ); Wichita
*John Edwin Scherer (EE); McPherson
Louise Ann Scherger (VM); Manhattan
Jack Denman Scheu (CE); Manhattan
*Nylalee Schiereck (HE&A); Dighton
*Robert V. Schilling (BA); Norton
Joseph Francis Schindelar, Jr. (ME); Bound Brook, N. J.
Richard Thayer Schindling (ME); Leavenworth
*John Royal Schnelle (PVM); Medicine Lodge
*John William Schober (CE); Horton
*Evelyn Ella Scholz (HE); Frankfort
*Loren Dayle Schroeder (ME); Beverly
*Andrew John Schuler (Ag); Junction City
*Harry William Schultz (EE); Manhattan
*Clair Francis Schumaker (G); Clifton
*Charles Leslie Schwab (ME); Madison
*Jack Junior Schwab (AA); Chapman
*Franklin Clarence Scofield (G); Manhattan
*Georgiajean Scollick (PE); Ottawa
*John Elmer Scott (Ag); Ogden
*Wilson Henry Scott (ME); Belleville
*Charles Wallace Searcy (VM); Hutchinson
*Harold Ray Seely (PS); Asherville
Charles Dwinnell Seiler (ChE); Topeka
*Emma Jean Selby (HE); Manhattan
*Marjorie Ilene Setter (IJ); Manhattan
*Marion Paul Seward (Ag); Leon
*Elizabeth Susan Shaffer (HE); Waldo
*Phyllis Jean Shank (HE-1; IJ-2); Salina
*Stephen Baldry Shannon (VM); Kansas City
*Betty May Sharp (HE); Morrowville
*Dean Max Sharp (G); Dighton
*Eileen Shaw (G); Herington
*Wallace Samuel Sheard, Jr. (ChE); Junction City
*Alice Isabel Shedd (HE&N); Bethel
*Guy Morrell Shelley, Jr. (ME); Wichita
*Edgar Dayle Shelton (ME); Gypsum
Frederick Earl Sherlock (G); St. Francis
*Clinton DeBoi Sherman (Ag); Coldwater
*George Oscar Sherman, Jr. (ME); Salina
*Marvin Henry Sherman (CE); Chanute
Donald David Shirk (G); Sedgwick
*James Nelson Shively (PVM); Moran
*Frances Patrica Shoemaker (D&IM); Kanopolis
*Kenneth Wayne Showers (ChE); Hill City

* Matriculated 1942-'43.

FRESHMAN—*Continued*

*Mary Camilla Shuss (HE); Manhattan
*Frank Eugene Sibrava (IJ); Wilson
*Paul Creighton Siegert (CE); Tonganoxie
*Norman John Sies (IJ); Lorraine
*Loren Loyd Signor (ChE); Effingham
*Frederick Arlyn Simmons (BA); Barnard
*Cecil Irvin Simonton (PS); Topeka
*Melvin Rea Simpson (G); Oberlin
*John Bernard Sjo (Ag); Brookville
*Winston Blanchard Skinner (EE); Neodesha
*Byron James Slade (ME); Stafford
*Virginia Lynette Slothower (HE&N); Wellington
*Jack Eugene Smalley (ME); Newton
*Charles Newton Smith (CE); Hutchinson
*Clyde Norman Smith (Ag); Wauneta
*David Lawrence Smith (VM); Coffeyville
*Duane Wesley Smith (ME); Beardsley
*Eunice Jean Smith (IJ); Great Bend
Frank Charles Smith (G); Summerfield
*George Edward Smith (Ag); Shawnee
*Harold Louis Smith (Ag); Sedan
*Homer Wayne Smith (Ag); Lewis
James Joseph Smith (VM); Axtell
*Jean Clarke Smith (VM); Mapleton
John William Smith (VM); Harveyville
*S. LaMarr Smith (CE); Topeka
*Wayne Elwyn Smith (AE); Little River
*Marjorie Ann Smythe (G); Holton
*Charles Louis Snail (EE); Leavenworth
*Marianna Jane Snair (HE); Manhattan
*Bonnie Lorene Sobers (D&IM); Sabetha
*Mildred Ruth Socolofsky (HE); Manhattan
Audrey Berniece Somers (HE); Galva
*James Wesley Spaeth (G); Salina
*Glen Eugene Spafford (Ag); Belleville
*George William Spangler (PVM); Eskridge
*Charles Edward Speaker (EE); Kansas City
*Edward David Spencer (G); Lost Springs
*Ramona Lee Spencer (HE); Oakley
*Richard Hugh Spencer (PVM); Oakley
*Homer Dale Spiers (ChE); Oakley
*Theo Karl Spillman (EE); Coyville
*Leland Earl Spivey (ME); Minneapolis
*Millard Eugene Spratt (Ag); Ottawa
*Stella Marie Spurney (G); Belleville
*Leland Mordecai Srack, Jr. (CE); Salina
*Robert Alden Stainbrook (ChE); Liberal
*Betty Ruth Stamp (G); Great Bend
*Elizabeth Annette Stark (HE-1; IJ-2); Scotia, N. Y.
*Harold Dwayne Starkey (VM); Haviland
*Arnold Dumont States (CE); Logan
*Theodore Carl Stauch (CE); Kansas City, Mo.
*Oliver Paul Steele III (EE); Washington
*Rosemary Elizabeth Steelsmith (G); Detroit
*Hazel Steinhoff (HE&A); Osage City
*Robert Dale Stephens (ME); Milan
*Kenneth Parsons Stewart (IJ); Manhattan
*Maurice Dean Stewart (CE); Salina
Melvin Junior Stiefel (VM); Gypsum
*Edward Lee Stigall (CE); Osborne
Frank Cranmer Stiles, Jr. (Ag); Overland Park
*Elmer Eugene Stinebaugh (ArE); Princeton
*Ella Mae Stinson (BA); Randall
*Virginia Rose Stoecker (BA); Salina
*Jessie Mae Stoker (HE&N); Olathe
*Eunice Jean Stoltenberg (G); Holyrood
*Carolyn Stout (HE); Kansas City, Mo.
*Joan Strait (HE); Leon
*Beth Charlotta Stratton (HE); Muncie
William Reel Streeter (VM); Kansas City
Samuel James Strong (BA); Kansas City
Calvin Arthur Strowig (BA); Abilene
*Edsel Maurice Stuckman (G); Kirwin
*Bertha Alberta Stuewe (HE); Alma
Norman Paul Stuewe (Ag); Alma
*Jean Lee Sutter (D&IM); Paxico
*Robert Benoni Swan, Jr. (EE); Manhattan
*Donald Francis Swartz (Ag); Soldier
*EuGene Gordon Swenson (MI); Clay Center
*Clifford Daniel Switzer (Ag); Dodge City
Billie Jean Tarwater (HE); Manhattan
*Everett Joe Taylor (CE); Enterprise
*Kenneth Eugene Taylor (PVM); Osborne
*Phyllis Lorraine Taylor (HE); Solomon
*Wilma Iola Taylor (HE); Enterprise
*Christine Marie Teagarden (D&IM); Manhattan
*Robert Dale Teasley (EE); Glasco
*Marjorie Ann Tennant (HE); Manhattan
*Donald Allison Tessendorf (CE); Onaga
*Milton Nash Thomas (Ag); Medicine Lodge
*Leonard Leroy Thompson (PVM); Ozawkie
*Mildred Mae Thompson (IJ); Salina
*Noel Butler Thomsen (BA&A); Oberlin
*Ernest Burnell Thorn, Jr. (ME); Topeka
*Ray Iams Throckmorton, Jr. (ME); Manhattan
*Lyman Lester Thurmon (PVM); Napoleon, Mo.
*Ruth Elizabeth Tichenor (HE&A); Abilene
*Dean Victor Tiemann (BA&A); Westboro, Mo.
*Edna Dolores Tiemann (D&IM); Lincoln
*June Patricia Tilton (HE&A); Medicine Lodge
*Joseph Philip Timmons (PE); Fredonia
*Harold Hilton Tindal (BA&A); Osborne
*Richard Stanley Tindell (Ag); Burlingame
*Robert Darrel Toburen (EE); Manhattan
*Warren Donald Toburen (ChE); Manhattan
*Myrtle Belle Toothaker (IJ); Protection
*Donald Eugene Torkelson (CE); Manhattan
*Nila Jean Torrence (PE); Baileyville
*Gerald Donovan Townsend (ME); Wichita
*Robert John Tregemba (CE); Overbrook
Donald McLean Trotter (VM); Dawson, Minn.
*Lane Francis Trotter, Jr. (F&OH); Dawson, Minn.
*Carl Dean Tucker (EE); Elkhart
*Thomas William Tuttle (VM); Fort Atkinson, Wis.
*Keen Umbehr, Jr. (PVM); Alma
*Charles Arthur Underwood (BA); Wichita
*David Clifford Underwood (BA); Wichita
*James Max Ungles (VM); Satanta
*James Lee Unruh (MI); Newton
*Ruth Marie Upham (BA); Junction City
*Inez Emma Van Beber (HE&N); Kansas City
*Albert Kenneth Van Walleghem (PVM); Shawnee
*Harold Kenneth Varenhorst (EE); Conway Springs
*Edward Vargon (F&OH); Kansas City
Mike Vargon (G); Kansas City
*Willie Herbert Vaughan (Ag); Grenola
*Emma Janette Vawter (HE); Oakley
*Gerald Duane Venburg (PVM); Ogden
*Dorothy Louise Venning (IJ); Concordia
*Grace Marie Venning (HE); Grenola
*Robert William Vennum (EE); Wichita
*Freeman Merrifield Vicory (PS); Greenleaf
Joe Alvin Vining (ME); Horton
Harry Wayne Vinson (CE); Garfield
Earl Constantine Voelker (PVM); Manhattan
*Donald George Vohs (EE); Plainville
*Ralph Louis Vollbracht (CE); Newton
*Loren von Riesen (G); Marysville
*Max Wendell Wade (CE); Whiting
*Dorljean Louise Wagner (HE); Burlington Junction, Mo.

* Matriculated 1942-'43.

FRESHMAN—*Concluded*

*Norma Jean Wainscott (IJ); Hazelton
Earl Raymond Walker (VM); Osborne
Howard Waldean Walker (EE); Smith Center
*Marshall Waymire Walker (Ar); Manhattan
Thurman Walling (ME-1; G-2); Wichita
*Francis Kelsey Walters (ME); Manhattan
*Robert Wade Walters (Ag); Manhattan
*Rosalie Estelle Wamsley (MuE); Hutchinson
*Everett J. Waudby (ArE); Russell
*Carol Beth Ward (HE); Elmdale
*Linton Edward Ward (G); Concordia
*Marjorie Marie Ward (HE); Coldwater
*Wilma Louise Ward (HE&A); Manhattan
*Elda Eileen Warner (BA&A); Glasco
*Edward Dale Watson (Ag); Peck
*John Robert Watt (PVM); Independence, Mo.
*Hope Elizabeth Watts (HE); Havensville
*John Louis Weaver (G); Concordia
*Lyle Edwin Weaver (ME); Sedan
Elwood Edward Wedman (VM); Harper
*Hubert Lee Weeks (CE); Leavenworth
*Mary Elizabeth Weeks (HE); Fort Scott
*David Weinstein (BA&A); Kansas City
*Carl Herbert Welch (IJ); Manhattan
*Bertna Frances Weldon (G); Topeka
*Harold Gene Welk (ME); Great Bend
*Avis Lee Welker (D&IM); Nickerson
*Louise Audrey Wells (HE); Manhattan
*Phyllis Maxine Wells (IJ); Hutchinson
*Albert Louis Wempe (ME); Frankfort
*Eugene Edward Werner (IC); Kinsley
*Elizabeth Ann Werts (HE&N); Smith Center
*Kenneth Lavonne Wheatcroft (PVM); Red Wing
*Eleanor Ruth Whipple (HE&N); Manhattan
*Chris Clayton White (EE); Peru
*James Hamilton White, Jr. (PVM); Delphos
*Joseph Spencer White, Jr. (ME); Peaks Island, Me.
*Keith Lewis White (ME); Soldier
Ollie Wilford White (EE); Peru
*Clinton Dennis Whitehair (PVM); Abilene
*Margaret Louise Whitnah (IJ); Manhattan
*Charles Meade Whitney (PVM); Phillipsburg
*Eddie Wilbur Whitney (G); Norton
*Reah Joan Wiatt (HE); Lakin
*Nora Elaine Wichers (Ar); Manhattan
*Neil Wallace Wilkinson (BA&A); Washington
*Donald Marion Williams (PVM); Geneseo
*Herbert Roosevelt Williams, Jr. (G); Kansas City
*Raymond Crawford Williams (PVM); Chicago, Ill.
*Richard Gale Williams (ChE); Hiawatha
Ronald Royce Williams (Ag); Macksville
*Marianna Wilsey (HE-1; G-2); Washington
*Adelbert Lee Wilson (IJ); Wheaton
*Alice Jeanne Wilson (G); Kansas City
*Arlene May Wilson (D&IM); Manhattan
*Beatrice Olga Wilson (HE&N); Manhattan
*Dorothy Lou Wilson (BA&A); Manhattan
*Elizabeth Jane Wilson (HE&A); Girard
Esther Mae Wilson (HE&A); Anthony
*Joseph Millington Wilson (ME); Winfield
*Laurence Lee Wilson (IJ); Atchison
*Maxine Fay Wilson (D&IM); Manhattan
*Richard Wayne Winger (AA); McCune
*Harvey Keith Wingerd (BA&A); Navarre
*Robert Samuel Winteroth (Ag); Concordia
*Glenn Eldon Wise (PVM); Louisburg
Stanford Lyle Wise (ME); Clearwater
*Thelma Jean Wise (Ar); Wichita
*Warren Reed Wixom (BA); Clay Center
*Ralph Harold Woertendyke (EE); Stafford
*J. B. Wohlberg (ArE); Manhattan
*Charles Henry Wolf (EE); Salina
Frank Edward Wolf (VM); Manhattan
*Lewis William Wolf (PVM); Longford
*Ralph Max Wolffing (MI); Manhattan
*Elmer LeRoy Wood (ME); Richland
*Howard Cope Wood (AE); Elmdale
*John Kirk Wood (G); Overland Park
*Ralph Merle Wood (ME); Trousdale
*Zella Mae Woodall (HE); Colby
Leslie Scott Woodruff (ChE); Wamego
*Robert Eugene Woodson (ME); Hutchinson
*Eugene Milo Worcester (Ag); Hill City
George Carl Wreath (VM); Manhattan
Richard Carr Wright (VM); Lawrence
*Elda Leora Wycoff (MuE); Norcatur
*Betty Jean Yapp (HE); Manhattan
Robert Creston Yapp (Ag); Manhattan
*Edmond Ferril Ylander (G); Frankfort
*Henry Forrest York (ME); Healy
Lawrence Wiley York (Ag); Wilmore
Paul Keith Yost (G); Dighton
*Jack Youk (Ag); Marion
*Edward Stanton Young (ME); Coldwater
*Frances Elsie Young (D&IM); Sheridan, Wyo.
*Joan Lenore Young (IJ); Westphalia
*Marian Mildred Young (G); Leavenworth
*Ramona Lee Young (HE); Protection
*Marvin Fredrick Zeigler (G); Codell
*Lawrence Carl Zillhart (PVM); Shawnee
*Kenneth LaVern Zimmerman (G); Jennings
*Lindley Rutherford Zimmerman (EE); Wellington
Thomas James Zouzas (PE); Ellsworth

SPECIAL STUDENTS

*Marilyn Whitlock Ackerly (HE); Manhattan
Lee Frederich Adams (G); Fleetwood, Pa.
Parthena Ainsworth (G); Lyons
Marjorie Ann Barrett (G); Pratt
Virginia Bransford Baylies (HE); Manhattan
*Lewis Ansel Carrick (G); Enterprise
Claudine Mary Immenschuh (HE); Manhattan
Emil William Karl (G); Abilene
*Roslyn Levy (E&A); Manhattan
Milton Wiley McLaren, Jr. (G); Yuma, Ariz.
Vernon Martin Neff (G); Ulysses
Mulford Ollason (G); Yuma, Ariz.
*Myrtle Helene Schuttler (G); Manhattan
*William Arthur Sidlinger (G); Hutchinson
*Phyllis Mavis Tritsch (G); Manhattan
Philip Alexander Van Winkle (G); Manhattan
Enrique Vidal Martins (Ag); Montevideo, Uruguay, S. A.
Howard Raymond Wetzel (G); Churubusco, Ind.
Everett Craigh Witham (G); Fort Riley
*Ralph Aubrey Carlyle Yates (G); Junction City
*Allen Henry Young (E&A); St. Joseph, Mo.

* Matriculated 1942-'43.

SUMMER SCHOOL STUDENTS

Nine-week Summer School

May 27 to July 25, 1942

GRADUATE STUDENTS

Charles H. Adams; Wilsey
Kathleen Ahearn; Manhattan
A. Margaret Ansdell; Jamestown
Paul Edmund Allison; Lincoln
O. Joye Ansdell; Jamestown
Bette G. Archer; Wichita
Esther Ann Atkinson; Butte, Neb.
Rhoda Anna Austin; Emporia
Doris Emily Barnes; Ottawa
Lee Ella Blake; Kansas City
Bernard Benjamen Bohren; Manhattan
Roy Elmer Bonar; Alta Vista
August Russell Borgmann; Longmont, Colo.
Dean Eugene Braden; Junction City
Charles H. Bratt; Nebraska City, Neb.
Joseph Oscar Brown; Wakeeney
Joe Bryske; Mankato
Margaret Iola Buck; Welda
Frank Sherman Burson; Manhattan
Albert B. Cameron; Smith Center
Charles Loyd Cassel; Culver
Paul Raymond Chilen; Solomon
George Wilson Cochran; Topeka
Zelia S. Coleman; Marshall, Texas
Betty Ruth Conley; Cozad, Neb.
William Joseph Conover; Ames, Iowa
Robert Thomas Cotton; Manhattan
Morris Seufert Cover; Manhattan
Veola Mae Crouch; Houston, Texas
Mildred Mathes Dalby; Lee's Summit, Mo.
Earl Gilbert Darby; Manhattan
Catherine Eileen Detrich; Chapman
James Arthur Dilts; Stillwater, Okla.
Alva Leese Duckwell, Jr.; Abilene
Ida Mae Elder; Eureka
Franklin Elmer Eldridge; Manhattan
Ruby Louise Erickson; Chanute
Viola Frances Eyestone; Kensington
Everett Leroy Fiedler; Wamego
Harold Robert Fox; Wichita
Esther Marie Gable; Pittsburg
Gloria Ann Gish; El Dorado
Eldon W. Graber; Pretty Prairie
Alice Lucile Graham; Webber
Harold C. Grinnell; Americus
Dorothy Belle Gudgell; Edmond
Ida Merkey Hahn; Morrill
Albert Alexander Haltom; Lafontaine
Margaret E. Harper; Glasco
John Orville Harris; Manhattan
Irene Wassmer Hartman; Garnett
Jane Haymaker; Manhattan
Thelma Lucille Hennon; Washington
Mary E. Hoff; Manhattan
Hazel Juanita Hoke; Manhattan
Myrtle Catherine Hunter; Emporia
Maggie Lorene Jeffrey; Elmdale
Rodney William Johnston; Central City, Neb.
Patricia Catherine Kail; Longford
Mary Jorgenson Kessler; Manhattan
Marion Gibbonney Kirkpatrick; Manhattan
Colter Adiel Landis; St. George
Maron J. Lorimer; Olathe
Mary Lou Loudermilk; Ulysses
John Henry McCoy; Manhattan
Zelma Mae McIntosh; Topeka
Miriam Garvin McLaren; Augusta
Marie Masson; St. Marys
Roy W. Maze; Alma
Henry John Meenen; Clifton
Lloyd E. Milleson; Junction City
Gertrude Edith Myers; Formoso
Dorothy Emma Nichols; Pittsburg
William Wallace O'Donnell; Manhattan
Fern Roderick Osterhout; Bluff City
F. W. Osterhout; Bluff City
Jean Parsons; Wichita
Claude Kingsford Paul; Fairview, Okla.
Wilma Kathryn Price; Manhattan
Helen Isabel Peterson; Manhattan
Ruby Randall; Ashland
Henrietta Gillett Rankin; Burr Oak
Harold G. Regier; Hillsboro
Harold Duane Richardson; Long Island
Bertha Juanita Robertson; Marysville
Sylvia Frances Roper; Manhattan
Earl William Rose; White Cloud
Ruth Roberta Ruhlen; Woodbine
Loretta Maye Sawin; Waterville
Kathryn Patricia Scheier; Salina
Marvin Le Roy Schreiber; Yates Center
William George Schrenk; Manhattan
Hazel Marie Scott; Manhattan
Ernest Louis Semersky; Toledo, Ohio
Lucile Heath Shaidnagle; Manhattan
Elvon Gilbert Skeen; Kanopolis
Lydia Elizabeth Andres Skeen; Kanopolis
Charles L. Skocpol; Crete, Neb.
Frieda A. Sloop; Lyndon
Edna Blanton Smith; Manhattan
Genevieve Margaret Smith; Chicago, Ill.
Pauline Dorothea Smith; Norwich
Esra Ervin Stockebrand; Yates Center
Emery Carlton Swanson; Manhattan
Charles Fletcher Swingle; Manhattan
Harriet Cordelia Taylor; Parsons
Alberta Mae Temple; Topeka
Lois Belle Turner; Manhattan
Wilbur V. Unruh; Inman
John Allen Wagoner; Manhattan
Arthur W. Waltner; Goessel
June Beverly Watters; Wichita
Mary Christine Wiggins; Manhattan
James Garfield Wilson; Milford
Maye Alexander Wilson; Milford
Mary M. Windhorst; Altoona
Charles Louis Wisseman, Jr.; Dallas, Texas
Kittie Marie Woodman; Independence
Lloyd Lander Woods; Wichita

UNDERGRADUATE STUDENTS

Paul Milton Ableson; Wichita
Maynard Lynn Abrahams; Wayne
Janie Ackert; Manhattan
Harry Stanley Adams; Fort Riley
John Harold Adams; Atchison
William Henry Adams; Manhattan
Howard Wilber Akers; Centerville
Lynn Bruce Alford; Kansas City, Mo.
Jean Amos; Manhattan
Eugene Elvia Anderson; Greenleaf
Robert Arthur Anderson; Partridge
Van Keith Anderson; Osage City
James Vernon Andrews; Manhattan
Lois Jean Angstead; Manhattan
Dale Eugene Anstine; Cherryvale
Archie E. Armstrong; Seneca
Sue Frances Armstrong; Topeka
Mary Margaret Arnold; Manhattan
Clarence Lafayette Ash; Wetmore
Dorothy Maxine Atkin; Pittsfield, Mass.
Robert Claude Atkins; Parsons
George William Atkinson; Hutchinson
Betty Jane Babb; Manhattan
Jean Adele Babcock; Manhattan
Glenna Marie Baer; Chapman
Lois Irene Bailey; Wichita
Mary Catherine Bain; Lamar
Ernestine M. Baker; Topeka
Robert Crary Baldridge; Emporia
Jacob William Banks; Atchison
Earl Clair Barb; Hamilton
Charles Edward Bardshar; Mount Hope
Lola M. Barger; Alma
Glenn Clark Barngrover; Wichita
John Francis Scott Barr; Manhattan
H. James Bartels; Inman
Dean Cecil Batt; Marion
Robert Denver Bauer; Junction City
Charles Thomas Baxter; Circleville
Burke Benjamin Bayer; Manhattan
Margaret June Bayless; Wakarusa
Ralph Gordon Beach; Marysville
Charles Dean Beard; Neodesha
Betty Lee Beatty; Ellsworth
Floyd Edwin Beaver; Olathe
Henry Voorhees Beck; Colby
Neil D. Beckenhaur; Delavan
Doris Ann Beebe; Lenexa
Wendell Dean Bell; Silver Lake
Rachel Beller; Russell
Henry A. Bender; Topeka
Felicita Marie Bennett; Wheaton
Lloyd Alan Bennett; Conway Springs
Leo G. Berg; Harper
Mae Ellen Berggren; Republic
Denzil Wallace Bergman; Manhattan
Jack Lowell Berkey; Kansas City
Elizabeth Golsan Berry; Manhattan
Leo R. Best; Allen
Clifford Duane Beyler; Harper
Ray Richard Biege; Hutchinson
Freeman Elmer Biery; Stockton
Nita Mae Biery; Stockton
Lloyd Calvin Billings; Nortonville
Clara Jane Billingsley; Belleville
Herschel E. Blackburn; St. Marys
Doris Dea Blackman; Hill City
Edythe Evelyn Blaesi; Abilene
M. Lowell Blaser; Waterville
Adzianna Mary Blochlinger; Concordia
Gladys Victoria Blomgren; Enterprise
Frances DeLoyce Boles; Manhattan
Rose Marie Boling; Emmett
Betty J. Boone; Manhattan
Paul Eugene Borg; Marquette
Delverna Sophia Bosse; Wheaton
Wilma Irene Bottom; Havensville
Don Raymond Bowers; Downs
Dale Emerson Bowyer; Manchester
Arleta Ruth Boyer; Manhattan
Eldon Eugene Boyington; Goodland
Joseph Marshall Braly; Coldwater
Grace Louise Brandner; Leoti
Silas E. Brandner; Carlton
Adell Warren Brecheisen; Welda
Gale Eugene Breed; Havensville
Olive Abigail Breed; Onawa, Iowa
Samuel Peter Breiner; Savonburg
Josephine Ann Breit; St. Joseph, Mo.
Harriet Lorrene Brick; Haddam
Betty Lee Bright; Baxter Springs
William Elihu Brock; Manhattan
Everett Lee Brosius; Wichita
Clyde Ellis Brown; Pittsburg
Francis Hoyt Brown; Manhattan
Geraldine Brown; Burlingame
Roberta Hazel Brown; Wamego
Ruby Rebecca Brown; Great Bend
Teloir Marie Brown; Ashland
Wilma Alene Brown; Mildred
Frances Brunim; Herington
Jack R. Bruner; Burns
Bill Boyd Bryson; Kansas City
George John Buchholtz; Olathe
Richard Irwin Buchli; Kansas City
Carroll La Rhue Buck; Welda
Morris Eugene Buckman; Olathe
Frederick Herbert Budden, Jr.; Manhattan
Helen Maude Bullock; Westmoreland
Rex Burden; Chase
Marjorie Marie Burger; Summerfield
Orley Glade Burgess; Arnold
Lester Harlan Burkert; Valley Falls
Charles Floyd Burket; Elkhart
Clodagh Maurine Burkhead; Utica
John Robert Burns; Manhattan
Blanche Irene Burris; Spring Hill
Edward George Buss; Holton
Burson George Busset; Manhattan
Wilbert John Buxton; Cherryvale
Elizabeth Cadwell; Marquette
Emma Jean Camp; Bucyrus
George Frederic Campbell; Wichita
Herbert David Campbell; Beverly
Robert Duncan Campbell; Junction City
Ronald Wayne Campbell; Cherryvale
Thomas Clark Campbell; Laurel
Hugh Louis Caraway; Shreveport, La.
Janette Claire Carlsen; Manhattan
Anna Mae Carnahan; Clay Center
Imogene Jeannette Carpenter; Clay Center
Edith Marie Carr; Hutchinson
Helene Carswell; Manhattan
Vinton DeVere Carver; Luray
Audrey Jean Catlin; Miltonvale
Vera Zeldean Catlin; Miltonvale
Mary Margaret Cawood; Wetmore
Minnie Cawood; Wetmore
Philip Dean Cazier; Wakarusa
Beverly Ross Chapin; Wichita
Douglas Scott Chapin; Manhattan
Ailene Frances Chapman; Wakefield
Gregg Leo Chappell; Topeka
LaVera Ione Charpie; Palmer
Natalie Evelyn Chavey; Clyde
Richard George Checksfield; Topeka
Marion Christiana Chegwidden; Wilson
Ivan Lee Cheney; Abilene
Bernice Lorene Christesen; Osage City
Laurence Richard Clark; Manhattan
George Sumner Clark; Longton
Louise Irene Clark; Frankfort
Robert Alfred Clark; Smith Center
Donald Joseph Clarkson; Kansas City, Mo.
Clarence Samuel Clay; Emporia
Ted Davis Cleary; Ingalls
Howard Eugene Clements; Salina
Mary Lucile Clingman; Harlan
Gordon Dwain Cloepfil; Hunter

UNDERGRADUATE STUDENTS—*Continued*

Gladys Elizabeth Clubine; Independence
Albert Swift Coates, Jr.; Kansas City
Marion Louise Coe; Manhattan
Roger Bragg Coffman; Overbrook
Seymour Cohen; Brooklyn, N. Y.
Charles Buford Colburn; Manhattan
Mary Maxine Cole; Wichita
Mary Patricia Collard; Leavenworth
Margaret Leslie Collins; Manhattan
Valdine Oral Combs; Almena
Neel Leon Conley; Wellington
Mary Martha Conrad; Manhattan
Ronald Edmond Conrad; Clay Center
Leo Roy Conwell; Emporia
Raymond Hollis Cook; Courtland
Lucy Mildred Coulter; Willis
Byron Vannoy Cox, Jr.; El Dorado
Catherine LaVonne Coxsey; Leavenworth
John Adam Crabb; Topeka
Ernest Richard Cram; St. Francis
Alice Malinda Crane; Jewell
Ernest Richard Cram; St. Francis
Virginia May Crawford; Madison
Girdner Forrest Crofoot; Matfield Green
James Wesley Crooks, Jr.; Manhattan
Charles Curtis Curry; Arkansas City
Jack L. Cullen; Smith Center
Mary Louise Curry; Kansas City
George Walter Curtis; Toronto
Wilmer R. Dague; Topeka
Orval William Daniels; Bronson
Gloria Jane Danielson; St. Francis
George Robert Darnes; Sublette
Marjorie Gladys Davies; Lebo
Helen Dorothy Davis; Meriden
Rufus William Davis; Meriden
Edith Margaret Dawley; Manhattan
Robert Price Dawley; Manhattan
Helen Elizabeth Day; Lawrence
Merle Logan Day; El Dorado
Don Max Debler; Kansas City
Kathleen Elizabeth DeCock; Paola
Robert Courtland Dennison; Salina
William Melvin Dicke; Paola
Lucy Rachel Dickson; Leonardville
Lillian Mae Dieball; Alma
Junior Charles Diehl; Manhattan
Helen Ruth Dieter; Longford
Max R. Diller; Alma
Dorothy Ann Dillinger; Green
Charlotte Dixon; Junction City
Dennis Ralph Donahue; Bonner Springs
David Rumbough Donaldson; Fort Knox, Ky.
Darcy Doryland; Manhattan
Richard Arthur Doryland; Manhattan
Terryll Dougherty; Manhattan
Ralph Erwin Douglas; Coffeyville
Helen Frances Drake; Corbin
Mary Frances Dreier; Clyde
Merrill Dale Dronberger; Kansas City
Carrie Jean Drummond; Elmdale
Lorraine DuMont; Manhattan
Lawrence Arthur Duncan; Lucas
Robert Matthew Dunlap; Liberal
Betty Dunn; Miltonvale
Merrill E. Dunn; Topeka
Daniel Durniak; Germantown, N. Y.
Robert Clair Duwe; Lucas
Von Eloise Eastman; Matfield Green
Martha Rosa Eck; Galva
Richard Ward Eddington; Courtland
Lauren F. Edgar; Manhattan
Erma LaVerne Ehrsam; Bern
Irene Veronica Ellenbecker; Marysville
Cecile Ann Elliott; Hoisington
William Dean Elliott; Elmo
Ruth Irene Emrich; Miltonvale
Elton Arthur Endacott; Manhattan
Paul Leland Engle; Manhattan
Esther Eileen English; Belpre
Francis Dean Engwall; Jamestown
Robert Nathaniel Erickson; Orland, Cal.
Grace Eskeldson; Ramona
Jean Elaine Estep; Garden City
Kendall Evans; Berkeley, Cal.
Mary Lou Evert; Republic
Cleora Mary Ewalt; Herington
L. Maxine Ewing; Sabetha
Cecil LaVerne Eystone; Leavenworth
Violet H. Farmer; Fredonia
Rosemary Farney; Kiowa
Byron W. Farnsworth; Manhattan
Betty Ann Faubion; Manhattan
Louise Marietta Fechner; Alta Vista
Franklin Hays Fenton; Manhattan
Clancy Carlyle Ferguson; El Dorado
M. Henrietta Ferguson; Manhattan
Zelma Marie Finn; Great Bend
Jack Monroe Fiskin; Mount Hope
Doris Flanders; Pratt
Muriel Maxine Flear; Greenleaf
Lois Fleming; Manhattan
Naomi Marie Flentie; Centralia
Robert Both Fleske; Albert
Thomas J. Fletcher; Horton
Robert Carl Floersch; Manhattan
Leslie Orval Foelschow; Manhattan
Theda R. Foland; Almena
Alma Lenora Foraker; Havensville
Marjorie Lee Force; Wheaton
Herbert Wilson Ford; Manhattan
Eldon Fredyrick Frazey; Haven
Anna Kathryn Freel; Corning
Elaine Friesen; Inman
William Albert Frusher; Ness City
Anna Mae Fry; Morrill
Mary Woolfolk Frye; Kansas City
Ralph Charles Fuhrken; Washington
Alice Louise Fuller; Courtland
Mabyn Belle Fuller; Manhattan
Ethel Mae Funkhouser; Manhattan
Howard H. Furumoto; Ninole, Hawaii
Robert Gahagen; Manhattan
William Jacob Galle; Arkansas City
Bettie Irene Garrison; Waverly
Avery M. Garton, Jr.; Chanute
Leo John Garvert; Blainville
Douglas Edmond Gary; Larned
Shirley Eva Gasswint; Enterprise
Paul William Gatzoulis; Kansas City
Eugene Gault; Glen Elder
Lloyd R. Gebhart; Culver
Margaret Jean Gehlbach; Coffeyville
Vernon Victor Geissler; Durham
Max Gelwix; Thayer
Virginia Nina Gemmell; Manhattan
Robert Francis Gentry; Topeka
William Bradley Gerlach; Manhattan
Mary Christine Gertson; Clyde
Lyman Earl Gessell, Jr.; Manhattan
Geraldine Marie Giffin; Spring Hill
Ella Corene Gillogly; Louisburg
Etta Irene Gillogly; Louisburg
Ellis Victor Gish; Paleo
Edgar N. Glotzbach; Paxico
Wayne Lawrence Godsey; Netawaka
Martha Olive Goheen; Manhattan
Anabel Golden; Whitewater
Peter Earl Gory; Hoisington
Bertha Myrtle Graham; Clifton
Roy Scott Graham; Altamont
Roy Max Grandfield; Manhattan
Margaret Louise Gray; Peabody
Dan A. Green; Mound City
Duane Marvin Green; Leoti
Gladys Jean Greep; Longford
L. Burton Greer; Pittsburg
Margaret Elizabeth Gregg; Dodge City
Truman DeRoam Gregory; Woodston

UNDERGRADUATE STUDENTS—*Continued*

Raymond L. Gribben; Salina
Leighton Henry Grier; Mount Hope
Gordon L. Griffith; Bogue
Kenneth Edward Griffith; Larned
Clayton Bronaugh Griffiths, Jr.; Santa Barbara, Cal.
Lloyd Dale Grote; Sabetha
David Henry Gruver; Augusta
Joe E. V. Guilfoil; Kansas City
Robert Ellis Guilfoil; Kansas City
Gerald Gurss; Burlingame
Merlin DeWayne Gustafson; Leonardville
Neil Claypool Gustafson; Hutchinson
William Ewers Guy; Kansas City
Francis Burdette Gwin; Leoti
Harold Leroy Hackerott; Alton
William D. Hadley; Alton
Maxine Lois Hageman; Leonardville
Gail Lovene Haley; Erie
Donna Ruth Hall; Powhattan
Hubert Hall; Turner
William Carlton Hall, Jr.; Coffeyville
Daniel Adam Hamer; Madison
Ruth Ann Hamilton; Topeka
Ruth Elemina Hamilton; Manhattan
Clara Hampl; Luray
Meda Mae Hampton; Ames
Betty Lou Hancock; St. Francis
Harriet L. Hancock; St. Francis
John Harvey Hancock; St. Francis
Robert Thomas Handel; Napa, Cal.
Hugh Carey Hanks, Jr.; Hutchinson
Iris Evadna Hanson; Wabaunsee
Harvey Harkawa; Honolulu, Hawaii
Harriet Alice Harbeck; Abilene
Edwin Harold Harclerode; Iola
Bernard Lewis Harden; Coffeyville
Mary Naomi Harding; Wakefield
LaVerne Collins Harold; Parker
Adrienne Edna Harper; Vermillion
Genevieve Jean Harris; Manhattan
Warren G. Harris; Manhattan
Wilton Eugene Harry; Home City
D. Elaine Hartsook; Ashland
Donice Averne Hawes; Benton
Delbert Ray Hawkins; Cedarvale
Alfred Simpson Hawkinson; McPherson
John Blagg Healy; Junction City
Victoria Marie Hedke; Waterville
Burns Edward Hegler; Arkansas City
Alice Marie Hejtmanek; Delia
Edward John Hellmer; Olpe
John Gunion Helm; Simpson
Leona Ruth Helvey; Mankato
Keith Donald Henrikson; Manhattan
Kenneth Hillis Henry; Wichita
Donald Allen Henshaw; Herington
Robert Wayne Hentzler; Topeka
Pauline Jane Herndon; Kansas City
Clara May Hesse; St. Marys
Alice Marie Herr; Abilene
Arthur Nathan Hibbs; Easton
Jess William Hicks; Herington
Robert Donald Hilgendorf; Lincoln
June Hill; Wamego
Lawrence Andre Hill; Horton
Margaret Elizabeth Hill; Belleville
Milt Dean Hill; Kansas City, Mo.
James Glenn Hillabrant; Washington
Kalo Albert Hineman; Dighton
Richard Elmer Hineman; Dighton
Margaret Alene Hinshaw; Topeka
Doris Marie Hiser; Manhattan
Margaret Ann Hobbs; Manhattan
Wayne D. Hochuli; Holton
Arthur Meyer Hockett; Hutchinson
John Henry Hoins; Leavenworth
Wilber Glen Hole; Topeka
James Maynard Holecek; Burns
Orvin Hugh Holler; Conway
Melvin Wayne Holmes; Ness City
Virginia June Holmes; Manhattan
Harriet Elizabeth Holt; Ellsworth
Charles Sherman Holtz; Manhattan
David Adrian Holtz; Manhattan
Mary Anne Holtz; Manhattan
Joseph Benedict Hoover; Greenleaf
Lillian M. Hoover; Manhattan
Theresa Wurtz Hoover; Clifton
Blanche Mildred Horne; Alma
Kretta Katherine Horner; Wakefield
Dorothy May Horstick; Richmond
Clarence Beyler Hostetler; Harper
Charles Frederick Houghton; Leavenworth
Marjorie Goldstein Howard; Manhattan
Virginia Howenstine; Manhattan
Alice Bernice Hughes; Olathe
Glenda Maxine Hughes; Broughton
Henry George Hurtig; Hanover
Archie Richard Hyle; Madison
Mary Copeland Hylton; Manhattan
Mary Iles; Manhattan
Claudine Mary Immenschuh; Manhattan
*George Nelson Inskeep; Manhattan
Felicia Geraldine Irving; Manhattan
Donald Franklin Irwin; Fairview
Lloyd Linell Isaacson; Osage City
Walter Paul Isaacson; Hiawatha
William Earl Ives; Topeka
Bob Willard Jackson; Salina
S. Lester Jackson; Parker
Mary Ellen Jacobson; Formoso
Joseph Edward Jagger; Minneapolis
William Collins Jamison, Jr.; Kansas City
Everett E. Janne; Wilson
Robin Joan Jefferis; Lewis
Jo Ann Jefferson; Garnett
Dwight Hillis Jenkins; Humboldt
Lillian Edna Jensen; Miltonvale
Berneice B. Johansen; Holyrood
Jimmie Lincoln Johns; Manhattan
Cecil Loring Johnson; Wamego
Louis Bruce Johnson; Liberal
Malvin G. Johnson; Moran
Romaine Edwin Johnson; Manhattan
Howard James Johnstone; Wamego
Frances Jane Jones; Reading
Keith Gordon Jones; Penalsoa
Phyllis Jones; Sedan
Ralph J. Jones; Stafford
Eunice Wheeler Justus; Manhattan
William Wade Justus; Hill City
Doretta Henrietta Katz; Centralia
Eleanor Mae Kaufman; Haddam
Frank William Kaul; Holton
Ray Albert Keen; Topeka
Neva Lucille Keene; Norton
Donald Ernest Keith; Manhattan
Robert Edgar Keith; Manhattan
William Arthur Kells; Emporia
Alberta Nell Kellsy; Westmoreland
Kate Kemper; Frankfort
Orla Cormack Kemper; Manhattan
James G. Kenney; Kansas City
Mary Maxine Ketterman; Summerfield
Romney Junior Ketterman; Summerfield
John Milton Keyser; Wilson
Clara Belle Edna Kientz; Manhattan
Charles Edward Kier; Mankato
Irma V. Kietzman; Alta Vista
John Patrick Kilkenny; Manhattan
Shirley Imogene Kilmer; Kirwin
Donald Ross Kimball; Lane
Keck Kimbell; Lyons
Eugene Fred Kimple; Lyons
Elizabeth Susan Kindscher; Beloit

*Also pursuing graduate study.

UNDERGRADUATE STUDENTS—*Continued*

Wilbur W. Kindschi; Garden City
Milton George Kingsley; Formoso
Ada Ruth Kingston; Hoisington
Floyd Ernest Kirkland; Junction City
Joe Eldon Kirkpatrick; Bogue
Gerald Wilbert Klema; Wilson
Russell Charles Klotz; Saffordville
Ralph William Knoche; Adrian, Minn.
Vivian White Koby; Delphos
Robert Wolfe Kohn; Atchison
Leland Thomas Konz; Independence
Glen Millard Koontz; Haven
Phoebe Lahr Kopper; Manhattan
Ralph Earl Krey; Zenith
Norman Leroy Kruse; Barnes
Ralph Jennings Kueker; Belleville
Charles Evans Lacey; Belleville
Shirley June Lacy; Everest
Jack Duncan Lamont; Manhattan
Flora Evelyn Lancaster; Yates Center
Robert Dean Laramey; Pueblo, Colo.
June Marguerite Larrick; Topeka
Leland Albert Latham; Washington
Arnold Monroe Latschar; Manhattan
John Milton Lawrence; Winfield
Donald Eugene Leavitt; Iola
Frances Eldora Lehman; Deer Creek, Okla.
Rex Ernest Leuze; Sabetha
Esther LaVerne Lewis; Home
Mildred Josephine Lewis; Dodge City
June Elaine Light; Liberal
Dean T. Lill; Mount Hope
Elizabeth Lillibridge; Hutchinson
Margaret Ellen Lisher; Haddam
Harriet Littan; Clyde
Maryanna Lock; Mayetta
Bernice Evangeline Long; Manhattan
Ruth Shubert Lord; Frankfort
Mabel Irene Lovell; Burden
Robert Lloyd Lucas; Kansas City
Lucille Pauline Luckey; Woodston
Albert Nolan Ludwig; Parsons
William Valjean Lumb; Manhattan
Betty Jane Lunger; Summerfield
Donald Wesley Lunt; Yankee Hill, Cal.
Doris Elizabeth Lupton; Cimarron
Ruth Irene Luthi; Wakefield
Marjorie Marie McAninch; Neodesha
Johnny F. McCammon; Americus
John William McClure; Eureka
Arlan Wilbur McClurkin; Clay Center
Ann Elizabeth McConnell; Junction City
Mary Elizabeth McConwell; Wetmore
Mary Ruth McCoy; Manhattan
Dale Frederick McCune; Stafford
Marybelle McDonald; Bremen
Terrence Eugene McDonald; Kansas City
Clarence A. McGee; Kansas City
Joan Therese McKenna; Kingman
Ernest Lowe McLain; Kansas City
John James McLinden, Jr.; Cedar Point
Willard Lyle McMahan; Rossville
Austin Thomas McMurtray; Wichita
Cathleen Rebecca McRae; Manhattan
John S. McRae; Manhattan
Margaret Gardiner Mack; Manhattan
R. Kendall MacKirdy; Manhattan
Wayne Hendrix MacKirdy; Manhattan
Allen Bush Madsen; Corbin
Evelyn Ann Magill; Fanwood, N. J.
Clifford Dale Makalous; Cuba
Dorothy Evelyn Mangels; Kansas City, Mo.
John Ellis Mangelsdorf; Honolulu, Hawaii
Vivian F. Marlow; Meade
John A. Marten; Winfield
Herbert Hudson Martin; Altamont
John Everett Martin; Lyons
Norma Elizabeth Martin; Chapman
Zelda Frida Maser; Dighton
Laverne Laura Maskil; Westmoreland
Audrey Elizabeth Mason; Axtell
Harold Z. Mason; Vermillion
Mildred Elizabeth Mast; Burlingame
Rea Lou Matson; Smith Center
Thayne Orvile Mauch; Ness City
Isabel Harriette May; Atchison
Pauline Ward May; Manhattan
Thurmon Adrian Mayhew; Trousdale
Geneva Morrison Mendenhall; Belleville
William Hugh Meredith; Lincoln
Norman Rockwell Meriweather; Chetopa
Alva Donald Messenheimer; Manhattan
Ralph Leonard Messer; Lawrence
Robert B. Michael; Hiawatha
William Burhl Miesse; Marion
Edsel Leo Miller; Manhattan
Elvin Eugene Miller; Manhattan
James Wolford Miller; Manhattan
*Marion A. Miller; Topeka
Vance Vernon Miller; Salina
Roy Milleret; Kansas City
Carroll R. Mills; Blaine
Eugene Booth Mills; Wichita
Esther Dora Milner; Republic
Russell Galbraith Minnis; Manhattan
Agnes Emma Minter; Industry
Evelyn Teresa Mitchell; Axtell
Kenneth Peter Mitchell; Axtell
Leonard Wesley Mohney; Sawyer
Alex John Molnar; Manhattan
Helene Mae Monfort; Iola
Earl Lawrence Montgomery; Parsons
Helen Maxine Monty; Aurora
Robert Beckwith Moody; Greeley
Bonnie Jean Moon; Dodge City
Chas. Wright Moore; Fort Riley
Marcus Daniel Morris; Parsons
Olin Wayne Morris; Manhattan
Orpha Katherine Morris; Riley
Thelma Mae Morton; Frankfort
William John Moseley, Jr.; Topeka
Ernst William Moser; Hanover
Robert Leonard Muchow; Topeka
Melville Rhodes Mudge; Topeka
Fred Hartman Mueller; Topeka
Kenneth K. Muirhead; Jennings
Daniel Albert Muller, Jr.; Manhattan
Freda Evelyn Mumaw; Onaga
Elsie Katherine Murray; Summerfield
Jack M. Muse; Manhattan
Curtis Eugene Musgrave; Minneapolis
Raymond Lee Mussatto; Burlingame
Bill John Myers; Bethel
Donald Kivett Myers; Topeka
Maxine Lorraine Myers; Junction City
Richard B. Myers; Bethel
Thora Dagny Mykland; Chapman
Florence Ruth Nanninga; Leonardville
Thelma Grace Neaderhiser; Manchester
Ineta Ruth Neel; Hutchinson
Allan Bakewell Neely, Jr.; Minneapolis
Alven William Neff; Manhattan
Arthur William Neff; Ulysses
Jo Ann Neibanger; Tonganoxie
Clella Eleanor Nelson; McPherson
Dorothy Leona Nelson; Manhattan
John H. Nelson, Jr.; Minneapolis
Robert Kenneth Nelson; Chicago, Ill.
Jeanne Newberry; Blue Rapids
Michael Sidney Newborg; New York, N. Y.
James Robert Newlin; Hillsboro
William Clare Newlin; Lewis
John Porter Newman; Manhattan
Katherine Jane Newman; Manhattan
MacDonald Newsom; Scott City
Norman Frederick Niemeier; Manhattan

* Also pursuing graduate study.

UNDERGRADUATE STUDENTS—*Continued*

Drusilla Marie Norby; Pratt
Otto Fredrick Oberhelman, Jr.; Manhattan
Fayne H. Oberst; McPherson
Lester Francis Oborny; Marion
Max F. Oelschlaeger; Manhattan
Helene M. Oetinger; Green
Fred Benjamin Ogilvie; Edwardsville
Richard Olney; Manhattan
Mary Margaret O'Loughlin; Lakin
Charles William Olson; Manhattan
Julia Viola Olson; Inman
Mary Marie Olson; Dwight
Leo Benedict Osterhaus; Marysville
Russell Dean Osterhout; Bluff City
Leonard Ray Ottman; Barnes
Merle Pickard Ottman; Barnes
Edward John Otto, Jr.; Riley
Lucille J. Owen; Edson
Dorothy Jane Owens; Garnett
Laurence Glenn Pacey; Miltonvale
James Thomas Painter; Meade
Earl Albert Palmberg; Meriden
Kendrick Lowell Palmer; Murdock
Kenneth Elwood Palmer; Cheney
Margaret Lucile Pancake; Enterprise
Viola Adelephia Pancake; Enterprise
Harriett Ruth Parkhurst; Kinsley
Mary Elizabeth Parkhurst; Kinsley
Edwin Atkins Parks; Fort Scott
Merle Wayne Patterson; Junction City
Betty Lee Payne; Topeka
Grace Eva Peck; Dighton
Perry Cushman Peine; Manhattan
Clarence M. Penticuff; Kansas City
Jay H. Perreten; Kansas City
Thelma Ruth Perry; Axtell
George William Peterkord; Greeley
Florence A. Peterson; Manhattan
William James Peycke, Jr.; Alta Vista
Donald Phinney; Russell
Robert Cooper Pickett; Manhattan
Betty Kay Pierce; Wichita
William L. Pilcher; Burlington
Mary Alice Pile; Liberal
Edwin Moats Pincomb; Overland Park
Robert Lee Poppenhouse; Manhattan
Henry Dean Porter; Mount Hope
James Armer Porter; Fredonia
Jerald Gorman Porter; Norton
John Jefferson Porter; Selma
Marion Edgar Postlethwaite; Wichita
Billy Glenn Price; Harrisonville, Mo.
Rex Leroy Pruett; Culver
Earl Carleton Pugh; Salina
Robert Lee Pyles; Kansas City
William Kay Quick; Beloit
Byron White Quinby; Manhattan
Cleta Margaret Railsback; Manhattan
Harold Edward Rall; Menlo
Mary Catherine Randall; Marysville
Roberta Lee Randle; Riley
Bill Hays Ransopher; Clyde
Lee Ronald Rarick; Glen Elder
Giovanna Jane Reardon; Liberty
William Robert Rector; Leavenworth
Robert C. Reed; Stockton
Wilbur Bernell Reed; Marysville
Marshall Perry Reeve; Garden City
Lois Vivian Reeves; Almena
Marvin Emor Reinecke; Great Bend
Marie Katherine Reinhardt; Russell
Loretta Irene Reist; Seneca
Anellen Mary Reiter; Marysville
Cleo Carl Rice; Lost Springs
Donald Paul Richards; Manhattan
Leone A. W. Riekenberg; Hollenberg
Charles Watson Riley; Manhattan
John Lewis Riling; Lawrence
David Earl Rintoul; Garden City
Richard Gale RoBards; Manhattan
Arthur D. Robb; Manhattan
Charles Davis Roberts; Topeka
Max Orville Roberts; Chanute
Clair Milton Robertson; Holton
William Bruce Robertson; Barnard
Orpha Jean Robison; Concordia
Loma Jane Robley; Independence
Merrill Dean Rockhold; Herington
Hallie Louise Roden; Gorham
Haroldine Roessler; Medicine Lodge
John B. Rogers; Manhattan
Richard D. Rogers; Manhattan
Ruth Violet Rogers; Alma
Ned W. Rokey; Sabetha
Lucille May Rosenberger; Greensburg
Joe Raymond Rowlin; Eskridge
Peter Sturges Ruckman; Topeka
Jess Wayne Ruf; Arkansas City
Alice Ann Russ; Corning
Bryce Gilford Russel; Canton
Darrell Arden Russel; Canton
Ethel Agnes Russell; Courtland
Margery Jean Russell; New Albany
Robert Frank Sager; Manhattan
Dorothy Lucille Sanneman; Idana
Vernon Kenzo Sato; Kolaheo, Hawaii
Catherine Bobbette Savage; Parsons
Duane Leon Sawhill; Glasco
Maude I. Schane; Onaga
Louise Ann Scherzer; Wichita
Warren Schlaegel; Olathe
Ralph R. Schlicht; Claflin
Philip Davis Schnelle; Coffeyville
Edwin Andrew Schoen; Lenora
Bob LeRoy Schrag; Burrton
Robert Edward Schreiber; Garden City
Mary Franceska Schroller; Marysville
Frank Edward Scheyer; Manhattan
Glen Perry Schulthess; Manhattan
Wayne Fredrick Schultz; Trousdale
Charles Blades Schwab; Morrowville
Robert Wayne Schwirtz; Kansas City
Melvin Frank Scoby; Fairview
Dorothy Louise Scollick; Ottawa
Lawrence William Scott; Langhorne, Pa.
Ridge Lavan Scott; Kansas City
James Harris Sealey; Pratt
Sarah Frances Seaton; Manhattan
Lorrain Oscar Sebree; Kansas City
Joe Elwood Seitz; Ellsworth
Marvel Arlene Senti; Junction City
Robert Lowe Servis; Manhattan
Edward George Seufert; Tonganoxie
George Wilfred Seymour; El Dorado
Charles Kenneth Shane; Manhattan
James David Sharpe; Council Grove
Mary Ellen Shaver; Salina
Shirley Anne Shaver; Salina
Ann Ella Shaw; Belleville
Max Sherman Sheehey; Belle Plaine
Richard Romig Sheets; Topeka
Barbara Ellen Sheffer; Manhattan
Leslie Harold Sherman; Toronto
Raymond Henry Shideler; Salina
Theodore Wheeler Shideler, Jr.; Wichita
Allen Baer Shopmaker; Kansas City
George Edward Short; Manhattan
Wesley Blain Sidesinger; Colby
LeRoy O. Sidfrid; Topeka
Everett Otto Siegele; Princeton
Evelyn Jean Siemers; Clay Center
William James Simic; Superior, Neb.
Robert Ralph Singleton; Merriam
Beth Sirridge; Topeka
Betty Jean Smith; Tucson, Ariz.
Ella Ethel Smith; Haddam
James Joseph Smith; Axtell
Joe Morris Smith; Neodesha
Leland Edgerton Smith; Arkansas City
Maxine Mae Smith; Palmer
Meryl Edith Smith; Colby

UNDERGRADUATE STUDENTS—*Concluded*

Nellie Geneva Smith; Clay Center
Phil Roger Smith; Manhattan
Robert J. Smith; Manhattan
Walter Henry Smith; Shawnee
Richard Martin Smoll; Wichita
Neil Harrison Smull; Bird City
Harvey James Snapp; Belleville
Neal Wanner Snow; Neodesha
Nancy Marie Snyder; Hutchinson
Ralph Edward Snyder; Junction City
Joseph Hall Somers; Topeka
Ralph Norman Spencer; Leavenworth
Carl Lester Sperry; Marysville
Nan L. Sperry; Overland Park
Blandine Mary Spiering; Junction City
Earl John Splitter; Frederick
Marion David Spoelstra; Prairie View
Shirley Spohn; Conway
Irene Spurgin; Republic
Jean Marie Sramek; McDonald
Harold Ellsworth Staadt; Ottawa
Wilma Marie Staehli; Abilene
Helen Esther Stagg; Manhattan
Mary Zoe Stahl; Wichita
Helen Stallard; Topeka
John Ralph Stallings; Frankfort
Wayne R. Starr; Hiawatha
Vera Elizabeth Steffen; Broughton
Arlabel Rosemary Stewart; Hutchinson
Ross M. Stewart; Wilburton
William Allen Stewart; Manhattan
Keith Gregory Steyer; Chanute
Helen Margaret Stinebaugh; Princeton
Edward Donald Stoddard; Manhattan
Albert Hendrix Stone; Honolulu, Hawaii
Margaret Frances Stone; Honolulu, Hawaii
Ernest Kirk Stonebraker; Leavenworth
Althea H. Strasen; Alma
Clyde Roe Stratton; Greenville, Tenn.
George Edward Streib; Leona
Mollie Gretchen Strohm; Manhattan
Theresa Irene Strotkamp; Burns
Bertha Alberta Stuewe; Alma
Don Alwin Stuewe; Alma
Charles Delbert Stumpff; De Soto
Clanton Tillman Suiter; Otis
Dale Ellsworth Suttle; Manhattan
Ernest Earl Swanson, Jr.; Kansas City
Robert Benoni Swan; Manhattan
Irene C. Swanson; Manhattan
Irene Anna Swenson; Concordia
James Robert Swenson; Crowley, Colo.
Melvin John Swenson; Concordia
Margaret Adelaide Swift; Holton
Jay Carlyle Symns; Hutchinson
Bernard Taub; Brooklyn, N. Y.
Delbert Gale Taylor; Meade
Dorothy W. Taylor; Goodland
June Leona Taylor; Manhattan
Ocie Alice Taylor; Tribune
Rex Robert Taylor; Hillsboro
Howard Earl Teagarden; Manhattan
Floyd Leonard Tempero; Wichita
Wilma Amelia Teske; Onaga
Warren Edward Tharp; Atchison
Cleo Marguerite Theobald; Yates Center
Emily Jane Theye; Emporia
William Matthew Thies, Jr.; Marion
Glen Courtney Thomas; Wichita
Roy Corley Thomas; Parsons
Jack Russell Thomasson; Belleville
Zelma Mae Thorp; Longford
Donald L. Timma; Manhattan
H. Elwin Todd; Quinter
Virginia Ruth Toews; Inman
Evelyn Louise Torrence; Baileyville
David Eugene Totten; Clifton
Delbert L. Townsend; Danbury, Neb.
Monte Monroe Trimble; Kansas City
Irene Agnes Turner; Oskaloosa
Harry William Tyrrell, Jr.; Columbus
Grace Marie Uhlenhop; Leonardville
Wayne Hubert Ukena; Robinson
Jim Ungles; Satanta
James Alva Upham; Junction City
Roy Walter Upham; Junction City
Dean Urquhart; Manhattan
Gordon William Vacura; Kansas City
Inez Emma Van Beber; Manhattan
Warren Lewis Vance; Mankato
Margaret Jean Van Horn; Larned
Sibyl Fay Van Leewen; Vesper
Virginia Cassandra Van Meter; Ada
Vincent Thomas Van Sickel; Abilene
Mary Ruth Vanskike; Arkansas City
Edna Mae Van Tuyl; Burns
Philip Alexander Van Winkle; Manhattan
Richard James Van Winkle; Manhattan
James Henry Vavroch; Oberlin
Dolores Doris Vishnefske; Belleville
Harold Roy Volkemann; Lyons
Katherine Marie Vytlacil; Republic
Grant W. Waggoner, Jr.; Baxter Springs
Robert Hewitt Walker; Kansas City
Marjorie May Wanamaker; Barnes
Arlin Bruce Ward; Manhattan
Janetta Flo Waters; St. Francis
James Wesley Watkins; Manhattan
Lowell M. Webb; Beverly
Howard O. Weber; Kansas City
Bernice Elaine Webster; Blaine
Leo R. Webster; Dodge City
Jeanne Wedell; Topeka
Max Corwin Weeks; Topeka
Glenn Arthur Weir; Hazelton
William Russell Wendt; Topeka
Frank David Werner; Junction City
Gordon B. West; Manhattan
Nila Stewart West; Hutchinson
Francis Edwin Westermann; Kansas City
Wilbur Wellington White; Delphos
Charles Elmer Whiteman; Carrollton, Ill.
Howard Elmer Whiteside; Neodesha
John Carey Whitnah; Manhattan
Mary Jane Wick; Hutchinson
Esther Irene Wiedower; Spearville
Raymond L. Wilcox; Kincaid
Betty Lou Wiley; Tonganoxie
Margaret Nancy Wiley; El Dorado
Leona Margaret Wilkerson; McFarland
Lysle M. Wilkins; Delphos
Clarence Stanley Williams, Jr.; Humboldt
Frances Antoinette Williams; Marion
Mary Marjorie Willis; Newton
Warren Wesley Willis; Manhattan
Amos Powers Wilson; Manhattan
Chase C. Wilson, Jr.; Mulvane
David Ott Wilson; Wichita
Donald Ray Wilson; Mound Valley
George Lincoln Wilson; Hoisington
Mark Francis Wilson; Ashland
Oid Lee Wineland; Alton
Leland Stanley Winetroub; Leavenworth
Buford Dale Winters; Parsons
E. Virginia Wolf; Gardner
Anabel Wood; Mayetta
Evelyn Pearl Wood; Mayetta
Robert Gordon Wood; Kansas City, Mo.
Mona Ailene Woodhams; Clay Center
Ernest Emerson Woods, Jr.; Kansas City, Mo.
Charles Arthur Worthington; Lecompton
Robert Paul Worthman; Lincoln, Neb.
Helen Margot Wright; Manhattan
Richard Carr Wright; Lawrence
Virginia F. Yapp; Manhattan
DePhayne Aileen Young; Westmoreland
Frances Jean Zibell; Holton
Kenneth Charles Zimmerman, Jr.; Coffeyville
Maxine Odell Zimmerman; Belle Plaine
Zora Estelene Zimmerman; Belle Plaine
Jack Eugene Zumbrunn; Enterprise

Four-week Summer Shool

June 29 to July 25, 1942

GRADUATE STUDENTS

Raiffe Cobb Alvord; Lawrence
Arthur E. Bate; Denver, Colo.
Erma Evangeline Currin; Manhattan
Reynold George Dahms; Lawton, Okla.
Travis Berkley Howard; New Madrid, Mo.
Dorris Mae Kastner; Manhattan
Winfred Owen McCarty; Parker
Ashton Price Renwick; Kansas City, Mo.
Herbert Harold Robinson; Charleston, Mo.
Wayne Haskell Thomas; Norwich

Additional Four-week Summer School

July 27 to August 22, 1942

GRADUATE STUDENTS

Arthur E. Bate; Denver, Colo.
August Russell Borgmann; Longmont, Colo.
Albert B. Cameron; Smith Center
Lyle Murphy Carson; Dennis
Arnott Stafford Crase; Manhattan
William Harrison Dunham; Wichita
Muriel A. Glasson; Almena
Eldon W. Graber; Pretty Prairie
Alice Lucile Graham; Webber
John Orville Harris; Manhattan
Joseph John Hendrix; Kanorado
Lucile Louise Johnson; Cleburne
Eunice Ethel Jones; Medicine Lodge
Grace Sadie Mann; Council Grove
Margaret Irene Martin; Altamont
William Wallace O'Donnell; Manhattan
Helen I. Peterson; Manhattan
Ashton Price Renwick; Kansas City, Mo.
Earl William Rose; White Cloud
Marvin LeRoy Schreiber; Yates Center
William George Schrenk; Manhattan
Clarence Roy Spong; Great Bend
Emery Carlton Swanson; Manhattan

UNDERGRADUATE STUDENTS

Charles Earl Abbey; Newton
Maynard Lynn Abrahams; Wayne
John Harold Adams; Atchison
Howard Wilber Akers; Centerville
Nola Pearl Allen; Havensville
Ethel Sprague Anderson; Eskridge
Robert Arthur Anderson; Partridge
Van Keith Anderson; Osage City
James V. Andrews; Manhattan
Jean Adele Babcock; Manhattan
Mary Catherine Bain; Lamar
Robert Crary Baldridge; Emporia
Jacob William Banks; Atchison
Earl Clair Barb; Hamilton
Glenn C. Barngrover; Wichita
John Francis Scott Barr; Manhattan
H. James Bartels; Inman
Dean Cecil Batt; Marion
Burke Benjamin Bayer; Manhattan
Wendell Dean Bell; Silver Lake
Rachel Bessie Beller; Russell
Lloyd Alan Bennett; Conway Springs
Robert Goddard Bensing; Manhattan
Denzil Wallace Bergman; Manhattan
Darrel Ottis Berry; Cullison
Lloyd Calvin Billings; Nortonville
Herschel E. Blackburn; St. Marys
M. Lowell Blaser; Waterville
Betty Boone; Manhattan
George Franklin Boone; Manhattan
Dale Emerson Bowyer; Manchester
Eldon Eugene Boyington; Goodland
Silas E. Brandner; Carlton
Betty Lee Bright; Baxter Springs
Clarence Kendrick Brown; Salina
Jack R. Bruner; Burns
William Boyd Bryson; Kansas City
George John Buckholtz; Olathe
Morris Eugene Buckman; Olathe
Maria E. Buller; Hillsboro
Rex Burden; Chase
Orley G. Burgess; Arnold
Edward George Buss; Holton
Wilbert John Buxton; Cherryvale
George Frederic Campbell; Wichita
Herbert David Campbell; Beverly
Ronald Wayne Campbell; Cherryvale
Leon Bernard Carlson; Marquette
Halcia Marguerite Cerny; Rossville
Ailene Frances Chapman; Wakefield
Richard George Checksfield; Topeka
Laurence R. Clark; Manhattan
Robert Alfred Clark; Smith Center
Donald Joseph Clarkson; Kansas City, Mo.
Clarence Samuel Clay; Emporia
Gordon Dwain Cloepfil; Hunter
Charles Buford Colburn; Manhattan
Mary Martha Conrad; Manhattan
Ronald Edmond Conrad; Clay Center
Byron Van Noy Cox, Jr.; El Dorado
John Adam Crabb; Topeka
Ernest Richard Cram; St. Francis
Edith Tempero Crawford; Clay Center
Norman Le Roy Crook; Manhattan
James Wesley Crooks, Jr.; Manhattan
Jack L. Cullen; Smith Center
George Walter Curtis; Toronto
Bill L. Dague; Topeka
Merle Logan Day; Manhattan
Donald Max Debler; Kansas City
Ethel May Dent; Council Grove
David Rumbough Donaldson; Fort Knox, Ky.
Ernest Darcy Doryland; Manhattan
Richard Arthur Doryland; Manhattan
Lawrence Arthur Duncan; Lucas
Wilbur Samuel Duncan; Wakeeney
Merrill Edwin Dunn; Topeka
Daniel Durniak; Germantown, N. Y.
Robert Clair Duwe; Lucas
Madelyn Mary Eagan; Axtell
Richard Eddington; Courtland
Irene Veronica Ellenbecker; Marysville
Charles L. Ely; Ashland
Paul Leland Engle; Manhattan
Ola Belle Woods Engstrom; Lebanon
Francis Dean Engwall; Jamestown
Cecil LaVerne Eystone; Leavenworth
Byron W. Farnsworth; Manhattan
Louise Marietta Fechner; Alta Vista
Viola Fern Ferguson; Salina
Thomas Jesse Fletcher; Manhattan

UNDERGRADUATE STUDENTS—*Continued*

Robert Carl Floersch; Manhattan
Doris Flanders; Pratt
Herbert Wilson Ford; Manhattan
William Albert Frusher; Ness City
John Robinson Fuller; Salina
Howard H. Furumoto; Ninole, Hawaii
Robert D. Gahagen; Manhattan
William Jacob Galle; Arkansas City
Wilford Eugene Gault; Glen Elder
Max Gelwix; Thayer
Glenna Louise Germann; Manhattan
Mary Christine Gertson; Clyde
Lyman Earl Gessell, Jr.; Manhattan
Jack Harris Gilman; Topeka
Ellis Victor Gish; Palco
Edgar N. Glotzbach; Paxico
Wayne Laurence Godsey; Netawaka
Roy Scott Graham; Altamont
Dan A. Green; Mound City
D. Marvin Green; Leoti
Truman DeRoam Gregory; Woodson
Leighton Henry Grier; Mount Hope
Kenneth Edward Griffith; Larned
Merlin DeWayne Gustafson; Leonardville
Francis Burdette Gwin; Leoti
Harold Leroy Hackerott; Alton
William Doyle Hadley; Alton
Hazel Harriet Hall; Concordia
Daniel Adam Hamer; Madison
Ruth Ann Hamilton; Topeka
Esther Alice Hane; Lincolnville
Harvey Harakawa; Honolulu, Hawaii
LaVerne Collins Harold; Parker
Roy Sears Harvey; Junction City
Alfred Simpson Hawkinson; McPherson
Burns Edward Hegler; Arkansas City
Edward John Hellmer; Olpe
John Gunion Helm; Simpson
Arthur Nathan Hibbs; Easton
Jess William Hicks, Jr.; Herington
Robert Donald Hilgendorf; Lincoln
James Glenn Hillabrant; Washington
Wayne D. Hochuli; Holton
James Maynard Holecek; Burns
Cecil Ernest Holland; El Dorado
Virginia June Holmes; Manhattan
Charles Sherman Holtz; Manhattan
David Adrian Holtz; Manhattan
Lillian Maxine Hoover; Manhattan
Charles Frederick Houghton; Manhattan
Virginia Louise Howenstine; Manhattan
Lola H. Blaser Hoyer; Marysville
Archie Richard Hyle; Madison
George Nelson Inskeep; Manhattan
Donald Franklin Irwin; Fairview
Walter Paul Isaacson; Hiawatha
Bertha Esta Jackson; Hope
Joseph Edward Jagger; Minneapolis
Everett E. Janne; Wilson
Vernon Elroy Janssen; Lorraine
Dwight Hillis Jenkins; Humboldt
James Lincoln Johns; Manhattan
Blanche Bernice Johnson; Talmo
Cecil Loring Johnson; Wamego
Louis Bruce Johnson; Liberal
Malvin G. Johnson; Moran
Howard James Johnstone; Wamego
Eva Susan Jones; Hiawatha
Keith Gordon Jones; Penalosa
William W. Justus; Hill City
Theresa Viola Kehler; Sabetha
Arthur Louis Kelly; Derby
Romney Junior Ketterman; Summerfield
John Milton Keyser; Wilson
Charles Edward Kier; Mankato
Donald Ross Kimball; Lane
Eugene Fred Kimple; Lyons
Edward Joffert King, Jr.; Jetmore
Milton George Kingsley; Formoso
Ada Ruth Kingston; Hoisington
A. Leonard Kirchner; Marion
Joseph Eldon Kirkpatrick; Bogue
Gerald Wilbert Klema; Wilson
Renata Kleopfer; Ramona
Grace Mae Knisely; Abilene
Gladys Pauline Knuth; Hope
Norman LeRoy Kruse; Barnes
Charles Evans Lacey; Belleville
John M. Lawrence; Winfield
Bertha Lesher; Abilene
Dean Thomas Lill; Mount Hope
Edythe Lowell; Concordia
Betty Jean Lull; Haddam
Doris Elizabeth Lupton; Cimarron
Daisy McBeth; Yates Center
John F. McCammon; Americus
Mary Josephine McCreary; Peabody
Velda Maurine Smith McCullough; Republic
Dale Frederick McCune; Stafford
Ernest Lowe McLain; Kansas City
John S. McRae; Manhattan
William Howard McVey; Fredonia
R. Kendall MacKirdy; Manhattan
Wayne Hendrix MacKirdy; Manhattan
*Wilbur Laurence Maddy; Utica
Allen Bush Madsen; Corbin
Clifford Dale Makalous; Cuba
Herbert Hudson Martin; Altamont
John E. Martin; Lyons
Harold Z. Mason; Vermillion
Thayne Orvle Mauch; Ness City
Thurman Adrian Mayhew; Trousdale
Norman Rockwell Meriweather; Chetopa
Alva Dan Messenheimer; Manhattan
Mae Sower Messenheimer; Manhattan
Edsel Leo Miller; Manhattan
James Wolford Miller; Manhattan
Bessie Lillie Monteith; Irving
Dora Mae Ross Moore; Meade
William John Moseley; Topeka
Melville Rhodes Mudge; Topeka
Fred Hartman Mueller; Topeka
Kenneth K. Muirhead; Jennings
Daniel Albert Muller; Manhattan
Jack M. Muse; Manhattan
Curtis Eugene Musgrave; Minneapolis
Harold Francis Neaderhiser; Maplehill
Alven William Neff; Manhattan
Arthur W. Neff; Ulysses
John H. Nelson, Jr.; Minneapolis
Theodosia May Hays Nelson; Manhattan
James Robert Newlin; Hillsboro
William Clare Newlin; Lewis
Margaret Niederhouse; Durham
Fern Nothern; Manhattan
Naoma Jean O'Daniel; Westmoreland
Max Frederick Oelschlaeger; Manhattan
Margaret Lucile Oldweiler; Mayetta
Charles William Olson; Manhattan
Mary McDivitt Orton; Alta Vista
Robert Leo Osborne; Rexford
Russell Dean Osterhout; Bluff City
Leonard R. Ottman; Barnes
Edward John Otto, Jr.; Riley
Edwin Atkins Parks; Fort Scott
Merle Wayne Patterson; Junction City
Wendell Allen Patterson; Attica
Perry Cushman Peine; Manhattan
Jay H. Perreten; Kansas City
George William Peterkord; Greeley
Frances A. Peterson; Chapman
William James Peycke, Jr.; Alta Vista
Robert Cooper Pickett; Manhattan
Marceline Opal Pixley; Concordia
Judith Kjellberg Polson; Axtell
Jerald Gorman Porter; Dellvale
Marion Edgar Postlethwaite; Wichita
Mary Marjorie Powell; Highland
Billy Glenn Price; Harrisonville, Mo.

UNDERGRADUATE STUDENTS—*Concluded*

Rex Leroy Pruett; Culver
William Kay Quick; Beloit
Harold E. Rall; Menlo
Bill H. Ransopher; Clyde
Helena Elizabeth Reding; St. Marys
Marvin Emor Reinecke; Great Bend
Vivian Ray Reisner; Wamego
Donald Paul Richards; Manhattan
Pearl Alberta Richards; Hiawatha
Clair Milton Robertson; Holton
William Bruce Robertson; Barnard
O. Jean Robison; Concordia
Richard Dean Rogers; Manhattan
Ned Wilson Rokey; Sabetha
Joseph Raymond Rowlen; Eskridge
Peter Sturges Ruckman; Topeka
Bryce Gilford Russel; Canton
Darrell Arden Russel; Canton
Margaret Mary Ryan; Blaine
Robert Frank Sager; Manhattan
Vernon Kenzo Sato; Kolaheo, Hawaii
Raymond Clinton Schneider; Manhattan
Robert Edward Schreiber; Garden City
Mary Franciska Schroller; Marysville
Frank Edward Schryer; Manhattan
Jack Carl Schuster; Augusta
Lawrence William Scott; Langhorne, Pa.
Ridge Lavan Scott; Kansas City
Madge Leanore Secrest; Randolph
Katie Gundelfinger Seitz; Hollenberg
Robert Lowe Seruis; Manhattan
Edward George Seufert; Tonganoxie
Shirley Anne Shaver; Salina
Leslie Harold Sherman; Toronto
Everett Otto Siegele; Princeton
Harold Leslie Siegele; Princeton
Robert Ralph Singleton; Merriam
Robert J. Smith; Manhattan
Walter Henry Smith; Shawnee
Richard Martin Smoll; Wichita
Neil Harrison Smull; Bird City
Harvey James Snapp; Belleville
Joseph Hall Somers; Topeka
Anna Blanche Milleson Sprecker; Wilsey
Harold Ellsworth Staadt; Ottawa
J. R. Stallings; Frankfort
Wayne R. Starr; Hiawatha
Mary L. Steffen; Yates Center
Jens E. Stensaas; Concordia
Lawrence Grant Stevenson; Pomona
Lyla Stewart; Waterville
Albert Hendrix Stone; Honolulu, Hawaii
George Edward Streib; Leona
Donald Alwin Stuewe; Alma
Clanton Tillman Suiter; Otis
Robert Benoni Swan, Jr.; Manhattan
Ernest Earl Swanson, Jr.; Kansas City
Orrin Homer Swindler; Pratt
Rex Robert Taylor; Hillsboro
Howard Earl Teagarden; Manhattan
Anna Lois Tessmann; Abilene
Olive C. Thomason; Glade
Jack Russell Thomasson; Belleville
Herbert Corzine Thompson; Ellinwood
H. Elwin Todd; Quinter
David Eugene Totten; Clifton
Delbert Leroy Townsend; Danbury, Neb.
Carl Leonard Tucker; Minneola
Madeline Catherine Tucker; Wamego
Wayne Hubert Ukena; Robinson
James Alva Upham; Junction City
Dorothy Uppendahl; Marienthal
Warren Lewis Vance; Mankato
Vincent Thomas Van Sickel; Abilene
James Henry Vavroch; Oberlin
George Richard Verhage; Downs
Don Carlton Vickers; Abilene
James Wesley Watkins; Manhattan
Max Corwin Weeks; Topeka
Glenn Arthur Weir; Hazelton
Pauline V. Welsh; Milford
Howard Elmer Whiteside; Neodesha
Mary Jane Wick; Hutchinson
Margaret Elizabeth Thornton Wieland; Smith Center
Clarence Stanley Williams, Jr.; Humboldt
James Junior Williams; Lyons
Nan Williams; Sabetha
Hazel Price Wilson; Abilene
Robert Raymond Wilson; Council Grove
Oid Lee Wineland; Alton
Leland Stanley Winetroub; Leavenworth
Robert Gordon Wood; Kansas City, Mo.
Ernest Emerson Woods, Jr.; Kansas City, Mo.
Charles Arthur Worthington; Lecompton
Zora Estelene Zimmerman; Belle Plaine
Jack Eugene Zumbrum; Enterprise

Students by States, Foreign Countries and Kansas Counties

STATE

Arizona	3	Kansas	3,625	Oklahoma	8
Arkansas	1	Louisiana	2	Pennsylvania	4
California	7	Massachusetts	5	Tennessee	2
Colorado	9	Michigan	2	Texas	7
Connecticut	5	Minnesota	7	Virginia	1
District of Columbia	2	Missouri	76	Washington	1
Idaho	1	Nebraska	11	Wisconsin	6
Illinois	20	New Jersey	10	Wyoming	1
Indiana	3	New York	22		
Iowa	4	Ohio	4	Total	3,849

FOREIGN COUNTRIES

Germany	1	Palestine	1	Total	12
Hawaii	9	Uruguay	1		
				Grand total	3,861

KANSAS COUNTIES

Allen	21	Greenwood	19	Pawnee	18
Anderson	15	Hamilton	7	Phillips	21
Atchison	27	Harper	18	Pottawatomie	81
Barber	19	Harvey	35	Pratt	23
Barton	45	Haskell	4	Rawlins	9
Bourbon	13	Hodgeman	7	Reno	79
Brown	42	Jackson	41	Republic	55
Butler	46	Jefferson	15	Rice	56
Chase	14	Jewell	25	Riley	557
Chautauqua	11	Johnson	51	Rooks	19
Cherokee	11	Kearny	6	Rush	10
Cheyenne	24	Kingman	18	Russell	23
Clark	12	Kiowa	13	Saline	90
Clay	58	Labette	37	Scott	4
Cloud	78	Lane	17	Sedgwick	128
Coffey	20	Leavenworth	41	Seward	13
Comanche	15	Lincoln	25	Shawnee	128
Cowley	39	Linn	9	Sheridan	12
Crawford	17	Logan	13	Sherman	9
Decatur	28	Lyon	28	Smith	31
Dickinson	115	McPherson	45	Stafford	31
Doniphan	12	Marion	41	Stanton	1
Douglas	11	Marshall	80	Stevens	2
Edwards	34	Meade	15	Sumner	36
Elk	9	Miami	14	Thomas	26
Ellis	10	Mitchell	21	Trego	8
Ellsworth	39	Montgomery	28	Wabaunsee	44
Finney	15	Morris	22	Wallace	3
Ford	25	Morton	5	Washington	75
Franklin	26	Nemaha	46	Wichita	11
Geary	73	Neosho	12	Wilson	34
Gove	7	Ness	16	Woodson	12
Graham	13	Norton	34	Wyandotte	127
Grant	3	Osage	22		
Gray	8	Osborne	22		
Greeley	2	Ottawa	40	Total	3,625

Record of Enrollment and Degrees Conferred, 1863-1943

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	1				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	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	Engineering short course	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	14	Lunch room m'g't	280		85	Milling short course	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	98	120			560	575	368	383	321	48	200	3,089	223	6
1915-'16	536	85	17		207	188	175			484	605	454	305	401	76	219	3,314	341	18
1916-'17	586	103	14		228	191	172		Engineering trade courses	422	693	471	378	282	68	279	3,339	197	13
1917-'18	481	84		8	119	135	138			231	483	349	294	238	36	190	2,406	216	17
1918-'19	519	25	5		160	400	199			216	810	322	254	201	34	144	2,991	167	7
1919-'20	415	57	3	6	117	362	271			224	894	400	297	273	44	167	3,376	260	11
1920-'21	604	30	10		96	278	270	8		280	878	602	318	273	42	294	3,395	249	14
1921-'22	820	19	10		59	173	221			297	931	628	422	296	125	813	3,560	272	28
1922-'23	884	19	8		55	83	163	12		220	1004	656	460	401	118	457	3,626	341	31
1923-'24	978	12	7		43	57	161	3		167	1160	657	458	413	171	475	3,812	342	43
1924-'25	1120	14	14		55	54	139	5		47	1391	679	467	347	185	486	4,031	335	53
1925-'26	947	12	11		41	29	89				1494	725	512	344	182	384	4,019	341	51

RECORD OF ENROLLMENT AND DEGREES CONFERRED, 1863-1943—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	734	85
1941-'42	880	....	....	....	....	....	17	....	....	....	1274	926	807	748	417	590	4,479	617	68
1942-'43	1178	....	....	....	....	....	21	....	....	....	1234	717	587	717	253	846	3,861	....	....

† Figures above this column include neither graduate students in summer session, nor undergraduate students pursuing graduate work.

College Registration, 1942-'43

The School.	Men.	Women.	Total.
The School of Agriculture	**417**	**1**	**418**
Graduate students	22	.....	22
Seniors	106	.....	106
Juniors	61	.....	61
Sophomores	85	.....	85
Freshmen	142	1	143
Special students	1	.....	1
The School of Veterinary Medicine	**220**	**2**	**222**
Graduate students	4	.....	4
Seniors	100	.....	100
Juniors	1	.....	1
Sophomores	48	1	49
Freshmen	67	1	68
The School of Arts and Sciences	**663**	**398**	**1,061**
Graduate students	47	28	75
Seniors	102	73	175
Juniors	94	69	163
Sophomores	106	99	205
Freshmen	304	124	428
Special students	10	5	15
The School of Home Economics	.....	**727**	**727**
Graduate students	.....	22	22
Seniors	.....	170	170
Juniors	.....	161	161
Sophomores	.....	177	177
Freshmen	.....	194	194
Special students	.....	3	3
The School of Engineering and Architecture	**1,020**	**12**	**1,032**
Graduate students	15	3	18
Seniors	169	1	170
Juniors	203	.....	203
Sophomores	218	1	219
Freshmen	414	6	420
Special students	1	1	2
Totals	2,320	1,140	3,460
Counted twice	42	28	70
Net totals	2,278	1,112	3,390
The Summer Schools, 1942	**667**	**511**	**1,178**
Totals	2,945	1,623	4,568
Counted twice	526	181	707
Net grand totals	2,419	1,442	3,861
The Graduate School	**133**	**120**	**253**
Graduate students in regular session	72	48	120
Graduate students in summer schools	67	74	141
Counted twice	22	7	29
Net in summer schools only	45	67	112
Graduate students in absentia (included in above figures)	9	1	10
Undergraduate students carrying graduate work	16	5	21

Degrees Conferred in the Year 1942

School and Curriculum (or Major Study).	Men.	Women.	Total.
School of Agriculture (B. S.)	**101**	**1**	**102**
Agriculture	81	1	82
Milling	20	.....	20
School of Engineering and Architecture (B. S.)	**138**	.....	**138**
Agricultural Engineering	5	.....	5
Architecture	2	.....	2
Architectural Engineering	6	.....	6
Chemical Engineering	20	.....	20
Civil Engineering	20	.....	20
Electrical Engineering	27	.....	27
Industrial Arts	2	.....	2
Mechanical Engineering	56	.....	56
School of Arts and Sciences	**80**	**81**	**161**
General Curriculum (B. S.)	30	33	63
Business Administration (B. S.)	24	12	36
Industrial Chemistry (B. S.)	7	.....	7
Industrial Journalism (B. S.)	8	18	26
Music Education (B. S.)	2	9	11
Music (B. M.)	2	1	3
Physical Education (B. S.)	7	8	15
School of Home Economics (B. S.)	.....	**163**	**163**
Home Economics	.....	157	157
Home Economics and Nursing	.....	6	6
School of Veterinary Medicine (D. V. M.)	**53**	.....	**53**
Veterinary Medicine	53	.....	53
Total of undergraduate degrees	372	245	617
The Graduate School (M. S.)	**43**	**18**	**61**
Agricultural Economics	4	.....	4
Agronomy	6	.....	6
Animal Husbandry	2	.....	2
Art	.....	3	3
Bacteriology	1	.....	1
Botany and Plant Pathology	2	.....	2
Chemistry	6	.....	6
Chemical Engineering	5	.....	5
Child Welfare and Euthenics	.....	1	1
Clothing and Textiles	.....	5	5
Dairy Husbandry	2	.....	2
Education	6	.....	6
English	1	.....	1
Food Economics and Nutrition	.....	4	4
History and Government	2	1	3
Home Economics Education	.....	2	2
Industrial Journalism	.....	1	1
Mathematics	1	.....	1
Milling Industry	2	.....	2
Physiology and Medicine	1	.....	1
Poultry Husbandry	1	.....	1
Zoology	1	1	2
The Graduate School (Ph. D.)	**5**	.....	**5**
Animal Husbandry	1	.....	1
Bacteriology	1	.....	1
Entomology	1	.....	1
Medical Entomology	1	.....	1
Poultry Genetics	1	.....	1
Honorary Degrees	**1**	**1**	**2**
Doctor of Science	1	.....	1
Master of Family Life	.....	1	1
Total of degrees conferred in 1942	**421**	**264**	**685**