

The University of Akron

AKRON, OHIO

MARCH, 1946

Annual Catalog 1945-1946
With Announcements For 1946-1947



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THE UNIVERSITY OF AKRON, AKRON, OHIO

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THE UNIVERSITY CALENDAR

1946

- JANUARY 2, WEDNESDAY.....Classes resumed.
- JANUARY 7-19, INCLUSIVE.....Advance classification for second semester.
- JANUARY 28 TO FEBRUARY 1,
INCL..... Semester final examinations for Day and Evening Sessions.
- FEBRUARY 4-7, INCLUSIVE.....Freshman examinations, admission and classification.
MONDAY TO THURSDAY
- FEBRUARY 8 AND 9.....Final classification of students in Day Session.
FRIDAY AND SATURDAY
- FEBRUARY 11, MONDAY.....Classes begin for Day Session.
- FEBRUARY 11, MONDAY.....Examinations for admission to Evening Session.
7:00 P. M. TO 10:00 P. M.
- FEBRUARY 15 AND 16.....Registration and classification of Evening Session Students.
FRIDAY, 1:00-9:00 P. M.
SATURDAY, 9:00 A. M.-9:00 P. M.
- FEBRUARY 18, MONDAY.....Evening Session classes begin.
- FEBRUARY 22, FRIDAY.....Washington's Birthday—a holiday.
- APRIL 15 TO 20, INCLUSIVE.....Spring recess.
- APRIL 22, MONDAY.....Classes resumed.
- APRIL 23, TUESDAY.....Qualifying examinations for student teaching. Advance classification for Summer Quarter begins.
- MAY 6 TO 24.....Advance classification for Summer Quarter.
- MAY 18, SATURDAY.....Examinations for candidates for graduate degrees with a major or minor in psychology or education.
- MAY 30, THURSDAY.....Memorial Day—a holiday.
- JUNE 3 TO 8.....Registration and classification of entering students.
MONDAY TO NOON SATURDAY
- JUNE 7-12.....Semester final examination week.
- JUNE 14 AND 15.....Registration and classification for Summer Session.
FRIDAY AND SATURDAY
- JUNE 14, FRIDAY.....Commencement.
- JUNE 17, MONDAY.....Day and Evening classes begin.
- JULY 4, THURSDAY.....Independence Day—a holiday.
- JULY 27, SATURDAY.....Six-week Summer Session ends.
- AUGUST 30, FRIDAY.....Summer Quarter closes.
- SEPTEMBER 3 TO 14, INCL.....Registration and classification of entering students.
(MORNINGS ONLY ON SATURDAYS)
- SEPTEMBER 16 TO 19, INCL.....Orientation Week.
MONDAY TO THURSDAY
- SEPTEMBER 20 AND 21.....Final registration and classification for Day Session.
FRIDAY AND SATURDAY

- SEPTEMBER 23, MONDAY.....Classes begin (Day Session).
 SEPTEMBER 23, MONDAY.....Examinations for admission to Evening Session.
 7 TO 10 P. M.
 SEPTEMBER 27 TO 28.....Registration and classification for Evening Session.
 FRIDAY 1 TO 9 P. M.
 SATURDAY 9 A. M. TO 9 P. M.
 SEPTEMBER 30, MONDAY.....Evening classes begin.
 NOVEMBER 19, TUESDAY.....Qualifying examinations for student teaching.
 NOVEMBER 21 TO 23, INCL.....Thanksgiving recess.
 DECEMBER 21, NOON TO
 JANUARY 1, 1947, INCLUSIVE..Christmas recess.

1947

- JANUARY 2, THURSDAY.....Classes resumed.
 JANUARY 6 TO 17, INCL.....Advance classification for second semester.
 JANUARY 27 TO 31, INCL.....Semester final examinations for Day and Evening
 Sessions.
 FEBRUARY 3 TO 6, INCL.....Freshman examinations, admission and classifica-
 MONDAY TO THURSDAY tion.
 FEBRUARY 7 AND 8.....Final classification of students in Day Session.
 FRIDAY AND SATURDAY
 FEBRUARY 10, MONDAY.....Classes begin for Day Session.
 FEBRUARY 10, MONDAY.....Examinations for admission to Evening Session.
 7 TO 10 P. M.
 FEBRUARY 14 AND 15.....Registration and classification of Evening Session
 FRIDAY 1 TO 9 P. M. students.
 SATURDAY 9 A. M. TO 9 P. M.
 FEBRUARY 17, MONDAY.....Evening Session classes begin.
 FEBRUARY 22, SATURDAY.....Washington's Birthday—a holiday.
 APRIL 7 TO 12, INCLUSIVE.....Spring recess.
 APRIL 14, MONDAY.....Classes resumed.
 APRIL 22, TUESDAY.....Qualifying examinations for student teaching. Ad-
 vance classification for Summer Session begins.
 MAY 17, SATURDAY.....Examinations for candidates for graduate degrees
 with a major or minor in psychology or
 education.
 MAY 19 TO 31, INCLUSIVE.....Advance registration of entering students.
 SATURDAYS 8:30 A. M. TO
 12 NOON
 MAY 30, FRIDAY.....Memorial Day—a holiday.
 JUNE 2 TO 7.....Registration and classification of entering students.
 MONDAY TO NOON SATURDAY
 JUNE 6 TO 11.....Semester final examination week.
 JUNE 13 AND 14.....Registration and classification for Summer Session.
 FRIDAY AND SATURDAY
 JUNE 13, FRIDAY.....Commencement.
 JUNE 16, MONDAY.....Day and Evening classes begin.
 JULY 4, FRIDAY.....Independence Day—a holiday.
 AUGUST 29, FRIDAY.....Summer Quarter closes.

UNIVERSITY FACULTY AND ASSISTANTS

1945-1946

NOTE: The dates in parentheses indicate the beginning of service at Buchtel College or the University of Akron; unless otherwise stated, service began in the month of September.

- HEZZLETON E. SIMMONS, *President of the University* (1910)
B.S., Buchtel College; M.S., University of Pennsylvania, 1912; D.Sc., College of Wooster; LL.D., University of Toledo.
- PAUL ACQUARONE, *Associate Professor of Botany and Geology* (1931)
B.S., Pennsylvania State College; Ph.D., Johns Hopkins University, 1929.
- JOANNA ALOGDELIS, *Instructor in Speech* (June, 1942)
B.A., University of Akron; M.A., State University of Iowa, 1941.
- DAVID E. ANDERSON, *Director of Testing Laboratory and Assistant Professor of Chemistry* (1923)
B.A., Augustana College; M.S., University of Chicago, 1923.
- FREDERIC E. AYER, *Dean Emeritus of the College of Engineering, including the Daniel Guggenheim Airship Institute* (March, 1914)
C.E., Lafayette College, 1900.
- *JOSEPH BALASCO, *Instructor in Physics* (1940)
B.S., M.S., University of Akron, 1940.
- PAUL R. BALDACCI, *Assistant Professor of Physical Education and Football Coach* (1942)
B.S., William and Mary College, 1931.
- SUMMERFIELD BALDWIN, 3RD, *Professor of History* (February, 1943)
A.B., A.M., Ph.D., Harvard University, 1928.
- †MRS. JANE BARNHARDT, *Professor of Art* (June, 1923)
B.E., M.Ed., University of Akron, 1930.
- GEORGE BATTUK, *Assistant at the Daniel Guggenheim Airship Institute* (1945)
B.M.E., University of Akron, 1944.
- *IRENE CATHERINE BEAR, *Assistant Professor of Home Economics* (1944)
B.S., Illinois Wesleyan; M.A., Texas State College for Women, 1937.
- RUSSELL J. BEICHLY, *Assistant Professor of Physical Education and Basketball Coach* (March, 1940)
B.A., Wittenberg College, 1926.
- *LEONARD J. BISBING, *Instructor in Commerce* (1942)
B.S.Com., Regis College, Denver, Colorado; M.S.Com., University of Denver, 1939.
- MORTON W. BLOOMFIELD, *Assistant Professor of English* (1939)
B.A., M.A., McGill University; Ph.D., University of Wisconsin, 1938.
- MAXWELL P. BOGGS, *Treasurer of the University* (March, 1927)
B.A., Muskingum College, 1924.
- BORIS W. BOGUSLAVSKY, *Professor of Civil Engineering* (June, 1942)
B.S.C.E., M.S.C.E., University of Washington; D.Sc.C.E., Massachusetts Institute of Technology, 1938.
- CHARLES BULGER, *Dean of Graduate Study, Dean of Buchtel College of Liberal Arts, and Hilton Professor of Modern Languages* (February, 1910)
Ph.B., Buchtel College; A.M., Ph.D., University of Wisconsin, 1925.
- RENA NANCY CABLE, *Assistant Professor of Art* (1929)
B.E., M.Ed., University of Akron, 1931.
- LULA CAINE, *Instructor in History* (February, 1943)
A.B., University of Illinois; M.A., Ph.D., University of Chicago, 1929.
- JAMES M. CAMPBELL, *Special Instructor in String Instruments* (1933)
B.A., University of Akron; M.A., Western Reserve University, 1938.

*Resigned, 1945.

†Retired, June, 1945.

- TURNER M. CHAMBLISS, *Professor of Military Science and Tactics* (January, 1946)
B.S., Virginia Military Institute; Colonel, Infantry, U.S.A.
- ROBERT I. CIRALDO, *Assistant Professor of Military Science and Tactics* (May, 1945)
University of Akron; Captain, Infantry, U.S.A.
- JEAN CLAYTON, *Instructor in Physical Education* (1943)
B.A., Hanover College; M.A., State University of Iowa, 1943.
- WALTER A. COOK, *Professor of Chemistry* (1926)
A.B., A.M., Ph.D., University of Cincinnati, 1924.
- ARTHUR M. COON, *Pierce Professor of English Literature* (1945)
B.A. Cornell University; M.A., University of Michigan; Ph.D., Cornell University, 1938.
- EMILY DAVIS, *Professor of Art* (1945)
B.A., Ohio State University; M.A., Columbia Teachers College; Ph.D., Ohio State University, 1936.
- HARMON O. DEGRAFF, *Professor of Sociology* (1930)
B.A., M.A., State University of Iowa; Ph.D., University of Chicago, 1926.
- EARL L. DENT, *Assistant Professor of Vocational Education* (July, 1943)
M.S.Ed., University of Akron, 1938.
- HJALMER W. DISTAD, *Professor of Education* (1934)
B.S.Ed., M.A., Ph.D., University of Minnesota, 1926.
- MAUD DOHERTY, *Professor of Nursing Education* (1945)
B.S., M.A., Columbia University, 1936.
- HOWARD M. DOUTT, *Professor of Secretarial Science and Chairman of the Division of Applied Arts* (February, 1926)
B.A., University of Akron; M.A., University of Chicago, 1934.
- DALLAS L. DOWNING, *Associate Professor of Vocational Education* (1937)
B.A., Indiana State Teachers College; M.A., Columbia University; D.Ed., Indiana University, 1941.
- DALE A. DREISBACH, *Assistant Professor of Chemistry* (1941)
B.A., Hiram College; Ph.D., Western Reserve University, 1937.
- CHARLES DUFFY, *Associate Professor of English* (1944)
Ph.B., University of Wisconsin; M.A., University of Michigan; Ph.D., Cornell University, 1939.
- *JOHN PAUL DUNCAN, *Instructor in Political Science* (1942)
A.B., Butler University; M.A., Ph.D., Indiana University, 1943.
- *MRS. BERNICE G. DUNCAN, *Instructor in Spanish* (February, 1943)
A.B., A.M., Butler University, 1933.
- **ROSS C. DURST, *Professor of Civil Engineering* (June, 1917)
B.S.C.E., C.E., Ohio Northern University, 1922.
- ELMER ENDE, *Associate Professor of Music* (1930)
B.Mus., American Conservatory of Music, Chicago; M.A., Ohio State University, 1930.
- HOWARD R. EVANS, *Dean of the College of Education and Professor of School Administration* (1929)
A.B., Indiana State Teachers College; M.A., Columbia University; Ph.D. Northwestern University, 1930.
- A. JOHN B. FAIRBURN, *Professor of Electrical Engineering* (February, 1942)
B.S., Pennsylvania State College; M.A., Columbia University, 1929; P.E., State of New York, 1936.
- **MARGARET F. FANNING, *Assistant Professor of Modern Languages* (1927)
B.A., University of Akron; M.A., Radcliffe College, 1926; Diploma, University of Toulouse, France, 1927.
- LYLE F. FISHER, *Assistant Military Property Custodian and Assistant Military Instructor* (February, 1946)
M/Sgt., U.S.A.
- H. GRANT FLETCHER, *Assistant Professor of Public School Music* (February, 1945)
B. Music, Illinois Wesleyan University; M. Music, University of Michigan, 1939.
- ELDORA FLINT, *Associate Professor of Secretarial Science* (1929)
B.Ed., University of Akron; M.S.Ed., Syracuse University, 1935.
- VAUGHN WILBUR FLOUTZ, *Assistant Professor of Chemistry* (1941)
B.A., Olivet College; M.A., Ph.D., University of Colorado, 1932.
- †CAROLL W. FORD, *Associate Professor of Economics* (1936)
B.A., Ph.D., Cornell University, 1936.
- HARRY K. FOSTER, *Assistant Director of Adult Education and Assistant Professor of Education* (1939)
B.S., Bates College; M.A., University of Maine; Ph.D., State University of Iowa, 1939.

*Resigned, 1945.

**On leave.

†Resigned, 1946.

- OMER R. FOUTS, *Associate Professor of Physics* (1926)
B.A., Wittenberg College; M.A., Ohio State University, 1925.
- FREDERICK A. FUNKHOUSER, *Special teacher of Violin* (1939)
B.A., Oberlin College; B.Mus., Oberlin Conservatory, 1929; affiliated with the Cleveland Symphony Orchestra.
- DONFRED H. GARDNER, *Dean of Students and Professor of History* (1924)
A.B., A.M., Princeton University, 1923.
- **JAMES W. GLENNEN, *Instructor in French* (1934)
A.B., University of Akron; M.A., Western Reserve University, 1934.
- DUDLEY PETERS GLICK, *Associate Professor of Bacteriology* (January, 1944)
B.A., M.A., Ph.D., Ohio State University, 1937.
- BERNARD GOLDBERG, *Special Instructor in Flute*, (1945)
Institute of Musical Art, N.Y.C., Diploma 1943.
- **DWIGHT E. GRAY, *Associate Professor of Physics* (1932)
A.B., Muskingum College; A.M., Ph.D., Ohio State University, 1932.
- FRED S. GRIFFIN, *Professor of Mechanical Engineering* (1921)
M.E., Ohio State University, 1911.
- HOPE ROBERTS GRIFFITHS, *Special Instructor in Cello* (October, 1944)
B.S., University of Akron, 1936.
- *BETHUEL S. GROSS, *Professor of Music* (October, 1941)
B.A., B.M., Washburn College; B.M.E., M.Mus., Ph.D., Northwestern University, 1941.
- *HARLAN W. HAMILTON, *Pierce Professor of English Literature* (1937)
A.B., Oberlin College; M.A., Columbia University; Ph.D., Cornell University, 1934.
- *C. ARNOLD HANSON, *Assistant to Director of Adult Education and Instructor in Sociology* (1939)
A.B., University of Akron, 1939.
- LESLIE P. HARDY, *Director of Adult Education and Director of the Summer Session; Assistant to the President* (1934)
B.S.Ed., Kent State University; M.S.Ed., University of Akron, 1935.
- *WILLIAM HELMBOLDT, *Special Instructor in Woodwind Instruments* (1944)
B.S. in Ed., Kent State University, 1937.
- GERARD V. HERRBACH, *Instructor in French and Spanish* (1945)
A.B., A.M., Gonzaga University, 1930.
- *THOMAS C. HILLIARD, *Associate Professor of Accounting* (1935)
B.A., Nebraska State Teachers College; M.A., University of Nebraska, 1935; C.P.A. (Ohio) 1940.
- **ORVILLE A. HITCHCOCK, *Professor of Speech* (1937)
B.A., Pennsylvania State College; M.A., Ph.D., University of Iowa, 1936.
- JOHN P. HLAS, *Instructor in Military Science and Tactics* (June, 1944)
B.S., University of Akron, 1930; S/Sgt., U.S.A.
- JOHN HOFFHINES, *Assistant Professor of Military Science and Tactics* (1945)
B.S., Ohio State University, 1939; Lieutenant, Infantry, U.S.A.
- FRED F. HOUSEHOLDER, *Professor of Physics and Chairman of the Division of Natural Science* (1918)
B.A., M.A., University of Wisconsin, 1916.
- RAYMOND W. HUGHES, *Assistant Military Property Custodian and Assistant Military Instructor* (February, 1946)
M/Sgt., U.S.A.
- PAUL O. HUSS, *Professor of Meteorology* (January, 1941) (*The Daniel Guggenheim Airship Institute*)
B.S.Ed., B.S.E., M.S.E., Sc.D., University of Michigan, 1935.
- DONATO INTERNOSCIA, *Assistant Professor of Modern Languages* (1938)
B.A., Broadview College; M.A., Ph.D., Northwestern University, 1938.
- BERNARD F. JOHNSON, *Professor of Military Science and Tactics* (August, 1944)
Purdue University; Captain, Field Artillery, U.S.A.
- *EDGAR P. JONES, *Associate Professor of Biology* (1932)
B.S., M.S., Ph.D., University of Pittsburgh, 1932.
- EDWARD W. JONES, *Assistant Professor of Geography* (January, 1944)
B.S., Western Reserve University; M.A., Kent State University, 1940.
- †JOHN LEWIS JONES, *Ainsworth Professor of Mathematics* (February, 1920)
Ph.B., Lafayette College; M.A., Ph.D., Yale University, 1911.

**On leave.
*Resigned, 1945.
†Retired, 1945.

- SIGURD JORGENSEN, *Professor of Music* (1945)
B.M., M.M., MacPhail School of Music, 1940; Ph.D., Ohio State University, 1945.
- MRS. MARY KEATING, *Adviser of Women* (1936)
B.S., University of Akron, 1936.
- VERGIL L. KECK, *Instructor in Physics* (1942)
B.A., University of Akron, 1931.
- DON A. KEISTER, *Assistant Professor of English and Director of the Introductory Course in the Humanities* (1931)
B.A., M.A., University of Akron, 1933.
- CLARA M. KEMLER, *Associate Professor of Primary-Elementary Education* (1928)
B.A., M.A., Wittenberg College, 1926.
- DAVID KING, *Assistant Professor of Political Science* (1927)
B.A., Maryville College; M.A., University of Chicago, 1925.
- WALTER C. KRAATZ, *Professor of Biology* (1924)
B.A., University of Wisconsin; M.A., Ph.D., Ohio State University, 1923.
- EMERY L. KUHNES, *Professor of Education* (1923)
B.S., Upper Iowa University; Pd.M., Ph.D., New York University, 1915.
- LUCILLE D. LAMKIN, *Assistant Professor of Physical Education* (1943)
B.S.Ed., M.A., Ohio State University, 1934.
- R. D. LANDON, *Dean of the College of Engineering, including the Daniel Guggenheim Airship Institute* (February, 1946)
C.E., M.S., University of Cincinnati, 1927.
- EBBA LARSON, *Assistant Registrar* (August, 1926)
University of Akron.
- WARREN W. LEIGH, *Professor of Commerce and Business Administration* (1926)
B.A., University of Utah; M.B.A., Ph.D., Northwestern University, 1936.
- CLARENZ LIGHTFRITZ, *Special teacher of Piano* (November, 1941)
Bowling Green State University; private instruction with Ernest White and Miss Rena Wills.
- WILL LIPSCOMBE, *Associate Professor of Mathematics* (1921)
B.S., Florida College; M.S., Ohio State University, 1926.
- DEXTER MACMULLEN, *Assistant Professor of Military Science and Tactics* (January, 1946)
Rhode Island State College; Lieutenant, Field Artillery, U.S.A.
- JOHN A. MCCLURE, *Professor of Industrial Management* (August, 1942)
B.S., M.S., University of Illinois; Ph.D., Purdue University, 1946.
- HAROLD T. MCKEE, *Associate Professor of Business Administration* (1929)
B.S., M.A., University of Pittsburgh, 1929.
- ANDREW MALUKE, *Instructor in Physical Education and Assistant Coach of Football* (February, 1946)
B.S. in Ed., University of Akron, 1944.
- MARGARET EVELYN MAUCH, *Assistant Professor of Mathematics* (1945)
B.S., Huron College; M.S., Ph.D., University of Chicago, 1938.
- **AUSTIN L. MOORE, *Assistant Professor of History* (1936)
A.B., Oberlin College; A.M., Ph.D., Columbia University, 1938.
- CURTIS C. MYERS, *Professor of Industrial Production and Director of the Daniel Guggenheim Airship Institute* (April, 1943)
M.M.E., Cornell University.
- JAY L. O'HARA, *Professor of Economics and Chairman of the Division of Social Sciences* (January, 1934)
B.A., University of Michigan; Ph.D., University of Minnesota, 1927.
- TROY ORGAN, *Professor of Philosophy* (1945)
A.B., Hastings College; B.D., McCormick Theological Seminary; M.A., Ph.D., State University of Iowa, 1941.
- WILLIAM I. PAINTER, *Assistant Professor of Education* (1945)
A.B., Oakland City College; M.A., Ph.D., Indiana University, 1933.
- MRS. RUTH PUTMAN, *Assistant Professor of English* (1934)
B.A., Howard College; M.A., Western Reserve University, 1938.
- RUTH MARGUERITE RAW, *Assistant Professor of English in the College of Engineering* (1929)
B.A., M.A., Hiram College; M.A., Columbia University, 1924.

**On leave.

- *JAMES F. REAGAN, *Instructor in Aeronautical Engineering* (1942)
B.Aero. Eng'g., University of Detroit; M.S. Mech. Eng'g., Ph.D., Case School of Applied Science, 1945.
- *EVAN J. REED, *Part-time Instructor in Business Law* (1937)
A.B., J.D., University of Michigan, 1933.
- KATHARINE M. REED, *Associate Professor of Modern Languages* (1918)
B.A., Newcomb College; M.A., Tulane University, 1903.
- **DARRELL L. REEDY, *Instructor in Secretarial Science* (1940)
B.S. in Educ., Central Missouri State Teachers College; M.A., New York University, 1940.
- **HAROLD O. RIED, *Associate Professor of Education and Director of the Introductory Course in Hygiene* (1938)
B.A., Nebraska Wesleyan University; M.A., Ph.D., University of Nebraska, 1938.
- **WILBUR C. ROBART, *University Physician* (1929)
B.S., University of Akron; M.D., Jefferson Medical College; University of Pennsylvania, M.S. (Med.) 1935.
- EDGAR C. ROBERTS, *Assistant Professor of English* (1926)
B.S.Ed., M.A., Ohio State University, 1924.
- MRS. GLADYS C. ROBINSON, *Instructor in Biology and Chemistry* (1942)
A.B., Louisiana State Normal College; M.S., University of Chicago, 1931.
- JEROME ROGOFF, *Instructor in Mathematics* (February, 1946)
B.S., University of Akron, 1937; M.A., Harvard University, 1941.
- ROBERT S. ROSS, *Assistant Professor of Aeronautical Engineering* (May, 1942)
B.S. Mech. Eng'g., M.S. Mech. Eng'g., Ph. D., Case School of Applied Science, 1943.
- ROBERT R. RUGGLES, *Instructor in Aeronautical Engineering* (January, 1944)
B.S. Mech. Eng'g., Case School of Applied Science, 1943.
- **N. OWEN SAPPINGTON, *Professor of History* (1932)
B.A., Piedmont College; M.A., University of North Carolina; Ph.D., University of Wisconsin, 1932.
- RICHARD H. SCHMIDT, *Registrar and Professor of Chemistry* (April, 1918)
B.A., Wesleyan University; M.A., Columbia University, 1915.
- FREDERICK S. SEFTON, *Professor of Physical Education and Director of Athletics* (1915)
B.S., Colgate University; M.Ed., Harvard University, 1925.
- SAMUEL SELBY, *Professor of Mathematics* (1927)
A.B., A.M., University of Manitoba; Ph.D., University of Chicago, 1929.
- MRS. LUCY T. SELF, *Assistant Professor of Secretarial Science* (February, 1933)
B.A., Ohio Wesleyan University, 1920.
- *MAURICE O. SHARP, *Special teacher of Flute* (1941)
B.M., Curtis Institute of Music; studied with George Barrere and William Kincaid. Affiliated with the Cleveland Symphony Orchestra.
- *AMY LOUISE SHAW, *Instructor in Secretarial Science* (1942)
B.S.Sec.Sci., University of Akron; M.C.S., Boston University, 1942.
- PHILIP S. SHERMAN, *Adviser of Men* (August, 1936)
A.B., University of Akron, 1936.
- ROY V. SHERMAN, *Professor of Political Science and Director of the Introductory Course in Social Science* (1929)
B.A., M.A., Ph.D., State University of Iowa, 1927.
- KENNETH F. SIBILA, *Assistant Professor of Electrical Engineering* (February, 1940)
B.S.E.E., M.S.E.E., Case School of Applied Science, 1937.
- FRANK SIMONETTI, *Instructor in Business Administration* (1945)
B.S., University of Akron; M.B.S., Boston University, 1941.
- EUCLID SMITH, *Assistant Professor of Home Economics* (1945)
B.S., Texas State College for Women; M.A., Columbia University, 1925.
- HARRY A. SMITH, *Associate Professor of Physical Education* (1928)
B.E., M.Ed., University of Akron, 1929.
- PAUL C. SMITH, *Associate Professor of Electrical Engineering* (1925)
B.S.E.E., Purdue University, 1917.
- †ALBERT I. SPANTON, *Dean Emeritus of Buchtel College of Liberal Arts*
Ph.B., Buchtel College; M.A., Harvard University; Litt.D., University of Akron, 1938.

*Resigned, 1945.

**On leave.

†Retired, June 30, 1943.

- JOHN F. STEIN, *Special teacher of Voice* (1933)
Private instruction with Herbert Witherspoon, Enrico Rosati, and Maria Kurenko.
- FREDERICK J. STIMLER, *Instructor in Physics and Aeronautical Engineering* (October, 1943)
B.Mech.Eng'g., University of Akron, 1943.
- ERNEST A. TABLER, *Assistant Director of Adult Education and Assistant Professor of Mathematics* (1935)
B.S., Kent State University; M.A., Western Reserve University, 1933.
- MRS. HELEN S. THACKABERRY, *Instructor in English* (February, 1940)
B.A., M.A., State University of Iowa, 1937.
- **ROBERT E. THACKABERRY, *Assistant Professor of English* (1938)
B.A., M.A., Ph.D., State University of Iowa, 1937.
- HAROLD TOWER, *Special Instructor in Organ* (February, 1945)
B.M., Oberlin College, 1911.
- †THEODOR H. TROLLER, *Director of Research at the Daniel Guggenheim Airship Institute and Professor of Aeronautical Engineering* (December, 1930)
D.Eng'g., Technical College of Aachen, Germany, 1928.
- MRS. AUDRA TENNEY TUCKER, *Assistant Professor of Secretarial Science* (1926)
B.A., University of Akron; M.A., New York University, 1936.
- PAUL E. TWINING, *Professor of Psychology* (November, 1941)
B.S., Ottawa University (Kansas); M.A., University of Kansas; Ph.D. University of Chicago, 1938.
- CLARENCE R. UPP, *Associate Professor of Mechanical Engineering* (1925)
M.E., Ohio State University, 1910.
- ULYSSES S. VANCE, *University Editor and Assistant Professor of English* (1923)
B.A., State University of Iowa, 1923.
- SUMNER W. VANICA, *Instructor in Bacteriology and Sanitation* (October, 1943)
B.A., University of Akron, 1935.
- MRS. DOROTHY S. VAN SICKLE, *Special Instructor in the Music Department* (1940)
B.S.Ed., University of Akron, 1936.
- DONALD S. VARIAN, *Assistant Professor of Speech* (1934)
B.A., M.A., University of Wisconsin, 1934.
- **CHI-TEH WANG, *Assistant Professor of Aeronautical Engineering* (November, 1944)
B.S.M.E., Chiao-Tung University; M.Aero.E., Rensselaer Polytechnic Institute; M.S., Brown University; D.Sc.Aero.E., Massachusetts Institute of Technology, 1944
- ALLEN D. WARD, *Assistant Professor of Military Science and Tactics* (January, 1946)
Lieutenant, Infantry, U.S.A.
- WILLIAM WHEELER, *Special teacher of Voice* (1942)
B.A., Beloit College; B.A., Ithaca Conservatory of Music, 1902.
- GEORGE STAFFORD WHITBY, *Professor of Rubber Chemistry and Director of Rubber Research* (1942)
A.R.C.Sc., B.S., University of London; M.S., Ph.D., D.Sc., McGill University, 1939.
- MRS. FLORENCE N. WHITNEY, *Assistant Professor of English* (1936)
A.B., Dakota Wesleyan University; A.M., Columbia University, 1913.
- NELLIE WHITTAKER, *Special Instructor in Piano* (1945)
B.E., M.E., University of Akron, 1935.
- EARL R. WILSON, *Associate Professor of Engineering Drawing* (1929)
B.M.E., Ohio State University, 1916.
- ISABELLA C. WILSON, *Professor of Home Economics* (1942)
A.B., University of Illinois; M.A., Ph.D., Teachers College, Columbia University, 1936.
- MARY H. WILSON, *Instructor in Home Economics* (April, 1943)
B.S., Iowa State College, 1932.
- EUGENE WITTERS, *Instructor in Music* (1941)
B.S. in Educ., Bowling Green State University, 1933.
- MRS. B. EVANGELINE WITZEMAN, *Associate Professor of Psychology* (1942)
B.S. in Home Economics, M.S.Ed., University of Akron; Ph.D., Western Reserve University, 1940.
- ALVIN C. WOLFE, *Assistant Professor of Chemistry* (October, 1942)
A.B., M.S., Ph.D., Ohio State University, 1941.

**On leave.

†Resigned, January, 1946.

- WINNIGENE WOOD, *Instructor in Home Economics* (1944)
 B.S., Miami University; M.A., Teachers College, Columbia University, 1939.
- MAJOR L. YOUNCE, *Assistant Professor of Political Science* (1945)
 A.B., M.A., Ph.D., Marquette University, 1931.
- ARTHUR M. YOUNG, *Professor of Latin and Greek and Chairman of the Division of Humanities* (1930)
 A.B., A.M., Ph.D., Harvard University, 1930.
- **PAUL ZEIS, *Assistant Professor of Political Science* (1938)
 A.B., University of Akron; A.M., Ph.D., Princeton University, 1936.

PART-TIME FACULTY AND ASSISTANTS

(On a temporary basis)

- WESLEY ALVEN, *Instructor in Education* (1945)
 Th.B., Northern Baptist Theological Seminary, 1939; Ph.B., Loyola University, 1940;
 M. A., University of Akron, 1944.
- MRS. KARL ARNSTEIN, *Instructor in German*
 B.A., University of Akron, 1935.
- MRS. W. R. METZ, *Instructor in Modern Languages*
 B.A., Smith College, 1920.
- MRS. HELEN PAINTER, *Instructor in Education* (1945)
 A.B., A.M., Ed.D., Indiana University, 1941.
- MILDRED RASNEOR, *Instructor in Biology*
 B.S., Ohio State University, 1944.
- MRS. DAETTA YOUNCE, *Instructor in Social Science* (1945)
 A.B., Carroll University; A.M., Northwestern University, 1945.

LIBRARY STAFF

- JOSEPHINE A. CUSHMAN, *Professor of Bibliography* (August, 1919)
 Ph.B., University of Akron; B.L.S., University of Illinois, 1919.
- GENIE J. PRESTON, *Associate Professor of Bibliography* (1939)
 B.A., Northwestern University; M.A., University of Illinois, 1936.
- DOROTHY HAMLIN, *Assistant Professor of Bibliography* (February, 1936)
 B.A., University of Akron; B.S.L.S., Western Reserve University, 1942.
- MRS. CARMEL D'ANDRE, *Assistant Professor of Bibliography* (1944)
 B.A., University of Akron; B.L.S., Drexel Institute, 1943.
- MRS. ANN FOSTER, *Instructor in Bibliography* (1941)
 B.A., University of Akron, 1941.
- GRACE ROHRER, *Instructor in Bibliography* (1944)
 B.A., Kent State University; B.L.S., Western Reserve University, 1944.
- FREDA MAE STEWART, *Instructor in Bibliography* (1944)
 B.S.Ed., University of Akron, 1944.
- MARTHA LEFEVRE, *Instructor in Bibliography* (1945)
 B.A., University of Akron, 1945.

UNIVERSITY HEALTH SERVICE

- DR. W. E. MOORE, *Psychiatrist*
 DR. MARGARET MOORE, *University Physician*
 MRS. FRANCES BROWN, *Nurse*

PART-TIME INSTRUCTIONAL STAFF

(Not on regular Day Session staff)

SUMMER SESSION—1945

Activity School and Workshop Groups

- EMILY R. GIBSON.....*Fourth, Fifth and Sixth Remedial Work*
 ROSE MARY KRAUS.....*Handicrafts*
 HENRIETTA LORD.....*Kindergarten*
 JEANETTE MARSH.....*Fourth and Fifth Grades*
 RENA LEE MOTSINGER.....*Third Grade*
 LORETTA TISCH.....*Sixth and Seventh Grades*

**On leave.

Critic Teachers

L. L. EVERETT.....	Barberton
H. M. AULT, B.A., M.A.....	South
ANNA FLINT, A.B., A.M.....	South
DOROTHY LEFFLER.....	South
MARY MOSTENIC, B.A., B.E.....	South
ROSE PISCAZZI, B.S.....	South
VIDA HALL, B.E.....	South
EMILY GIBSON, B.A., M.A., Ed.....	Spicer

1945-46 EVENING SESSION

BERNHARD ANDREAS.....	Figure Drawing
Academy of Fine Arts, Chicago, 1913; Chicago Art Institute.	
A. W. BIGGS.....	Industrial Plants
A.B., Miami University; B.S.Ed., Miami University, 1927.	
JAMES CAMPBELL.....	English
B.A., University of Akron, 1935; M.A., Western Reserve University, 1938.	
ASHFORD CARR.....	Advertising
B.S., University of Akron, 1940.	
JOHN R. CLARKE.....	Personnel Management
B.A., College of Puget Sound, 1938; M.S., Purdue University, 1939.	
MRS. CARMEL SIMONETTI D'ANDRE.....	English
B.A., University of Akron, 1942; B.S. in L.S., Drexel Institute of Technology, 1943.	
LUCILLE DAVISON.....	Foods
B.Ed., University of Akron, 1933.	
JAMES D'IANNI.....	Chemistry
B.S., University of Akron; M.S., Ph.D., University of Wisconsin.	
MRS. VIRGINIA SABO FARKAS.....	Shorthand
B.S.Ed., University of Akron, 1943.	
KENNETH B. FISHPAW.....	Accounting
B.S., Ohio State University, 1932.	
ANNA MAE FLINT.....	Shorthand
B.S. in Sec.Sci., University of Akron, 1932.	
ARTHUR E. GEMTER.....	Municipal Recreation
B.P.E., Springfield College, 1926.	
E. K. HAMLEN.....	Engineering Drawing
B.M.E., University of Akron, 1929.	
MRS. ADENA HANDWERK.....	Business English
B.A.Ed., University of Akron.	
T. DONALD JOHN.....	News Writing
Assistant News Editor, Akron Beacon Journal.	
MARVIN JOHNSON.....	Algebra
B.S., Kent University; M.A., Western Reserve University.	
PAUL D. KING.....	Production Planning and Control
Ohio University.	
ROSE MARY KRAUS.....	Handicrafts
B.E., University of Akron; M.A., Columbia University.	
ARTHUR H. KRUSE.....	Community Organization
B.A., University of Akron; M.A., Syracuse University; M.Sc., Western Reserve University, 1942.	
WILLIAM LANTZ.....	Accounting
Asst. Manager, Department of Contract Re-negotiations, B. F. Goodrich Co.	
ALFRED J. LOWDERMILK.....	Chemistry
B.S., Chem. Engr., North Carolina State College, 1938.	
J. SLEATH MCANLIS.....	Mathematics
B.S., Wooster College; M.S., University of Akron, 1940.	
DOROTHY M. MARTY.....	Spanish
B.A., in Ed., University of Akron, 1943.	
FRIEDL MOCH.....	Crafts
Graduate of School of Applied Arts, Nuremberg and Pforzheim, Germany; Cleveland School of Art.	
MRS. MARIAN MONDL.....	French
B.S. in Ed., University of Akron.	

PAUL B. MONTGOMERY.....	<i>Mathematics</i>
B.C.E., University of Akron, 1941.	
MARY MOSTENIC.....	<i>English</i>
A.B., B.E., University of Akron, 1931.	
KATHERINE OANA.....	<i>Secretarial Science</i>
B.S. in Ed., University of Akron, 1941.	
THOMAS M. POWERS.....	<i>Business Law</i>
B.A., Cornell University; L.L.B., Cleveland Law School.	
C. LEONA STERLEY.....	<i>Shorthand</i>
B.S. in Sec.Sci., University of Akron, 1936.	
LEWIS C. TURNER.....	<i>Business and Professional Speaking</i>
B.A., Hiram College; M.A., University of Akron, 1929.	
CARLTON VOBBE.....	<i>Quality Control</i>
B.B.A., University of Toledo, 1935.	
S. L. WANSKY.....	<i>Time and Motion Study</i>
University of Akron, Industrial Engineering, 1935.	
ROBERT B. WILSON.....	<i>Radio Speaking</i>
Manager WADC Broadcasting Station.	
EDWIN YOUNG.....	<i>Statistics</i>
A.B., University of Akron; M.A., Ohio State University, 1932.	

RUBBER RESEARCH STAFF

DR. G. STAFFORD WHITBY, <i>Professor of Rubber Chemistry, Director of Rubber Research</i>	
†SEYMOUR KAPLAN, <i>Assistant</i>	
B.A., Cornell University; M.S., Northwestern University, 1943.	
JACK ZOMLEFER, <i>Assistant</i>	
B.S., University of Illinois; M.S., State University of Iowa.	
E. P. BUDEWITZ, <i>Assistant (1944)</i>	
B.A., University of Montana; M.S., University of Akron, 1944.	

AKRON PUBLIC SCHOOL OFFICERS AND TEACHERS
CO-OPERATING WITH THE COLLEGE OF EDUCATION

OTIS C. HATTON, M.A.....	<i>Superintendent of Schools</i>
HAROLD S. VINCENT, M.A.....	<i>First Assistant Superintendent</i>
A. J. DILLEHAY, B.Ed., M.A.....	<i>Executive Director</i>
GEORGE F. WEBER, M.A.Ed.....	<i>Executive Director</i>
MARY LOUISE BEVERLY, B.S.Ed.....	<i>Principal of Spicer School</i>

TEACHERS IN SPICER DEMONSTRATION LABORATORY SCHOOL

MARY BEVERLY, B.S.Ed.	BESSIE MILLER, B.S.Ed.
ESTHER EPIOTIS, B.E.	CATHERINE REDINGER, B.S.Ed.
CAROLINE FRENCH	MARY REDINGER
EMILY GIBSON, B.A., M.A.Ed.	EULALIE SAUVE
VIRGINIA GILLOOLY, B.E., B.A.	RUTH SCHISLER
GRACE ION	DOROTHY SCHORLE, B.S.Ed.
ROSE MARY KRAUS, B.E., M.A.	ELEANOR TEBLE, B.S.Ed.
MARIE LALLI, B.A.Ed.	FANNIE WALCOTT
VESTA LEIGHT	LUCILLE WORKMAN
LUCILLE MCCONNELL, B.S.Ed.	OLGA ZEBLANSKY, B.E.
JEANETTE MARSH, B.S.Ed.	

†Resigned, January, 1946.

CRITIC TEACHERS

MARGARET ALLEN, M.Ed.....	<i>West</i>	LUCILLE MCCONNELL, B.S.Ed.....	<i>Spicer</i>
ISABEL BARBER, B.S.Ed.....	<i>Rankin</i>	JEANETTE MARSH, B.S.Ed.....	<i>Spicer</i>
MARY BEVERLY, B.S.Ed.....	<i>Spicer</i>	BESSIE MILLER, B.S.Ed.....	<i>Spicer</i>
ANITA CAHILL.....	<i>East</i>	ROBERT MOHLER, A.B., M.A.....	<i>Central</i>
GERTRUDE CARLSON.....	<i>Lane</i>	MARY MOSTENIC, B.A., B.E.....	<i>East</i>
LILLIAN CLARK, A.B., M.A.....	<i>West</i>	GLADYS PARSHALL, A.B.....	<i>Central</i>
GRACE DEAN, A.B.....	<i>Central</i>	MARY PUSATERI, A.B., M.A.....	<i>South</i>
GRACE EDGAR.....	<i>Miller</i>	CATHERINE REDINGER.....	<i>Spicer</i>
ESTHER EPIOTIS, B.E.....	<i>Spicer</i>	MARY REDINGER.....	<i>Spicer</i>
CAROLINE FRENCH.....	<i>Spicer</i>	EULALIE SAUVE.....	<i>Spicer</i>
EMILY GIBSON, B.A., M.A.Ed.....	<i>Spicer</i>	RUTH SCHISLER.....	<i>Spicer</i>
VIRGINIA GILLOOLY, B.E., B.A.....	<i>Spicer</i>	DOROTHY SCHORLE, B.S.Ed.....	<i>Spicer</i>
CECILIA HANSEN, B.S.Ed.....	<i>Hotchkiss</i>	DOROTHY SHANK, A.B.....	<i>North</i>
MARY HARVEY.....	<i>King</i>	EVELYN SILLS, B.S.Ed.....	<i>Bd. of Ed.</i>
BERNICE HENRY, B.A., B.A.....	<i>West</i>	HAZEL SMITH, B.S.Ed.....	<i>Voris</i>
NELLIE HOFFMAN, B.S.Ed.....	<i>Garfield</i>	MARTHA STURDEVANT, B.A.....	<i>East</i>
GRACE ION.....	<i>Spicer</i>	HELEN SULLIVAN, M.A.Ed.....	<i>East</i>
NADINE JENNINGS, A.B.....	<i>Garfield</i>	ELEANOR TEELE, B.S.Ed.....	<i>Spicer</i>
ISA KECK, B.S.....	<i>Central</i>	LILLIAN THOMAS.....	<i>Crouse</i>
ROSE MARY KRAUS, B.E., M.A.....	<i>Spicer</i>	FANNIE WALCOTT.....	<i>Spicer</i>
MARION KROEGER, A.B., M.A.....	<i>East</i>	LUCILLE WORKMAN.....	<i>Spicer</i>
MARIE LALLI, B.A.Ed.....	<i>Spicer</i>	OLGA ZEMLANSKY, B.E.....	<i>Spicer</i>
VESTA LEIGHT.....	<i>Spicer</i>		

OTHER CO-OPERATING SCHOOLS

MRS. LUCILLE WEISENBORN, B.S.....	<i>Barberton</i>
MARY QUEBEN.....	<i>Barberton</i>

COMMITTEES OF THE UNIVERSITY FACULTY

1945-1946

EXECUTIVE

Simmons, Bulger, Evans, Hardy, Gardner, Landon, Welch (Secretary).

COMMITTEE OF DEANS

Gardner (Chairman), Bulger, Landon, Evans.

ADMISSIONS AND ADVANCED STANDING

Schmidt, Bulger, Landon, Evans, Hardy, Gardner.

CLASSIFICATION

Buchtel College of Liberal Arts.....Registrar, Dean of Buchtel College of Liberal Arts, and Heads of Departments*The College of Engineering*.....Registrar, Dean of the College of Engineering, and Heads of Departments*The College of Education*.....Registrar, Dean of the College of Education and all members of the College of Education Faculty.*The General College*.....Registrar, Gardner, Keating, Distad, and Heads of Departments.*The Division of Adult Education*.....Registrar, Director of Adult Education, Heads of Departments of all Colleges.*Graduate Study*.....Registrar, Dean of Graduate Study, and Heads of Departments of all Colleges.

LIBRARY

Cushman, Landon, Bulger, Evans.

UNIVERSITY TESTING

Evans, Gardner, Griffin, Twining.

DISCIPLINE

Simmons, Bulger, Evans, Landon, (Members ex officio: Gardner, President of the Student Council, and President of the Women's League).

EXTRA-CURRICULAR ACTIVITIES

Keating, Gardner, Boguslavsky, Davis, Vance, Rogers, Tabler, Jorgensen, Varian, Distad, President of the Student Council, President of the Women's League, President of the Evening Session Senate, Student Building Manager.

ASSEMBLY

Varian (Chairman), Gardner, H. Foster, Duffy, Tucker, Painter, Jorgensen, President of the Student Council, President of the Women's League, Student Building Manager.

ADULT EDUCATION — ADVISORY

Hardy, Bulger, Landon, Evans.

STUDENT LOANS AND GRANTS

Boggs, Keating, Hardy.

ASHTON PUBLIC SPEAKING CONTESTS

Varian, Alogdelis, King, Coon.

PIXLEY SCHOLARSHIPS

Schmidt, Bulger, Evans, Keating.

POST WAR AFFAIRS

Distad, H. Foster, Organ.

LIBRARY BUILDING

Keister, Acquarone, Boguslavsky, Distad, Dreisbach, Foster, Tucker.

STUDENT BUILDING

Simmons, Boggs, Gardner.

VISUAL AID

Painter, Jones, Keister, Sibila, Gardner, Glick, Hamlen.

ATHLETIC

Evans, Anderson, Boggs, Duffy, Griffin, Sefton, Detwiler (ex-officio).

GENERAL INFORMATION

HISTORICAL STATEMENT

The University of Akron was created as a municipal institution by an ordinance of the Akron City Council, passed on August 25, 1913. This ordinance accepted in behalf of the city the offer of the Trustees of Buchtel College to give to the city the entire plant and endowment of the college as the nucleus of a municipal university, the Council promising in behalf of the city to support properly the new institution thus created. After the transfer of property had been completed by President Kolbe and Secretary Olin for the Trustees of Buchtel College, Mayor Rockwell on December 15, 1913, together with City Solicitor Taylor accepted the deeds of transfer in behalf of the city and appointed nine citizens of Akron as members of the Board of Directors of the Municipal University of Akron.

Buchtel College, the institution thus turned over to the city of Akron, was founded in 1870 by the Ohio Universalist Convention and took its name from its most generous benefactor, Hon. John R. Buchtel, who consecrated his life and his wealth to its support. It was chartered by the Ohio Legislature in the same year as a College of Liberal Arts and first opened its doors for the admission of students in September, 1872.

By the terms of transfer to the City of Akron, provision was made that Buchtel College retain its name and identity as Buchtel College of Liberal Arts of the municipal university.

In September, 1926, by action of the Board of Directors, the name of the university was changed to The University of Akron.

The University of Akron, being supported in large part by public taxation, is entirely non-sectarian.

PRESIDENTS OF BUCHTEL COLLEGE

*S. H. MCCOLLESTER, D.D. LITT.D.....	1872-1878
*E. L. REXFORD, D.D.....	1878-1880
*ORBELLO CONE, D.D.....	1880-1896
*CHARLES M. KNIGHT, Sc.D. (ad interim).....	1896-1897
*IRA A. PRIEST, D.D.....	1897-1901
*A. B. CHURCH, D.D., LL.D.....	1901-1912
*PARKE R. KOLBE, PH.D., LL.D.....	1913-1914

PRESIDENTS OF THE UNIVERSITY OF AKRON

*PARKE R. KOLBE, PH.D., LL.D.....	1914-1925
GEORGE F. ZOOK, PH.D., LL.D.....	1925-1933
HEZZLETON E. SIMMONS, D.Sc., LL.D.....	1933-

*Deceased.

ADMISSION TO THE UNIVERSITY

Students are admitted to the University by high school certificate and the Orientation Week examinations or honorable dismissal from other colleges and universities, or if qualified by reason of maturity and experience and over 21 years of age, as special students not in candidacy for a degree. See under General College.

ADMISSION FROM OTHER COLLEGES

Candidates for admission with advanced standing should have transcripts (together with an honorable dismissal) sent directly from the institution last attended to the University Registrar.

For admission, the student must be eligible to re-enter the institution from which he desires to transfer, and must have a satisfactory scholastic record.

In general, 16 credit hours a semester represent a full allowance of credit. Such evaluations and credit allowances are tentative, and depend upon a satisfactory quality of work at the University of Akron. Their validity also depends upon the completion of the course in the standard length of time.

A degree will not be granted a student entering with advanced standing from another college or university unless he spends a full year in residence and completes 32 credit hours of work, three-fourths of which must be done in the college granting the degree. It is expected that the student will do his last year's work at the University of Akron.

REQUIREMENTS FOR DEGREES

Students on the full-time basis must present 128 semester hours with necessary quality points. Engineering students must present 149 semester hours (142 during the accelerated program) with the necessary quality points.

Candidates for a degree are required to file an application with the Registrar by March 1 of their senior year.

DEGREE WITH DISTINCTION

Students who have an average grade of 90 per cent, (or a quality point ratio of 3.25) or better over all the work taken during the four undergraduate years shall be graduated with distinction. Students who transfer from another college must maintain a quality point ratio of 3.25 or better, at the University of Akron. The words "with distinction" shall appear upon the diploma and upon the commencement program.

MILITARY SCIENCE AND TACTICS

In 1919 the United States Government established at the University of Akron a unit of the Reserve Officers' Training Corps. All men students are required to take Military Science and Tactics unless exempted because of physical disability, age, or other reasons.

STANDARDS

The University of Akron maintains high academic standards and is accredited by the North Central Association of Colleges and the Ohio College Association. It is a member of the American Council on Education, the Association of American Colleges, the Association of Urban Universities, and the American Association of Teachers Colleges. It is included in the approved list of the Association of American Universities for admission of graduates to graduate and professional schools, and is approved for pre-medical work by the American Medical Association. The Committee on Professional Training of the American Chemical Society has approved the work of the University of Akron in the field of Chemistry for the professional training of chemists. Curricula in Electrical Engineering and Mechanical Engineering (including options in Aeronautics and Industrial Engineering) are accredited by the Engineers' Council for Professional Development. Its women graduates with approved degrees (requiring at least two years or a minimum of 60 credit hours of non-professional, non-technical work which would be credited toward an A. B. degree) are eligible to membership in the American Association of University Women.

BUILDINGS AND EQUIPMENT

The University campus lies on Buchtel Avenue at the head of College Street, only a short distance from the city's business center.

Buildings on the campus include Buchtel Hall, in which are located the administration offices and eight classrooms; Carl F. Kolbe Hall, housing Bierce Library; Knight Chemical Laboratory; Crouse Gymnasium; R.O.T.C. Armory; Curtis Cottage, housing the department of home economics, including laboratories and the University Health Service; Phillips Hall, housing the art department and the Alumni Association offices; Olin Hall, occupied by the department of biology, with laboratories; Simmons Hall, housing the departments of commerce, secretarial science, political science and physics as well as the work of the College of Engineering in classroom and laboratory; and the central heating plant.

The University Student Building, first occupied in 1939, was constructed by means of a loan and grant from the Public Works Administration. It contains dining room facilities, the book store and a little theatre with lighting equipment, carpenter shop and dressing rooms. Other space in the building is occupied by offices of student publications, meeting and game rooms, and lounge.

The Music Department is housed in a two-story building at 227 East Center Street. This building is leased by the University to provide adequate facilities for the work of the department. It contains two large rooms for orchestra, band, and choral groups on the first floor, and a number of small rooms on the second floor for offices, studios, and practice rooms.

Departmental libraries are maintained in Olin Hall for the biology department, in Simmons Hall for the departments of engineering and physics, in Phillips Hall for art, and in Curtis Cottage for home economics.

The facilities of Bierce Library are open to the citizens of Akron.

Through the courtesy of the Board of Education of the Akron Public Schools, the College of Education occupies a part of the nearby Spicer School building for classroom and office purposes.

The athletic field and stadium are situated about two blocks from the campus. The intercollegiate contests in football are held at the Akron Rubber Bowl or the athletic field.

BIERCE LIBRARY

The University Library, known as Bierce Library in recognition of a bequest received from General L. V. Bierce in 1874, occupies Carl F. Kolbe Hall. It contains 70,530 catalogued volumes, 21,545 pamphlets, and a considerable amount of other material (not counted) concerning the history of Buchtel College and the University of Akron, as well as 560 current periodicals, and 1,160 music recordings. In addition 18,176 mounted pictures are available for circulation.

THE CITY TESTING LABORATORY

The City Testing Laboratory was created January 1, 1914, by a proposal made by the Board of Directors and accepted by the Akron City Council. Until November, 1930, it was known as the Bureau of City Tests. Much of the chemical and physical testing work of the city is done in the laboratory. The laboratory is conveniently close to the testing equipment of the engineering laboratories.

THE DANIEL GUGGENHEIM AIRSHIP INSTITUTE

The Guggenheim Foundation for the Promotion of Aeronautics which was established in 1926 by the late Daniel Guggenheim, made a gift in October, 1929, to the University of Akron and the California Institute of Technology jointly for the study of lighter-than-air problems. This gift was supplemented by a contribution from the City of Akron, especially for the erection of a suitable building. These gifts were secured largely through the efforts of Dr. George F. Zook.

The Guggenheim Airship Institute building is located at the northwest corner of the municipal airport. The main building, four stories in height, was completed in 1932, and a one-story addition to accommodate a gust tunnel was built in 1936. For further information concerning the equipment of the Institute, see the Engineering College section of this catalog.

On October 19, 1934, the original contract expired, and upon agreement of the parties concerned, control of the Institute was transferred to the University of Akron under the directorship of Dr. Theodore Troller, in charge of research. In April, 1943, Mr. Curtis C. Myers became director. Dr. Theodor von Karman, who had served as Director for the five years, is now Technical Consultant. In connection with the fundamental research carried on at the institute a certain amount of testing is done for industry, for which a charge is made.

At the June 7, 1940, meeting of the Board of Directors, the Daniel Guggenheim Airship Institute was made an integral part of the College of Engineering, and the staff of the Institute were given academic status as members of the Engineering College faculty.

GOVERNMENT LABORATORIES

Early in 1944, the University, at the request of the Rubber Director, assumed, under contract with Rubber Reserve Company, the management of a Government-owned pilot plant and evaluation laboratory on West Wilbeth Road. The institution was dedicated to the service of the nation on June 28, 1944. It now consists of six buildings housing equipment for the production and testing of experimental rubbers in connection with research studies designed to increase the ease of fabricating rubber goods and improving their quality.

In the pilot plant are 14 five gallon, 2 eighty gallon and 2 five hundred gallon reactors in which synthetic rubber latex may be made. All auxiliary equipment necessary to convert the rubber into dry, solid material is also installed. Well equipped physical and chemical laboratories are provided for evaluating the quality of experimental rubbers and, through research studies, for perfecting better methods of determining their quality. Physical tests are conducted not only at room temperatures but at elevated and reduced temperatures.

For testing at low temperatures, there are two cold rooms; one of about 80 square feet for testing at or around -10° F., another of about 200 square feet which can be cooled to -55° F. When fully staffed, the institution employs about 200 men and women.

EXTRA-CURRICULAR AFFAIRS

The University of Akron offers a well-rounded student program of extra-curricular activities through such organizations as the Student Council, Women's League, Y.W.C.A., The Akron Buchtelite (student newspaper), The Tel-Buch (student yearbook), athletics for men and women, departmental clubs, sororities and fraternities. The program is facilitated by the Student Building lounge, cafeteria, dining room, and recreation rooms.

INTRAMURAL SPORTS

All day students carrying eight credit hours or more may participate in intramural athletics. The sports are conducted for everyone with the aim of providing wholesome recreation and physical exercise. To attain this end the department makes an effort to have each student in the University enroll in one or more of the scheduled activities.

INTERCOLLEGIATE ATHLETICS

Intercollegiate sports are under the administration of a Faculty Committee appointed by the President.

ATHLETIC INJURIES

Students training for, or participating in, athletic competition, do so voluntarily and assume the risks incident thereto. The University assumes no legal responsibility or obligation to meet the expense of the treatment of injuries received by athletes while training for, or participating in, intercollegiate sports, unless the treatment is first authorized by the University medical officer for athletes.

STUDENT ACCIDENTS

The University of Akron assumes no responsibility for accidents to students which may occur incident to attendance at or participation in classroom, gymnasium, or laboratory work.

GYMNASIUM LOCKERS

Gymnasium lockers are obtained by depositing \$1.00 at the office of the Treasurer of the University.

THE UNIVERSITY HEALTH SERVICE

To provide for the student body necessary phases of health promotion not included in the field of physical education, the University Health Service has been established. Complete physical records and a follow-up system are maintained. The medical examinations conducted by the Health Service and the posture and physical efficiency tests conducted by the Department of Physical Education are combined. The University Physician is in her office in Curtis Cottage one and one-half hours each day. A registered nurse is on duty daily.

EMPLOYMENT FOR STUDENTS

The Office of the Dean of Students serves as a clearing center for employment opportunities which come to the University. Students who need some employment in order to earn money to meet their expenses should make application at this office and they will be informed of available openings. Students who must earn a large portion or all of their expenses may carry lighter schedules.

DISCIPLINE

The University reserves the right to penalize any student whose conduct at any time is in its judgment detrimental to the institution.

GENERAL OBJECTIVES OF THE UNIVERSITY OF AKRON

The University of Akron is a municipal university supported in large measure by city taxes. It, therefore, aims to devote its efforts to the work of higher education especially for the people of Akron.

The University of Akron has as its aims:

To give students a survey of the chief fields of knowledge and thus acquaint them with the world of nature and human life; to develop their ability to make sound judgments and to profit from experience; to arouse their intellectual curiosity and stimulate their scholarly growth; to aid them to develop their physical well-being; to help them to appreciate beauty in all its forms and thus to furnish them with resources for enjoying their leisure hours.

To develop and strengthen in students a sense of social responsibility so that they have a proper regard for the rights of others to prepare them for a sane and loyal family life and an active and intelligent citizenship.

To prepare students for greater social and individual effectiveness in public service, commerce and industry, and the professions; for the professions of teaching and engineering; for entering the professional schools of law, medicine, and dentistry, and for advanced study in other fields; for careers in art, music, home economics, and secretarial science.

In the attainment of these objectives, the University of Akron proposes to utilize its available resources to the utmost. Students who are admitted will be expected to have a satisfactory degree of intellectual maturity, and adequate scholastic preparation along with the necessary aptitudes and interests. It is also expected that their educational objectives will harmonize with those of the University.

The University has further aims:

To provide expert advice for various civic and educational agencies; to furnish a scientific testing service for commerce and industry; to offer educational programs for the dissemination of culture and knowledge.

ORGANIZATION OF THE UNIVERSITY

I. THE GENERAL COLLEGE

The purpose of the General College is two-fold: (a) to furnish a general cultural education for (1) students who plan to enter an Upper College and secure an academic degree, and (2) students who desire approximately two years of general education, but who do not desire or are unable to enter an Upper College; (b) to furnish pre-professional courses and terminal courses of an occupational nature for students who do not desire or are unable to enter an Upper College.

II. THE UPPER COLLEGES

After completion of the work in the General College, the student may begin work in his field of concentration in one of the Upper Colleges.

BUCHTEL COLLEGE OF LIBERAL ARTS

The departments of the Liberal Arts College are grouped in four divisions as follows:

<i>Humanities</i>	<i>Social Sciences</i>	<i>Natural Sciences</i>	<i>Applied Arts</i>
Latin and Greek	Economics	Biology	Art
Literature	History	Chemistry	Commerce
Modern Languages	Political Science	Mathematics	Home Economics
Music	Psychology	Physics	Secretarial Science
Philosophy	Sociology		Industrial Management
Speech			

THE COLLEGE OF ENGINEERING

The departments of the College of Engineering are:

Civil Engineering	Industrial Engineering
Electrical Engineering	Mechanical Engineering
Aeronautical Engineering	

THE COLLEGE OF EDUCATION

There are no divisions in the College of Education, but preparatory courses are offered in a variety of teaching fields.

Art	Home Economics	Physical Education
Commerce	Kindergarten	Psychology
Elementary	Music	Vocational Education
High School	Primary	

GRADUATE STUDY

In certain colleges and departments—especially in the College of Education—opportunity is offered properly qualified persons to study for the Master's degree. In some of the departments graduate courses given in connection with the work in Adult Education have been arranged on a rotating plan to enable candidates to meet the requirements for a major or a minor.

For details as to the colleges and departments which offer courses of graduate rank see the catalog material under the various colleges and departments and also the section on graduate study.

DEGREES

For completion of his work in the Upper College a student is expected to have taken at least 50%—and it is desirable that he take not more than 75%—of his total work (outside the 36 to 42 hours of required work in general education) in the major division.

A statement of degrees conferred upon completion of courses of study is given under the descriptive matter of each college. To receive a second bachelor's degree in course from the University of Akron, the student must complete all requirements for the degree with a minimum of 32 semester hours of work not counted for the first degree.

DIVISION OF ADULT EDUCATION

THE EVENING SESSION

All colleges of the University offer courses in the evening. Credit is given toward a degree for regularly prescribed subjects. Full-time or part-time schedules are possible for new and former students in degree, diploma, and certificate courses. Candidates for a diploma or degree must satisfy the entrance requirements of the University.

THE SUMMER QUARTER

A Summer Session of six weeks furnishes instruction to teachers and other persons who seek opportunities for training. Courses are offered to meet the needs of students in all colleges of the University. In 1942, the first 12-week session was held in order to enable students to complete their college work in a shorter time. See section on Summer Session. In 1946, a summer quarter of eleven weeks will enable students to attend on a year-around basis.

INSTITUTES

Non-credit courses to meet the needs of many persons who already have a degree or desire practical training for a particular vocation or avocation are offered on a short-term basis. A program of apprentice training for local industries, designed to parallel factory work with classroom training, is now in its seventh year of operation. For further information see section on Community Co-operation.

ACCELERATED PROGRAM

The Summer Session of 1942 was the beginning of an accelerated war-time program of work at the University of Akron. By attending through the summer it is possible for the student to complete the regular four-year course of study in three full years.

GENERAL REGULATIONS

THE SEMESTER HOUR—The unit of instruction is one hour per week for one semester. Three hours of laboratory work (including time for writing reports) shall be considered as equivalent to one recitation hour with preparation therefor. This unit is known as a "semester hour" or "credit."

GRADING SYSTEM

93-100 inclusive	Excellent	A
85-92 inclusive	Good	B
77-84 inclusive	Fair	C
70-76 inclusive	Poor	D
Below 70	{ Conditioned	E
	{ Failed	F
Incomplete		I

The grade "*Conditioned*" may be given only for the first semester's work in a subject continuing through two or more semesters, such as first-year chemistry or first-year foreign language.

"*Conditioned*" means that although the semester's work is not of passing grade the deficiency may be made up without repeating the course in class. Failure to remove the deficiency satisfactorily by the close of the student's next semester in the University converts the grade to "F." No higher grade than "D" is given for the removal of a "*Condition*."

"*Incomplete*" means that the student has done passing work in the course, but some part, for good reason, has not been completed. Failure to make up the omitted work satisfactorily within the first nine weeks of the next semester in the University converts the grade to "F."

QUALITY REQUIREMENTS

For graduation from the University, the student must present 128 semester hours with a quality point ratio of 2 for all work attempted. Quality points are given as follows:

- For each credit hour of A, 4 quality points.
- For each credit hour of B, 3 quality points.
- For each credit hour of C, 2 quality points.
- For each credit hour of D, 1 quality point.
- For each credit hour of F, 0 quality point.

No student is eligible for a degree unless he has the same ratio of quality points in his major subject as is required for graduation.

PROBATION AND FAILURE

In the General College a student who fails at any time to maintain a quality point ratio of 2 may be subject to change of courses, suspension, or some other form of academic discipline.

In an Upper College a student whose scholarship is unsatisfactory may be placed on probation, suspended for a definite period of time, or dropped from the University at any time by the Dean of the college in which the student is enrolled.

The load for every probationary student is determined by the Dean who has jurisdiction over him.

Students who have been dropped from the University are not eligible to register for any college courses in Day, Evening, or Summer Sessions. Such individuals may, however, enroll for non-credit work in the Community College. Reinstatement of dropped students is under the control of the Committee on Admissions and Advanced Standing, and is a prerequisite for enrolling in college work.

CHANGES IN STUDENTS' PROGRAMS

No Upper College student is allowed to drop a study after the opening of a semester, or in any way change his selection of studies for any semester, without permission of the Dean of the college in which he is registered.

For Upper College students, all changes from one field of concentration to another shall be subject to the approval of the Dean.

Students in the General College will secure the permission at the Office of the Dean of Students.

Students who withdraw from a course *with the permission of the Dean* are given a grade of work at the time of withdrawal. (This grade is used for statistical purposes.)

If a student withdraws from a course on the recommendation of the Dean, it shall not count as work attempted except in the compilation of statistical averages.

If a student leaves a course *without the recommendation of the Dean*, or is dropped from any course by the Dean, he is given a failing grade in the course and it is counted as work attempted.

All grades received by students whether passing or failing, withdrawn or dropped, are used in the compilation of statistical averages for student groups.

No student is allowed to enter a course after the first week of the semester.

First-year students are not permitted to elect work above the freshman year except by special permission.

WITHDRAWAL

A student desiring to withdraw from the University is requested to notify the Dean of the college in which he is enrolled. Otherwise "F" grades may be received in all work carried.

STUDENT LOAD

Sixteen hours a semester are counted as full work for a student. No student is allowed to take more than 17 hours a semester without the consent of the Dean of the college in which he is enrolled. An excess load charge is made for work taken in excess of 18 hours, except in the case of certain definitely prescribed curricula.

ABSENCE

Students are expected to be present at all meetings of classes for which they are registered, and may be dropped by the Dean from a course at any time for absence on recommendation of the instructor.

In case of prolonged absence, students may be reinstated in classes only by the Dean on recommendation of the instructor, and are required to make up the omitted work at the discretion of the instructor.

PROMOTION TO AN UPPER COLLEGE

For promotion to an Upper College the student must make a quality point ratio of 2 for the work taken in the General College and must complete at least 64 hours of work including all the required general courses. At the discretion of the Division a point ratio higher than this may be required. (It is understood that certain exceptions may be made in the operation of this ruling in the Engineering College and in the Division of Natural Science.)

The admission of students to the Upper College shall be a responsibility of the academic deans in consultation with administrative officers of the General College and the heads of the departments concerned.

At the discretion of the Division, an examination over the courses preparatory to the work of that Division may be required.

GENERAL FINAL EXAMINATIONS

A general final examination covering the major field of study is required in many departments of instruction. In divisions and departments of the University which give a general final examination, the passing of that examination is a requirement for graduation.

The administration of these examinations is in the hands of a committee consisting of the Registrar as chairman, and one member from each college faculty appointed by the deans of the respective faculties.

In the College of Education the fourfold qualifying examinations at the close of the junior year are regarded as the general final examination.

SYSTEM OF NUMBERING

1-99. Courses given in the General College. (Numbers 1-19 are reserved for required courses in General Education.)

100-199. Courses of Upper College rank.

200-299. Undergraduate courses for which graduate credit may be obtained for a greater amount and a higher quality of work than that required of undergraduates.

300-399. Graduate courses to which a few undergraduates who have shown unusual ability may be admitted.

400-499. Graduate courses for which the prerequisite is a bachelor's degree.

FEES AND EXPENSES

All fees are payable at the Treasurer's office before the student enters classes. Deferred payments have been discontinued.

CLASSIFICATION OF CHARGES

TUITION is not charged to legal residents of Akron. Tuition charges for those not legal residents of Akron are shown below.

A **MAINTENANCE FEE** is paid by all students. The amount of the fee depends upon the number of credit hours taken.

A **LIBRARY FEE** is payable by all students enrolled for 6 or more credit hours.

A **REGISTRATION FEE** is charged each student enrolled in the Division of Adult Education.

STUDENT ACTIVITY FEE (*Day Session*) payable by all undergraduate students enrolled for 6 credit hours or more. Payment of this fee provides support for the extra-curricular activities program.

(*Evening Session*) payable by all evening session students. Payment of this fee aids in the support of activities of the evening students.

(*Summer Session*) payable by all summer session students. Payment of this fee aids in the support of the activities of the summer students.

STUDENT BUILDING FEE, payable by all students in all sessions, makes available the facilities of the student building.

LABORATORY FEES AND BREAKAGE DEPOSITS are charged in some courses to cover the materials used. See listings on pages 32 and 33.

A **GRADUATION FEE** is payable in connection with the Bachelor's degree and Master's degree.

LATE REGISTRATION FEE.

MISCELLANEOUS FEES.

REFUNDS.

SUMMARY STATEMENT

For ease in determining approximate costs for each semester, the following tabulation indicates a typical charge for a student enrolled in day classes for a normal full time schedule of work of 16 hours each semester of the academic year.

	First Semester	Second Semester
Tuition fee, for non-residents of Akron.....	\$ 90.00	\$ 90.00
Maintenance fee, for all students.....	35.00	35.00
Student activity fee, for all students.....	7.00	3.00
Student building fee.....	3.00	3.00
Library fee.....	1.50	1.50
	\$136.50	\$132.50
Total for non-residents of Akron.....	\$136.50	\$132.50
Total for residents of Akron.....	\$ 46.50	\$ 42.50

Laboratory fees, deposits and books are additional and vary with the courses taken.

VETERANS' EXPENSES

Students who are veterans of World War II, and who are eligible for admission to the University may, if certified by the Veterans Administration, register for courses of study without payment of fees. In this instance the educational cost or its equivalent* including necessary books and supplies will be paid by the Federal Government. This is done upon the basis of an agreement between the University and the Veterans Administration based upon the provisions of Public Law 16 (Veterans Rehabilitation) and Public Law 346 ("G. I. Bill") as amended.

Provisional admission without payment of fees may be granted to a veteran if eligible for admission to the University, pending the receipt of a Certificate of Eligibility. This will be done upon submission of evidence that application has been made to the Veterans Administration to enroll at the University of Akron, and also upon the written consent of the veteran to pay for his courses of study, books and supplies, in the event it is later determined by the Veterans Administration that he is not eligible to participate under the provisions of law applicable to the veteran.

TUITION FEES

Payable by non-resident students in the day session:

	Each Semester
For 1 to 5 credit hours inclusive, per credit hour.....	\$ 6
For 6 credit hours.....	35
For 7 credit hours.....	50
For 8 credit hours.....	60
For 9 credit hours.....	70
For 10 credit hours.....	80
For 11 credit hours or more.....	90

Payable by non-resident students in the evening session:

For less than 7 hours.....	No charge
For 7 to 10 hours inclusive, per credit hour in excess of 6.....	\$20
For 11 credit hours or more.....	90
Summer Session, per credit hour.....	6

RULES GOVERNING TUITION

(Adopted March 14, 1941)

Legal residents of the City of Akron shall not be charged tuition in any College or Division of the University.

In applying this rule, the following persons, if citizens of the United States, shall be deemed to be legal residents of Akron unless the circumstances of any particular case may show the fact to be otherwise, viz.:

1. An unmarried person under 21 years of age living with parents who are legal residents of the City of Akron.

2. A person over 21 years of age who at the time of his enrolment is a legal resident of the City of Akron.

3. A husband living with his wife, or a wife living with her husband within the City of Akron when such husband and wife are legal residents of the City of Akron.

*The educational cost or its equivalent shall be judged to be a sum equal to the tuition plus such other fees as are applicable to the curriculum in which the student is enrolled.

In every other case the responsibility of proving legal residence in the City of Akron shall rest with the person claiming exemption from tuition payment.

In order to be a legal resident within the purpose of these rules, a person shall be required to have resided continuously in the State of Ohio for at least one year and in the City of Akron thirty days immediately prior to registering in the University for any semester.

Any person enjoying the right of exemption from the payment of tuition shall forfeit that right upon abandoning the City of Akron as his legal residence but may regain the right upon reestablishing his legal residence in the City of Akron.

No person shall be considered to have gained or lost legal residence status by virtue of any act of himself, his parents, or his guardian, within any semester he or she is enrolled in the University.

In case a legal resident of the City of Akron is appointed guardian of the person of a minor, the legal residence of such minor for the purpose of this rule shall not be considered to be established in the City of Akron until the expiration of one year after such appointment, but no legal residence may be acquired by a minor for whom a legal guardian of the person is appointed solely for the purpose of avoiding the payment of tuition to the University of Akron.

Any person living outside of Akron but owning property within the City of Akron which is taxed, may receive credit on tuition of his child or children during any semester to the extent of taxes actually paid by him for that half-year toward the University levy, upon presenting a certificate from the County Auditor or Treasurer, stating the amount so paid.

MAINTENANCE FEES

Payable by all students both resident and non-resident in the day and evening sessions:

For 1 to 5 credit hours inclusive, per credit hour.....\$ 6

For 6 credit hours or more..... 35

An advance deposit of \$5 is required of all freshmen when applying for admission for the fall semester. This sum is credited on the maintenance fee at entrance and is not subject to refund.

LIBRARY FEE

Payable by all day or evening students enrolled for 6 or more credit hours.....\$1.50

REGISTRATION FEE

Payable by students enrolled in the Division of Adult Education. Per semester....\$1.00

STUDENT ACTIVITY FEE

Payable by all undergraduate students in the day session taking six credit hours or more. (Not subject to change during a semester because of reduction in number of credits earned.)

First semester (including athletic and dramatic ticket).....\$7.00

Second semester, students enrolled first semester 3.00

Second semester, new entrants (including athletic and dramatic ticket) 5.00

Payable by all evening session students, per semester..... .50

STUDENT BUILDING FEE

Payable by all students in the day session enrolled for six credit hours or more, per semester. (Not subject to change during a semester because credit hours are reduced)	\$3.00
Payable by all students enrolled in the day session taking less than six hours, per semester	1.50
Payable by all evening session students, per semester .....	.50

FEES FOR 1946 SUMMER SESSION

SIX-WEEK TERM

Maintenance fee:	
1 to 4 credit hours, per credit hour	\$ 6.00
5 to 6 credit hours	25.00
Student Activity Fee	1.50
Student Building Fee .....	.50
Late Fee	5.00

ELEVEN-WEEK TERM

Maintenance fee:	
1 to 5 credit hours, per credit hour	\$ 6.00
6 or more credit hours	35.00
*Non-Resident Tuition Fee (eleven credit hours)	90.00
Library Fee	1.00
Student Activity Fee (6 or more credit hours)	2.00
Less than 6 credit hours	1.50
Student Building Fee	1.50
Late Fee	5.00
Registration Fee (Evening Students only)	1.00

No student Activity Fee or Student Building Fee is charged in the summer term for registrations in which all of the enrolment is in classes scheduled to meet in the evening.

The Student Activity Fee charged at the time of registration will not be reduced should the student later elect to reduce his load.

LATE REGISTRATION FEE

A fee of \$5 will be charged day students, and \$1 for evening students, who have not completed registration, classification, and payment of fees before the closing time of registration in the college in which they are registered. The late fee for summer session students is \$5.

The dates on which this fee will first be payable each semester, 1946-47, are as follows:

First Semester: Monday, September 23, for Day and September 30 for Evening Session.

Second Semester: Monday, February 10 for Day Session. Monday, February 17 for Evening Session.

1946 Summer Session: June 17.

MUSIC

Two individual half-hour lessons per week, each semester, in Piano, Voice, Violin, Organ or Band Instruments	\$60
One individual half-hour lesson per week, each semester, in Piano, Voice, Violin, Organ or Band Instruments	30
Organ rental by special arrangement.	

*Less than eleven credit hours, see tuition fee schedule on page 29.

GRADUATION FEE

(Payable at time of application for degree)

Bachelor's degree	\$ 5
Master's degree	10

All graduate students presenting a thesis for a Master's degree are required to pay a thesis fee of \$10 and the cost of the thesis binding, which is \$1.50 per copy.

AUDITORS

The fees for an auditor in any course or group of courses are the same as if taken for credit.

MISCELLANEOUS FEES

One free transcript of record is furnished a student. A fee of \$1 is charged for each additional copy.

After a student has been classified, a charge of \$1 is made for any change in his program which is not made at the instance of the University authorities.

A fee of \$2 is charged for each two-year or three-year certificate.

A fee of \$5 is charged for each examination in college work not taken in course.

A fee of \$25 is charged for a Trade Major examination in the Department of Vocational Education, of the College of Education.

All Smith-Hughes courses which the student may desire at some future time to use toward a degree shall be paid for at the time of registration at the rate of \$6 per credit hour.

For hours taken in excess of an 18 hour load, a fee of \$6 per credit hour is charged. Exceptions are made in the case of students enrolled for credit hours taken in band, glee club, orchestra and debate. This fee is not subject to refund.

LABORATORY FEES

	Each Semester
Art 175, 176 (Figure Drawing).....	\$ 1.50
Biology 41, 42 (Geology).....	2.50
Biology 51, 52 (Botany) 61, 62 (Zoology) 113, 114 (Field Botany).....	4.00
Biology 135, 136, 235, 236 (Physiology) 141 (Invertebrate Zoology).....	4.00
Biology 144 (Entomology) 217 (Plant Anatomy and Histology).....	4.00
Biology 107, 108 (Bacteriology).....	7.50
Biology 107E, 108E (Bacteriology).....	3.75
Biology 146, 148 (Genetics).....	1.00
Biology 155 (Vertebrate Anatomy).....	10.00
Biology 215, 216 (Plant Physiology) 154 (Histological Technique).....	6.00
Biology 256 (Embryology).....	7.50
Biology 267, 268 (Biological Problems) 367, 368 (Research) per credit hour	2.00
*Chemistry 21, 22, 43, 44, 55, 56, 105, 106, 107, 108.....	10.00
*Chemistry 23, 24, 25, 131, 132.....	5.00
*Chemistry 213, 214, 321, 322, 307, 308.....	8.00
*Chemistry 327, 328, 330.....	15.00
*Chemistry 365, 366 per credit hour.....	5.00
Education 41 (Handicrafts in El. School).....	2.00
Education 105 (Tests and Measurements) 312 (Educ. Meas.).....	2.00
*Engineering 21, 22, 43, 101 (Surveying) 108 (Route Surveying) (C.E.)....	2.00
*Engineering 49 (Shop Practice) (M.E.).....	3.00
*Engineering 58, 123, 124, 149 (E. E. Lab.) (E. E.).....	3.00
*Engineering 134, 138, 140 (Metallurgy).....	5.00
*Engineering 112 (Concrete Lab. C. E.) (C. E.).....	1.00
*Engineering 117, 118 (Strength of Materials C. E.).....	1.00
*Engineering 171 (E. E. Lab.) (E. E.).....	4.00
*Engineering 173 (E. E. Lab.) (E. E.).....	4.00

*Requires a breakage deposit of \$5.00, the unused portion of which is returned to the student.

	Lab. Fee Each Semester
•Engineering 151 (Electron Tube Applications) (E. E.).....	3.00
•Engineering 202 (Aerodynamics Lab.) 158 (Motion and Micromotion).....	2.00
•Engineering 203 (Aeronautical Problems) 194 (M. E. Problems).....	3.00
•Engineering 182, 183 (Mechanical Lab.) (M. E.).....	2.00
Home Economics 41, 45, 46 (Foods).....	6.00
Home Economics 107, 108 (Textiles) 119, 120 (Nutrition).....	2.00
Home Economics 115, 116 (Foods).....	7.50
Home Economics 216 (Quantity Cookery).....	5.00
Home Economics 215 (Household Equipment).....	2.00
Home Economics 62 (Home Management).....	1.00
Home Economics 65 (Child Care and Development).....	2.00
Hygiene Lab. (Swimming—Men).....	2.50
Hygiene Lab. (Swimming—Women).....	6.00
Physical Education 114 (Swimming—Men).....	2.50
Physical Education 114 (Swimming—Women).....	6.00
Physics 21, 22, 209, 210, 309, 310.....	4.00
Physics 43, 44, 51, 52, 53, 203, 304, 306, 314.....	2.00
Psychology 42.....	1.00
Psychology 110, 208.....	2.00
Psychology 207.....	5.00
••R.O.T.C. Basic Course.....	5.00
••R.O.T.C. Advanced Course.....	10.00
Secretarial Science 26 (Filing and Machine Calculation).....	1.75
Secretarial Science 31, 51, 52, 56, 152 (Typewriting).....	1.00
Secretarial Science 74 (Secretarial Training).....	1.50
Secretarial Science 63, 64, 83, 84, 85, 142, 143, 144, 163, 164, 165, 166, 186, 187, 188 (Dictation).....	1.00
Secretarial Science 293 (Office Practice).....	2.50
Speech 161, 162 (Play Production).....	2.00
Speech 181 (Radio Speaking).....	1.00
Speech 287 (Radio Speaking).....	1.00

REFUNDS

Tuition and Fees are not returnable either by cash or by adjustment of an account except when withdrawal is caused by:

- (1) Serious illness as evidenced by a written statement of a physician.
- (2) Change in hours of employment as evidenced by a written statement of employer.
- (3) Other circumstances entirely beyond the control of the student.

Application for refund or adjustment of an account will not be considered after the close of the semester for which fees have been charged. The time of withdrawal is ordinarily taken as the date at which the student formally files his withdrawal request. The date of withdrawal is certified by the Dean or Director.

*Requires a breakage deposit of \$5.00, the unused portion of which will be returned to the student.

••This deposit is returnable at the end of the semester less charges for lost or damaged articles.

No refund will be made on the following fees:

- (1) Freshman Advance Deposit.
- (2) Change of Course.
- (3) Excess Load.
- (4) Swimming Fee.
- (5) Late Registration.
- (6) Special Examination.
- (7) In case a student is dropped for failure or academic discipline.

To be entitled to a refund, in any case, the student withdrawing must present to the Treasurer of the University in writing a "Withdrawal Request" setting forth the particulars properly supported as they apply to his case. Permission to withdraw does not imply that a refund or adjustment will be made, but serves only as a basis for application on the rules by the Treasurer's office.

1. A statement from the Dean of his college that the student is in good standing, is entitled to an honorable dismissal, and is withdrawing with the Dean's permission, from the school or courses designated.
2. A statement from the Military Department, if he is a student in R.O.T.C. that his uniform account is clear.
3. If dropping a laboratory subject, he shall return his deposit card certified by the proper person, showing the amount of the refund due him.
4. If dropping an Evening College or Summer Session subject, he shall present a statement from the Director stating that he is permitted to withdraw from the subject.

When above conditions have been complied with, the request will be ruled upon and refund, if due, will be made in accordance with the following plan:

Evening and Summer Course Fees: In full for courses offered that may not actually be given due to insufficient enrolment.

Student Activity Fee: Upon return of the student athletic ticket, refund or adjustment will be made on the same basis as other regular fees.

Other Regular Fees: The amount actually charged will be refunded or adjusted less the proportion to be retained by the University as follows:

FIRST AND SECOND SEMESTER

<i>Time of Withdrawal</i>	<i>Amount Retained by the University</i>
After registration or	\$5.00 Day Session
During 1st week	\$1.00 Evening Classes
During 2nd week	20% of semester charge
During 3rd and 4th weeks	40% of semester charge
During 5th and 6th weeks	60% of semester charge
During 7th and 8th weeks	80% of semester charge
After 8th week	Full amount of semester charge

SUMMER SESSION

Six-week Term

After registration or	
During 1st week	\$2.00
During 2nd week	40% of term charge
During 3rd week	60% of term charge
After 3rd week	Full amount of term charge

Eleven-week Term

After registration or	
During 1st week	\$5.00
During 2nd week	20% of term charge
During 3rd week	40% of term charge
During 4th week	60% of term charge
During 5th week	80% of term charge
After 5th week	Full amount of term charge

REFUNDS TO STUDENTS CALLED FOR MILITARY SERVICE

The University will refund in full or abate all unpaid charges to students who withdraw from the University by reason of being accepted for service in the armed forces of the United States under the following conditions:

- a. In event of call to military service under the Selective Service Act, refund or abatement will be made throughout each semester.
- b. In respect to voluntary enlistment, refund or abatement will be made in full before three-fourths of the semester shall have elapsed.
- c. The date of formal withdrawal from classes to enter military service shall be certified by the Dean or Director of the College or Division.
- d. All applications for refunds or abatements must be supported by proper documentary evidence and submitted within the semester during which the student has been currently enrolled.

THE GENERAL COLLEGE

ENTRANCE REQUIREMENTS

The admission of any student to the University of Akron will depend upon the evidences of his preparation and ability to do college work in a satisfactory manner. The evidences are: (1) graduation from an accredited four-year secondary school or its equivalent; (2) quality of the work done in the secondary school; (3) ranking in certain tests given by the University to determine preparation, ability, and aptitudes; (4) attitude toward college work.

In determining the admission of any applicant, consideration is given to the above factors. A low ranking in any one will require a higher ranking in the others. For example, a student whose secondary school average is low may be admitted if his ranking in the tests is high. Also, an applicant with a fair secondary school record may make such a poor ranking in these tests as not to qualify for admission.

Any student applying for admission is expected to have a satisfactory background in both oral and written English. A description of this requirement may be obtained from the Registrar.

Such college courses as Latin and mathematics cannot be taken until the prerequisites are met.

For admission to the engineering course at least 1½ units of high school algebra and 1 unit of plane geometry are required. It is recommended that each candidate desiring college training in technical and scientific lines include in his preparatory work an adequate high school training in mathematics and science.

SPECIAL STUDENTS

Students of maturity, over 21 years of age, who have not graduated from high school, may be admitted to certain courses upon presentation of sufficient evidence of preparation, aptitude, ability, and interest. These students are known as special students, and work taken by them does not count toward a degree until entrance requirements are met.

IRREGULAR STUDENTS

Students who have fulfilled the entrance requirements, but who are not pursuing a regular course, are known as irregular students. Students carrying a load of less than eight credit hours are classed as irregular students.

ADMISSION FROM OTHER COLLEGES

The student who wishes to enter the University of Akron with advanced standing should ask the registrar of the institution from which he is transferring to send to the University Registrar a transcript of his record and an honorable dismissal.

No student will be received on transfer from another college or university who does not meet the scholastic requirements of the University of Akron, or who is ineligible to re-enter the institution from which he desires to transfer.

REGISTRATION AND CLASSIFICATION

A student who wishes to gain admission for the fall semester, by certificate, should ask his high school principal to mail a statement of his high school record on a blank supplied by the University Registrar upon request. If the certificate is satisfactory, the applicant is notified, and is expected to present himself in person to register between September 3 and September 14. A \$5 deposit, required at the time of registration, is applied on semester fees.

ORIENTATION WEEK

To aid the freshman in adjusting himself to university life, the week preceding the opening of the regular session is devoted to a program consisting of a general assembly, tests, physical examination, lectures, and payment of fees.

All entering freshmen are *required* to report Monday, September 16, 1946 for the fall session, and attend all sessions, Monday to Thursday, inclusive. Sessions of this program will occupy the time from 8 a. m. to 4 p. m. of the days specified.

REGISTRATION DAYS

The registration days for students in both day and evening sessions will be found in the University Calendar in the opening pages of this catalog.

CURRICULUM OF THE GENERAL COLLEGE

Courses in the General College have been planned and organized in scope, content, method of approach, and method of presentation, to attain as fully as possible the general objectives of the University.

While there are no separate departmental divisions in the General College, the different divisions of the upper colleges, through their various departments, will offer, in addition to certain subjects required for students majoring in the department, other introductory courses, open to all students in the General College, but ordinarily not open to students of the upper colleges.

PRE-PROFESSIONAL AND TERMINAL COURSES

In addition to the work offered in general education, the General College offers certain pre-professional courses and terminal courses of an occupational nature for students who do not desire to remain longer at the University or who are unable to do so.

GENERAL EDUCATION

Ordinarily the work in the General College will cover two years; however, abler students may shorten the time by taking examinations for credit. The required courses in general education are:

1. English, Oral and Written..... 6 hours, first year
2. Hygiene, Physical and Mental..... 4 hours, first year
3. Introduction to the Social Sciences..... 6 hours, first year
- *4. Introduction to the Natural Sciences..... 6 hours, first or second year
5. Introduction to the Humanities..... 6 hours, first or second year
6. Mathematics, Accounting, or Foreign Language..... 6 or 8 hours, first or second year
7. Military Science and Tactics (for men)..... 6 hours
(One from 4 and 5, and one from 6 must be taken the first year)
8. Physical Education..... 2 hours, first year

REQUIREMENTS FOR PROMOTION
TO UPPER COLLEGE WORK

For promotion to upper college standing, the student must complete the requirements in general education stated above, and, in addition, certain courses specified by the departments concerned. The departmental requirements, which are in addition to the general requirements, are listed in the following pages.

BUCHTEL COLLEGE OF LIBERAL ARTS

Students who are planning to meet the requirements for promotion to upper college standing in the College of Liberal Arts should consult the list of studies laid down by the department concerned as prerequisite to promotion. It will be seen that some departments lay down specifications which should be taken in the freshman year. This is particularly to be noted in the case of the departments in the Natural Science Division and in commerce, home economics and secretarial science.

In other cases, the choice of a department for a major need not be made until the beginning of the sophomore year because of a smaller amount of prescribed work. It will also be noted that there are some departments which do not specify any requirement until the beginning of the third year in college. Those desiring to major in these departments would not need to make the decision until the beginning of the third year.

THE HUMANITIES DIVISION

ENGLISH—*Required*: American Literature 47-48. *Strongly Recommended*: French, German, or Latin.

LATIN AND GREEK—*Required*: Latin 43-44.

*MODERN LANGUAGES—*Required*: Modern foreign language, both years.

MUSIC—*Required*: Music Orientation 21, The Art of Music 22, Theory I, 41, Theory II, 42. *Recommended*: Psychology 41-43, Philosophy 55-56, Shakespeare 41.

*The Introduction to the Natural Sciences may be waived in whole or in part at the discretion of the proper academic officers in the case of certain science majors.

**Second year of German is required for graduation from the Upper College in the case of Chemistry and Pre-Medical majors, the second year of either French or German in the case of Biology and Mathematics majors, and the second year of a foreign language in the case of Physics Majors.

In the Humanities and Social Science Divisions (except Commerce and Secretarial Science), the requirement is the second year of a foreign language on the college level, ordinarily taken in the General College.

PHILOSOPHY—*Required*: Philosophy 55-56. *Recommended*: Psychology 41, Sociology 41, Literature—especially Shakespeare 41.

SPEECH—*Required*: Speech 41. *Suggested Electives*: Reading Aloud 51 and any other General College speech courses, the basic courses in the social sciences and psychology, Shakespeare 41, Structural Art 21.

Since Upper College work in speech embraces the fields of public speaking, debate, dramatics, speech correction, and interpretation, the student should elect a program in General College that will apply directly to the specific interests in the field of speech which he proposes to follow in Upper College.

THE SOCIAL SCIENCE DIVISION

ECONOMICS—*Required*: Economics 41, and 3 hours to be chosen from 42, 44, or 48. *Recommended*: Accounting 21-22, Business Administration 61, Psychology 41-43, Mathematics 21-22, Sociology 41-42, Political Science 41-42.

HISTORY—*Required*: None. *Recommended*: Social Science.

POLITICAL SCIENCE—*Required*, one of the following: American National Government 41, American State and Local Government 42, Comparative Government 43 or American Diplomacy 44. *Recommended*: Social Science.

PSYCHOLOGY—*Required*: Psychology 41. Social Statistics is required either in 2nd or 3rd year. *Recommended*: Psychology 42, 43, Social Science, Biology, Business Administration 61, Philosophy, English, Speech.

SOCIOLOGY—*Required*: Sociology 41-42. *Recommended*: Psychology 41-43, Speech 41, English.

THE NATURAL SCIENCE DIVISION

BIOLOGY—*Required*: Zoology 61-62, Botany 51-52, Inorganic Chemistry 21-22.

PRE-MEDICAL—*Required*: Zoology 61-62, Inorganic Chemistry 21-22, Qualitative Analysis 43, Introductory Organic Chemistry 44, Algebra 21, Trigonometry 22, German 21-22.

CHEMISTRY—*Required*: Inorganic Chemistry 21-22, Qualitative Analysis 43, Elementary Organic Chemistry 44, Algebra 21, Trigonometry 22, Analytics 43, Calculus 45-46.

MATHEMATICS—*Required*: Algebra 21, Trigonometry 22, Analysis 43, Calculus 45-46.

PHYSICS—*Required*: Physics 21-22, 43-44, Algebra 21, Trigonometry 22, Analytics 43, Calculus 45 and 46 or Chemistry 21-22.

THE APPLIED ARTS DIVISION

ART—*Required*: Appreciation of Art 29-30, Design 21-22, Industrial Design 43, Drawing and Rendering 45-46, Modeling 59-60. *Recommended*: Psychology 41-43, Sociology 41, Shakespeare 41.

COMMERCE—*Required*: Accounting 21-22, Business Administration 61, Selling and Advertising 81, Economics 41-48. *Recommended*: Analytical Accounting 43, Economic Geography 54, Typewriting 31, Sociology 41-42, Psychology 41, 62.

HOME ECONOMICS—*Required*: Textiles 21, Clothing 22, General Foods 45-46, Home Economics Orientation 53, Consumer Economics 82. Foods and Nutrition majors take in addition Chemistry 23-24 and Chemistry 55-56.

SECRETARIAL SCIENCE—*Required*: Shorthand Theory 41-42, Typewriting 51-52. *Recommended*: Accounting 21-22 or 41-42, Business Law 51, Business Administration 61, Economics 41-42, Secretarial Procedure 21, Filing and Machine Calculation 26.

INDUSTRIAL MANAGEMENT. For details concerning this curriculum see under Industrial Management in Liberal Arts section.

THE COLLEGE OF ENGINEERING

Students who are definitely planning on taking a course in engineering have a somewhat different group of subjects arranged for them. The full curriculum is listed in the engineering section of the catalog, and should be consulted by all students enrolled in engineering.

THE COLLEGE OF EDUCATION

The curriculum plan for the first two years is given for those students desiring to go into the College of Education. It should be understood that this is suggestive and not rigid. Differences will occur, depending upon the teaching fields for which preparation is being made.

Freshman Year

First Semester		Second Semester	
	Cr. Hrs.		Cr. Hrs.
English 1.....	3	English 2.....	3
Introduction to Social Science 5....	3	Introduction to Social Science 6....	3
Hygiene, Physical and Mental 15..	2	Hygiene, Physical and Mental 16..	2
Elective	6	Elective	6
Military Training 11 (Men).....	1½	Military Training 12 (Men).....	1½
Physical Education 3.....	1	Physical Education 4.....	1

Sophomore Year

First Semester		Second Semester	
	Cr. Hrs.		Cr. Hrs.
Introduction to Humanities 7.....	3	Introduction to Humanities 8.....	3
Introduction to Natural Science 9..	3	Introduction to Natural Science 10	3
General Psychology 41.....	3	Educational Psychology 52.....	3
Introduction to Education 55.....	3	Fundamentals of Speech 76.....	3
Literature	3	Literature	3
Military Training 43 (Men).....	1½	Military Training 44 (Men).....	1½

Further information concerning the requirements for promotion to upper college standing in various divisions of the University may be obtained from the office of the Dean of Students, or from the deans of the several colleges.

REQUIRED COURSES IN GENERAL EDUCATION

1-2. FRESHMAN ENGLISH, ORAL AND WRITTEN. *3 credits each semester.*

Instruction in reading, writing, and speaking the English language. Assigned readings, correlated with the general introductory courses, provide models for analysis and stimulate expression, both oral and written, on the part of the student. During the first semester, this material is primarily expository in character; during the second, the narrative and descriptive methods of reporting experiences are stressed. A review of the principles of English usage, and instruction in taking notes and using the library.

Students who demonstrate exceptionally good preparation in English may go directly into English 2 on the condition that they follow it, in the next semester, with another General College course in English. Students who make A in English 1 may substitute another General College course in English for English 2; students who make B may take another General College course in English *as well as* English 2 in their second semester.

15-16. HYGIENE, PHYSICAL AND MENTAL. *2 credits each semester.*

This course has three major objectives. The first is to assist the student to master certain knowledges and to develop attitudes, habits, and skills which will be effective in enabling him to live at a high level of physical efficiency. The second is to enable him to explore, analyze, and evaluate his abilities, interests, and needs as a sound basis for personal and social adjustments. The third is to assist the student in his other school work. One lecture and one discussion group per week.

3-4. PHYSICAL EDUCATION. *1 credit each semester.*

Required course in Physical Education activity. For description of sections see Physical Education Department section of this catalog.

5-6. INTRODUCTION TO THE SOCIAL SCIENCES. *3 credits each semester.*

The purpose of this course is to give each student an appreciation of, an interest in, and a general comprehension of, the fundamental institutions of modern civilization. It is based upon the thesis of social change and organized primarily around the social, economic, and political problems of our time. It is intended to serve as a terminal course for students who concentrate in other fields, and as a foundation for social science study.

7-8. INTRODUCTION TO THE HUMANITIES. *3 credits each semester.*

The chief aim of the course is to assist the beginning student to understand and appreciate the intellectual and cultural achievements and tendencies of his own civilization and of the past. Text, lecture, and discussion are combined to present a broad survey of western civilization.

9-10. INTRODUCTION TO THE NATURAL SCIENCES. *3 credits each semester.*

A study of how the development of science has affected the course of human life and made modern civilization a possibility. The course begins with the study of man's placing himself in his universe. Many of the great discoveries in science are discussed. Illustrative material is drawn from the biological and physical sciences. The aims are: to encourage the use of objective methods of reasoning, and to develop an appreciation of the contributions made by the great scientists; to give the student a greater knowledge of the fundamental principles of science.

PRE-PROFESSIONAL AND TERMINAL COURSES

SPECIAL TWO-YEAR CERTIFICATE COURSE IN
SECRETARIAL SCIENCE

A special two-year secretarial course (at least 64 semester hours) is offered for those who feel unable to spend more than two years in college.

This curriculum may be modified in the case of students who have had commercial courses prior to entering the University.

First Year

<i>First Semester</i>	<i>Cr. Hrs.</i>	<i>Second Semester</i>	<i>Cr. Hrs.</i>
Shorthand Theory 41.....	3	Shorthand Theory 42.....	3
Typewriting 51.....	2	Advanced Typewriting 52.....	2
English, Oral and Written 1.....	3	English, Oral and Written 2.....	3
Hygiene, Phys. and Mental 15.....	2	Hygiene, Phys. and Mental 16.....	2
Introduction to Social Sciences 5.....	3	Introduction to Social Sciences 6.....	3
Secretarial Procedure 21.....	3	Filing and Machine Calculations 26.....	3
Physical Educ. 3.....	1	Physical Educ. 4.....	1

Second Year

Introduction to Humanities 7.....	3	Introduction to Humanities 8.....	3
Introduction to Natural Science 9.....	3	Introduction to Natural Science 10.....	3
Accounting 21 or 41.....	3	Accounting 22 or 42.....	3
Advanced Shorthand and Transcription 63.....	4	Advanced Shorthand and Transcription 64.....	4
Business Letters 93.....	2	Secretarial Training 74.....	2

PRE-PHYSICAL THERAPY

Admission requirements to schools of physical therapy are:

- A—Graduation from accredited school of nursing or
- B—Graduation from accredited school of physical education or
- C—Two years of approved college training, including satisfactory courses in biology and other sciences. Courses in general physics and chemistry, as well as biology, are highly recommended as preliminary training.

The following two-year program is acceptable to physical therapy schools which take students who have had two years of college work:

FIRST YEAR

<i>First Semester</i>	<i>Cr. Hrs.</i>	<i>Second Semester</i>	<i>Cr. Hrs.</i>
English 1.....	3	English 2.....	3
Hygiene 15.....	2	Hygiene 16.....	2
Social Science 5.....	3	Social Science 6.....	3
Zoology 61.....	4	Zoology 62.....	4
Chemistry 21.....	4	Chemistry 22.....	4
Physical Education 3.....	1	Physical Education 4.....	1

SECOND YEAR

Humanities 7.....	3	Humanities 8.....	3
Psychology 41.....	3	Educational Psychology 52.....	3
Anatomy and Physiology 31.....	5	Normal Diagnosis and Corrective Exercises 115.....	2
Physics 51.....	4	Physics 52.....	4
		Electives.....	3 or 4

A course to be offered in the Division of Adult Education on the junior college level. A suggested course of study not recommended toward a degree for those wishing to carry on recreational work in the community.

EDUCATIONAL RECREATION

	Cr. Hrs.
English 1.....	3
Fundamentals of Speech 76.....	3
Hygiene 15, 16.....	4
Physical Education 3, 4, 45, 46.....	4 - 8
Handicrafts 41.....	2
Story Telling 83 and 84.....	6
Leadership 104.....	3
Psychology 41.....	3
Organization and Administration of Industrial Recreation 69.....	2
or	
Organization and Administration of Municipal Recreation 70.....	2
The balance of the program should be worked out with advisers. Courses will be selected from the following:	
Games for Elementary Grades 132.....	1
Child Psychology 105.....	3
Psychology of Adolescence 106.....	2
Drawing and Rendering 45, 46.....	4
Clay Modeling 59.....	2
Weaving.....	4

NON-DEPARTMENTAL MAJORS

There are available certain courses of study which are non-departmental, including work taken from several departments or divisions. They are:

A—Divisional majors in

- Natural Science
- Social Science
- Humanities

For further details consult the chairman of the appropriate division.

B—The American Civilization major.

C—The Inter American Business major.

For information about these two majors, consult the dean of the College of Liberal Arts.

D—The Occupational Therapy course.

The head of the Art department is the adviser in connection with this course of study.

E—The Industrial Management curriculum.

For details see the chairman of the Applied Arts division or the Professor of Industrial Engineering.

MILITARY SCIENCE AND TACTICS

RESERVE OFFICERS' TRAINING CORPS

COLONEL TURNER M. CHAMBLISS, *Professor*
 CAPTAIN BERNARD F. JOHNSON, *Professor*
 CAPTAIN ROBERT I. CIRALDO, *Assistant Professor*
 FIRST LIEUTENANT JOHN W. HOFFHINES, *Assistant Professor*
 FIRST LIEUTENANT DEXTER MACMULLEN, *Assistant Professor*
 FIRST LIEUTENANT ALLEN WARD, *Assistant Professor*
 MASTER SERGEANT LYLE FISHER, *Assistant Military Instructor*
 MASTER SERGEANT RAYMOND HUGHES, *Assistant Military Instructor*
 STAFF SERGEANT JOHN P. HLAS, *Instructor*

In 1919 the United States Government established at the University of Akron a unit of the Reserve Officers' Training Corps. This unit is of the same type as those established at practically all of the large universities and colleges throughout the country, with the idea of producing trained men for the Officers' Reserve Corps. The instruction is divided into two parts: the basic course of the first two years, required of all freshman and sophomore men who are physically fit; and the advanced course of the last two years, elective for the men who have completed satisfactorily the basic course and the first two years of scholastic work, and who have been selected by the President of the University and the Professor of Military Science and Tactics. The advanced course was discontinued at the end of the spring semester of 1942-43 for the remainder of World War II. The advanced course was reactivated at the beginning of the spring semester of 1945-46.

Transfer students and veterans desiring credit for previous military experience will confer with the military department at the beginning of the semester to ascertain the amount of credit to be given in military science and tactics.

BASIC COURSE

The basic course in R.O.T.C. is required of all men during the freshman and sophomore years, with the following exceptions:

- a. Aliens.
- b. Men physically disqualified.
- c. Men who have been in the regular military or naval service more than one year.
- d. Men who are taking short professional or pre-professional courses not leading to degrees.
- e. Men carrying less than eight hours of work.
- f. Men who present a certificate of having completed forty-eight semester hours of work at another accredited college or university.
- g. Men above the age of twenty-six.
- h. Men who submit written declaration of valid religious or conscientious objections to military service similar to those in effect during the war entitling one to exemption from service.

The work is given three hours per week for the first two academic years. 1½ hours of credit are given each semester.

During this basic course no compensation is paid the student by the government, but uniforms (except shoes) and equipment are issued for his use. Each student is held responsible for loss or damage to government property issued to him. Each student must provide one pair of military pattern russet shoes and brown or tan socks for use with the uniform. Uniforms must be turned in at the completion of each year, or at the time of leaving; they are replaced at the beginning of the next academic year. A deposit of \$5 is required, which is returned when the uniform is turned in.

<i>First Year</i>	Hrs.	<i>Second Year</i>	Hrs.
Dismounted Drill.....	12	Administration	12
Equipment and Clothing.....	1	Application of Military Law.....	5
Extended Order Drill.....	5	Articles of War.....	1
Field Sanitation	2	Associated Arms.....	8
First Aid.....	7	Field Sanitation	2
Formations, Ceremonies, and Processing	24	First Aid.....	4
Map and Aerial Photograph Reading	15	Formations, Ceremonies, and Processing	24
Military Courtesy and Discipline..... (Articles of War)	5	Map and Aerial Photograph Reading	14
Organization of the Army.....	2	Safeguarding Military Information..	2
Personal and Sex Hygiene.....	3	Personal and Sex Hygiene.....	1
Rifle Cal. .30 (Mechanical Training and Marksmanship)	18	Tactical Training and Combar Or- ganization	11
Safeguarding Military Information and Military Censorship	2	Training Management	12

ADVANCED COURSE

This course consists of five hours per week (three hours' credit per semester) during the junior and senior years. The advanced course is open to all students who have satisfactorily completed the basic course or veterans who have been honorably discharged, or transferred to the Enlisted Reserve Corps and relieved from active duty, provided they have been selected by the President of the University and the Professor of Military Science and Tactics. During this course the Government furnishes uniforms (officer type, complete with field overcoat and shoes) and equipment, and also pays a monetary allowance in lieu of subsistence to each student. This allowance will be paid in addition to benefits authorized by the G. I. Bill of Rights. No applicant will be admitted to the advanced course who is less than 19 or more than 26 years of age at the time of admission. Formally enrolled members of the advanced course are exempt from registration, induction, training, or service under the Selective Training and Service Act of 1940, as amended. Upon the satisfactory completion of the advanced course the student will receive an appointment as second lieutenant, Officers' Reserve Corps.

The advanced course, once entered upon, must be completed as a pre-requisite for graduation.

ADVANCED CAMP

Advanced R.O.T.C. camps of six weeks' duration are conducted annually at military reservations designated by the War Department. Students will be required to complete the camp program unless sooner discharged from the R.O.T.C. for the convenience of the Government, and will normally attend immediately after completing the first year advanced course. The pay of the seventh enlisted grade while at advanced camp, and travel pay from the University to and from camp at the rate of 5 cents per mile will be paid each student.

*First Year**Second Year*

	Hrs.	
Army Vehicles and Aircraft.....	6	Schedule to be announced at a later date by the War Department.
Basic Infantry Tactics.....	5	
Classification Procedures and Utilization of Manpower.....	2	
Combined Arms.....	10	
Communications	8	
Current Organization of the Army..	6	
Drill, Ceremonies, and Inspections...	32	
Principles of Leadership.....	5	
Health of Personnel.....	6	
Individual Tactics.....	2	
Interior Guard Duty.....	2	
Map and Aerial Photo Reading.....	16	
Mess Management	4	
Military Courtesy, Discipline, and Customs of the Army.....	2	
Military Instruction	9	
Military Law and Boards of Officers	9	
Principles of Intelligence.....	5	
Reconnaissance and Security.....	2	
R.O.T.C. and National Defense	4	
Supply Management	6	
Unit Administration	13	
Weapons	6	

THE UPPER COLLEGES

BUCHTEL COLLEGE OF LIBERAL ARTS

CHARLES BULGER, PH.D., *Dean*

Buchtel College was founded as a College of Liberal Arts in 1870 by the Ohio Universalist Convention in co-operation with the Honorable John R. Buchtel. It became a part of the Municipal University of Akron (now the University of Akron) December 15, 1913, and is known as Buchtel College of Liberal Arts.

OBJECTIVES OF THE COLLEGE WITH
REFERENCE TO ITS STUDENTS

1. To acquaint them with the world of nature and human life by giving them a survey of the chief fields of knowledge.
2. To train them in the scientific method, and help them form habits of clear thinking.
3. To arouse their intellectual curiosity and stimulate their scholarly growth.
4. To give them the necessary general preparation for post-graduate study; for entering schools of law, medicine, dentistry, and other professions; or for careers in art, music, and other cultural fields.
5. To help them appreciate beauty in all its forms, and thus furnish them with resources for enjoying their leisure hours.
6. To develop and strengthen in them a sense of social responsibility in order that they may have a proper regard for the rights of others, and to prepare them for an active and intelligent citizenship.
7. To help them acquire good manners and develop a moral strength adequate to cope with the various situations in which they find themselves.

DIVISIONS OF THE COLLEGE

Buchtel College of Liberal Arts includes four divisions: Humanities, Social Sciences, Natural Sciences, and Applied Arts.

The allocation of departments and particular fields of study to the several colleges does not mean that election of courses is restricted to students enrolled in a particular college. The student may cross college lines, under proper supervision, should this be necessary to enable him to select the courses best suited to his needs.

SUBJECTS OF INSTRUCTION IN THE DIVISIONS

The departments and subjects of instruction are grouped under the divisions as follows:

HUMANITIES	NATURAL SCIENCES	SOCIAL SCIENCES	APPLIED ARTS
Latin and Greek	Biology	Economics	Art
English	Chemistry	History	Commerce
Modern Languages	Mathematics	Political Science	Home Economics
Music	Physics	Psychology	Industrial Management
Philosophy		Sociology	Secretarial Science
Speech			

OBJECTIVES OF THE HUMANITIES DIVISION

1. To develop in the student an awareness of, and appreciation for, man's cultural heritage in literature, art, music, and philosophy, together with an understanding of the necessity for its preservation and enrichment.

2. To send out into the world men and women who not only can do things but also can understand things; who view the present in its proper relation to the past; who remain hopeful because they have enjoyed an ennobling acquaintance with the aspirations and achievements of the world's great creative artists; who are better citizens because they are thoughtful citizens; who are happier human beings because they can enjoy the use of their own minds.

3. To aid the student in his efforts to express himself clearly and forcefully in his mother tongue.

4. To motivate the student toward independent study so that he may continue to pursue his aesthetic and philosophical interests after he has finished his college work.

5. To offer the student such training in the individual subject fields that he may be able to pursue his chosen study beyond his undergraduate work.

6. To encourage the student to develop latent creative ability.

OBJECTIVES OF THE NATURAL SCIENCE DIVISION

1. To acquaint the student with the various fields of science as an aspect of world culture.

2. To prepare the student for further training in the graduate, professional, and technical schools.

3. To provide that still larger group who either do not desire or are unable to continue their academic training, with such knowledge, techniques, and skills as will enable them to become competent citizens.

4. To make technical service and information available to the city and its industries through the libraries and laboratories of the division.

In order to accomplish these objectives, the division offers courses designed to prepare students for the following fields:

Graduate study in biology, chemistry, mathematics, physics.

The study of medicine.

The teaching of science in high school.

Technical laboratory work in rubber chemistry.

Technical laboratory work in applied physics.
Position as hospital technician.
Expert technical service.

OBJECTIVES OF THE SOCIAL SCIENCE DIVISION

1. To give students cultural and useful information in the fields of economics, history, political science, psychology, and sociology.
2. To prepare students for graduate study in the professions, in public service, and in business, and in so doing to emphasize sound methods of inquiry, fair criticism, and love of truth.
3. To inculcate in students a sense of social responsibility, and a respect for the opinions and rights of others; to equip them with a knowledge of human relationships and with qualities of leadership so that they may function worthily in, and seek to improve, our social order; and to enable them to enjoy human fellowship and to maintain a saving sense of humor in the process of social adjustment.
4. To supply the local community with expert service in the field of social science.

OBJECTIVES OF THE DIVISION OF APPLIED ARTS

1. To give students the necessary preparation for vocations in the fields included in the Division; to encourage general education and an appreciation of cultural values; to provide undergraduate educational programs suitable as a basis for advanced study; to help students in personal development and growth.
2. To encourage the faculty to think in terms of broad educational policy and to provide a means for an understanding of basic problems.
3. To serve the community by providing trained personnel and by being alert to changing community needs.
4. To assist returning veterans in solving their vocational problems and in achieving their vocational objectives.

PROMOTION REQUIREMENTS

In order to be enrolled in a division, the student must have completed, with a quality point ratio of two, 64 semester hours in the General College, including the required courses in general education and such prerequisites as may be prescribed for his field of concentration.

The admission of students to the Upper College is a responsibility of the academic deans in consultation with the Dean of Students and the heads of the departments concerned.

FIELDS OF CONCENTRATION

Each student chooses some field of concentration within the division. These fields of concentration vary, depending upon the student's preparation, interests, and objectives. The chief aim is to have the student pursue, under the guidance of the department head and the divisional chairman, that program of studies which most adequately meets his individual needs. The emphasis is not on any prescribed and inflexible program which all students must take, but rather on the individual student himself and what will best prepare him for his future work.

DIVISIONAL MAJORS

For students who do not desire any narrower field of concentration than the division itself, the following divisional majors are provided:

In Humanities, at least 49 hours in the division, at least 18 hours of which must be in courses of 100 level or above.

In Social Science, irrespective of the introductory courses in general education, each program must include:

- a. At least 54 semester hours in the division. Only courses which count toward the B.A. degree may be included.
- b. At least 18 hours and not more than 21 hours in each of two departments. No hours in excess of 21 in any one department will be accepted for credit unless the student meets requirements of such department for graduation.
- c. At least 9 hours in each of two other departments, or 18 hours in one other department.
- d. At least 24 hours of divisional courses on the upper college level.
- e. At least 24 hours outside the division.

In Natural Science, at least five semester courses on the upper college level. These courses may be taken in two or more departments, if the student has had the necessary prerequisites.

Students choosing divisional majors are required to pass a general final examination in the second semester of the senior year.

AMERICAN CIVILIZATION MAJOR

Students majoring in American Civilization are under the direct supervision of the Dean of the College of Liberal Arts. Those who are considering this major are urged to consult with the Dean of Students as early as possible in the second year. Printed instructions describing the requirements of this field of study are available in the Dean's office.

INTER-AMERICAN BUSINESS MAJOR

For those interested in business with or in Latin America, a special curriculum in Inter-American Business is provided, leading to a bachelor's degree. It includes fundamental business subjects as well as courses in Spanish and in Latin American History and Geography. The program may be adapted for a language other than Spanish.

Students majoring in Inter-American Business are under the supervision of Professor H. M. Doust, chairman of the Applied Arts Division. An outline of this curriculum is available in his office.

DEGREES

The following degrees are granted in the divisions:

The Humanities: Bachelor of Arts.

The Social Sciences: Bachelor of Arts.

The Major in American Civilization: Bachelor of Arts.

The Natural Sciences: Bachelor of Science. (However, at the discretion of the divisional chairman, students majoring in mathematics may be

granted the Bachelor of Arts degree if much of their work is in the humanities or social sciences.)

The Applied Arts: Bachelor of Arts; Bachelor of Science in Art; Bachelor of Science in Business Administration; Bachelor of Science in Secretarial Science; Bachelor of Science in Industrial Management.

REQUIREMENTS FOR GRADUATION

1. A minimum of 128 semester hours, including the work in the General College.
2. A minimum quality point ratio of two in the major field and for all work attempted.
3. The recommendation of the student's major professor.
4. Except in commerce, secretarial science, industrial management, and occupational therapy, completion of the second year of a foreign language on the university level.
5. Exclusive of the required courses in general education in the General College, students are expected to take at least fifty per cent—and it is desirable that they take not more than seventy-five per cent — of their total work for graduation in their major division.

PREPARATION FOR HIGH SCHOOL TEACHING

All Liberal Arts students who wish to prepare for high school teaching must register with the Dean of the College of Education two years prior to the time at which they expect to begin teaching.

Each prospective high school teacher is expected to be prepared to teach in one major and two minor fields, according to the grouping of subjects by the State Department of Education.

Each student will be required to pass the qualifying examination before entering upon practice teaching.

For additional information concerning requirements see College of Education.

Professional requirements and their sequence:

<i>Second Year General College</i>			
First Semester	Cr. Hrs.	Second Semester	Cr. Hrs.
General Psychology	3	Educational Psychology	3
Introduction to Education	3		
(first or second semester)			
<i>First Year Upper College</i>			
Methods	3	Tests and Measurements	2
<i>Second Year Upper College</i>			
Principles of Education	3	Student Teaching	6
—or—		School Management	2
Student Teaching	6	—or—	
School Management	2	Principles of Education	3

THE ARTS-TEACHERS COMBINATION COURSE

A five-year combination Liberal Arts-Education program, leading to the degree Bachelor of Arts and the degree Bachelor of Arts in Education, is offered students preparing for teaching. Students interested in taking such a combination course should confer with the Dean of the College of Education before entering the Upper College.

SUBJECTS OF INSTRUCTION

ART

PROFESSOR DAVIS, ASSISTANT PROFESSOR CABLE,
MRS. ARCHER, MR. ANDREAS, MISS MOCH

Prerequisites in the General College: To enter art as a field of concentration, students should have completed in the General College the following courses in addition to the required courses in general education: Design, 4 credits; Art Appreciation, 4 credits; Industrial Design, 2 credits; Drawing and Rendering, 4 credits; Modeling, 4 credits; Occupational Therapy, 2 credits; and the second year of a foreign language. Courses suggested but not required: Psychology 41-43, Sociology 41, Shakespeare 41.

General Final Examination: Students majoring in art will be required, in the second semester of the senior year, to pass a general final examination in the subject.

Required Courses in the Upper College:

	Cr. Hrs.
History of Art.....	9
Commercial Art.....	4
Graphic Arts.....	4
General Crafts.....	2
Costume or Interior Decoration.....	6
Figure Drawing.....	4
Still Life Painting.....	4
Electives in Art.....	8
	41

Suggested Electives: Ancient and Medieval History, 12 credits; Greek Masterpieces, 4 credits; Drama, 6 credits.

GENERAL COLLEGE

21. DESIGN. *Either semester. 2 credits.*

Basic principles of design and color theory, with adaptation to specific problems.

22. DESIGN. *Second semester. 2 credits.*

Prerequisite, 21. Problems in commercial and advertising design, including suitable adaptation to textiles, wood, metal, and plastics.

29-30. APPRECIATION OF ART. *2 credits each semester.*

Discussion of basic principles of design and color theory and their adaptation to our surroundings and the articles which we use. The development of graphic art and design through the ages.

43. INDUSTRIAL DESIGN. *First semester. 2 credits.*

Prerequisite, 22. Geometrical construction, lettering, orthographic, isometric and cabinet projection, cartography and adaptation of design to present day demands.

45-46. DRAWING AND RENDERING. *2 credits each semester.*

Basic course for training the eye in freehand perspective, composition and representation of still life, figures and landscape through the use of various mediums.

59. CLAY MODELING. *First semester. 2 credits.*

Prerequisite, 22. Modeling in the round and relief simple pottery shapes, tiles, masks, etc.

60. MODELING. *Second semester. 2 credits.*

Prerequisite, 59. Continuation of work in clay modeling, and carding and finishing of wood.

70. OCCUPATIONAL THERAPY. *2 credits.*

Prerequisite, 22. Simple crafts which may be adapted to work with handicapped persons, in recreational or educational institutions.

UPPER COLLEGE

102. GENERAL CRAFTS. *2 credits.*

Prerequisite, 70. More advanced work in general crafts with particular attention given to materials and their limitations.

104. GRAPHIC ARTS. *First semester. 2 credits.*

Prerequisite, 46. Block Printing, Stencil, Provincetown Prints.

105. GRAPHIC ARTS. *Second semester. 2 credits.*

Prerequisite, 104. Acid and Dry Point Etching, Screen Printing.

106-107. WEAVING. *2 credits each semester.*

Prerequisite, 22. Warping and threading of looms; plain and pattern weaving on different types of looms.

108-109. METAL CRAFT. *2 credits each semester. Evening session.*

Prerequisite, 22. Work in copper, brass, pewter, silver, using different methods: hammering, sawing, etching, and stone setting. Making trays, small objects and jewelry.

115-116. STILL LIFE PAINTING. *2 credits each semester.*

Prerequisite, 46. Oil paints and water colors are the mediums used for developing a fine skill in handling these materials and in developing a fine feeling for color and composition.

120-121. SCULPTURE. *2 credits each semester. Evening session.*

Prerequisite, 60. Modeling of figures: animal and human figure, group composition, casting. Finishing in permanent form.

131-132. COMMERCIAL ART. *2 credits each semester.*

Prerequisite, permission of instructor. A practical course in advertising art—layout, lettering, processes of reproduction, materials and mediums.

141-142. ADVANCED COMMERCIAL ART. *2 credits each semester.*

Prerequisite, 132. A continuation of 131-132.

151-152. COSTUME. *3 credits each semester.*

Prerequisite, 22. History of costume and its influence on dress of the present day. 1945-46 and alternate years.

161-162. COSTUME. *2 credits each semester.*

Prerequisite, 22. Evening session. See content 151-152.

171-172. INTERIOR DECORATION. *3 credits each semester.*

Prerequisite, 43. History of traditional types of houses; house plans, elevations, and blue prints; study of interiors and furnishings.

175-176. FIGURE DRAWING. *2 credits each semester.*

Prerequisite, 46. Study of anatomy, action and proportion of the human figure. Fee, \$1.50 each semester. 1946-47 and alternate years.

179. ILLUSTRATION. First semester. 2 credits.

Prerequisite, 176. Psychology of art for children of different ages; making of child's book, lettered, illustrated, and bound. 1945-46 and alternate years.

180. ILLUSTRATION. Second semester. 2 credits.

Prerequisite, 179. Techniques used in fashion, newspaper and other advertising. Story illustration. Making of adult's book, lettered, illustrated, and bound. 1945-46 and alternate years.

181-182. INTERIOR DECORATION. 2 credits each semester.

Prerequisite, 43. Evening session. Same content as 171-172, with less laboratory work.

200. HISTORY OF ART, CLASSICAL AND MEDIEVAL. First semester. 3 credits.

A survey of architecture, sculpture, painting and the minor arts as they developed in Prehistoric, Egyptian, Mesopotamian, Aegean, Greek, Roman, Byzantine, Romanesque and Gothic civilizations.

201. HISTORY OF ART, RENAISSANCE. First semester. 3 credits.

Prerequisite, 200 or 211. A survey of the arts in Italy, Spain, Flanders, Holland, Germany, and England with historical background.

202. HISTORY OF ART, MODERN. Second semester. 3 credits.

Prerequisite, 201 or 212. A survey of the arts of France and America. Study of conditions leading to modern movement and reactions of the present day.

203-204. HISTORY OF ART SEMINAR. 3 credits each semester.

Prerequisites, 202 or 213. A restricted field of study to be selected by the individual or group.

211. CLASSICAL AND MEDIEVAL ART. 2 credits.

Evening session. See 200 for content.

212. HISTORY OF ART, RENAISSANCE. 2 credits.

Prerequisite, 200 or 211. Evening session. See 201 for content.

213. HISTORY OF ART, MODERN. 2 credits.

Prerequisite, 201 or 212. Evening session. See 202 for content.

225-226. SPECIAL PROBLEMS IN ART. 3 credits each semester.

Prerequisite, permission of head of department. Problems of an advanced nature in the field of special interest.

COURSE IN OCCUPATIONAL THERAPY

The purpose of the course is to provide training and instruction to enable students to fulfill the requirements of a registered occupational therapist.

The first two years conform to the regular General College curriculum of the University of Akron, including some technical subjects.

In the junior year theoretical and laboratory training and clinical lectures are under the supervision of a registered occupational therapist.

The senior year consists of clinical training in hospitals under the direct supervision of a registered occupational therapist.

In order to complete the University requirements in four years, twenty-three hours of electives must be taken during summer sessions. These electives should be chosen in fields recommended by the faculty adviser. All work except the hospital training is done at the University of Akron.

CURRICULUM IN OCCUPATIONAL THERAPY

First Year

First Semester		Cr. Hrs.	Second Semester		Cr. Hrs.
English 1	3	3	English 2	3	3
Int. to Social Science 5	3	3	Int. to Social Science 6	3	3
Hygiene 15	3	3	Hygiene 16	3	3
Psychology 41	3	3	Design 22	2	2
Drawing & Rendering 45	2	2	Drawing & Rendering 46	2	2
Design 21	2	2	Electives	4	4
		16			17

Second Year

Literature	3	3	Literature	3	3
Int. to Humanities 7	3	3	Int. to Humanities 8	3	3
General Zoology 61	2*	2*	General Zoology 62	2*	2*
Anatomy & Physiology 31	5	5	Sociology 41	3	3
O. T. General Crafts 70	2	2	O. T. General Crafts 102	2	2
Design 43	2	2	Textiles 21	3	3
		17			16

Junior Year

Kinesiology 124	2	2	Abnormal Psychology 120	3	3
Social Attitudes 42	3	3	Play Production 161	3	3
Public Speaking 41	3	3	Weaving 107	2	2
Weaving 106	2	2	Modeling 60	2	2
Modeling 59	2	2	Theory & Application O. T.	2	2
Clinical Lectures	2	2	Clinical Lectures	2	2
Theory & Application O. T.	2	2	Electives	2	2
Art Appreciation 29	2	2	Art Appreciation 30	2	2
		18			18

Senior Year

†Electives	11	11	Electives	11	11
Graphic Art 104	2	2	Graphic Art 105	2	2
		13			13
Hospital Training	9 months				

BIOLOGY

PROFESSOR KRAATZ, ASSOCIATE PROFESSORS ACQUARONE AND GLICK,
MRS. ROBINSON, MR. VANICA, MISS RASNEOR

Biology major students must secure 36 credits in the department; for some graduate schools more is essential.

Major students must include Zoology 61-62 and Botany 51-52, in the General College. Either can be taken in the freshman year, and the other in the sophomore year, or both in the sophomore year. If one of these is deferred until the junior year, it will be impossible to work in a sequence of advanced courses in that science in the remaining year.

Upper College Courses may be: (1) General Biological, which may include any combination of Upper College biology courses, but including Biology Seminar; (2) Zoological, which must include Biology Seminar, General Genetics, Human Physiology (or General Physiology), and at least two of the following: Invertebrate Zoology, Entomology, Vertebrate Anatomy, Vertebrate Embryology, and Organic Evolution; (3) Botanical, which must include Biology Seminar, Field Botany, Plant Physiology, and General Genetics or Plant Anatomy, or at least one semester of Bacteriology.

Biological Problems is open to seniors, and in exceptional cases to juniors, who desire to work on some definite problems, a type of minor research.

Geology and Conservation of Natural Resources do not count in the Biology Major. They are free electives.

Required work in other departments: Chemistry 21-22 and in some cases a second year, preferably either Organic Chemistry 44 and 107 or Organic Chemistry

*Lecture only.

†At least 6 hours to be chosen from crafts.

55 and Physiological Chemistry 56, but for other biology majors, interested more in social sciences or in meeting teaching requirements, only Chemistry 21-22; German 43-44 or French 43-44; and Psychology 41. Recommended are Physics 51-52, Mathematics 21-22, and Sociology 41.

General Final Examination: All Biology Major and Pre-Medical Course students must take a general final examination covering in a comprehensive way all work taken in the department.

PRE-MEDICAL MAJOR COURSE

<i>First Year</i>			
First Semester	Cr. Hrs.	Second Semester	Cr. Hrs.
English 1.....	3	English 2.....	3
Hygiene, Physical and Mental 15..	3	Hygiene, Physical and Mental 16..	3
Int. to Social Science 5.....	3	Int. to Social Science 6.....	3
Mathematics 21.....	3	Mathematics 22.....	3
Inorganic Chemistry 21.....	4	Inorganic Chemistry 22.....	4
Military Training 11.....	1½	Military Training 12.....	1½

<i>Second Year</i>			
First Semester	Cr. Hrs.	Second Semester	Cr. Hrs.
General Zoology 61.....	4	General Zoology 62.....	4
Qualitative Analysis 43.....	5	Organic Chemistry (El.) 44.....	4
Int. to Humanities 7.....	3	Int. to Humanities 8.....	3
German 21.....	4	German 22.....	4
Military Training 43.....	1½	Military Training 44.....	1½

<i>Third Year</i>			
First Semester	Cr. Hrs.	Second Semester	Cr. Hrs.
Bacteriology 107.....	4	Bacteriology 108.....	4
Organic Chemistry (Int.) 107.....	4	Physics 52.....	4
Physics 51.....	4	German 44.....	3
German 43.....	3	Psychology 41.....	3

<i>Fourth Year</i>			
First Semester	Cr. Hrs.	Second Semester	Cr. Hrs.
Vertebrate Anatomy 155.....	4	Vertebrate Embryology 256.....	4
General Physiology 235.....	3	General Physiology 236.....	3
Physics (Light) 53.....	4	Human Genetics 148.....	2
Quantitative Analysis 105.....	4	Quantitative Analysis 106.....	4

Biological courses listed in third and fourth years may have to be reversed in the schedule because Biology 155, 256, 235, 236, and 142 are given in alternate years.

PRE-TECHNICIANS' COURSE

The registry of Medical Technologists requires a year of hospital laboratory training preceded by a minimum of two years of college. The two-year schedule comprises (1) Absolute requirements: biology, 8 semester credits; bacteriology, 3 semester credits; inorganic chemistry, 8 credits; quantitative analysis, 3 credits; (2) "Highly recommended" courses: physics, 8 credits; organic chemistry, 4 credits.

A three-year curriculum is arranged which includes: (1) the University required general college introductory courses; (2) the above minimum requirements; and (3) such other courses as are found in other pre-technician curricula and are deemed helpful by hospital technicians.

The student can complete four years with the B.S. degree by fulfilling the additional requirements of the biology major.

University courses included in the three-year curriculum are: English 1 and 2, 6 credits; Hygiene 15 and 16, 6 credits; Social Science 5 and 6, 6 credits; Humanities 7 and 8, 6 credits; Algebra 21, 3 credits; Chemistry 21 and 22, 8 credits; Chemistry 43, 5 credits; Chemistry 55 and 56, 8 credits; Physics 51 and 52, 8 credits; Zoology 61 and 62, 8 credits; Bacteriology 107 and 108, 8 credits; Histological Technique 154, 3 credits; Physiology 135 and 136 or 235 and 236, 6 credits.

GENERAL COLLEGE

No credit is given toward graduation for less than a full year's work in 41-42, 51-52, and 61-62.

31. ANATOMY AND PHYSIOLOGY. *5 credits.*

The anatomy of the human body and the functions or processes of all organ systems. Three lectures and two 2-hour laboratory and demonstration periods a week. Required in the nurses' training curriculum.

33. MICROBIOLOGY. *3 credits.*

A survey of the bacteria and other micro-organisms in their relation to mankind. Two lectures and one 2-hour laboratory period a week. Required in the nurses' training curriculum.

35. NATURE STUDY. *3 credits.*

Common plants and animals of this region, their life, habits and interrelations. Adapted to use of teachers of nature study. Some field trips will be made.

41-42. GENERAL GEOLOGY. *4 credits each semester.*

Study of the earth, its materials, its surface features, and its changes during the ages. Three lectures and one 3-hour laboratory period a week. Lab. fee, \$2.50 each semester.

51-52. GENERAL BOTANY. *4 credits each semester.*

The study of plants, their anatomy, physiology, and a survey of plant groups and evolution in the plant kingdom. Required of biology majors. Two lectures and three 2-hour laboratory periods a week. Lab. fee, \$4 each semester.

61-62. GENERAL ZOOLOGY. *4 credits each semester.*

The study of animals, their general characteristics, and a survey of animal groups and an explanation of evolution and heredity. Required of biology and pre-medical majors. Two lectures and three 2-hour laboratory periods a week.

71-72. SANITATION. *3 credits each semester.*

History and principles of sanitary science and practice, including municipal water, sewage, epidemic disease and other health problems. Three lectures a week.

82. CONSERVATION OF NATURAL RESOURCES. *Second semester.*

3 credits.

Survey of the principles and practice of conservation of mineral, plant and animal resources. Three class periods a week. 1946-47 and alternate years.

UPPER COLLEGE

107-108. BACTERIOLOGY. *4 credits each semester.*

Bacteria, their characteristics, growth and relations to man, and the rest of the organisms. Pathogenic bacteria are included. Required of pre-medical students. Two lecture hours and three 2-hour laboratory periods a week. Prerequisite, 61-62, or 51-52 or equivalent, and some knowledge of chemistry. Laboratory fee, \$7.50 each semester; breakage fee, \$5 each semester.

107e-108e. BACTERIOLOGY. *3 credits each semester.*

or Lecture separately, 2 credits each semester.

The lectures are the same as for course 107-108. Laboratory for one credit, one 3-hour period a week, in the Evening Session. Laboratory fee, \$3.75 each semester; breakage fee, \$5 each semester.

113-114. FIELD BOTANY. *3 credits each semester.*

The classification and recognition of plants, principally seed plants of the region. Two lectures and three hours of laboratory a week. Course 51-52 is desirable as background. 1946-47 and alternate years. Lab. fee, \$4 each semester.

215-216. PLANT PHYSIOLOGY. 4 credits each semester.

Water, soil and mineral requirements of plants, and their metabolism, growth and response to stimuli. Two lectures and six hours of laboratory a week. Prerequisites, 51-52 and some knowledge of chemistry. 1945-46 and alternate years. Lab. fee, \$6 each semester.

217. PLANT ANATOMY. First semester. 4 credits.

Structure of cells, tissues and organs of land plants; relation of structure to utilization of plants. Two lectures and six hours of laboratory a week. Prerequisite, 51-52. 1946-47 and alternate years. Lab. fee, \$4.

135-136. HUMAN PHYSIOLOGY. 3 credits each semester.

The physiology or functioning of the human body with special reference to all of metabolism and other fundamental processes. For biology majors, home economics and education students requiring a broad course in human physiology. Two lectures and one 3-hour laboratory period a week. General Zoology 61-62 or equivalent desirable as background. 1945-46 and alternate years. Lab. fee, \$4 each semester.

235-236. GENERAL PHYSIOLOGY. 3 credits each semester.

Physiology principles of the animal organisms. Required of pre-medical students. Prerequisites, 61-62, General and Organic Chemistry. Two lectures and one 3-hour laboratory period a week. 1946-47 and alternate years. Lab. fee, \$4 each semester.

141. INVERTEBRATE ZOOLOGY. First semester. 4 credits.

A study of all invertebrate groups, their classification and anatomy and life history of representative types. Two lectures and two 3-hour laboratory periods a week. 1946-47 and alternate years. Prerequisite, 61-62. Laboratory fee, \$4.

144. GENERAL ENTOMOLOGY. Second semester. 4 credits.

Insects, their nature, structure, life history, and economic importance. Insect orders with representative families and types. Two lectures and 6 hours of laboratory a week. 1946-47 and alternate years. Prerequisite, 61-62. Lab. fee, \$4.

146. GENERAL GENETICS. First or second semester. 3 credits.

Study of the principles of heredity illustrated by plant and animal organisms. Three class periods a week. 61-62 or 51-52 or equivalent desirable as background. 1945-46 and alternate years. Lab. fee, \$1.

148. HUMAN GENETICS. First or second semester. 2 credits.

Study of the principles of heredity as illustrated by the human species, and with attention to eugenics problems. Required of pre-medical majors. Prerequisite, 61-62, but for advanced sociology students without this prerequisite. 1946-47 and alternate years.

151. ORGANIC EVOLUTION. First semester. 3 credits.

History of the evolution concept; fields of evidence of evolution; trends of annual evolution through the ages. Three lectures a week. Prerequisite, 61-62. 1946-47 and alternate years.

154. HISTOLOGICAL TECHNIQUE. Second semester. 3 credits.

The methods of preparation of tissues for microscopical study. One class period and six hours of laboratory a week. Required in pre-technicians' course. Prerequisite, 61-62. Lab. fee, \$6.

155. VERTEBRATE ANATOMY. First semester. 4 credits.

The vertebrate animals and a comparative study of all organ systems from fishes to mammals. Two lectures and two 3-hour laboratory periods a week. Required of premedical majors. Prerequisite, 61-62. 1945-46 and alternate years. Lab. fee, \$10.

256. EMBRYOLOGY OF VERTEBRATES. *Second semester. 4 credits.*

General early embryonic development of vertebrates and relatives, and, chiefly, the more detailed embryology of frog and chick. Two class periods and two 3-hour laboratory periods a week. Required of pre-medical majors. Prerequisite, 155. 1945-46 and alternate years. Lab. fee, \$7.50.

265. BIOLOGY SEMINAR. *First semester. 3 credits.*

Discussions and written reports on biological books and papers from current biological literature. One class period a week. Required of biology major seniors.

267-268. BIOLOGICAL PROBLEMS. *1-3 credits each semester.*

Individual problem work of laboratory type. Open to seniors and, in exceptional cases, to juniors. Two continuous semesters are advisable. Lab. fee, \$2 per credit.

367-368. RESEARCH. *3 or more credits each semester.*

Individual problem work of laboratory type of a more advanced nature. May include thesis work for the master's degree. Open to graduate students. Lab. fee, \$2 per credit.

CHEMISTRY

PROFESSORS COOK AND WHITBY, ASSISTANT PROFESSORS DREISBACH AND FLOUTZ, MR. D'IANNI, MR. LOWDERMILK

To be properly qualified for admission to the prescribed work (listed below) in the Upper College, the student must have completed in the General College the required courses in general education and in addition the following or their equivalent: Algebra and Trigonometry, 6 hours; Analytic and Calculus, 9 hours; Chemistry 21-22, 8 hours; Chemistry 43, 5 hours; Chemistry 44, 4 hours.

Fees: In addition to laboratory fees, a deposit of \$5 for breakage is required in each course.

GENERAL COLLEGE**21-22. GENERAL INORGANIC CHEMISTRY. *4 credits each semester.***

A study of the basic facts and principles of chemistry, the occurrence, preparation, and properties of the elements. Production and properties of the more important compounds with emphasis on inorganic chemistry. Laboratory experiments illustrate the principles studied. No credit is given toward graduation for less than the full year's work. Lab. fee, \$10 a semester.

23-24. INORGANIC CHEMISTRY. *3 credits each semester.*

Designed primarily for students in home economics. The course presents the fundamental laws and theories of chemistry together with a study of the more important elements and their compounds. 1946-47 and alternate years. Lab. fee, \$5 a semester.

25. CHEMISTRY FOR NURSES. *4 credits.*

Planned especially for women taking nurses' training course in hospitals. The course covers the necessary fundamentals in inorganic, organic and physiological chemistry. Lab. fee, \$5.

43. QUALITATIVE ANALYSIS. *First semester. 5 credits.*

Prerequisite, 22. The classwork emphasizes the mathematical aspects of chemical equilibrium. The semimicro method is employed in the laboratory for separation and identification of ions. Lab. fee, \$10.

44. ELEMENTARY ORGANIC CHEMISTRY. *Second semester. 4 credits.*

Prerequisite, 22. A general survey of the field of organic chemistry with particular emphasis on fundamentals. Lab. fee, \$10.

55. ORGANIC CHEMISTRY. *First semester. 4 credits.*

Prerequisite, 24. A course designed especially for students in home economics whose needs are given especial attention. 1945-46 and alternate years. Lab. fee, \$10.

56. PHYSIOLOGICAL CHEMISTRY. *Second semester. 4 credits.*

Prerequisite, 55. Planned as a continuation of 55 for students in home economics. Particular attention is given to the chemistry involved in digestion, absorption, and metabolism. 1945-46 and alternate years. Lab. fee, \$10.

UPPER COLLEGE

<i>Third Year</i>	Cr. Hrs.	<i>Fourth Year</i>	Cr. Hrs.
Introductory Physics 51-52.....	8	Advanced Physics 53 and elective	8
Intermediate Organic 107.....	4	Physical Chemistry 213-214.....	10
Advanced Organic 108.....	4	Special Topics 309.....	3
Quantitative Analysis 105-106....	8	German 43-44.....	6
Chemical Calculations 118.....	2		
German 21-22.....	8		

105-106. QUANTITATIVE ANALYSIS. *4 credits each semester.*

Prerequisite, 43-44. The theory, laboratory technique and calculations of quantitative analysis. Acidimetry and alkalimetry, oxidation and reduction, volumetric precipitation, and gravimetric methods, systematic analysis. The theories and technique are applied to the analysis of common ores, minerals and alloys. Lab. fee, \$10 each semester.

107. INTERMEDIATE ORGANIC CHEMISTRY. *First semester. 4 credits.*

Prerequisite, 44. An intensive study of aliphatic and alicyclic compounds. Lab. fee, \$10.

108. ADVANCED ORGANIC CHEMISTRY. *Second semester. 4 credits.*

Prerequisite, 107. A thorough study of aromatics, heterocyclics, and certain special topics as time permits. Lab. fee, \$10.

118. CHEMICAL CALCULATIONS. *Second semester. 2 credits.*

Prerequisite, 43-44, 105.

131-132. ENGINEERING CHEMISTRY. *See College of Engineering.***133-134. METALLURGY. *See College of Engineering.*****136. CHEMISTRY (Fuels and Combustion). *Second semester. 2 credits.***

See College of Engineering.

137-138. METALLURGY. *See College of Engineering.***213-214. PHYSICAL CHEMISTRY. *5 credits each semester.***

Prerequisites, 106, 107, Physics 52, Math 46. The physical states of matter, thermodynamics, solutions, colloids, equilibrium, the phase rule, thermo-chemistry, chemical kinetics, electrochemistry, atomic and molecular structure, special topics, problems. Laboratory experiments carried on concurrently with the study of principles. Lab. fee, \$8 each semester.

227-228. INTRODUCTION TO RUBBER CHEMISTRY. *2 credits each semester.*

Evening session. Prerequisite, 106-107. A study of crude rubber, latex, vulcanization, physical testing, compounding, accelerators, synthetic rubber, reclaimed rubber. Credit not given for this course and for 327-328.

229. POLYMERS AND POLYMERIZATION. *2 credits.*

Prerequisites, 106, 108, and permission.

250. INDUSTRIAL CHEMISTRY. *Second semester. 2 credits.***307-308. ORGANIC ANALYSIS, QUALITATIVE OR QUANTITATIVE.**

2 credits each semester.

Prerequisites, 106 and 108. Lab. fee, \$8 each semester.

309. SPECIAL TOPICS IN ORGANIC CHEMISTRY. *First semester. 3 credits.*

Prerequisite, 108.

313-314. CHEMICAL THERMODYNAMICS. 2 credits each semester.

Prerequisites, 214 and Calculus. The fundamental theories of thermodynamics and their applications in the chemical problems of equilibrium and stability form the basis of the course. Topics covered include laws of thermodynamics, free energy, entropy, partial molal quantities, ideal and non-ideal solutions, electromotive force, problems, sources of data.

321-322. ADVANCED INORGANIC PREPARATIONS. 2 credits each semester.

Prerequisites, 106, 214. Lab. fee, \$8 each semester.

325. COLLOID CHEMISTRY. Second semester. 2 credits.

Prerequisites, 106, 107. A study of the principles of colloid chemistry. Methods of preparation. A study of the properties and stability of colloids, dialysis, coagulation, aerosols, hydrosols, gels, emulsions, and foams. The emphasis on application.

326. CHEMISTRY OF LATEX TECHNOLOGY. 2 credits.**327-328. CHEMISTRY OF RUBBER TECHNOLOGY. 4 credits each semester.**

Prerequisites, 106, 107. Topics considered include those given under 227-228 with additional material and laboratory requirements. Lab. fee, \$15 each semester. Credit is not given for this course and for 227-228.

329. CHEMISTRY OF PLASTICS. 2 credits.

Prerequisite, permission.

330. CHEMISTRY OF PLASTICS LABORATORY. 1 credit.

Open only to students enrolled for 329. Lab. fee, \$15.

365-366. RESEARCH. 1-3 credits each semester.

Open to properly qualified students. Lab. fee, \$5 per credit.

Courses 313-314, 321-322, and 325 are offered only when the demand warrants.

COMMERCE

PROFESSOR LEIGH, ASSOCIATE PROFESSOR MCKEE, MR. SIMONETTI, MR. POWERS,
MR. CLARKE, MR. MOLES, MR. CARR, MR. FISHPAW, MR. LANTZ

The department of commerce offers professional training to young men and women who plan to enter the fields of industry, trade, finance, or transportation. The curriculum in business administration aims to develop and apply those general fundamentals of economics and administration which are common to all businesses and governmental organizations. The University of Akron, being situated in a great industrial and trade area, is particularly qualified to offer training in the fields of accounting, finance, management, marketing, advertising, and merchandising. By means of lectures, inspection trips, and problems the student is kept in touch with the actual developments in the various phases of commerce.

In addition to the 36 hours specified in the General College requirements, the following specific requirements should be met for admission to the commerce department: Accounting 21-22; Business Administration 61; Selling 81; Economics 41-48. For General College courses recommended but not required, see General College section.

For a degree in business administration, the following additional requirements must be taken during the second or third year: Analytical Accounting 43, Economic Geography 54, Typewriting 31.

The degree of Bachelor of Science in Business Administration will be granted to those students who complete the prescribed curriculum in Business Administration, including two hours of seminar.

THE BUSINESS ADMINISTRATION COURSE

Third Year

First Semester	Cr. Hrs.	Second Semester	Cr. Hrs.
Business Law 141.....	3	Business Law 142.....	3
Marketing 183.....	3	†Production Management 162 or	} 3
Business Finance 171.....	3	†Advertising 185.....	
‡Approved Elective.....	3	Statistics 148.....	4
		‡Approved Elective.....	3

Fourth Year

First Semester	Cr. Hrs.	Second Semester	Cr. Hrs.
Electives in Majors.....	6	Electives in Majors.....	6
Seminar.....	1	Business Policy 268.....	3
		Seminar.....	1

In addition to the particular courses specified above, each business administration student will elect and complete 14 hours, including Seminar, in some major. Five fields of specialization are available to him: namely, Accounting, Finance, Advertising and Marketing, Management, and General Business. The courses applicable and required (starred courses required) toward each major are listed below.

ACCOUNTING

Courses	Cr. Hrs.	Prerequisites
*Accounting 44.....	3	.....Accounting 43
*Cost Accounting 127.....	3	.....Accounting 44
Advanced Cost Accounting 228	6	.....Accounting 44
Auditing 229.....	3	.....Accounting 44
Advanced Accounting 231-232	6	.....Accounting 44
Specialized Accounting Problems		.....Advanced Accounting
236.....	3	229, 231-232
Federal Taxation 233-234.....	3	.....Consent of Instructor
Accounting Systems 230.....	3	.....Consent of Instructor
*Seminar.....	2	

FINANCE

Courses	Cr. Hrs.	Prerequisites
*Money and Banking 48.....	3	.....Economics 41
Economics 208.....	3	.....Business Finance 171
Insurance and Security 158.....	3	.....Economics 41-48
Banking Practice and Manage-		.....Money and Banking 48
ment 176.....	3	{ Money and Banking 48
*Investments 172.....	3	{ Business Finance 171
Security Markets 277.....	3	{ Money and Banking 48
Problems in Finance 279.....	3	{ Money and Banking 48
*Seminar.....	2	{ Business Finance 171

ADVERTISING AND MARKETING

Courses	Cr. Hrs.	Prerequisites
Commercial Art 131-132.....	4	
*Advertising 185.....	3	
Advanced Advertising 186.....	3	.....Advertising 185
Retailing 192.....	3	
Problems in Marketing 293.....	3	.....Marketing 183
Sales Administration 291.....	3	.....Marketing 183
Market Analysis 296.....	3	.....Marketing 293
*Seminar.....	2	

†Majors in management and accounting must take Production Management; majors in finance and marketing must take Advertising; majors in general business must take Production Management and Advertising.

‡The following courses are particularly recommended: Commercial Art, Labor Problems, Public Finance, Business Mathematics, Government and Business, Business Psychology, and Business Correspondence.

*Required courses in the particular major.

MANAGEMENT

Courses	Cr. Hrs.	Prerequisites
*Cost Accounting 127.....	3	.....9 hours of accounting
Personnel Administration IE-154	3	.....Business Administration 61
Industrial Production or Management Problems IE-155 or 156	3	.....Personnel Administration IE-154
Time or Motion Study IE-157-158	3	
Purchasing 189.....	2	.....Business Administration 61
*Sales Administration 291.....	3	.....Marketing 183
*Seminar.....	1	
*Personnel Management 164.....	2	

GENERAL BUSINESS

Courses	Cr. Hrs.	Prerequisites
Cost Accounting 127.....	3	.....9 hours of accounting
Transportation 151 or Foreign Trade 156.....	3	.....Money and Banking 48
Personnel Management 164.....	3	.....Business Administration 61
*Advertising 185.....	3	
Purchasing 189.....	2	.....Money and Banking 48
Problems in Finance 279.....	3	.....Business Finance 171
*Sales Administration 291.....	3	.....Marketing 183
*Seminar.....	2	

GENERAL COLLEGE

21-22. ACCOUNTING. *3 credits each semester.*

Recording of important transactions such as the acquisition of assets and their depreciation, incurring of expenses, purchases and sales; the balance sheet, statement of profit and loss, their construction and use. Required of all Commerce sophomores. No credit is given toward graduation for less than the full year's work.

41-42. SECRETARIAL ACCOUNTING. *3 credits each semester.*

A course designed especially for secretarial science students. However, such students may take either this course or Accounting 21-22.

43. ANALYTICAL ACCOUNTING. *First semester. 3 credits.*

Prerequisite, 22. This course summarizes, develops and analyzes accounting procedure.

44. INTERMEDIATE ACCOUNTING. *Second semester. 3 credits.*

This is a continuation of 43 which is a prerequisite. Graded problems are used to illustrate the capital expenditures and depreciation policies, determination of cost for inventory valuations, installment accounts, etc.

51. BUSINESS LAW. *First semester. 3 credits.*

Designed especially for students in secretarial science.

54. ECONOMIC GEOGRAPHY. *Either semester. 3 credits.*

Climate, land forms, soils, mineral resources, and vegetation and their influence upon economic activity. Required of all Commerce students.

61. BUSINESS ADMINISTRATION. *First semester. 3 credits.*

A survey course in which the business establishment is considered as a unified concern composed of various departments. Required of all commerce sophomores.

*Required courses in the particular major.

81. **SELLING.** *Either semester. 2 credits.*

Examines the characteristics of effective salesmen, the nature of the sales operation, and demonstrates the best methods of selling merchandise or intangibles.

82. **CONSUMER ECONOMICS.** *Second semester. 3 credits.*

UPPER COLLEGE

123. **BUDGETING.** *First semester. 3 credits.*

Prerequisite, 43.

125. **ENGINEERING ACCOUNTING.** *3 credits.*127. **COST ACCOUNTING.** *First semester. 3 credits.*

Prerequisite, 44. General methods of collecting costs of materials, labor, and burden of incorporating them into the books of account.

128. **COST ACCOUNTING AND BUDGETS.** *3 credits.*

A Study of the elementary technique of accounting for costs, covering job order and process cost type of installations. Open to juniors in industrial management. Prerequisite, Engineering Accounting 125.

228. **ADVANCED COST ACCOUNTING.** *Second semester. 3 credits.*

Prerequisite, 127. Alternate years. Analysis and use of standard costs; estimated and uniform cost systems; installation and design of the cost system.

229. **AUDITING.** *First semester. 3 credits.*

Prerequisite, 44. 1946-47 and alternate years. Preparation of accounts for an audit, examination of the books of account, the nature of audits, and the general method of audit procedure.

230. **ACCOUNTING SYSTEMS.** *Second semester. 3 credits.*

Prerequisite, 44. The design and use of accounting forms, the construction of the manual for a wholesale grocery, an automobile agency, and a club.

231-232. **ADVANCED ACCOUNTING.** *3 credits each semester.*

Prerequisite, 44. First semester, partnership and receivership accounting; second semester, consolidation accounting.

233-234. **FEDERAL TAXATION.** *3 credits each semester.*

Prerequisite, 44. Given in alternate years. Federal Income and Excess Profits taxes, Federal Capital Stock tax, Social Security taxes. First semester, individual taxes; second semester, corporate taxes.

236. **SPECIALIZED ACCOUNTING PROBLEMS.** *Second semester. 3 credits.*

Prerequisite, 44. A study of specific industrial and financial accounting, such as banks, building and loans, mines, clubs, hospitals, etc.

141-142. **BUSINESS LAW.** *3 credits each semester.*

Origin of commercial law, operation and discharge of contracts, law of sales, agency, and negotiable instruments, partnerships and corporations.

144. **LAW OF CREDIT AND COLLECTIONS.** *Second semester. 2 credits.*146. **REAL ESTATE LAW.** *Second semester. 2 credits.*148. **STATISTICS.** *Either semester. 4 credits.*

Prerequisite, 6 credits in Economics.

248. **ADVANCED STATISTICS.** *Second semester. 3 credits.*

Prerequisite, 148.

151. **TRANSPORTATION.** *First semester. 3 credits.*

Prerequisite, Economics 41 and 48.

152. **TRAFFIC MANAGEMENT.** *2 credits.*

Prerequisite, 151.

- 153-154. INTERNATIONAL COMMERCE. *2 credits each semester.*
Covers the principles of international trade, balances, distribution machinery, and examines the characteristics and potentials of various foreign markets. Credit will not be given for both Foreign Trade and International Commerce.
156. FOREIGN TRADE. *Second semester. 3 credits.*
Prerequisite, Economics 41 and 48.
158. INSURANCE AND SECURITY. *Second semester. 3 credits.*
Prerequisite, Economics 41 and 48.
162. PRODUCTION MANAGEMENT. *Second semester. 3 credits.*
Prerequisite, 61.
- 163-164. PERSONNEL MANAGEMENT AND RELATIONS. *2 credits each semester.*
Prerequisite, 61. Job analysis, selection and maintenance of a labor supply, placement and promotion, co-operation between employers and employees, and employee participation in management.
268. BUSINESS POLICY. *Second semester. 3 credits.*
Required of all commerce seniors.
171. BUSINESS FINANCE. *First semester. 3 credits.*
Prerequisite, Economics 41 and 48.
172. INVESTMENTS. *Second semester. 3 credits.*
Prerequisite, 171.
174. CREDITS AND COLLECTIONS. *Second semester. 2 credits.*
176. BANKING PRACTICE AND MANAGEMENT. *3 credits.*
Prerequisite, Economics 48. Given only when demand warrants.
277. SECURITY MARKETS. *Second semester. 3 credits.*
Prerequisite, 171.
279. PROBLEMS IN FINANCE. *Second semester. 3 credits.*
Prerequisite, 171.
183. MARKETING. *First semester. 3 credits.*
Prerequisite, Economics 41 and 48. Analyzes the functions of distribution and critically examines the institutions and activities required to move manufactured and agricultural commodities to market. Open to juniors.
185. PRINCIPLES OF ADVERTISING. *Either semester. 3 credits.*
186. ADVANCED ADVERTISING. *Second semester. 3 credits.*
Prerequisite, 185.
189. PURCHASING AND PROCUREMENT. *2 credits.*
Given only when demand warrants.
192. RETAILING. *Second semester. 3 credits.*
Prerequisite, junior standing or consent of instructor.
291. SALES ADMINISTRATION. *Second semester. 3 credits.*
Prerequisite, 183.
293. PROBLEMS IN MARKETING. *Second semester. 3 credits.*
Prerequisite, 183. The various problems involved in determining marketing channels, methods and sales are applied to specific situations. Given in alternate years.
296. MARKET ANALYSIS. *Second semester. 3 credits.*
Prerequisite, 293, or equivalent.
- 297-298. SEMINAR. *1 credit each semester.*
Required of all senior commerce majors.

ECONOMICS

PROFESSOR O'HARA, ASSOCIATE PROFESSOR FORD

Students emphasizing economics in their field of concentration are expected to take at least 24 hours of work in the field of economics. The courses included in this requirement are determined by the needs and interests of the individual student. In order to insure the best possible sequence of courses to meet the objectives of the student, it is important: (1) that the student select his field of concentration as early as possible in his course, and (2) that he consult the head of his department promptly and arrange his tentative program for the remaining years of his course.

The following courses are accepted in meeting the requirements for a degree in economics. Except as indicated, all have as prerequisites Economics 41 and 48, (offered in the General College). In special cases, these prerequisites may be modified.

For General College courses suggested but not required, see General College section.

GENERAL COLLEGE

41. PRODUCTION, PRICES AND INCOME. *Either semester. 3 credits.*

The principles of production, the pricing process or value theory, the distribution of income, and related topics. Prerequisite to all other economics courses.

42. CURRENT ECONOMIC PROBLEMS. *Either semester. 3 credits.*

The problems of employment and wages, monetary and fiscal problems, foreign trade and exchanges, etc. Designed as a survey of the field of economics for those who do not intend to take courses at the upper college level.

44. DEVELOPMENT OF ECONOMIC INSTITUTIONS. *3 credits.*

A study of medieval and modern economic history. The origins and growth of the significant institutions of modern economic life are traced. Offered as demanded.

48. MONEY AND BANKING. *Second semester. 3 credits.*

The development of money, credit and banking, the place of each in the modern economy.

82. CONSUMER ECONOMICS. *Second semester. 3 credits.*

UPPER COLLEGE

151. TRANSPORTATION. *First semester. 3 credits.*171. BUSINESS FINANCE. *First semester. 3 credits.*

Prerequisite, 48.

183. MARKETING. *First semester. 3 credits.*

(Courses 151, 171 and 183 are given in the Commerce Department).

204. MONETARY AND BANKING POLICY. *Second semester. 3 credits.*

Prerequisite, 48. The exercise of control over currency and credit; policies of control by central banks and governments, with special emphasis upon the U. S. Treasury and the Federal Reserve System.

206. LABOR PROBLEMS. *Second semester. 3 credits.*

The position of labor in modern industrial society; problems of the wage system, trade unionism and labor law.

208. PUBLIC FINANCE. *Second semester. 3 credits.*

The facts, principles and theories of public expenditures, taxation, and debt.

210. COMPARATIVE ECONOMICS. *Second semester. 3 credits.*

A comparative study of the advantages and limitations of Capitalism, Socialism, Communism, Fascism, and Co-operation.

215. MONOPOLY IN INDUSTRY. *Either semester. 2 credits.*

Nature and history of monopoly. Forms of monopoly — public utilities, monopoly of resources, trade associations, etc. The economics of monopoly and monopolistic competition. Solutions of the monopoly problem.

241. ANALYTICAL ECONOMICS. *First semester. 3 credits.*

An advanced course in the principles of economics. Emphasis is placed upon the exercise of discrimination in the evaluation of theories and systems.

268. INTERNATIONAL ECONOMIC RELATIONS. *Second semester. 3 credits.*

An analysis of the theory of international trade and the foreign exchanges. Policies of free and controlled trade. Trade monopoly. International monetary problems. World economic planning.

291. ECONOMIC CYCLES. *First semester. 2 credits.*

Types of business fluctuation; methods of measurement and correction; comparative study of theories of the cycle and proposals for correction or elimination.

293. DEVELOPMENT OF ECONOMIC THOUGHT. *First semester. 3 credits.*

The evolution of theory. Relation of the ideas of economists to the contemporary conditions of their times. Special emphasis upon the period from 1776 to 1890.

294. CONTEMPORARY ECONOMIC THOUGHT AND POLICY. *Second semester. 3 credits.*

An extension of 293 but covering the period from Marshall to the present, with special emphasis upon Keynes and his school.

298. SEMINAR IN ECONOMICS. *Second semester. 2 credits.*

Each senior major is required to select a field of intensive study and research, and to submit his results in a well-organized and documented report or thesis.

301. THE ECONOMICS OF JOHN MAYNARD KEYNES. *Second semester. 3 credits.*

Based upon Lord Keynes' GENERAL THEORY, this course compares earlier equilibrium theories with contemporary views and develops the modern views with respect to such relationships as the following: saving and investment; investment and income; income, consumption and saving, etc. In general, dynamic, process analysis is employed instead of the conventional static, partial analysis of older economics.

ENGLISH

PROFESSOR COON; ASSOCIATE PROFESSOR DUFFY; ASSISTANT PROFESSORS VANCE (JOURNALISM), ROBERTS, KEISTER, RAW, BLOOMFIELD, PUTMAN, WHITNEY; MRS. THACKABERRY, MR. CAMPBELL, MRS. D'ANDRE, MISS MOSTENIC

Effective reading and expression are primary objectives in English. As the student acquires reading skill, he is systematically guided to the familiarity with great books expected of cultured persons. Expert interpretations help him to magnify the scope of his experience at the side of those master spirits who yet live in their literary works, and thus to enrich his own spirit. At the same time great literature provides him with more and better things to say, familiarizes him with models of the best composition, enlarges his vocabulary, and acquaints him with varied techniques of expression; these accomplishments he may supplement with special courses in composition. Finally, the student of English should acquire the ability to discriminate between good books and bad, and develop a lifelong taste for the best.

Required Courses: Students majoring in English must take English Literature 65-66 in the General College, preferably as sophomores; in the Upper College they must take twenty-six hours in the department, exclusive of courses in Journalism. English History and three or four years (at the very least, two) of a foreign language are strongly recommended—in order of preference: French, German, Latin.

GENERAL COLLEGE

1-2. ENGLISH, ORAL AND WRITTEN. *3 credits each semester.*
Described in the General College section.

41. SHAKESPEARE. *3 credits.*

Reading of fifteen of Shakespeare's best plays, with explanatory lectures and class discussions. The course provides an introduction to poetry and to drama, and to a laboratory of human experience. Recommended to students who can take but one course in literature.

42. THE MAKING OF MODERN ENGLISH. *Second semester. 3 credits.*

A study of modern English usage, with attention to historical backgrounds and the principles of descriptive grammar.

43. ADVANCED WRITING — IMAGINATIVE. *First semester. 2 credits.*

A continuation of the composition part of Freshman English, for those who need or desire further training, especially in description and narration. Guided analysis of good models for their techniques; practice; and individual help in classes limited to 20 students.

44. ADVANCED WRITING — FACTUAL. *Second semester. 2 credits.*

Similar to English 43, except that the writing is factual, ranging from simple exposition to the familiar essay, the character sketch, and the book review. Recommended for those who will have to write term papers or reports later. Classes limited to 20 students.

45. APPRECIATION OF PROSE. *Either semester. 3 credits.*

46. APPRECIATION OF POETRY. *Either semester. 3 credits.*

50. APPRECIATION OF THE DRAMA. *Either semester. 3 credits.*

Courses 45, 46, and 50 constitute the General College program in appreciation of literature. They may be taken in any order. Prerequisite for any of these courses is normally English 2.

Each unit of the work offers a critical approach to specify literary forms, and the three units combine to provide an introduction to general reading and to an understanding of the contribution made by literature to a well-rounded life. Required readings include both standard literary works and contemporary writings.

47-48. AMERICAN LITERATURE OF THE NINETEENTH CENTURY.

3 credits each semester.

The work of leading American writers is considered with reference to the social, political, and religious thought of the century.

65-66. ENGLISH LITERATURE. *3 credits each semester.*

A survey of literature in English from Anglo-Saxon to modern times. Assigned readings in masterpieces of all periods; explanatory lectures; class discussions. Required of English majors. Preferably taken in the sophomore year.

Journalism

51. NEWS WRITING. *First semester. 3 credits.*
The class meets two periods each week. The third credit is given for laboratory work on the student newspaper.
52. NEWS WRITING. *Second semester. 3 credits.*
A continuation of 51 but may be taken either before or after it.
53. NEWS WRITING AND EDITING. *First semester. 2 credits.*
Evening session only. A comprehensive course covering all phases of newspaper work.
55. HISTORY OF JOURNALISM. *First semester. 2 credits.*
1946-47 and alternate years.
56. FEATURE WRITING. *Second semester. 2 credits.*
This course, offered in both day and evening sessions, considers the writing of the magazine or special feature article.
57. EDITORIAL WRITING. *First semester. 2 credits.*
1945-46 and alternate years. Editorials are considered as a special type of essay.

UPPER COLLEGE

102. SIXTEENTH CENTURY LITERATURE. *Second semester. 3 credits.*
A study of the non-dramatic literature of the Tudor period. 1946-47 and alternate years.
103. SEVENTEENTH CENTURY LITERATURE. *First semester. 3 credits.*
A survey of important tendencies and achievements in English prose and poetry from Bacon to Dryden, exclusive of the drama. 1945-46 and alternate years.
104. EIGHTEENTH CENTURY LITERATURE. *Second semester. 3 credits.*
A survey of the literature of the century with emphasis upon the work of Pope and Johnson. 1945-46 and alternate years.
- 105-106. NINETEENTH CENTURY LITERATURE. *3 credits each semester.*
In the first semester, a study of the English Romantic Movement; in the second, the Victorian period. Emphasis upon major writers. 1946-47 and alternate years.
112. MODERN EUROPEAN LITERATURE. *2 credits.*
Reading and discussion of representative works in translation of the outstanding personalities in Twentieth-Century European literature, especially of those who, like Proust, Mann, Kafka, and Malraux, have become as well known in America and England as in their native countries.
- 113-114. THE ENGLISH BIBLE AS LITERATURE. *3 credits each semester.*
Extensive readings in the Bible with reference to literary values. First semester: the Old Testament, exclusive of the Wisdom Books. Second semester: the Wisdom Books and the New Testament. 1946-47 and alternate years.
- 119-120. AMERICAN LITERATURE. *3 credits each semester.*
A course in the history of American thought with emphasis distributed among literary, political, social, and economic materials. First semester: Colonial period and period of early nationalism. Second semester: Nineteenth Century.
- 121-122. ENGLISH FICTION: DEVELOPMENT OF THE NOVEL. *3 credits each semester.*
Reading and discussion of the chief English novels, principally from the points of view of technique and aesthetics, but with due attention to psychological, historical, and sociological values. First semester: DeFoe to Dickens; second semester, Eliot to Huxley.

143. **ADVANCED WRITING WORKSHOP — FACTUAL.** *First semester.*
2 credits.

Prerequisite, 43, 44, or permission. The writing of articles, essays, and other factual compositions at a level above that of English 44, but otherwise similar to that course. The class meets once weekly for two hours, and is limited to 15 students.

144. **ADVANCED WRITING WORKSHOP — IMAGINATIVE.** *Second semester.*
2 credits.

Prerequisite, 43, 44, or permission. Similar to English 143, except that students write stories, plays, poetry, according to their needs and desires. The class meets once weekly for two hours, and is limited to 15 students.

162. **HISTORY OF THE ENGLISH LANGUAGE.** *Second semester. 3 credits.*

A study of the development of the English language from the Anglo-Saxon period to the present, with emphasis on its history in America. Offered in 1945-46.

201. **CHAUCER.** *First semester. 3 credits.*

A study of The Canterbury Tales as one of the Masterpieces of English poetry and as a reflection of medieval life.

203-204. **WORLD DRAMA.** *3 credits each semester.*

The story of the drama from ancient Athens to modern Broadway in plays of masters from Aeschylus to Shaw and Sherwood. Through the reading of a number of the world's most enduring plays, the course aims at a knowledge of the development of the English and American drama, and its enrichment through classical and continental influences.

205-206. **ANGLO-SAXON.** *3 credits each semester.*

A study of the language and literature of the Anglo-Saxon period. The second semester is devoted to the study of Beowulf. 1946-47 and alternate years.

207. **MIDDLE ENGLISH.** *3 credits.*

A study of the language and literature of the eleventh to the fifteenth centuries, exclusive of Chaucer.

209. **SHAKESPEARE.** *Second semester. 3 credits.*

A study of three each of the greatest comedies, histories, and tragedies.

212. **MILTON.** *Second semester. 2 credits.*

Emphasis upon Paradise Lost and Samson Agonistes. 1945-46 and alternate years.

231-232. **SEMINAR.** *Either or both semesters, with a total of 2 credits.*

Special studies, with instruction in the methods of literary research.

401. **RESEARCH.** *1 to 3 credits.*

Writing of a thesis for the Master of Arts degree.

Journalism

153-154. **EDITING.** *2 credits each semester.*

Prerequisite, News Writing 51-52 or the equivalent. Copyreading, headline writing, proofreading and makeup are studied.

HISTORY

PROFESSOR BALDWIN, MISS CAINE

General Final Examination: In order to be recommended for a degree, students emphasizing history in the Division of Social Sciences will be required to pass a general final examination covering Historiography and four of the following fields: Ancient, Medieval, European, Modern European, American, American Colonial.

GENERAL COLLEGE

41. AMERICAN HISTORY THROUGH THE CIVIL WAR. *First semester. 3 credits.*

A general course in American history beginning with the period of Exploration and Discovery and continuing through the Civil War.

42. AMERICAN HISTORY SINCE THE CIVIL WAR. *Second semester. 3 credits.*

A continuation of 41. The Reconstruction period following the Civil War to the present date.

43. ORIENTAL AND GREEK CIVILIZATION. *First semester. 3 credits.*

A study of the development of Oriental and Greek civilizations, and especially of the significant developments of Greek political and historical thought, art and ideals.

44. ROMAN CIVILIZATION. *Second semester. 3 credits.*

A study of Roman experience, historical, political, and cultural, from the rise of Rome to early Christian times.

45-46. MODERN EUROPEAN HISTORY. *3 credits each semester.*

Europe from the Protestant Reformation to the present. The course is divided at 1815. An introductory course.

49. MEDIEVAL HISTORY. *Either semester. 3 credits.*

The age of the beginning of West-European history. Some consideration is given to the inheritance from Judaeo-Christian and Classical civilizations.

UPPER COLLEGE

125. AMERICAN FRONTIER. *First semester. 3 credits.*

1945-46 and alternate years. The development of successive frontiers in the United States and their influence upon the main stream of American history.

151-152. ENGLISH HISTORY. *3 credits each semester.*

In the first half, the emphasis is on the development of the parliamentary constitution; in the second half, upon the growth of the British Empire. The course is divided at 1660.

161. LATIN AMERICAN HISTORY. *Second semester. 3 credits.*

Physical features, the early civilization, and the colonial period will be given brief consideration. The achievement of independence and the rise of the separate states will be covered. Emphasis will be placed on international relations, especially relations between the United States of America and the Latin American countries.

217. EARLY MEDIEVAL CIVILIZATION. *First semester. 3 credits.*

The development of ecclesiastical and feudal institutions.

218. LATER MEDIEVAL CIVILIZATION. *Second semester. 3 credits.*

The rise of plural sovereignties and the birth of the lay spirit in the Fourteenth and Fifteenth centuries.

221. AMERICAN COLONIAL HISTORY. *First semester. 3 credits.*

1946-47 and alternate years. An advanced course designed to give the student an intimate knowledge of the social, economic, and political life of the American colonies.

222. FOUNDATIONS OF AMERICAN NATIONALITY. *Second semester. 3 credits.*
1946-47 and alternate years. This course begins with the Peace of Paris, 1783. It covers the period of the Confederation, the Constitutional Convention, 1787, the problems of the early years of the republic, Jeffersonian and Jacksonian Democracy.
223. UNITED STATES IN THE LATER NINETEENTH CENTURY (1865-1900). *First semester. 3 credits.*
1945-46 and alternate years. A consideration of the social and economic forces which dominated American life in the post-Civil War period and their influence upon the political history of the nation.
224. RECENT UNITED STATES. *Second semester. 3 credits.*
1945-46 and alternate years. A detailed study of American history in the Twentieth century with emphasis on the period after 1918 and the New Deal.
241. FRENCH REVOLUTION. *First semester. 3 credits.*
The rise and fall of Jacobinism; Reign of Terror and Democratic Empire.
242. HISTORIOGRAPHY AND HISTORICAL METHODOLOGY. *Either semester. 3 credits.*
This course aims to provide the student with a knowledge of the history of historical writing, especially in Western Europe and in the 19th and 20th centuries, and to give some practical experience in the use of the various arts and auxiliary sciences used by historians. Prerequisite, 12 credit hours in history.
245. EUROPE. 1870-1919. *First semester. 3 credits.*
1946-47 and alternate years. The making of the First World War.
246. RECENT EUROPE. *Second semester. 3 credits.*
The "Long Armistice" and the Second World War.
251. THE DEVELOPMENT OF MODERN RUSSIA. *3 credits.*
Factors shaping present society in the Soviet Union. Political, economic, and social changes, particularly since the Revolution, contrasted with developments in other countries. The emergence of a new civilization and a world power.
261. CHINA AND THE FAR EAST. *3 credits.*
After sketching the history of Classical China, this course surveys the history of China from the acceptance of Buddhism to the present. Manchu and Japanese imperialism, as well as China's relations with the western world, will receive special attention.
412. INDIVIDUAL READING AND RESEARCH.
Open only to those who have completed an undergraduate major, or at least 24 hours in history, and have received special permission from the chairman of the department. Not more than 3 credits will be given in any one semester.

HOME ECONOMICS

PROFESSOR WILSON, ASSISTANT PROFESSOR SMITH, MISS MARY WILSON,
MISS WOOD, MISS DAVISON

Home Economics is a program of studies based on sound fundamental training in the physical, biological, and social sciences.

For subjects that home economics majors must take in the General College, see General College section.

Three majors in home economics are offered:

Foods and Nutrition Major, planned for those students whose professional interest may point to such work as that of food analyst, nutritionist, dietitian, institutional manager, or food demonstrator. This field offers a rich opportunity to men as well as to women.

Clothing or Textile Major, for students who wish to prepare themselves to follow some line of clothing work in the commercial field. Students may begin work on this major in the freshman year.

General Home Economics Major, a non-professional major planned for students who wish a broad cultural background with the emphasis on effective home living.

Following are the home economic subjects required in the Upper College for the respective majors:

FOODS AND NUTRITION

Third Year

First Semester	Cr. Hrs.	Second Semester	Cr. Hrs.
Advanced Foods 115.....	3	Advanced Foods 116 or Quantity	
Nutrition in Health 119.....	3	Cookery 216.....	3
		Nutrition in Disease 120.....	3

Fourth Year

Child Development 65.....	3	Institutional Management 212....	3
Home Economics Education 151	3		

TEXTILES AND CLOTHING

Third Year

	Cr. Hrs.		Cr. Hrs.
Advanced Clothing 105.....	3	Advanced Clothing 106.....	3
		Home Management 62.....	3

Fourth Year

Advanced Textiles 107.....	3	Advanced Textiles 108.....	3
Child Development 65.....	3	Selection of House Furnishings 58	3
Historic Costume 117.....	3		

GENERAL COURSE

Third Year

	Cr. Hrs.		Cr. Hrs.
Nutrition in Health 119.....	3	Nutrition in Disease 120.....	3
Advanced Foods 115.....	3	Home Management 122.....	3

Fourth Year

Child Development 65.....	3	Selection of House Furnishings 58	3
Household Equipment 215.....	3	Advanced Clothing 106.....	3
Advanced Clothing 105.....	3		

GENERAL COLLEGE

21. TEXTILES. *First semester. 3 credits.*

A study of the source, manufacture and characteristics of the textile fibers used in clothing and house furnishings, with special emphasis on the factors which determine the wearing quality, use and price of these fabrics.

22. CLOTHING SELECTION AND CONSTRUCTION. *Second semester. 3 credits.*

The selection of individual wardrobes; social, economic and hygienic factors of clothing; care and repair of clothing. Two recitations and one three-hour laboratory.

41. ELEMENTARY FOODS AND NUTRITION. *Evening session. 3 credits.*

This is a basic course in foods for those persons, not majors, who want a fundamental understanding of the preparation of foods for family use. One hour lecture, three hours laboratory. Fee, \$6.

42. ELEMENTARY FOODS AND NUTRITION. *Evening session. 3 credits.*

This course covers the essentials of an adequate diet with emphasis on the selection of the right food in sufficient amounts to meet the requirements of the family group. Two hours lecture, two hours laboratory. For non-majors. Fee, \$2.

43. FOODS AND NUTRITION. *For student nurses. 3 credits.*

This course combines the study of principles of food preparation with that of diet in normal nutrition. Two hours lecture, two hours laboratory. Lab. fee, \$6.

45. GENERAL FOODS. *3 credits.*

A scientific study of food production, selection and preparation. Four hours laboratory, one hour lecture. Laboratory fee, \$6.

46. GENERAL FOODS. *Second semester.*

Planning and serving meals on different cost levels; a scientific study of food preservation. One hour lecture, four hours laboratory. Prerequisite, 45. Fee, \$6.

53. HOME ECONOMICS ORIENTATION. *First semester. 2 credits.*

History and development of home economics in the field of women's education; study of the different fields of home economics.

58. SELECTION OF HOUSE FURNISHINGS. *Second semester. 3 credits.*

A study of the art principles which are fundamental to the satisfactory selection and arrangement of house furnishings. Problems in the selection of linens, china, glass and silver will be considered.

62. HOME MANAGEMENT. *Second semester. 3 credits.*

Consideration of the management of time, energy, and money in the home; purchase and use of equipment; modern housing problems. Fee, \$1.

65. CHILD DEVELOPMENT. *First semester. 3 credits.*

A study of the physical, social, mental and emotional development of the child from infancy through adolescence. Two hours lecture, two hours laboratory. Fee, \$2.

UPPER COLLEGE

105-106. ADVANCED CLOTHING. *3 credits each semester.*

Study of commercial patterns; designing of costumes; tailoring, millinery, restyling and repairing of clothing. Two recitations, three hours laboratory.

107-108. ADVANCED TEXTILES. *3 credits each semester.*

A study of the construction, color and design of such materials as furs, laces, Oriental rugs, tapestries, brocades, India prints, etc. Fee, \$2 each semester.

115-116. ADVANCED FOODS. *3 credits each semester.*

Prerequisite, 45-46. A study of cookery of the nations with an opportunity to prepare and serve foreign and regional foods. Food demonstrations are given.

The second semester is a study of experimental cookery. Individual and group experiments are made. Fee, \$7.50 each semester.

117. HISTORIC COSTUME. *First semester. 3 credits.*

A study of costume from the time of the Egyptians to the present, with emphasis on the social, economic and religious factors influencing costume.

119. NUTRITION IN HEALTH. *First semester. 3 credits.*

Fundamental problems of nutrition based upon the nutritive requirements of man. Two hours lecture, two hours laboratory. Fee, \$2.

120. NUTRITION IN DISEASE. *Second semester. 3 credits.*

The use of diet in the prevention and treatment of diseases. Two hours lecture, two hours laboratory. Fee, \$2.

121. FIELD WORK IN HOME ECONOMICS. *3 credits.*

A course providing for additional laboratory or apprentice experience in a specialized field of home economics. Open to seniors.

- 151. HOME ECONOMICS EDUCATION. *First semester. 3 credits.*
Organization of home economics in the secondary schools.
- 212. INSTITUTIONAL MANAGEMENT. *Second semester. 3 credits.*
A discussion course in the standards for good food service and the facts to be considered in food service; food purchasing, time, labor, materials, cost, equipment, and goodwill.
- 215. HOUSEHOLD EQUIPMENT. *First semester. 3 credits.*
A lecture and laboratory course in the study, selection, care, and use of hand, gas, kerosene, and electric household equipment. Fee, \$2.
- 216. QUANTITY COOKERY. *Second semester. 3 credits.*
A laboratory course in the preparation of all types of food, the care of equipment and utensils, the layout of different types of food preparation and service centers. Fee, \$5.

INDUSTRIAL MANAGEMENT

PROFESSOR MCCLURE

The purpose of this curriculum is to give those individuals, with the ability and desire to advance to managerial positions in industry, training in basic management skills and knowledge. The content of the courses will center on fundamental principles with application to practical problems. Satisfactory completion of the 128 hours of required work leads to a degree of Bachelor of Science in Industrial Management.

CURRICULUM IN INDUSTRIAL MANAGEMENT

<i>First Year</i>			
First Semester	Cr. Hrs.	Second Semester	Cr. Hrs.
Psychology 41.....	3	Psychology 62.....	3
English 1.....	3	English 2.....	3
Hygiene 15.....	3	Hygiene 16.....	2
†*Drawing Interpretation & Sketching 20.....	1	†*Industrial Process 22.....	2
R.O.T.C. 11.....	1½	R.O.T.C. 12.....	1½
Int. to Soc. Science 5.....	3	Int. to Soc. Science 6.....	3
<i>Second Year</i>			
Int. to Natural Science 9.....	3	Int. to Natural Science 10.....	3
Int. to Humanities 7.....	3	Int. to Humanities 8.....	3
Economics 41.....	3	†*Indus. Org. & Mgt. 47.....	3
R.O.T.C. 43.....	1½	R.O.T.C. 44.....	1½
Business Administration 61.....	3	Money & Banking 48.....	3
Electives.....	2	Elective.....	3
<i>Third Year</i>			
†*Indus. Plants Layout & Materials Handling 101.....	3	Motion & Micromotion Study 158....	2
†*Quality Control (Inspection) 105.....	2	†*Production Planning & Inventory Control 103.....	3
Time Study 157.....	2	†*Safety Engineering 107.....	2
†**Engineering Accounting 125.....	3	Statistics 148.....	4
Electives.....	5	†**Cost Accounting and Budgets 128....	3
Labor Problems 206.....	3		14
	18		
<i>Fourth Year</i>			
†*Maintenance of Plant & Equipment 109.....	3	Purchasing 189.....	2
Business Law 141.....	3	Business Law 142.....	3
Personnel Adm. & Rel. 163.....	2	Personnel Adm. & Rel. 164.....	2
Marketing 183.....	3	†Industrial Management Prob. (Seminar and Research) 256.....	3
Electives.....	6	Electives.....	7

*For description see Industrial Engineering department.
 **For description see Commerce department.
 †Not credited in any other department toward a degree from the College of Liberal Arts.

LATIN AND GREEK

PROFESSOR YOUNG

Required Courses for majors: in the Upper College, Latin and Greek Masterpieces, Classical Seminar.

Major: Twenty-three hours of Latin.

General Final Examination: Students majoring in this department are subject to a general final examination in their senior year to test their achievement in their chosen field of study.

GENERAL COLLEGE

At least two units of high school Latin are required in order to enter Latin 21. Students presenting four units for admission are expected to enroll in Course 43; those presenting three units should consult the instructor.

21. CICERO: LETTERS. *First semester. 3 credits.*
22. PLINY: LETTERS AND NEPOS: LIVES. *Second semester. 3 credits.*
Prerequisite, 21, or high school equivalent.
43. OVID: METAMORPHOSES. *First semester. 3 credits.*
Prerequisite, 22, or high school equivalent.
44. PLAUTUS: MOSTELLARIA, AND APULEIUS: GOLDEN ASS. *Second semester. 3 credits.*
Prerequisite, 43, or high school equivalent.
- 21-22. ELEMENTARY GREEK. *4 credits each semester.*
Given on sufficient demand.

ADVANCED GREEK will be given on sufficient demand.

99. CLASSICAL MYTHOLOGY. *Second semester. 3 credits.*

A study of the legends of ancient Greece and Rome, and of their rebirth in the arts of succeeding ages down to modern times.

UPPER COLLEGE

Prerequisite to the following courses, 44, unless otherwise specified.

103. PLAUTUS: MENAECHEMI, AND MARTIAL: EPIGRAMS. *First semester. 3 credits.*
104. LUCRETIUS: DE RERUM NATURA, AND TACITUS: AGRICOLA. *Second semester. 3 credits.*
105. HORACE: ODES. *First semester. 3 credits.*
106. VERGIL: AENEID, AND JUVENAL: SATIRES. *Second semester. 3 credits.*
107. CATULLUS, AND VERGIL: GEORGICS. *First semester. 3 credits.*
108. LATIN EPIGRAPHY, AND SUETONIUS: LIVES OF CAESARS. *Second semester. 3 credits.*
- 109-110. LATIN PROSE COMPOSITION. *1 credit each semester.*
Indispensable for prospective graduate students and candidates for teaching positions.
111. SELECTIONS FROM MEDIEVAL LATIN, AND SELECTIONS FROM LATIN NOVELS. *Second semester. 3 credits.*

112. CLASSICAL SEMINAR. *Second semester. 1 credit.*

A survey of the major contributions of classical culture to succeeding ages. Prerequisite, senior rank. Required for majors.

114. ROMAN PRIVATE LIFE. *3 credits.*

An historical study of the ancient Romans at home and abroad, at work and at play, their religion, thoughts about life and death, and their physical environment. No prerequisite.

149-150. GREEK MASTERPIECES IN ENGLISH TRANSLATION. *2 credits each semester.*

An intensive study of the significance, historical environment and tradition of a few great masterpieces of Greek literature. Required for majors. No prerequisite.

152. LATIN MASTERPIECES IN ENGLISH TRANSLATION. *Second semester. 3 credits.*

An intensive study of the significance, historical environment and tradition of the great authors of Latin literature. No prerequisite. Required for majors.

231-232. INDIVIDUAL READING. *1 to 3 credits each semester.*

MATHEMATICS

PROFESSOR SELBY, ASSOCIATE PROFESSOR LIPSCOMBE, ASSISTANT PROFESSORS
TABLER AND MAUCH, MR. MONTGOMERY, MR. MCANLIS, MR. JOHNSON

All students whose work of concentration lies in the Division of Natural Science, except those in the Biological Sciences, must have taken in the General College Mathematics 21, 22, 43, 45-46. Pre-medical students, however, must take 21, 22, and students taking the Pre-technicians' course must take 21.

Students preparing to teach Mathematics, or who expect to take some engineering courses, must take Physics.

Students majoring in Mathematics must take at least 24 hours of Mathematics. Included in these hours must be course 204, and at least one other 3-hour upper college course.

GENERAL COLLEGE

19. ALGEBRA. *Either semester. 2 credits.*

Open only to students who have had one year or less of high school algebra or to persons who have been out of school for some time. If taken prior to Algebra 21, credit will be allowed only to those students whose high school transcripts show at most one year of high school algebra. This course cannot be counted toward a major, nor substituted for Algebra 21.

21. COLLEGE ALGEBRA. *Either semester. 3 credits.*

A review of algebra through quadratics, and a study of progressions, variation, binomial theorem, theory of equations, permutations, combinations.

22. TRIGONOMETRY. *Either semester. 3 credits.*

Prerequisite, High School Algebra. Solution of triangles, formulas for half angle, double angle, and sum and difference of angles for use in the Calculus.

23. SPHERICAL TRIGONOMETRY. *Either semester. 2 credits.*

Prerequisite, 22. Study of right and oblique spherical triangles, and numerous applications to aviation and astronomy.

31. MATHEMATICS OF NAVIGATION AND AVIATION. *First semester.*

2 credits.

Prerequisite, 22. Solution of problems in navigation and aviation which require the use of mathematics; study of maps, charts, tables, and use of computers.

43. ANALYTIC GEOMETRY. *First semester. 3 credits.*

Prerequisite, 21, 22. This course shows how geometrical properties of curves and surfaces may be studied by the aid of algebra and coordinates of different kinds.

45. DIFFERENTIAL CALCULUS. *First semester. 3 credits.*

Prerequisite, 43, or concurrently with 43. The rates of change of variable quantities with respect to the variables; development of formulas and application to practical problems; maxima and minima, time rates, curvature, etc.

46. INTEGRAL CALCULUS. *Second semester. 3 credits.*

Prerequisite, 45. Integration, definite integral; reduction methods of integration; methods of approximation; application to areas, volumes, moments of inertia, center of pressure.

57. SOCIAL STATISTICS. *3 credits.*

This course combines a review of basic mathematics with the fundamentals of statistics. Required of all students planning to major in any department of the Social Science Division. Credit will not be granted for this course and for Statistics 148.

58. BUSINESS MATHEMATICS. *Second semester. 3 credits.*

Prerequisite, 21. Simple and compound interest, annuities, stocks and bond evaluation, depreciation, building and loan associations.

UPPER COLLEGE

Courses 104, 121, 125, 126 and 201 are offered only when the demand warrants.

104. HISTORY OF MATHEMATICS. *Second semester. 3 credits.*

Prerequisites, 19 or 21-22. The origin and development of the elementary mathematical ideas and processes.

121. MATHEMATICS OF INSURANCE. *First semester. 3 credits.*

Prerequisites, 21, 58. This course develops formulas for finding the premiums of the most important policies of life insurance, the valuation of these policies, the construction and use of the mortality tables.

125-126. ASTRONOMY. *2 credits each semester.*

Prerequisites, 19 or 21-22. A study of the most important of the celestial phenomena and the instruments by which this study is accomplished. Given 1946-47 and alternate years.

201. ADVANCED CALCULUS. *3 credits.*

Prerequisite, 46. Partial differentiation, multiple integrals, line and surface integrals, maxima and minima of functions of several variables, with applications to geometry and mechanics. 1945-46 and alternate years.

204. DIFFERENTIAL EQUATIONS. *3 credits.*

Prerequisite, 46. A study of the most important ordinary and partial differential equations, and their numerous applications in the fields of science.

205. THEORY OF EQUATIONS. *First semester. 3 credits.*

Prerequisite, 45. Determinants, solution of linear systems of equations, primitive roots of unity, methods of solving higher degree equations by Newton and Horner, theorems of Descartes.

206. HIGHER GEOMETRY. *Second semester. 3 credits.*

Prerequisite, 45. A continuation of 43; uses the methods of calculus and of projective geometry to study the properties of curves and surfaces. 1946-47 and alternate years.

207. HIGHER ALGEBRA. *First semester. 3 credits.*

Prerequisite, 45. The multinomial theorem, series, partial fractions, undetermined coefficients, inequalities, choice and chance.

213-214. ADVANCED ENGINEERING MATHEMATICS. *1 credit each semester.*

Prerequisite, 46. Vector methods, approximation methods, differential equations, with applications to problems of engineering.

MODERN LANGUAGES

PROFESSOR BULGER, ASSOCIATE PROFESSOR REED,
ASSISTANT PROFESSOR INTERNOSCIA, MR. HERRBACH, MISS MARTY,
MRS. MONDL, MRS. ARNSTEIN, MRS. METZ

Students who concentrate in foreign languages at the upper level are required to take, toward the end of the senior year, a general final examination in the language particularly emphasized.

Major: At least 24 hours in one language.

Credit for college work in Modern Languages is indicated by the following table:

High School Credits	Course Entered in College	Credit Given
1 unit	First year	Full credit
	*Second year	Full credit
2 units	Second Year	Full credit
	First Year	Half credit
	†Third Year	Full credit
3 units	Second Year	Half credit
	First Year	No credit
4 units	Third Year	Full credit
	Second Year	No credit

GENERAL COLLEGE

21-22. FIRST YEAR FRENCH. *4 credits each semester.*

Thorough drill in pronunciation and grammar; reading of short stories and simple plays.

43-44. SECOND YEAR FRENCH. *3 credits each semester.*

Prerequisite, 21-22. Intermediate grammar and composition; 19th Century stories; biography of Mme. Curie; two plays of Moliere.

*Superior students may enter the second year course.

†Superior students may enter the third year course.

- 21-22. FIRST YEAR GERMAN. *4 credits each semester.*
Reading, speaking, and writing German.
- 43-44. SECOND YEAR GERMAN. *3 credits each semester.*
Prerequisite, 21-22. Review of grammar; practice in reading, speaking, and writing German.

- 21-22. FIRST YEAR SPANISH. *4 credits each semester.*
Pronunciation, dictation, elements of grammar, translation into English and into Spanish, and simple conversation. In the second semester comprehension and conversation are intensified and outside reading is begun.
- 43-44. SECOND YEAR SPANISH. *3 credits each semester.*
Prerequisite, 21-22. Review of grammar, gradually intensified reading, translation and conversation. Independent reading of one novel each semester. In the latter part of the second semester some attention is given to Spanish history and culture.

UPPER COLLEGE

- 101-102. THIRD YEAR FRENCH: THE FRENCH NOVEL. *2 credits each semester.*
Prerequisite, 44. The French Novel of the 19th Century. Resumes in French.
- 103-104. FRENCH COMPOSITION. *1 credit each semester.*
Prerequisite, 44. Advanced composition based on French texts.
105. FRENCH PHONETICS. *Second semester. 1 credit.*
- 209 to 216. ADVANCED FRENCH. *3 credits each semester.*
Prerequisite, 102 or 104.

One of the following French courses is given each year:

- 209-210. NINETEENTH CENTURY DRAMA.
- 211-212. SURVEY OF FRENCH LITERATURE.
- 213-214. FRENCH LITERATURE OF THE EIGHTEENTH CENTURY.
- 215-216. HISTORY OF THE FRENCH NOVEL TO THE NINETEENTH CENTURY.

- 101-102. GERMAN DAILY LIFE AND COMPOSITION. *3 credits each semester.*
Prerequisite, 44.
- 207 to 218. ADVANCED GERMAN. *3 credits each semester.*
Prerequisite, 44.

One of the following German courses is offered each year:

- 207-208. SCHILLER.
- 209-210. GOETHE.
- 211-212. SURVEY OF GERMAN LITERATURE.
- 213-214. MODERN GERMAN DRAMA.
- 215-216. FAUST.
- 217-218. SHORT STORY.

One of the following Spanish courses is offered each year:

- 103-104. APPLIED SPANISH. *3 credits each semester.*
Prerequisite, 44. Intensive reading of Spanish and Spanish-American stories, with class discussion in Spanish. Independent reading of several Spanish-American novels.
106. COMMERCIAL CORRESPONDENCE. *3 credits.*
Prerequisite, 103. Translation of business letters from Spanish into English and from English into Spanish, with some attention to advertising, and some emphasis on the rubber industry.
- 207-208. MODERN SPANISH LITERATURE. *3 credits each semester.*
Prerequisite, 44.
- 209-210. SPANISH LITERATURE OF THE GOLDEN AGE AND EIGHTEENTH CENTURY (1550-1800). *3 credits each semester.*
Prerequisite, 44.
- 211-212. SURVEY OF SPANISH LITERATURE. *3 credits each semester.*
Prerequisite, 44. Study of representative Spanish authors and their contributions to literature. Class discussion in Spanish.
- 231-232. INDIVIDUAL READING IN FRENCH, GERMAN, OR SPANISH.
1 to 3 credits each semester.

MUSIC

PROFESSOR JORGENSEN, ASSOCIATE PROFESSOR ENDE, ASSISTANT PROFESSOR FLETCHER, MR. STEIN, MR. LIGHTFRITZ, MISS WHITTAKER, MR. WHEELER, MR. FUNKHOUSER, MR. WITTERS, MR. GOLDBERG, MRS. GRIFFITHS

Departmental requirements for the B.A. degree with a major in music:

THEORETICAL MUSIC.....34 credits	APPLIED MUSIC.....8 credits
General College	Individual Instruction in any of the following fields:
Cr. Hrs.	Cr. Hrs.
Music Orientation 21..... 2	Piano 1 or 2
The Art of Music 22..... 2	Voice 1 or 2
Theory I, 41..... 3	Organ 1 or 2
Theory II, 42..... 3	Violin 1 or 2
Upper College	Flute 1 or 2
History of Music 101-102..... 4	Woodwind instruments 1 or 2
Theory III, 103..... 2	Brass instruments 1 or 2
Theory IV, 104..... 2	Cello 1 or 2
Composition 111..... 2	
Conducting 112..... 2	
Orchestration 114..... 2	
MUSIC ORGANIZATIONS.....4 credits	CLASS INSTRUCTION—RECOMMENDED
University Women's Chorus..... 1	Piano Class 51-52..... 2
University Symphony Orchestra..... 1	Voice Class 53-54..... 2
University Singers..... 1	String Class 55-56..... 2
University Men's Glee Club..... 1	Woodwind Class 57..... 1
University Band..... 1	Brass Class 58..... 1
University Theatre Orchestra..... 0	

Additional Requirements for Majors in Music: (1) All music majors will be required to pass a general final examination in the Theory and History of Music in the second semester of the senior year, (2) Presentation of both Junior and Senior recitals is recommended.

Music Organizations: Enrolment in University Women's Chorus, University Men's Glee Club, University Band, and University Symphony Orchestra is open to all students of the University. Membership in the University Singers and Theatre Orchestra is by audition and appointment. Not more than 4 credits for music organizations can apply toward graduation.

Applied Music: Enrolment for credit in all Applied Music courses (individual and class instruction) is contingent upon enrolment in Music Orientation. This requirement may be waived upon examination. Those who desire special or advanced instruction should enroll for individual lessons where the instruction is adapted to meet the immediate individual needs. Those desiring more of an elementary or general knowledge of performance should enroll in the class instruction. Not more than 8 credits in individual instruction may apply toward graduation for Liberal Arts students. All registration in individual instruction requires the payment of additional fees. Two half-hour lessons a week (2 credits each semester), \$60. One half-hour lesson a week (1 credit each semester), \$30.

Theoretical Music: All Theory courses may be taken for credit in sequence.

Music Education: Courses in Music Education cannot be counted toward graduation in the Liberal Arts College.

THEORETICAL MUSIC

GENERAL COLLEGE

21. MUSIC ORIENTATION. 2 credits.

A functional introduction to music embracing notation, terminology, scale construction, simple melodic dictation, and sight singing. Familiarity with the piano keyboard.

22. THE ART OF MUSIC. 2 credits.

An introduction to the literature of music using recordings as illustrative material.

31-32. DALCROZE EURYTHMICS. 1 credit each semester.

The mental and physical acclimation to every conceivable rhythmic device, which is essential to anyone interested in music. This course is so conceived that it can be applicable to all of the various branches of music.

41. THEORY I. 5 credits.

A detailed study of scales, intervals, triads and chord formations through ear, eye and keyboard.

42. THEORY II. 5 credits.

A continuation of Theory I in the study of altered chords, ornamentations, and modulations.

UPPER COLLEGE

101-102. HISTORY OF MUSIC. 2 credits each semester.

An historical resume of the development of music from ancient to modern times, using recordings as illustrative material.

103. THEORY III. 3 credits.

Simple two- and three-part modal and tonal counterpoint in the five species.

104. THEORY IV. 3 credits.

An analytical study of the forms employed in music, covering both the homophonic and polyphonic devices.

111. COMPOSITION. 2 credits.

Original creative work based on the simpler homophonic and polyphonic forms.

112. CONDUCTING. 2 credits.

The technique and practice of conducting choral and instrumental scores.

114. ORCHESTRATION. *2 credits.*

A study of the theory of instrumentation, reading and scoring, and the reduction of an orchestral score for the piano.

201. MUSIC CRITICISM. *2 credits.*

Prerequisites, 101-102 and Philosophy 110. An introduction to musicology, stressing a study of comparative values. To be taken in senior year.

202. RESEARCH. *2 credits.*

A study of special problems in the theory and in the history of music; open only to graduates and advanced undergraduates.

PHILOSOPHY

PROFESSOR ORGAN

Students selecting Philosophy as a field of concentration are required to take Philosophy 55, 56, 103, 104, and enough other work in Philosophy to total at least 24 hours. Such students must also pass a general final examination in the second semester of the senior year.

GENERAL COLLEGE

55. INTRODUCTION TO PHILOSOPHY. *Either semester. 3 credits.*

A systematic study of the problems of philosophy and of the principal solutions that have been offered.

56. LOGIC. *Second semester. 3 credits.*

An introduction to classical and modern logic designed to train the student in accurate and constructive thinking.

UPPER COLLEGE

103-104. HISTORY OF PHILOSOPHY. *3 credits each semester.*

First semester. Ancient and Medieval: Pre-Socratics, Socrates, Plato, Aristotle, Epicureanism, Stoicism, Neo-Platonism, Patristic Period, Scholasticism.

Second semester. Modern: Renaissance, Seventeenth-century Rationalism, Eighteenth-century Empiricism, Kant, Post-Kantians, Hegel, Comte.

105. ETHICS. *First semester. 3 credits.*

A study of the ethical situation and of the ideals and standards of personal and public morality.

107. PHILOSOPHY OF RELIGION. *First semester. 3 credits.*

An analysis of religion in relation to the whole life of man, of the fundamental concepts of religion, and of the types of philosophies of religion. 1947-48 and alternate years.

108. COMPARATIVE RELIGION. *Second semester. 3 credits.*

An examination of the origin, development, tenets, and practices of the world's living religions. 1947-48 and alternate years.

109. METAPHYSICS. *First semester. 3 credits.*

Prerequisite, 55. A systematic study of the philosophical assumptions of the sciences and of the comprehensive metaphysical speculations which can be defended in the light of present knowledge. 1946-47 and alternate years.

110. AESTHETICS. *Second semester. 3 credits.*

An examination of the various interpretations of aesthetic value and of the role of values in human life. 1946-47 and alternate years.

203. PLATO. *First semester. 2 credits.*

Prerequisite, 103. An intensive study of selected dialogues. 1947-48 and alternate years.

204. ARISTOTLE. *Second semester. 2 credits.*

Prerequisite, 103. An intensive study of the more important works. 1947-48 and alternate years.

PHYSICS

PROFESSOR HOUSEHOLDER, ASSOCIATE PROFESSOR FOUTS, MR. KECK

Students who desire to elect physics as their field of concentration should elect at least six hours of mathematics and eight hours of physics in the General College. In addition to this it will be necessary to have another year of each unless they have removed part of the requirement in chemistry or in foreign language. Students who plan to continue their academic training in the graduate school should elect mathematics through the calculus and German in the General College. Students who are more interested in the applications of physics would find courses 21, 22, 43 and 44 more suited to their needs. They should also elect two years of mathematics in the General College. Such students may substitute engineering courses for the foreign language. A total of 30 hours of physics together with chemistry 21, 22, and the calculus, are required. The major in physics should also include the chemistry courses in qualitative analysis and elementary organic chemistry. Where possible, they will be required.

GENERAL COLLEGE

21-22. MECHANICS. *4 credits each semester.*

A first course in measurements and mechanics. A thorough study of forces and torques, and their effects. The conditions under which equilibrium can be obtained and their application to simple machines and elementary frameworks constitute the most of the first semester's work. This is followed by a study of the effects of forces and torques on motion, kinetics in general, elasticity, hydrostatics, hydraulics and pneumatics. The course is fundamentally a laboratory course, but the essential principles of analytical and graphical analysis and laboratory technique must be mastered in order to continue with the succeeding courses. This course is required of all students who plan to take engineering. Students taking this course must have completed the freshman mathematics courses or take them concurrently. Lab. fee, \$4 per semester.

43-44. HEAT, ELECTRICITY AND MAGNETISM, AND SOUND. *4 credits each semester.*

A continuation of 21-22, but with more recitation work and less laboratory work. The study of heat and its effects and the fundamental principles of heat engines constitute the most of the first semester's work. This is followed by the study of electricity and the principles underlying D.C. and A.C. machinery. The study of sound and the elements of acoustical engineering complete the year's work. Students in this course will have need of the calculus. Three recitations and one laboratory period per week. Lab. fee, \$2 per semester.

51-52. GENERAL PHYSICS. *4 credits each semester.*

An introductory lecture course planned to give a general survey of the mechanics, sound, heat electricity and magnetism. No mathematics beyond that taken in the high school is required. While the course does not presume to prepare the student for work in applied physics, it is sufficient for the general arts student and for pre-medical students. Three lectures and one laboratory period per week. Lab. fee, \$2 per semester.

53. OPTICS. *4 credits.*

Optics is that branch of physics which is concerned with the phenomena of radiation but the major part of this course is concerned with visible light. The principles of geometrical optics and their applications in optical instruments and optical measurements absorb about three-fourths of the semester. The elementary principles of physical optics complete the course. Students will need sophomore mathematics, and physics 52 or 44. Three lectures and one laboratory period per week. Lab. fee, \$2.

UPPER COLLEGE

203. ELECTRICITY AND MAGNETISM. *3 credits.*

A second course in electricity and magnetism with emphasis on the theory and use of electrical measuring instruments. Since the course covers the field of alternating currents and the rigorous treatment of direct current phenomena, the calculus and physics 52 or 44 are prerequisites. Three recitations per week.

203. LABORATORY. *1 credit.*

Laboratory work in electrical measurements to accompany or follow 203. Lab. fee, \$2.

204. INTRODUCTION TO ATOMIC PHYSICS. *3 credits.*

A review of the revolutionary discoveries in physics made since 1890 and the part they have had in establishing the electrical nature of matter. The structure of the atom, the transmutation of matter, and an elementary introduction to the quantum mechanics complete the course. Prerequisites, calculus and optics. Three lectures per week.

205. MECHANICS AND SOUND. *3 credits.*

An intermediate course in mechanics and heat with special emphasis on the theory of elasticity and acoustics. Prerequisites, calculus and physics 52 or 43. Three lectures per week.

209-210. PHYSICS MEASUREMENTS. *2 credits each semester.*

A laboratory course in advanced physics measurements involving advanced laboratory technics. Some of the more advanced classical experiments will be repeated and certain experimental projects growing out of physics 204 and 205. A thesis course. Lab. fee, \$4 each semester.

221-222. COLLOQUIUM. *1 credit each semester.*

GRADUATE COURSES

302. THEORETICAL MECHANICS. *3 credits.*

An advanced course in theoretical mechanics based primarily on the vector notation and vector methods. Three lectures per week.

304. ELECTRIC CURRENTS THROUGH GASES. *3 credits.*

The theory and practice of electric currents in gases and vacuum tubes. The relation of current intensity to gaseous pressure and the characteristics of the more important vacuum tube circuits. A foundation course for future work in electronics. Three lectures per week.

304. LABORATORY. *1 credit.*

A series of experiments involving the use of electron tubes and electric circuits to accompany or follow 304. Lab. fee, \$2.

306. PHYSICAL OPTICS. *3 credits.*

An advanced course in the physical theory of light including the development of the wave theory and the wave mechanics. The elements of spectroscopy and spectroscopic analysis will be emphasized. Three lectures per week.

306. LABORATORY. *1 credit.*

Laboratory exercises in interference diffraction and polarization to accompany or follow 306. Lab. fee, \$2.

307. ELECTRODYNAMICS. *3 credits.*

The mathematical theory of the electric field based on Maxwell's equations. The application of these principles, and the more recent findings of the wave mechanics, to electrical communication problems will form the nucleus of the course. Three lectures per week.

308. NUCLEAR PHYSICS. *3 credits.*

A study of the structure of the nucleus and modern methods of transmutation, with their application to bio physics and chemical physics. Three lectures per week.

309-310. ADVANCED PHYSICAL MEASUREMENTS.

A graduate thesis course. Credit according to work done. Usually about 2 credits per semester. Lab. fee, \$4 each semester.

311-312. THERMODYNAMICS. *3 credits each semester.*

A mathematical course covering the fundamental principles of thermodynamics and their physical applications. Simple engineering applications will not be included. Three lectures per week.

314. X-RAYS. *3 credits.*

A first course in the theory and applications of X-rays to physical and chemical problems. Extensive use of X-ray camera and interpretation of X-ray photographs. Three lectures per week.

314. LABORATORY. *1 credit.*

Laboratory practice in X-ray work to accompany or follow 314. Lab. fee, \$2.

(Courses on the 300 level are offered in alternate years.)

POLITICAL SCIENCE

PROFESSOR SHERMAN, ASSISTANT PROFESSORS KING AND YOUNCE

Students emphasizing political science in their field of concentration are expected to have at least 24 hours in the field of political science. Students preparing to teach will find that the State Department of Education considers political science and history as one subject major or minor.

Prerequisites: At least three hours of political science in the General College are required. These three hours may be selected from four courses, any one of which will satisfy the requirement: American National Government 41, American State and Local Government 42, Comparative Government 43, and American Diplomacy 44.

GENERAL COLLEGE

41. AMERICAN NATIONAL GOVERNMENT. *Either semester. 3 credits.*

A study of the Constitution, its distribution of powers, the President, the Congress, the courts and the great administrative organization in its contacts with the citizen.

42. AMERICAN STATE AND LOCAL GOVERNMENT. *Second semester. 3 credits.*

A study of the forty-eight states and many county governments, with particular emphasis on Ohio government.

43. COMPARATIVE GOVERNMENT. *Second semester. 3 credits.*

Emphasis is placed on the government of England. Other governmental systems are compared with England and with each other.

44. AMERICAN DIPLOMACY. *First semester. 3 credits.*

This course analyzes the machinery by which the United States conducts its foreign relations and the varying policies adopted toward different major areas of the world.

UPPER COLLEGE

Courses Offered Each Year

103. POLITICAL PARTIES. *First semester. 3 credits.*
The development, organization, functions, and machinery of American political parties.
109. GOVERNMENT AND SOCIAL WELFARE. *First semester. 3 credits.*
A study of the part government has come to play in the social welfare field.
110. GOVERNMENT AND BUSINESS. *Second semester. 3 credits.*
The relationships of government with business in the nature of prohibitions, regulations, supervision, and assistance.
- 115-116. POLITICAL THEORY. *2 credits each semester.*
The first semester begins with the political thinking at the time of Plato and ends with the seventeenth century; the second semester continues to the present day with emphasis on American political thought.
205. CONSTITUTIONAL LAW. *First semester. 3 credits.*
A study of the Constitution and the American system of government in terms of Supreme Court decisions.
211. INTERNATIONAL RELATIONS. *First semester. 3 credits.*
A study of the basic realities of nation-state relationships; power politics; the balancing of power; specific foreign policies; economic, cultural, and geographical factors which exert influence.
212. INTERNATIONAL LAW. *Second semester. 3 credits.*
A study of the established rules, practices, and conventions governing the relations of the several national states of the world and their citizens in their relationship with one another.
- 217-218. FIELD WORK IN PUBLIC ADMINISTRATION. *3 credits each semester.*
Open only to senior majors with six hours of public administration. This course is for the student who desires a career in public service.
298. SEMINAR IN POLITICAL SCIENCE. *Second semester. 2 credits.*
Required for senior majors. Seniors taking 217-218 may be excused from seminar.

Courses Offered 1946-47 and Alternate Years

101. MUNICIPAL GOVERNMENT. *First semester. 3 credits.*
The development, composition, and governmental organization of American city life.
102. MUNICIPAL ADMINISTRATION. *Second semester. 3 credits.*
The organization of city government for the performance of services to the public, such as police protection, supervised playgrounds, parks, etc.
206. MUNICIPAL CORPORATIONS. *Second semester. 3 credits.*
The American city from the legal point of view as established by the many court decisions.

Courses Offered 1947-48 and Alternate Years

108. PARLIAMENTARY LAW AND LEGISLATIVE PROCEDURE. *Second semester. 3 credits.*
A drill course in parliamentary procedure. About one-third of the course is devoted to modern legislative procedure.

207. MUNICIPAL FINANCE. *Second semester. 2 credits.*

Municipal budgets, purchasing of materials, sources of municipal revenue, and problems of real estate tax.

213-214. PUBLIC ADMINISTRATION. *3 credits each semester.*

A study of the principles of administrative organization; of personnel recruitment; of sound budget organization and procedure; of public reporting and public relations.

220. ADMINISTRATIVE LAW. *Second semester. 3 credits.*

A study of the rights of a citizen before government agencies and the rights and duties of the public official; the customary procedures of government agencies and the legal recourse of both agency and citizen in accomplishing the objectives of each.

PSYCHOLOGY

PROFESSOR TWINING

The staff is listed and the courses are described under Psychology in the College of Education section of the catalog. Students emphasizing Psychology in the field of concentration are expected to take at least 24 credits in Psychology. The courses included in the requirement are determined by the needs and interests of the student. For courses required in the General College and recommended elective courses, see the General College section.

All courses in the department except 51 are acceptable in the major. No student, major or otherwise, may present more than two of the courses numbered 43, 52, and 62. All Social Science Division requirements, and Liberal Arts College requirements for graduation, apply to students who major in Psychology, including the requirement of the second year of a foreign language on the college level.

SECRETARIAL SCIENCE

PROFESSOR DOUTT, ASSOCIATE PROFESSOR FLINT, ASSISTANT PROFESSORS TUCKER AND SELF, MRS. HANDWERK, MISS ANNA MAE FLINT, MISS STERLEY, MRS. FARKAS, MRS. OANA

Students interested in preparing themselves for the higher grade secretarial and office positions may choose between two programs offered in Secretarial Science: a two-year certificate course, listed in the General College, and a degree course which is essentially a combination of the technical work required in business and the broad cultural education needed for effective living. By proper planning, it is possible to complete the 4-year curriculum in three years, including summer sessions. Considerable latitude is allowed for the planning of each individual's program to meet his particular needs.

Admission: Admission to the department is open to all who have satisfactorily met the requirements of the General College and who have completed one year of shorthand and typewriting (41-42 and 51-52 or equivalent). However, it is advisable to elect the other General College courses listed below.

Combination Courses: Two special five-year programs are available, each leading to two degrees: (1) Secretarial Science—Liberal Arts, and (2) Secretarial Science—Education. Those interested should confer with the head of the department.

Graduation: (1) In addition to the regular requirements of the University for graduation, students must pass a general final examination (field of specialization only) in the senior year. (2) At least 60 semester hours of the total program must be in academic subjects. (3) Graduates receive the degree of B.S. in Secretarial Science.

Shorthand and Typewriting: Those who have had shorthand and typewriting before entrance will begin these courses in college at such point as their degree of proficiency permits as indicated by placement tests. Approved electives, preferably academic subjects, will be taken in place of the work omitted. Full credit will not be granted where undue repetition exists.

Credit for Shorthand and Typewriting:

For those who take Shorthand 41-42 or Typewriting 51-52:		
High School Credits	Course Entered in College	Credit Given
1 unit	First semester	Half credit
	Second semester (or review class)	Full credit
2 units	First semester	No credit
	Second semester (or review class)	Half credit
	Second year	Full credit

For those who take Shorthand 141-142:		
High School Credits	Course Entered in College	Credit Given
1 unit	First semester	Full credit
1½ units	First semester	Full credit
2 units	First semester	Half credit
	Second semester	Full credit

A program for students specializing in this field must include:

<i>First Year</i>			
First Semester	Cr. Hrs.	Second Semester	Cr. Hrs.
Secretarial Procedure 21.....	3	Filing & Mach. Calc. 26.....	3
<i>Second Year</i>			
*Typewriting 51.....	2	Typewriting 52.....	2
Accounting 41 or 21.....	3	Accounting 42 or 22.....	3
<i>Third Year</i>			
Shorthand Theory 141.....	5	Intermediate Dictation 142.....	5
Economics 41.....	3	Transcription 152.....	1
Business Law 51.....	3	Economics (Advanced).....	3
Secretarial Training 74.....	2	Business Administration 61.....	3
		Business Correspondence 133....	3
<i>Fourth Year</i>			
Advanced Dictation 143.....	4	Advanced Dictation 144.....	4
Office Practice 293.....	3	Office Organization and Management 296	3

**ONE YEAR SECRETARIAL CERTIFICATE
PROGRAM FOR COLLEGE GRADUATES**

First Semester	Cr. Hrs.	Second Semester	Cr. Hrs.
Shorthand Theory 141.....	5	Intermediate Dictation 142.....	5
Typewriting 51.....	2	Transcription 152	1
Secretarial Procedure 21.....	3	Typewriting 52.....	2
Accounting 41 (or 21).....	3	Filing & Machine Calculation	
Business Correspondence 133....	3	26	3
		Accounting 42 (or 22).....	3
		Office Organization and Management 296	3

GENERAL COLLEGE

21. SECRETARIAL PROCEDURE. *Either semester. 3 credits.*

The fundamental principles and procedures which relate to the secretarial position.

23. SECRETARIAL PROCEDURE. *Either semester. 2 credits.*

An adaptation of 21 for adults with office experience. Given in the evening only.

*Those planning to complete the four-year program in three years by attending summer sessions should begin Typewriting in the first year.

25. MACHINE AND SLIDE RULE CALCULATION. *Either semester. 1 credit.*
Techniques of machine and slide rule calculation as applied to business. Credit is not allowed for this course and also for Filing and Machine Calculation 26.
26. FILING AND MACHINE CALCULATION. *Either semester. 3 credits.*
Thorough treatment of all basic filing systems. Fundamental operations of listing, key-type, and crank-driven adding and calculating machines. Fee, \$1.75.
31. TYPEWRITING (*Personal*). *Either semester. 2 credits.*
A basic course intended primarily for those who can devote only one semester to this subject. Credit not allowed for this course and also for 51. Fee, \$1.
35. BUSINESS ENGLISH. *Either semester. 2 credits.*
Fundamentals of English, with stress on areas in which business men have found college graduates to be weak.
- 41-42. SHORTHAND THEORY. *3 credits each semester.*
Gregg shorthand theory is completed, transcription introduced, and general dictation given between 60 and 80 words per minute.
46. SHORTHAND REVIEW. *Second semester. 3 credits.*
A thorough review of Gregg Shorthand Theory, covering one year's work. Credit not allowed for this course and also for 41-42.
- 51-52. TYPEWRITING. *2 credits each semester.*
Fundamentals of typewriting, including drill, placement, letters, tabulations, preparation of reports, etc. Fee, \$1 each semester.
56. TYPEWRITING REVIEW. *Second semester. 2 credits.*
A thorough review of typewriting, covering one year's work. Credit not allowed for this course and also for 51-52. Fee, \$1.
- 63-64. ADVANCED SHORTHAND AND TRANSCRIPTION. *4 credits each semester.*
Prerequisite, 42 and 52 or equivalent. Vocabulary building; general dictation on letters, articles, and speed takes ranging from 60 to 120 words per minute. Fee, \$1 each semester.
74. SECRETARIAL TRAINING. *Either semester. 2 credits.*
Prerequisite, 42 and 52, or equivalent. Advanced typewriting, transcription, business forms, duplicating processes, dictating and transcribing machines. Fee, \$1.50.
- 83-84. INTERMEDIATE DICTATION. *Evening session. 3 credits each semester.*
Prerequisite, mastery of shorthand and typewriting theory. Vocabulary building, general dictation on letters, articles, and congressional record material. Speed from 60 to 100 words per minute. Fee, \$1 each semester.
85. INTERMEDIATE DICTATION. *Evening session. First semester. 3 credits.*
Prerequisite, ability to take dictation at 100 words per minute and type 40-50 words per minute. Vocabulary building, general dictation on letters and articles. Speed from 100 to 120 words per minute. Fee, \$1.
93. BUSINESS LETTERS. *Either semester. 2 credits.*
Principles and practice in the writing of business letters.

UPPER COLLEGE

133. BUSINESS CORRESPONDENCE. *Either semester. 3 credits.*

Prerequisite, English 2. An advanced treatment of business letter writing, including extensive outside reading and reports. Credit not allowed for this course and also for 93.

141. SHORTHAND THEORY. *First semester. 5 credits.*

Prerequisite, Typewriting 52. This course covers Gregg Shorthand theory. Dictation at speeds ranging from 60 to 80 words per minute.

142. INTERMEDIATE DICTATION. *Second semester. 5 credits.*

Prerequisite, 141. This course covers vocabulary and phrase building. Dictation of letters, articles, and speed takes ranging from 100 to 120 words per minute.

152. TRANSCRIPTION. *Second semester. 1 credit.*

This must accompany 142. Drills to increase transcription rate and transcription from dictation given in 142. Fee, \$1.

143. ADVANCED DICTATION. *First semester. 4 credits.*

Prerequisite, 142. This course consists of the dictation of letters, articles, and congressional record publications. Speed of dictation ranges from 100 to 140 words per minute. Fee, \$1.

144. ADVANCED DICTATION. *Second semester. 4 credits.*

Prerequisite, 143. Dictation material consists of court cases, letters, and articles. Three transcribed lectures are required. Speed of dictation ranges from 130 to 160 words per minute. Fee, \$1.

165-166. ADVANCED DICTATION. *4 credits each semester.*

Prerequisite, 64 or 164, or equivalent. Letters, articles, congressional record material, court cases, and lectures, with speed of dictation ranging from 100 to 160 words per minute. Fee, \$1 each semester.

186. ADVANCED DICTATION. *Evening session. Second semester. 3 credits.*

Prerequisite, ability to take dictation for five minutes at 110 to 120 words per minute and type from 30 to 35 words per minute. Abbreviated vocabulary, dictation on letters and congressional record material. Speed from 110-130 words per minute. Fee, \$1.

187-188. ADVANCED DICTATION. *Evening session. 3 credits each semester.*

Prerequisite, 186. Technical vocabulary dictation on letters and articles; court reporting and lectures with speed of dictation from 125 to 160 words per minute. Fee, \$1 each semester.

293. OFFICE PRACTICE. *First semester. 3 credits.*

Prerequisite, 26 and 142. Laboratory work on duplicating machines, calculating machines, transcribing and dictating machines, filing, long carriage machine and electric typewriter, and part-time office experience. Fee, \$2.50.

296. OFFICE ORGANIZATION AND MANAGEMENT. *Second semester. 3 credits.*

Prerequisite, Commerce 61. A seminar with individual projects relating to analyses of various aspects of the office and to problems involved in office management.

SOCIOLOGY

PROFESSOR DEGRAFF, MR. KRUSE, MRS. WOOD

For General College courses suggested but not required, see General College section.

Students emphasizing Sociology in their field of concentration are expected to take 24 hours in the field of Sociology. The courses in this requirement are selected with special reference to the needs of the individual student. In special cases, either more or less than 24 hours may be required.

Students emphasizing social welfare work as their field of concentration are required to take Field Work 111-112; Technique of Social Case Work 251-252; Theory of Social Work 221; Government and Social Welfare 109; Sanitation 71-72; Community Organization 206; Child Welfare 117; Welfare Aspects of Social Security 209; Specific courses in economics, home economics, and biology are also recommended.

Students may do their supervised field work with the Summit County Children's Home, the Family Service Society, the Juvenile Court, the City Hospital, Department of Public Charities, Y.M.C.A., Y.W.C.A., the Boy Scouts, the Girl Scouts, War Chest, Federal Housing, Jewish Center, Catholic Service League, Council of Social Agencies, or Red Cross.

A course in statistics is required for all students. Mathematics 57, Social Statistics, meets this requirement.

The following courses count toward the 24-hour requirement. The courses all have Sociology 41 and 42 (offered in the General College) as a prerequisite. However, with permission of the head of the department, the prerequisite may be taken collaterally with these courses.

Courses 43, 104, 117, 206, 209, 221, 251 and 252 are planned to meet the needs of both University students and field workers in social agencies and institutions.

GENERAL COLLEGE

21. SOCIOLOGY FOR NURSES. *2 credits.*

This course treats of personal adjustment of nurse to patient; patient to nurse; and the nurse's relationship to the community.

41. INTRODUCTION TO SOCIOLOGY. *First semester. 3 credits.*

A study of the origin, development, structure, and function of social groups.

42. SOCIAL ATTITUDES. *Second semester. 3 credits.*

Prerequisite, 41. A study of the development of a person and personality, emphasizing the processes by which such are developed as a function of the social group.

43. MODERN SOCIAL PROBLEMS. *3 credits.*

A presentation of social problems from the sociological point of view.

45. SOCIAL ANTHROPOLOGY. *3 credits.*

An elementary course dealing with the fundamental concepts of our cultural heritage.

UPPER COLLEGE

Courses Offered Each Year

109-110. SEMINAR AND THESIS. *2 credits each semester.*

For seniors only. Required. A study of research techniques and a presentation of a paper before a group composed of students, faculty, and special guests.

111-112. FIELD WORK. *3 credits for 150 hours of work at a recognized agency or institution. Seniors only. Two semesters recommended.*

Intended primarily for students interested in welfare or group work.

206. COMMUNITY ORGANIZATION. *First semester. 3 credits.*

A practical study of the social, religious, educational, relief, and character building agencies of a community. A required course.

251-252. TECHNIQUE OF SOCIAL CASE WORK. *2 credits each semester.*

A study of practical techniques with emphasis upon case work interpretation and procedure.

Courses Offered 1946-47 and Alternate Years

114. CRIMINOLOGY. *Second semester. 3 credits.*

A general background course for delinquency and penology. Cause, treatment, and prevention of crime.

117. CHILD WELFARE. *First semester. 3 credits.*

A study of the relation and responsibility of the state and community to the child.

205. THE SOCIOLOGY OF LEISURE TIME. *First semester. 3 credits.*

A study of the public, private, commercial, and industrial provisions for recreation and leisure time activities.

207. SOCIAL THEORY. *First semester. 2 credits.*

A study and analysis of theoretical basis of modern social thoughts, institutions, and organizations. A required course.

208. SOCIAL ORIGINS. *Second semester. 2 credits.*

A study and analysis of the origin of social institutions, organizations, and systems of social thought.

209. WELFARE ASPECTS OF SOCIAL SECURITY. *Second semester. 3 credits.*

An analysis of social security as interpreted by social and welfare agencies.

221. THEORY OF SOCIAL WORK. *First semester. 3 credits.*

An interpretation of the historical and theoretical background of social work, techniques, and philosophy.

Courses Offered 1947-48 and Alternate Years

104. LEADERSHIP. *Second semester. 2 credits.*

An interpretation of leaders and leadership with emphasis upon problems, techniques, and processes of the same.

113. URBAN-RURAL SOCIOLOGY. *First semester. 2 credits.*

A comparison and analysis of urban and rural life with emphasis upon the person.

204. THE FAMILY. *Second semester. 3 credits.*

A presentation of the family as a group of interacting personalities.

210. POPULATION MOVEMENTS. *Second semester. 3 credits.*

Present movements of population as in-migration, refugee, prison, urban and rural, with their sociological implications.

213. THE JUVENILE DELINQUENT. *First semester. 3 credits.*

A study of the delinquent as a person. Emphasis upon causes, treatment and prevention.

217. RACE RELATIONS. *Second semester. 3 credits.*

A study of minority groups with emphasis upon the sociological interpretation.

SPEECH

ASSISTANT PROFESSOR VARIAN, MISS ALOGDELIS, MR. TURNER, MR. WILSON

The courses in the Department of Speech are designed to provide education in the fundamentals of speech, including social adaptation and control, public address, and personal proficiency. Professional training is given, and students are prepared to become teachers in one or more of the following fields: public speaking, argumentation and debate, acting and dramatic production, interpretation, radio speaking, and speech correction. Since Upper College work in speech embraces these fields, the student should elect a program in General College that will apply directly to the specific interests in the field of speech which he proposes to follow in Upper College.

Major: A minimum of 24 hours in speech. The following courses are required: 41, 51, 271, 272, 291, 292, 293. Students are expected to take at least one course in each area of the speech field.

Suggested Electives: Interpretation 51 and any other General College speech courses, the basic courses in the social sciences and psychology, Shakespeare 41, Appreciation of Drama 50, Design 21, Art Appreciation 30, History of Music 102, and Roman Civilization 44.

The University Theatre: The University Theatre provides excellent facilities for training students in acting and dramatic production. At least three full length plays are staged each year.

Forensic Activities: The Department of Speech sponsors a University Debate Team and supervises a program of intramural and intercollegiate debates.

The Speech Clinic: The clinic, which is free to all citizens of Akron, provides guidance and assistance in the diagnosis and treatment of all kinds of voice and speech disorders. Remedial treatment is offered to a limited number. Advanced students assist with the work of the clinic.

Radio Broadcasting Studio: Provisions have been made for a direct line from the University broadcasting studio to station WADC. Students may obtain practical experience in broadcasting from the University studio at least once every week. Training is provided in announcing, writing, and performing for the radio.

Speakers' Bureau: The Speech Department supervises a Speakers' Bureau for the convenience of the residents of Akron and for training of its students. Speakers, debaters, readers, and discussion panels are available to local groups. Occasionally a one-act play can be provided.

Ashton Public Speaking Contests: Several prizes are available each year to the winners of the public speaking contests and the interpretation contest. The contests are open to all students in the University.

Pixley Scholarships in Speech: See section on scholarships and prizes.

GENERAL COLLEGE

41. PUBLIC SPEAKING. *Either semester. 3 credits.*

A beginning course designed to provide instruction in the essentials of effective public speaking.

42. ADVANCED PUBLIC SPEAKING. *Either semester. 3 credits.*

Prerequisite, 41. An advanced course for those who wish to develop skill in direct public address.

45-46. ORAL ARGUMENT. *2 credits each semester.*

A study of the theory of argument. Analysis of the logical processes in the speech situation. Practice in argument and discussion.

47. BUSINESS AND PROFESSIONAL SPEAKING. *Either semester. 2 credits.*
An adaptation of the speech skills to business and professional life. Practice in conference, discussion, and types of speeches.
48. ADVANCED BUSINESS AND PROFESSIONAL SPEAKING. *Either semester. 2 credits.*
Prerequisite, 47.
51. INTERPRETATION (Reading Aloud). *First semester. 3 credits.*
A basic course designed to provide experience in the oral interpretation of the printed page.
52. ADVANCED INTERPRETATION. *Second semester. 3 credits.*
Prerequisite, 51. Further practice in reading aloud. Program building in reference to specific audiences and specific types of literature.
56. PUBLIC DISCUSSION AND GROUP PROCEDURE. *Second semester. 3 credits.*
Prerequisite, permission. The technique of discussion in terms of the skills of the effective discussion leader and the effective discussion-participant. Practice in the various types of discussion.
- 57-58. INTERCOLLEGIATE DEBATE. *1 or 2 credits each semester.*
A study of the nature of argument in its application to a particular question which is debated among the universities and colleges each year. A group is selected to comprise the University Debate Team which fulfills intercollegiate engagements.
- 59-60. INTERCOLLEGIATE DEBATE. *1 or 2 credits each semester.*
- 65-66. SPEECH IMPROVEMENT. *1 credit each semester.*
For those students who need special help to improve their articulation and enunciation, voice quality, pitch, intensity, or rate.
76. FUNDAMENTALS OF SPEECH. *Either semester. 3 credits.*
A course designed especially for majors in the College of Education. Effective speaking for the classroom teacher with emphasis upon organization, delivery, voice, and articulation.

UPPER COLLEGE

114. TEACHING OF SPEECH. *Either semester. 2 credits.*
A course in teaching methods to improve the speech of the elementary and secondary school child. Not credited in the Liberal Arts College.
143. FORMS OF PUBLIC ADDRESS. *Either semester. 3 credits.*
Prerequisite, 42. A consideration of the psychology of persuasion, the style, and the type of speech as applied to direct public address.
144. FORMS OF PUBLIC ADDRESS. *Second semester. 3 credits.*
Prerequisite, 143.
154. VOICE TRAINING. *Either semester. 1 credit.*
Specific training and practice for the advanced student intended to improve vocal conditions for all speech purposes.

161. **PLAY PRODUCTION.** *First semester. 3 credits.*

An introductory course in play direction and stage design. The fundamentals of scenery construction, stage lighting, make-up, and theatre management. Fee, \$2.

162. **ADVANCED PLAY PRODUCTION.** *Second semester. 3 credits.*

Prerequisite, 161. Fee, \$2.

163-164. **ACTING.** *3 credits each semester.*

Prerequisite, 51. A detailed study of the actor's resources, stage practice, gesture, movement, timing and pointing of lines, sustaining emotional scenes, effective characterization, and styles in acting.

165-166. **SPEECH IMPROVEMENT (Advanced).** *1 credit each semester.*

Prerequisite, 65-66, or permission.

167. **HISTORY OF THE THEATRE.** *First semester. 3 credits.*

An historical survey of modes and manners in the theatre from ancient times to the present day. Styles in acting, scene design, stage construction, stage lighting, and drama.

181. **RADIO SPEAKING.** *Either semester. 3 credits.*

A study of the technique and the performance of radio broadcasting. Practice in microphone technique, announcing, reading and writing for the radio. Fee, \$1.

204. **SPEECH PHONETICS.** *Second semester. 2 credits.*

271-272. **SPEECH CORRECTION.** *2 credits each semester.*

The classification, diagnosis, and treatment of speech defects. In the second semester special attention is given to case studies and clinical practice.

287. **SEMINAR IN RADIO WRITING AND PRODUCTION.** *3 credits.*

Practical experience in writing and adapting for the radio. Opportunity is provided for performance from the University studio over one of the local stations. Fee, \$1.

291-292. **HISTORY AND DEVELOPMENT OF SPEECH.** *2 credits each semester.*

A comparative study of public speaking and oratory from primitive times to the present with emphasis upon particular speakers, outstanding speeches, and speaking techniques.

293. **SPEECH SEMINAR.** *Second semester. 2 credits.*

393. **RESEARCH.** *Either semester. 1 to 3 credits.*

THE COLLEGE OF ENGINEERING

FRED E. AYER, C.E., *Dean*

R. D. LANDON, C.E., M.S., *Dean* (February, 1946)

GENERAL INFORMATION

The Directors of the University of Akron established the College of Engineering in 1914, and adopted the five year co-operative course patterned after the "Cincinnati Plan."

*THE CO-OPERATIVE PLAN

The essential features of co-operative education in any field are:

First, the underlying science is acquired in an educational institution under trained teachers.

Second, practical experience is acquired by working under commercial, competitive conditions.

Third, the acquisition of theory and practice proceeds concurrently. This means that the student must do his outside work while he is in college and not before he comes or after he leaves.

It follows from the foregoing that there are many types of truly co-operative plans in operation. They vary in the relative amounts of college and outside work, time of commencing practice, kinds of experience required and accepted, length of alternating periods, and many other details, and yet all include the three essential features.

Moreover, strict adherence to the fundamentals still leaves room for flexibility with which to meet changing industrial conditions.

While a student is at work he is subject to all rules and regulations imposed by his employer upon the other employees. All existing labor laws and conditions, including those pertaining to liability for accident, apply to the student in the same way as to any other employee.

In accordance with the policy of other engineering colleges, The University of Akron has adopted an accelerated program which enables engineering students to graduate in three years. It is expected that the five-year co-operative program will be resumed soon.

ENGINEERING OPPORTUNITIES

The erroneous impression prevails in many quarters that an engineering graduate must practice his profession. The number of such graduates successfully pursuing other occupations indicates that engineering training adds to earning power in almost any field of endeavor.

*Because of the accelerated program and the selective service requirement, the co-operative plan has been suspended for the present.

Also, the profession itself offers a diversity of opportunities for those of widely variant inclinations. The sales engineer must be able to recommend the particular type and size of equipment which his customers' needs require. The production engineer must be able to understand and handle personnel and management problems. Design, development, research, and appraisal are some of the other sub-divisions which are found in nearly every branch of engineering.

In order to conduct a co-operative course, the college must be located in or near an industrial center, and, while there are over a thousand colleges and universities in the United States, comparatively few of them are so located that such a course is practicable. Akron is essentially a manufacturing center, and this type of engineering education was selected as being the one best adapted to the city's needs.

THE DANIEL GUGGENHEIM AIRSHIP INSTITUTE

The Daniel Guggenheim Airship Institute building is located at the northwest corner of the Municipal Airport. The main building, four stories in height, was completed in 1932, and an addition to accommodate a gust tunnel was built in 1936.

The building houses three pieces of major equipment, a wind tunnel, a whirling arm, and a water tank. In addition there are a machine shop, moving picture cameras, a microphotometry outfit, and meteorological instruments.

The wind tunnel is one of the few vertical ones in the world. It has an overall height of 50 feet, the jet opening is 6 feet 6 inches in diameter, and the vertical distance between the jet entrance and exit is 13 feet. A 225 horsepower electrical motor drives a fan which is capable of producing a wind velocity of 120 miles per hour.

In the wind tunnel the model is at rest and the air moves by it. A model on the whirling arm moves through still air. This arm is 32 feet long, can be rotated at 75 revolutions per minute, and attains a velocity at its terminus of 170 miles per hour. A supplementary vertical wind tunnel delivers air normal to the path of the moving model and thus simulates conditions met with by a ship encountering gusts and squalls.

Inasmuch as air and water are both fluids, it is possible to test airship models in water and investigate the effects of cross currents in the water which are analogous to gusts in the air. The water tank is properly designed and equipped to make such investigations.

OUTSIDE WORK

The Department of Co-ordination and the employer endeavor so to plan the work that the student gets a carefully graded training, beginning with work requiring no skill or experience and ending with actual professional work. This work is required when the co-operative plan is in opera-

tion and begins with the student's admission to the Upper College. The alternation is by half semester periods until the senior year, the whole of which is spent in college.

Each student's work assignment is an individual problem. Scholastic records, work reports, conferences, and shop visits are all utilized by co-ordinators in an effort to give each student the type of practical experience which best suits his particular needs. Weekly work reports are prepared in diary form and contain a daily account of the student's practical experience. These reports provide a constant check upon the student's progress in his outside employment.

The outside work, properly co-ordinated with the University training, furnishes a large part of the technical detail required in professional subjects.

WAGES

The object of requiring outside work is to give the student practical experience, not to enable him to earn money. The student's earnings are not sufficient to pay his expenses and he is frequently called upon to change practice jobs where the change means a decrease in salary.

Engineering students are paid for their outside work the same as other employees. Beginners are paid a little more than apprentices and are increased according to a rate agreed upon by the employer and the Department of Co-ordination. Students are paid only for the time actually employed, and receive their wages directly from their employer.

DEGREES

The degrees of Bachelor of Civil Engineering, Bachelor of Mechanical Engineering, Bachelor of Electrical Engineering, and Master of Science in Mechanical Engineering, will be granted to those students who satisfactorily complete the required work of the respective courses of study. In addition to his diploma, each co-operative student will receive a certificate showing in detail his practical experience.

The addition of the staff of The Daniel Guggenheim Airship Institute to the faculty of the College of Engineering makes it possible for students to complete the requirements for a degree in mechanical engineering with an option in aeronautics.

MILITARY SCIENCE AND TACTICS

Military training under the direct supervision of the United States Government is required of all male students physically fit. Men entering the College of Engineering are required to take the two-year basic course.

Students pursuing advanced R.O.T.C. are allowed to substitute military training (not over six hours of credit) for courses in the curriculum. These courses are selected by a committee composed of the Dean, head of the department in which the student is classified, and the professor of co-ordination.

PROMOTION

Students are promoted to Upper College work in the College of Engineering after satisfactory completion of two years of work in the General College as indicated in the program outlined on this page. A minimum of 64 semester hours and 128 quality points is required for promotion.

ESTIMATED EXPENSE OF FIRST YEAR

First Semester

	Resident	Non-Resident
Tuition	Free	\$ 90.00
Fees	\$ 62.50	62.50
Books and Drawing Instruments.....	40.00	40.00
Total.....	\$102.50	\$192.50

Second Semester

	Resident	Non-Resident
Tuition	Free	\$ 90.00
Fees	\$ 48.50	48.50
Books	8.00	8.00
Total.....	\$ 56.50	\$146.50

OUTLINE OF REQUIRED COURSES

THE GENERAL COLLEGE

First Year

First Semester	Cr. Hrs.	Second Semester	Cr. Hrs.
Military Science & Tactics 11.....	1½	Military Science & Tactics 12.....	1½
Hygiene & Physical Educ. 15.....	2	Hygiene & Physical Educ. 16.....	2
Physics 21 (Mechanics).....	4	Physics 22 (Mechanics).....	4
Math. 21 (Algebra).....	3	Math. 22 (Trigonometry).....	3
English 1.....	3	English 2.....	3
Engineering Drawing 21.....	2	Engineering Drawing 22.....	2
Survey of Engineering 24.....	1	Industrial Processes 22.....	2
Physical Educ. 3.....	1	Physical Educ. 4.....	1
	<u>17½</u>		<u>18½</u>

Summer Session

	Cr. Hrs.
Military Science and Tactics 43.....	1½
Physics 43 (Heat and Electricity).....	4
Math. 43 (Analytical Geometry).....	3
Math. 45 (Differential Calculus).....	3
Surveying 21-22.....	2
	<u>13½</u>

CIVIL ENGINEERING

PROFESSOR BOGUSLAVSKY

OUTLINE OF COURSES

Second Year

First Semester		Second Semester	
	Cr. Hrs.		Cr. Hrs.
Military Science & Tactics 44.....	1½	Applied Mechanics CE 109-110....	3
Physics 44 (Electricity, Light and Sound)	4	Strength of Materials CE 117-118..	3
Math. 46 (Integral Calculus).....	3	Engineering Geology CE 44.....	2
Elements of Electrical Engineering		Engineering Mathematics 213-214	2
EE 58	3	Elements of Electrical Engineering	
Engineering Chemistry 131.....	3	EE 123	3
Strength of Materials CE 46	3	Engineering Chemistry 132.....	3
		Descriptive Geometry ME 44.....	3
	<hr/>		<hr/>
	17½		19

Summer Quarter

	Cr. Hrs.
Heat, Power Engineering ME 46.....	3
Hydraulics ME 184.....	3
Surveying CE 43-101.....	4
Economics 41	3
	<hr/>
	13

Third Year

First Semester		Second Semester	
	Cr. Hrs.		Cr. Hrs.
Structural Design CE 114.....	3	Structural Design CE 200.....	3
Route Surveying CE 108.....	3	Highways CE 107	3
Concrete Laboratory CE 112.....	1	Statically Indeterminate Structures	
Thermodynamics ME 189.....	3	CE 205.....	3
English 61-62 (Report Writing)...	2	Water Supply CE 210.....	2
Stress Analysis CE 122.....	3	Industrial Organization and Man-	
Business & Professional Speaking		agement IE 47.....	3
47	2	Electives	5
	<hr/>		<hr/>
	17		19

Summer Quarter

	Cr. Hrs.
Roofs and Bridges CE 103	3
Structural Design CE 201.....	3
Soil Mechanics CE 215.....	3
Sewerage CE 211.....	2
Elective	3
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	14

All credit hours are based on a complete semester period. The above courses are required for the degree of Bachelor of Civil Engineering. In no case, however, will a degree be awarded until the student has passed, with necessary quality points, a minimum of 149* credit hours.

*142 during the accelerated program.

GENERAL COLLEGE

21-22. SURVEYING. *Summer term. 2 credits.*

Use of the tape, the level, and the transit. Computation of areas. Drawing of a map. Lab. fee, \$2 each.

24. SURVEY OF ENGINEERING. *First semester. 1 credit.*

Lectures, reading, and motion pictures covering scope of the work in various branches of engineering.

44. ENGINEERING GEOLOGY. *Second semester. 2 credits.*

Survey of the essential facts of dynamic, structural, and economic geology. Study of minerals and rocks.

46. STRENGTH OF MATERIALS. *First semester. 3 credits.*

Prerequisites, Math. 46, Physics 22. Tensile, comprehensive, and shearing stresses. Riveted joints. Torsion. Shear and bending moment. Design of beams. Deflection of beams.

UPPER COLLEGE

43-101. SURVEYING. *Summer term. 4 credits.*

Prerequisite, Surveying 21-22. Adjustment of instruments. Stadia and plane table. Contour mapping. Engineering astronomy. Lab. fee, \$2 each.

102. STRUCTURAL DRAWING. *Second semester. 2 credits.*

Prerequisite, Descriptive Geometry ME 44. Conventional methods of representing structural shapes. Detailing riveted joints, beams, girders, columns and roof trusses.

103. ROOFS AND BRIDGES. *Summer quarter. 3 credits.*

Prerequisite, CE 200. Design of roof and bridge trusses.

107. HIGHWAYS. *Second semester. 3 credits.*

Construction, cost, and advantages of the various types of hard surfaced highways. Study of traffic. Testing of bituminous material.

108. ROUTE SURVEYING. *First semester. 3 credits.*

Prerequisite, CE 43-101. Maps and profiles. Grades. Curves and spirals. Earthwork. Office and field work. Lab. fee, \$2.

109-110. APPLIED MECHANICS. *Second semester. 3 credits.*

Prerequisite, Math. 46, Physics 22. Forces. Resultants. Equilibrium. Friction. Centroids. Motion. Work and energy. Impulse and momentum.

112. CONCRETE LABORATORY. *First semester. 1 credit.*

Laboratory tests of cement, aggregates, and concrete in accordance with the A.S.T.M. standards. Lab. fee, \$1.

114. STRUCTURAL DESIGN. *First semester. 3 credits.*

Prerequisite, CE 46. Riveted and welded connections. Pins and bolts. Tension members.

117-118. STRENGTH OF MATERIALS. *Second semester. 3 credits.*

Prerequisite, CE 46. Compression, tension, and torsion tests of steel, wood, brick, and cast iron. Column design. Combined stresses. Continuous beams. Lab. fee, \$2.

122. STRESS ANALYSIS. *First semester. 3 credits.*

Prerequisite, CE 109-110. Structural analysis. Reactions, shears, and moments. Influence lines. Stresses in trusses.

200. STRUCTURAL DESIGN. *Second semester. 3 credits.*

Prerequisite, CE 117-118 and CE 114. Compression members. Direct stress and flexure. Plate girders. Timber. Construction.

201. STRUCTURAL DESIGN. *Summer quarter. 3 credits.*

Prerequisite, CE 122. Design of concrete structures, such as buildings, slab and girder bridges, and retaining walls.

205. STATICALLY INDETERMINATE STRUCTURES. *Second semester.*

3 credits.

Prerequisite, CE 122. Graphic statics. Lateral and longitudinal forces. Angle changes in beams and trusses. Moment distribution. Joint translation. Virtual work. Williot diagram. Maxwell's law of reciprocal deflections.

210. WATER SUPPLY. *Second semester. 2 credits.*

Prerequisite, ME 184. Sources of water supply. Estimation of demand. Conveyance of water. Quality and treatment of water.

211. SEWERAGE. *Summer quarter. 2 credits.*

Prerequisite, CE 210. Estimation of sewage. Design of sewer systems. Characteristics of sewage. Sewage disposal.

215. SOIL MECHANICS. *Summer quarter. 3 credits.*

Prerequisite, CE 109-110. Soil properties. Soil moisture. Limits of consistency. Permeability. Cohesion and internal friction. Compressibility and consolidation. Stress distribution in soil. Settlement of structures.

220. THEORY OF VIBRATIONS. *3 credits.*

Prerequisite, CE 109-110. Vibrations without damping. Damped vibrations. Systems with several degrees of freedom. Models of vibration systems.

300. ADVANCED STRUCTURAL THEORY. *3 credits.*

Prerequisite, CE 122. Methods of analysis of statically indeterminate structures. Computation of deflections. Secondary stresses.

301. SUSPENSION BRIDGES. *3 credits.*

Prerequisite, CE 122. Detailed study of suspension bridges.

302. ARCHES AND RIGID FRAMES. *3 credits.*

Prerequisite, CE 300. Study of steel and reinforced concrete structures.

ELECTRICAL ENGINEERING

PROFESSOR FAIRBURN, ASSOCIATE PROFESSOR SMITH, ASSISTANT PROFESSOR SIBILA.
MR. SEIFRIED

OUTLINE OF COURSES

Second Year

First Semester	Cr. Hrs.	Second Semester	Cr. Hrs.
Military Science & Tactics 44.....	1½	Descriptive Geometry ME 44.....	3
Physics 44 (Electricity, Light and Sound)	4	Applied Mechanics CE 109-110....	3
Math. 46 (Integral Calculus).....	3	Engineering Mathematics 213-214	2
Elements of Electrical Engineering EE 58.....	3	Elements of Electrical Engineering EE 123	3
Strength of Materials CE 46.....	3	Strength of Materials CE 117-118..	3
Engineering Chemistry 131.....	3	Engineering Chemistry 132.....	3
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	17½		17

Summer Quarter

	Cr. Hrs.
Elements of Electrical Engineering EE 124.....	3
Heat Power Engineering ME 46.....	3
Machine Drawing ME 23.....	2
Hydraulics ME 184.....	3
Shop Practice ME 49.....	2
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	13

Third Year

First Semester	Cr. Hrs.	Second Semester	Cr. Hrs.
Basic Industrial Electronics EE 127	2	Engineering Electronics EE 150....	3
A. C. Machines EE 170.....	3	A. C. Machines EE 172.....	3
A. C. Machines Laboratory EE 171	1½	A. C. Machines Laboratory EE 173	2
A. C. Circuits EE 130-131.....	3	Electrical Drafting, Blue Print	
Thermodynamics ME 189.....	3	Reading EE 128.....	3
English 61-62 (Report Writing)..	2	Economics 41	3
Elective	5	Elective	6
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	19½		20

Summer Quarter

	Cr. Hrs.
Electrical Measurements EE 149.....	3
Illumination Engineering EE 180.....	3
Illumination Engineering Laboratory EE 181.....	1
Electron Tube Applications EE 151.....	2
Thesis EE 198.....	1½
Option—Senior Electrical Engineering Problems EE 190 or Industrial Organization and Management IE 47 or Steady State A. C. Analysis EE 200.....	3
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	13½

All credit hours are based on a complete semester period. The above courses are required for the degree of Bachelor of Electrical Engineering. In no case, however, will a degree be awarded until the student has passed, with necessary quality points, a minimum of 149* credit hours.

*142 during the accelerated program.

GENERAL COLLEGE

58. ELEMENTS OF ELECTRICAL ENGINEERING. *First semester. 3 credits.*

Prerequisite, Physics 43. Two recitations and one 3-hour laboratory period. Lab. fee, \$3. An elementary technical survey of the electrical engineering field. Switching devices, direct current electrical measurements, arc welding, telephony, direct current radio, automotive and aviation electricity, direct current generators and motors, direct current transmission.

UPPER COLLEGE

123-124. ELEMENTS OF ELECTRICAL ENGINEERING. *3 credits each semester.*

Prerequisites, EE 58, Math. 46. Lab. fee, \$3 each semester. Two recitations, one 3-hour laboratory period. Technical aspects of direct current and alternating current machines and thermionic vacuum tubes. Characteristics, methods of control and testing. Industrial applications.

127. BASIC INDUSTRIAL ELECTRONICS. *First semester. 2 credits.*

Electronic theory and fields of application. Technical analysis of existing devices. Future trends.

128. ELECTRICAL DRAFTING, BLUE PRINT READING, AND ESTIMATING.

Second semester. 3 credits.

Two recitation periods, and one 3-hour laboratory period. Practice in electrical drafting. Standard symbols, bill of materials, blue print readings, printing machines, National Electric code, City code, wiring design of motor controls, factory layouts, estimating, specification writing.

130-131. ALTERNATING CURRENT CIRCUITS. *First semester. 3 credits.*

Prerequisite, EE 124. Three recitations.

149. ELECTRICAL MEASUREMENTS. *Summer quarter. 3 credits.*

Prerequisite, EE 124. Lab. fee, \$3. Two recitations and one 3-hour laboratory period.

150. ENGINEERING ELECTRONICS. *Second semester. 3 credits.*

Prerequisites, EE 131, EE 149. Three recitations. A technical study of electronic tubes and associated circuits. A foundation course.

151. ELECTRON TUBE APPLICATIONS. *Summer quarter. 2 credits.*

Prerequisite, EE 150. Lab. fee, \$3. One 4-hour laboratory period. The supporting laboratory experience for EE 150.

170. ALTERNATING CURRENT MACHINES. *First semester. 3 credits.*

Prerequisite, EE 131. A critical analysis of all types of alternators and transformers. Supporting laboratory, EE 171.

171. ALTERNATING CURRENT MACHINES LABORATORY. *First semester.*

1½ credits.

One 3-hour laboratory. Concurrent with EE 170. Lab. fee, \$4.

172. ADVANCED ALTERNATING CURRENT MACHINES. *Second semester.*

3 credits.

Prerequisite, EE 170. A continuation of EE 170, involving all types of induction motors, synchronous motors and rotary converters. Supporting laboratory, EE 173.

173. ADVANCED ALTERNATING CURRENT MACHINES LABORATORY.

Second semester. 2 credits.

Prerequisites, EE 170, EE 171. One 4-hour laboratory. Concurrent with EE 172. Lab. fee, \$4.

180. ILLUMINATION ENGINEERING. *Summer quarter. 3 credits.*

Prerequisite, Physics 44. Technical presentation of illumination theory. Survey and analysis of existing installations. Problems in design for lighting. Supporting laboratory, EE 181.

181. ILLUMINATION LABORATORY. *Summer quarter. 1 credit.*

Concurrent with EE 180. One 3-hour laboratory.

198-199. THESIS. *1½ credits each semester.*190. SENIOR ELECTRICAL PROBLEMS. *Summer quarter. 3 credits.*200. STEADY STATE ANALYSIS. *Summer quarter. 3 credits.*

Prerequisite, EE 130-131 or permission of head of department. Mathematical analysis of A. C. circuits without restrictions as to frequency or magnitude. Application of complex variables to circuit analysis. Study of filter circuits and meshes. Use of hyperbolic functions in transmission line analysis. Fourier series analysis of complex waves. Balanced and unbalanced polyphase circuits.

201. TRANSIENT ALTERNATING CURRENT ANALYSIS. *First semester. 3 credits.*

Prerequisite, EE 200, or permission of head of department. Methods of analysis for transient conditions in circuits with lumped and distributed parameters. Use of new operational methods. Bessel functions as applied to electrical circuits. Methods of analyzing non-linear circuits.

292. AIRCRAFT ELECTRICAL ENGINEERING. *3 credits.*

Prerequisite, EE 124 or equivalent. Electrical power, control, and instruments in aircraft.

INDUSTRIAL ENGINEERING

PROFESSOR McCLURE, MR. WANSKY

GENERAL COLLEGE

22. INDUSTRIAL PROCESSES. *Second semester. 2 credits.*

A study of manufacturing or fabricating processes of principal industries by use of process charts, motion pictures, plant visits, and assigned readings.

23. JOB SIMPLIFICATION. *3 credits.*

Application of motion economy principles to improve job methods on problems brought in by class members.

25. HUMAN RELATIONS IN INDUSTRY. *3 credits.*

Analyzing, planning for and handling human relations problems such as inducting, training, improving, correcting, stimulating, and placating employees.

47. INDUSTRIAL ORGANIZATION AND MANAGEMENT. *3 credits.*

Principles and practices of planning, organizing and controlling the activities of an industrial organization, in whole or in part.

UPPER COLLEGE

101. INDUSTRIAL PLANTS. *First semester. 3 credits.*

Prerequisite, IE 47. Principles, practices, and economics in Plant Location, Building, Layout, Physical Conditions and Materials Handling.

103. PRODUCTION PLANNING AND CONTROL. *Second semester. 3 credits.*

Prerequisite, IE 47. Principles and practices in Process and Product Design, Production Planning and Control, Inventory Control, Warehousing, Stores and Salvage Functions.

105. QUALITY CONTROL. *2 credits.*

Prerequisite, IE 47. Principles and practices in inspecting, testing, correcting and controlling quality of product or service.

107. SAFETY ENGINEERING. *Summer quarter. 3 credits.*

Prerequisite, IE 47. Principles and practices in industrial safety as effected by engineering, education, equipment and enforcement.

109. MAINTENANCE OF PLANT AND EQUIPMENT. *3 credits.*

Prerequisite, IE 47. Organization and Administration of Maintenance; Selection and Procurement; Stores; Power Metering; Inspection, Cleaning, Lubrication and Repair; Supervision, Planning and Scheduling; Recording Analysis, Estimating and Control of Maintenance Costs.

157. TIME STUDY. *First semester. 2 credits.*

Prerequisite, IE 47. Principles and practices in analyzing, timing, and setting standards for job performance and wage payment.

158. MOTION STUDY AND MICRO-MOTION STUDY. *Second semester. 2 credits.*

Prerequisite, IE 47. One recitation alternating with laboratory period. Lab. fee, \$2. Principles and practices applied to reducing time and effort waste.

256. INDUSTRIAL MANAGEMENT PROBLEMS. *Summer quarter. 3 credits.*

Modern principles and practices applied to an actual problem from industry. (Seminar—Senior standing or permission of instructor.)

MECHANICAL ENGINEERING

PROFESSOR GRIFFIN, ASSOCIATE PROFESSORS UPP AND WILSON

OUTLINE OF COURSES

First Semester		Second Semester	
	Cr. Hrs.		Cr. Hrs.
Military Science & Tactics 44.....	1½	Engineering Mathematics 213-214	2
Physics 44 (Electricity, Light and Sound)	4	Strength of Materials CE 117-118	3
Math. 46 (Integral Calculus).....	3	Applied Mechanics CE 109-110..	3
Elements of Electrical Engineering EE 58	3	*Descriptive Geometry ME 44.....	3
Strength of Materials CE 46.....	3	Elements of Electrical Engineering EE 123	3
Engineering Chemistry 131.....	3	Engineering Chemistry 132.....	3
	17½		17
		<i>Summer Quarter</i>	
			Cr. Hrs.
Heat Power Engineering ME 46.....			3
Machine Drawing ME 23.....			2
Shop Practice ME 49.....			2
Hydraulics ME 184.....			3
Elements of Electrical Engineering EE 124.....			3
			13
		<i>Third Year</i>	
First Semester		Second Semester	
	Cr. Hrs.		Cr. Hrs.
Mechanical Engineering Laboratory ME 182.....	2	Mechanical Engineering Laboratory ME 183.....	3
Thermodynamics ME 189.....	3	Steam Power Plants ME 185.....	3
Mechanism ME 172.....	3	Machine Design ME 178.....	3
Mechanism Drawing 174.....	1	Chemistry 136 (Fuels and Combustion)	2
Heating and Air Conditioning ME 187	3	Industrial Organization and Management IE 47.....	3
English 61-62 (Report Writing) ..	2	Elective	5
Business and Professional Speaking 47	2		
Economics 41	3		19
	19		
		<i>Summer Quarter</i>	
			Cr. Hrs.
Gas and Oil Engines ME 190.....			3
Special Mechanical Engineering Problems ME 194.....			3
Steam Power Plants ME 186.....			3
Machine Design ME 179.....			5
			14

*Students electing the Industrial Engineering Option will take Industrial Organization and Management IE 47 in their second year and Descriptive Geometry in their third year.

Third Year

(Industrial Engineering Option)

First Semester		Second Semester	
	Cr. Hrs.		Cr. Hrs.
Industrial Plant IE 101.....	3	Production Planning and Control IE 103.....	3
Time Study IE 157.....	2	Motion Study IE 158.....	2
Mechanical Engineering Labora- tory ME 182.....	2	Machine Design ME 178.....	3
Thermodynamics ME 189.....	3	Accounting	3
Mechanism ME 172.....	3	Business and Professional Speak- ing 47	2
Mechanism Drawing ME 174.....	1	Descriptive Geometry ME 44.....	3
English 61-62 (Report Writing)..	2	Electives	3
Economics 41.....	3		
	<hr/>		<hr/>
	19		19

Summer Quarter

	Cr. Hrs.
Gas and Oil Engines ME 190.....	3
Machine Design ME 179.....	5
Industrial Management Problems IE 256.....	3
Personnel Administration	3 or 4
	<hr/>
	14 or 15

(Aeronautical Engineering Option)

Summer Quarter

	Cr. Hrs.
Heat Power Engineering ME 46.....	3
Machine Drawing ME 23.....	2
Economics 41.....	3
Hydraulics ME 184.....	3
Elements of Electrical Engineering EE 124.....	3
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	14

Third Year

First Semester		Second Semester	
	Cr. Hrs.		Cr. Hrs.
Mechanical Engineering Labora- tory ME 182.....	2	Machine Design ME 178.....	3
Thermodynamics ME 189.....	3	Industrial Organization and Man- agement IE 47.....	3
Mechanism ME 172.....	3	Aerodynamics Laboratory 202.....	3
Mechanism Drawing ME 174.....	1	Business & Professional Speaking 47	2
Shop Practice ME 49.....	2	Electives	8
Aerodynamics 200.....	3		
English 61-62 (Report Writing)..	2		
Stress Analysis CE 122.....	3		
	<hr/>		<hr/>
	19		19

Summer Quarter

	Cr. Hrs.
Gas and Oil Engines ME 190.....	3
Machine Design ME 179.....	5
Aeronautical Problems 203.....	3
Airplane Design 201.....	3
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	14

All credit hours are based on a complete semester period. The above courses are required for the degree of Bachelor of Mechanical Engineering. In no case, however, will a degree be awarded until the student has passed, with necessary quality points, a minimum of 149* credit hours.

*142 during the accelerated program.

GENERAL COLLEGE

20. DRAWING INTERPRETATION AND SKETCHING. *1 credit.*

One two-hour laboratory period a week. Methods of representing objects by showing the proper views, the use of the scale, dimensioning, cross sections, notes and specifications, shop terms, types of fits, screw threads, and the application of pictorial drawing of production and assembling processes.

21-22. ENGINEERING DRAWING. *2 credits each semester.*23. MACHINE DRAWING. *Summer quarter. 2 credits.*

Prerequisite, 22.

24. AIRCRAFT DRAFTING. *2 credits.*

Prerequisite 22. A study of the materials and methods used in airplane construction with special emphasis on terminology, abbreviations, and standard parts as adopted by leading airplane manufacturers and approved by the Army and Navy. The exercises will include dimensional control, lofting, pattern layouts, ribs, spars, contours, controls and details of various airplane parts.

44. DESCRIPTIVE GEOMETRY. *Second semester. 3 credits.*

Prerequisite, 22.

46. HEAT POWER ENGINEERING. *Summer quarter. 3 credits.*

Prerequisite, Physics 22. This course treats of the principles and theory involved in the application of heat to various forms of heat engines, including the steam engine, steam turbine, internal combustion engine, and power plant auxiliaries.

49. SHOP PRACTICE. *Summer quarter. 2 credits.*

Lab. fee, \$3.

UPPER COLLEGE

172. MECHANISM. *First semester. 3 credits.*174. MECHANISM DRAWING. *First semester. 1 credit.*

Prerequisite, ME 172.

178. MACHINE DESIGN. *Second semester. 3 credits.*

Prerequisite, CE 118. A study of the construction, materials used, and the functions of various machine elements and the theory and methods used to calculate size of parts by means of the application of Mechanics and Strength of Materials.

179. MACHINE DESIGN. *Summer quarter. 5 credits.*

Prerequisite, ME 178. A continuation of 178 with laboratory work which includes the calculations and design of an assigned machine.

180. MACHINE DESIGN. *2 credits.*

Prerequisite, ME 179. An elective course for students desiring additional work in this field. The student works on an assigned project.

182. MECHANICAL ENGINEERING LABORATORY. *First semester. 2 credits.*

The calibration and the use of instruments and apparatus including pressure and vacuum gauges, thermometers, engine indicators and oil testing apparatus. Basic tests on internal combustion engines. Lab. fee, \$2.

183. MECHANICAL ENGINEERING LABORATORY. *Second semester. 3 credits.*

Prerequisite, ME 182. Experiments on the flow of fluids, including the orifice, Venturi meter, flow meter, weirs and the Pitot tube. Steam engine and turbine tests and standard S.A.E. tests on internal combustion engines. Lab. fee, \$2.

184. HYDRAULICS. *Summer quarter. 3 credits.*

Prerequisite, Math. 46. Fluid pressure, its measurement and its effect on various structures. The fundamental theory of fluid flow and its measurements by means of orifices, meters, weirs, pipes, and channels. The dynamic effect of jets on fixed and moving vanes.

185. STEAM POWER PLANTS. *Second semester. 3 credits.*

Prerequisite, ME 46. Fuels, combustion and heat transfer followed by the fundamental laws of heat power as applied to steam boilers, steam turbines, and power plant auxiliaries.

186. STEAM POWER PLANTS. *Summer quarter. 3 credits.*

Prerequisite, ME 185. Steam turbines and condensing equipment followed by numerous problems in heat power and thermodynamics.

187. HEATING AND AIR CONDITIONING. *First semester. 3 credits.*

Prerequisite, Physics 43. Heat loss in buildings, various types of heating equipment and the methods used to calculate their sizes. Cooling, dehumidifying and air circulation with a study of the methods used to design and select the proper equipment to satisfy the given requirements.

189. THERMODYNAMICS. *First semester. 3 credits.*

Prerequisite, Math. 46.

190. GAS AND OIL ENGINES. *Summer quarter. 3 credits.*

Prerequisite, ME 189. A study of the fundamental cycles of operation and combustion phenomena as applied to the internal combustion engine.

192. REFRIGERATION. (*An elective course*). *3 credits.*

Prerequisite, ME 189. A study of the characteristics of refrigerants and the theory, design and construction of refrigeration equipment with modern applications.

194. SPECIAL MECHANICAL ENGINEERING PROBLEMS. *Summer quarter. 3 credits.*

Lab. fee, \$3.

196. INSPECTION TRIPS. *Second semester. 1 credit.*197. HEATING AND VENTILATING. *First semester. 2 credits.*

Evening session. Heat loss in buildings, various types of heating equipment and the methods used to calculate their sizes.

198. AIR CONDITIONING. *Second semester. 2 credits.*

Evening session. Cooling, dehumidifying and air circulation with a study of the methods used to design and select the proper equipment to satisfy the given requirements.

AERONAUTICS

PROFESSORS MYERS, TROLLER AND HUSS, MR. ROSS
MR. RUGGLES, MR. STIMLER, MR. BATTUK

161-162. AIRCRAFT MATERIALS AND CONSTRUCTION. *2 credits each semester.*

Prerequisite, Strength of Materials. The requirements of aircraft structures including the materials and their characteristics. Steel, aluminum, and their alloys, magnesium, timber, plastics, rubber, and glass. An application of the use of the above materials to the construction of ribs, covers, ailerons, tail surfaces, cables, bearings, engine supports, and steering mechanisms. Also problems in vibration, damping, fatigue, and noise reduction.

163. GENERAL AERONAUTICS. *First semester. 3 credits.*

An introduction to aeronautics. An outline of history of aeronautics, Survey of the various types of aircraft, Physical properties of the air, Theory of flight, Component parts of the airplane, Construction and operation of airplanes, Instruments, Aeronautical safety appliances and communications.

169-170. METEOROLOGY. *3 credits each semester.*

Prerequisite, Physics 44. Meteorology as applied to aeronautics. Structure and characteristics of the atmosphere, wind and pressure, weather maps and symbols, forecasting, the Synoptic chart including its preparation and significance, and a study of various charts to represent upper strata.

200 (165). AERODYNAMICS. *Second semester. 3 credits.*

Prerequisite, Applied Mechanics, CE 110. A study of the nature of air forces, Airfoils, Theory of lift, Induced drag, Parasite drag, Pitching moment, Pitot and Venturi tubes, Types of flow, The monoplane, Flow mechanics, Circulation, impulse, and lift of wings, The propeller, Static stability, Dynamic stability, Auxiliary lift devices, Turning flight and load factors.

201 (166). AIRPLANE DESIGN. *Summer session. 3 credits.*

Prerequisite, Aerodynamics 200. Procedure in designing an airplane, such as, weight distribution in the airplane, determination of center of gravity location and motion, static stability calculations, critical loads on the airplane as determined by government regulations, determination of critical wing shear and bending moment curves, structural analysis of some of the main airplane parts.

202 (167). AERODYNAMICS LABORATORY. *Second semester. 3 credits.*

To be taken concurrently with Aerodynamics 200. The study and use of instruments and testing equipment in order to familiarize the student with the technique of aeronautical laboratory testing. The work is correlated with Aerodynamics 200, and thus the student is able to apply aerodynamic theory to the solution of practical problems. Wind tunnel experiments predominate. An engineering report is required on each assignment. Lab. fee, \$2.

203 (168). AERONAUTICAL PROBLEMS. *Summer session. 3 credits.*

Prerequisite, Aerodynamics Laboratory 202. This is a course in which the student makes use of the laboratory in the working of a particular research problem selected by him with the approval of the instructor. The purpose of the course is to help the student develop the technique of analyzing a problem and of setting up and carrying out a laboratory testing procedure that will enable him to obtain the solution. The work may be done individually or in small groups. Lab. fee, \$3.

300. AERODYNAMIC PRINCIPLES. *3 credits.*

Prerequisite, Aerodynamics 200. A more advanced study of aerodynamic principles and their development. Would be accompanied with the practical application of these principles to design and to performance estimates.

301-302 (159-160). AERODYNAMICS OF LIGHTER-THAN-AIR CRAFT.

2 credits each semester.

Prerequisite, Mechanical or aeronautical engineering (three years or equivalent). Definition of air forces on dirigibles and captive balloons, experimental facts about air forces, pressure distribution and general nature of flow about airship bodies, theory of potential flow about airship bodies, theory of surface friction and its effect on airships, theory of airship propulsion, stability of free and captive ships and of moored airships, ground handling forces, gust forces, heat transfer, performance of airships, wind tunnel tests, various design problems and possibilities.

303. STABILITY OF AIRPLANES. *3 credits.*

Prerequisite, Aerodynamics 200. The static and dynamic stability of the airplane.

304. AIRPLANE PERFORMANCE. *3 credits.*

Prerequisites, Aerodynamics 200 and Airplane Design 201. Calculation of the complete performance of an Airplane based upon available design data.

OTHER COURSES FOR ENGINEERING STUDENTS

CHEMISTRY

ASSISTANT PROFESSOR ANDERSON

131. ENGINEERING CHEMISTRY. *First semester. 3 credits.*
Lab. fee, \$5.
132. ENGINEERING CHEMISTRY. *Second semester. 3 credits.*
Lab. fee, \$5.
136. CHEMISTRY (FUELS AND COMBUSTION). *Second semester. 2 credits.*

ENGLISH

ASSISTANT PROFESSOR RAW

- 61-62. ENGLISH (Report Writing). *2 credits.*

METALLURGY

PROFESSOR FAIRBURN, MR. GROVE

133. PHYSICAL METALLURGY. *First semester. 2 credits.*
A beginning course in the fundamental science of metals. Chemistry of metals. Electron theory. Atomic structure. Types of lattices. Grains. Dendrites. Binary equilibrium diagrams of the basic alloy types; completely soluble, insoluble, partially soluble and compounds. Theory of solder, babbitt metals, etc. The microscope. The X-Ray. Radium. Electrical phenomena in metals; Conductivity, Magnetism, Seebeck effect, Peltier effect, Thompson effect, Electronic emission. Temperature measurements. Introduction to theory of steels.
134. PHYSICAL METALLURGY LABORATORY. *First semester. 1 credit.*
Concurrent with 133. One 3-hour laboratory period. A beginning laboratory course in Metallurgy, correlated with 133. Electrical phenomena in metals. Measurement of temperature by all known methods. The microscope. Polishing and etching of samples. Equilibrium diagrams of simple binary alloys. Lab. fee, \$5.
137. FERROUS METALLURGY. *Second semester. 2 credits.*
Prerequisite, 133. A course designed to familiarize the student with the alloys of iron, their properties, heat treatment, limitations and correct applications; to provide him with the background necessary for his entering the field of ferrous metallurgy. Pure iron. Steel, alloy systems, binary and ternary equilibrium diagrams. Solidification. Fundamentals of heat treatment, hot and cold working, annealing, normalizing, spheroidizing, tempering, austempering, nitriding, carburizing, induction heating. Static mechanical properties. Dynamic mechanical properties. Low, medium and high-carbon steels. Heat and corrosion resistance, welding. Cast iron, composition, structure, properties and applications.
138. FERROUS METALLURGY LABORATORY. *Second semester. 1 credit.*
One 3-hour laboratory period. Concurrent with 137. A laboratory course dealing with alloying of iron. Heat treatments. Cold working. Quenching. Grain size. Tensile, compressive and hardness tests. Micrographs. Identification of iron alloys. Surface treatments.
139. NON-FERROUS METALLURGY. *First semester. 2 credits.*
Prerequisite, 133. An advanced course in the metallurgy of Aluminum and Magnesium Alloys. Occurrences and extraction methods. Equilibrium diagrams, binary, ternary, etc. Casting, forging, extrusion, rolling. Heat treatments, precipitation hardening. Considerations of Beryllium and Lithium for future alloys.
140. NON-FERROUS METALLURGY LABORATORY. *First semester. 1 credit.*
One 3-hour laboratory period. Concurrent with 139. A laboratory course dealing with the alloying of Aluminum, Magnesium, Beryllium, etc. Compositions. Cold working. Heat treatments. Quenching. Grain size, hardness. Casting technique. Mechanical tests. Micrographs.

THE COLLEGE OF EDUCATION

HOWARD R. EVANS, PH.D., *Dean*

GENERAL INFORMATION

The College of Education, formerly known as the Teachers College, was established in 1921 in co-operation with the Akron Board of Education, replacing the former Perkins Normal School of Akron. Teachers College, until the close of the academic year 1930-31, was supported by both educational systems. For its faculty it draws upon the teaching staff of both the Public Schools and the University. Along with the reorganization plan which was placed into effect in September, 1935, the name was changed to the College of Education.

The University of Akron is so organized that students in any college may take courses in other colleges. This enables the College of Education to use the facilities of the whole University in the preparation of teachers. The Akron Public schools co-operate with the University in a number of ways, chief of which is the provision of the Spicer Elementary School for observation and laboratory experiences. Students in the University are inducted into actual school experience, for the most part in classes in the public schools of the city of Akron. Occasionally, however, Barberton, Summit County, and other neighboring school systems are used. Particular emphasis is placed upon the preparation of teachers for the city of Akron. Graduation does not, however, insure appointment to a teaching position in the city. Selection is made on the basis of scholarship, professional training, personality, and character.

The College of Education has for its first major purpose the professional preparation of teachers. Attention is given, however, to the development of characteristics and qualities which are equally important, such as a broad and liberal education, strong and pleasing personality, and desirable character.

In the preparation of teachers there is a related function, that of the improvement of teachers in service. In order to satisfy this need, evening, Saturday, and summer session courses are offered. These courses are designed to strengthen academic preparation, to improve professional mastery, and to inspire and lead teachers to a clearer conception of their responsibilities and privileges.

A third purpose is to bring teacher training into closer contact with the instructional, supervisory, and administrative forces of the city. The real, vital problems of education may thus be studied by all who represent these forces. In this way the vigorous progressive phases of school work in the city will be reflected in the training courses, and the study of these problems by the College of Education will bring suggestions for new forms of training and for various modifications of school work.

COURSES OF STUDY AND DEGREES

The College of Education offers curricula in the following fields: high school teaching in the regular academic subjects, the special fields such as physical education, music, art, secretarial science, commerce, speech and home economics; nursery school, kindergarten-primary, and all grades of the elementary school.

Each student is required to pass a qualifying examination before entering upon Student Teaching, or before graduation if his Student Teaching requirement has already been met.

The Department of Psychology is open to the students in the Liberal Arts College or the College of Education who wish to make Psychology their field of concentration.

The State of Ohio will grant a temporary or provisional elementary school certificate upon the completion of a program leading to the three-year diploma. Such a program is still provided by the College of Education for those students who wish to complete it. The first two years of the student's preparation are given over to general education in the General College. During the second year, however, if the student anticipates entering the College of Education he should plan to take certain prerequisite courses.

Any student in the University who is not enrolled in the College of Education and who wishes to enter the teaching profession should register with the Dean of the College of Education at least two years prior to the time at which he expects to be eligible to teach.

Students who complete a prescribed four-year curriculum of 128 semester hours and have the required quality of work are entitled to receive the B.A. in Education or the B.S. in Education degree.

Graduate courses are open to any student who holds a Bachelor's degree from an accredited institution and who has the necessary background and ability for advanced study. The Master's degree is granted upon the completion of 30 semester hours of study.

REQUIREMENTS FOR ADMISSION

1. Each student must have secured an average quality point ratio of 2.0 in all work carried.
2. Each student is required to pass an examination on the introductory courses in the General College.
3. Each student must pass an examination in written English.
4. Each student is required to meet a satisfactory standard with respect to personality. This rating is made by instructors conducting the courses in Education in the General College, by the office of the Dean of Students, or by means of a standardized rating, or by a combination of them.

5. Each student planning to major in a special field must take an examination by the special department.

6. Each prospective high school teacher must be prepared for certification in three subjects, one major and two minors. The teaching majors and minors are defined on the next page.

7. Each prospective high school teacher must be prepared to enter upper college courses in at least two teaching fields.

BASIC REQUIREMENTS FOR ALL DEGREES

1. General Education and prerequisite pre-professional requirements:	
English 1-2.....	6
Introduction to Social Science 5-6.....	6
Introduction to Humanities 7-8.....	6
Introduction to Natural Science 9-10.....	6
Hygiene, Physical and Mental 15-16.....	4
Physical Education 3-4.....	2
General Psychology 41.....	3
Educational Psychology 52.....	3
Introduction to Education 55.....	3
Fundamentals of Speech 76.....	3
Literature	6
Mathematics, Foreign Language, Accounting or *Elective.....	6-8
Military Science and Tactics (Men).....	6
2. Professional courses:	
Tests and Measurements 105.....	2
School Management 115.....	2
Student Teaching 124.....	6
Methods.....	Varies with the teaching field
Principles of Education 201.....	3
3. Major field plus one or two minors, depending upon field.	

REQUIREMENTS FOR THE B.A. IN EDUCATION

The B.A. degree in Education is granted to those whose major field is in one of the regular academic fields such as English, History, Mathematics, Science, etc. (Majors in special fields, including elementary, receive the B.S. degree in Education.)

*For Elementary Curriculum.

STATEMENT OF NUMBER OF HOURS REQUIRED IN VARIOUS
FIELDS FOR THE COMPLETION OF MAJORS AND MINORS

Field	H. S. Units as Pre- requisites	Major	Minor	Special
Art .....	.....	.....	24	60
Biological Science	1	24	15	.....
Business Education .....	.....	.....	.....	45
Bookkeeping—Social Business .....	.....	40	20	.....
Salesmanship—Merchandising .....	.....	40	20	.....
Stenography—Typing .....	.....	40	20	.....
Typing .....	.....	.....	5	.....
Earth Science	1	.....	15	.....
English	3	*30	15	.....
†French	2	24	15	.....
General Science .....	.....	*40—com- prehensive major	15	.....
†German	2	24	15	.....
History	2	24	15	.....
Home Economics .....	.....	.....	20	35
†Latin	2	18	15	.....
Mathematics	2	20	15	.....
Music—Instrumental .....	.....	.....	24	53
Vocal .....	.....	.....	24	53
Physical Education .....	.....	.....	16	40
Physical Science	1	24	15	.....
Psychology .....	.....	24	15	.....
Social Science	1	*24	15	.....
Social Studies (comprehensive major) .....	.....	40	.....	.....
†Spanish	2	24	15	.....
Speech .....	.....	24	15	40

For selection of required courses to constitute a teaching field, consult the Dean of the College of Education or appropriate adviser.

Each student expecting to receive the Bachelor of Arts in Education degree is required to have one major and two minors according to the definitions above, in addition to the requirements for promotion to the upper college as listed on page 38 and the following courses in education:

†Methods	3 hours
Tests and Measurements, 105	2
Principles of Education, 201	3
Student Teaching, 124	6
School Management, 115	2
Fundamentals of Speech, 76	3

Each student is required to pass a qualifying examination before entering upon student teaching, or before graduation if his student teaching requirement has already been met.

Each student is required to complete 128 semester hours of work with a minimum of a 2 point average. At the time of entering upon student teaching, this must be 2.5 in the major field and 2 in the minors.

*General courses are *not* included in the total hours listed above.

†The two units of high school which are required as prerequisites to college study in a language may be satisfied by taking the eight-hour beginning course. This means that, in order to place a language on a certificate as a teaching field, 23 hours would be required if the study of the language is begun in college.

‡Varies with the major and minors. In some cases the methods requirement is included as a part of the major.

SEQUENCE OF PRE-PROFESSIONAL AND PROFESSIONAL COURSES

<i>Second Year General College</i>			
First semester	Cr. Hrs.	Second semester	Cr. Hrs.
General Psychology.....	3	Educational Psychology.....	3
Introduction to Education (first or second semester).....		3	
<i>First Year Upper College</i>			
First semester	Cr. Hrs.	Second semester	Cr. Hrs.
Methods	3	Tests and Measurements 105.....	2
<i>Second Year Upper College</i>			
First semester	Cr. Hrs.	Second semester	Cr. Hrs.
Principles of Education 201.....	3	Student Teaching.....	6
		School Management.....	2
Student Teaching.....	6	<i>or</i>	
School Management.....	2	Principles of Education 201.....	3

ELEMENTARY EDUCATION

The following curriculum for the preparation of elementary school teachers leads to the B.S. degree in Education.

Elective work should be chosen in consultation with the advisers so that there will be some concentration comparable to at least one minor.

The lower elementary course is designed for students preparing to teach in grades one to three inclusive. The upper elementary course is for those preparing to teach in grades four to eight inclusive.

In addition to the basic requirements listed on page 115, the following courses should be taken:

LOWER ELEMENTARY

UPPER ELEMENTARY

<i>General College</i>			
	Cr. Hrs.		Cr. Hrs.
Design 21	2	Design 21.....	2
Introduction to Music 61.....	2	Introduction to Music 61.....	2
Elementary School Music Literature and Appreciation 62.....	2	Elementary School Music Literature and Appreciation 62.....	2
Design 22	2	Design 22	2
Story Telling 83-84.....	6	Story Telling 83 or 84.....	3
Children's Literature 86.....	2	Children's Literature 86.....	3
Handicrafts 41.....	3	Handicrafts 41.....	3
Geography	6	Geography	6
<i>College of Education</i>			
	Cr. Hrs.		Cr. Hrs.
Prim. Elementary Music Education 121.....	2	Prim. Elementary Music Education 121.....	2
Primary Education 131-132.....	6	Hygiene and Health Activities 131	2
Hygiene and Health Activities 131	2	Games for Elementary Grades 132	1
Games for Elementary Grades 132	1	Teaching of Reading 135.....	3
Teaching of Reading 135.....	3	Art for the Grades 121.....	2
Art for the Grades 121.....	2	Child or Adolescent Psychology....	3-2
Child Psychology 105.....	3	Science for Elementary Grades 133	3
Science for Elementary Grades 133	3	Economics, History, Political Science or Sociology	6
Economics, History, Political Science or Sociology.....	6	Teaching of Language Arts 137....	2
		Teaching of Social Studies 138.....	2
		Teaching of Arithmetic 136.....	2

KINDERGARTEN COURSE

To qualify for the special Kindergarten-Primary Certificate the applicant must complete the Lower-Elementary Course with the following exceptions:

1. Kindergarten Education 129 instead of Primary Education 132.
2. Student Teaching must be in the kindergarten and/or the first grade.

ART COURSE

To obtain the B.S. in Education degree with a major in art, one must fulfill the basic requirements listed on page 115 plus the following courses in art.

	Cr. Hrs.		Cr. Hrs.
Drawing:		Design, Painting, Sculpture:	
Drawing and Rendering 45-46..	4	Design 21-22	4
Illustration 179.....	2	Industrial Design.....	2
Graphic Arts 104-105.....	4	Still Life Painting 115-116.....	4
Figure Drawing 175-176.....	4	Modeling 59-60.....	4
		Weaving 106.....	2
Methods, etc.:		Occupational Therapy 70.....	2
Methods in Teaching Art 191..	3	General Crafts 102.....	2
Art for the Grades 121.....	2	Costume 151-152 or	
Student Teaching 124.....	6	Interior Decoration 171-172.....	6
		Appreciation and History:	
		Appreciation 29-30.....	4
		History of Art 200-201.....	6

COMMERCIAL TEACHER TRAINING

The general field of Business Education is divided into three specific fields: Stenography-Typing, Bookkeeping-Social Business, and Salesmanship-Merchandising. Students preparing to teach commercial subjects may follow a comprehensive major of 45 hours distributed over all three fields, or else a specific major of 40 hours in any one. The requirements for each follow:

Business Education.—Valid for teaching all subjects in the secretarial and commercial field. 45 semester hours distributed over all three fields and including second-semester Dictation, third-semester Accounting, Special Methods, High School Methods, one minor, general and professional requirements.

Stenography-Typing.—Valid for teaching Shorthand, Typewriting, Business English, Clerical Practice, and Secretarial Practice. The course must include fourth-semester Dictation, preparation for the other valid teaching subjects, Special Methods, and pertinent electives to total 40 hours; also two minors, High School Methods, general requirements, and professional requirements.

A minor in this field includes Shorthand, Typewriting, and Dictation, 14 hrs.; Special Methods, 4 hrs., and Secretarial Training, 2 hrs.

Bookkeeping-Social Business.—Valid for teaching Bookkeeping, Business Law, Economic Geography, Business Economics, Business Organization and Management. The course must include fourth-semester Accounting, preparation for the other valid teaching subjects, Special Methods, and pertinent electives to total 40 hours; also two minors, High School Methods, general requirements, and professional requirements. A minor in this field includes Accounting, 9 hrs.; Business Law, 3 hrs.; Economic Geography, 3 hrs.; Business Administration, 3 hrs.; and Special Methods, 2 hrs.

Salesmanship-Merchandising.—Valid for teaching Merchandising, Retail Store Selling, Salesmanship, Advertising, and Economic Geography. The course must include Marketing, 3 hrs.; Salesmanship, 3 hrs.; preparation for the other valid teaching subjects; Special Methods; and pertinent electives to total 40 hours; also two minors, High School Methods, general requirements, and professional requirements.

A minor in this field includes Marketing Principles, 3 hrs.; Salesmanship, 3 hrs.; Advertising; Retailing; Merchandising; Economic Geography; and pertinent electives to total 20 hours.

CURRICULUM IN COMMERCIAL TEACHER TRAINING

First Year, General College

First semester	Cr. Hrs.	Second semester	Cr. Hrs.
English 1.....	3	English 2.....	3
Introduction to Soc. Sc. 5.....	3	Introduction to Soc. Sc. 6.....	3
Hygiene, Mental 15.....	2	Hygiene, Physical 16.....	2
Physical Educ. 3.....	1	Physical Educ. 4.....	1
Military Training (Men).....	1½	Military Training (Men).....	1½
Mathematics, Accounting, or Foreign Language.....	3 or 4	Mathematics, Accounting, or Foreign Language.....	3 or 4
Introduction to Humanities 7 or Elective.....	3	Introduction to Humanities 8 or Elective.....	3

Second Year, General College

Introduction to Natural Science 9	3	Introduction to Natural Science 10	3
General Psychology 41.....	3	Educational Psychology 52.....	3
Military Training (Men).....	1½	Military Training (Men).....	1½
Fundamentals of Speech 76 or Major	3	Literature.....	3
Literature.....	3	Typewriting (Major) 52.....	2
Typewriting (Major) 51.....	2	Major.....	3
Introduction to Education 55.....	3		

Major subjects to be selected from Accounting, Business Administration, Business Law, Consumer Economics, Economic Geography, Filing and Machine Calculation, Secretarial Procedure, Selling and Advertising, and Shorthand.

Third Year, College of Education

Special Methods.....	2 or 3	High School Methods 113.....	3
Economics 41.....	3	Special Methods or Major.....	2 or 3
Tests and Measurements 105.....	2	Economics.....	3
Major or Minor.....	6 to 9	Major or Minor.....	6 to 9

Additional major subjects: Advertising, Business Correspondence, Dictation, Marketing, Purchasing.

Fourth Year, College of Education

Student Teaching 124.....	6	Principles of Education 201.....	3
School Management 115.....	2	Major, Minor, or Elective.....	13
Major, Minor, or Elective.....	8		

Additional major subjects: advanced work in any field for which prerequisites have been taken.

HEALTH AND PHYSICAL EDUCATION

One may obtain a B.S. in Education degree with a major in Physical Education by following the suggested curriculum and by planning electives to constitute one minor.

First Year, General College

First semester	Cr. Hrs.	Second semester	Cr. Hrs.
English 1.....	3	English 2.....	3
Introduction to Social Science 5.....	3	Introduction to Social Science 6.....	3
Introduction to Humanities 7.....	3	Introduction to Humanities 8.....	3
Hygiene, Mental 15.....	2	Hygiene, Physical 16.....	2
Physical Educ. 3.....	1	Physical Educ. 4.....	1
Foreign Language or Mathematics 3 or 4		Foreign Language or Mathematics 3 or 4	
Military Training (Men).....	1½	Military Training (Men).....	1½

Second Year, General College

Introduction to Natural Science 9	3	Introduction to Natural Science 10	3
General Psychology 41	3	Educational Psychology 52	3
Physical Education 45	3	Physical Education 46	3
Introduction to Education 55	3	Fundamentals of Speech 76	3
Literature	3	Literature	3
Military Training (Men)	1½	Military Training (Men)	1½

Third Year, College of Education

Theory and Practice 103	2 or 3	Theory and Practice 104 (Men)	2
Theory and Practice 105	2 or 3	Theory and Practice 106	2 or 3
Normal Diagnosis and Corrective Exercise 115	2	Theory and Prac. 108 (Women)	3
First Aid 111	1	Physical Education 114	2
Anatomy 127	3	Methods of Phys. Ed. 125	2
		Massage 112	1
		Physiology 128	3

Fourth Year, College of Education

Tests and Meas. 105	2	School Management 115	2
Org. and Adm. of Phys. Ed. 121	2	School Health 118	2
Kinesiology 124	2	Org. and Adm. of Phys. Ed. 122	2
Hygiene and Health Activities for Elementary Grades 131	2	Student Teaching 124	6
Games for Elem. Grades 132	1	Principles of Educa. 201	3

HOME ECONOMICS COURSE

To obtain the B.S. in Education degree with a major in home economics one must fulfill the basic requirements listed on page 115 plus the home economics major plus one minor.

MAJOR IN HOME ECONOMICS

Foods	
General Foods 45-46	6
Nutrition 119 or 42	3
Clothing	
Textiles 21	3
Clothing 22	3
Advanced Clothing 105 and 106	6
General	
Child Development 65	3
Home Management 62	3
Home Eco. Survey 53	2
Selection of Home Furnishings 58	3
Household Equipment 215	3
Total	35

MINOR IN HOME ECONOMICS

Foods	
General Foods 45-46	6
Clothing	
Textiles 21	3
Clothing 22	3
General	
Child Development 65	3
Home Management 62	3
Methods	
Home Economics Education 151	3
Total	21

MUSIC

To obtain the B.S. in Education degree with a major in Music one must complete the basic requirements listed on page 115 and the requirements given below.

Department of Music Requirements

THEORETICAL MUSIC		MUSIC ORGANIZATIONS	
	Cr. Hrs.	University Women's Chorus	
Music 61.....	2	University Singers	
Music 62.....	2	University Civic Orchestra	
Theory I 41.....	5		
Theory II 42.....	5		
Theory III 103.....	3		
History of Music 101-102.....	4		
Orchestration 114.....	2		
Conducting 112.....	2		
APPLIED MUSIC (Individual)		MUSIC EDUCATION	
Piano 1 or 2 credits per semester			Cr. Hrs.
Voice 1 or 2 credits per semester		Primary Elementary Music Ed.	
Organ 1 or 2 credits per semester		121.....	2
Violin 1 or 2 credits per semester		Secondary Music Ed. 123.....	2
Flute 1 or 2 credits per semester		Psych. of Music Ed. 124.....	2
Woodwind Instruments		Administrative Problems 128....	2
1 or 2 credits per semester			
Brass Instruments			
1 or 2 credits per semester			
Cello 1 or 2 credits per semester			
Accompanying 1 credit per semester			
		APPLIED MUSIC (Class)	
			Cr. Hrs.
		Piano Class 51, 52.....	2
		Voice Class 53, 54.....	2
		String Class 55, 56.....	2
		Woodwind Class 57.....	1
		Brass Class 58.....	1

Additional Requirements for Majors in Music

- (1) If a student wishes to major in School Music, he must have reached a satisfactory degree of achievement in Voice, or in some instrument, before entering college. A musical aptitude test will be given each student near the beginning of the first year of study.
- (2) Sixteen credits are necessary in individual instruction and must include 4 credits in Piano and 4 credits in Voice.
- (3) Class instruction may not be substituted for individual instruction.
- (4) Presentation of both Junior and Senior recitals is recommended.
- (5) Continuous enrolment in any one of the music organizations is compulsory.

SPEECH

To obtain the B.S. in Education degree with a major in Speech one must fulfill the basic requirements listed on page 115 and the following courses:

	Cr. Hrs.
Public Speaking 41.....	3
Reading Aloud 51.....	3
Fundamentals of Speech 76.....	3
Play Production 161.....	3
Speech Correction 271, 272.....	4
History of Speech 291, 292.....	4
Seminar 293.....	2
Teaching of Speech 114.....	2
Elective	16
	<hr style="width: 100%; border: 0.5px solid black;"/>
	40

The B.A. in Education with a major in Speech may be obtained by completing 24 hours of Speech including the courses listed above with the exception of Teaching of Speech 114. The minor requirement is 15 hours and includes the courses listed above with the exception of History of Speech 291-292, Seminar 293 and Teaching of Speech 114.

VOCATIONAL EDUCATION COURSE

This course leads to the B.S. in Ed. degree and a Smith-Hughes certificate.

All students must include the following subjects. Students wishing both the degree and the certificate must take in addition all the requirements for a degree (69 or 73 credits); those wishing only the certificate need include but 2 credits in Observation and Student Teaching instead of the 6 credits required for the degree.

	Cr. Hrs.
Major Field.....	24
Engineering Drawing.....	6
Occupational Analysis.....	2
Organization of Instructional Material.....	2
Methods of Teaching Occupational Subjects.....	2
Shop Management.....	2
Conference Method of Teaching.....	2
Educational and Vocational Guidance.....	2
Organization and Administration of Vocational Education.....	2
History and Philosophy of Vocational Education.....	2
Vocational Tests and Measurements.....	2

STUDENT ADVISERS

All students should confer with the following persons regarding their work according to the fields in which they expect to teach.

Students should also feel free to consult the Dean of the College of Education regarding any of their problems.

Art.....	MISS DAVIS
Commercial Subjects.....	MR. DOUTT, MR. LEIGH
Four-Year Elementary.....	MR. DISTAD
High School.....	MR. KUHNES
Home Economics.....	MISS WILSON
Kindergarten-Primary.....	MISS KEMLER
Music.....	MR. FLETCHER
Physical Education.....	MISS LAMKIN, MR. SEFTON
Primary-Elementary.....	MISS KEMLER
Speech.....	MR. VARIAN
Vocational Education.....	MR. DOWNING

THE QUALIFYING EXAMINATION

All students are required to pass satisfactorily a qualifying examination before engaging in student teaching. This examination covers (1) subject matter to be taught in the subjects or grades of the public school for which the student is certificated; (2) mastery of professional concepts, facts, and abilities which are taught in courses such as Psychology, History and Principles of Education, and Methods.

This examination is to be taken at the close of the junior year and is given in the spring and fall, each year. This examination serves in the College of Education as the comprehensive examination which is required of all students for graduation. If a student has taken his student teaching prior to his attendance at the University of Akron, the passage of the examination is, nevertheless, required for the degree.

RECOMMENDATIONS FOR CERTIFICATION

Some students who receive degrees from the College of Liberal Arts wish to qualify for teaching. Some instruction regarding this is given on page 51. These persons will be recommended for certification on the basis of the major and minor requirements on page 116 and the completion of the courses listed above under Sequence of Pre-Professional and Professional courses.

Admission to student teaching will be based upon the same point average requirement as in the case of students in the College of Education. Satisfactory work must be done in teaching fields and in education, particularly student teaching, to warrant recommendation for teaching certificates.

Every teacher in the public schools of Ohio is required to have a certificate covering the fields in which he is teaching. This certificate is issued by the State Department of Education upon recommendation of the Dean of the College of Education. The student must make out an application form, which may be obtained in the office of the Dean or in the office of the Registrar. This form should be filled out about one month before the student plans to complete all of his requirements for teaching.

CONVERSION FROM SECONDARY TO ELEMENTARY CERTIFICATE

The holder of a high school certificate may be temporarily certificated for elementary teaching upon completion of 12 semester hours. The temporary certificate may be renewed by taking 12 semester hours of additional training each year until such time as all of the requirements of the general pattern for the training of elementary teachers are met. Upon completion of all of the requirements, the provisional elementary certificate will be issued.

Consult the Dean of the College of Education for courses to be taken.

STUDENT TEACHING

The student teaching in all courses is done in the public schools under the supervision of critic teachers and a representative of the faculty of the College of Education. Each student must teach for a semester under regular assignment. Under such supervision the student teacher really assumes full teaching responsibility.

In addition to the qualifying examination a student, in order to be eligible to engage in student teaching, must have at least an average quality point ratio of 2.5 in his major field, an average quality point ratio of 2 in his minor fields, and at least an average quality point ratio of 2 in all subjects taken.

GRADUATE STUDY

The College of Education offers graduate courses leading to the following degrees: Master of Arts in Education (to candidates holding the B.A. degree), and Master of Science in Education (to candidates holding the B.S. degree, the B.S. in Education or the B.E. degree). For further information about graduate work see section of the catalog headed Graduate Study.

For the convenience of graduate students the following suggestive programs have been outlined. The selection of one of these programs or some other program should be made in consultation with the Dean of Graduate Study, the Dean of the College of Education, or an adviser they suggest.

ELEMENTARY EDUCATION

	Cr. Hrs.
Adv. Educa. Psychology 303.....	2
Activity School 303.....	3
Adv. Child and Adol. Psych. 308	2
Educational Diagnosis 313.....	2
Supervision of Instruction 322.....	2
Philosophy of Education 323.....	2
Technique of Research 425.....	2
Psychotherapy 310.....	2
Seminar in Curriculum 427.....	2
Thesis	2

SECONDARY SCHOOL
PRINCIPAL

Adult Education 211.....	2
Guidance 301.....	2
Adv. Educa. Psychology 303.....	2
Educational Statistics 311.....	2
Adv. Educa. Measurements 312.....	2
Hist. and Systems of Psych. 317.....	2
Secondary Sch. Admin. 320.....	2
Public Sch. Administration 321.....	2
Supervision of Instruction 322.....	2
Educational Philosophy 323.....	2
Evaluation of Sec. Schools 341.....	2
Technique of Research 425.....	2
Psychotherapy 310.....	2
Seminar in Curriculum 427.....	2
Thesis	2

GUIDANCE COUNSELOR

<i>Undergraduate prerequisites:</i>	
Educational Psychology 52.....	3
Educational Tests and Measurements 105.....	2
Normal and Abnormal Personality 120	3
Production, Prices, and Income 41	3
Labor Problems 106.....	3
<i>Recommended courses:</i>	
Personnel Management 164.....	3
Community Organization 206.....	3
Family 204.....	3
Adult Education 211.....	2
<i>Required courses with graduate credits:</i>	
Psych. Testing 207.....	3
Psychotherapy 310.....	2
Prin. of Personnel Counseling 208	2
Guidance for Elem. Sch. 301.....	3
Guidance for Sec. Sch. 302.....	3
Advanced Educa. Psych. 303.....	2
Educational Statistics 311.....	2
Educational Diagnosis 313.....	2
Secondary Sch. Admin. 320.....	2
Public Sch. Admin. 321.....	2

ELEMENTARY SCHOOL
PRINCIPAL

	Cr. Hrs.
Adv. Educa. Psychology 303.....	2
Activity School 303.....	2
Educational Statistics 311.....	2
Educational Diagnosis 313.....	2
Hist. and Systems of Psych. 317.....	2
Supervision of Instruction 322.....	2
Educational Philosophy 323-324.....	4
Elem. School Admin. 331.....	2
Technique of Research 425.....	2
Psychotherapy 310.....	2
Seminar in Curriculum 427.....	2
Thesis	2

SCHOOL SUPERINTENDENT

Adult Education 211.....	2
Guidance 301.....	2
Adv. Educa. Psychology 303.....	2
Educational Statistics 311.....	2
Educational Diagnosis 313.....	2
Hist. and Syst. of Psych. 317.....	2
Sec. Sch. Administration 320.....	2
Public Sch. Administration 321.....	2
Supervision of Instruction 322.....	2
Educational Philosophy 323.....	2
Elem. Sch. Administration 331.....	2
Technique of Research 425.....	2
Seminar in Curriculum 427.....	2
Comparative Education 433.....	2
Thesis	2

SCHOOL PSYCHOLOGIST

<i>Undergraduate prerequisites:</i>	
Child Psychology 105.....	3
Psych. of Adolescence 106.....	2
Normal and Abnormal Personality 120	3
<i>Recommended courses:</i>	
Speech Sci. and Correct. 172.....	3
<i>Required courses with graduate credits:</i>	
Psychological Testing 207.....	3
Psychotherapy 310.....	2
Technique of Social Case Work 251-252	4
Guidance in Elem. Sch. 301.....	3
or	
Guidance in the Sec. Sch. 302.....	3
Advanced Social Psych. 302.....	2
Advanced Educa. Psych. 303.....	2
Educational Statistics 311.....	2
Adv. Educa. Measure. 312.....	2
Educational Diagnosis 313.....	2

SUBJECTS OF INSTRUCTION

An asterisk (*) preceding the course number indicates the course is credited in the Liberal Arts College.

ART

PROFESSOR DAVIS, ASSISTANT PROFESSOR CABLE, MISS RIBLETT, MR. FAYSASH

121. ART FOR THE GRADES. *Either semester. 2 credits.*

Prerequisite, 21. A survey of art requirements in the elementary grades with laboratory work, to give teachers a knowledge of materials and mediums, and skill in handling them.

191. METHODS IN TEACHING ART. *First semester. 3 credits.*

Prerequisite, completion of the required course for art teachers and quality point ratio of 2 in the field. Study of trends and procedure in teaching and in supervision; relation of art to the home, school and community; observation in selected schools is required.

BUSINESS EDUCATION

PROFESSOR DOUTT, ASSOCIATE PROFESSOR FLINT

154. METHODS IN TYPEWRITING AND OFFICE PRACTICE. *2 credits.*

Prerequisite, Secretarial Training 74 and quality point ratio of 2 in the field. Typewriting technique, methods of grading and testing. Written observations are required. A theory test must be passed before credit is given for the course.

155. METHODS IN SHORTHAND AND TRANSCRIPTION. *2 credits.*

Prerequisite, Secretarial Science 63 or 142 and a quality point ratio of 2 in the field. Includes methods of presentation and written observations. A theory test must be passed before credit is given for the course.

172. METHODS IN BOOKKEEPING AND GENERAL BUSINESS. *2 credits.*

Prerequisite, Accounting 22 or 42, and a quality point ratio of 2 in the field. Includes methods of presentation, working a practice set, preparing lesson plans, and making written observations.

EDUCATION

DEAN EVANS, PROFESSORS DISTAD AND KUHNES, ASSOCIATE PROFESSOR KEMLER, ASSISTANT PROFESSORS FOSTER, JONES AND PAINTER, MISS KRAUS

GENERAL COLLEGE

41. HANDICRAFTS IN ELEMENTARY SCHOOL. *1 to 3 credits.*

This course consists of a broad range of experiences through the manipulation of various craft mediums which will enrich the curriculum of the elementary school. Lab. fee, \$2.

*55. INTRODUCTION TO EDUCATION. *Either semester. 3 credits.*

An orientation course giving an overview of the characteristic features of the American educational system and some explanation of the forces that have affected its development.

*65. EDUCATIONAL SOCIOLOGY. *Either semester. 3 credits.*

The purpose of this course is to study the political, social, and economic forces and problems in relation to educational problems such as delinquency, population shifts, vital statistics, unemployment and technological advance.

69. INTRODUCTION TO AVIATION. *Evening session. 3 credits.*

This is an introductory course covering general principles of aviation. Topics include: flight principles, construction and operation of airplanes and airplane engines, flying instruments, and safety devices.

83-84. STORY TELLING. *Each semester. 3 credits.*

A study of story material, discriminative selection, preparation, and presentation of traditional and modern stories for children; emphasis on the telling of stories and creative dramatics.

*86. CHILDREN'S LITERATURE. *3 credits.*

A survey of materials for children in prose, poetry, and illustrations from early historical periods to modern types; criteria of selection and methods of presentation are critically examined.

88. SPEECH FOR THE CLASSROOM TEACHER. *Either semester. 2 credits.*

The course will deal with choral speaking as a means to speech improvement, and the correction of simple speech deviation.

UPPER COLLEGE

101. ACTIVITY SCHOOL. *3 credits.*

A course offered in connection with the demonstration school in the summer. Designed to examine critically recent trends and newer practices in elementary education and to develop a forward-looking point of view.

*105. EDUCATIONAL TESTS AND MEASUREMENTS. *Either semester. 2 credits.*

Prerequisite, 52. A study of the various methods and devices employed in comprehensive and continuous evaluation. Some attention given to the treatment and interpretation of scores. Fee, \$2.

113. HIGH SCHOOL METHODS. *Either semester. 3 credits.*

This course includes four units of study carried on concurrently: (1) the basic principles of teaching; (2) a working knowledge of methodology in a specific field; (3) daily observation and participation; (4) preparation of teaching materials.

115. SCHOOL MANAGEMENT AND ADMINISTRATION. *2 credits.*

Accompanies Student Teaching. A study of the administrative relations and responsibilities of the teacher. Group discussion of problems arising in student teaching.

124. STUDENT TEACHING. *Either semester. 6 credits.*

Prerequisite, Education 113 or equivalent. Student teaching under the guidance of a directing teacher and a university supervisor.

129. KINDERGARTEN EDUCATION. *3 credits.*

Prerequisite, Psychology 52. This course aims to develop a forward-looking viewpoint in the education of pre-school children; a study of materials, techniques, and practices which promote all-around growth and development of young children.

131. PRIMARY EDUCATION. *First semester. 3 credits.*

Prerequisite, Psychology 52. This course aims to develop a forward-looking viewpoint in the education of young children. Materials, techniques, and practices are examined which furnish opportunities for co-operative enterprises and serve as a background for democratic living.

132. PRIMARY EDUCATION. *Second semester. 3 credits.*

Prerequisite, Education 131. A continuation of course 131 with emphasis on the teaching of the language arts, science, and social studies at the primary level.

133. SCIENCE FOR THE ELEMENTARY GRADES. *3 credits.*

Prerequisite, Psychology 52. A course for the prospective teacher of science in the elementary school; the development of a point of view toward science teaching and a study of methods of presenting science material; major emphasis is placed upon science content.

134. AUDIO-VISUAL EDUCATION.

The primary purpose of this course is to acquaint teachers of all levels with the wide variety of visual and auditory aids available and the techniques for their respective use. Other purposes are learning to operate all types of projectors and sound reproducers, to locate materials available, and to construct materials for one's own specific use.

135. THE TEACHING OF READING. *First semester. 3 credits.*

Prerequisite, Psychology 52. A survey of the reading program for the elementary school, together with modern methods of teaching reading at the various levels.

136. THE TEACHING OF ARITHMETIC. *2 credits.*

Prerequisite, Psychology 52. A study of trends in arithmetic instruction in the elementary school. Attention is given to procedures for the development of mathematical concepts and skills.

137. TEACHING THE LANGUAGE ARTS. *2 credits.*

Prerequisite, Psychology 52. This course deals with materials, grade allocations, and methods for teaching oral and written expression, spelling, and handwriting in elementary grades, according to the best modern practice.

138. THE TEACHING OF SOCIAL STUDIES. *2 credits.*

Prerequisite, Psychology 52. A study of social studies program in the elementary school and the varied means of implementing the program.

151-152. ELEMENTARY EDUCATION. *Evening and summer sessions. 3 credits each semester.*

An evaluation of recent trends and newer practices in elementary education. A refresher course.

201. PRINCIPLES OF EDUCATION. *Either semester. 3 credits.

The purpose of this course is to assist the senior student in integrating his thinking regarding the purpose of an educational system in a democratic community.

211. ADULT EDUCATION. *2 credits.*

A survey course for public school teachers and administrators as well as for those engaged full time in Adult Education. An historical background including European influences and their relation to the rapid developments in the field during the last decade will be emphasized. A greater share of the course will be devoted to current programs throughout the United States which include the social, economic and civic importance of a well-planned program of Adult Education in a Democracy.

235. WORKSHOP. (*Elementary School*). *3 credits.*

Opportunity for individual work under staff guidance on curriculum problems; utilization of community resources; planning of curriculum units.

GRADUATE COURSES IN EDUCATION

DEAN EVANS, PROFESSORS DISTAD AND KUHNES, ASSOCIATE PROFESSOR KEMLER,
ASSISTANT PROFESSOR FOSTER

Prerequisite to graduate courses in Education: At least 12 hours of undergraduate work in Education or the equivalent, and the Bachelor's degree or equivalent, and the provisional certificate for teaching.

301. GUIDANCE IN THE ELEMENTARY SCHOOL. *2 or 3 credits.*

A study of the fundamental principles and methods of guidance and pupil adjustment.

302. GUIDANCE IN THE SECONDARY SCHOOL. 2 credits.

A study of the principles and techniques of student guidance; the setting up of an effective guidance program in the secondary school.

303. ACTIVITY SCHOOL. 3 credits.

See Course 101. For graduate credit additional work of an advanced nature is required.

***311. EDUCATIONAL STATISTICS. 2 credits.**

A course in statistical methods and techniques used in the field of measurement and by research workers in education and psychology.

312. ADVANCED EDUCATIONAL MEASUREMENTS. 2 credits.

A study of the techniques of measuring and evaluating pupil progress. Some attention will be given to the theory of test construction. Fee, \$2.

313. EDUCATIONAL DIAGNOSIS. 2 credits.

A study of the factors contributing to educational disability. Techniques of diagnostic and remedial work will also be treated.

320. SECONDARY SCHOOL ADMINISTRATION. 2 credits.

A treatment of the problems, procedures, and principles of organization and administration in secondary schools.

321. PUBLIC SCHOOL ADMINISTRATION. 2 credits.

The theory and practices of educational administration in the state and county systems, cities, and rural districts.

322. SUPERVISION OF INSTRUCTION. 2 credits.

A study of the principles, organization, and techniques of supervision with a view to the improvement of instruction.

323-324. EDUCATIONAL PHILOSOPHY. 2 credits each semester.

The purpose of the course is to integrate the thinking regarding the current educational problems that must be solved by understanding the current philosophy of life in the light of its history and present trends.

331. ELEMENTARY SCHOOL ADMINISTRATION. 2 credits.

A study of the problems, procedures, and principles of organization, administration, and supervision in elementary schools.

335. WORKSHOP (Secondary School). 2 credits.

This course consists of lectures on workshop technique supplemented by the working out of individual problems under staff guidance.

341. EVALUATION OF SECONDARY SCHOOLS. 2 credits.

This is a laboratory course in which the evaluation of a high school will be made by use of up-to-date techniques and criteria.

401. GREAT TEACHERS. 2 credits.

The purpose of this course is to assist the student to perceive the educational significance of the leaders in the field during the past three hundred years.

423. CONCEPT OF MIND IN EDUCATIONAL THEORY. 2 credits.

The purpose of this course is to examine the influence upon educational theory and practice of the concepts that have been dominant in education.

425. TECHNIQUE OF RESEARCH AND INVESTIGATION. 2 credits.

A study of research methods and techniques commonly used in education and psychology; some emphasis given to the preparation of research reports.

427. SEMINAR IN CURRICULUM. 2 credits.

A study of the principles underlying curriculum construction; review of important investigations; and practice in construction of curriculum units.

433. COMPARATIVE EDUCATION. 2 credits.

A comparison of the educational philosophy and organization of English and American education.

434. COMPARATIVE EDUCATION. 2 credits.

A comparison of the educational philosophy and organization of American and Latin American education.

GEOGRAPHY

ASSISTANT PROFESSOR JONES

GENERAL COLLEGE***71. PRINCIPLES OF GEOGRAPHY. 3 credits.**

A study of those principles which are basic in gaining an understanding of the relationship of man's activities to his natural environment.

***72. GEOGRAPHY OF NORTH AMERICA. 3 credits.**

A study of the natural regions, climate, natural resources, work patterns and industries of the continent.

***73. GEOGRAPHY OF SOUTH AMERICA. 3 credits.**

This course will give each student a basic view of the entire South American continent, its climate, products, types of inhabitants, its various kinds of government and its relation to the North American neighbors.

***74. GEOGRAPHY OF EUROPE. 3 credits.**

A study of the natural regions, the uneven distribution of resources among the several political units and an evaluation of some of the problems faced by the countries of the continent.

***75. WORLD GEOGRAPHY. 3 credits.**

In this course a general study is made of the effects of geographical environment upon the human response of people living in Africa, Malaysian Lands, India, China, Japan, Russia, South America, Caribbean Lands, The United States, and Western Europe.

76. METEOROLOGY. Evening session. 2 credits.

A first course covering the composition and properties of the atmosphere, causes of clouds and cloud types, variations of temperature and their effects, circulation of air, air masses, fronts, and disturbances, weather reports, weather maps, and weather forecasts.

77. GEOGRAPHY OF ASIA. Either semester. 3 credits.

Prerequisite, 71. This course is designed to help develop an understanding of the various countries of Asia, their economic-geographic regions, their major commodities, and their industries and commerce. It will help to interpret adjustments to the environment through the study of space relationships, climate, relief, and natural resources as well as significant political, racial and social factors which have a bearing upon industrial and commercial activities.

HOME ECONOMICS

See under Home Economics in the College of Liberal Arts.

MUSIC EDUCATION

PROFESSOR JORGENSEN, ASSOCIATE PROFESSOR ENDE,
ASSISTANT PROFESSOR FLETCHER, MR. STEIN, MR. LIGHTFRITZ, MR. WHEELER,
MR. FUNKHOUSER, MR. MCBRIDE, MR. FRENCH, MR. CAMPBELL,
MRS. VAN SICKLE, MISS WELLS

31-32. DALCROZE EURYTHMICS. *2 credits.*

The mental and physical acclimation to every conceivable rhythmic device, which is essential to anyone interested in music. This course is so conceived that it can be applicable to all the various branches of music.

61. INTRODUCTION TO MUSIC. *2 credits.*

Designed to introduce the Education student to problems of music study, fundamentals of musical notation. It allows the student to gain daily experience in writing, playing and singing those materials which are necessary to provide competent grade school music teaching. Prerequisite to any further study in music — should be taken as early as possible.

62. ELEMENTARY SCHOOL MUSIC LITERATURE AND APPRECIATION.

2 credits.

Prerequisite, Introduction to Music 61. Materials and methods for teaching music appreciation in grade school classes, beginning with rote and reading song materials and their correlation with children's activities and progressing to eventual enjoyment of generally.

121. PRIMARY-ELEMENTARY MUSIC EDUCATION. *2 credits.*

The methods of teaching music from the kindergarten to the sixth grade inclusive. All the available materials are also investigated.

123. SECONDARY MUSIC EDUCATION. *2 credits.*

The procedures that should be employed to give the adolescent a well-balanced participation in applied and theoretical music.

124. PSYCHOLOGY OF MUSIC EDUCATION. *2 credits.*

The basic motivations of music education. The psychological factors in gaining these musical dispositions are examined.

128. ADMINISTRATIVE PROBLEMS. *2 credits.*

The academic, economic, social, and professional problems that confront every music teacher. A summary is made of the contributions which have appeared in the professional journals.

PHYSICAL EDUCATION

PROFESSOR SEFTON, ASSOCIATE PROFESSOR SMITH, ASSISTANT PROFESSORS BEICHLY,
LAMKIN AND BALDACCI, MISS CLAYTON

GENERAL COLLEGE

*15-16. HYGIENE, PHYSICAL AND MENTAL. *For description see page 41.*

One lecture, one discussion period a week.

3-4. PHYSICAL EDUCATION. *1 credit each semester.*

Required course in physical education activity planned for freshman year.

MEN

- I. Tumbling, apparatus and stunts (each semester).
- II. Minor sports, soccer, volleyball, basketball, leisure sports.
- III. Calisthenics (each semester).
- IV. Athletics—football, basketball, track (varsity squad).
- V. Remedial gymnastics (each semester).

Tests will be given in physical efficiency, knowledge of games and technique of skills.

WOMEN

- I. Folk and National Dancing (first semester) 1 credit.
- II. American Square Dancing (second semester) 1 credit.
- III. Tumbling, Stunts, and Apparatus (second semester) 1 credit.
- IV-V. Team Sports—Baseball, Hockey, Volleyball, Basketball, Speedball (each semester) 1 credit.
- VI. Beginning Swimming (first semester) 1 credit.
- VII. Intermediate Swimming (second semester) 1 credit. (Permission of Instructor.)
- VIII. Advanced Swimming (second semester) 1 credit.
- IX-X. Modern Dance (either semester) 1 credit.
- XI-XII. Individual and Leisure Time Sports—Archery, Badminton, Table Tennis, Paddle Tennis, Deck Tennis, Tennis, Bowling, 1 credit.
- XIII. Remedial Gymnastics (first semester) 1 credit.

45-46. BASIC COURSE IN PHYSICAL EDUCATION PRACTICE. *Each semester. 3 credits.*

Men students majoring in Physical Education are required to take all laboratory sections provided for Physical Education 3-4. Women majors are required to take sections I-XIII given above.

69. ORGANIZATION AND ADMINISTRATION OF INDUSTRIAL RECREATION. *2 credits.*

This is a lecture and discussion course of the following material: Health Education, Athletic Equipment, Noon-Hour Recreational Physical Activities, Programs of Activities, Programs of Games, Organization and Administration of Athletic Meets, and Industrial Athletic Organization.

70. ORGANIZATION AND ADMINISTRATION OF MUNICIPAL RECREATION. *2 credits.*

This course will deal with subjects of Administration, Budgets, management of Individual Playgrounds, the neighborhood Recreation Center and Community Activities.

UPPER COLLEGE

103. THEORY AND PRACTICE OF PHYSICAL EDUCATION (*for women*). *First semester. 3 credits.*

Historical development, methods and practice in the teaching of apparatus, gymnastics, stunts and tumbling.

103-104. THEORY AND PRACTICE OF PHYSICAL EDUCATION (*for men*). *Each semester. 2 credits.*

The purpose of this course is to develop personal technique and skill in presenting calisthenics, marching, and gymnastic activities; general lesson plans and teaching techniques suitable for elementary and secondary school programs.

105-106. THEORY AND PRACTICE OF ATHLETICS. *2 credits for men and 3 credits for women each semester.*

Interpretation of rules, techniques and practice in officiating in team and individual sports.

108. THEORY AND PRACTICE OF DANCING. *Second semester. 3 credits.*

History, theory and philosophy of dance as a creative art experience. Practice in rhythmical analysis and composition.

111. FIRST AID. *1 credit.*

This is the standard American Red Cross course which gives instruction and practice in the immediate and temporary care of injuries and sudden illness.

112. **MASSAGE.** *Second semester. 1 credit.*
Theory and practice in the scientific manipulation of the muscles as related to therapeutic exercise.
114. **THEORY AND PRACTICE OF SWIMMING.** *Second semester. 2 credits.*
Analysis of strokes and dives; methods and practice in the teaching of swimming.
115. **NORMAL DIAGNOSIS AND INDIVIDUAL CORRECTIVE GYMNASTICS AND CORRECTIVE EXERCISE.** *2 credits.*
A study of current theories and practices relating to the needs of physically handicapped children; particular emphasis is given to underlying philosophy, purpose, and administration.
118. **SCHOOL HEALTH.** *2 credits.*
The purpose of this course is to acquaint students of education, teachers in service, and others interested, with the broad general nature of health problems in schools.
- 121-122. **ORGANIZATION AND ADMINISTRATION OF PHYSICAL EDUCATION.** *2 credits.*
A comprehensive study of the various aspects of the organization and administration of physical education programs.
124. **KINESIOLOGY.** *2 credits.*
This is a study of body movements from the standpoint of energy, leverage, angle positions, sequence and efficiency as applied to sports and working conditions.
125. **METHODS IN PHYSICAL EDUCATION.** *2 credits.*
An analysis of the objectives and principles of physical education as related to the techniques of teaching; and a study of present-day trends through observation of methods in teaching physical education.
127. **APPLIED ANATOMY.** *3 credits.*
This is a study of the structure of the architecture of the human body, specializing on the origin, insertion, action, innervation and blood supply of the important muscles of the body in relation to physical education and health.
128. **APPLIED PHYSIOLOGY.** *3 credits.*
The purpose of this course is to study the general laws of life and the functional activity of tissues, organs and systems, learning what they can do and how they work in everyday life.
131. **HYGIENE AND HEALTH ACTIVITIES FOR ELEMENTARY GRADES.**
2 credits.
A survey of the hygiene and health factors which influence child development physically, mentally, and socially; methods and materials in teaching hygiene and health at the various age-levels.
132. **GAMES FOR ELEMENTARY GRADES.** *1 credit.*
Practical analysis of games and rhythms for the elementary school child in relation to child development at the various age-levels.

PSYCHOLOGY

PROFESSOR TWINING, ASSISTANT PROFESSOR WITZEMAN,
MR. ALVEN, MRS. PAINTER

***41. GENERAL PSYCHOLOGY. 3 credits.**

A study of the basic facts and principles involved in normal human behavior. Lectures, demonstrations, and discussions.

42. INTRODUCTION TO GENERAL EXPERIMENTAL PSYCHOLOGY. 1 credit.

Taken along with or after 41, preferably at same time. Introduction to laboratory procedures through readings, demonstrations and the performances of group experiments which are common to general psychology. The topics parallel those in 41. Two 1-hour laboratory periods a week. Fee \$1.00.

***43. APPLIED PSYCHOLOGY. 3 credits.**

Prerequisite 41. Introductory survey of techniques used and results obtained by applied psychologists in their analyses of business, education, clinical problems, home, industry, law and criminology, medicine, personnel relationships, social change, and vocation. Lectures, reports, and discussions.

51. PSYCHOLOGY FOR NURSES. 2 credits.

Designed to prepare prospective nurses to meet the psychological problems that will appear in their profession. Attention is given to applications of psychology to specific hospital situations and public health nursing as well as to basic facts and principles.

***52. EDUCATIONAL PSYCHOLOGY. 3 credits.**

Prerequisite 41. Designed to prepare the prospective teacher or supervisor to guide the all-around development of his students more efficiently. Concepts of growth, learning, adjustment, and individual differences are stressed. Observations of different classroom situations are included.

***62. HUMAN RELATIONS IN BUSINESS AND INDUSTRY. 3 credits.**

Prerequisite 41. Principles and techniques for improving labor management relationships; psychological factors in supervision which affect results in training, adjustment, and morale; psychological factors in marketing, advertising and selling which have effects upon producers, distributors and consumers.

Only two of the three courses numbered 43, 52, and 62 may be presented for credit.

UPPER COLLEGE

***105. CHILD PSYCHOLOGY. 3 credits.**

Prerequisite 41. The child from birth to adolescence; the principles of development in behavior; preparation of clinical studies on individual children.

***106. PSYCHOLOGY OF ADOLESCENCE. 2 credits.**

Prerequisite 41. A continuation of the approach used in child psychology through the adolescent period; emphasis on special needs and problems of this age.

***110. EXPERIMENTAL PSYCHOLOGY. 3 credits.**

Prerequisite 42. A study of the scientific methods and tools of modern experimental psychology; group and individual laboratory experiments in such topics as sensory processes, attention and perception, and learning; some attention to field studies in the measurement of public opinion. One lecture and two 2-hour laboratory periods a week. Fee \$2.00.

***115. SOCIAL PSYCHOLOGY. 3 credits.**

Prerequisite 41. A study of the psychological responses of the individual in relation to the group situations and the social influences of modern life.

***120. NORMAL AND ABNORMAL PERSONALITY. 3 credits.**

Prerequisite two courses in psychology. Basic principles regarding the nature, development and organization of normal personality; a study of the range of adjustment mechanisms including the normal, the minor maladjustment area, the psychoneuroses, and the extreme psychoses. Lectures, recitations and visits to mental hospitals when possible.

207. PSYCHOLOGICAL TESTING IN PERSONNEL. 3 credits.

Prerequisite 6 hours of psychology. A survey of psychological tests and their common uses in business, industry, government and education; some attention to theoretical bases of test construction; practice in administering and interpreting general ability, special aptitude, vocational interest and personality tests. Two lectures and two 1-hour laboratory periods a week. Materials fee \$2.00.

208. PRINCIPLES AND TECHNIQUES IN PERSONNEL COUNSELING. 2 credits.

Prerequisite 207 or adult engaged in counseling. Instruction and practice in interviewing; survey of occupations and use of Dictionary of Occupational Titles; special problems of counselors in industrial, commercial and school situations. One lecture and two 1-hour laboratory periods per week.

211. PSYCHOLOGICAL FACTORS IN MARITAL AND HOME ADJUSTMENT.

2 credits.

Prerequisite a senior or adult with at least 1 course in psychology. No graduate credit possible. A study of the psychology of sex adjustments in adolescence, adulthood, and marriage; attention to a psychological evaluation of the factors which are important in successful marriage and parenthood. Lectures, readings, and discussions.

***213. ADVANCED GENERAL PSYCHOLOGY. 2 credits.**

Prerequisite 9 credits in psychology. A critical survey of major findings in the study of the normal human adult. Emphasis is on physiological background and contemporary experimental results. Lectures, readings, and reports.

***214. COMPARATIVE AND GENETIC PSYCHOLOGY. 2 credits.**

Prerequisite 9 credits in psychology. A study of animal behavior in its relation to human behavior by means of a critical survey of laboratory experiments in such areas as sensory discrimination, intelligence, learning and problem solving; a tracing of phylogenetic and ontogenetic development. Lectures, readings, and reports.

216. SEMINAR AND RESEARCH PROBLEM. 2 credits.

Prerequisite senior major or graduate. Reports by students on reading research and experimental research; individual experimental problem done by some students; reviews and critical discussion of current literature in the psychology journals.

GRADUATE COURSES

207, 208, 213, 214, and 216 are recommended for graduate students. They will be required to do additional work to that required of undergraduates. The prerequisite for graduate psychology courses is graduate standing with some background in psychology or seniors with 15 credit hours of psychology who may be admitted to courses at the 300 level.

302. ADVANCED SOCIAL PSYCHOLOGY. 2 credits.

Concepts and techniques involved in analyzing the behavior of individuals in such social phenomena as folkways, institutions, attitudes, propaganda, leadership, public opinion, and social morality.

303. ADVANCED EDUCATIONAL PSYCHOLOGY. 2 credits.

An analysis of development of skills and knowledge; interests and ideals; problem solving and creative activity; social growth and character formation. Designed for teacher or supervisor.

308. ADVANCED CHILD AND ADOLESCENT PSYCHOLOGY. 2 credits.

Analysis and evaluation of methods and conclusions of current major researches in child and adolescent development.

310. PSYCHOTHERAPY FOR PROFESSIONAL WORKERS. 2 credits.

Designed to help understand the varieties of adjustive behavior and how to aid readjustment and re-education. Case studies pertain to problems arising in the work of teachers, personnel managers and counselors, social workers, and other professional groups.

317. HISTORY AND SYSTEMS OF PSYCHOLOGY. 2 credits.

A critical survey of the evolution of methods and concepts of psychology and of contemporary points of view.

406. INDIVIDUAL PSYCHOLOGICAL TESTING. 2 credits.

Prerequisite 207. Offered only to outstanding graduate students who are planning to become School Psychologists or Clinical Psychologists. Course is given on an individual basis. Instruction and intensive practice in the administration and interpretation of the Stanford-Binet Test and one or two other individual psychological tests.

VOCATIONAL EDUCATION

ASSOCIATE PROFESSOR DOWNING, ASSISTANT PROFESSOR DENT

Courses 101 to 206 inclusive are required for both the degree and state certification.

100. INTRODUCTION TO VOCATIONAL EDUCATION. 1 credit.

A general pre-service course presented with the aim of furnishing immediate practical information for the beginning teacher

201. TRADE AND JOB ANALYSIS. 2 credits.

The objective of this course is to identify the elements of the various trades to be taught.

202. ORGANIZATION OF INSTRUCTIONAL MATERIAL. 2 credits.

Analysis developed in course 201 will be used as a basis for the construction of the course of study outline. Selection of functioning content will be stressed.

203. METHODS OF TEACHING OCCUPATIONAL SUBJECTS. 2 credits.

Careful consideration will be given to the common methods of teaching and to adapting them for use in vocational schools. Particular attention will be given to the psychology of the learning process.

204. VOCATIONAL TESTS AND MEASUREMENTS. 2 credits.

Theory of testing, necessary terminology, analysis and interpretation of results and construction of tests to be used in the vocational school.

205. SHOP MANAGEMENT. 2 credits.

How best to organize and manage a school shop. Shop planning, care of tools, shop routine. Course is largely conducted by the conference method.

206. CONFERENCE METHOD OF TEACHING.* 2 credits.

Planning, organizing, and conducting conferences. Each student will lead one or more conferences. Subjects chosen will be those of most interest to the group.

FOREMAN CONFERENCE LEADERSHIP.* No college credit or 2 credits.

Follows techniques developed by the Federal Board.

207. EDUCATIONAL AND VOCATIONAL GUIDANCE. 2 credits.

Development of theory, philosophy, and applications of guidance.

208. HISTORY AND PHILOSOPHY OF VOCATIONAL EDUCATION. 2 credits.

A tracing of the growth of vocational schools from their original roots in home craftsmanship. Guilds, trade unions, Smith-Hughes and succeeding laws, functioning content, placement, follow-up. Local responsibility.

209. ORGANIZATION AND ADMINISTRATION OF VOCATIONAL EDUCATION.

2 credits.

Provisions of the national laws and their application to local schools.

210. PSYCHOLOGY APPLIED TO OCCUPATIONAL TEACHING. 2 credits.

Attention is directed toward a better understanding of the fundamental laws of learning and their application in mastering a trade together with its related science, mathematics, blue print reading, etc.

211. INDUSTRIAL RELATIONS. 2 credits.

This course is intended to point the way toward a better understanding of labor adjustments, personnel problems, and industrial psychology. Some of the basic underlying philosophy is given consideration.

212. DEVELOPING CONTENT FOR SHOP AND RELATED SUBJECTS. 2 credits.

This course is designed to assist the Vocational teacher in developing material for which he has most need with considerable emphasis on related material.

*These courses have the same basic content but emphasis is placed on factory situations in the first and on teaching method in the second.

NURSING PROGRAMS

The nursing program originated as a part of the United States Cadet Nurse program sponsored by the federal government, and was operated in co-operation with the three general hospitals of Akron — City Hospital, Peoples Hospital, and St. Thomas Hospital. This co-operative plan continues since the closing of the United States Cadet Program on October 15, 1945.

There are now two basic nursing programs and an advanced nursing program offered.

BASIC NURSING PROGRAMS

LEADING TO A DIPLOMA IN NURSING

This program is a continuation and development of the original program. In addition to the first semester's work, formerly offered to pre-Cadets, the University now also provides the second semester's work for students of the three hospital schools. The student nurses are regularly enrolled in the University, with college credit, for these two semesters.

All applications for admission to this program will be handled through the hospital schools of nursing.

The following courses constitute the two semesters' work:

<i>First Semester</i>		<i>Second Semester</i>	
	Credits		Credits
Anatomy and Physiology 31.....	5	Microbiology 33	3
Chemistry 25	4	Diet Therapy	3
Foods 43	3	History of Nursing	3
Psychology 51	2	Nursing Arts I	2
Sociology 21	2	Pharmacology I	2
		Intro. to Medical Science	3
		Professional Adjustments	1
	<u>16</u>		<u>17</u>

LEADING TO B.S. DEGREE IN NURSING

This five-year basic program provides for candidates to be admitted directly to the University. The first two academic years and the first semester of the third year are spent on the campus. The remaining time is spent in hospitals and allied health centers. It includes general cultural courses and courses directly relating to nursing.

CURRICULUM FOR FIVE-YEAR BASIC NURSING PROGRAM

<i>First Semester</i>		<i>First Year</i>		<i>Second Semester</i>	
	Cr. Hrs.				Cr. Hrs.
English 1	3	English 2	3	English 2	3
Intro. Soc. Sc. 5	3	Intro. Soc. Sc. 6	3	Intro. Soc. Sc. 6	3
Anatomy and Physiology	5	Anatomy and Physiology	5	Anatomy and Physiology	5
Chemistry	4	Chemistry	4	Chemistry	4
Physical Ed. 3	1	Physical Ed. 4	1	Physical Ed. 4	1
	<u>16</u>		<u>16</u>		<u>16</u>
<i>First Semester</i>		<i>Second Year</i>		<i>Second Semester</i>	
	Cr. Hrs.				Cr. Hrs.
Intro. Human. 7	3	Intro. Human. 8	3	Intro. Human. 8	3
Bacteriology	4	Bacteriology	4	Bacteriology	4
Gen. Psychology 41	3	General Soc. 41	3	General Soc. 41	3
Hist. Nursing I	2	Hist. Nursing II	2	Hist. Nursing II	2
Math., Accounting or Foreign Language. 3-4	3-4	Math., Accounting or Foreign Language. 3-4	3-4	Math., Accounting or Foreign Language. 3-4	3-4
	<u>15-16</u>		<u>15-16</u>		<u>15-16</u>

Third Year

<i>First Semester</i>	<i>Cr. Hrs.</i>
Foods & Nutrition 43	3
Lab.	
Elective	3
Elective	3
Nursing Arts I	3
Intro. Med. Sc.	3
Pharmacology I	2
Prof. Adj. I	1
	<hr/>
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ADVANCED PROFESSIONAL PROGRAM FOR GRADUATE NURSES

Programs of advanced study are being arranged for graduate nurses, and one program—Ward Management and Teaching—is in operation. This program is designed for graduates of accredited nursing schools who wish to prepare for positions of ward management and teaching in hospitals by pursuing a program leading to a Bachelor of Science degree in Nursing Education.

Candidates must present evidence of good professional nursing education.

CURRICULUM FOR WARD MANAGEMENT AND TEACHING

<i>General Courses</i>	<i>Credits</i>	<i>Professional Courses</i>	<i>Credits</i>
English	6	Ward Management and Teaching	3
Intro. to Soc. Sc.	6	Supervised Practice	3
Intro. to Human.	6	Teaching Nursing Arts	3
Math., Accounting, or Foreign Language..	6-8	Nursing Trends	3
Chemistry or Physics	8	Hospital Administration	6
Physiology	6		
Bacteriology	8		<hr/>
Sociology	6		18
Psychology	6		
a. Educational			
b. Normal and Abnormal Personality			
Sanitation	6		
	<hr/>		
	64-66		

The number of electives will depend on the credit allowed the individual student for her basic professional program. Such credit not to exceed 45.

PUBLIC HEALTH NURSING

A program is offered for graduate nurses interested in the field of public health nursing. For details of this program, consult Professor Doherty.

Other programs in advanced nursing education will be announced later.

<p>GRADUATE STUDY CHARLES BULGER, PH.D., <i>Dean</i></p>
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In certain colleges and departments opportunity is offered properly qualified persons to study for the master's degree. In some of the departments graduate courses given in connection with the work in Adult Education have been arranged on a rotating plan to enable candidates to meet the requirements for a major or a minor.

Courses for graduate credit may be taken in the following departments:

English	Biology
Speech	Chemistry
Commerce	Mathematics
Economics	Physics
History	Education
Political Science	Psychology
Sociology	Engineering

It is planned that each of these departments will offer sufficient courses to enable students to complete a major or minor for a master's degree. Graduate courses are offered in rotation over a period of three to five years.

For details as to the actual courses offered, refer to the various colleges and departments.

Graduate work is characterized by quality as well as quantity. The degree is granted on the basis of high level of attainment in a certain field rather than for the collection of a specified number of credit hours.

Attainment is to be judged by (1) the thoroughness of the candidate's acquaintance with his field, (2) his knowledge of the methodology of his field, and (3) his initiative and independence.

The applicant for admission to graduate study must satisfy the Admissions Committee that all required secondary school and college credits have been secured and that the candidate has received a bachelor's degree from a college of recognized standing. A transcript must be sent to the Registrar by the institution from which the applicant obtained his bachelor's degree. The Committee on Graduate Study reserves the right to require any applicant for graduate work to prove that he has a satisfactory background for such work by taking and passing such examination or examinations as the Committee may prescribe.

Total credit of 26 to 30 semester hours, including a thesis, is required of all candidates; 20 to 24 semester hours of this work must be done at the University of Akron. If both major and minor are laboratory sciences, the total credit required is 26 hours; if either major or minor is a laboratory

science, the total credit required is 28; if neither major nor minor is a laboratory science, the requirement is 30 hours. The writing of a thesis is a requirement for the degree. Four hours of credit may be granted for the thesis. No work done more than five years previous to the date of granting the degree will be accepted in fulfilling the semester hour requirement. Six hours of graduate work may be done at another college subsequent to matriculation at the University of Akron. Graduate work done elsewhere previous to matriculation at the University of Akron will not be accepted.

No graduate credit will be granted for courses numbered under 200. Courses numbered 200-299 are primarily of senior (undergraduate) rank, and graduate credit may be established for these courses only when a greater amount and a higher quality of work is done than is required of the undergraduate students. Courses numbered 300-399 are primarily graduate courses to which a very few undergraduates who have shown unusual ability may be admitted. Courses numbered 400-499 are graduate courses for which the prerequisite is a bachelor's degree.

For courses in the 300 and 400 series no credit toward the master's degree will be allowed for work which receives the grade of D and not more than six hours of credit for work which receives the grade of C.

Choice of the major and the minor must have the approval of the Committee on Graduate Study. The minor may be elected in a college or division or department other than that in which the major is taken.

The thesis must have the approval of each member of the Thesis Committee. The thesis topic must be selected by November 1 of the academic year in which the student expects to graduate. Two copies of the thesis must be presented to the Dean of Graduate Study one month before the Commencement at which the candidate receives his degree; both copies shall be placed in the library.

Not later than one semester previous to the period at which the work for the degree will presumably be finished, the student must file with the Registrar a notice of intention to apply for the degree.

The thesis and all requirements for the master's degree must be completed within one year after the major or minor examination has been passed.

The following fees must be paid at the time application for the degree is filed:

Master's degree	\$10.00
Thesis fee	\$10.00
Binding fee, approximately, a volume.....	\$ 1.50

Each candidate must pass final written and oral examinations covering the major and minor fields.

SUMMER SESSIONLESLIE P. HARDY, M. S. ED., *Director*

The twenty-fifth annual Summer Session has been planned on an eleven-week quarter basis. Within the quarter a six-weeks session has been provided. This plan of organization for the Summer of 1946 permits flexibility in meeting the needs of:

- (1) Returned veterans and other students wishing to accelerate their educational programs. (11 weeks.)
- (2) Teachers, transfer students and others wishing to complete only one or two subjects in a shorter term. (6 weeks.)

Twenty-three departments are offering subjects of instruction on the undergraduate level. A number of the departments have scheduled classes in the Evening College. For graduate students there are a number of courses in Education, Psychology, Sociology and Engineering. High school graduates who wish to begin their college work immediately after graduation, and the regular students who wish to complete their undergraduate work in less than four years will find a liberal selection of offerings.

The College of Education has anticipated the special needs of teachers who wish to secure emergency certificates or who wish to renew certificates. Observation in the Activity School will provide an opportunity for teachers and prospective teachers to see the teaching skills at work in the classroom.

To meet the educational needs of the discharged veteran the summer curriculum has been planned to give these men and women courses which will help them expedite their educational program.

Each student will find the faculty and administrative officers eager to assist in selecting a program of studies that will make this Summer Session a valuable, pleasant and invigorating educational experience.

The Summer quarter begins Monday, June 17, and closes Friday, August 30. The six-weeks session begins June 17 and closes July 27.

ADMISSION REQUIREMENTS

The admission of any student to the University of Akron will depend upon the evidences of his preparation and ability to do college work in a satisfactory manner. The evidences are: (1) graduation from an accredited four-year secondary school or its equivalent; (2) quality of the work done in the secondary school; (3) ranking in certain tests given by the University to determine preparation, ability, and aptitudes; (4) attitude toward college work.

Admission examinations for entering freshmen will be held on Friday, June 14, and Saturday, June 15. Attendance at all periods is required.

Students from other colleges should present a statement of good standing from the registrar of the institution last attended.

EVENING CLASSES

A program of classes is scheduled for those who work during the day. This program also permits the student working morning hours or late night hours to plan a schedule from the day and evening classes.

SPECIAL STUDENTS

Students of maturity, over 21 years of age, who have not graduated from high school, may be admitted to certain courses upon presentation of sufficient evidence of preparation, aptitude, ability, and interest. These students are known as special students, and work taken by them does not count toward a degree until entrance requirements are met.

REGISTRATION

Registration for the 1946 Summer Session will be held in Buchtel Hall, Friday and Saturday, June 14 and 15. Any person registering after June 15 will be charged a late registration fee of \$5. Late registrants should report to the office of the Director.

All fees, including tuition and laboratory fees, must be paid to the Treasurer of the University as a part of registration. Registration and payment of fees should be made in person on June 14 or 15, or by mail before these dates.

FEEES

All fees are payable at the Treasurer's office before the student enters classes. The plan of deferred payments has been discontinued.

Consult the fee section for information concerning charges for work taken in either the six-week term or the eleven-week term.

APPOINTMENT BUREAU

The Dean of the College of Education is chairman of the Appointment Bureau for Teachers. Summer Session students may enroll for appointment without extra fee.

STUDENT TEACHING

Student teaching will be done in the Akron and Barberton public schools. All requests for student teaching must be made to the Dean of the College of Education before June 3 with the understanding that those first enrolled will be assigned first. A deposit of \$10 is required with each formal application for student teaching.

CERTIFICATION

Teachers who are planning the completion of courses for state certificates may complete this work in summer sessions at the University of Akron and in addition receive college credit toward a degree. Many subjects taught in the summer session are also credited toward degrees in the other colleges of the University.

Students who expect to complete the requirements at the close of the 1946 Summer Session for diplomas should file application in the Registrar's office the first week of the Summer Session. A fee of \$2 will be charged.

HIGH SCHOOL CERTIFICATES

One who has trained in a special field to qualify for the high school four-year provisional certificate must, in addition to the professional courses required for the special certificate, possess the following credits:

Organization and management in the academic field.....	2 semester hours
Special methods in an academic major or minor.....	2 semester hours
Student teaching in the high school academic field.....	2 semester hours

ELEMENTARY SCHOOL CERTIFICATES

In view of the fact that many who train for secondary school work may wish later to go into elementary teaching, the following work in the elementary field is prescribed, as additional to that necessary for a high school provisional certificate, in order to obtain an elementary provisional certificate:

Special Methods in three elementary subjects, one of which must be reading.....	6 semester hours
Practice teaching in the elementary field.....	2 semester hours
Music in the grades.....	2 semester hours
Art in the grades.....	2 semester hours
Health Education in the grades.....	2 semester hours

GRADUATE STUDY

The Summer Session program offers opportunity for study on the graduate level. Students interested in graduate courses for advanced study should confer with the instructors in their specialized fields and with the Dean of Graduate Study if they wish to be candidates for the Master's degree.

Graduate work is offered in the following departments: Education, Psychology, Sociology and Engineering.

ACTIVITY SCHOOL

The University of Akron, in cooperation with the Akron City Schools, will conduct for the ninth summer an activity school for children from pre-school age through sixth grade. Children ready for kindergarten in September may enroll.

The activity school and the school for special help will be in session from 9:00 to 12:00 o'clock at Spicer School for 6 weeks beginning June 17. The enrolment fee is \$12.00 to be paid at the time of registration, Saturday, June 15, at Spicer School from 9:00 to 12:00.

NURSES' EDUCATION PROGRAM

This program is operated in cooperation with the City Hospital, Peoples Hospital and St. Thomas Hospital, all of the city of Akron. It originated as a part of the Cadet Nurse Training Program sponsored by the federal government. The purpose is to aid in supplying the large increase in the number of nurses needed in connection with the war. The University provides the academic work of the first semester of this program. The nurses are regularly enrolled as students in the University, with college credit.

Students may secure additional information from the training director of the hospital of their choice or from the office of the Dean of the College of Education.

All applications for admission will be handled through the hospital training directors.

Prerequisites for admission are as follows:

A certificate of preliminary education secured from the Ohio State Nurses' Board which must be filed by each prospective candidate for the individual schools of nursing at one of the three hospitals.

This certificate is issued on the basis of graduation from a high school of the first grade. The minimum requirements for entrance to an accredited school of nursing in the State of Ohio are stated as follows: English, three units; Mathematics, one unit; Social Studies, two units (one unit to include American history and government); Science with Laboratory, two units (Chemistry is recommended but not demanded).

SCHEDULE

The summer quarter schedule of classes for 1946 is published separately. It will be available for distribution in April and copies may be obtained on request.

The offerings are in all departments of the University and a regular sequence of courses is planned on the same basis as in the Fall and Spring semesters. Early registration and payment of fees is advised in order to lessen the pressure and crowding on the final registration days. Qualified students may complete the whole process of registration and payment of fees in this manner.

For new entrants, either freshmen or transfers, the entrance examination is a requirement. This test may be taken on one of the following dates:

April 27—9:00 a.m., Room 155, Simmons Hall.

May 18—9:00 a.m., Room 155, Simmons Hall.

THE DIVISION OF ADULT EDUCATION

LESLIE P. HARDY, M.S. ED., *Director*
HARRY K. FOSTER, PH.D., *Assistant Director*
ERNEST A. TABLER, M.A., *Assistant Director*

THE EVENING SESSION**ADMISSION REQUIREMENTS AND REGISTRATION**

The admission of any student to the University of Akron will depend upon the evidences of his preparation and ability to do college work in a satisfactory manner. The evidences are: (1) graduation from an accredited four-year secondary school or its equivalent; (2) quality of work done in the secondary school; (3) ranking in certain tests given by the University to determine preparation, ability, and aptitudes; (4) attitude toward college work.

In determining the admission of any applicant, consideration is given to the above factors. A low ranking in any one will require a higher ranking in the others. For example, a student whose secondary school average is low may be admitted if his ranking in the tests is high. Also, an applicant with a fair secondary school record may make such a poor ranking in these tests as not to qualify for admission.

Students of maturity, over 21 years of age, who have not graduated from high school, may be admitted to certain courses upon presentation of sufficient evidence of preparation, aptitude, ability, and interest. These students are known as special students, and work taken by them does not count toward a degree until entrance requirements are met.

Students from other colleges should present a statement of good standing from the registrar of the institution last attended. If transfer students are expecting to continue in attendance at the University of Akron, it is necessary that a transcript and honorable dismissal be sent from the college last attended direct to the Registrar of the University of Akron.

Registration dates for 1946-47 are: First Semester—Friday and Saturday, September 27 and 28, 1946. Second Semester—Friday and Saturday, February 14 and 15, 1947. Registration is in Buchtel Hall. For late registration an additional fee of \$1.00 is charged.

AUDITORS

Auditors are not required to participate in class discussions or examinations, and do not receive credit. The fee is the same as for regular credit enrollment. Designation as an auditor should be made at the time of registration, or, during the first two weeks of classes. Transfer to the status of an auditor after the first two weeks may be made only with the permission of the Director of Adult Education.

ACADEMIC CREDIT

The unit of credit is the semester hour which requires class meetings totaling 15 clock hours or more for lecture-discussion types of classes with additional time for laboratory classes.

For graduation from the University, the student must present 128 semester hours with a quality point ratio of 2 for all work carried. No student is eligible for a degree unless he has the same ratio of quality points in his major subject as is required for graduation. Students taking the Engineering course of study are required to present 149 semester hours. Candidates for a degree are required to file an application with the Registrar by March 1 of the year in which they expect to graduate.

CONSULTATION

The Director of Adult Education and staff maintain office hours to consult with students concerning the selection of courses, and other academic problems. Student programs should be carefully planned with the aid of the Office of Adult Education. It is also advisable that persons in the Upper Colleges should confer as frequently as is possible with their advisers in the field of concentration. It is wise to obtain this advice previous to the registration period, although members of the faculty will be present on registration days to confer with those who come to register.

LOAD

For those holding full-time positions 6 credit hours of work in any semester are regarded as the maximum load that should be attempted.

There is no fixed rule that the student cannot carry more, but experience and records show that over 6 hours is a burden to the student working full time during the day rather than a schedule to be accomplished satisfactorily.

ATTENDANCE

Students are expected to be present at all meetings of classes for which they are registered. Upon request the instructor may permit a student to make up work missed through unavoidable absence. When a student has been absent from class twice as many hours as the subject offers credit in each semester, he may be dropped from the class upon recommendation of his instructor. Recommendation of the instructor and approval of the Director are necessary for reinstatement.

WITHDRAWALS

Necessary withdrawals on account of serious illness or other causes entirely beyond the control of the student will be ruled upon as the individual cases arise. Copies of the rules are printed on the reverse side of the student identification card given when fees are paid. Application for withdrawal is made in the office of Adult Education. See pages 26, 33.

The University reserves the right to cancel courses in which the registration is insufficient to warrant their continuance, in which case the fees are refunded. It is usually possible for the student to transfer to some other course being given.

GRADING SYSTEM

Information concerning the grading system will be found in the General Regulations section of this catalog.

THE COLLEGE OF EDUCATION

Those who are working toward graduation in the College of Education should consult with the following advisers concerning the curriculum requirements for the degree or diploma toward which they are working.

Kindergarten and Primary Elementary.....	MISS KEMLER
Elementary	MR. DISTAD
High School.....	MR. KUHNES
Art	MISS DAVIS
Secretarial Science.....	MR. DOUTT
Commerce	MR. LEIGH
Music	MR. FLETCHER
Vocational Education.....	MR. DOWNING
Physical Education.....	MR. SEFTON

New students in the College of Education should confer with the proper advisers before registering. This is especially important for transfer students, to avoid duplication of courses. A transcript from the last institution attended should be sent directly from the college to the University Registrar, who will evaluate such work toward the degree sought. Certain courses in the College of Education are counted toward other degrees. Those desiring to count them in this way should consult with the Dean of the college concerned or with the Registrar.

STATE CERTIFICATE

All who are attempting to meet the requirements for a state certificate for teaching may obtain at the office a list of the state requirements together with a statement of courses which are being offered this year at the University and which will be acceptable in meeting these requirements.

STUDENT ACTIVITIES

The Student Council of the Evening Session is organized through the election of class representatives who, in turn, select the Student Senate composed of eight members.

The Evening Theatre, which is open to all students of the Evening Session interested in dramatics, presents one or more major productions each year, and also numerous one-act plays.

The A E Honorary Fraternity is made up of those students who have met the requirements for an A E Key, which is awarded on the basis of activities and scholarship in the Evening Session.

1945-46 CLASS SCHEDULE

Note: 1-2 Course continues through the year.
1.2. Course is repeated second semester.

Semester	Course	Cr. Hrs.	Semester	Course	Cr. Hrs.
ART			EDUCATION		
1-2	Still Life, 47-48a.....	2	1.2.	Handicrafts, 41.....	2
1-2	Still Life, 47-48b.....	2	2	Speech for the Classroom Teacher, 76	3
1	Occupational Therapy, 101	2	1	Geography of No. America, 72	3
2	General Crafts, 102.....	2	1	Primary Education, 132.....	3
1-2	Figure Drawing, 175-176..	2	1	Principles of Education, 201	3
1-2	Metal Crafts, 108-109.....	2	2	Introduction to Education, 55	3
2	Art for the Grades, 121.....	2	2	Geography of Europe, 74..	3
1-2	History of Art, 211-212....	2	2	Introduction to Music, 61..	2
1-2	Weaving, 106-107.....	2	2	Teaching of Social Studies, 138	2
BIOLOGY			GRADUATE EDUCATION		
1-2	Bacteriology, 107-108.....	2	1	Guidance in Elem. School, 301	2
	and Lab.	1	1	Public Sch. Admin., 321....	2
CHEMISTRY			1	Secondary School Admin., 320	2
1.	Chemistry (Gen. Inorg.), 22	4	1	Techniques of Research, 425	2
2	Chemistry (Gen. Inorg.), 21	4	2	Educational Statistics, 311..	2
1-2	Intro. to Rubber Chem., 227-228	2	2	Advanced Educa. Measure- ments, 312	2
1	Qual. Organic Analysis, 307-308	2	2	Philosophy of Education, 323	2
2	Qualitative Analysis, 43....	5	ENGINEERING		
2	Colloid Chemistry, 325.....	2	1-2	Engineering Drawing, 21-22c	2
COMMERCE			1-2	Engineering Drawing, 21-22d	2
1-2	Accounting (Beginning), 21-22a	3	1	Engineering Drawing, 22..	2
1-2	Accounting (Beginning), 21-22b	3	1	Engineering Drawing, 22..	2
1	Accounting, 22	3	1	Descriptive Geometry, 44..	3
1-2	Accounting, 43-44.....	3	1	Stress Analysis, CE122.....	3
2	Cost Accounting, 127.....	3	1-2	Industrial Electronics, EE55-56	2
1-2	Accounting, 231-232.....	3	1-2	Industrial Electricity, 21-22	4
1	Accounting, 230	3	1	Aerodynamics, 200.....	3
2	Federal Taxation, 233.....	3	2	Statically Indeterminate Struc. 205	3
1.2.	Business Administration, 61	3	2	Soil Mechanics, 215	3
1-2	Business Law, 141-142.....	3	1-2	Physical Metallurgy, 133....	2
1-2	Personnel Mgt. & Relations, 163-164	2	1-2	Physical Metallurgy, Lab., 134	1
1	Marketing, 183	3	1	Strength of Materials, 117-118	3
1	Advertising, 185.....	3	1	Industrial Plants, 101.....	3
2	Advanced Advertising, 186	3	1	Prod. Planning and Con- trol, 103	3
1	Selling, 81	2	ECONOMICS		
1	Statistics, 148	4	1	Production Prices & Income, 41	3
2	Market Analysis, 296.....	3	1	Labor Problems, 106.....	3
2	Production Management, 162	3	2	Current Economic Problems, 42	3
ECONOMICS			2	Business Cycles, 291.....	3

Semester	Course	Cr. Hrs.	Semester	Course	Cr. Hrs.
1	Quality Control, 105.....	2	1-2	Calculus, 45-46	3
1	Time Study, 157.....	2		*Can be taken concurrently with Analytical Geometry, 43.	
2	Motion & MicroMotion, 158	2	1	Theory of Equations, 205..	3
2	Industrial Org. & Mgt., 47	3	2	Differential Equations, 206	3
2	Safety Engineering, 107.....	3		MODERN LANGUAGES	
2	Industrial Processes, 22.....	2	1-2	Beginning French, 21-22....	4
2	Steady State A.C. Analysis, 200	3	1-2	Beginning Spanish, 21-22	4
2	Transient A.C. Analysis, 201	3	1-2	Second Year Spanish, 43-44	3
ENGLISH			MUSIC		
1-2	English, 1a-2a	3	1	Art of Music, 22.....	2
1-2	English, 1b-2b	3	2	Music Orientation, 21.....	2
1	English, 2	3	1-2	Private Lessons (Voice, Violin, Piano, Brass, Woodwind)	
2	English, 1a	3	1-2	Music Organizations: Band	1
2	English, 1b	3		Chorus	1
1-2	American Lit., 47-48.....	3		Orchestra	1
1	Bible Literature, 113	3		University Singers	1
1	Seminar in American Lit., 231	2	2	Men's Glee Club.....	1
2	Appreciation of Drama, 50	3	2	University Theatre Orchestra.	
2	Essay Writing, 63.....	2	PHILOSOPHY		
2	Chaucer, 201	3	2	Comparative Religions, 108	3
HISTORY			PHYSICAL EDUCATION		
1-2	American History, 41-42..	3	2	Physical Education, 4.....	1
1	Historiography, 242	3	1-2	Municipal Recreation, 59-60	2
2	Dev. of Modern Russia, 251	3	PHYSICS		
1	Recent European History, 246	3	1-2	Physics, 21-22	4
HOME ECONOMICS			1	Physics, 203	3
1.2.	Foods, 41	3	1	Physics, 306	4
2	Foods, 42	3	1	Physics, 203	4
1	Child Development, 125....	3	1-2	Physics, 309-310	2
2	Clothing Construction, 22..	3	2	Physics, 314	3
INTRODUCTORY			POLITICAL SCIENCE		
1-2	Social Sciences, 6-5.....	3	1-2	American Government, 41-42	3
1-2	Humanities, 7-8.....	3	1	International Relations, 211	3
1-2	Natural Science, 9-10.....	3	2	American Diplomacy, 44....	3
1-2	Hygiene, 16-15	2	PSYCHOLOGY		
JOURNALISM			1.2.	General Psychology, 41.....	3
1	News Writing & Editing, 53	2	1	Applied Psychology, 43.....	3
2	Feature Writing, 56.....	2	2	Human Relations in Bus. & Ind., 62	3
LATIN AND GREEK			1	Psy. Factors in Marital and Home Adjustment, 211 (Senior or Adult)	2
1	Classical Mythology, 99....	3	2	Social Psychology, 115.....	3
2	Greek Masterpieces in Eng- lish Translation, 149.....	2	GRADUATE PSYCHOLOGY		
MATHEMATICS			1	Psy. of Testing in Person- nel, 207	3
1.2.	Algebra, 19	2	2	Principles & Techniques in Personnel Counseling, 208	2
1.2.	College Algebra, 21a.....	3			
1.2.	College Algebra, 21b.....	3			
1.2.	Trigonometry, 22	3			
1.2.	Analytic Geometry, 43.....	3			

Semester	Course	Cr. Hrs.	Semester	Course	Cr. Hrs.
SECRETARIAL SCIENCE					
1	Business English, 35a.....	2	1	Community Organization, 206	3
1.2.	Business English, 35b.....	2	2	General Sociology, 41.....	3
1	Business Letters, 93.....	2	2	Leadership, 104	2
2	Business Letters, 93.....	2	2	Race Relations, 217.....	3
2	Secretarial Procedure, 23....	2			
2	Machine & Slide Rule Cal- culation, 25	1	SPEECH		
1	Shorthand, 41a	3	1.2.	Public Speaking, 41.....	3
1	Shorthand, 41b	3	1-2	Reading Aloud, 51-52.....	3
1.2.	Shorthand, 42	3	1-2	Bus. and Professional Speaking, 47-48	2
1-2	Dictation, 83-84	3	1	Bus. and Professional Speaking, 48	2
2	Dictation, 83	3	2	Bus. and Professional Speaking, 47	2
2	Dictation, 186	3	1	Radio Speaking, 181.....	2
1-2	Typewriting, 51-52.....	2	2	Radio Writing & Produc- tion, 287	3
2	Typewriting, Personal, 31..	2			
SOCIOLOGY					
1	Social Anthropology, 45....	3			
1	Urban Rural Sociology, 113	2			

COMMUNITY CO-OPERATION

The University of Akron, as a municipal university, aims to bring all of its departments into close touch with the activities of the city of Akron.

The following covers the work of the several colleges and divisions.

THE COLLEGE OF ENGINEERING

In normal times, students in the College of Engineering work part-time in foundries, machine shops, and rubber factories, on construction and railroad work, and in municipal and county engineering departments. Engineering instructors make numerous tests of materials and equipment, and the facilities of the department are available to the technical men in local organizations for testing purposes.

The Daniel Guggenheim Airship Institute does testing and research investigations for the local industries.

THE COLLEGE OF EDUCATION

In addition to the preparation of teachers for the Akron Public School system and other school systems of the state, the College of Education aims to increase the opportunities for the continued education of teachers already in service. Late afternoon, evening, and Saturday courses are offered. Students are required to do student teaching for one semester before graduation. This is made possible through the co-operation of the Board of Education. Members of the faculty consult with teachers and school administrators about their educational problems.

In May 1945 operation of a program began in co-operation with the United States Veterans Administration. Under this plan the University does the testing of those veterans who apply for vocational advisement under Public Laws 16 and 346. The Veterans Administration uses the test results for vocational counseling and placement.

Although a clinic has not been formally organized in the fields of education and psychology, a wide and varied service is rendered to individuals and institutions, including welfare organizations and the public schools. This service includes not only testing of intelligence but measuring aptitudes and vocational interests, and diagnosing educational and personality difficulties. The establishment of this program has enabled us to enlarge our services in this area to the students of the University of Akron and the public.

Members of the faculty of the College of Education are glad to present talks to Parent Teacher association groups, teachers associations, school administration groups and others who are interested in the problems of the school. Services are rendered from time to time to the administration of school boards for survey of educational facilities. The resources of the University are available for the improvement of the schools of the metropolitan area.

THE LIBRARY

The resources of the library are open to citizens of Akron for reference during the regular library hours, and for circulation in so far as the demands of classwork upon the collection will permit.

CO-OPERATION WITH THE LOCAL HOSPITALS

By special arrangement with the local hospitals in their war effort courses are offered to nurses in training who are graduates of accredited high schools. The work carries regular college credit and is acceptable toward a degree. The following courses are given: Anatomy and Physiology, Chemistry, Microbiology, Nutrition and Foods, Psychology, and Sociology.

THE TESTING LABORATORY OF THE CITY OF AKRON

In accordance with the proposal made by the Directors of the University and accepted by the Akron City Council, the Testing Laboratory does much of the chemical and physical testing work of the city. It serves especially the Board of Education, the Police Department, the Service Department, and the Coroner's Office. It answers many calls requesting chemical or other technical information. In addition it serves as a commercial laboratory for those concerns which do not have testing equipment or personnel of their own and in cases in which this service does not duplicate facilities already existing.

DEPARTMENT OF BIOLOGY

Close affiliation is maintained with the City Health Department. Bacteriological and serological testing and investigations are carried on in connection with the various clinics and hospitals. Facilities are provided for research work on the part of some of the surgeons of the city. Lectures and informal talks have been given to organizations in Akron. Identification of zoological and botanical specimens is made from time to time by various members of the department.

DEPARTMENT OF CHEMISTRY

Two fellowships in the chemistry of rubber technology, open to graduates of standard American colleges, have been established at the University of Akron by the Goodyear Tire and Rubber Company and the Firestone Tire and Rubber Company, for the purpose of training men for service in their laboratories. These are not awarded during the war emergency.

The University has entered into a contract with the Rubber Reserve Company for conducting a research problem in synthetic rubber under the direction of the office of the Rubber Director.

COMMERCE DEPARTMENT

The Commerce Department attempts to tie in closely with the business and economic life of Akron. Monthly, in co-operation with the Chamber of Commerce, a bulletin is issued analyzing Akron business trends. The department quite regularly makes traffic and occupancy surveys of the business district, as well as consumer and trade studies of a community nature which are extensively used. The work in the field of automobile tire distribution and market statistics has become widely known and accepted.

DEPARTMENT OF HOME ECONOMICS

The Home Economics department has assisted with radio programs on nutrition, food conservation, and dental health by providing speakers for city-wide social service programs, for city and county nutrition programs by student demonstrations, and exhibits on foods and nutrition for organizations. Laboratory work in child care and development was carried on in the municipal housing child centers.

DEPARTMENT OF SOCIOLOGY

The Department of Sociology has active affiliations with the Akron Community Service Center, Boy Scouts, Catholic Service League, City Hospital, United War Chest, Department of Public Charities, Family Service Society, Girl Scouts, Jewish Center, Jewish Social Service Federation, Juvenile Court, Metropolitan Housing Authority, Summit County Children's Home, Y. M. C. A., Y. W. C. A., Detention Home and Council of Social Agencies. These institutions and agencies provide the supervised training for the students who are actively interested in entering the profession of social welfare work or in character building and United War Chest Agencies.

The census tract maps for the City of Akron are under the direct supervision of the department of sociology. Surveys and specially supervised studies are conducted by the department. Students are also trained in statistical research.

The department conducts an annual two-day Social Welfare Institute complimentary to the City of Akron and contiguous areas.

DEPARTMENT OF SPEECH

The Speech Clinic is under the direction of members of the Speech Department faculty. Anyone in Akron is privileged to come to the Clinic for advice concerning speech defects. Remedial training is offered to a limited number. Advanced students assist with the work of the clinic.

The Speakers' Bureau furnishes speakers, debaters, and discussion panels to local groups. A number of one-act plays are also available.

The department prepares and produces radio programs of an educational nature.

THE DIVISION OF ADULT EDUCATION

The Division of Adult Education offers credit and non-credit courses in evening classes.

In the Community College, Goodrich Institute, and ESMIT programs, non-credit classes are arranged to meet the needs of many persons who want practical training for a particular vocation or avocation. The Community College classes are conducted on a short term basis on the campus each semester; most classes meet for a twelve-week period and have a fee of \$6. Organized on a twelve-week basis, Goodrich Institute classes are offered at the B. F. Goodrich Company, with an enrolment fee of \$4.

COMMUNITY COLLEGE

The courses offered in Community College are planned to satisfy the specific needs and interests of those persons who are not particularly interested in earning a college degree.

Classes are conducted on a lecture-discussion basis. Additional classes will be arranged for fifteen or more persons interested in a subject not offered in the program. Each class meets once a week for twelve weeks.

Classes held during the first semester of 1945-46 were: English for Improvement of Speech and Writing, Aeronautical Meteorology, Navigation of Aircraft, Elementary Nutrition, Photography for Beginners, Beginning Conversational Spanish, Pre-Engineering Math., Applied Engineering Math., House Planning, Blue Print Reading, Organization and Management of Small Business, Industrial Accounting, Conversational German, Public Relations, Introduction to Russian, Intermediate Russian, Conversational French, Millinery, Beginning Portuguese, Psychology of Personality, Refrigerator Service and Maintenance I and II.

Classes offered the second semester of 1945-46 were: Business Letters—Types and Uses, Blue Print Reading I and II, Retail Sales Training, Theory, Maintenance and Repair of Electrical Appliances—Domestic and Industrial I and II, Brave New Worlds—Utopias and Utopian Thought, Pre-Engineering Math., Applied Engineering Math., Conversational Spanish II, Photography for Beginners, Advanced Photography, Beginning Chinese, Magazine Short Story Writing Workshop, English for Improvement of Speech and Writing, House Planning II, Organization and Management of Small Business, Conversational German I and II, Industrial Accounting, Stationary Engineering (Heat-Power), Some Contemporary European Novelists, Beginning Conversational Spanish, Introduction to Russian, Intermediate Russian, Beginning Portuguese, Millinery, Conversational French, Public Relations, Automotive Electrical Equipment, Part I, Radio Servicing, Part I, Electrical Meters—Construction and Application, Refrigerator Service and Maintenance I and II, Refresher in Algebra and Trigonometry I and II, Plastics and Real Estate Appraisal.

ENGINEERING, SCIENCE AND MANAGEMENT WAR TRAINING

During the war the University co-operated with the U. S. Office of Education in sponsoring war training classes. From January, 1941, to the termination of the program June 30, 1945, the Division of Adult Education enrolled 11,754 persons in these classes. The University was approved to offer courses in all phases of the program and throughout the period of operation ranked among the highest in the state and in the nation.

PRIZES, FELLOWSHIPS, SCHOLARSHIPS, HONORS, AND SPECIAL FUNDS

THE ASHTON PRIZES

A fund of \$3000 was established in 1887 by Oliver C. Ashton of Bryan, Ohio, endowing the O. C. Ashton Prizes for excellence in reading and speaking. Three contests during the year are held, an Upper College Contest, a General College Contest, and an Interpretative Reading Contest. The amounts of the prizes awarded at each contest depend upon the income available from the fund.

THE SENIOR ALUMNI PRIZE

A fund has been established by the Alumni Association for the purpose of awarding an annual cash prize of \$50 to that senior student who has completed the regular undergraduate curriculum with the highest average grade for the work taken, having carried an average load of 12 credit hours per semester.

THE DR. E. B. FOLTZ PRE-MEDICAL PRIZE

The Dr. E. B. Foltz Pre-Medical Prize of \$100 is awarded each year to that member of the graduating class who makes the highest average grade in all work taken in the four-year pre-medical course and who plans to enter medical college the following year. The name of the winner is announced at Commencement but the actual award is not made until the winner has enrolled in medical college.

FIRESTONE AND GOODYEAR FELLOWSHIPS

Fellowships in the Department of Chemistry are offered by the Firestone Tire and Rubber Company and the Goodyear Tire and Rubber Company for the study of the chemistry and technology of rubber. These fellowships are open to graduates of standard American colleges and universities and are of the value of \$1000 per year, with remission of all University fees.

THE OHIO STATE UNIVERSITY GRADUATE SCHOLARSHIP

In the spring of 1935 a number of graduate scholarships were established by the Ohio State University, one to be assigned to each of the Ohio colleges fully accredited by the North Central Association of Colleges and Secondary Schools. The scholarship entitles the student to the exemption of tuition and fees of all kinds except a matriculation fee. Selection is left to the individual colleges.

AKRON COLLEGE CLUB PRIZES

The women students having the highest scholastic average in each of these three departments, elementary education, home economics and secretarial science will be awarded a twenty-five dollar War Bond. The award will be announced at the June Commencement.

FRANK PIXLEY MEMORIAL FUND

The Frank Pixley Memorial Fund was established in 1931 by the will of Isabel McRoy Pixley, wife of Frank Pixley, class of 1887. The fund amounts to \$50,000, the income from which is used for the establishment of scholarships in speech, music and literature.

THE PIXLEY SCHOLARSHIPS

In accordance with the terms of the Pixley bequest, awards are made each semester to students of outstanding ability and promise in the fields of literature, music, and speech. To be eligible for one of these awards the student must be enrolled in an upper college or qualified to enter an upper college and must be a major in the department in which the scholarship is awarded, or a divisional major in the humanities division. The awarding of these scholarships is made by a committee of which the Registrar is the chairman. To be eligible for a Pixley Scholarship, a student must have a quality point ratio of at least 2 in all work taken; in the field of the award, the quality of scholarship is expected to be much higher. Applications for scholarship should be addressed to the Registrar.

ROBERT KASSE MEMORIAL SCHOLARSHIP FUND

The Robert Kasse Memorial Scholarship Fund was established in 1945 by his family and friends to perpetuate the memory of Robert Aaron Kasse, who died in the service of his country on December 10th, 1944.

The sum of \$100.00 is to be awarded annually to that student in the Department of English (including Journalism), Speech, Radio and Dramatics, in Buchtel College of Liberal Arts, who at the completion of his junior year shows the greatest promise of success based upon academic excellence, character and leadership.

THE RUTH DUGAN AERONAUTIC SCHOLARSHIP

One of the accomplishments credited to the Women's Chapter of the National Aeronautic Association is the Ruth Dugan Aeronautic Scholarship of \$100 a year to be awarded to that student who shall be accepted by the scholarship committee of the Akron Women's Chapter upon recommendation by the co-operating advisory committee of the University of Akron. Part of the work included in the course of study will be given at the University of Akron, and the necessary research will be carried on at the Daniel Guggenheim Airship Institute. The scholarship fund first became available for the year 1936-37. Not awarded during the war emergency.

HONORARY FRATERNITIES

PHI SIGMA ALPHA is an honorary fraternity founded in 1910 to encourage high scholarship among the students of the Liberal Arts College. The requirements are as follows:

1. Only such courses as are taken in the Liberal Arts College or such courses as are regularly accredited in that college may be counted for standing in the fraternity.

2. A minimum of 108 hours for three and one-half years for those completing the regular four-year course, or of 77 hours for two and one-half years for students who have spent one year at another institution are required.

3. All seniors who have maintained an average grade of not less than 90% (a quality ratio of 3.25) during their three and one-half years are eligible for membership, provided that at least two and one-half years have been taken in Buchtel College of Liberal Arts.

4. Juniors who have completed two and one-half years of work in Buchtel College of Liberal Arts with the average grade not less than 92% (a quality point ratio of 3.5) shall be eligible for membership.

5. Those seniors who may have entered the institution at mid-year as freshmen and who have remained three years in the Liberal Arts College are also eligible, the required number of scholarship hours being 96.

6. Average scholarship is reckoned as a whole, not specialization.

SIGMA TAU is a national honorary engineering fraternity. Phi Chapter was established at the University of Akron in December, 1924, the charter being granted to the local honorary fraternity O.H.M. which was founded in 1919. Sigma Tau elects its men on the basis of scholarship, sociability, and practicality. Any engineering student in the upper college is eligible whose scholastic average for all his previous college work ranks him in the upper third of the combined pre-junior, junior, and senior students.

KAPPA DELTA PI, an Honor Society in Education, has for its purpose the encouragement of professional, intellectual, and personal standards. The Society is an international organization composed of a Laureate Chapter, honorary, and institutional and alumni chapters, active. Alpha Theta Chapter was chartered in 1925. Candidates for membership must be juniors, must have earned six semester hours in professional subjects, or eleven hours if of senior rank, and have a quality point average in all work of 3 when A equals 4.

SIGMA PI EPSILON is an honor fraternity established for the purpose of promoting scholarship, citizenship, and artisanship among the students of the College of Education. Students being graduated with distinction automatically become members of the fraternity.

PHI ETA SIGMA is a national fraternity for freshman men. Its purpose is to recognize superior scholarship, and to encourage academic achievement. Men are pledged twice each year, in March and in September. To be eligible for pledging, a man must have a quality point ratio of 3.5 or better (half A's, half B's) for his first semester, or for his first year.

ALPHA LAMBDA DELTA. Alpha Lambda Delta is a national honorary fraternity for freshman women. Its purpose is to recognize scholastic attainment during the freshman year at college and to encourage academic achievement among freshman women. To be eligible for pledging a woman must make a quality point ratio of 3.5 (half A's, half B's) or better for her first semester or for her first year.

LOAN FUNDS

Applications for loans are received at the office of the Dean of Students prior to the opening of each semester, and upon emergencies, during the academic year.

HARRIET PHILLIPS FUND

The Harriet Phillips Fund was created in 1930 by a bequest of \$18,000. The income from this fund is used for the care and maintenance of gifts of paintings, etchings and other art treasures, together with an Art Library, which was given by Miss Phillips to the University in memory of her family. The building housing the Phillips Art Memorial Collection is known as Phillips Hall, named in honor of the donor and her generous gift to the University.

THE KATHERINE CLAYPOLE LOAN FUND

This fund was established by a number of women's organizations of the city and dedicated as a memorial to Mrs. Katherine Claypole, wife of Dr. E. W. Claypole, former Professor of Natural Science at Buchtel College. The principal of the fund is lent to students "who in mid-semester, as often happens, find themselves without sufficient means to complete the year's work."

THE THOMAS-LITCHFIELD LOAN FUND

This fund was established by two directors of the University, Mr. John W. Thomas and Mr. P. W. Litchfield, in 1932. From it money to pay fees is lent for short periods to upperclassmen who are residents of Akron.

MABEL JANE ROGERS MEMORIAL FUND

The Mabel Jane Rogers Memorial Fund, amounting to \$100, was given by the alumnae of Flora Stone Mather College, Western Reserve University, in memory of Miss Mabel Jane Rogers who was instructor in Spanish at the University of Akron for eight years. It is used for short emergency loans to women students.

HOMER C. CAMPBELL FUND

A fund established under the will of the late Homer C. Campbell provides for assistance by loan or gift from its income to needy students dependent on their own resources. Preference is given to young men who have been newsboys in Akron.

AKRON HOME AND SCHOOL LEAGUE LOAN FUND

This fund was established in 1925. Loans are made from this fund to Juniors and Seniors of the University to be repaid following graduation. The fund is administered by the League. Applicants are required to have the approval of the University.

THE HARRIET HALE FUND

The money in this fund was given to the University by the trustee of the Harriet Hale estate to be used in the furtherance of education in music. Loans for the payment of fees are made to students specializing in music.

RICHARD J. WITNER LOAN FUND

A fund has been established by the parents and wife of Captain Richard James Witner, who was killed in action in North Africa on March 28, 1943. The principal of this fund is to be used for loans, payable after graduation, to worthy students to finance their education.

EVENING SESSION LOAN FUND

By voluntary contributions each semester since February, 1933, the evening students have accumulated this fund to aid evening session students. Loans are made for short periods to students who have attended this division of the University for at least one year.

THE AKRON COLLEGE CLUB FUND

The Akron College Club maintains a loan fund known as the Elizabeth A. Thompson Scholarship Fund. Loans are made to deserving women students of the University. This fund is administered by a committee of the College Club. Applicants are required to be recommended by the University.

THE CUYAHOGA PORTAGE CHAPTER**D. A. R. LOAN FUND**

The money in this fund was donated by the Cuyahoga Portage Chapter of the Daughters of the American Revolution for the purpose of aiding deserving men and women students of the University.

**INDIAN TRAIL CHAPTER OF DAUGHTERS OF
THE AMERICAN COLONISTS LOAN FUND**

The money in this fund was donated by the Indian Trail Chapter of Daughters of the American Colonists for the purpose of making loans to students of the University.

TOUCHDOWN CLUB LOAN FUND

This fund was created by the Touchdown Club to provide financial aid through loans to young men of superior athletic ability and good academic standing. Recommendation of the Director of Athletics to the Loan Committee is required of applicants. This fund was established in 1942 and additions have been made to it from time to time.

HERMINE Z. HANSEN LOAN FUND

A trust fund, established under the will of the late Hermine Z. Hansen, provides for a share of the distribution of its income to be used for the benefit of needy and deserving students while attending the University. At the discretion of the trustees of the fund, money is available through loans to needy students for purposes which will assist in completing their studies. Repayments are returned to the income of the trust fund.

GRANTS IN AID

In 1945 the Board of Directors of the University established a fund to be designated as a Student Aid Fund, to assist worthy and deserving students of recognized talent and ability to finance their education. That the President of the University, and such other members of the faculty and staff as he may designate, be authorized to seek contributions to be received through the office of the Treasurer of the University. That grants be made from this fund upon recommendation of a committee to be appointed by the President.

SUMMARY OF STUDENTS IN DAY CLASSES

1945-46

BUCHTEL COLLEGE OF LIBERAL ARTS

	Men	Women	Total	
Graduate Students	20	15	35	
Applied Arts Division				
Commerce	26	7	33	
Sec. Science	3	21	24	
Others	2	24	26	
Humanities Division	11	42	53	
Natural Science Division	22	19	41	
Social Science Division	31	27	58	
Misc. (no majors)		3	3	
Irregular Students	10	14	24	
	<u>125</u>	<u>172</u>	<u>297</u>	297

COLLEGE OF ENGINEERING

Graduate Students	3	.....	3	
Regular Students	42	.....	42	
Irregular Students .....	.....	.....	.....
	<u>45</u>		<u>45</u>	45

COLLEGE OF EDUCATION

Graduate Students	8	20	28	
Regular Students	29	99	128	
Irregular Students	3	11	14	
	<u>40</u>	<u>130</u>	<u>170</u>	170

THE GENERAL COLLEGE

New Freshmen				
Regular Students	759	388	1147	
Irregular Students	27	19	46	
Others				
Regular Students	526	290	816	
Irregular Students	32	35	67	
	<u>1344</u>	<u>732</u>	<u>2076</u>	2076

2588

Summer Session 1945 (included in above).....183 287 470

A regular student is one who is classified for 8 or more credits per semester; an irregular student is classified for less than 8 credits. For the summer session 6 hours was used as the basis for a regular student.

SUMMARY OF ALL STUDENTS IN THE
UNIVERSITY

1945-46

	Men	Women	Total
Graduate Students	31	35	66
Upper Colleges	166	242	408
General College	1285	678	1963
Irregular Students	72	79	151
	<hr/>	<hr/>	<hr/>
Total Day Session Enrolment.....	1554	1034	2588
Total Evening Enrolment.....	1296	944	2240
	<hr/>	<hr/>	<hr/>
	2850	1978	4828

ENROLMENT BASED ON STUDENT CREDIT HOURS

	Total Student Credit Hours	*Full-time Student equivalent
Buchtel College of Liberal Arts	6,789.0	212.1
College of Engineering	859.0	26.8
College of Education	3,329.5	104.0
General College	42,878.0	1,340.0
Evening Session	11,024.0	344.5
	<hr/>	<hr/>
	64,879.5	2,027.4

*A full-time student is the equivalent of one student pursuing a normal full-time load (32 hours) during the academic year.

DEGREES CONFERRED JUNE 4, 1945

BUCHTEL COLLEGE OF LIBERAL ARTS

Bachelor of Arts

Pasqual Areta	Helen Murawski
Carol Louise Aspell	Lauro ReFugio Muro
Marjorie Jean Ball	Ann Musson
With Distinction	Evan Alexander Newman
Carl Holland Burnham	Kathleen Marie Olson
With Distinction	George Panich
Mary Jean Collins	Minnie Virginia Pullen
With Distinction	Mary Helen Raies
John Francis Crumrine	Kaymon Laverne Robinson
Thomas George Denton	Elisabeth Irene Sauser
Margaret Ann Dingle	With Distinction
With Distinction	Shirley Schwartz Shapiro
Evelyn Dunn	Mary Jane Shively
With Distinction	Joyce Elaine Spencer
Jane Ruth Durbin	Ruth Virginia Strayer
Mary Mildred Eichelberger	Virginia Stavely Sugden
Mary Isabel Gerber	Pearl Teresa Tapar
Margaret Marion Hunsicker	Bert Wainer
Iris Elaine Johnson	Solidelle Fortier Wasser
Kathryn Joanne Koegel	Helen Elaine Wilson
Martha Frances LeFevre	Rita Marie Wilson
Adrienne Lola Moss	

Bachelor of Science

Robert Eugene Boehme	Robert Dean Lowrey
Doris Mae Dudich	Roland Miller
Dorris Murriel Hall	Bernard Arthur Mong
Clarice Wilma Hoofman	Edith Robbins
Charles Harold Kraatz	With Distinction
Edith Margaret Lockhart	Clarence S. Wilkinson, Jr.
	William A. Wilson

Bachelor of Science in Applied Art

Susannah Theresa Burns

Bachelor of Science in Business Administration

George Criswell Baird	Elizabeth Jane Murphy
Hugh Aquilla Davis	With Distinction
Marvin Thomas Deane	Perry Charles Rausch
Henry Iffland	Richard Edward Slusser
Marietta Kageorge	Val Thorne
With Distinction	Ruth Elizabeth Wagner
	With Distinction

Bachelor of Science in Secretarial Science

Elizabeth Tarmichael Dorais	Jeanne Adrienne Prentice
Helen Marie Heller	Mary Margaret Snearline
Lois Jean Hitchcock	Helen Annette Taylor
Doris Darlene Huff	Marjorie Shriber Tyler
Jane Lois Libal	With Distinction
With Distinction	Sarah Jane Witt

THE COLLEGE OF ENGINEERING

Bachelor of Electrical Engineering

Gabriel A. Martinez Matos

Graduation With Distinction: Students who have an average grade of 90 per cent. (or a quality point ratio of 3.25) or better, for all work taken during the four undergraduate years, shall be graduated with distinction. Students who transfer from another college must maintain a quality point ratio of 3.25 or better at the University of Akron.

THE COLLEGE OF EDUCATION

Bachelor of Arts in Education

Helen Hardesty Briney	Ethel R. Manchester
Mary Ann Burkley	Joan April Newman
With Distinction	Leanna Gertrude Park
Joyce Elaine Jackson	Lena Perri
Dorothy Jo Keatts	Beatrice R. Thomas
Edward Kormanik	Betty Marie Dugan Van Nostran

Bachelor of Science in Education

Marian Elizabeth Barnes	Mary K. Moore
With Distinction	Catherine Collins Nettling
Doris E. Bender	Martha Lucile Nuckols
Nancy Carpenter	Rose Mary Piscazzi
Edith Eugenia Davis	Margaret Lytle Price
Murl Irene Denning	Catherine Jeannette Redinger
Grace Gertrude Eastbourne	Sally Lou Sargent
Helen Elaine Frye	Tula Serves
Virginia Dare Goson	Betty Louise Sibley
With Distinction	Catharine Fan Walcott
Walter Grigas	Olive Cecelia Watson
Anthony James Modugno	Barbara Anne Woodward

GRADUATE STUDY

Master of Science

Max Hans Keck A.B., College of Wooster, 1941

Master of Arts in Education

Milo M. Ratkovich A.B., Brooklyn Poly. Inst., 1928

HONORARY DEGREES

Doctor of Science—John W. Thomas*Doctor of Laws*—John S. Knight

DEGREES CONFERRED SEPTEMBER 1, 1944

BUCHTEL COLLEGE OF LIBERAL ARTS

Bachelor of Arts

Phyllis Selby Justice Jean Lucille Ritzman Averille Maynard Thorn

Bachelor of Science

Bruce Gordon Bennett	Elizabeth Frances Rae Dewey
With Distinction	With Distinction
Mary Louise Buckmaster	Harry Victor Nelson

Margaret Roberta Fouse *Bachelor of Science in Secretarial Science*

THE COLLEGE OF ENGINEERING

Bachelor of Mechanical Engineering

Albert Morlan LaRue

THE COLLEGE OF EDUCATION

Bachelor of Arts in Education

Dorothy Aileen Hoose Barbara Weimer Thomas

Bachelor of Science in Education

Ione Beyer Friess	Sister Mary Mercedes Hohman, O.P.
Kathryn Jobe Judson	Freda Mae Stewart
Kathleen Lucy Karr	Ethel Katherine Timmons
Ruth Eleanor Kesterson	Betty Becker Weaver
Elizabeth Ann Owen	Marilyn Jean Wilcox
Barbara Elaine Patton	Waldene B. Williams
Sister Mary Anthony Johnson, O.P.	Betty Jo Xinos

GRADUATE STUDY

Master of Science

Eugene Paul Budewitz A.B., Montana State University, 1943

Master of Education

Margaret K. Bolanz B.E., The University of Akron, 1929

HONORS AND PRIZES

THE SENIOR ALUMNI PRIZE

Awarded to that senior student who has completed the regular undergraduate curriculum with the highest average grade for the work taken, having carried an average load of 12 credit hours per semester.

Edith Robbins

ROBERT AARON KASSE MEMORIAL SCHOLARSHIP

A \$100 prize awarded annually to that student in the Department of English (including Journalism), or Speech, Radio and Dramatics, in Buchtel College of Liberal Arts, who at the completion of his junior year shows the greatest promise of success based upon academic excellence, character, and leadership. The question of race, color, creed or sex shall not enter into the consideration of the committee making the award.

Ellen M. Raw

DR. E. B. FOLTZ PRE-MEDICAL PRIZE

A \$100 prize awarded each year to that member of the graduating class who makes the highest average grade in all work taken in the four-year pre-medical course, and who plans to enter medical college the following year.

Robert Boehme

THE COLLEGE CLUB OF AKRON

The College Club of Akron this year presented a twenty-five dollar War Bond as an award to each of the three senior women having the highest scholastic standing in the following subjects:

Elementary Education—Marian Elizabeth Barnes.

Home Economics—Elisabeth Irene Sauser

Secretarial Science—Jane Lois Libal

PIXLEY SCHOLARS—1944-45 (Including Summer, 1944)

From the Frank Pixley Memorial Fund, awards are made to students of outstanding ability and promise in the fields of literature, music and speech.

In English—Margaret Dingle, Ellen Raw.

In Speech—Phyllis Bachelder, Evelyn Dunn, Phyllis S. Justice.

HONORARY FRATERNITIES

PHI SIGMA ALPHA

In Buchtel College of Liberal Arts, for scholarship in the senior class, an average of not less than 90 per cent.; in the junior class, an average grade of not less than 92 per cent.:

Elected to membership:

Class graduating June, 1945, as juniors

Marjorie Jean Ball

Margaret Ann Dingle

Edith Robbins

Class graduating September, 1944, as seniors

Bruce Gordon Bennett

Elizabeth Frances Rae Dewey

Class graduating June, 1945, as seniors

Carl Holland Burnham

Mary Jean Collins

Marietta Kageorge

Elizabeth Jane Murphy

Elisabeth Irene Sauser

Ruth Elizabeth Wagner

Class of 1946, as senior

Jack Kunert

Class of 1946, as juniors

Phyllis Bachelder

Floyd Miller

SIGMA PI EPSILON

Selected for scholarship, citizenship, and artisanship in the College of Education.

Marian Elizabeth Barnes

Mary Ann Burkley

Virginia Dare Goson

UNIVERSITY OF AKRON ALUMNI ASSOCIATION

OFFICERS OF GENERAL ASSOCIATION (1945-46)

<i>President</i>	VINCENT H. JOHNSON, '34
<i>Executive Secretary</i>	JOHN M. DENISON, Ex. '28
<i>1st V. Pres.</i>	JOHN M. PITTINGER, '31
<i>2nd V. Pres.</i>	BYRON H. LARABEE, '26
<i>Secretary</i>	SHERMAN O. SCHUMACHER, '27
<i>Treasurer</i>	MAXWELL P. BOGGS

ALUMNI ASSOCIATION BOARD OF TRUSTEES

Terms expire June, 1946—PARK P. CRISP, '16; ARDEN E. FIRESTONE, '29, (In U. S. Navy); MRS. RICHARD L. MILLER, '32; CARL E. BOYER, '26.

Terms expire June, 1947—MRS. WILLIAM H. FLEMING, '11; VINCENT H. JOHNSON, '34; JOHN J. KEPLER, '26; ARTHUR F. RANNEY, '15.

Terms expire June, 1948—DR. E. B. FOLTZ, '96; BYRON H. LARABEE, '26; MRS. LESTER J. MIKOLASHEK, '43; JOHN M. PITTINGER, '31.

ASSOCIATION BRANCHES

<i>Chicago</i>	<i>President</i> , DR. CARL E. FRICK, '16, 8512 Constance Avenue, Chicago, Illinois.
<i>Cleveland</i>	<i>Secretary</i> , MRS. JOSEPH B. SHEA, '19, 2025 Chester Ave., Cleveland 14, Ohio.
<i>Detroit</i>	<i>President</i> , THEODORE HARRINGTON, '25, 16800 Parkside, Detroit, Michigan.
<i>Los Angeles</i>	<i>President</i> , GEORGE W. BRUNER, '15, 5471 West Boulevard, Los Angeles, California.
<i>Pittsburgh</i>	<i>Secretary</i> , MISS IRENE WILLSON, '16, Shadyside Hospital, 5230 Centre Avenue, Pittsburgh, Pennsylvania.

The Alumni Association of the University of Akron was organized in 1874 to further the interests of the college and to promote the fellowship among graduates and former students. To fulfill this purpose, the Association sponsors the annual Homecoming Celebration and the Alumni Banquet at Commencement time, as well as the organization of alumni clubs in other cities, and publishing the alumni magazine, *The Akron Alumnus*.

All records of the Association, including card record files for each graduate and former student, biographical files, and historical data, are kept in the alumni office, headquarters of the Alumni Association, located in Phillips Hall on the campus. 4,858 students have been graduated from the University of Akron.

The Board of Trustees of the Alumni Association is the governing body and is composed of the officers and twelve trustees, all of whom must be graduates of the University. Only those who have paid their dues may vote or hold office.

There are three forms of membership dues in the Alumni Association: (1) Annual dues and subscription to *The Akron Alumnus*, \$2; (2) Life Membership Pledge (paid in three installments of \$10 each), \$30; (3) Alumni Loyalty Bond (paid in five installments of \$10 each), \$50.

The first three installments on the \$50 bonds are paid to the Alumni Association in full payment of a life membership in the Association, and the last two installments are paid to the University of Akron to be applied on an Alumni Loyalty Fund. This fund is used for capital investment or endowment purposes as the Board of Directors of the University may deem best.

Checks for dues and pledges should be made payable to the University of Akron Alumni Association.

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