The University of Akron

AKRON, OHIO

MAY, 1947

Annual Catalog 1946-1947
With Announcements For 1947-1948

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THE UNIVERSITY OF AKRON

THE UNIVERSITY CALENDAR

1947

JANUARY 2, THURSDAY. Classes resumed.
JANUARY 27 TO 31, INCL. Semester final examinations for Day and Evening Sessions.
FEBRUARY 3 TO 6, INCL. Orientation Program
FEBRUARY 7 AND 8. Final classification of students in Day Session.
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 students.
FEBRUARY 17, MONDAY. Evening Session classes begin.
FEBRUARY 22, SATURDAY. Washington's Birthday—a holiday.
MARCH 31 TO APRIL 5, INCL. Spring recess.
APRIL 7, MONDAY. Classes resumed.
APRIL 22, TUESDAY. Qualifying examinations for student teaching. Advance classification for Summer Session begins.
MAY 17, SATURDAY. Examinations for candidates for graduate degrees with a major or minor in psychology or education.
MAY 30, FRIDAY. Memorial Day—a holiday.
MAY 31 TO JUNE 6. Semester final examination week.
JUNE 2-7. Registration and classification of entering students.
JUNE 10, TUESDAY. Commencement.
FRIDAY AND SATURDAY JUNE 16, MONDAY. Day and Evening Summer Session classes begin.
JULY 4, FRIDAY. Independence Day—a holiday.
AUGUST 30, SATURDAY. Summer Quarter closes.
SEPTEMBER 2 TO 13, INCL. Registration and classification of entering students.
SEPTEMBER 15 TO 18, INCL. Orientation Program.
MONDAY THROUGH THURSDAY SEPTEMBER 19 AND 20. Final registration and classification for Day Session.
FRIDAY AND SATURDAY SEPTEMBER 22, MONDAY. Classes begin for Day Session.
SEPTEMBER 22, MONDAY. Examinations for admission to Evening Session. 7 TO 10 P. M.
SEPTEMBER 26 TO 27. Registration and classification for Evening Session students.
FRIDAY 1 TO 9 P. M.
SATURDAY 9 A. M. TO 12 NOON
SEPTEMBER 29, MONDAY. Evening classes begin.
NOVEMBER 18, TUESDAY. Qualifying examinations for student teaching.
NOVEMBER 27 TO 29, INCL. Thanksgiving recess.
DECEMBER 20, NOON TO JANUARY 3, 1948, INCL. Christmas recess.
CALENDAR

1948

JANUARY 5, MONDAY.---Classes resumed.
JANUARY 26 TO 31, INCL.---Semester final examinations for Day and Evening Sessions.
FEBRUARY 2 TO 5, INCL.---Orientation Program.
FEBRUARY 6 AND 7.---Final classification of students in Day Session.
FEBRUARY 9, MONDAY.---Classes begin for Day Session.
FEBRUARY 9, MONDAY.---Examinations for admission to Evening Session.
7 TO 10 P.M.
FEBRUARY 13 AND 14.---Registration and classification of Evening Session students.
FEBRUARY 16, MONDAY.---Evening Session classes begin.
FEBRUARY 23.---Washington's Birthday—a holiday.
MARCH 22 TO 27, INCL.---Spring recess.
MARCH 29, MONDAY.---Classes resumed.
APRIL 20, TUESDAY.---Qualifying examinations for student teaching.
MAY 15, SATURDAY.---Examinations for candidates for graduate degrees with a major or minor in psychology or education.
MAY 31, MONDAY.---Memorial Day—a holiday.
JUNE 7 TO 12.---Semester final examination week.
JUNE 15, TUESDAY.---Commencement.
JUNE 16 AND 19.---Final Registration for Summer Session.
JUNE 20, MONDAY.---Day and Evening Summer Session classes begin.
JULY 4, MONDAY.---Independence Day—a holiday.
BOARD OF DIRECTORS
TERM EXPIRES DECEMBER 31, 1947

ROBERT AzAR  Summit County Courthouse
H. L. Beshhardt  618 Noble Avenue
CHARLES W. Entart  2193 Ridgewood Road

TERM EXPIRES DECEMBER 31, 1949

Lee J. Ferbstein  531 Second National Building
Lee R. Jackson  1200 Firestone Parkway
Charles J. Jahnant  655 N. Portage Path

TERM EXPIRES DECEMBER 31, 1951

Hurl J. Albrecht  750 East Tallmadge Avenue
Cletus G. Roetzel  1110 First-Central Tower
Harry P. Schrane  120 Twin Oaks Road

OFFICERS FOR 1947

Chairman  Cletus G. Roetzel
Vice Chairman  Hurl J. Albrecht
Secretary  M. P. Boggs

ADMINISTRATIVE OFFICERS AND ASSISTANTS

H. E. Simmons, D.Sc., LL.D.  President of the University
Charles Bulger, Ph.D.  Dean of Graduate Study and
Frederic E. Ayer, C.E.  Dean Emeritus of the College of Engineering
Howard R. Evans, Ph.D.  Dean of the College of Education
R. D. Landon, C.E., M.S.  Dean of the College of Engineering
Dorothy H. Gardner, A.M.  Dean of Students
Leslie P. Hardy, M.S.Ed.  Director of Adult Education and
Assistant to the President

Curtis C. Myers, M.M.E.  Director of the Daniel Guggenheim Airship Institute
Maxwell P. Boggs, B.A.  Treasurer of the University
Richard H. Schmidt, M.A.  Registrar
Dorothy Hamlen, B.S.L.S.  Acting Librarian
Ulysses S. Vance, B.A.  University Editor
Russell J. Beichly, B.A.  Director of Athletics
Ernest A. Tabler, M.A.  Assistant Director of Adult Education
Clayton Palmer, M.A.  Adviser of Women
Philip S. Sherman, B.A.  Assistant Dean of Students
Gordon Hagerman, B.A.  Adviser of Men
Cecil A. Rogers, B.S.Bus.Adm.  Assistant Treasurer
Ezra Larson  Assistant Registrar
Robert H. Pealy, B.S.Sec.Sc.  Assistant Registrar
John M. Denison  Alumni Secretary
Robert Berry, B.S.Bus.Adm.  Assistant in Treasurer's Office
Margaret Dingle, B.A.  Assistant University Editor
UNIVERSITY FACULTY AND ASSISTANTS
1946-1947

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.

HEZELTON 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 AQUARONE, Associate Professor of Botany and Geology (1931)
B.S., Pennsylvania State College; Ph.D., Johns Hopkins University, 1929.

**JOANNA ALOGBELIS, Instructor in Speech (June, 1942)
B.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.

JULIA ANICH, Instructor in English (1946)
B.A., University of Akron, 1946.

FREDERIC E. AYER, Dean Emeritus of the College of Engineering, including the Daniel Guggenheim Airship Institute (March, 1914)
C.E., Lafayette College, 1900.

MILDRED BABCOCK, Associate Professor of Primary Education (1946)
A.B., Western Reserve University; M.A., Columbia University, Teachers College; D.Ed., New York University, 1940.

FRANK BAILEY, Instructor in Physics (1946)
A.B., Glenville State College; M.A., West Virginia University, 1946.

PAUL R. BALSACCI, 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.

BILL BARKLEY, Instructor in Psychology (1946)
B.S., University of Akron, 1946.

GEORGE BATEK, Instructor in Aeronautical Engineering at the Daniel Guggenheim Airship Institute (1945)
B.S.E., University of Akron, 1944.

RUSSELL J. BEICLY, Director of Athletics, Assistant Professor of Physical Education and Basketball Coach (March, 1946)
B.A., Wittenburg College, 1926.

PAUL BENNETT, Instructor in English (1946)

*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., University of Washington; M.S.C.E., Massachusetts Institute of Technology, 1936.

CHARLES BULGER, Dean of Graduate Study, Dean of Buchtel College of Liberal Arts, and Hilton Professor of Modern Languages (February, 1910)
Ph.D., Buchtel College; A.M., Ph.D., University of Wisconsin, 1922.

RENA NANCY CABLE, Assistant Professor of Art (1927)

*Lola CAINE, Instructor in History (February, 1943)
A.B., University of Illinois; M.A., Ph.D., University of Chicago, 1929.

** On leave.
* Retired 1966.
---

**Turner M. Chambers, Professor of Military Science and Tactics (January, 1946)**

B.S., Virginia Military Institute; Colonel, Infantry, U. S. A.

---

*Jean Clayton, Instructor in Physics Education (1943)*

B.A., Denison College; M.A., State University of Iowa, 1943.

**Walter A. Cook, Professor of Chemistry (1936)**

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, 1926.

**E. O. Davidson, Instructor in Marketing and Salesmanship (February, 1947)**

B.S., Grove City College; M.S., Temple University, 1940.

**Emily Davis, Professor of Art (1945)**

B.A., Ohio State University; M.A., Columbia Teachers College; Ph.D., Ohio State University, 1946.

**Richard C. Davis, Instructor in Mathematics (1946)**


---

*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, 1948)*

M.S.Ed., University of Akron, 1938.

---

*Hjalmar W. Distad, Professor of Education (1934)*

B.S.Ed., M.A., Ph.D., University of Minnesota, 1929.

---

*Maud Doherty, Professor of Nursing Education (1945)*

B.S., M.A., Columbia University, 1926.

---

*John Douchman, Area Coordinator of Apprentice Instruction, State Department of Education (May, 1946)*

B.S.Ed., Wilmington College, 1926.

---

*Howard M. Doutt, Professor of Secretarial Science and Chairman of the Division of Applied Arts (February, 1946)*


---

*Dallas L. Downing, 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, Pierce Professor of English Literature (1944)*

Ph.B., University of Wisconsin; M.A., University of Michigan; Ph.D., Cornell University, 1939.

---

*Theodore Duke, Instructor in Latin and Greek (1946)*

B.A., University of Akron; M.A., Western Reserve University; Ph.D., Johns Hopkins University, 1946.

---

*Ross C. Durst, Professor of Civil Engineering (June, 1917)*

F.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.

---

*John B. Fairburn, Professor of Electrical Engineering (February, 1942)*

B.S., Pennsylvania State College; M.A., Columbia University, 1929; Ph.D., State of New York, 1926.

---

*Margaret F. Fanning, Assistant Professor of Modern Languages (1927)*

B.A., University of Akron; M.A., Radcliffe College, 1926; Diploma, University of Toulouse, France, 1937.

---

*Robert Furgason, Special Instructor in Music (1946)*

B.Mus., University of Pittsburgh, 1939.

---

*H. Grant Fletcher, Assistant Professor of Public School Music (February, 1945)*

B. Mus., Illinois Wesleyan University; M. Mus., University of Michigan, 1939.

---

*Eldora Flitz, Associate Professor of Secretarial Science (1929)*

B.Ed., University of Akron; M.S.Ed., Syracuse University, 1935.

---

*Vaughn Wilbur Flotez, Assistant Professor of Chemistry (1941)*

B.A., Olivet College; M.A., Ph.D., University of Colorado, 1938.

---

***Transferred 1946.***

* Resigned 1946.

† Resigned 1947.
FACULTY AND ASSISTANTS

* 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.

Omer R. Fouts, Associate Professor of Physics (1926)
  B.A., Wittenberg College; M.A., Ohio State University, 1925.

Thomas A. Fox, Instructor in Civil Engineering (February, 1947)
  C.E., University of Akron, 1947.

Mrs. Aradith Franck, Instructor in Speech (1946)
  B.S.E.E., Kent State University, 1946.

Frederick A. Funkhouser, Special teacher of Violin (1939)
  B.A., Oberlin College; B.Mus., Oberlin Conservatory, 1929; affiliated with the Cleveland Symphony Orchestra.

Gwendolyn Galloway, Instructor in Physical Education (1946)
  B.S., University of Akron; M.A., Columbia University, 1946.

Donfed H. Gardner, Dean of Students and Professor of History (1924)
  A.B., A.M., Princeton University, 1924.

Mary Givens, Instructor in Secretarial Science (1946)
  B.S.Ed., University of Akron; M.S., Boston University, 1945.

Walter H. Givens, Assistant Professor of Accounting (February, 1946)

James W. Glensgen, Assistant Professor of Modern Languages (1934)
  A.B., University of Akron; M.A., Western Reserve University; Ph.D., University of Pennsylvania, 1943.

*Dudley Peters Gliew, Associate Professor of Bacteriology (January, 1944)
  B.A., M.A., Ph.D., Ohio State University, 1947.

Dennis Gordon, Instructor in Accounting (1946)
  M.B.A., University of Chicago, 1938.

Peter Grande, Instructor in Chemistry (1946)
  B.S., University of Akron, 1946.

*Dwight E. Gray, Associate Professor of Physics (1922)
  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.

Ossian Gruber, Instructor in Business Administration (1946)
  B.A., University of Minnesota, 1920; M.B.A., Northwestern University, 1928.

Emile Grunberg, Assistant Professor of Economics (1946)
  M.A., Ph.D., University of Frankfurt, 1940.

Gordon Hagerman, Adviser of Men (July, 1941)
  B.A., University of Akron, 1941.

E. K. Hamlin, Assistant Professor of Mechanical Engineering (March, 1946)
  B.M.E., University of Akron, 1938.

Mrs. Phyllis Hardenstein, Instructor in Speech (February, 1947)
  B.A., University of Akron, 1946.

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.

Mrs. Beatrice Hawkins, Instructor in Mathematics (February, 1947)
  B.E., B.A., University of Akron, 1936.

Mrs. Elizabeth Helmkamp, Instructor in Accounting (February, 1946)
  B.S., University of Akron, 1945.

Gerard V. Herrbach, Instructor in French and Spanish (1945)
  A.B., A.M., Gonzaga University, 1930.

*Orville A. Hitchcock, Professor of Speech (1937)
  B.A., Pennsylvania State College; M.A., Ph.D., University of Iowa, 1936.

* Resigned 1946.
† Resigned 1947.
THE UNIVERSITY OF AKRON

***John P. Hlas, Instructor in Military Science and Tactics (June, 1944)
B.S., University of Akron, 1930; S/Sgt., U.S.A.

***John Hoffines, 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)

Paul O. Huss, Professor of Meteorology at The Daniel Guggenheim Airship Institute (January, 1941)

Donato Internoscia, Assistant Professor of Modern Languages (1938)
B.A., Broadway 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.

Edward W. Jones, Assistant Professor of Geography (January, 1944)
B.S., Western Reserve University; M.A., Kent State University, 1940.

Sigurd Jorgensen, Professor of Music (1945)
B.M., M.M., MacPhail School of Music, 1940; Ph.D., Ohio State University, 1945.

Mrs. Mary Keating, Advisor of Women (1936)
B.S., University of Akron, 1936.

Vergil L. Keck, Instructor in Physics (1942)
B.A., M.S., University of Akron, 1946.

Don A. Keister, Associate 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)

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.

Richard P. Kraft, Jr., Instructor in Modern Languages (1946)
B.A., University of Connecticut; M.A., Yale University, 1940.

Emery L. Kuhner, Professor of Education (1923)
B.S., Upper Iowa University; Ph.D., New York University, 1915.

Lucille D. Lanker, Assistant Professor of Physical Education (1943)
B.S.Ed., M.A., Ohio State University, 1944.

R. D. Landon, Dean of the College of Engineering, including the Daniel Guggenheim Airship Institute, and Professor of Civil Engineering (February, 1946)
C.E., M.S., University of Cincinnati, 1927.

Ebba Larson, Assistant Registrar (August, 1926)
University of Akron.

Clarence Leckey, Instructor in History (1946)

Warren W. Leech, Professor of Commerce and Business Administration (1926)
B.A., University of Utah; M.B.A., Ph.D., Northwestern University, 1936.

Clarence Lichtfritz, Special teacher of Piano (November, 1941)
Bowling Green State University; private instruction with Ernest White and Miss Rena Will.

Marjorie Litt, Instructor in Political Science (1946)

John F. Lincks, Instructor in English (March, 1946)
B.A., University of Akron, 1946.

Will Lipscombe, Associate Professor of Mathematics (1921)
B.S., Florida College; M.S., Ohio State University, 1926.

†A. Tress Lundman, Assistant Professor of Speech (1946)
B.A., Huron College; M.A., University of Wisconsin, 1937.
FACULTY AND ASSISTANTS

***Dexter MacMullen, Assistant Professor of Military Science and Tactics
(January, 1946)
Rhode Island State College; Lieutenant, Field Artillery, U.S.A.

John A. McClone, 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.

James McHale, Instructor in Economics (1946)
B.A., University of Akron; M.A., Western Reserve University, 1942.

Andrew Malule, Instructor in Physical Education and Assistant Coach of Football
(February, 1946)
B.S. in Ed., University of Akron, 1944.

Ida Mann, Instructor in English (February, 1946)
B.A., University of Akron; M.A., University of Wisconsin, 1945.

Dorothy Marti, Instructor in Spanish (1946)

Margaret Evelyn Mauch, Assistant Professor of Mathematics (1945)
B.S., Huron College; M.S., Ph.D., University of Chicago, 1938.

Mrs. Helen Metz, Instructor in Modern Languages (1945)

Mrs. Stella Meyer, Assistant Professor of Modern Languages (1946)
A.B., M.A., University of Missouri, 1923.

Ellen Millisor, Assistant Professor of Physical Education (1946)
B.S., Ohio State University, 1935.

Mrs. Marian Mond, Instructor in Modern Languages (1946)

Austin L. Moore, Assistant Professor of History (1936)
A.B., Oberlin College; A.M., Ph.D. Columbia University, 1936.

Chester Morgan, Instructor in Accounting (1946)
B.S., Ohio University, 1941.

Curtis C. Myers, Professor of Industrial Production and Resident Director of the
Daniel Guggenheim Airship Institute (April, 1943)
M.M.E., Cornell University.

Raymond J. Nelson, Professor of Philosophy (1946)
A.B., Grinnell College, 1941.

Mrs. Esther Neuenschwander, Instructor in English (February, 1946)
Ph.B., Heidelberg College, 1914.

Lee Newscomer, Instructor in History (1946)
A.B., DePauw University; M.A., Ohio State University, 1926.

Mrs. Agnes Odell, Instructor in Political Science (1946)

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.

Mrs. Virginia Olivo, Assistant Professor of Economics (February, 1946)
B.A., University of Akron; M.S., University of Chicago, 1928.

Troy Orgain, Professor of Philosophy (1945)
A.B., Hastings College; B.D., McCormick Theological Seminary; M.A., Ph.D.,
State University of Iowa, 1941.

Wayne S. Overmyer, Instructor in Accounting and Business Administration
(February, 1947)
B.S. in Bus Admin., Ohio State University, 1940.

Mrs. Charlotte Packan, Instructor in Art (1946)
B.S., University of Akron; M.A., Western Reserve University, 1940.

Mrs. Helen Painter, Instructor in Education (1945)
A.B., A.M., Ed.D., Indiana University, 1941.

William J. Painter, Assistant Professor of Education (1945)
A.B., Oakland City College; M.A., Ph.D., Indiana University, 1943.

* Resigned 1946.

** Transferred 1946.
Mrs. Gladys Palmer, Adviser of Women (November, 1946)
A.B., St. Lawrence University; M.A., Teachers College, Columbia University, 1945.

†George Panich, Assistant Psychometrician in College of Education (March, 1946)
B.A., University of Akron, 1945.

Robert Pealy, Assistant Registrar (February, 1946)
B.S. in Sec'l. Science, University of Akron, 1937.

W. M. Pethy, Assistant Professor of Mechanical Engineering (1946)
B.S.M.E., University of Missouri, 1937.

Mrs. Ruth Putman, Assistant Professor of English (1946)
B.A., Howard College; M.A., Western Reserve University, 1938.

Ruth Marguerite Raw, Assistant Professor of English in the College of Engineering (1929)

Katheine 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.

Cleo Ressler, Special Instructor in Voice (1946)
B.Mus., Cincinnati College of Music; M.A., Ohio State University, 1940.

Dallas Riddle, Instructor in Business Administration (1946)
B.S., University of Akron; M.B.A., Harvard Business School, 1943.

*Harold O. Reed, Associate Professor of Education and Director of the Introductory Course in Hygiene (1938)
B.A., Nebraska Wesleyan University; M.A., University of Nebraska, 1938.

Donald Rinkoski, Instructor in Aeronautical Engineering (December, 1946)
B.S. in Mech. Eng.'g., Case School of Applied Science, 1945.

†Wilbur C. Rober, 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. Clayes C. Robinson, Assistant Professor of Physiology (1942)
A.B., Louisiana State Normal College; M.S., University of Chicago, 1921.

Louis Rodabaugh, Associate Professor of Mathematics (1946)
A.B., Miami University; M.A., Ph.D., Ohio State University, 1938.

**Jerome Rogoff, Instructor in Mathematics (February, 1946)
B.S., University of Akron, 1937; M.A., Harvard University, 1941.

Louis Ross, Instructor in Mathematics (February, 1946)

Robert S. Ross, Associate Professor of Aeronautical Engineering and Technical Director of the Daniel Guggenheim Airship Institute (May, 1942)

Robert K. 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. Septon, Professor of Physical Education (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.

Philip S. Sherman, Assistant Dean of Students (August, 1936)
A.B., University of Akron, 1956.

† Resigned 1947.
‡ Retired June, 1946.
* Resigned 1946.
** On leave.
FACULTY AND ASSISTANTS

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, Assistant Professor of Business Administration (1942)
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)

PAUL C. SMITH, Associate Professor of Electrical Engineering (1925)
B.S.E.E., Purdue University, 1917.

R. B. SMITH, University Physician (1946)
B.A., M.D., Ohio State University, 1940.

R. A. SPANTON, Dean Emeritus of Buchtel College of Liberal Arts
Ph.D., Buchtel College; M.A., Harvard University; Litt.D., University of Akron, 1938.

JOHN F. STEIN, Special teacher of Voice (1933)
Private instruction with Herbert Witherspoon, Enrico Rosati, and Maria Kurenko.

FREDERICK J. STEINER, Instructor in Aeronautical Engineering (October, 1944)

CLYDE STINER, Assistant Professor of Vocational Education (July, 1946)
B.A., B.S., Miami University; M.A., Teachers College, Columbia University, 1946.

ROGER STONE, Special Instructor in Violin (February, 1945)
Pittsburgh Musical Institute, University of Pittsburgh.

CLAYTON STRAW, Instructor in Physics (1946)
B.A., University of Akron, 1954.

ERNEST A. TABLER, Assistant Director of Adult Education and Assistant Professor of Mathematics (1935)
B.S., Kent State University; M.A., Western Reserve University, 1935.

MRS. HELEN S. THACKABERRY, Instructor in English (February, 1940)
B.A., M.A., State University of Iowa, 1927.

ROBERT E. THACKABERRY, Assistant Professor of English (1938)
B.A., M.A., Ph.D., State University of Iowa, 1937.

MRS. AUDRA TENNEY TUCKER, Assistant Professor of Secretarial Science (1926)
B.A., University of Akron; M.A., New York University, 1936.

PAUL E. TWEETING, 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. VANICE, University Editor and Assistant Professor of English (1923)
B.A., St. Mary's University of Iowa, 1923.

SUMNER W. VANICE, Instructor in Bacteriology and Sanitation (October, 1943)

DONALD S. VIARIAN, Associate Professor of Speech (1934)
B.A., M.A., University of Wisconsin, 1934.

FRED WALLACH, Instructor in Industrial Management (1946)
B.A., College of the City of New York, 1940.

CHI-TEH WANG, Assistant Professor of Aeronautical Engineering at the Daniel Guggenheim Airship Institute (November, 1944)
B.S.M.E., Chiao-Tung University; M.Aero.E., Rensselaer Polytechnic Institute; M.S., Brown University; B.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.

LESTER WEINBERG, Instructor in Civil Engineering (June, 1946)
B.C.E., University of Detroit, 1946.

1 Retired June 30, 1945.
* Resigned 1946.
** Transferred 1946.
Charles Franklin West, Associate Professor of Political Science (February, 1947)  
A.B., M.A., Ohio Wesleyan University; M.A., Harvard University;  
LL.D., National University, 1933.

*William Wheeler, Special teacher of Voice (1942)  
B.A., Beloit College; B.A., Ithaca Conservatory of Music, 1902.

George Stafford Whitty, Professor of Rubber Chemistry and Director of Rubber Research (1942)  
A.B.Sc., B.S., University of London; M.S., Ph.D., D.Sc., McGill University, 1909.

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 Mechanical Engineering (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)  
A.B., 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.

Winniogene Wood, Instructor in Home Economics (1944)  
B.S., Miami University; M.A., Teachers College, Columbia University, 1939.

Albina Yakaitis, Instructor in Biology, (1946)  
B.S., University of Chicago, 1945.

†Mrs. Darita Younce, Instructor in Social Science and English (1945)  
A.B., Rollins University; A.M., Northwestern University, 1945.

†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)

Stanley Abramson, Instructor in Natural Science (1946)  
University of Akron.

James Akins, Instructor in Physics (February, 1947)  
University of Akron.

Aubrey P. Allman, Instructor in Natural Science (1946)  
B.S., University of Akron, 1940.

Mrs. Bertha Arnstein, Instructor in German (1945)  
B.A., University of Akron, 1935.

John A. Bailey, Instructor in Business Law (February, 1947)  
Ohio State University; University of Akron; Akron School of Law, LL.B.

Paul Becker, Instructor in Psychology (February, 1947)  
B.S. In Ed., University of Akron, 1934.

Michael Bezratchenko, Instructor in Engineering Drawing (February, 1947)  
University of Akron.

* Resigned 1946.  
† Resigned 1947.
FACULTY AND ASSISTANTS

VINCENT BIONDO, Instructor in English (1946)
B.A., M.A., University of Akron, 1937.

MRS. SERAPHIMA BOGUSLAVSKY, Instructor in Biology (February, 1947)
B.S., University of Washington, 1935.

MRS. HELEN BOYD, Instructor in Psychology (1946)
A.B., Fairmont State Teachers College, 1934.

MRS. MARY BROWN, Instructor in Home Economics (1946)
Rochester Institute of Technology.

FRANCES CLARK, Instructor in Secretarial Science and Social Science (1946)
B.S., University of Akron; M.Ed., University of Pittsburgh, 1946.

MRS. CARMEL D'ANDRE, Instructor in English (1944)
B.A., University of Akron; B.L.S., Drexel Institute, 1943.

AUGUSTUS DYCUS, Instructor in Natural Science (1946)
University of Akron.

MADELINE FIPER, Instructor in English (1946)
B.S., M.A., New York University, 1944.

JOHN GIFFITTS, Instructor in Mathematics (1946)
B.S., M.B., University of Akron, 1942.

MARGARET GIRSNER, Graduate Assistant in Zoology (1946)
B.S., University of Akron, 1946.

MRS. IRENE GRUNBERG, Instructor in Modern Languages (1946)
University of Frankfurt; University of Geneva.

OSCAR HIMEBAUGH, Instructor in Chemistry (1946)
B.S., Ohio Northern University; M.A., Ohio State University, 1927.

IRENE HORNING, Instructor in Biology (1946)
B.S., Western Reserve University, 1944.

JOHN HULL, Instructor in English (1946)
B.A., University of Akron; M.A., Harvard University, 1958.

MARGARET HUNSICKEK, Instructor in Home Economics (February, 1941)
B.A., University of Akron, 1945.

MRS. ROSALIND IRISH, Instructor in English (February, 1946)
B.S., B.A., University of Akron; M.S., Columbia University, 1928.

MRS. KATHERINE KIMBLE, Instructor in Home Economics (February, 1946)
University of Illinois; University of Akron.

MRS. JIMMIE LOONEY, Graduate Assistant in Botany (1946)
University of Akron.

RALPH McINTYRE, Instructor in English (November, 1946)
University of Akron.

CATHERINE MARX, Instructor in Social Science (February, 1947)
University of Akron.

JACK MARKEN, Instructor in Humanities (1946)
University of Akron.

MARY MOSTENIC, Instructor in English (1946)
B.A., B.E., University of Akron, 1931.

WILLIAM NELSON, Instructor in Natural Science (1946)
University of Akron.

JOSEPH PAPPANO, Instructor in Modern Languages (February, 1947)
B.A., University of Akron, 1941.

EDWARD PAUL, Instructor in the Humanities (February, 1947)
University of Akron.

MILDRED RASNEOR, Graduate Assistant in Bacteriology (1945)
B.S., Ohio State University, 1944.

ELLEN RAW, Graduate Assistant in Economics (1946)
B.A., University of Akron.
Evan Reed, Instructor in Business Law (1946)
B.A., Judson College; University of Michigan, 1933.

Mrs. Mary Reithal, Instructor in Psychology (1946)
B.A., Oberlin College; M.A., Ohio State University, 1945.

Mabel Riedinger, Instructor in Psychology (February, 1947)
A.B., Mount Union College; A.M., University of Chicago; Ed.D., Teachers College, Columbia University, 1946.

Cecil Shepherd, Instructor in Engineering Drawing (1946)
B.S., South Dakota State College, 1941.

Mrs. Glennia Snow, Instructor in Home Economics (February, 1947)
B.S. in Ed., M.S., Ohio State University, 1920.

Helene Steigner, Instructor in Home Economics (February, 1947)
B.S., Berean College, 1944.

Jane Steinker, Instructor in English (1946)
B.A., University of Akron; M.A., Western Reserve University, 1945.

Joan Sweeny, Instructor in Mental Hygiene (February, 1947)
B.A., University of Texas, 1946.

Kathryn Teeple, Instructor in Biology (February, 1947)
B.S., University of Akron, 1925.

Evelyn Thomas, Instructor in Psychology (February, 1947)
B.A., Tulane University, June, 1946.

John Van Sickle, Instructor in Biology (1946)
B.A., University of Akron, 1935.

William Waggoner, Instructor in English (1946)
B.A., University of Akron; M.A., Columbia University, 1939.

L. O. Weis, Instructor in Mathematics (1946)
B.S., College of Wooster; M.A., Columbia University, 1927.

Albion Weitel, Instructor in Natural Science (1946)
University of Akron.

Don Williams, Instructor in Engineering Drawing (February, 1947)
University of Akron.

David Wilson, Instructor in Social Science (February, 1947)
University of Akron.

Mrs. George Wright, Instructor in Speech (February, 1947)
B.A., M.A., Southwestern University, 1930.

William Zornow, Instructor in Humanities (1946)
A.B., Adelbert College; M.A., Western Reserve University, 1944.

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 Hamlen, Acting Librarian and 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, 1945.

*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.

Frederick Sax Stewart, Instructor in Bibliography (1944)
B.S.Ed., University of Akron, 1944.
FACULTY AND ASSISTANTS

Martha LeFever, Instructor in Bibliography (1945)
B.A., University of Akron, 1945.
Mary Dagge, Instructor in Bibliography (May, 1946)
B.S.Ed., University of Akron; B.S.L.S., Western Reserve University, 1945.
Zola Jones, Instructor in Bibliography (1946)
A.B., M.A., Bob Jones College; B.S.L.S., Western Reserve University, 1946.
Lois Reed, Assistant in Reserve Room (1946)
B.S., University of Akron, 1946.

UNIVERSITY HEALTH SERVICE
R. B. Smith, M.D., University Physician.
Mrs. Marjorie Golden, Nurse.

PART-TIME INSTRUCTIONAL STAFF
(Not on regular Day Session staff)

SUMMER SESSION — 1946
Miss Virginia Lloyd..........First Grade
Miss Emily Gibson.........Fifth Grade
Mrs. Lucille Langin......Second Grade
Mrs. Iva James...............Sixth Grade
Miss Marjorie Cook.........Third Grade
Mr. Albert J. Dillehay
Miss Jeanette Marsh.........Fourth Grade

CRITIC TEACHERS FOR SUMMER SESSION — 1946
L. L. Everett..............Barberton
Harry E. Kuntz..........South High School
Louis E. Bauman........South High School
J. M. McDougall..........South High School
Fred Weber........South High School
Clara Kemler........Spicer

TEACHERS IN SPICER DEMONSTRATION LABORATORY SCHOOL
Mary Louise Beverly........Principal
Catherine Redinger.........Kindergarten
Lucille McConnell..........1B
Bessie Miller............1B
Rosemary Kraus............2B
Dorothy Schorle...........2B
Mary Redinger............3B
Jeanette March............3B
Caroline French...........4B
Eulalie Saube.............4A

CRITIC TEACHERS FOR FALL 1946
Jeanette Marsh........Spicer
Gilbert Nolley........Manchester
Sister M. Bernice, O.P........St. Vincent
Frank DiNapoli........Mason
Virginia Lloyd........Lincoln
Mrs. Louise Donnelly.....Crosby
Julia Fitzpatrick.........Crosby
Robert Young...............David Hill
Mrs. Lillian Thomas.......Crosby
Esther Davis........Mason
Mrs. Wanda Baker.........Leggett
Mrs. Evelyn Sills Board of Education
Isa Kreger........Central High School
Paul Pugh........Garfield High School
Margaret McKibbes........Old Trail
M. J. Dwyer............Old Trail
Mrs. E. Rogers...........Old Trail
Mrs. Bertha Malecott......Old Trail
Mrs. Bertha Malecott......Old Trail
Mrs. Bertha Malecott......Old Trail
Mrs. Bertha Malecott......Old Trail
Dorothy Lundell..........Henry

Lillian M. Clark.........West High School
Bertha Maier........Buchtel High School
Verena White........Garfield High School
Elizabeth Stump.........Garfield High School
Nellie Hoffmann........Garfield High School
Rose Pisciuzzi.........East High School
Emily Lance........South High School
Mrs. Lucille Weinborn...
Mrs. Mary Jane Queen.....Barberton High School
Florence Danforth.........Margaret Park
Harold Becker........Central High School
Olga Zemiansky........Spicer
Helena Sullivan.........East High School
James Appley........Lincoln
Mike Kinno..........East High School
William Satterlee......South High School
Russell Estey..........East High School
OTHER CO-OPERATING SCHOOLS

Mr. Walter S. Chewson, B.S., M.S. .................................................. Barberton
Mr. H. A. Peiffer, B.S., M.A. .......................................................... Barberton
Mr. Gordon M. DeWitt, B.A., M.A. .................................................. Cuyahoga Falls
Mr. Gilbert Roberts, B.S. ............................................................... Cuyahoga Falls
Mr. Robert L. Amsden, B.A., M.A. .................................................. Old Trail
Sister M. Bernice, O.P. ................................................................. St. Vincent

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

Otis C. Hatton, M.A. ................................................................. Superintendent of Schools
Harold S. Vincent, M.A. ............................................................. First Assistant Superintendent
A. J. Dilleyhay, B.Ed., M.A. .......................................................... Executive Director
George F. Weber, M.A.Ed. ......................................................... Executive Director
Mary Louise Beverley, B.S.Ed. .................................................... Principal of Spicer School

1946-47 EVENING SESSION

Harry E. Albert ................................................................. Physical Chemistry
B.S., Chem. Eng., University of Pennsylvania, 1939; M.S., University of Akron; Ph.D., Yale University

Glenn Alliger ................................................................. Physical Chemistry
B.S., Washington State; M.S., Ph.D., University of Iowa

Joseph C. Amelang ............................................................. Chemistry
B.S., University of Akron; Ph.D., Yale University

Josephine Amer ............................................................... Advanced Clothing
A.B., University of Akron; Vogue School of Interior Decoration, Chicago; New York School of Interior Decoration; Fashion School, Cleveland

Mrs. Edna K. Archer ........................................................... Art for the Grades
B.S., University of Akron; M.A., Columbia University

Charles H. Bair ............................................................ English
Haverford College; B.A., University of Pittsburgh

Jean H. Bartlett ............................................................. English
A.B., University of Akron; M.A., Middlebury College

Paul Becker ................................................................. Psychology
B.S. in Ed., University of Akron, 1934

James R. Berry .............................................................. Business Organization
B.S. in Bus. Ad., University of Akron, 1939

Mrs. Carl Bickle ............................................................ Shorthand
B.S. in Secretarial Science

James K. Boughton .......................................................... Electrical Drafting

James M. Campbell .......................................................... English
B.A., University of Akron, 1935; M.A., Western Reserve University, 1939

A. R. Carr ................................................................. Advertising
B.S., University of Akron, 1940

George Davero ............................................................ Federal Taxation
B.S., Ohio State, 1929; LL.B., Akron Law School, 1939; C.P.A. Certificate, 1933

Lucille M. Davison .......................................................... Foods
B.S., University of Akron, 1938

A. J. Dilleyhay ............................................................... Teaching of Arithmetic
B.S., University of Akron; M.A., Ohio State University

Edward R. Eaton ............................................................. Engineering Drawing
B.S., Northeastern University, Boston

Mrs. Virginia Farkas .......................................................... Shorthand
B.S. in Ed., University of Akron, 1943

Anna Mae Flint ............................................................. Shorthand
B.S. in Sec. Sci., University of Akron, 1942

Flora Flint ................................................................. Secretarial Procedure
B.S. in Sec. Sci., University of Akron, 1941
<table>
<thead>
<tr>
<th>Name</th>
<th>Degree(s)</th>
<th>Subject</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thomas G. Fox</td>
<td>B.S. in Chemistry, Lebanon Valley College, 1940; Ph.D., Columbia University, 1943</td>
<td>Thermodynamics</td>
</tr>
<tr>
<td>Arthur Freeder</td>
<td>B.S., B.E., M.S., University of Akron, 1917, 1924, 1926</td>
<td>Mathematics</td>
</tr>
<tr>
<td>Leroy Garver</td>
<td>A.B. Baker University, Baldwin City, Kansas, 1920</td>
<td>Economics</td>
</tr>
<tr>
<td>A. E. Center</td>
<td>B.E., Springfield College, 1926</td>
<td>Municipal Recreation</td>
</tr>
<tr>
<td>Earl H. Gillesland</td>
<td>A.B., University of Akron, 1920</td>
<td>Industrial Management</td>
</tr>
<tr>
<td>Norma Greer</td>
<td>B.A., University of Akron, 1943; Trohagen School of Design, New York, 1944</td>
<td>Clothing</td>
</tr>
<tr>
<td>John C. Griffith</td>
<td>B.E., University of Akron, 1931; M.E., University of Akron, 1942</td>
<td>Algebra</td>
</tr>
<tr>
<td>Mrs. Adena Handwerk</td>
<td>B.A. in Ed., University of Akron, 1941</td>
<td>Business English</td>
</tr>
<tr>
<td>Robert C. Hare</td>
<td>B.S., M.S., University of Akron, 1939</td>
<td>Natural Science</td>
</tr>
<tr>
<td>Victor H. Hasselquist</td>
<td>B.M.E., Ohio State, 1925</td>
<td>Machine Drawing</td>
</tr>
<tr>
<td>John Hickman</td>
<td>A.B., Columbia University, 1934; M.S., Syracuse University, 1940</td>
<td>Industrial Management</td>
</tr>
<tr>
<td>Ruth Hoffmaster</td>
<td>B.A. in Ed., University of Akron, 1940</td>
<td>Spanish</td>
</tr>
<tr>
<td>Franklin Hunt</td>
<td>M.A., M.A., Middlebury College, 1942</td>
<td>Advertising</td>
</tr>
<tr>
<td>T. Donald John</td>
<td>M.A., University of Akron, 1937</td>
<td>Journalism</td>
</tr>
<tr>
<td>Cyril Jones</td>
<td>A.B., University of Akron, 1931; M.A., University of Akron, 1934</td>
<td>Public Speaking</td>
</tr>
<tr>
<td>Dorothy Kester</td>
<td>A.B., University of Akron, 1937</td>
<td>Speech for the Classroom Teacher</td>
</tr>
<tr>
<td>Rose M. Krause</td>
<td>B.E., University of Akron; M.A., Columbia University</td>
<td>Handicrafts</td>
</tr>
<tr>
<td>Arthur H. Kruse</td>
<td>B.A., University of Akron; M.A., Syracuse University; M.S., Western Reserve, 1942</td>
<td>Community Organization</td>
</tr>
<tr>
<td>William Kurth</td>
<td>A.B., University of Akron, 1937</td>
<td>German</td>
</tr>
<tr>
<td>William Lantz</td>
<td>University of Akron</td>
<td>Purchasing</td>
</tr>
<tr>
<td>Frank Larue</td>
<td>M.S. in M.E., State University of Iowa, 1932</td>
<td>Engineering Drawing</td>
</tr>
<tr>
<td>James C. Laurence</td>
<td>A.M., University of Akron</td>
<td>Mathematics</td>
</tr>
<tr>
<td>R. C. Lloyd</td>
<td>M.S. in M.E.; M.S. in M.E., Michigan State College, 1939, 1941</td>
<td>Descriptive Geometry</td>
</tr>
<tr>
<td>Alfred Lowdermilk</td>
<td>B.S., Chem. Engr., North Carolina State College, 1938</td>
<td>Chemistry</td>
</tr>
<tr>
<td>F. J. Lutes</td>
<td>University of Akron</td>
<td>Metallurgy Lab</td>
</tr>
<tr>
<td>J. Sleath McAnlis</td>
<td>B.S., Wooster College; M.S., University of Akron, 1940</td>
<td>Mathematics</td>
</tr>
<tr>
<td>H. T. McKee</td>
<td>B.S., M.A., University of Pittsburgh, 1929</td>
<td>Advanced Accounting</td>
</tr>
<tr>
<td>John Meeks</td>
<td>LaSalle Extension University, 1922; Interstate Commerce Law, National University, Washington, D. C., 1946</td>
<td>Traffic Management</td>
</tr>
</tbody>
</table>
Frederick Mock
B.S. in Ed., University of Akron

Oliver C. Moles
A.B., University of Denver, 1918; A.M., Harvard University, 1914; LL.B., Georgetown University, 1917

Paul R. Montgomery
B.S. Eng., University of Akron, 1941

George Murphy
B.S. Met., Carnegie Tech

Kenneth O. Myers
B.S., M.S., University of Pittsburgh

Donald W. Nies
B.S., B.A. Ed., University of Akron, 1946

Mrs. Katherine Oana
B.S. in Ed., University of Akron, 1941

Sarah Olinoff
B.A., University of Akron

Keith Perkins
A.B., DePauw University; M.A., University of Michigan; Ph.D., Purdue University

Thomas M. Powers
B.A. Cornell University; LL.B., Cleveland Law School

Robert C. Quinn
A.B., University of Akron, 1929

Mark Riedinger
A.B., Mt. Union College, 1926; A.M., University of Chicago, 1930

O. M. Rodenick
L.B.B., Ohio State

Helen Rook
B.S. in Ed., Ohio State, 1917; M.A., Columbia University, 1924

W. A. Rook
E.B., University of Akron.

Guy Smart
Public Accountant

Russell L. Smith
B.S. in Bus. Ad., Kent State University, 1940

Jane Stiner
A.B., University of Akron, 1928; A.M., Western Reserve, 1945

Leona Sterley
B.S. in Sec. Sci., University of Akron, 1936

Guy D. Swartz
A.B., Otterbein College; A.M., Ohio State

William Terrall
Marketing

G. C. Turner
B.A., Elms College; M.A., University of Akron, 1929

Grant Tyte
A.B., Western Reserve University, 1931; A.M., Western Reserve, 1935

Carlton Vore
B.S.A., University of Toledo, 1935

A. C. Vore
B.S., Ohio University, 1934; M.S., in Ed., pending thesis

Mrs. Betty Weaver
B.S., University of Akron, 1944

Ray Weller
Metallurgy Lab.

Gladys Wells

Dorothy Whittington
M.A., Brown University; Ph.D., Denison University
FACULTY AND ASSISTANTS

NEWELL WILLIAMS
Electrical Drafting
B.S. in E.E., University of Akron, 1937

ROBERT WILSON
Radio Speaking
Manager, WADC Broadcasting Station

RICHARD T. WISE
Engineering Drawing
Technical M.E. Degree, University of Cincinnati, 1939

VELMA WOOD
Child Welfare
B.S., University of Toledo; M.S., Smith College School for Social Work

LOUISE WOOFER
Design
B.E., University of Akron, 1935

EDWIN YOUNG
Statistics
A.B., University of Akron, 1930; M.A., Ohio State University, 1932

�RUBBER RESEARCH STAFF

DR. G. STAFFORD WHITBY, Professor of Rubber Chemistry, Director of Rubber Research

*E. P. BUDEWITZ, Assistant (1944)
B.A., University of Montana; M.S., University of Akron, 1944

PETER CANTERINO, Assistant (1946)
B.S., Manhattan College; M.S., D.Sc., University of Cincinnati, 1946

ALBERT J. GREENE, Assistant (May, 1946)
B.S., Providence College, 1941

MORTIMER CROSS, Assistant (1946)
B.S., Polytechnic Institute of Brooklyn, 1942

LESTER WIEJ, Research Chemist (June, 1946)
A.B., Brooklyn College; M.A., Ph.D., Columbia University, 1943

*JACK ZOMLEFER, Assistant (1943)
B.B., University of Illinois; M.S., State University of Iowa

R. O. T. C. STAFF

EDMUND M. GREGOIRE, Professor of Military Science and Tactics (September, 1946)
The Citadel; Colonel, Infantry

GEORGE G. NORMAN, Professor of Air Science and Tactics (September, 1946)
University of Indiana, B.S. in Bus. Adm., 1944; Lieutenant Colonel, Air Corps.

EDWARD L. NICELY, Assistant Professor of Military Science and Tactics (March, 1946)
University of Akron, B.S. in Educ., 1941; Major, Infantry.

ROBERT J. CIRALDO, Assistant Professor of Military Science and Tactics (April, 1945)
University of Akron; Major, QMC.

DARK L. GEDDE, Assistant Professor of Air Science and Tactics (October, 1946)
Ohio State University, B.A., 1940; Captain, Air Corps.

ROBERT R. FOWLER, Assistant Professor of Air Science and Tactics (December, 1946)
King College, Tenn., B.A., 1942; 1st Lieutenant, Air Corps.

LYLE F. FISHER, Instructor, Military Science and Tactics (February, 1946)
M/Sgt., Army Ground Forces

RAYMOND W. HUGHES, Instructor, Military Science and Tactics (February, 1946)
M/Sgt., Army Ground Forces

MORRIS E. TAYLOR, Instructor, Air Science and Tactics (September, 1946)
M/Sgt., Air Corps.

GILBERT G. CANTER, Instructor in Air Science and Tactics (September, 1946)
M/Sgt., Air Corps.

ROBERT D. TRAUTMAN, Instructor in Air Science and Tactics (September, 1946)
7/Sgt., Air Corps.

HERBERT W. GIMPLE, Assistant Instructor, Military Science and Tactics (July, 1946)
Sergeant, Army Ground Forces.

CHARLES A. HERMANN, Assistant Instructor, Military Science and Tactics (June, 1946)
Technicolor 4th Grade, Army Ground Forces.

*Resigned 1946
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 adult students.

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 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.

In 1946 the United States Army Air Forces established a unit of the Air Forces Reserve Officers' Training Corps.
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 Aeronautical and Industrial options) are accredited by the Engineers' Council for Professional Development. Women graduates of the University 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; 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, 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, and basketball games are played at Goodyear Gymnasium.

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 71,700 catalogued volumes, 21,610 pamphlets, and a considerable amount of other material (not counted) concerning the history of Buchtel College and the University of Akron, as well as 586 current periodicals, and 1,210 music recordings. In addition 18,223 mounted pictures are available for circulation.

THE TESTING LABORATORY

The 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 College of Engineering 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. In April, 1943, Mr. Curtis C. Myers became Resident Director. Dr. Theodor von Karman, who had served as Director for the five years, is now Technical Consultant. Mr. Robert Ross is Technical Director. In connection with the fundamental research carried on at the Institute a certain amount of testing is done for industry and for governmental agencies on a contract or fee basis.

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 College of Engineering 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 minus 10 degrees F., another of about 200 square feet which can be cooled to minus 55 degrees 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.

GYMNASUIM LOCKERS

Gymnasium lockers are obtained by depositing $1 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 his 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 or 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:

<table>
<thead>
<tr>
<th>Humanities</th>
<th>Social Sciences</th>
<th>Natural Sciences</th>
<th>Applied Arts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Latin and Greek</td>
<td>Economics</td>
<td>Biology</td>
<td>Art</td>
</tr>
<tr>
<td>Literature</td>
<td>History</td>
<td>Chemistry</td>
<td>Commerce</td>
</tr>
<tr>
<td>Modern Languages</td>
<td>Political Science</td>
<td>Mathematics</td>
<td>Home Economics</td>
</tr>
<tr>
<td>Music</td>
<td>Sociology</td>
<td>Physics</td>
<td>Secretarial Science</td>
</tr>
<tr>
<td>Philosophy</td>
<td>Speech</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

THE COLLEGE OF ENGINEERING

The departments of the College of Engineering are:

- Civil Engineering
- Electrical Engineering
- Mechanical 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
- Commerce
- Elementary
- High School
- Home Economics
- Kindergarten
- Music
- Primary
- Physical Education
- Psychology
- Vocational Education
- Nursing Education

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.

ACCELERATED PROGRAM

The Summer Session of 1942 was the beginning of an accelerated wartime 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. It is expected that by the summer of 1949 a return to the prewar summer session will be effected.

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 1947, 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 eighth year of operation. For further information see section on Community Co-operation.
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

<table>
<thead>
<tr>
<th>Score Range</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>93-100</td>
<td>Excellent</td>
</tr>
<tr>
<td>85-92</td>
<td>Good</td>
</tr>
<tr>
<td>77-84</td>
<td>Fair</td>
</tr>
<tr>
<td>70-76</td>
<td>Poor</td>
</tr>
<tr>
<td>Below 70</td>
<td>Conditioned</td>
</tr>
<tr>
<td></td>
<td>Failed</td>
</tr>
<tr>
<td></td>
<td>Incomplete</td>
</tr>
</tbody>
</table>

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 at least 128 credit 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 College of Engineering 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 administration 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

Payment of fees is a part of the registration procedure. All fees must be paid at the Treasurer's office at the time of enrolment.

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.

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 37 and 38.

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

LATE REGISTRATION FEE.

COMMUNITY COLLEGE FEES.

EXCESS LOAD FEE.

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.

<table>
<thead>
<tr>
<th></th>
<th>First Semester</th>
<th>Second Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuition fee, for non-residents of Akron</td>
<td>$ 90.00</td>
<td>$ 90.00</td>
</tr>
<tr>
<td>Maintenance fee, for all students</td>
<td>35.00</td>
<td>35.00</td>
</tr>
<tr>
<td>Student activity fee, for all students</td>
<td>7.00</td>
<td>3.00</td>
</tr>
<tr>
<td>Student building fee</td>
<td>3.00</td>
<td>3.00</td>
</tr>
<tr>
<td>Library fee</td>
<td>1.50</td>
<td>1.50</td>
</tr>
</tbody>
</table>

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.

All fees are payable at the Treasurer's office before the student enters classes. Deferred payments have been discontinued.
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 and the eleven-week summer term:

<table>
<thead>
<tr>
<th>Each Semester</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>For 1 to 5 credit hours inclusive, per credit hour</td>
<td>$ 6</td>
</tr>
<tr>
<td>For 6 credit hours</td>
<td>35</td>
</tr>
<tr>
<td>For 7 credit hours</td>
<td>50</td>
</tr>
<tr>
<td>For 8 credit hours</td>
<td>60</td>
</tr>
<tr>
<td>For 9 credit hours</td>
<td>70</td>
</tr>
<tr>
<td>For 10 credit hours</td>
<td>80</td>
</tr>
<tr>
<td>For 11 credit hours or more</td>
<td>90</td>
</tr>
</tbody>
</table>

Payable by non-resident students in the evening session and the six-week summer term:

| For less than 7 hours | no charge |
| For 7 to 10 credit hours inclusive, per credit hour in excess of 6 | $20 |
| For 11 credit hours or more | 90 |

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

**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 (evening classes), 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: $0.50
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 1947 SUMMER SESSION

Six-Week Term
**Non-Resident Tuition Fee (For less than 7 hours) No Charge
Maintenance fee:
1 to 4 credit hours, per credit hour $ 6.00
5 to 7 credit hours 25.00
Student Activity Fee 1.50
Student Building Fee .50
Late Fee 5.00

Eleven-Week Term
*Non-Resident Tuition Fee (eleven credit hours) $90.00
Maintenance Fee:
1 to 5 credit hours, per credit hour 6.00
6 or more credit hours 35.00
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 enrollment 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 the 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, 1947-48, are as follows:
First Semester: Monday, September 22, for Day and September 29, for Evening Session.
Second Semester: Monday, February 9, for Day Session. Monday, February 16, for Evening Session.
1947 Summer Session: June 14.

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.
Semi-private Voice Lesson (Small Group Instruction) 20
GENERAL INFORMATION

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.

COMMUNITY COLLEGE

A fee of $6.00 is charged for Community College Courses unless otherwise noted in the circular printed each semester which describes the courses.

EXCESS LOAD FEE

A fee of $6.00 per credit hour is charged for registrations in excess of 18 hours in the regular semesters of the day session and the eleven-week summer term. In the six-week summer term, this fee is applied to registrations for more than 7 hours. 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.

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.

LABORATORY FEES

<table>
<thead>
<tr>
<th>Course</th>
<th>Each Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art 175, 176 (Figure Drawing)</td>
<td>$1.50</td>
</tr>
<tr>
<td>Biology 41, 42 (Geology)</td>
<td>$2.50</td>
</tr>
<tr>
<td>Biology 51, 52 (Botany) 113, 114 (Field Botany)</td>
<td>$4.00</td>
</tr>
<tr>
<td>Biology 61, 62 (Zoology)</td>
<td>$5.00</td>
</tr>
<tr>
<td>Biology 91, 125, 135, 235, 236 (Physiology)</td>
<td>$4.00</td>
</tr>
<tr>
<td>Biology 144 (Entomology) 217 (Plant Anatomy and Histology)</td>
<td>$4.00</td>
</tr>
<tr>
<td>*Biology 107-108 (Bacteriology)</td>
<td>$7.50</td>
</tr>
<tr>
<td>*Biology 107E-108E (Bacteriology)</td>
<td>$3.75</td>
</tr>
<tr>
<td>Biology 146, 148 (Genetics)</td>
<td>$1.00</td>
</tr>
<tr>
<td>Biology 155 (Vertebrate Anatomy)</td>
<td>$12.00</td>
</tr>
<tr>
<td>Biology 215, 216 (Plant Physiology) 154 (Histological Technique)</td>
<td>$6.00</td>
</tr>
<tr>
<td>Biology 256 (Embryology)</td>
<td>$7.50</td>
</tr>
<tr>
<td>Biology 267-268 (Biological Problems) 367, 368 (Research) per credit hour</td>
<td>$2.00</td>
</tr>
<tr>
<td>*Chemistry 23, 24, 45, 55, 56, 105, 106, 107, 108, 309</td>
<td>$10.00</td>
</tr>
<tr>
<td>*Chemistry 23, 24, 45, 55, 131, 132</td>
<td>$5.00</td>
</tr>
<tr>
<td>*Chemistry 213, 214, 321, 322, 307, 308</td>
<td>$8.00</td>
</tr>
<tr>
<td>*Chemistry 327, 328, 330</td>
<td>$15.00</td>
</tr>
<tr>
<td>*Chemistry 365, 366, per credit hour</td>
<td>$5.00</td>
</tr>
<tr>
<td>Education 41 (Handicrafts in El. School)</td>
<td>$2.00</td>
</tr>
</tbody>
</table>

* Requires a breakage deposit of $5.00, the unused portion of which will be returned to the Student.
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.
†This deposit is returnable only upon completion of the course.
No refund will be made on the following fees:

1. Change of Course.
2. Excess Load.
3. Swimming Fee.
4. Late Registration.
5. Special Examination.
6. 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:

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

**Six-week Term**

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Fee or Percentage of Term Charge</th>
</tr>
</thead>
<tbody>
<tr>
<td>After registration or 1st week</td>
<td>$2.00</td>
</tr>
<tr>
<td>During 2nd week</td>
<td>40% of term charge</td>
</tr>
<tr>
<td>During 3rd week</td>
<td>60% of term charge</td>
</tr>
<tr>
<td>After 3rd week</td>
<td>Full amount of term charge</td>
</tr>
</tbody>
</table>

**Eleven-week Term**

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Fee or Percentage of Term Charge</th>
</tr>
</thead>
<tbody>
<tr>
<td>After registration or 1st week</td>
<td>$5.00</td>
</tr>
<tr>
<td>During 2nd week</td>
<td>20% of term charge</td>
</tr>
<tr>
<td>During 3rd week</td>
<td>40% of term charge</td>
</tr>
<tr>
<td>During 4th week</td>
<td>60% of term charge</td>
</tr>
<tr>
<td>During 5th week</td>
<td>80% of term charge</td>
</tr>
<tr>
<td>After 5th week</td>
<td>Full amount of term charge</td>
</tr>
</tbody>
</table>
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.

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

For admission to the engineering course at least 1 1/2 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.

ADULT STUDENTS

Applicants over twenty-one years of age may be permitted to enroll for not over seven credit hours in any one semester in evening classes and may be permitted to take up to a total of fourteen credits. Such students will be designated as Adult Students. If adult students desire to take any additional work for credit, they must qualify for regular student status by meeting entrance requirements to the satisfaction of the Committee on Admissions. The initiative for change of status rests with the adult student.

SPECIAL STUDENTS

Special students are applicants who do not meet the requirements for admission, but may by special act of the Committee on Admissions, be permitted to take a limited amount of work for which they are qualified by experience. Special students will not receive credit and will be designated as auditors. It is understood that they will not displace any regular students.
AUDITORS
Auditors are students who are required to do all the work prescribed for students enrolled for credit except the taking of credit examinations. The fee is the same as for regular credit enrolment. Designation as an Auditor must be made at the time of registration.

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 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. The applicant is expected to present himself in person to register between September 2 and September 13. Fees are due at time of registration.

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 15, 1947, 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 COLLEGE

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 year 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: English 65-66. Strongly Recommended: French, German, or Latin.

LATIN AND GREEK—Required: Latin 43-44.

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


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, Design 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 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, Social Science, and Applied Arts Division (except Commerce, Secretarial Science, Industrial Management, and Occupational Therapy), the requirement is the second year of a foreign language on the college level, ordinarily taken in the General 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.


THE NATURAL SCIENCE DIVISION


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

PHYSICS—Required: Physics 21-22, 43-44, Algebra 21, Trigonometry 22, Analytics 43, Calculus 45 and 46 or Chemistry 21-22. For alternative plan see departmental statement.

THE APPLIED ARTS DIVISION


INDUSTRIAL MANAGEMENT. For details concerning this curriculum see under Commerce 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 |  |
|---------------|----------------|-------------------|-----------------|
|               | 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 |
## 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, the 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, analyse, 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

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

Second Year

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Cr. Hrs.</th>
<th>Second Semester</th>
<th>Cr. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction to Humanities 7</td>
<td>3</td>
<td>Introduction to Humanities 8</td>
<td>3</td>
</tr>
<tr>
<td>Introduction to Natural Science 9</td>
<td>3</td>
<td>Introduction to Natural Science 10</td>
<td>3</td>
</tr>
<tr>
<td>Accounting 21 or 41</td>
<td>3</td>
<td>Accounting 22 or 42</td>
<td>3</td>
</tr>
<tr>
<td>Advanced Shorthand and Transcription 63</td>
<td>4</td>
<td>Advanced Shorthand and Transcription 64</td>
<td>4</td>
</tr>
<tr>
<td>Business Letters 93</td>
<td>2</td>
<td>Secretarial Training 74</td>
<td>2</td>
</tr>
</tbody>
</table>

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

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

Second Year

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Cr. Hrs.</th>
<th>Second Semester</th>
<th>Cr. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humanities 7</td>
<td>3</td>
<td>Humanities 8</td>
<td>3</td>
</tr>
<tr>
<td>Psychology 41</td>
<td>3</td>
<td>Educational Psychology 52</td>
<td>3</td>
</tr>
<tr>
<td>Anatomy and Physiology 31</td>
<td>5</td>
<td>Normal Diagnosis and Corrective Exercises 115</td>
<td>2</td>
</tr>
<tr>
<td>Physics 51</td>
<td>4</td>
<td>Physics 52</td>
<td>4</td>
</tr>
<tr>
<td>Electives</td>
<td>3 or 4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
EDUCATIONAL RECREATION

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.

<table>
<thead>
<tr>
<th>Course</th>
<th>Cr. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>English 1</td>
<td>3</td>
</tr>
<tr>
<td>Fundamentals of Speech 76</td>
<td>3</td>
</tr>
<tr>
<td>Hygiene 15, 16</td>
<td>4</td>
</tr>
<tr>
<td>Physical Education 3, 4, 45, 46</td>
<td>4-8</td>
</tr>
<tr>
<td>Handicrafts 4</td>
<td>2</td>
</tr>
<tr>
<td>Story Telling 83 and 84</td>
<td>6</td>
</tr>
<tr>
<td>Leadership 104</td>
<td>3</td>
</tr>
<tr>
<td>Psychology 41</td>
<td>3</td>
</tr>
<tr>
<td>Organization and Administration of Industrial Recreation 69</td>
<td>2</td>
</tr>
</tbody>
</table>

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:

<table>
<thead>
<tr>
<th>Course</th>
<th>Cr. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Games for Elementary Grades 132</td>
<td>1</td>
</tr>
<tr>
<td>Child Psychology 105</td>
<td>3</td>
</tr>
<tr>
<td>Psychology of Adolescence 106</td>
<td>2</td>
</tr>
<tr>
<td>Drawing and Rendering 45, 46</td>
<td>4</td>
</tr>
<tr>
<td>Clay Moulding 59</td>
<td>2</td>
</tr>
<tr>
<td>Weaving</td>
<td>4</td>
</tr>
</tbody>
</table>

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.
MILITARY SCIENCE AND TACTICS

RESERVE OFFICERS’ TRAINING CORPS

GROUND FORCE INSTRUCTORS

COLONEL EDMUND M. GREGORIE, Professor

MAJOR EDWARD L. NICELLY, Executive; Assistant Professor

MAJOR ROBERT L. CIRALDO, Plans and Training; Assistant Professor

MASTER SERGEANT LYLE FISHER, Supply; Assistant Military Instructor

MASTER SERGEANT RAYMOND HUGHES, Sg’t Major; Assistant Military Instructor

SERGEANT HERBERT GIMPLE, Maintenance; Assistant Instructor

TECHNICIAN FOURTH GRADE CHARLES HERMANN, Automotive; Assistant Instructor

AIR FORCE INSTRUCTORS

LT. COLONEL GEORGE G. NORMAN, Professor

CAPTAIN DAVID L. GADE, Assistant Professor

1ST LT. ROBERT R. FOWLER, Assistant Professor

MASTER SERGEANT MORRIS E. TAYLOR, Assistant Military Instructor

MASTER SERGEANT GILBERT G. CANTER, Assistant Military Instructor

TECHNICAL SERGEANT ROBERT D. TROUTMAN, Assistant Military 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 elementary 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 elementary course and the first two years of scholastic work, or have served a minimum of one year active service in the Army, Navy, Coast Guard or Marines, and who have been selected by the President of the University and the Professor of Military Science and Tactics.

In 1946 the United States Army Air Forces established at the University of Akron a unit of the Air Forces Reserve Officers’ Training Corps. This unit is of the same type as was established at some 75 other leading universities and colleges throughout the country with the purpose of producing college trained officers primarily for the Air Reserve, and for the Regular Air Force, and for Air Units of the National Guard. The instruction for the elementary courses in all R. O. T. C. departments is on subjects which are common to all arms and services; therefore the students in the Air R. O. T. C. department are only distinguished from other sections by indicating during their initial enrolment that they intend to enter the Air Force Section when they become eligible for the Advanced Course.

Requirements for eligibility to enter the Advanced Course Air R. O. T. C. are the same as for the other Advanced Course Section.
THE ELEMENTARY COURSE

The elementary 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 elementary course no compensation is paid the student by the government, but uniforms and equipment are issued for his use. Each student is held responsible for loss or damage to government property issued to him. 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.

ELEMENTARY CURRICULUM

<table>
<thead>
<tr>
<th>FIRST YEAR</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>World Military Situation</td>
<td>8</td>
</tr>
<tr>
<td>Military Organization</td>
<td>8</td>
</tr>
<tr>
<td>Hygiene and First Aid</td>
<td>9</td>
</tr>
<tr>
<td>Leadership, Drill, and Exercise of Command</td>
<td>37</td>
</tr>
<tr>
<td>Individual Weapons and Marksmanship</td>
<td>20</td>
</tr>
<tr>
<td>Maps and Aerial Photographs</td>
<td>10</td>
</tr>
<tr>
<td>National Defense Act and ROTC</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SECOND YEAR</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>World Military Situation</td>
<td>2</td>
</tr>
<tr>
<td>Leadership, Drill, and Exercise of Command</td>
<td>37</td>
</tr>
<tr>
<td>Physical Development Methods</td>
<td>5</td>
</tr>
<tr>
<td>Maps and Aerial Photographs</td>
<td>8</td>
</tr>
<tr>
<td>Military Administration</td>
<td>10</td>
</tr>
<tr>
<td>Evolution of Warfare</td>
<td>20</td>
</tr>
<tr>
<td>Military Law and Boards</td>
<td>11</td>
</tr>
</tbody>
</table>

THE 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. The applicant must not yet
have reached 27 years of age at the time of initial enrolment. 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 and four years of education at a college or university level, the student will receive an appointment as second lieutenant, Officers' Reserve Corps.

The Advanced course, once entered upon, must be completed as a prerequisite for graduation.

THE 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.

INFANTRY CURRICULUM

<table>
<thead>
<tr>
<th>FIRST YEAR</th>
<th>Hours</th>
<th>SECOND YEAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Military Leadership, Psychology and Personnel Management</td>
<td>10</td>
<td>Command and Staff</td>
</tr>
<tr>
<td>Leadership, Drill, and Exercise of Command</td>
<td>16</td>
<td>Military Teaching Methods</td>
</tr>
<tr>
<td>Military Problems of the United States</td>
<td>10</td>
<td>Psychological Warfare</td>
</tr>
<tr>
<td>Occupied Territories</td>
<td>10</td>
<td>Geographical Foundation of National Power</td>
</tr>
<tr>
<td>Military Law and Boards</td>
<td>16</td>
<td>Leadership, Drill and Exercise of Command</td>
</tr>
<tr>
<td>Tactics and Techniques</td>
<td>96</td>
<td>Combined and Joint Operations</td>
</tr>
</tbody>
</table>

AIR CORPS CURRICULUM

<table>
<thead>
<tr>
<th>FIRST YEAR</th>
<th>Hours</th>
<th>SECOND YEAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Military Leadership, Psychology and Personnel Management</td>
<td>10</td>
<td>Schedule to be announced at a later date by the war department</td>
</tr>
<tr>
<td>Leadership, Drill, and Exercise of Command</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>Military Problems of the United States</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Occupied Territories</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Military Law and Boards</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Tactics and Techniques of the Army Air Force</td>
<td>96</td>
<td></td>
</tr>
</tbody>
</table>
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:

<table>
<thead>
<tr>
<th>Humanities</th>
<th>Natural Sciences</th>
<th>Social Sciences</th>
<th>Applied Arts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Latin and Greek</td>
<td>Biology</td>
<td>Economics</td>
<td>Art</td>
</tr>
<tr>
<td>English</td>
<td>Chemistry</td>
<td>History</td>
<td>Commerce</td>
</tr>
<tr>
<td>Modern Languages</td>
<td>Mathematics</td>
<td>Political Science</td>
<td>Home Economics</td>
</tr>
<tr>
<td>Music</td>
<td>Physics</td>
<td>Sociology</td>
<td>Secretarial Science</td>
</tr>
<tr>
<td>Philosophy</td>
<td>Speech</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## 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, 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.

f. Mathematics 57, Social Statistics.

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. Doutt, 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 Gen-
   eral 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 teach-
ing 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 be-
fore entering upon practice teaching.

For additional information concerning requirements see College of
Education.

Professional requirements and their sequence:

<table>
<thead>
<tr>
<th>Second Year General College</th>
<th>First Year Upper College</th>
<th>Second Year Upper College</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Psychology</td>
<td>Methods</td>
<td>Principles of Education</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Introduction to Education</td>
<td>Tests and Measurements</td>
<td>Student Teaching</td>
</tr>
<tr>
<td>3</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>(first or second semester)</td>
<td></td>
<td>School Management</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Principles of Education</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

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 Educa-
tion, 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. PACKAN,
MRS. ARCHER, MISS MOCH, MISS WOOFTER

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.

Required Courses in the Upper College:  

<table>
<thead>
<tr>
<th>Required Course</th>
<th>Cr. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>History of Art</td>
<td>9</td>
</tr>
<tr>
<td>Commercial Art</td>
<td>4</td>
</tr>
<tr>
<td>Graphic Arts</td>
<td>4</td>
</tr>
<tr>
<td>General Crafts</td>
<td>2</td>
</tr>
<tr>
<td>Costume or Interior Decoration</td>
<td>6</td>
</tr>
<tr>
<td>Figure Drawing</td>
<td>4</td>
</tr>
<tr>
<td>Still Life Painting</td>
<td>4</td>
</tr>
<tr>
<td>Electives in Art</td>
<td>8</td>
</tr>
</tbody>
</table>

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.

23-24. COSTUME—STYLES AND FASHION. 2 credits each semester.
It would be desirable for Design 21-22 to precede this course. A study of costume design and influences contributing to styles and fashions. Attention is given to the full range of costume and accessories, stressing the relation to the human figure, the occasion and the specific individual. No credit toward major.

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.

33-34. HOUSE PLANNING AND DECORATION. 2 credits each semester.
It would be desirable for Design 21-22 to precede this course. A study of various types of housing and interiors, together with a survey of furniture, textiles, etc., with emphasis on both historic and contemporary styles. The work will be carried on by means of lecture, discussion and demonstration, with some simple laboratory problems. Attention will be given to individual problems. No credit toward major.

43. INDUSTRIAL DESIGN. First semester. 2 credits.
Prerequisite, 22. Geometrical construction, lettering, orthographic, isometric and cabinet projection. Consideration of the requirements for Industrial Design, of materials and processes and the carrying out of the full procedure in design to meet these requirements.
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.

50-51. **DRAWING AND PAINTING. 2 credits each semester.**
It would be desirable for Drawing and Rendering 45-46 to precede this course. The aim is to develop an appreciation of color and composition through laboratory participation. Most of the problems will be in the nature of still life, every effort being made to offer the student as wide a range of painting experiences as possible. The first semester will be oil and the second, water color. No credit toward major.

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 carving 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.

75. **HISTORY OF ART, CLASSICAL AND MEDIEVAL. 2 credits.**
A consideration of the architecture, painting, sculpture, and the minor arts, from Prehistoric times to the close of the Middle Ages. No credit toward major.

76. **HISTORY OF ART, RENAISSANCE. 2 credits.**
It would be desirable for History of Art 75 to precede this course. A survey of the arts of Western Europe from 1500. Emphasis will be upon architecture, painting and sculpture. No credit toward major.

77. **HISTORY OF ART, MODERN. 2 credits.**
It would be desirable for History of Art 76 to precede this course. A consideration of the arts of France and the United States, with considerable emphasis upon contemporary art. No credit toward major.

**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.**
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.**
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. 1946-47 and alternate years.

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. 1947-48 and alternate years.

171-172. **Interior Decoration. 3 credits each semester.**
Prerequisite, 45. 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. 1947-48 and alternate years.

179. **Illustration. First semester. 2 credits.**

180. **Illustration. Second semester. 2 credits.**

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. Second semester. 3 credits.**
Prerequisite, 200. A survey of the arts in Italy, Spain, Flanders, Holland, Germany, and England with historical background.

202. **History of Art, Modern. First semester. 3 credits.**
Prerequisite, 201. A survey of the arts of France and America. Study of conditions leading to modern movements and reactions of the present day.

203-204. **History of Art Seminar. 3 credits each semester.**
Prerequisite, 202. A restricted field of study to be selected by the individual or group.

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

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Cr. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>3</td>
</tr>
<tr>
<td>Int. to Social Science 5</td>
<td>3</td>
</tr>
<tr>
<td>Hygiene 15</td>
<td>2</td>
</tr>
<tr>
<td>Psychology 41</td>
<td>2</td>
</tr>
<tr>
<td>Drawing &amp; Rendering 45</td>
<td>2</td>
</tr>
<tr>
<td>Design 21</td>
<td>3</td>
</tr>
<tr>
<td>Physical Education 3</td>
<td>3</td>
</tr>
<tr>
<td>Literature</td>
<td>3</td>
</tr>
<tr>
<td>Int. to Humanities 7</td>
<td>3</td>
</tr>
<tr>
<td>General Zoology 61</td>
<td>3</td>
</tr>
<tr>
<td>Anatomy &amp; Physiology 31</td>
<td>2</td>
</tr>
<tr>
<td>O. T. General Crafts 70</td>
<td>2</td>
</tr>
<tr>
<td>Design 45</td>
<td>3</td>
</tr>
<tr>
<td>Kinesiology 124</td>
<td>2</td>
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<tr>
<td>Social Attitudes 42</td>
<td>2</td>
</tr>
<tr>
<td>Public Speaking 41</td>
<td>2</td>
</tr>
<tr>
<td>Weaving 106</td>
<td>2</td>
</tr>
<tr>
<td>Modeling 59</td>
<td>2</td>
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<tr>
<td>Clinical Lectures</td>
<td>2</td>
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<tr>
<td>Theory &amp; Application O. T.</td>
<td>2</td>
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<tr>
<td>Art Appreciation 29</td>
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<tr>
<td>Electives</td>
<td>11</td>
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<tr>
<td>Graphic Art 104</td>
<td>3</td>
</tr>
<tr>
<td>Hospital Training</td>
<td>3 months</td>
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Second Year

<table>
<thead>
<tr>
<th>Second Semester</th>
<th>Cr. Hrs.</th>
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</thead>
<tbody>
<tr>
<td>English</td>
<td>3</td>
</tr>
<tr>
<td>Int. to Social Science 6</td>
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</tr>
<tr>
<td>Hygiene 16</td>
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<tr>
<td>Design 25</td>
<td>2</td>
</tr>
<tr>
<td>Drawing &amp; Rendering 46</td>
<td>2</td>
</tr>
<tr>
<td>Physical Education 4</td>
<td>1</td>
</tr>
<tr>
<td>Literature</td>
<td>3</td>
</tr>
<tr>
<td>Int. to Humanities 7</td>
<td>3</td>
</tr>
<tr>
<td>General Zoology 62</td>
<td>3</td>
</tr>
<tr>
<td>Sociology 41</td>
<td>3</td>
</tr>
<tr>
<td>O. T. General Crafts 102</td>
<td>3</td>
</tr>
<tr>
<td>Textiles 21</td>
<td>3</td>
</tr>
<tr>
<td>Abnormal Psychology 120</td>
<td>3</td>
</tr>
<tr>
<td>Play Production 141</td>
<td>3</td>
</tr>
<tr>
<td>Weaving 107</td>
<td>2</td>
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<tr>
<td>Modeling 50</td>
<td>2</td>
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<tr>
<td>Theory &amp; Application O. T.</td>
<td>2</td>
</tr>
<tr>
<td>Clinical Lectures</td>
<td>2</td>
</tr>
<tr>
<td>Electives</td>
<td>2</td>
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<tr>
<td>Art Appreciation 10</td>
<td>2</td>
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<tr>
<td>Electives</td>
<td>11</td>
</tr>
<tr>
<td>Graphic Art 105</td>
<td>2</td>
</tr>
<tr>
<td>Hospital Training</td>
<td>3 months</td>
</tr>
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Junior Year

<table>
<thead>
<tr>
<th>Junior Year</th>
<th>Cr. Hrs.</th>
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</thead>
<tbody>
<tr>
<td>Electives</td>
<td>11</td>
</tr>
<tr>
<td>Electives</td>
<td>11</td>
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Senior Year

<table>
<thead>
<tr>
<th>Senior Year</th>
<th>Cr. Hrs.</th>
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</thead>
<tbody>
<tr>
<td>Electives</td>
<td>11</td>
</tr>
<tr>
<td>Electives</td>
<td>11</td>
</tr>
</tbody>
</table>

BIOLOGY

PROFESSOR KRAATZ, ASSOCIATE PROFESSORS ACQUARONE AND GLICK,
ASSISTANT PROFESSOR ROBINSON, MR. VANICA, MISS YAKAITIS,
MISS HORNING, MR. VAN SICKLE

Biology major students must secure 36 credits in the department; a few graduate schools require a larger number of credits.

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.

*At least 6 hours to be chosen from art.*
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 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

### First Year

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

### Second Year

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

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Cr. Hrs.</th>
<th>Second Semester</th>
<th>Cr. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vertebrate Anatomy 155</td>
<td>4</td>
<td>Embryology 256</td>
<td>4</td>
</tr>
<tr>
<td>Organic Chemistry (Int.) 107</td>
<td>4</td>
<td>Physics 52</td>
<td>4</td>
</tr>
<tr>
<td>Physics 51</td>
<td>4</td>
<td>German 44</td>
<td>3</td>
</tr>
<tr>
<td>German 43</td>
<td>3</td>
<td>Psychology 41</td>
<td>3</td>
</tr>
</tbody>
</table>

### Fourth Year

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Cr. Hrs.</th>
<th>Second Semester</th>
<th>Cr. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Physiology 235</td>
<td>3</td>
<td>General Physiology 236</td>
<td>3</td>
</tr>
<tr>
<td>Physics (Optics) 53</td>
<td>4</td>
<td>Human Genetics 148</td>
<td>2</td>
</tr>
<tr>
<td>Quantitative Analysis 105</td>
<td>4</td>
<td>Quantitative Analysis 106</td>
<td>4</td>
</tr>
<tr>
<td>Electives, Humanities or Social Science Division</td>
<td>3-6</td>
<td>Electives, Humanities or Social Science Division</td>
<td>3-6</td>
</tr>
</tbody>
</table>

Women students must take six more hours elective in Humanities or Social Science divisions in place of the six credits of R. O. T. C.

Biological courses listed in third and fourth years may have to be reversed in the schedule because Biology 155, 256, 235, and 148 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, chiefly gross anatomy of all organ systems, and the functions or processes of the organ systems. Three lectures and two 2-hour laboratory periods a week. Required in the nurses' training curriculum. Credit for this course granted only to students in the courses in Nursing or Occupational Therapy.

33. Microbiology. 3 credits.
A survey of the bacteria and other microorganisms 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 functions. Required of biology, pre-dental, and pre-medical majors. Two lectures and three 2-hour laboratory periods a week. A survey of all the animal phyla. In the laboratory representative animals of the phyla are studied. An explanation of animal evolution and genetics. Lab. fee, $5 a semester.

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.

91. Introductory Human Physiology. Either semester. 4 credits.
A briefer study of modern human physiology than course 135-136. Adapted especially to the needs of students in Home Economics. Not open to biology and pre-medical majors. No prerequisites in biology. Two lectures and two 2-hour laboratory and demonstration periods a week. Lab. fee, $4.
UPPER COLLEGE

107-108. BACTERIOLOGY. 4 credits each semester.
Bacteria, their characteristics, growth and relations to man. Pathogenic bacteria are included. Required in pre-technicians' course. Two lecture hours and three 2-hour laboratory periods a week. Prerequisite, 61-62, or 51-52 or equivalent, and some knowledge of chemistry. Lab. fee, $7.50 each semester; breakage fee, $5 each semester.

107c-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 Evenening Session. Lab. 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. 1947-48 and alternate years. Lab. fee, $6 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. Prerequisite, 51-52 and some knowledge of chemistry. 1946-47 and alternate years. Lab. fee, $4 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. 1947-48 and alternate years. Lab. fee, $4.

135-136. HUMAN PHYSIOLOGY. 3 credits each semester.
The physiology or functioning of the human body. The processes going on in all organ systems, including considerable emphasis on metabolism and blood. For biology majors. Not open to pre-medical majors. Two lectures and one 3-hour laboratory period a week. Prerequisite, General Zoology 61-62 or equivalent and some beginning chemistry. 1946-47 and alternate years. Lab. fee, $4 each semester.

235-236. GENERAL PHYSIOLOGY. 3 credits each semester.
A study of all physiological principles. Fundamental life processes as exhibited in all organisms, especially in the complicated organ systems of the higher vertebrates. Required of pre-medical students. Prerequisites, Inorganic and Organic Chemistry. Two lectures and one 3-hour laboratory period a week. 1947-48 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. 1947-48 and alternate years. Prerequisite, 61-62. Lab. fee, $4.

144. GENERAL ENTOMOLOGY. Second semester. 4 credits.
Insects, their nature, structure, life history, and economic importance. Most of the time is devoted to a study of insect orders, with reference to representative families and types. An insect collection is made. Two lectures and two 3-hour laboratory periods a week. 1948-49 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. 1946-47 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. 1947-48 and
alternate years.

151. ORGANIC EVOLUTION. First semester. 3 credits.
History of the evolution concept. A study of all the fields of evidence for
evolution. Trends of animal evolution through the ages. Theories of methods of
evolution. Three lectures a week. Prerequisite, 61-62. 1948-49 and alternate years.

154. HISTOLOGICAL TECHNIQUE. Second semester. 3 credits.
A course in the methods of preparation of tissues and other specimen materi­
als for microscopical study. No lectures. Nine hours of laboratory work a week.
Required in pre-technicians' course. Suitable for biology majors. Prerequisite, 61-62.
Lab. fee, $5.

155. VERTEBRATE ANATOMY. First semester. 4 credits.
The vertebrate animals, and the related protochordates. A comparative
study of all organ systems from fishes to mammals included. Laboratory work on
shark, Necturus, and cat. Required of pre-medical majors. Prerequisite, 61-62.
Given each year through 1947-48 and then in alternate years. Two lectures and two
3-hour laboratory periods a week. Lab. fee, $12.

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. Given each year through 1947-48 and then in 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 excep­
tional 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 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 ANDERSON,
FLOUTZ, AND WOLFE. MR. GRANDE, MR. LOWDERMILK,
MR. ALBERT, MR. ALLIGER, MR. SWARTZEL,
MR. HIMEBAUGH AND MR. FOX

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 equiva­
 lent: Algebra and Trigonometry, 6 hours; Analytics and Calculus, 9 hours; Chem­
istry 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. 2 credits recitation,
2 credits laboratory each semester.
A study of the basic facts and principles of chemistry, the occurrence, prepa­
ration, 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. 2 credits recitation, 1 credit laboratory 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. 3 credits recitation, 1 credit laboratory.

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. 3 credits recitation, 2 credits laboratory.

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. 2 credits recitation, 2 credits laboratory.

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

45. Elementary Quantitative Analysis. First semester. 1 credit recitation, 2 credits laboratory.

Prerequisite, 22. A course intended primarily for students preparing to become laboratory or hospital technicians. Elementary theory and calculations in quantitative analysis will be studied, and fundamental operations in volumetric, gravimetric, and colorimetric analysis will be performed in the laboratory. One class period and two 3-hour laboratory periods per week. 1946-47 and alternate years. Lab. fee, $5.

55. Organic Chemistry. Second semester. 2 credits recitation, 2 credits laboratory.

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

56. Physiological Chemistry. Second semester. 2 credits recitation, 2 credits laboratory.

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. 1947-48 and alternate years. Lab. fee, $10.

UPPER COLLEGE

<table>
<thead>
<tr>
<th>Third Year</th>
<th>Cr. Hrs.</th>
<th>Fourth Year</th>
<th>Cr. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introductory Physics</td>
<td>51-52</td>
<td>Advanced Physics 53 and elective</td>
<td>8</td>
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<tr>
<td>Intermediate Organic</td>
<td>107</td>
<td>Physical Chemistry 213-214</td>
<td>10</td>
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<tr>
<td>Advanced Organic</td>
<td>108</td>
<td>Special Tools 109</td>
<td>3</td>
</tr>
<tr>
<td>Quantitative Analysis</td>
<td>106-2</td>
<td>German 43-44</td>
<td>6</td>
</tr>
<tr>
<td>Chemical Calculations</td>
<td>113</td>
<td></td>
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</tr>
<tr>
<td>German 23-22</td>
<td>8</td>
<td></td>
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</tr>
</tbody>
</table>

105-6. Quantitative Analysis. 2 credits recitation, 2 credits laboratory each semester.

Prerequisite, 43. 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 techniques are applied to the analysis of common ores, minerals and alloys. Lab. fee, $10 each semester.
107. **Intermediate Organic Chemistry.** First semester. 2 credits
recitation, 2 credits laboratory.
Prerequisite, 94. An intensive study of aliphatic and alicyclic compounds.
Lab. fee, $10.

108. **Advanced Organic Chemistry.** Second semester. 2 credits
recitation, 2 credits laboratory.
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 recitation.
Prerequisites, 43, 44, 105. A course designed primarily for department
majors for the purpose of correlating the mathematics of undergraduate chemistry and
giving further practice in the solving of typical problems.

2 credits recitation, 1 credit laboratory each semester.
A study of the basic facts and principles of Chemistry, the occurrence, prepara-
tion and properties of the elements and compounds. Emphasis is placed on
engineering applications. Laboratory exercises are used to illustrate the principles
studied. Lab. fee, $5 each semester.

133-134. **Metallurgy.** See College of Engineering.


213-214. **Physical Chemistry.** 3 credits recitation,
2 credits laboratory each semester.
Prerequisites, 106, 107, Physics 52, Mathematics 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. A somewhat briefer treatment of the topics listed under course 327-328. No
laboratory work. Credit not given for this course and for 327-328.

229. **Polymers and Polymerization.** 2 credits recitation.
Prerequisites, 106, 108, and permission. The principles of addition and of
condensation polymerization and of copolymerization in bulk, solution and emulsion;
influence of chemical constitution and of molecular weight on the properties of high
polymers; the study of specific polymers of importance.

250. **Industrial Chemistry.** Second semester. 2 credits recitation.
Prerequisites, 106-107. A lecture course designed to cover unit operations
for industrial processes in chemical industries and the type of equipment and instru-
ments used, together with their construction and operation.

307-308. **Organic Analysis, Qualitative or Quantitative.**
2 credits laboratory each semester.
Prerequisites, 106, 108. A course of laboratory instruction intended to
familiarize the student with the methods of separation of the component of organic
mixtures, the characterization and identification of the individual components. Quantitative analytical methods for carbon, hydrogen, nitrogen, sulfur, and the halogens are employed in the determination of the composition of pure substances. Lab.
fee, $8 each semester.
309. SPECIAL TOPICS IN ORGANIC CHEMISTRY. First semester.
   2 credits recitation, 1 credit laboratory.
   A study of special topics in advanced organic chemistry, such as terpenes, dyestuffs, medicinals, alkaloids, heterocyclic compounds, carbohydrates, etc. Lab. fee, $10.

313-314. CHEMICAL THERMODYNAMICS. 2 credits recitation 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 molar quantities, ideal and non-ideal solutions, electromotive force, problems, sources of data.

321-322. ADVANCED INORGANIC PREPARATIONS. 2 credits laboratory
   each semester.
   Prerequisites, 106, 214. A study of methods and techniques for preparing and purifying compounds not always available in laboratory stocks of chemicals. Such operations as crystallization, distillation, sublimation, precipitation, and liquefaction will be performed. Exercises will be chosen to illustrate the preparation of different types of compounds as well as colloidal dispersions. Lab. fee, $8 each semester.

325. COLLOID CHEMISTRY. First semester. 2 credits recitation.

326. CHEMISTRY OF LATEX TECHNOLOGY. 2 credits recitation.

327-328. CHEMISTRY OF RUBBER TECHNOLOGY. 2 credits recitation,
   2 credits laboratory each semester.
   Prerequisites include those given under 227-228 with additional material and laboratory requirements. Credit is not given for this course and for 227-228. Lab. fee, $15 each semester.

329. CHEMISTRY OF PLASTICS. 2 credits recitation.
   Prerequisite 107. The production, chemistry and applications of phenolic, urea and other thermosetting resins; cellulose derivatives, vinyl resins, polyamides, and other thermoplastic resins. Permission required to take this course.

330. CHEMISTRY OF PLASTICS LABORATORY. 1 credit laboratory.
   Preparation of typical synthetic resins and plastics in illustration of the subject matter of course 329. Open only to students enrolled for 329. Lab. fee, $15.

331. PHYSICS OF HIGH POLYMERS. 2 credits recitation.
   Physical and physio-chemical properties of high polymers: condensation and addition polymerization, molecular weight, crystalline polymers, elastic and flow behavior, transition phenomena, kinetic theory of high elasticity, permeability to gases and vapors, dielectric properties, birefringence, infrared absorption, light-scattering of solutions, fabrication and testing.

365-366. RESEARCH. 1 to 3 credits each semester.
   Open to properly qualified students. Supervised original research in the fields of inorganic, physical and organic chemistry, and in the chemistry and technology of rubber and plastics. Lab. fee, $5 per credit.

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

PROFESSOR LEIGH, ASSISTANT PROFESSORS GIVENS AND SIMONETTI, MR. GORDON, MR. MORGAN, MR. GRUBER, MR. RIDDLE, MR. WALLACH, MRS. HELMKAMP, MR. POWERS, MR. REED, MR. RODERICK, MR. CARR, MR. DAVERO, MR. BERRY, MR. BAILEY, MR. LANTZ, MR. SMART, MR. HICKMAN, MR. SMITH, MR. VOBBE, MR. GILLIAND, MR. POWERS, MR. REED, MR. RODERICK, MR. CARR, MR. DAVERIO, MR. BERRY, MR. BAILEY, MR. LANTZ, MR. SMART, MR. HICKMAN, MR. SMITH, MR. VOBBE.

The Department of Commerce offers professional training to men and women who plan to enter or advance themselves in the fields of business and industrial management. The curriculums aim to develop and apply those principles and techniques of economics and administration, which are common to business and industrial organizations.

The University of Akron, situated in an active trade and industrial center, is particularly qualified to offer training in the areas specified. Lectures, problems, inspection trips integrate theory and practice and keep the student in touch with the actual developments in the various phases of Commerce.

Through its evening courses, institutes, and special lectures, the Department also is especially adapted to give specialized and upgrading training to men and women in Akron industry and business.

BUSINESS ADMINISTRATION

This program is adapted to students desiring to prepare for careers in the fields of business management, accounting, marketing and merchandising, advertising, sales, finance or transportation. The various programs of study offered are presented on the following pages.

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

### BASIC CURRICULUM IN BUSINESS ADMINISTRATION

#### First Year

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Cr. Hrs.</th>
<th>Second Semester</th>
<th>Cr. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>English 1</td>
<td>3</td>
<td>English 2</td>
<td>3</td>
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<tr>
<td>Hygiene 15</td>
<td>3</td>
<td>Hygiene 16</td>
<td>3</td>
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<tr>
<td>Int. to Soc. Science 5</td>
<td>3</td>
<td>Int. to Soc. Science 6</td>
<td>3</td>
</tr>
<tr>
<td>Int. to Nat. Science 9</td>
<td>3</td>
<td>Int. to Nat. Science 10</td>
<td>3</td>
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<tr>
<td>R. O. T. C. 12</td>
<td>1½</td>
<td>Accounting 22</td>
<td>1½</td>
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<tr>
<td>Accounting 21</td>
<td>3</td>
<td>Accounting 22</td>
<td>1½</td>
</tr>
<tr>
<td>Physical Education 3</td>
<td>1</td>
<td>Physical Education 4</td>
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#### Second Year

<table>
<thead>
<tr>
<th>Cr. Hrs.</th>
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<tbody>
<tr>
<td>Selling 1 or Typewriting 31</td>
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<tr>
<td>Economics 41</td>
<td>3</td>
</tr>
<tr>
<td>Int. to Humanities 7</td>
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<tr>
<td>Bus. Org. &amp; Mgt. 61</td>
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<tr>
<td>R. O. T. C. 44</td>
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<tr>
<td>Anal. Accounting 23</td>
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#### Third Year

<table>
<thead>
<tr>
<th>Cr. Hrs.</th>
<th>16½</th>
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<tbody>
<tr>
<td>Business Law 142</td>
<td>3</td>
</tr>
<tr>
<td>Marketing 183</td>
<td>8</td>
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<tr>
<td>Business Finance 371</td>
<td>3</td>
</tr>
<tr>
<td>Elective 140</td>
<td>3</td>
</tr>
<tr>
<td>Statistics 140</td>
<td>3</td>
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#### Fourth Year

<table>
<thead>
<tr>
<th>Cr. Hrs.</th>
<th>16</th>
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<tbody>
<tr>
<td>Major</td>
<td>3-6</td>
</tr>
<tr>
<td>Seminar</td>
<td>3-6</td>
</tr>
<tr>
<td>Elective</td>
<td>9-12</td>
</tr>
</tbody>
</table>

The courses specified above are common to all curriculums in the Business Administration field. During his Junior year, the student will elect a "major" or field in which he desires to specialize. He must complete a minimum of 14 hours of work in his "major," including Seminar.
Four fields of specialization are available: Accounting; Finance; Marketing, Merchandising and Advertising; and General Business.

The courses applicable and required toward each major are listed below.

### ACCOUNTING

<table>
<thead>
<tr>
<th>Courses</th>
<th>Cr. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting 44</td>
<td>3</td>
</tr>
<tr>
<td>Cost Accounting 27</td>
<td>3</td>
</tr>
<tr>
<td>Advanced Cost Accounting 228</td>
<td>3</td>
</tr>
<tr>
<td>Auditing 229</td>
<td>3</td>
</tr>
<tr>
<td>Specialized Accounting Problems 246</td>
<td>3</td>
</tr>
<tr>
<td>Advanced Accounting 231-232</td>
<td>6</td>
</tr>
<tr>
<td>Federal Taxation 233-234</td>
<td>6</td>
</tr>
<tr>
<td>Accounting Systems 230</td>
<td>3</td>
</tr>
<tr>
<td>Budgeting and Control 122</td>
<td>2</td>
</tr>
</tbody>
</table>

### FINANCE

<table>
<thead>
<tr>
<th>Courses</th>
<th>Cr. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Money and Banking 48</td>
<td>3</td>
</tr>
<tr>
<td>Economics 209</td>
<td>3</td>
</tr>
<tr>
<td>Insurance and Security 158</td>
<td>3</td>
</tr>
<tr>
<td>Banking Practice and Management 176</td>
<td>3</td>
</tr>
<tr>
<td>Investments 172</td>
<td>3</td>
</tr>
<tr>
<td>Monetary and Banking Policy (Econ.) 204</td>
<td>3</td>
</tr>
<tr>
<td>Security Markets 277</td>
<td>3</td>
</tr>
<tr>
<td>Problems in Finance 279</td>
<td>3</td>
</tr>
</tbody>
</table>

### MARKETING, MERCHANDISING AND ADVERTISING

<table>
<thead>
<tr>
<th>Courses</th>
<th>Cr. Hrs.</th>
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<tbody>
<tr>
<td>Sales Promotion 207</td>
<td>2</td>
</tr>
<tr>
<td>Retail Advertising 187</td>
<td>2</td>
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<tr>
<td>Sales Administration 291</td>
<td>3</td>
</tr>
<tr>
<td>Market Analysis 294</td>
<td>3</td>
</tr>
<tr>
<td>Problems in Marketing 293</td>
<td>3</td>
</tr>
<tr>
<td>*Retailing 197</td>
<td>2</td>
</tr>
<tr>
<td>Merchandising 194</td>
<td>2</td>
</tr>
<tr>
<td>Commercial Art 131-132</td>
<td>4</td>
</tr>
<tr>
<td>International Economic Relations 268</td>
<td>3</td>
</tr>
</tbody>
</table>

### GENERAL BUSINESS

<table>
<thead>
<tr>
<th>Courses</th>
<th>Cr. Hrs.</th>
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<tbody>
<tr>
<td>Production Management 61</td>
<td>3</td>
</tr>
<tr>
<td>Cost Accounting 27</td>
<td>3</td>
</tr>
<tr>
<td>Transportation 131 or Traffic Management 132</td>
<td>3</td>
</tr>
<tr>
<td>Personnel Management and Relations 165-4</td>
<td>4</td>
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<tr>
<td>Purchasing 189</td>
<td>2</td>
</tr>
<tr>
<td>Problems in Finance 279</td>
<td>3</td>
</tr>
<tr>
<td>*Sales Administration 291 or Retailing 192</td>
<td>3</td>
</tr>
<tr>
<td>Economic Cycles 261</td>
<td>2</td>
</tr>
<tr>
<td>Advanced Statistics 246</td>
<td>3</td>
</tr>
</tbody>
</table>

### 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.

42. SECRETARIAL ACCOUNTING. 3 credits.

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

23. ACCOUNTING. 3 credits.

Prerequisite, Accounting 22. This course is designed for students who want a working knowledge of accounting but do not intend to become accountants. The accounting principles and materials learned in courses 21 and 22 are applied primarily for analytical and executive purposes. A great deal of emphasis is placed upon the purposes of accounting, types of accounting analyses and accounting ratios.

25. ENGINEERING ACCOUNTING. 3 credits.

27. COST ACCOUNTING. First semester. 3 credits.

Prerequisite 22. General methods of collecting costs of materials, labor, and burden of incorporating them into the books of account.

28. 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 165.

43. CORPORATION ACCOUNTING. 3 credits for accounting majors.

44. INTERMEDIATE ACCOUNTING. 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. 3 credits.

Designed especially for students in secretarial science. No credit given in Commerce.

*Required courses in the particular major.
†Requirements vary depending whether student most interested in Marketing, Retailing or Advertising.
54. Economic Geography. 3 credits.
Climate, land forms, soils, mineral resources, and vegetation and their influence upon economic activity. Required of all Commerce students.

61. Business Organization and Management. 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.

62. Production Management. 3 credits.
Prerequisite, 61.

81. Selling. 2 credits.
Examines the characteristics of effective salesmen, the nature of the sales

82. Consumer Economics. 3 credits.

UPPER COLLEGE

123. Budgeting. 3 credits.
Prerequisite, 43.

228. Advanced Cost Accounting. 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. 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. 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.
Prerequisite, 44. First semester, partnership and receivership accounting; second semester, consolidation accounting.

233-234. Federal Taxation. 3 credits each.
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. 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.
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. 2 credits.

146. Real Estate Law. 2 credits.

148. Statistics. 4 credits.
Prerequisite, 6 credits in Economics.

248. Advanced Statistics. 3 credits.
Prerequisite, 148.

151. Transportation. 3 credits.
Prerequisite, Economics 41 and 183.

152. Traffic Management. 2 credits.
Prerequisite, 151.
153-154. INTERNATIONAL COMMERCE. 2 credits each.
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. 3 credits.
Prerequisite, Economics 41 and 48.

158. INSURANCE AND SECURITY. 3 credits.
Prerequisite, Economics 41 and 48.

163. PERSONNEL MANAGEMENT. 2 credits.
Prerequisite, 61. Job analysis, selection and maintenance of a labor supply, placement and promotion.

164. PERSONNEL RELATIONS. 2 credits.
Prerequisite, 63. Labor-Management Relations, public interest in labor problems, bases of a working industrial relationship.

268. BUSINESS POLICY. 3 credits.
Required of all commerce seniors.

171. BUSINESS FINANCE. 3 credits.
Prerequisite, Economics 41 and 48.

172. INVESTMENTS. 3 credits.
Prerequisite, 171.

174. CREDITS AND COLLECTIONS. 2 credits.

176. BANKING PRACTICE AND MANAGEMENT. 3 credits.
Prerequisite, Economics 48. Given only when demand warrants.

277. SECURITY MARKETS. 3 credits.
Prerequisite, 171.

279. PROBLEMS IN FINANCE. 3 credits.
Prerequisite, 171.

183. MARKETING. 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. 3 credits.

186. ADVANCED ADVERTISING. 3 credits.
Prerequisite, 185.

187. RETAIL ADVERTISING. Evening session. 2 credits.
Prerequisite, Advertising 185, or experience. This course concerns itself with retail advertising problems, the advertising budget, planning and creating newspaper, direct mail, promotional advertising, etc., for small and large stores.

189. PURCHASING AND PROCUREMENT. 2 credits.
Given only when demand warrants.

192. RETAILING. 3 credits.
Prerequisite, junior standing or consent of instructor.

194. MERCHANDISING. Evening session. 2 credits.
Prerequisite, Marketing 183, or experience. This basic course covers the subjects of merchandise buying, inventory and merchandise control, pricing, store layout, merchandise display, etc.

287. SALES PROMOTION. 2 credits.
Prerequisite, Advertising 185. Sales promotion programs will be formulated and executed, and the student will be expected to create and set up folders, booklets, catalogs, merchandise displays, etc.
291. Sales Administration. 3 credits.
Prerequisite, 183.

293. Problems in Marketing. 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. 3 credits.
Prerequisite, 293, or equivalent.

297-298. Seminar. 1 credit each.
Required of all senior commerce majors.

INDUSTRIAL MANAGEMENT

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.

<table>
<thead>
<tr>
<th>First Year</th>
<th>Second Year</th>
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<tbody>
<tr>
<td>Cr. Hrs.</td>
<td>Cr. Hrs.</td>
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101. Industrial Plants. First semester. 3 credits.
Prerequisite, 62. Principles, practices, and economics in plant location, building, layout, physical conditions and materials handling.

103. Production Planning and Control. Second semester, 3 credits.
Prerequisites, 62. 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, 62. Principles and practices in inspecting, testing, correcting and controlling quality of product or service.
107. INDUSTRIAL SAFETY. 2 credits.
Prerequisite, 62. Principles and practices in industrial safety as effected by engineering, education, equipment and enforcement.

109. MAINTENANCE OF PLANT AND EQUIPMENT. 3 credits.
Prerequisite, 62. 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, 62. 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 62. 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.)

ECONOMICS
PROFESSOR O'HARA, ASSISTANT PROFESSORS GRUNBERG AND OLIVO,
MR. McLAIN, MISS RAW

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. Either 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.
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.*


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.
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 elect twenty-six hours within the department (exclusive of courses in Journalism). Six of these hours must be English 65-66, which should be taken in the sophomore year. English and American 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 or more plays, with explanatory lectures and discussions. Recommended to students who take only 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.

47-48. AMERICAN LITERATURE. 3 credits each semester.
American literature from its colonial beginnings to the present. First semester: Captain John Smith to Melville; second semester: Whitman to the present.

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 specific 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.

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. Discussions, and extensive use of exercise material to supplement the textbook.

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.
An intensive study of the growth of American newspapers, to make recent developments more understandable. About one-third of the semester devoted to the last 10-year period.

56. FEATURE WRITING. Second semester. 2 credits.
Special feature articles, suitable for Sunday newspapers or for magazines, are discussed and prepared for publication. Extensive writing is required.

57. EDITORIAL WRITING. First semester. 2 credits.
1947-48 and alternate years. Editorials are considered as a special type of essay. Considerable writing is required.

UPPER COLLEGE

112. MODERN EUROPEAN LITERATURE. 3 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 in England as in their native countries.

113-114. THE ENGLISH BIBLE AS LITERATURE. 3 credits each semester.

143. ADVANCED WRITING WORKSHOP—FACTUAL. First semester. 2 credits.
Prerequisite, 43, 44, or permission. The writings 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.

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.
202. SIXTEENTH CENTURY LITERATURE. Second semester. 3 credits.
A study of the non-dramatic literature of the Tudor period.

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. ANGLO-SAXON. 3 credits.
Anglo-Saxon language and literature; linguistic studies of Old English as a predecessor of Modern English; readings in Beowulf and in Anglo-Saxon prose.

207. MIDDLE ENGLISH. 3 credits.
A study of the language and literature of the eleventh to the fifteenth centuries, exclusive of Chaucer.

209. SHAKESPEARE. 3 credits.
Concentrated study of three or four plays, with lectures and discussions.

212. MILTON. Second semester. 2 credits.
Emphasis upon Paradise Lost and Samson Agonistes.

213. 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. 1947-48 and alternate years.

214. EIGHTEENTH CENTURY LITERATURE. Second semester. 3 credits.
A survey of the literature of the century with emphasis upon the work of Pope and Johnson. 1947-48 and alternate years.

215-216. 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.

218. ENGLISH LITERATURE, 1890 TO THE PRESENT. 3 credits.
A consideration of recent English prose, poetry, and drama.

219-220. MAJOR AMERICAN WRITERS. 3 credits each semester.
An intensified study of a selected group of authors. First semester: Poe, Hawthorne, Melville; second semester: Whitman, Emerson, Mark Twain.

221-222. 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.

231-232. SEMINAR. Either or both semesters, with a total of 2 credits.
Special studies, with instruction in the methods of literary research.

262. 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.

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, MR. LECKEY, MR. NEWCOMER

General Final Examination: In order to be recommended for a degree, a major in history will be required to pass a general final examination covering Historiography, American History, Modern Europe, and two other fields approved by the department.

GENERAL COLLEGE

41. THE UNITED STATES TO 1865. 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. 3 credits.
The age of the beginning of West-European history. Some consideration is given to the inheritance from Judeo-Christian and Classical civilizations.

UPPER COLLEGE

118. THE RENAISSANCE. 3 credits.
The cultural and institutional history of Europe in the fourteenth and the fifteenth centuries. The birth of the lay spirit. The rise of plural sovereignties.

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. 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.

171. THE BYZANTINE EMPIRE AND THE MOHAMMEDAN WORLD. 3 credits.
The Byzantine Empire from Justinian: its rise and fall. The origin and spread of Islamic civilization; the economic and political factors explaining the growth and persistence of Mohammedanism.

222. THE AMERICAN REVOLUTION AND THE CONSTITUTION. First semester.
3 credits.
1948-49 and alternate years. This course covers in considerable detail the formative period in American history, 1763-1790.
223. **THE CIVIL WAR.** *First semester. 3 credits.*
1947-48 and alternate years. A study of the slavery controversy, the Civil War and Reconstruction.

224. **THE UNITED STATES AS A WORLD POWER.** *Second semester. 3 credits.*
Beginning with the Spanish-American War, the development of the nation will be followed to the present, with primary emphasis on its rise to a dominant position in the world of nations.

241. **THE REVOLUTIONARY PERIOD IN EUROPE.** *First semester. 3 credits.*
1948-49 and alternate years. Background, causes, and results of the French Revolution and subsequent wars for European independence; the development of nationalism, 1789-1848; the congress of Vienna, and the legacy of Bonaparte.

242. **HISTORIOGRAPHY AND HISTORICAL METHODOLOGY.** *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. **NATIONALISM AND DEMOCRACY IN EUROPE.** *First semester. 3 credits.*
1947-48 and alternate years. The ascendency of Prussia after 1848; the unification of Germany and Italy; Bismarck's domestic policy; the growth of German militarism and Pan-Germanism.

246. **THE AGE OF CONFLICT.** *Second semester. 3 credits.*
The causes, grand strategy, and results of two world wars; experiments in revolution, recovery, and international organization.

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 DAIVISON, MRS. BROWN, MISS AMER, MRS. KIMBLE, MRS. SNOW, MISS HUNSICKER, MISS STEGNER, MISS GREER**

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 economics subjects required in the Upper College for the respective majors:

FOODS AND NUTRITION

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<td>Nutrition in Health 119</td>
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<td>Nutrition in Disease 120</td>
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<td>Child Development 65</td>
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<td>Institutional Management 212</td>
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<td>Home Economics Education 151</td>
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TEXTILES AND CLOTHING

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<td>Home Management 62</td>
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<td>Advanced Textiles 107</td>
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<td>Selection of House Furnishings 58</td>
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<td>Child Development 65</td>
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<td>Historic Costume 117</td>
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GENERAL COURSE

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<td>Advanced Foods 115</td>
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<td>Child Development 65</td>
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<td>Selection of House Furnishings 58</td>
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<td>Household Equipment 215</td>
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<td>Advanced Clothing 105</td>
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GENERAL COLLEGE

21. TEXTILES. First semester. 3 credits.
   A study of natural and synthetic fibers, their color, design, the various finishes and wearing quality with reference to selection, use and care. Includes a study of the regulations governing the standardization and labeling of textiles and clothing. Class limited to twenty. Fee, $1.

22. BEGINNING CLOTHING CONSTRUCTION. First semester. 3 credits.
   For students with no previous experience in clothing construction. Fundamental problems in machine and hand sewing. Includes the study of commercial patterns. A dress of cotton, linen, or rayon and one other garment will be made. One hour lecture and four hours laboratory. Class limited to twenty. Fee, $1.

23. CLOTHING CONSTRUCTION AND SELECTION. Second semester. 3 credits.
   Prerequisite, 22 or its equivalent. Construction of garments requiring the more difficult techniques. A study of line, design, color and type of fabrics suitable to various types of individuals and occasions. Includes wardrobe planning, care and repair of clothing. One hour lecture and four hours laboratory. Class limited to twenty. Fee, $1.

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. 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. Fee, $6.
43. **FOODS AND NUTRITION. For student nurses. 3 credits.**

A practical course designed to give a knowledge of the basic principles of nutrition and cookery; hygiene of food, selection and care, study of dietary requirements on various age levels, analysis of student's own diet, study of racial differences in dietary habits. Individual practice in food preparation, with special emphasis on cookery for the invalid and on tray service. Two hours lecture, two hours laboratory. Fee, $6.

45. **GENERAL FOODS. 3 credits.**

Composition, selection and preparation of food, with a study of the scientific principles, especially chemical and nutritive. Involves analysis of recipes and study of standard products. Problems of home food preservation; food buying and labor, and time saving methods in preparation. One hour lecture, four hours laboratory.

46. **GENERAL FOODS. Second semester. 3 credits.**

Prerequisite, 45. Problems in time, labor, money and equipment in relation to planning, marketing, care of food, preparation, and service of meals for the family group, considering dietary standards and foods habits; appropriate forms of service for various types of meals; table etiquette; unit on deep freeze included. An opportunity for individual experience in various types of meal service and simple entertaining is afforded. One hour lecture, four hours laboratory. 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 fundamental principles which contribute to a satisfactory selection and arrangement of home furnishings. Problems in the selection of floor coverings, wall and window treatments, lighting, furniture, household textiles, china, glassware, silver and accessories for the home will be considered in relation to styles of decoration, color, design and cost. Class limited to twenty.

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. Two hours lecture, two hours laboratory. Fee, $1.

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

Care and feeding of infants and preschool children. A study of the physical, social, mental and emotional development of the child from infancy through adolescence. Child psychology is desirable as a prerequisite. Two hours lecture, two hours laboratory. Fee, $2.

**UPPER COLLEGE**

105. **ADVANCED CLOTHING. First semester. 3 credits.**

Prerequisite, 23. This course provides an opportunity to develop some of the professional skill that goes into the making of a custom-made garment, through the construction of a wool suit, coat or ensemble with lining. The remodeling of one wool garment may be included as an extra problem. One hour lecture, four hours laboratory. Class limited to twelve. Fee, $1.

106. **ADVANCED CLOTHING. Second semester. 3 credits.**

Prerequisite, 105. Advanced problems in clothing design and construction. Creating new designs by use of basic patterns or draping on a dress form. Using paper and muslin for experimental work. The application of one new design in the construction of a spring dress required. One hour lecture, four hours laboratory. Class limited to twelve. Fee, $1.

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. One hour lecture, four hours laboratory. Fee, $7.50 each semester.

117. **Historic Costume. First semester.** *3 credits.*

Prerequisite, Art 21. A study of costume from ancient times to the present day with emphasis on the influence on our present day styles, and the use of this information as a source of inspiration for creative designers today.

119. **Nutrition in Health. First semester.** *3 credits.*

Prerequisite, 45-46 and Chemistry 55. Chemical composition, metabolism and physiological functions of the food stuffs. Energy, protein, mineral, water metabolism, vitamins, and dietaries are covered. Nutritive requirements for individuals in different stages of development, and on various economic levels, social backgrounds and occupations, and results of dietary deficiencies are studied. Two hours lecture, two hours laboratory. Fee, $2.

120. **Nutrition in Disease. Second semester.** *3 credits.*

Prerequisite, 119. A study of the application of principles of normal nutrition to diet in disease. Practice is given in construction of diets for specific disease conditions. 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 in home economics. One hour conference, six hours practice.

151. **Home Economics Education. First semester.** *3 credits.*

Organization of home economics in the secondary schools. Two hours observation, two hours lecture. Not accepted toward a degree from the College of Liberal Arts.

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 electrical household equipment. Two hours lecture, two hours laboratory. 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. Six hours laboratory and conference. Fee, $5.

**Latin and Greek**

Mr. Duke

Some knowledge of classical life and thought is indispensable for any comprehension of Western culture as an entirety; any of the courses in this curriculum may be pursued with profit by students of the liberal arts and social sciences inasmuch as the comparative aspects of human culture and activity are heavily stressed. The student who elects to concentrate in the field will gain considerable knowledge of the ancient literature, arts and technologies and of their commanding influence in later times.

Required courses for majors: Latin 43-44, Comparative Literature 61-62, and Archaeology 113-114.

Major: Twenty-four hours.

**General College**

21-22. **Elementary Latin.** *4 credits each semester.*

No prerequisite. Grammar and reading.
43-44. **SECOND YEAR LATIN. 3 credits each semester.**
Prerequisite, 21-22, or two years of high school Latin. Inscriptions, Letters of Pliny, Selections from Vergil, or other material suited to needs or interests of students.

*Note:* In allowing credit to students who have had high school Latin, the practice of the Modern Languages Department will be followed.

21-22. **ELEMENTARY GREEK. 4 credits each semester.**
No prerequisite. Grammar and reading.

*Note:* Second Year Greek, given on demand, may be taken as Individual Reading or Research 131-132.

61-62. **COMPARATIVE LITERATURE. 3 credits each semester.**
No prerequisite, and either course may be taken without the other. First semester: study of the major Greek writers in translation, together with a consideration of their influence on later European literature. Second semester: study of the major Roman writers. No knowledge of Latin or Greek required.

99. **CLASSICAL MYTHOLOGY. Second semester. 3 credits.**
No prerequisite. The legends and folklore of Greece and Rome; their rebirth in later literature and art. No knowledge of Latin or Greek required.

**UPPER COLLEGE**

*Note:* Some of the following courses will be given each year, according to demand. Courses 103-111 require Latin 43-44 or equivalent as prerequisites.

103. **ROMAN SATIRISTS. 3 credits.**
Selections from Horace, Persius, Juvenal and Martial; lectures on the history of satire, both ancient and modern.

104. **ROMAN DRAMATISTS. 3 credits.**
Selected plays of Plautus, Terence and Seneca; lectures on the history of comedy and tragedy, with especial attention to stage antiquities.

105. **ROMAN HISTORIANS. 3 credits.**
Selections from Sallust, Livy and Tacitus; lectures on historiography and the philosophy of history.

106. **ROMAN PHILOSOPHICAL AND RELIGIOUS WRITERS. 3 credits.**
Selections from Lucretius, Cicero, Seneca and Boethius; lectures on the pagan syncretism and mystery religions.

107. **MEDIEVAL LATIN WRITERS. 3 credits.**
Selections from St. Augustine or the other Fathers; the Goliards or other secular literature. Special attention to Church Latin. Letters of famous Humanists may be included.

108. **ROMAN LYRIC AND ELEGIC POETS. 3 credits.**
Selections from Catullus, Horace, Ovid, Propertius and Tibullus.

111. **ROMAN NOVELISTS. 3 credits.**
Selections from Petronius and Apuleius; lectures on the Milesian tale and Alexandrian romance.

113. **GREEK ARCHAEOLOGY. 3 credits.**
No prerequisite. The daily life of the Greeks; their achievements in the arts and sciences. Archaeological aims and methods. No knowledge of Latin or Greek required.

114. **ROMAN ARCHAEOLOGY. 3 credits.**
No prerequisite. The daily life of the Romans; their achievements in the arts and sciences. Archaeological aims and methods. No knowledge of Latin or Greek required.

131-132. **INDIVIDUAL READING OR RESEARCH. 1-3 credits each semester.**
Prerequisites depend upon subject, which may be either in the languages or in archaeology.
MATHEMATICS

PROFESSORS SELBY AND AYER, ASSOCIATE PROFESSOR LIPSCOMBE,
ASSISTANT PROFESSORS TABLER, MAUCH, AND RODABAUGH, MR.
ROSS, MR. DAVIS, MRS. HAWKINS, MR. LAWRENCE, MR.
FREEDER, MISS ORLINOFF, MR. GRIFFITH, MR. MONT-
GOMERY, MR. McANLIS, MR. ROGOFF

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

17. ALGEBRA. 1 credit (given in evening session only).
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. 3 credits.
A review of algebra through quadratics, and a study of progressions, variation,
binomial theorem, theory of equations, permutations, combinations, determinants,
and inequalities.

22. TRIGONOMETRY. 3 credits.
It is recommended that this course be taken following or simultaneously
with 21. It begins with the definitions of the trigonometric functions and follows
through such topics as the solution of right triangles, trigonometric identities (with
special stress on those pertaining to the half angle, double angle, and sum and
difference of angles), logarithms, and their application to the solution of right and
oblique triangles.

23. SPHERICAL TRIGONOMETRY. 2 credits.
Prerequisite, 22. Study of right and oblique spherical triangles, and
numerous applications to aviation and astronomy.

31. MATHEMATICS OF NAVIGATION AND AVIATION. 2 credits.
Prerequisite, 22. Solution of problems in navigation and aviation which re-
quire the use of mathematics; study of maps, charts, tables, and use of computers.

43. ANALYTIC GEOMETRY. 3 credits.
Prerequisite, 21, 22. This course shows how geometrical properties of curves
and surfaces may be studied by the aid of algebra and various kinds of coordinate
systems.

45. DIFFERENTIAL CALCULUS. 3 credits.
Prerequisite, 43, or concurrently with 43. Theory of limits; development
and use of differentiation formulas; use of derivative and differential in problems of
maxima and minima, time rates, curvature, motion, approximate error; expansion of
functions in Maclaurin's series and Taylor's series; differentiation of functions of
two or more variables.

46. INTEGRAL CALCULUS. 3 credits.
Prerequisite, 45. Formal integration; definite integral and its use in finding
areas, volumes, moments of inertia, centroids; methods of approximating an indefinite
integral; use of multiple integral.
57. **Social Statistics. 3 credits.**
   This course combines a review of basic mathematics with the fundamentals of statistics, including averages, measures of dispersion, the normal curve, index numbers, simple correlation and time series. Specially planned for students in the Social Science Division. Credit will not be given both for this course and for Statistics 148.

58. **Business Mathematics. 3 credits.**
   Prerequisite, 21. Simple interest, simple discount, compound interest and compound discount, annuities, amortization and sinking funds, building and loan association, valuation of bonds, stocks, depreciation, straight line method, constant percentage method, sinking fund method, and unit cost method.

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**UPPER COLLEGE**

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

104. **History of Mathematics. 3 credits.**
   Prerequisites, 21-22. The origin and development of the elementary mathematical ideas and processes.

121. **Mathematics of Insurance. 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, 17 or 21-22. A study of the most important of the celestial phenomena and the instruments by which this study is accomplished.

201. **Advanced Calculus. 3 credits.**
   Prerequisite, 46. A more rigorous treatment of the material covered in 45 and 46 and material on infinite series; infinite, multiple, line and surface integrals; maxima and minima of functions of several variables; partial differentiation, etc.; with applications to geometry and mechanics.

204. **Differential Equations. 3 credits.**
   Prerequisite, 46. A study of the methods of forming and solving some important types of ordinary and partial differential equations, and their numerous applications in the fields of science.

205. **Theory of Equations. 3 credits.**
   This course includes the study of complex numbers, solution of cubic and quartic equations, numerical approximation to the roots, theorems of Sturm, Budan, and Descartes, determinants and matrices, simultaneous linear equations, symmetric functions, resultants, discriminants, and elimination.

206. **Higher Geometry. 3 credits.**
   Prerequisite, 45. A continuation of 43; analytic geometry of space; topics in non-Euclidean, projective and metric geometry.

207. **Higher Algebra. 3 credits.**
   Prerequisite, 45. Special topics in algebra are stressed, such as mathematical induction, partial fractions, complex number system, binomial theorem, multinominal theorem, summation of series, limits, infinitesimals, convergence and divergence of series, power series, inequalities, continued fractions and their application to indeterminate equations, theory of numbers, method of least squares.

213-214. **Advanced Engineering Mathematics. 1 credit each semester.**
   This course is designed specifically for Engineering students. It follows course 45, and stresses application of previous mathematical training to practical problems in engineering. This course is given on a one-hour basis per semester, and requires the student to prepare reports on problems assigned.
MODERN LANGUAGES

PROFESSOR BULGER, ASSISTANT PROFESSORS INTERNOSCIA, GLENNEN, AND MEYER, MR. HERRBACH, MISS MARTY, MRS. MONDL, MRS. ARNSTEIN, MRS. METZ, MR. KRAFT, MR. KURTH, MRS. GRUNBERG, MR. PAPPANO

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:

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<thead>
<tr>
<th>High School Credits</th>
<th>Course Entered in College</th>
<th>Credit Given</th>
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<tbody>
<tr>
<td>1 unit</td>
<td>First year</td>
<td>Full credit</td>
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<td>*Second year</td>
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<td>2 units</td>
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<td>First year</td>
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<td>†Third year</td>
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<td>3 units</td>
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<td>First year</td>
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<tr>
<td>4 units</td>
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<td>Second year</td>
<td>No credit</td>
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GENERAL COLLEGE

21-22. FIRST YEAR FRENCH. 4 credits each semester.
Reading, speaking, writing and understanding French, with intensive drill in pronunciation. Short stories and simple plays are read. Outside reading begun in second semester.

43-44. SECOND YEAR FRENCH. 3 credits each semester.
Prerequisite, 21-22. Grammar review. Practice in reading, writing, speaking, and understanding French. Short stories, plays, and novels on intermediate level. Outside readings.

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 second semester fluency in conversation is stressed.

UPPER COLLEGE

101-102. THIRD YEAR FRENCH: THE FRENCH NOVEL. 2 credits each semester.
Prerequisite, 44. A study of the French novel during the 19th century. Resumes in French.

103-104. FRENCH COMPOSITION. 1 credit each semester.
Prerequisite, 44. Advanced composition based on French models. Work study and drill on current idioms.

*Superior students may enter the second year course.
†Superior students may enter the third year course.
105. **French Phonetics.** *First semester. 1 credit.*
Prerequisite, 44. Intensive drill in pronunciation with correction and improvement of student's accent. Emphasis on articulation and intonation by use of phonograph records and individual recordings made by student.

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.**
A study of the development and tendencies of the French drama during the 19th century and contemporary period.

211-212. **Survey of French Literature.**
A survey of French literature from the Middle Ages through the contemporary period. Reading and discussion of the most important works of major writers.

213-214. **French Literature of the Eighteenth Century.**
A study of the literature of the 18th century with reading and discussion of the works of major writers.

215-216. **History of the French Novel to the Nineteenth Century.**
A study of the development and tendencies of the French novel during the 17th and 18th centuries.

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, MR. WITTERS,
MR. STEIN, MR. LICHTFRITZ, MISS WHITTAKER,
MR. FUNKHOUSER, MRS. GRIFFITHS, MISS
RESLER, MR. FERGUSON, MR. STONE

Departmental requirements for the B.A. degree with a major in music:

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<tr>
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<tr>
<td><strong>THEORETICAL MUSIC</strong></td>
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<tr>
<td>General College</td>
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<tr>
<td>Music Orientation</td>
<td>3</td>
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<tr>
<td>The Art of Music</td>
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<tr>
<td>Theory I, 41</td>
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<td>Theory II, 42</td>
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<tr>
<td>History of Music</td>
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<td>Theory III, 103</td>
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<td>Theory IV, 104</td>
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<tr>
<td>Composition 111</td>
<td>2</td>
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<tr>
<td>Conducting 112</td>
<td>2</td>
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<tr>
<td>Orchestration 114</td>
<td>2</td>
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<tr>
<td>Music Criticism 201</td>
<td>2</td>
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<td>Research 202</td>
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<tr>
<td><strong>MUSIC ORGANIZATIONS</strong></td>
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<tr>
<td>University Women's Chorus</td>
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<tr>
<td>University Symphony Orchestra</td>
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<tr>
<td>University Singers</td>
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Additiona 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: Enrollment 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: Enrollment for credit in all Applied Music courses (individual and class instruction) is contingent upon enrollment in Music Orientation. This requirement may be waived upon examination.

Students from other departments enrolled in Applied Music courses are advised to take the Music Orientation course.

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.

One semi-private voice lesson a week (1 credit each semester), $20. All beginning voice students will sign for this course and upon the recommendation of the instructor at the end of the semester will be admitted to private voice lessons. Semi-private voice lessons are of one hour duration with four students per class.

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.

ORGANIZATIONS

University Women's Chorus. 2 hours a week. 1 credit per semester.

Study and performance of modern and classical choral literature. This organization co-operates with the Men's Glee Club in the production of larger choral works for mixed chorus and orchestra.

University Men's Glee Club. 2 hours a week. 1 credit per semester.

Study and performance of music suitable to this group. Co-operates with Women's Chorus in the production of larger choral works for mixed chorus and orchestra.
UNIVERSITY SINGERS. 2 hours a week. 1 credit per semester.

A mixed chorus; membership in which is by appointment through audition to the Head of the Department of Music. Numerous public performances are made throughout the year at various civic organizations, churches, broadcasting stations, and social groups. Two one-year scholarships are awarded each spring to members.

UNIVERSITY SYMPHONY ORCHESTRA. 2 hours a week. 1 credit per semester.

An organization devoted to the advanced study of orchestral literature. This organization gives one spring concert and performs special programs such as Christmas, Easter, and commencement.

UNIVERSITY THEATRE ORCHESTRA. Special rehearsal. No credit.

A small, selected group of orchestra players who perform at all University theatre productions.

UNIVERSITY BAND. 1 credit per semester.

The University Football Band is organized in the first semester and plays for all games. Rehearsals are on Monday, Wednesday, and Friday, from 4 to 6 p.m. at Puchel Field. The University Concert Band functions only during the second semester and summer terms. Study and performance of advanced literature for the band. Membership in the concert band granted only by permission of the band director.

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. Prerequisite, a knowledge of the elements of music.

22. THE ART OF MUSIC. 2 credits.

An introduction to the literature of music using recordings as illustrative material.

41. THEORY I. 5 credits.

A detailed study of scales, intervals, triads and chord formations through ear, eye, and keyboard. Advanced melodic dictation.

42. THEORY II. 5 credits.

A continuation of Theory I. Harmonic dictation.

UPPER COLLEGE

101-102. HISTORY OF MUSIC. 2 credits each semester.

An historical résumé 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.

Creative work based on the simpler homophonic and polyphonic forms. Invention of melodies, their transformation and development with suitable accompaniment.

112. CONDUCTING. 2 credits.

114. **Orchestration. 2 credits.**
A study of the theory of instrumentation for various ensembles from the small ensemble to the full band and orchestra arrangements. Reduction of an orchestra score to 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 history of music; open only to advanced undergraduates. Prerequisite, 201.

**PHILOSOPHY**

**PROFESSOR NELSON**

Students selecting Philosophy as a field of concentration are required to take Philosophy 55, 56, 103, 104, and enough other work in Philosophy so 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 underlying problems of science, religion and morality from the broad point of view of philosophy. The analysis of these problems is pursued in terms of the traditional fields of philosophy; logic, metaphysics and ethics. The principal types of solutions that have been offered are investigated.

56. **Logic. Second semester. 3 credits.**
An introduction to traditional and modern logic and the methodology of science. The theories of deductive and inductive inference, definition, postulate systems and of elementary symbolic techniques are introduced and examined as used in the method of science.

**UPPER COLLEGE**

103-104. **History of Philosophy. 3 credits each semester.**
Prerequisite, 55 or consent of the department. The history of western thought including its connections with scientific, religious, social and political circumstances from ancient Greece to contemporary times. First semester: Pre-Socrates, Socrates, Plato, Aristotle, Stoics, Epicureans, Neo-Platonists, Church Fathers, Scholastics. Second semester: English Empiricists, Continental Rationalists, Kant, Neo-kantians, Hegel, Comte, Mill, Spencer and contemporary thinkers.

105. **Ethics. First semester. 3 credits.**
A study of the problems of moral conduct beginning with an historical survey of theories of value and moral obligation and ending with a systematic investigation of the contemporary ethical crisis and its relation to a democratic way of life.

107. **Philosophy of Religion. First semester. 3 credits.**
An analysis of the basic concepts underlying all religions. Some of the problems considered are: whether religion is primarily an emotional or intellectual experience; whether religion necessarily involves a belief in a spiritual being; what the relations are between religious and secular morality. 1947-48 and alternate years.

108. **Comparative Religion. Second semester. 3 credits.**
An examination of the origin of primitive religion and the development from such beginnings into the world's great faiths. The basic creeds and practices of Christianity, Mohammedianism, Brahmanism, Buddhism, etc. are compared and analyzed. 1947-48 and alternate years.

109. **Metaphysics. First semester. 3 credits.**
Prerequisites, 56 and 103-104. A systematic study of the problem of the ultimate nature of the universe. The study is pursued in relation to the assumptions of the physical, biological, and social sciences and of theology. The problems involved in finding one consistent set of beliefs adequate as a substructure for these sciences are investigated. 1946-47 and alternate years.
110. AESTHETICS. Second semester. 3 credits.
A study of the principles of aesthetic judgment. The course begins with a brief historical survey of theories of aesthetic value and proceeds to a systematic study of beauty with applications to music, art and literary criticism. 1946-47 and alternate years.

203. PLATO. First semester. 2 credits.
Prerequisite, 103. An intensive study of Plato's philosophy based on a thorough analysis and discussion of selected dialogues. Emphasis is placed on finding a sound interpretation of the dialogues without reference to later Neo-platonic developments or to the traditional interpretations, but on the basis of the writings themselves.

204. ARISTOTLE. Second semester. 2 credits.
Prerequisite, 56 and 103. An intensive study of selected portions of the Organon, Physics, On the Soul, and Metaphysics. A detailed study is made of the careful logical development of Aristotle's position with primary emphasis on his methodology.

PHYSICS

PROFESSOR HOUSEHOLDER, ASSOCIATE PROFESSOR FOUTS, MR. KECK, MR. BAILEY, MR. STRAW, MISS WEITZEL

The work in the Physics department is planned to give those students in the Arts College who wish to major in the subject a general knowledge of the fundamentals in Physics 51, 52, 53 with a series of more advanced courses to follow, such as 201, 202, 204, 205, 209-210. Courses 51, 52, 53 will supply the information needed for a minor for students in other fields, such as Chemistry, Mathematics and Education. These courses require no mathematics beyond the Freshman year. Courses 21, 22, 43, 44 are designed for Engineering students or others who are interested primarily in the applications of Physics. Majors may take these courses but it will increase the total hours required for a major.

The major requirements are a minimum of 28 credits in Physics, two years of Mathematics and at least one year of Chemistry, in addition to the general requirements of all students who plan to take the Bachelor's degree. For those students who do not plan to go beyond the Bachelor's degree but do plan to prepare for laboratory work in Industry may on consultation with the Dean and the Head of the Department substitute Engineering courses for the foreign language. All majors will be required to elect one course in Organic Chemistry if the schedule permits.

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 students 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.

The Laboratory work in these courses is very closely integrated with the class room work. No separate credit for the class work or the laboratory work is possible. The two parts must be taken simultaneously. Students who are repeating the course may be excused from the Laboratory work by permission of the Dean and Head of the Department.

61. **Laboratory Arts. 2 credits.**
This course is planned for majors in the Natural Science Division and is open to all persons planning to teach the sciences in high school and to those preparing for the position of laboratory assistant in industrial work. It is an elective course. Lab. fee, $4.

**UPPER COLLEGE**

203. **Electricity and Magnetism. 3 credits.**
A second course in electricity and magnetism with emphasis on electrostatics, magnetostatics, direct current machines, and the use of direct current electrical measuring instruments. 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 transmutations 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 techniques. 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 electric 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, ASSOCIATE PROFESSOR WEST, ASSISTANT PROFESSOR KING, MRS. ODELL, MISS LIITT

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 par-
   ticular emphasis on Ohio government.

43. COMPARATIVE GOVERNMENT. Second semester, 3 credits.
   Emphasis is placed on the government of England. Other governmental sys-
   tems 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 politi-
   cal 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-wide 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 rela-
   tionship 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.

301. READINGS IN WORLD AFFAIRS. 1 to 3 credits.

302. READINGS IN PUBLIC ADMINISTRATION. 1 to 3 credits.

303. READINGS IN POLITICS AND PUBLIC AFFAIRS. 1 to 3 credits.
Not more than 6 credits may be earned in reading courses.

401. RESEARCH AND THESIS IN POLITICAL SCIENCE. 1 to 3 credits.

PSYCHOLOGY

PROFESSOR TWNING

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. Psychology 41 is required in the General College. Social Statistics 57 is required either in the second or third year. Recommended courses in the General College are Psychology 42, 43, Social Science, Biology, Business Organization and Management 61, Philosophy, English and Speech.

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 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, MISS GIRVES, MRS. HANDWERK, MISS ANNA MAE FLINT, MISS STERLEY, MRS. FARKAS, MRS. BLICKLE, MISS CLARK, MRS. GANA, MRS. WEAVER, MISS FLORA FLINT

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. These 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:

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<tr>
<th>High School Credits</th>
<th>Course Entered in College</th>
<th>Credit Given</th>
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<tr>
<td></td>
<td>First semester</td>
<td>Half credit</td>
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<td>1 unit</td>
<td>Second semester (or review class)</td>
<td>Full credit</td>
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<tr>
<td>2 units</td>
<td>First semester</td>
<td>No credit</td>
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<td>Second semester (or review class)</td>
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<td>Second year</td>
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<td>1½ units</td>
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A program for students specializing in this field must include:

**First Year**

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<th>First Semester</th>
<th>Second semester</th>
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<tr>
<td>Cr. Hrs.</td>
<td>Cr. Hrs.</td>
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<tr>
<td>Secretarial Procedure 21</td>
<td>Films &amp; Mach. Calc. 26</td>
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**Second Year**

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<tr>
<th>First Semester</th>
<th>Second Semester</th>
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<tbody>
<tr>
<td>Cr. Hrs.</td>
<td>Cr. Hrs.</td>
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<tr>
<td>Typewriting 51</td>
<td>Typewriting 52</td>
</tr>
<tr>
<td>Accounting 41 or 21</td>
<td>Accounting 42 or 22</td>
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*Those planning to complete the four-year program in three years by attending summer sessions should begin Typewriting in the first year.*
## General College

### 21. Secretarial Procedure. Either semester. 3 credits.

The fundamental principles and procedures which relate to the secretarial position.

### 22. Secretarial Procedure. Either semester. 2 credits.

An adaptation of 21 for adults with office experience. Given in the evening only.


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, $4.

### 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, $4 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, $4.

### 57. Typewriting. Evening session. First semester. 1 credit.

A beginning course which lays the foundation for advanced work in typewriting through fundamental drills covering the keyboard and paragraph writing. Minimum speed requirements 20-25 words per minute at the end of the course. Fee, $4.

### 58. Typewriting. Evening session. Second semester. 1 credit.

Prerequisite, 57, or equivalent. Continuation of Typewriting 57, emphasizing letter and manuscript writing. Minimum speed requirements 35-40 words per minute at the end of the course. Fee, $4.
59. **Typewriting. Evening session. First semester. 1 credit.**
   Prerequisite, 58, or equivalent. Continuation of Typewriting 58, emphasizing tabulation, legal and business forms. Minimum requirement: 45-50 words per minute. Fee, $4.

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.

95-96. **Office Management and Practices. 2 credits each semester.**
   A study of office functions and of the principles involved in office management, adapted for adults with office experience. Credit not allowed for this course and also for 296.

**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 120 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 110-120 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. SEMINAR IN OFFICE 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, T.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.

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**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 1948-49 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 the theoretical basis of modern social thoughts, institutions, and organizations. A required course for majors.

208. **Social Origins. Second semester. 2 credits.**
   A study and analysis of the origin of social institutions, organizations, and systems of social thought. A required course for majors.

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**

**ASSOCIATE PROFESSOR** **VARIAN, MRS. FRANCK, MR. TURNER, MR. WILSON, MRS. WRIGHT, MR. JONES, MRS. HARDENSTEIN**

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 29-30, History of Music 102.

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 and Hearing 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.

47. Business and Professional Speaking. Either semester. 2 credits.
Prerequisite, 41. An advanced course for those who wish to develop skill in direct public address.

Prerequisite, 41.

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.

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.

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.
COLLEGE OF ENGINEERING
R. D. LANDON, C.E., M.S., Dean
FRED E. AYER, C.E., Dean Emeritus

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.”

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. The five-year co-operative program will be resumed for Freshman students registering in September, 1947.

Announcement of Co-operative courses will be published separately in the near future and may be obtained by request from the College of Engineering.

DEGREES

The degrees of Bachelor of Civil Engineering, Bachelor of Electrical Engineering, and Bachelor of Mechanical Engineering will be granted to those students who satisfactorily complete the required work of the respective courses of study. In Mechanical Engineering, students may elect either the Aeronautical or Industrial Option.

PROMOTION

Students are promoted to Upper College standing in the College of Engineering after satisfactory completion of the first semester of the second year.

ESTIMATED EXPENSE OF FIRST YEAR

<table>
<thead>
<tr>
<th></th>
<th>Resident</th>
<th>Non-Resident</th>
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<tr>
<td><strong>First Semester</strong></td>
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<tr>
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## SCHEDULE OF REQUIRED COURSES

### THE GENERAL COLLEGE

#### First Year

<table>
<thead>
<tr>
<th>Semester</th>
<th>Cr. Hrs.</th>
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<tbody>
<tr>
<td>Military Science &amp; Tactics 1</td>
<td>1 1/2</td>
</tr>
<tr>
<td>Hygiene 15</td>
<td>2</td>
</tr>
<tr>
<td>Physics 21 (Mechanics)</td>
<td>4</td>
</tr>
<tr>
<td>Math. 21 (Algebra)</td>
<td>3</td>
</tr>
<tr>
<td>English 1</td>
<td>3</td>
</tr>
<tr>
<td>Engineering Drawing 21</td>
<td>2</td>
</tr>
<tr>
<td>Survey of Engineering 24</td>
<td>1</td>
</tr>
<tr>
<td>Physical Ed. 3</td>
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#### Second Semester

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<tbody>
<tr>
<td>Military Science &amp; Tactics 12</td>
</tr>
<tr>
<td>Hygiene 16</td>
</tr>
<tr>
<td>Physics 22 (Mechanics)</td>
</tr>
<tr>
<td>Math. 22 (Trigonometry)</td>
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<tr>
<td>English 2</td>
</tr>
<tr>
<td>Engineering Drawing 22</td>
</tr>
<tr>
<td>Physical Ed. 4</td>
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### Summer Quarter

<table>
<thead>
<tr>
<th>Cr. Hrs.</th>
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</thead>
<tbody>
<tr>
<td>Military Science and Tactics 43</td>
</tr>
<tr>
<td>Physics 43 (Heat and Sound)</td>
</tr>
<tr>
<td>Math. 43 (Analytical Geometry)</td>
</tr>
<tr>
<td>Math. 45 (Differential Calculus)</td>
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<tr>
<td>Surveying 21-22</td>
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### CIVIL ENGINEERING

#### Schedule of Courses

#### Second Year

<table>
<thead>
<tr>
<th>Semester</th>
<th>Cr. Hrs.</th>
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<tbody>
<tr>
<td>Military Science &amp; Tactics 44</td>
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</tr>
<tr>
<td>Physics 44 (Electricity, and Magnetism)</td>
<td>4</td>
</tr>
<tr>
<td>Math. 46 (Integral Calculus)</td>
<td>3</td>
</tr>
<tr>
<td>Elements of Electrical Engineering EE 58</td>
<td>3</td>
</tr>
<tr>
<td>Engineering Chemistry 131</td>
<td>3</td>
</tr>
<tr>
<td>Applied Mechanics CE 109-110</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>17 1/2</strong></td>
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#### Second Semester

<table>
<thead>
<tr>
<th>Cr. Hrs.</th>
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<tbody>
<tr>
<td>Strength of Materials CE 46</td>
</tr>
<tr>
<td>Economics 41</td>
</tr>
<tr>
<td>Engineering Geology CE 44</td>
</tr>
<tr>
<td>Engineering Mathematics 213-214</td>
</tr>
<tr>
<td>Elements of Electrical Engineering EE 123</td>
</tr>
<tr>
<td>Engineering Chemistry 132</td>
</tr>
<tr>
<td>Descriptive Geometry ME 44</td>
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#### Summer Quarter

<table>
<thead>
<tr>
<th>Cr. Hrs.</th>
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</thead>
<tbody>
<tr>
<td>Heat Power Engineering ME 46</td>
</tr>
<tr>
<td>Hydraulics ME 184</td>
</tr>
<tr>
<td>Surveying CE 43-101</td>
</tr>
<tr>
<td>Strength of Materials CE 117-118</td>
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#### Third Year

<table>
<thead>
<tr>
<th>Semester</th>
<th>Cr. Hrs.</th>
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<tbody>
<tr>
<td>Structural Design CE 114</td>
<td>3</td>
</tr>
<tr>
<td>Route Surveying CE 106</td>
<td>3</td>
</tr>
<tr>
<td>Concrete Laboratory CE 112</td>
<td>3</td>
</tr>
<tr>
<td>Thermodynamics ME 189</td>
<td>3</td>
</tr>
<tr>
<td>English 61-62 (Report Writing)</td>
<td>2</td>
</tr>
<tr>
<td>Stress Analysis CE 122</td>
<td>3</td>
</tr>
<tr>
<td>Business &amp; Professional Speaking 47</td>
<td>2</td>
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<td><strong>Total</strong></td>
<td><strong>17</strong></td>
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#### Second Semester

<table>
<thead>
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<th>Cr. Hrs.</th>
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<tbody>
<tr>
<td>Structural Design CE 200</td>
</tr>
<tr>
<td>Highways CE 107</td>
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<tr>
<td>Statically Indeterminate Structures CE 205</td>
</tr>
<tr>
<td>Water Supply CE 210</td>
</tr>
<tr>
<td>Business Organization and Management 61</td>
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<tr>
<td>Electives</td>
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<td><strong>Total</strong></td>
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</table>
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.

### GENERAL COLLEGE

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tr>
<td>21-22. SURVEYING</td>
<td>2</td>
</tr>
<tr>
<td>Prerequisite, Math. 22</td>
<td></td>
</tr>
<tr>
<td>Lab. fee, $2 each</td>
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<tr>
<td>24. SURVEY OF ENGINEERING</td>
<td>1</td>
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<tr>
<td>44. ENGINEERING GEOLOGY</td>
<td>2</td>
</tr>
<tr>
<td>46. STRENGTH OF MATERIALS</td>
<td>3</td>
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<tr>
<td>Prerequisites, Math. 46, CE 109-110</td>
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### UPPER COLLEGE

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>43-101. ADVANCED SURVEYING</td>
<td>4</td>
</tr>
<tr>
<td>Prerequisite, Surveying 21-22</td>
<td></td>
</tr>
<tr>
<td>Lab. fee, $2 each</td>
<td></td>
</tr>
<tr>
<td>103. ROOFS AND BRIDGES</td>
<td>3</td>
</tr>
<tr>
<td>Prerequisite, CE 200</td>
<td></td>
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<tr>
<td>107. HIGHWAY DESIGN AND CONSTRUCTION</td>
<td>3</td>
</tr>
<tr>
<td>Prerequisite, CE 108</td>
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</tr>
<tr>
<td>108. ROUTE SURVEYING</td>
<td>3</td>
</tr>
<tr>
<td>Prerequisite, CE 21-22</td>
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<tr>
<td>Lab. fee, $2</td>
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<tr>
<td>109-110. APPLIED MECHANICS</td>
<td>3</td>
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<tr>
<td>Prerequisite, Math. 46, Physics 22</td>
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<tr>
<td>112. CONCRETE LABORATORY</td>
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<td>Prerequisite, CE 46</td>
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<td>Lab. fee, $2</td>
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<tr>
<td>114. STRUCTURAL DESIGN</td>
<td>3</td>
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<td>Prerequisite, CE 117-118</td>
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<tr>
<td>117-118. STRENGTH OF MATERIALS</td>
<td>3</td>
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<tr>
<td>Prerequisite, CE 46</td>
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</tr>
<tr>
<td>Lab. fee, $2</td>
<td></td>
</tr>
<tr>
<td>122. STRESS ANALYSIS</td>
<td>3</td>
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<tr>
<td>Prerequisite, CE 109-110, CE 46</td>
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<tr>
<td>200. STRUCTURAL DESIGN</td>
<td>3</td>
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<tr>
<td>Prerequisite, CE 117-118 and CE 114</td>
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<tr>
<td>201. STRUCTURAL DESIGN</td>
<td>3</td>
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<tr>
<td>Prerequisite, CE 122</td>
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<tr>
<td>205. STATICALLY INDETERMINATE STRUCTURES</td>
<td>3</td>
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<tr>
<td>Prerequisite, CE 122</td>
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<tr>
<td>210. WATER SUPPLY</td>
<td>2</td>
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<tr>
<td>Prerequisite, ME 184</td>
<td></td>
</tr>
<tr>
<td>211. SEWERAGE</td>
<td>2</td>
</tr>
<tr>
<td>Prerequisite, CE 210</td>
<td></td>
</tr>
<tr>
<td>215. SOIL MECHANICS</td>
<td>3</td>
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<tr>
<td>Prerequisite, CE 109-110</td>
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*149 during the accelerated program.
# ELECTRICAL ENGINEERING

**Professor Fairburn, Associate Professor Smith, Assistant Professor Sibila**

## SCHEDULE OF COURSES

### Second Year

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Second Semester</th>
<th>Cr. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Military Science &amp; Tactics 44</td>
<td>Descriptive Geometry ME 44</td>
<td>1½</td>
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<tr>
<td>Physics 44 (Electricity and Magnetism)</td>
<td>Strength of Materials CE 46</td>
<td>3</td>
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<tr>
<td>Math. 46 (Integral Calculus)</td>
<td>Engineering Math. 213-214</td>
<td>2</td>
</tr>
<tr>
<td>Elements of Electrical Engineering EE 50</td>
<td>Elements of Electrical Engineering EE 123</td>
<td>3</td>
</tr>
<tr>
<td>Applied Mechanics CE 399-110</td>
<td>Heat Power Engineering ME 46</td>
<td>3</td>
</tr>
<tr>
<td>Engineering Chemistry 131</td>
<td>Engineering Chemistry 132</td>
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**17½**

### Summer Quarter

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<tbody>
<tr>
<td>Elements of Electrical Engineering EE 124</td>
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<tr>
<td>Strength of Materials CE 117-118</td>
<td>3</td>
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<tr>
<td>Machine Drawing ME 23</td>
<td>2</td>
</tr>
<tr>
<td>Hydraulics ME 184</td>
<td>3</td>
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<tr>
<td>Shop Practice ME 49</td>
<td>2</td>
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**13**

### Third Year

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<th>First Semester</th>
<th>Second Semester</th>
<th>Cr. Hrs.</th>
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<tbody>
<tr>
<td>Basic Industrial Electronics</td>
<td>Engineering Electronics EE 150</td>
<td>3</td>
</tr>
<tr>
<td>EE 127</td>
<td>A. C. Machines EE 172</td>
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<tr>
<td>A. C. Machines EE 170</td>
<td>A. C. Machines Lab. EE 173</td>
<td>2</td>
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<tr>
<td>A. C. Circuits EE 150-131</td>
<td>Electrical Drafting, Blue Print</td>
<td>2</td>
</tr>
<tr>
<td>Thermodynamics ME 189</td>
<td>Reading EE 128</td>
<td>3</td>
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<tr>
<td>English 61-62 (Report Writing)</td>
<td>Economics 41</td>
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**19½**

### Summer Quarter

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<tr>
<td>Electrical Measurements EE 149</td>
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<tr>
<td>Illumination Engineering EE 180</td>
<td>3</td>
</tr>
<tr>
<td>Electron Tube Applications EE 151</td>
<td>2</td>
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<tr>
<td>Thesis EE 198</td>
<td>1½</td>
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<tr>
<td>Option—Senior Electrical Engineering Problems EE 190</td>
<td>3</td>
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<tr>
<td>or Business Organization and Management 61 or</td>
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<tr>
<td>Steady State Analysis EE 200</td>
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**22½**

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. 3 credits.
    Prerequisite, Physics 43. Lab. fee, $3.

UPPER COLLEGE

123-124. ELEMENTS OF ELECTRICAL ENGINEERING. 3 credits each semester.
    Prerequisites, EE 58, Math. 46, Physics 44. Lab. fee, $3 each semester.

127. BASIC INDUSTRIAL ELECTRONICS. 2 credits.
    Prerequisite, EE 124.

128. ELECTRICAL DRAFTING, BLUE PRINT READING, AND ESTIMATING. 3 credits.
    Prerequisite, senior standing.

130-131. ALTERNATING CURRENT CIRCUITS. 3 credits.
    Prerequisite, EE 124.

149. ELECTRICAL MEASUREMENTS. 3 credits.
    Prerequisite, EE 124. Lab. fee, $3.

150. ENGINEERING ELECTRONICS. 3 credits.
    Prerequisites, EE 131, EE 149.

151. ELECTRON TUBE APPLICATIONS. 2 credits.
    Prerequisite, EE 150. Lab. fee, $3.

170. ALTERNATING CURRENT MACHINES. 3 credits.
    Prerequisite, EE 131.

171. ALTERNATING CURRENT MACHINES LABORATORY. 1½ credits.
    Prerequisite or concurrent registration. EE 170. Lab. fee, $4.

172. ADVANCED ALTERNATING CURRENT MACHINES. 3 credits.
    Prerequisite, EE 170.

173. ADVANCED ALTERNATING CURRENT MACHINES LABORATORY. 2 credits.
    Prerequisite, EE 170, EE 171. Prerequisite or concurrent registration, EE 172.
    Lab. fee, $4.

180. ILLUMINATION ENGINEERING. 3 credits.
    Prerequisite, Physics 44.

190. SENIOR ELECTRICAL PROBLEMS. 3 credits.

200. STEADY STATE ANALYSIS. 3 credits.
    Prerequisite, EE 130-131 or permission of head of department.

201. TRANSIENT ALTERNATING CURRENT ANALYSIS. 3 credits.
    Prerequisite, EE 200, or permission of head of department.
MECHANICAL ENGINEERING

PROFESSOR GRIFFIN, ASSOCIATE PROFESSORS UPP AND WILSON,
ASSISTANT PROFESSORS Hamlen and Petry

SCHEDULE OF COURSES

Second Year

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Cr. Hrs.</th>
<th>Second Semester</th>
<th>Cr. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Military Science &amp; Tactics</td>
<td>44...</td>
<td>Engineering Math. 213-214</td>
<td>2</td>
</tr>
<tr>
<td>Physics 44 (Electricity and Magnetism)</td>
<td>4</td>
<td>Heat Power Engineering ME 46...</td>
<td>3</td>
</tr>
<tr>
<td>Math. 46 (Integral Calculus)</td>
<td>3</td>
<td>Strength of Materials CE 46...</td>
<td>3</td>
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<tr>
<td>Elements of Electrical Engineering EE 58</td>
<td>3</td>
<td>*Descriptive Geometry ME 44</td>
<td>3</td>
</tr>
<tr>
<td>Applied Mechanics CE 109-110</td>
<td>3</td>
<td>Elements of Electrical Engineering EE 123</td>
<td>3</td>
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<tr>
<td>Engineering Chemistry 131</td>
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<td>Engineering Chemistry 132</td>
<td>3</td>
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<tr>
<td></td>
<td></td>
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Summer Quarter

<table>
<thead>
<tr>
<th>Cr. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strength of Materials CE 117-118</td>
</tr>
<tr>
<td>Machine Drawing ME 23</td>
</tr>
<tr>
<td>Shop Practice ME 49</td>
</tr>
<tr>
<td>Hydraulics ME 184</td>
</tr>
<tr>
<td>Elements of Electrical Engineering EE 124</td>
</tr>
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Third Year

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Cr. Hrs.</th>
<th>Second Semester</th>
<th>Cr. Hrs.</th>
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<tbody>
<tr>
<td>Mechanical Engineering Laboratory ME 182</td>
<td>2</td>
<td>Mechanical Engineering Laboratory ME 183</td>
<td>3</td>
</tr>
<tr>
<td>Thermodynamics ME 189</td>
<td>3</td>
<td>Steam Power Plants ME 185</td>
<td>3</td>
</tr>
<tr>
<td>Mechanism ME 172</td>
<td>3</td>
<td>Machine Design ME 178</td>
<td>3</td>
</tr>
<tr>
<td>Mechanism Drawing 174</td>
<td>1</td>
<td>Business Organization and Management 61</td>
<td>3</td>
</tr>
<tr>
<td>Heating and Air Conditioning ME 187</td>
<td>3</td>
<td>Elective</td>
<td>5</td>
</tr>
<tr>
<td>English 61-62 (Report Writing)</td>
<td>2</td>
<td></td>
<td>17</td>
</tr>
<tr>
<td>Business and Professional Speaking 47</td>
<td>2</td>
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</tr>
<tr>
<td>Economics 41</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>19</td>
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Summer Quarter

<table>
<thead>
<tr>
<th>Cr. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gas and Oil Engines ME 190</td>
</tr>
<tr>
<td>Special Mechanical Engineering Problems ME 194</td>
</tr>
<tr>
<td>Steam Power Plants ME 186</td>
</tr>
<tr>
<td>Machine Design ME 179</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

*Students electing the Industrial Option will take Business Organization and Management 61 in their second year and Descriptive Geometry in their third year.
### Aeronautical Option

#### Summer Quarter

<table>
<thead>
<tr>
<th>Course</th>
<th>Cr. Hrs.</th>
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<tbody>
<tr>
<td>Strength of Materials CE 117-118</td>
<td>3</td>
</tr>
<tr>
<td>Machine Drawing ME 23</td>
<td>2</td>
</tr>
<tr>
<td>Economics 41</td>
<td>3</td>
</tr>
<tr>
<td>Hydraulics ME 184</td>
<td>3</td>
</tr>
<tr>
<td>Elements of Electrical Engineering EE 124</td>
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#### Third Year

<table>
<thead>
<tr>
<th></th>
<th>Cr. Hrs.</th>
<th>Second Semester</th>
<th>Cr. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mechanical Engineering Laboratory ME 182</td>
<td>2</td>
<td>Machine Design ME 178</td>
<td>3</td>
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<tr>
<td>Thermodynamics ME 189</td>
<td>3</td>
<td>Business Organization and Management 61</td>
<td>3</td>
</tr>
<tr>
<td>Mechanism ME 172</td>
<td>3</td>
<td>Aerodynamics Laboratory 202</td>
<td>3</td>
</tr>
<tr>
<td>Mechanism Drawing ME 174</td>
<td>1</td>
<td>Business &amp; Professional Speaking</td>
<td></td>
</tr>
<tr>
<td>Shop Practice ME 49</td>
<td>2</td>
<td>English 61-62 (Report Writing)</td>
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<tr>
<td>Aerodynamics 200</td>
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<td>Stress Analysis CE 122</td>
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<td>Electives</td>
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#### Summer Quarter

<table>
<thead>
<tr>
<th>Course</th>
<th>Cr. Hrs.</th>
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</thead>
<tbody>
<tr>
<td>Gas and Oil Engines ME 190</td>
<td>3</td>
</tr>
<tr>
<td>Machine Design ME 179</td>
<td>5</td>
</tr>
<tr>
<td>Aeronautical Problems 203</td>
<td>3</td>
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<tr>
<td>Airplane Design 201</td>
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#### Third Year

**Industrial Option**

<table>
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<th>Second Semester</th>
<th>Cr. Hrs.</th>
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<tbody>
<tr>
<td>Industrial Plants 101</td>
<td>5</td>
<td>Production Planning and Control</td>
<td>108</td>
</tr>
<tr>
<td>Time Study 157</td>
<td>2</td>
<td>Motion Study 158</td>
<td>2</td>
</tr>
<tr>
<td>Mechanical Engineering Laboratory ME 182</td>
<td>2</td>
<td>Machine Design ME 178</td>
<td>3</td>
</tr>
<tr>
<td>Thermodynamics ME 189</td>
<td>3</td>
<td>Engineering Accounting 25</td>
<td>3</td>
</tr>
<tr>
<td>Mechanism ME 172</td>
<td>3</td>
<td>Business &amp; Professional Speaking 47</td>
<td>2</td>
</tr>
<tr>
<td>Mechanism Drawing ME 174</td>
<td>1</td>
<td>Descriptive Geometry ME 44</td>
<td>3</td>
</tr>
<tr>
<td>English 61-62 (Report Writing)</td>
<td>2</td>
<td>Electives</td>
<td>3</td>
</tr>
<tr>
<td>Economics 41</td>
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<td></td>
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</table>


<table>
<thead>
<tr>
<th>Course Title</th>
<th>Cr. Hrs.</th>
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</thead>
<tbody>
<tr>
<td>Gas and Oil Engines ME 190</td>
<td>3</td>
</tr>
<tr>
<td>Machine Design ME 179</td>
<td>5</td>
</tr>
<tr>
<td>Industrial Management Problems 256</td>
<td>3</td>
</tr>
<tr>
<td>Personnel Administration and Relations 163</td>
<td>2</td>
</tr>
</tbody>
</table>

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.

**GENERAL COLLEGE**

20. **DRAWING INTERPRETATION AND SKETCHING. 1 credit.**

21-22. **ENGINEERING DRAWING. 2 credits each semester.**

25. **MACHINE DRAWING. 2 credits.**
   
   Prerequisite, 22.

44. **DESCRIPTIVE GEOMETRY. 3 credits.**
   
   Prerequisite, 22.

46. **HEAT POWER ENGINEERING. 3 credits.**

   Prerequisite, Physics 43.

49. **SHOP PRACTICE. 2 credits.**

   Lab. fee, $3.

**UPPER COLLEGE**

172. **MECHANISM. 3 credits.**

   Prerequisite, Applied Mechanics CE 109-110.

174. **MECHANISM DRAWING. 1 credit.**

   Prerequisite or concurrent registration, ME 172.

178. **MACHINE DESIGN. 3 credits.**

   Prerequisite, CE 118.

179. **MACHINE DESIGN. 5 credits.**

   Prerequisite, ME 178.

180. **MACHINE DESIGN. 2 credits.**

   Prerequisite, ME 179.

182. **MECHANICAL ENGINEERING LABORATORY. 2 credits.**

   Prerequisites, Physics 44, ME 46. Lab. fee, $2.

183. **MECHANICAL ENGINEERING LABORATORY. 3 credits.**

   Prerequisites, ME 182, ME 184. Lab. fee, $3.

184. **HYDRAULICS. 3 credits.**


185. **STEAM POWER PLANTS. 3 credits.**

   Prerequisites, ME 46, Physics 44.

186. **STEAM POWER PLANTS. 3 credits.**

   Prerequisite, ME 185.

187. **HEATING AND AIR CONDITIONING. 3 credits.**

   Prerequisite, Physics 43.

*142 during the accelerated program.
189. THERMODYNAMICS. 3 credits. 
Prerequisites, Math. 46, Physics 44.

190. GAS AND OIL ENGINES. 3 credits. 
Prerequisite, ME 189.

192. REFRIGERATION. 3 credits. 
Prerequisite, ME 189.

194. SPECIAL MECHANICAL ENGINEERING PROBLEMS. 3 credits. 
Lab. fee, $3.

196. INSPECTION TRIPS. 1 credit.

197. HEATING AND VENTILATING. 2 credits. 
Evening session. Prerequisite, Physics 43.

198. AIR CONDITIONING. 2 credits. 
Evening session. Prerequisite, Physics 43.

AERONAUTICAL OPTION

Professors Myers and Huss, Associate Professor Ross
Mr. Ruggles, Mr. Stimmer, Mr. Batuik

163. GENERAL AERONAUTICS. 3 credits.

169-170. METEOROLOGY. 3 credits each semester. 
Prerequisite, Physics 44.

200. AERODYNAMICS. 3 credits. 
Prerequisite, CE 110.

201. AIRPLANE DESIGN. 3 credits. 
Prerequisite, Aeronautics 200.

202. AERODYNAMICS LABORATORY. 3 credits. 
Prerequisite or concurrent registration, Aeronautics 200. Lab. fee, $3.

203. AERONAUTICAL PROBLEMS. 3 credits. 
Prerequisite, Aeronautics Laboratory 202. Lab. fee, $3.

301-302. AERODYNAMICS OF LIGHTER-THAN-AIR CRAFT. 2 credits each semester.

303. STABILITY OF AIRPLANES. 3 credits. 
Prerequisite, Aeronautics 200.

INDUSTRIAL OPTION

GENERAL COLLEGE

23. JOB SIMPLIFICATION. 3 credits.

61. BUSINESS ORGANIZATION AND MANAGEMENT. 3 credits.

UPPER COLLEGE

101. INDUSTRIAL PLANTS. 3 credits. 
Prerequisite, Business Organization and Management 61.

103. PRODUCTION PLANNING AND CONTROL. 3 credits. 
Prerequisite, Business Organization and Management 61.

105. QUALITY CONTROL. 2 credits. 
Prerequisite, Business Organization and Management 61.
107. **Industrial Safety.** 2 credits.
   Prerequisite, Business Organization and Management 61.

109. **Maintenance of Plant and Equipment.** 3 credits.
   Prerequisite, Business Organization and Management 61.

157. **Time Study.** 2 credits.
   Prerequisite, Business Organization and Management 61.

158. **Motion Study and Micro-Motion Study.** 2 credits.
   Prerequisite, Business Organization and Management 61.

256. **Industrial Management Problems.** 3 credits.
   Prerequisite, senior standing or permission of instructor.

**Other Courses for Engineering Students**

**Chemistry**

Assistant Professor Anderson

131. **Engineering Chemistry.** 3 credits.
   Lab. fee, $5.

132. **Engineering Chemistry.** 3 credits.
   Lab. fee, $5.

**English**

Assistant Professor Raw

61-62. **English (Report Writing).** 2 credits.

**Metallurgy**

Professor Fairburn

133. **Physical Metallurgy.** 2 credits.

134. **Physical Metallurgy Laboratory.** 1 credit.
   Prerequisite or concurrent registration, 133. Lab. fee, $5.

137. **Ferrous Metallurgy.** 2 credits.
   Prerequisite, 133.

138. **Ferrous Metallurgy Laboratory.** 1 credit.
   Prerequisite or concurrent registration, 137. Lab. fee, $5.

139. **Non-Ferrous Metallurgy.** 2 credits.
   Prerequisite, 133.

140. **Non-Ferrous Metallurgy Laboratory.** 1 credit.
   Prerequisite or concurrent registration, 139. Lab. fee, $5.
THE COLLEGE OF EDUCATION

HOWARD B. EVANS, PH.D., Dean

GENERAL INFORMATION

The College of Education, formerly known as the Teachers College, was established in 1921 in cooperation 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 re-organization 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 cooperate 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 provisional elementary school Cadet Certificate upon the completion of a 2-year program. Such a program is provided by the College of Education for those students who wish to complete it.

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 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 ....................................................... 3
   - Educational Psychology .................................................. 3
   - Introduction to Education ................................................ 3
   - Fundamentals of Speech .................................................. 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

<table>
<thead>
<tr>
<th>Field</th>
<th>H. S. Units as Pre-requisites</th>
<th>Major</th>
<th>Minor</th>
<th>Special</th>
</tr>
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<tbody>
<tr>
<td>Art</td>
<td></td>
<td>24</td>
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<tr>
<td>Biological Science</td>
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<tr>
<td>Business Education</td>
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<tr>
<td>Bookkeeping—Social Business</td>
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<td>Salesmanship—Merchandising</td>
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<td>Stenography—Typing</td>
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<tr>
<td>Earth Science</td>
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<td>15</td>
<td></td>
</tr>
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<td>Home Economics</td>
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<td>15</td>
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<tr>
<td>Latin</td>
<td></td>
<td>24</td>
<td>15</td>
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<tr>
<td>Mathematics—Instrumental</td>
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<td>Vocal</td>
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<td>15</td>
<td></td>
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<tr>
<td>Speech</td>
<td></td>
<td>24</td>
<td>15</td>
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</tbody>
</table>

*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
- Tests and Measurements 105
- Principles of Education 201
- Student Teaching 124
- School Management 115

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, 25 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

## Second Year General College

<table>
<thead>
<tr>
<th>First semester</th>
<th>Cr. Hrs.</th>
<th>Second semester</th>
<th>Cr. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Psychology</td>
<td>3</td>
<td>Educational Psychology</td>
<td>3</td>
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<tr>
<td>Introduction to Education (first or second semester)</td>
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## First Year Upper College

<table>
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<th>Cr. Hrs.</th>
<th>Second semester</th>
<th>Cr. Hrs.</th>
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<tbody>
<tr>
<td>Methods</td>
<td>3</td>
<td>Tests and Measurements 105</td>
<td>2</td>
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## Second Year Upper College

### First semester

<table>
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<tr>
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<th>Second semester</th>
<th>Cr. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principles of Education 201</td>
<td>3</td>
<td>Student Teaching</td>
</tr>
<tr>
<td>School Management</td>
<td>2</td>
<td></td>
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or

<table>
<thead>
<tr>
<th>Cr. Hrs.</th>
<th>Second semester</th>
<th>Cr. Hrs.</th>
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</thead>
<tbody>
<tr>
<td>Student Teaching</td>
<td>6</td>
<td>Principles of Education 201</td>
</tr>
<tr>
<td>School Management</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

## 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

<table>
<thead>
<tr>
<th>Cr. Hrs.</th>
<th>General College</th>
<th>College of Education</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Design 21</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Introduction to Music 61</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Elementary School Music Literature and Appreciation 62</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Design 22</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Story Telling 83</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Children's Literature 86</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Handicrafts 41</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Geography</td>
<td>6</td>
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</tbody>
</table>

### UPPER ELEMENTARY

<table>
<thead>
<tr>
<th>Cr. Hrs.</th>
<th>General College</th>
<th>College of Education</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Design 21</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Introduction to Music 61</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Elementary School Music Literature and Appreciation 62</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Design 22</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Story Telling 83 or 84</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Children's Literature 86</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Handicrafts 41</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Geography</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Prim. Elementary Music</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Science, or Sociology</td>
<td>6</td>
</tr>
</tbody>
</table>
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.

<table>
<thead>
<tr>
<th>Cr. Hrs.</th>
<th>Drawing:</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Drawing and Rendering 45-46...</td>
</tr>
<tr>
<td>2</td>
<td>Illustration 179...</td>
</tr>
<tr>
<td>4</td>
<td>Graphic Arts 104-105...</td>
</tr>
<tr>
<td>4</td>
<td>Figure Drawing 175-176...</td>
</tr>
<tr>
<td>Methods, etc.:</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Methods in Teaching Art 191...</td>
</tr>
<tr>
<td>2</td>
<td>Art for the Grades 121...</td>
</tr>
<tr>
<td>6</td>
<td>Student Teaching 124...</td>
</tr>
<tr>
<td>Cr. Hrs.</td>
<td>Design, Painting, Sculpture:</td>
</tr>
<tr>
<td>4</td>
<td>Design 21-22...</td>
</tr>
<tr>
<td>2</td>
<td>Industrial Design 43...</td>
</tr>
<tr>
<td>4</td>
<td>Still Life Painting 115-116...</td>
</tr>
<tr>
<td>4</td>
<td>Modeling 59-60...</td>
</tr>
<tr>
<td>2</td>
<td>Weaving 106...</td>
</tr>
<tr>
<td>2</td>
<td>Occupational Therapy 70...</td>
</tr>
<tr>
<td>2</td>
<td>General Crafts 102...</td>
</tr>
<tr>
<td>6</td>
<td>Costume 151-152 or Interior Decoration 171-172...</td>
</tr>
<tr>
<td>4</td>
<td>Appreciation and History:</td>
</tr>
<tr>
<td>4</td>
<td>Appreciation 29-30...</td>
</tr>
<tr>
<td>6</td>
<td>History of Art 290-291...</td>
</tr>
</tbody>
</table>

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 hour 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 other valid teaching subjects, Special Methods, and pertinent electives to total 40 hours; also two minors, High School Methods, general requirements, and professional requirements.

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.

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

<table>
<thead>
<tr>
<th>First semester</th>
<th>Cr. Hrs.</th>
<th>Second semester</th>
<th>Cr. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>English 1</td>
<td>3</td>
<td>English 2</td>
<td>3</td>
</tr>
<tr>
<td>Introduction to Soc. Sc. 5</td>
<td>3</td>
<td>Introduction to Soc. Sc. 6</td>
<td>3</td>
</tr>
<tr>
<td>Hygiene, Mental 15</td>
<td>2</td>
<td>Hygiene, Physical 16</td>
<td>2</td>
</tr>
<tr>
<td>Physical Educ. 3</td>
<td>1</td>
<td>Physical Educ. 4</td>
<td>1</td>
</tr>
<tr>
<td>Military Training (Men)</td>
<td>1½</td>
<td>Military Training (Men)</td>
<td>1½</td>
</tr>
<tr>
<td>Mathematics, Accounting, or Foreign Language</td>
<td>3 or 4</td>
<td>Mathematics, Accounting, or Foreign Language</td>
<td>3 or 4</td>
</tr>
<tr>
<td>Introduction to Humanities 7 or Elective</td>
<td>3</td>
<td>Introduction to Humanities 8 or Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>First semester</th>
<th>Cr. Hrs.</th>
<th>Second semester</th>
<th>Cr. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction to Natural Science 9</td>
<td>3</td>
<td>Introduction to Natural Science</td>
<td>3</td>
</tr>
<tr>
<td>General Psychology 41</td>
<td>3</td>
<td>Educational Psychology 52</td>
<td>3</td>
</tr>
<tr>
<td>Military Training (Men)</td>
<td>1½</td>
<td>Military Training (Men)</td>
<td>1½</td>
</tr>
<tr>
<td>Fundamentals of Speech 76 or Major</td>
<td>3</td>
<td>Literature</td>
<td>3</td>
</tr>
<tr>
<td>Literature</td>
<td>3</td>
<td>Typewriting (Major) 51</td>
<td>2</td>
</tr>
<tr>
<td>Typewriting (Major) 51</td>
<td>2</td>
<td>Major</td>
<td>3</td>
</tr>
<tr>
<td>Introduction to Education 55</td>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Second Year, General College

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 | 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

<table>
<thead>
<tr>
<th>First semester</th>
<th>Cr. Hrs.</th>
<th>Second semester</th>
<th>Cr. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>English 1</td>
<td>3</td>
<td>English 2</td>
<td>3</td>
</tr>
<tr>
<td>Introduction to Social Science 5</td>
<td>3</td>
<td>Introduction to Social Science 6</td>
<td>3</td>
</tr>
<tr>
<td>Introduction to Humanities 7</td>
<td>3</td>
<td>Introduction to Humanities 8</td>
<td>3</td>
</tr>
<tr>
<td>Hygiene, Mental 15</td>
<td>2</td>
<td>Hygiene, Physical 16</td>
<td>2</td>
</tr>
<tr>
<td>Physical Educ. 3</td>
<td>1</td>
<td>Physical Educ. 4</td>
<td>1</td>
</tr>
<tr>
<td>Foreign Language or Mathematics</td>
<td>3 or 4</td>
<td>Foreign Language or Mathematics</td>
<td>3 or 4</td>
</tr>
<tr>
<td>Military Training (Men)</td>
<td>1½</td>
<td>Military Training (Men)</td>
<td>1½</td>
</tr>
</tbody>
</table>
**Second Year, General College**

<table>
<thead>
<tr>
<th>Course</th>
<th>Cr. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction to Natural Science</td>
<td>3</td>
</tr>
<tr>
<td>General Psychology 41</td>
<td>3</td>
</tr>
<tr>
<td>Physical Education 45</td>
<td>3</td>
</tr>
<tr>
<td>Introduction to Education 55</td>
<td>3</td>
</tr>
<tr>
<td>Literature</td>
<td>3</td>
</tr>
<tr>
<td>Military Training (Men)</td>
<td>1½</td>
</tr>
<tr>
<td>Introduction to Natural Science</td>
<td>3</td>
</tr>
<tr>
<td>Educational Psychology 52</td>
<td>3</td>
</tr>
<tr>
<td>Physical Education 46</td>
<td>3</td>
</tr>
<tr>
<td>Fundamentals of Speech 76</td>
<td>3</td>
</tr>
<tr>
<td>Literature</td>
<td>3</td>
</tr>
<tr>
<td>Military Training (Men)</td>
<td>1½</td>
</tr>
</tbody>
</table>

**Third Year, College of Education**

<table>
<thead>
<tr>
<th>Course</th>
<th>Cr. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theory and Practice 103</td>
<td>2 or 3</td>
</tr>
<tr>
<td>Theory and Practice 105</td>
<td>2 or 3</td>
</tr>
<tr>
<td>Normal Diagnosis and Corrective</td>
<td>2</td>
</tr>
<tr>
<td>Exercise 115</td>
<td>2</td>
</tr>
<tr>
<td>First Aid 111</td>
<td>1</td>
</tr>
<tr>
<td>Anatomy 127</td>
<td>3</td>
</tr>
<tr>
<td>Theory and Practice 104 (Men)</td>
<td>2</td>
</tr>
<tr>
<td>Theory and Practice 106</td>
<td>2 or 3</td>
</tr>
<tr>
<td>Theory and Prac. 108 (Women)</td>
<td>3</td>
</tr>
<tr>
<td>Physical Education 114</td>
<td>2</td>
</tr>
<tr>
<td>Methods of Phys. Ed. 125</td>
<td>2</td>
</tr>
<tr>
<td>Massage 112</td>
<td>1</td>
</tr>
<tr>
<td>Physiology 128</td>
<td>3</td>
</tr>
<tr>
<td>Tests and Meas. 105</td>
<td>2</td>
</tr>
<tr>
<td>Org. and Adm. of Phys. Ed. 121</td>
<td>2</td>
</tr>
<tr>
<td>Kinesiology 124</td>
<td>2</td>
</tr>
<tr>
<td>Hygiene and Health Activities</td>
<td>2</td>
</tr>
<tr>
<td>for Elementary Grades 131</td>
<td>2</td>
</tr>
<tr>
<td>Games for Elem. Grades 132</td>
<td>1</td>
</tr>
<tr>
<td>School Management 115</td>
<td>2</td>
</tr>
<tr>
<td>School Health 118</td>
<td>2</td>
</tr>
<tr>
<td>Org. and Adm. of Phys. Ed. 122</td>
<td>2</td>
</tr>
<tr>
<td>Student Teaching 124</td>
<td>6</td>
</tr>
<tr>
<td>Principles of Educ. 201</td>
<td>3</td>
</tr>
</tbody>
</table>

**Fourth Year, College of Education**

<table>
<thead>
<tr>
<th>Course</th>
<th>Cr. Hrs.</th>
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</thead>
<tbody>
<tr>
<td>Tests and Meas. 105</td>
<td>2</td>
</tr>
<tr>
<td>Org. and Adm. of Phys. Ed. 121</td>
<td>2</td>
</tr>
<tr>
<td>Kinesiology 124</td>
<td>2</td>
</tr>
<tr>
<td>Hygiene and Health Activities</td>
<td>2</td>
</tr>
<tr>
<td>for Elementary Grades 131</td>
<td>2</td>
</tr>
<tr>
<td>Games for Elem. Grades 132</td>
<td>1</td>
</tr>
<tr>
<td>School Management 115</td>
<td>2</td>
</tr>
<tr>
<td>School Health 118</td>
<td>2</td>
</tr>
<tr>
<td>Org. and Adm. of Phys. Ed. 122</td>
<td>2</td>
</tr>
<tr>
<td>Student Teaching 124</td>
<td>6</td>
</tr>
<tr>
<td>Principles of Educ. 201</td>
<td>3</td>
</tr>
<tr>
<td>School Management 115</td>
<td>2</td>
</tr>
<tr>
<td>School Health 118</td>
<td>2</td>
</tr>
<tr>
<td>Org. and Adm. of Phys. Ed. 122</td>
<td>2</td>
</tr>
<tr>
<td>Student Teaching 124</td>
<td>6</td>
</tr>
<tr>
<td>Principles of Educ. 201</td>
<td>3</td>
</tr>
</tbody>
</table>

**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**

<table>
<thead>
<tr>
<th>Foods</th>
<th>Cr. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Foods 45-46</td>
<td>6</td>
</tr>
<tr>
<td>Nutrition 119 or 42</td>
<td>3</td>
</tr>
<tr>
<td>Clothing</td>
<td></td>
</tr>
<tr>
<td>Textiles 21</td>
<td>3</td>
</tr>
<tr>
<td>Clothing 22</td>
<td>3</td>
</tr>
<tr>
<td>Advanced Clothing 105 and 106</td>
<td>6</td>
</tr>
<tr>
<td>General</td>
<td></td>
</tr>
<tr>
<td>Child Development 65</td>
<td>3</td>
</tr>
<tr>
<td>Home Management 62</td>
<td>3</td>
</tr>
<tr>
<td>Home Eco. Survey 53</td>
<td>2</td>
</tr>
<tr>
<td>Selection of Home Furnishings 56</td>
<td>3</td>
</tr>
<tr>
<td>Household Equipment 215</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>35</td>
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</tbody>
</table>

**MINOR IN HOME ECONOMICS**

<table>
<thead>
<tr>
<th>Foods</th>
<th>Cr. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Foods 45-46</td>
<td>6</td>
</tr>
<tr>
<td>Clothing</td>
<td></td>
</tr>
<tr>
<td>Textiles 21</td>
<td>3</td>
</tr>
<tr>
<td>Clothing 22</td>
<td>3</td>
</tr>
<tr>
<td>General</td>
<td></td>
</tr>
<tr>
<td>Child Development 65</td>
<td>3</td>
</tr>
<tr>
<td>Home Management 62</td>
<td>3</td>
</tr>
<tr>
<td>Methods</td>
<td></td>
</tr>
<tr>
<td>Home Economics</td>
<td></td>
</tr>
<tr>
<td>Education 151</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>21</td>
</tr>
</tbody>
</table>
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

<table>
<thead>
<tr>
<th>THEORETICAL MUSIC</th>
<th>Cr. Hr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Music 61</td>
<td>2</td>
</tr>
<tr>
<td>Music 62</td>
<td>2</td>
</tr>
<tr>
<td>Theory I 41</td>
<td>5</td>
</tr>
<tr>
<td>Theory II 42</td>
<td>5</td>
</tr>
<tr>
<td>History of Music 101-102</td>
<td>4</td>
</tr>
<tr>
<td>Orchestration 114</td>
<td>2</td>
</tr>
<tr>
<td>Conducting 112</td>
<td>2</td>
</tr>
</tbody>
</table>

**Music Organizations**

- University Women's Chorus
- University Men's Glee Club
- University Singers
- University Symphony Orchestra
- University Theatre Orchestra

### 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 required.

### 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.

<table>
<thead>
<tr>
<th>CR. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Speaking 41</td>
</tr>
<tr>
<td>Reading Aloud 51</td>
</tr>
<tr>
<td>Fundamentals of Speech 76</td>
</tr>
<tr>
<td>Play Production 161</td>
</tr>
<tr>
<td>Speech Correction 271, 272</td>
</tr>
<tr>
<td>History of Speech 291, 292</td>
</tr>
<tr>
<td>Seminar 293</td>
</tr>
<tr>
<td>Teaching of Speech 114</td>
</tr>
<tr>
<td>Elective</td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>Cr. Hr.</th>
<th>Major Field</th>
<th>24</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Engineering Drawing</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Occupational Analysis</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Organization of Instructional Material</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Methods of Teaching Occupational Subjects</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Shop Management</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Conference Method of Teaching</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Educational and Vocational Guidance</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Organization and Administration of Vocational Education</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>History and Philosophy of Vocational Education</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Vocational Tests and Measurements</td>
<td>2</td>
</tr>
</tbody>
</table>

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. Dought, Mr. Leigh
Four-Year Elementary ----------------------------------------------- Mr. Distad
High School -------------------------------------------------------- Mr. Krehes
Home Economics ----------------------------------------------------- Miss Wilson
Kindergarten-Primary ----------------------------------------------- Miss Babcock
Music --------------------------------------------------------------- Mr. Jorgensen
Physical Education ------------------------------------------------- Miss Lamkin, Mr. Sefton
Primary-Elementary ------------------------------------------------ Miss Babcock
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 55. 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).
Provision has been made so that the student may have an option between the writing of a thesis which would carry 4 semester hours credit and the completion of an educational problem for 2 semester hours of credit. The difference between the thesis and the educational problem lies largely in the scope, originality and the formality of the written account of the study.

**ELEMENTARY EDUCATION**

*Constants*  
- Educational Statistics 311: 2  
- Scientific Study of Education 425: 2  
- Contemporary Philosophies of Education 324: 2

*Other Required Courses*  
- Elementary School Curriculum and Teaching 330: 2  
- Advanced Child and Adolescent Psychology 308: 2  
- Diagnostic Testing and Remedial Teaching 313: 2  
- Techniques of Evaluation 312: 2  
- Supervision of Instruction 322: 2  
- Seminar in Elementary Education 436: 2

A minor of twelve hours in an academic field or psychology or twelve hours elected from courses in education.

This is intended primarily for the student who expects to progress as a teacher in elementary schools. Students who wish to look forward to an elementary school principalship will qualify by electing courses in Administration.

**SECONDARY EDUCATION**

*Constants*  
- Educational Statistics 311: 2  
- Scientific Study of Education 425: 2  
- Contemporary Philosophies of Education 324: 2

*Other Required Courses*  
- Secondary School Curriculum and Teaching 319: 2  
- Advanced Child and Adolescent Psychology 308: 2  
- Guidance in the Secondary School 302: 2  
- Techniques of Evaluation 312: 2  
- Supervision of Instruction 322: 2  
- Seminar in Secondary Education 437: 2

A minor of twelve hours in an academic field is recommended for teachers of academic subjects.

**ELEMENTARY SCHOOL PRINCIPAL**

*Constants*  
- Educational Statistics 311: 2  
- Scientific Study of Education 425: 2  
- Contemporary Philosophies of Education 324: 2

*Other Required Courses*  
- Public School Administration 345-346: 4  
- Elementary School Administration 331: 2  
- Supervision of Instruction 322: 2  
- Elementary School Curriculum and Teaching 330: 2  
- Seminar in Elementary Education 436: 2
### Electives

<table>
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<tr>
<td>Diagnostic Testing and Remedial Teaching 313</td>
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<tr>
<td>Advanced Educational Psychology 303</td>
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<tr>
<td>Advanced Child and Adolescent Psychology 308</td>
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<tr>
<td>History of Educational Thought 323</td>
<td>2</td>
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<td>Comparative Education 433-434</td>
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<td>Principles and Techniques in Personnel Counseling 308</td>
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### Secondary School Principal

**Courses**

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<td>Guidance in the Secondary School 302</td>
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### School Superintendent

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<td>Contemporary Philosophies of Education 324</td>
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<td>Public School Administration 345-346</td>
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<tr>
<td>Supervision of Instruction 322</td>
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<td>Seminar: Individual Problems 438</td>
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<td>Guidance in the Secondary School 302</td>
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<td>Advanced Educational Psychology 305</td>
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</tbody>
</table>
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

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

156. SPECIAL METHODS IN BUSINESS EDUCATION. 3 credits.
Methods of presentation in typewriting, shorthand, bookkeeping, and social business subjects will be studied. Class demonstrations and observations required. Theory tests in fields studied must be passed before credit is given for the course.

EDUCATION

DEAN EVANS, PROFESSORS DISTAD AND KUHNES, ASSOCIATE PROFESSOR BABCOCK, ASSISTANT PROFESSORS JONES AND W. I. PAINTER, MISS KRAUS, MRS. PAINTER, MISS RIEDINGER

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.

45. HISTORY OF EDUCATION. 3 credits.
A study of the development of civilization with particular reference to the role of education.

*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.
COLLEGE OF EDUCATION

83. STORY TELLING. 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.

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 Babcock, Assistant Professor W. L. Painter

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.

A study of the principles and techniques of student guidance; the setting up of an effective guidance program in the secondary school.
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. **Techniques of Evaluation, 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. **Diagnostic Testing and Remedial Teaching, 2 credits.**
A study of the factors contributing to educational disability. Techniques of diagnostic and remedial work will also be treated. Fee, $2.

319. **Secondary School Curriculum and Teaching, 2 credits.**
The application of the dominant theory of education as applied to curriculum building and procedures in teaching.

320. **Secondary School Administration, 2 credits.**
A treatment of the problems, procedures, and principles of organization and administration in secondary schools.

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. **History of Educational Thought, 2 credits.**
An historical study of educational theory and its originators, necessary to an understanding of current theory and practice.

324. **Contemporary Philosophies of Education, 2 credits.**
An appraisal of conflicting philosophies which are most important in present school practice.

330. **Elementary School Curriculum and Teaching, 2 credits.**
The application of the dominant theory of education as applied to curriculum building and procedures in teaching.

331. **Elementary School Administration, 2 credits.**
A study of the problems, procedures, and principles of organisation, 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.

345-346. **Public School Administration, Each semester, 2 credits.**
The theory and practices of educational administration in the state and county systems, cities, and rural districts. Also includes school law, organization, administration, finance, pupil accounting, planning and completion of school buildings.

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.

† Required graduate course.
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, Indis, 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, MR. STEIN, MR. LIGHTFRITZ, MR. FUNKHOUSE, MR. WITTERS, MISS RESLER, MISS WHITTAKER, MR. FERGUSON, MISS WELLS, MR. STONE

31. DALCROZE EURYTHMICS. 1 credit.
Development of the rhythmic sense by means of movement based on musical rhythm. The study of the rhythmic elements in music, meter, beat, sound duration, rhythmic patterns—all expressed through movement. Analysis of phrase and form through the expression in movement of folk songs and simple classics.

32. DALCROZE EURYTHMICS. 1 credit.
A continuation of 31 with more detailed study of musical rhythm, and its application to work with children.

51. PIANO CLASS. 1 credit.
A comprehensive study of piano fundamentals for beginners covering methods and literature for the first two years of piano training for class work and private lessons. Outlines for the first year including all scales, major and minor. Fundamental chords and rhythm work.

52. PIANO CLASS. 1 credit.
Analysis of form and harmonic construction of various important piano work.

53. VOICE CLASS. 1 credit.
A series of discussions concerning the instructional techniques required for successful development of school, church, and community choral groups, and the conductor’s responsibilities toward them. Problems of the usual untrained human voice.

54. VOICE CLASS. 1 credit.
A survey of the literature of all periods now available for performance by choirs at all levels.

55-56. STRING CLASS. 1 credit each semester.
Actual playing of string instruments with special emphasis on the violin. Study of material and teaching techniques.

57. WOODWIND CLASS. 1 credit.
Actual playing of woodwind instruments with special emphasis on clarinet. Study of material and teaching techniques.

58. BRASS CLASS. 1 credit.
Actual playing of brass instruments with special emphasis on the cornet. Study of materials and teaching techniques. Rudimentary drumming is also introduced in this course.

58. INSTRUMENT REPAIR. 1 credit.
Woodwind instruments: proper method of cleaning, corking joints, repadding, replacing springs and other minor adjustments.

60. INSTRUMENT REPAIR. 1 credit.
Brass and String instruments: proper method of cleaning, aligning of valves; replacing corks and felts, soldering technique. Fitting of bridges, relathering bows and setting of sound posts for string instruments. Attention is also given to tucking of drum heads.
61. **INTRODUCTION TO MUSIC. 2 credits.**

Introduces the Education student to problems of music study and fundamentals of music notation. It allows the student to gain daily experience in writing, playing, singing, those materials which are necessary for grade school music teaching. A prerequisite to any further study in music.

62. **ELEMENTARY SCHOOL MUSIC LITERATURE AND APPRECIATION. 2 credits.**

Materials and methods for teaching music appreciation in grade school classes, beginning with rote and reading song correlation with children's activities and progressing to the enjoyment of famous serious music through recordings and concerts.

621. **PRIMARY-ELEMENTARY MUSIC EDUCATION. 2 credits.**

Theory and practice of presenting vocal and instrumental music in the grade school. Study of rote, observation, sight reading, and part-songs, and discussion of objectives and methods for grades I and VI. Survey of available materials in these fields and instruction in Rhythm Band, Melody Band, and other pre-instrumental methods.

623. **SECONDARY MUSIC EDUCATION. 2 credits.**

The procedures that should be employed to give the adolescent a well-balanced participation in applied and theoretical music.

624. **PSYCHOLOGY OF MUSIC EDUCATION. 2 credits.**

A study of the relationships between the mental processes and listening to, producing, or composing music, and the establishment of habits of creative thinking and perceptive awareness.

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**NURSING EDUCATION**

**PROFESSOR Doherty**

The nursing program originated as a part of the United States Cadet Nurse program sponsored by the federal government, and was operated in cooperation 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 PROGRAM**

**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:

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<th>Credits</th>
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<td>Microbiology 33</td>
<td>3</td>
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<td>6</td>
<td>Diet Therapy</td>
<td>3</td>
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<td>Foods 43</td>
<td>3</td>
<td>History of Nursing</td>
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<td>Psychology 51</td>
<td>2</td>
<td>Nursing Arts I</td>
<td>2</td>
</tr>
<tr>
<td>Sociology 21</td>
<td>2</td>
<td>Pharmacology</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>16</td>
<td>Intro. to Medical Science</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Professional Adjustments</td>
<td>1</td>
</tr>
</tbody>
</table>
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

<table>
<thead>
<tr>
<th>First Year</th>
<th>Second Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Semester</td>
<td>Cr. Hrs.</td>
</tr>
<tr>
<td>English 1</td>
<td>3</td>
</tr>
<tr>
<td>Intro. Soc. Sc. 5</td>
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</tr>
<tr>
<td>Anatomy and Physiology</td>
<td>5</td>
</tr>
<tr>
<td>Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>Physical Ed. 3</td>
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</tr>
<tr>
<td><strong>Total</strong></td>
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<table>
<thead>
<tr>
<th>Second Year</th>
<th>Cr. Hrs.</th>
<th>Second Semester</th>
<th>Cr. Hrs.</th>
</tr>
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<tbody>
<tr>
<td>Intro. Human. 7</td>
<td>3</td>
<td>Intro. Human. 8</td>
<td>3</td>
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<tr>
<td>Bacteriology</td>
<td>4</td>
<td>Bacteriology</td>
<td>4</td>
</tr>
<tr>
<td>Gen. Psychology 4</td>
<td>3</td>
<td>General Soc. 4</td>
<td>3</td>
</tr>
<tr>
<td>Hist. Nursing I</td>
<td>2</td>
<td>Hist. Nursing II</td>
<td>2</td>
</tr>
<tr>
<td>Math., Acc'ty., or Foreign Language</td>
<td>3-4</td>
<td>Math., Acc'ty., or Foreign Language</td>
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<td><strong>Total</strong></td>
<td><strong>15-16</strong></td>
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</table>

<table>
<thead>
<tr>
<th>Third Year</th>
<th>Cr. Hrs.</th>
<th>Second Semester</th>
<th>Cr. Hrs.</th>
</tr>
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<tbody>
<tr>
<td>Foods and Nutrition 4</td>
<td>3</td>
<td>Nursing Arts I</td>
<td>3</td>
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<tr>
<td>Lab.</td>
<td>3</td>
<td>Intro. Med. Sc.</td>
<td>3</td>
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<tr>
<td>Elective</td>
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<td>Pharmacology I</td>
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<tr>
<td>Elective</td>
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<td><strong>17</strong></td>
<td><strong>Total</strong></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>General Courses</th>
<th>Credits</th>
<th>Professional Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>6</td>
<td>Ward Management and Teaching</td>
<td>3</td>
</tr>
<tr>
<td>Intro. to Soc. Sc.</td>
<td>6</td>
<td>Supervised Practice</td>
<td>3</td>
</tr>
<tr>
<td>Intro. to Human.</td>
<td>6</td>
<td>Teaching Nursing Arts</td>
<td>3</td>
</tr>
<tr>
<td>Math., Acc’ty., or Foreign Language</td>
<td>6-8</td>
<td>Nursing Trends</td>
<td>3</td>
</tr>
<tr>
<td>Chemistry or Physics</td>
<td>8</td>
<td>Hospital Administration</td>
<td>6</td>
</tr>
<tr>
<td>Physiology</td>
<td>6</td>
<td><strong>Total</strong></td>
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</tr>
<tr>
<td>Bacteriology</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sociology</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychology</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Educational</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Normal and Abnormal Personality</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sanitation</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>14-16</strong></td>
<td><strong>Total</strong></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

The number of electives will depend on the credit allowed the individual student for her basic professional program. Such credit does not exceed 45 semester hours.
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.

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

44. DIET THERAPY. 3 credits.
For student nurses. This course is the application of the study of nutrition as a means of therapy. Two hours lecture, two hours laboratory. Lab. fee, $4.

52. NURSING ARTS I. 2 credits.
Designed to aid students in their orientation to nursing; in developing desirable ideals and attitudes, and in recognizing the principles of health conservation and promotion.

54. PHARMACOLOGY I. 2 credits.
An introductory course planned to give the student a thorough understanding of the systems and methods used in weighing and measuring drugs, making solutions, calculating dosage, and of the nurse's responsibility in the administration of medicine.

56. PROFESSIONAL ADJUSTMENTS I. 1 credit.
Consideration of the underlying principles of nursing ethics, and guidance to the student in making her personal and professional adjustments to nursing.

58. INTRODUCTION TO MEDICAL SCIENCE. 3 credits.
To acquaint the student with the causes of disease, bases for treatment, methods of prevention and control, and with the various professional groups with whom she associates in the care of the sick. Also to encourage the application of scientific principles and methods to the nursing care of patients.

63. FOOD ECONOMICS. 3 credits.
For student nurses. The relative, the nutritional, and material values of foods as used in the family dietaries and in planning and preparing meals. Two hours lecture, two hours laboratory. Fee, $4.

70-71. HISTORY OF NURSING. 2 credits each semester.
A study of the development of nursing from the pre-Christian period to the present time; its relation to religion, science, and social institutions; the influence of leaders and origin of organizations.

100. NURSING TRENDS. 3 credits.
A survey of nursing trends with emphasis on current developments and problems in the various fields of nursing, and attention to developments in other fields affecting nursing.

101. TEACHING THE NURSING ARTS. 3 credits.
A study of the principles and methods of teaching the nursing arts in classroom and wards. Analysis of nursing procedures and opportunity for students to demonstrate the teaching of a procedure before the group and benefit by their criticism; opportunity to observe and participate in classroom and ward teaching in the local hospitals.
PHYSICAL EDUCATION

PROFESSOR SEFTON, ASSOCIATE PROFESSOR SMITH, ASSISTANT PROFESSORS BEICHLY, LAMKIN, BALDACCI AND MILLISOR, MISS GALLOWAY

GENERAL COLLEGE

*15-16. HYGIENE, PHYSICAL AND MENTAL. For description see page 45.

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.

There 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, ASSOCIATE PROFESSOR WITZEMAN, MR. BARKLEY, MRS. BOYD, 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 the same time. Introduction to laboratory procedures through readings, demonstrations and the performance of group experiments which are common to general psychology. The topics parallel those in 41. Two 1-hour laboratory periods a week. Fee, $1.

*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.

*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 psycho-neuroses, 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, $5.

208. PRINCIPALS 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. Fee, $2.

211. PSYCHOLOGICAL FACTORS IN MARITAL AND HOME ADJUSTMENT.
2 credits.
Prerequisite, a senior or adult with at least one course in psychology. A study of the psychology of sex adjustments in adolescence, adulthood, and marriage; attention to a psychological evolution of the factors which are important to 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 for 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 adjustment 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 STINER

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.

† Required graduate courses.
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 second and on teaching method in the first.
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
- Speech
- Commerce
- Economics
- History
- Political Science
- Sociology
- Biology
- Chemistry
- Mathematics
- Physics
- Education
- Psychology

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.
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.

The composite rating will be the criterion for determining the admission of any applicant. 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.

Applicants over twenty-one years of age may be permitted to enroll for not over seven credit hours in any one semester in evening classes and may be permitted to take up to a total of fourteen credits. Such students will be designated Adult Students. If Adult Students desire to take any additional work for credit, they must qualify for regular student status by meeting entrance requirements to the satisfaction of the Committee on Admission. The initiative for change of status rests with the Adult Student.

An applicant who for any reason does not meet the requirements for admission may, by special act of the Committee on Admission, be permitted to take a limited amount of work for which he is qualified by experience. He will not receive credit and will be designated as an auditor. It is understood that he will not displace any regular student.

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 1947-48 are: For the Fall semester, September 19 and 20, 1947. For the Second semester, February 13 and 14, 1948. For late registration an additional fee of $1 is charged.
AUDITORS

Auditors are students who are required to do all the work prescribed for students enrolled for credit except the taking of credit examinations. The fee is the same as for regular credit enrollment. Designation as an auditor must be made at the time of registration.

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.

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. Application for withdrawal is made in the office of Adult Education. See page 31.
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.

**GRADING SYSTEM**

Information concerning the grading system will be found in the General Regulations section of this catalog.

**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.
SUMMER SESSION

Leslie P. Hardy, M.S.Ed., Director

The twenty-sixth 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 1947 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 and Sociology. 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.

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 16, and closes Saturday, August 30. The six-weeks session begins June 16 and closes July 26.

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 Saturday, April 26, 1 p.m.; Saturday, May 17, 1 p.m.; Monday, June 2, 7 p.m.

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.

ADULT STUDENTS
Applicants over 21 years of age may be permitted to enroll for not over seven credit hours in any one semester in evening classes and may be permitted to take up to a total of fourteen credits. Such students will be designated Adult Students. If Adult Students wish to take any additional work for credit, they must qualify for regular student status by meeting entrance requirements to the satisfaction of the Committee on Admission. The initiative for change of status rests with the Adult Student.

REGISTRATION
Final registration for the 1947 Summer Session will be held in Buchtel Hall, Friday and Saturday, June 13 and 14. Any person registering after June 14 will be charged a late registration fee of $5. Late registrants should report to the office of the Registrar.

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 or before June 13 or 14, or by mail before these dates.

FEES
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 2 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 1947 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.

SCHEDULE

The summer quarter schedule of classes for 1947 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:
Saturday, April 26—1 p.m., Room 155, Simmons Hall.
Saturday, May 17—1 p.m., Room 155, Simmons Hall.
Monday, June 2—7 p.m., Room 155, Simmons Hall.
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 undertakes 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 University of Akron, through the College of Education, is responsible for the Trades and Industries work of the State Department of Education. This is a part of the Federal Smith-Hughes program for Vocational Education.

The Graduate Record Office, an agency for the consideration and administration of tests for students who wish to enter engineering colleges, medical schools or other graduate institutions, has designated the University of Akron to conduct the testing programs for this area at appointed times during the year.

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 courses are offered to nurses in training who are graduates of accredited high schools. This 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 testing and investigations are carried on in connection with the various clinics and hospitals. 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.
COMMERCIAL 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

Laboratory work was carried on in the Summit County Children’s Home and in the municipal housing projects. Speeches, plays, and style shows were provided for local organizations. The food preservation program was promoted by the sponsoring of the pressure cooker testing project, and the nutrition program, by providing judges for “Better Balanced Meals” contests. Dietetics majors carry on field work in local high schools and hospitals. Household equipment is tested for the gas and electric companies. An information bureau on all phases of home economics is provided for the public.

DEPARTMENT OF SOCIOLOGY

The Department of Sociology has active affiliations with the Akron Community Service Center, Boy Scouts, Catholic Service League, City Hospital, Community 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 Community 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.

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 other special programs, non-credit classes are arranged to meet the needs of many persons who wish 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 published program.


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, a 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

This 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. The University announces with regret the death of Dr. E. B. Foltz which occurred in October, 1946. Under the provisions of Dr. Foltz's will, the fund has been perpetuated.

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 PRIZE

An award of $100 sponsored by the College Club of Akron, is given annually to a woman selected from the Junior class in the College of Education. It is made on the basis of outstanding scholarship and evidence of campus leadership. It is to be used by the recipient as an aid in financing the expense of her Senior year at the University.
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 scholarships 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 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 cooperating 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.

THE RAYMOND B. PEASE AWARD OF THE AKRON MANUSCRIPT CLUB
The Raymond B. Pease award was established in 1946 by the members of the Akron Manuscript Club. The sum of $25 is to be awarded annually to that Junior at the University of Akron who has been consistently outstanding in the field of creative writing during his three years at the University. In the selection of the recipient there shall be no consideration of race, sex, nationality, or creed. The recipient shall apply the award toward tuition in his Senior year at the University of Akron.
THE IOTA PHI LAMBDA NATIONAL BUSINESS WOMEN'S SORORITY SCHOLARSHIP

The Iota Phi Lambda National Business Women's Sorority has established an annual prize of $50 through its local Alpha Mu Chapter. This prize is based on national competition, and the winner of the local contest is awarded a prize of $50 in recognition of outstanding scholarship and achievement in the field of commercial subjects. The contestant must have maintained an average of 85 or over and be a graduate of a local high school during the current year, with a major in commercial subjects.

THE VICTOR I. MONTENYOHL SCHOLARSHIP

The Victor I. Montenyohl Scholarship Fund for advanced study was established in 1946 by Mrs. Elizabeth Montenyohl, his wife, and his son and daughter, Patricia and Victor, in memory of Victor I. Montenyohl, in recognition of Mr. Montenyohl's devotion to the rubber industry, and his belief that the University of Akron offered a unique opportunity for rubber research. It is considered appropriate that the income from this fund be made available whenever possible to a student of demonstrated ability in the field of rubber chemistry.

THE CLARENCE L. HYDE MEMORIAL SCHOLARSHIP

The Clarence L. Hyde Memorial Scholarship was created in 1946 by the Clarence L. Hyde League. The Scholarship shall be a living commemoration of Dr. Hyde and his service to humanity. It shall be awarded each year to a senior student, residing in Akron, and shall be determined by scholarship and by need on the part of the student. The question of race, color, creed, or sex shall not enter into the consideration of the committee in making the award.

THE ALFRED-LOUIS Handler Scholarship

The Ronoh Club, a local social and cultural organization, has sponsored an annual prize of $300 in memory of Alfred and Louis Handler, who lost their lives in their country's service in the late World War. This prize of $300 is to be divided equally between a young man and a young woman indicating a superiority in scholarship and leadership as well as evidence of need, selected from among outstanding graduates of local high schools and who are residents of Akron and have been accepted for enrollment in the University. The award will be made for the first time in September, 1947.

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 point 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 in 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 freshmen 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 of 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.

THE AKRON TORCH CLUB LOAN FUND
This fund was established in 1946 by the members of the Akron Torch Club. The sum of $100 was made available to the office of the Dean of Students, and, at the discretion of the Dean, is to be used in cases of emergency student aid.

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. The President of the University, and such other members of the faculty and staff as he may designate, are authorized to seek contributions to be received through the office of the Treasurer of the University. Grants are made from this fund upon recommendation of a committee to be appointed by the President.
### SUMMARY OF STUDENTS IN DAY CLASSES 1946-47

**BUCHTEL COLLEGE OF LIBERAL ARTS**

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<th>Division</th>
<th>Men</th>
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<td>Graduate Students</td>
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<td>Commerce</td>
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**COLLEGE OF ENGINEERING**

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<td>Graduate Students</td>
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<tr>
<td>Full-time Students</td>
<td>103</td>
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<tr>
<td><strong>Total</strong></td>
<td>113</td>
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**COLLEGE OF EDUCATION**

<table>
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<tr>
<th>Students</th>
<th>Men</th>
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<tr>
<td>Graduate Students</td>
<td>17</td>
<td>35</td>
<td>52</td>
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<tr>
<td>Full-time Students</td>
<td>49</td>
<td>90</td>
<td>139</td>
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<tr>
<td>Part-time Students</td>
<td>10</td>
<td>22</td>
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<tr>
<td><strong>Total</strong></td>
<td>76</td>
<td>147</td>
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**THE GENERAL COLLEGE**

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<th>Students</th>
<th>Men</th>
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<td>New Freshmen</td>
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<tr>
<td>Full-time Students</td>
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<td>401</td>
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<td>Part-time Students</td>
<td>51</td>
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<td>Others</td>
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<tr>
<td>Full-time Students</td>
<td>1341</td>
<td>287</td>
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<td>Part-time Students</td>
<td>53</td>
<td>32</td>
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<tr>
<td><strong>Total</strong></td>
<td>2605</td>
<td>745</td>
<td>3350</td>
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**Grand Total**                   | 4129|

*Summer Session (1946) Included in above...1581 481 2062*

A full-time student is one who is classified for 8 or more credits per semester; a part-time student is classified for less than 8 credits. For the summer session 6 hours was used as the basis for a full-time student.
### SUMMARY OF ALL STUDENTS IN THE UNIVERSITY

#### 1946-47

<table>
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<tr>
<th>Category</th>
<th>Men</th>
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<tr>
<td>Graduate Students</td>
<td>62</td>
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<td>Upper Colleges</td>
<td>322</td>
<td>258</td>
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<td>General College</td>
<td>2501</td>
<td>688</td>
<td>3189</td>
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<tr>
<td>Part-time Students</td>
<td>136</td>
<td>97</td>
<td>233</td>
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<tr>
<td>Total Day Session Enrolment</td>
<td>3021</td>
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<td>4129</td>
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<tr>
<td>Total Evening Enrolment</td>
<td>1683</td>
<td>904</td>
<td>2587</td>
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<tr>
<td>Total</td>
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#### ENROLMENT BASED ON STUDENT CREDIT HOURS

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<th>Full-time Student Equivalent</th>
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<td>Buchtel College of Liberal Arts</td>
<td>13,872.5</td>
<td>433.5</td>
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<tr>
<td>College of Engineering</td>
<td>4,370.0</td>
<td>136.6</td>
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<tr>
<td>College of Education</td>
<td>5,118.0</td>
<td>160.0</td>
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<td>General College</td>
<td>85,735.5</td>
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<td>Evening Session</td>
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<td><strong>Total</strong></td>
<td><strong>124,362.0</strong></td>
<td><strong>3,886.3</strong></td>
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*A full-time student is the equivalent of one student pursuing a normal full-time load (32 hours) during the academic year.*
DEGREES CONFERRED

DEGREES CONFERRED JUNE 14, 1946

BUCHTEL COLLEGE OF LIBERAL ARTS

Bachelor of Arts

Margaret Morledge Adler
Hollis Paul Allan
Julia Anich
Phyllis Marie Bachelov
With Distinction
Enid Joan Baker
Coletta Florence Begue
T. Douglas Bethune
Mary Stuart Brown
John Edward Cameron
Bebe A. Friedman Cherzer
Sally Elizabeth Connolly
Agnes Elizabeth Darago
Mary Catherine Dempsey
Mary Ann Dinoff
Evelita Rita Farnes
Mary Ann Growdon
Helen Irene Harsha
Harry Willis Johnson
Stanley David Keister
Janice P. Kennedy
Constance Thelma Leavitt
John Frederic Lincks, Jr.
Amos Howard Lytton
Winifred Jean Mallen

Albert Lanier Minton
Anthony Vincent Patrino
Martha Ellen Raw
With Distinction
Jeanne Marie Roberts
Ursa LaFrances Robinson
Clara Jean Roderick
With Distinction
Robert Harrington Rose
James Edmon Rutherford
Cornelia Ann Sherman
Margaret Loretta Stankard
With Distinction
Jeanette Isabelle Tarr
Robert Lawrence Tener
With Distinction
Edith Margaret Toye
H. Huston Trussell
Sterling Tucker
Rosemarie Valenti
Isabel Vinciguerra
Mary Kathryn Wilson
James Edward Witner
Jane Wood
Hazel Idella Woody
Phaeon Louise Zurbrick

Bachelor of Science

William Francis Blank
Ruth Maxine Endlich
Peter Thomas Grande
Clarence Hoefelt, Jr.

Jean Ann Malaney
Floyd Francis Miller
With Distinction
Marilyn Rennick
Ray Stanley Snyder

Bachelor of Science in Art

James Calvin Carter
Marcheta Viola Davis

Bachelor of Science in Business Administration

Richard Clay Bonnett
Betty Ann Buehl
Richard Thomas Byles
Mildred Rita Clark
Harold Russell Dorman
Frank Ivan Heimbaugh
Jerome David Heinick

Paul Ernest Landefeld
Robert William Larson
Rosemary Margaret Lentsch
Sam Marks
Herbert Paul Murray
Edgar Allen Parsons
Robert R. Singer

Bachelor of Science in Secretarial Science

Betty Eline Bateson
Dorothy Mae Beckler
Barbara Jane Brennan
Robert Ray Broadbent
Phyllis Gertrude Leatherman
Nell Ruth Rowe
Barbara May Scott
Mary Ann Frances Semoin

Bachelor of Science in Industrial Management

Arthur Woodrow Moline

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 ENGINEERING
Bachelor of Mechanical Engineering
Anthony Jack Fister
Irvin Raymond Heller
Thomas Joseph Gibbons, Jr.

THE COLLEGE OF EDUCATION
Bachelor of Arts in Education
Rita Catherine Alexander
William Davis
Margaret Elizabeth Galbraith
Marjorie May Goldaberry
Rosemary Greenwald
Florence Anna Kaufman
Emma Elizabeth Lewis
Jack Crandal Looney
Sister M. Marijane Werner, O. P.
Esther Helena Schultz
Mary Margaret Somerville
Dorothy Lenore Wagner
With Distinction

Bachelor of Science in Education
Glenn Lewis Boota
Sebastian Bon Boring, Jr.
Bernice May Dymson
Winnifred Parker Corsuch
Mildred Janepher Goson
Eileen Klingensmith
Doris Leach
Mary Smith Leich
Margaret Ann Mangano
Dorothy May Marsh
Mildred Lucille Martin
Alice June Pamer
Betty Ross Paul
Lois Ann Reed
Lois Ena Rhoades
Anna Elizabeth Rhodes
Sister M. Joseph Zeman, O. P.
Sister M. Vincent Miragliotto, O. P.
Janet Marie Schaeffer
Helen Marie Stankard
Jean Kathaleen Stratton
Elizabeth Marie Van Berg
Dixie Lenore Wales
With Distinction
Eva Grace Walter
Gwendolyn Shaffer Watt
William James Wilkins
Carolyn Beatrice Woods

GRADUATE STUDY
Master of Science
Chester Bernard Budd; B.S., Case School of Applied Science, 1931
Vergil L. Keck; A. B., University of Akron, 1931
James John Shipman; B. S., University of Akron, 1941
Martin Jerome Telle; B.S., in Mech. Eng., Washington University, 1941

Master of Arts in Education
Louis Edward Bauman; B.S. in Educ., Kent State Univ., 1933; Ph.B., Wheaton College, 1936
George H. Bertsch, Jr.; A.B., University of Akron, 1937
Raymond Willis Eckard; A.B. & A.B. in Educ., University of Akron, 1941

Master of Science in Education
Mary Louise Beverly; B. S. in Education, University of Akron, 1940
Thelma E. Harris; B. S. in Educ., Wilberforce University, 1938

HONORARY DEGREE
Doctor of Science
Paul W. Litchfield

CERTIFICATES
BUCHTEL COLLEGE OF LIBERAL ARTS
Two-year Certificate in Secretarial Science
Elizabeth Ann Fitzwater
Marie Louise Lenke
Dorothy May McAlonan

THE COLLEGE OF EDUCATION
Three-year Certificate in Elementary Education
Dorothy Wright Rohrer
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.

ROBERT LAWRENCE TENNER

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.

BARBARA ENGEL

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.

THE RAYMOND B. PEASE AWARD OF THE AKRON MANUSCRIPT CLUB
A yearly award of $25 to that junior at the University of Akron who has been consistently outstanding in the field of creative writing during his three years at the University.

In the selection of the recipient there shall be no consideration of race, sex, nationality, or creed.

The recipient shall apply the award toward tuition in his senior year at the University of Akron.

ALVIN RICHARDS

THE CLARENCE L. HYDE MEMORIAL SCHOLARSHIP
The Clarence L. Hyde Memorial Scholarship was created in 1946 by The Clarence L. Hyde League.

The scholarship shall be a living commemoration of Dr. Hyde and his service to humanity. It shall be awarded each year to a senior student, residing in Akron, and shall be determined by scholarship and by need on the part of the student. The question of race, color, creed or sex need not be considered by the committee making the award.

CATHERINE HELEN MARES
THE VICTOR I. MONTENYOHL SCHOLARSHIP

The Victor I. Montenyohl Scholarship for advanced study was created May 2, 1946 by Patricia, Victor and Elizabeth Montenyohl, in memory of Mr. Victor I. Montenyohl.

Because of Mr. Montenyohl's devotion to the rubber industry and his belief that the University of Akron offered a unique opportunity for rubber research, it is deemed appropriate that whenever possible the recipient be a student of rubber chemistry with demonstrated ability.

ALBERT VIELHABER

PIXLEY SCHOLARS — 1945-46 (Including Summer, 1945)

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—Ellen Raw, Joseph Brewer, Edith Baushuer
In Voice—Janice Eckard
In Piano—Lois Rhoades

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:

From the Class of 1946
As juniors in 1945:
   Phyllis Marie Bacheldor
   Floyd Francis Miller
As seniors:
   Martha Ellen Raw
   Margaret Loretta Stankard
   Robert Lawrence Tener

As juniors in the class of 1947:
   Charles Casto
   Mary Dellapa
   Jean Hayden
   Sylvia Leyrow
   Mary Maeran
   Catherine Mares
   Albine Weitzel

SIGMA PI EPSILON

Selected for scholarship, citizenship, and artisanship in the College of Education.

   Margaret Elizabeth Galbraith
   Rosemary Greenwald
   Alice June Pamer
   Esther Helena Schultz
   Sister M. Joseph Zeman, O. P.
   Sister M. Vincent Miragliotto, O. P.
   Sister M. Marijane Werner, O. P.
   Dixie Lenore Wales
   Dorothy Lenore Wagner
THE UNIVERSITY OF AKRON ALUMNI ASSOCIATION

John M. Denison, '28, Executive Secretary

OFFICERS OF GENERAL ASSOCIATION (1946-47)

President ........................................................................ Wilson A. Sparhawk, '34
First Vice President ........................................................... John M. Pittenger, B.A., '31
Second Vice President ....................................................... Byron H. Larabee, B.S., '26
Secretary ........................................................................ Sherman O. Schumacher, B.A., '27
Treasurer ........................................................................ Maxwell P. Boggs

ALUMNI ASSOCIATION BOARD OF TRUSTEES


The Alumni Association was organized in 1874 for the purpose of maintaining the interest of graduates and former students. Each year the Association sponsors annual Homecoming Day early in the fall, and Alumni Day at Commencement time. Alumni clubs are located in numerous cities. The Association publishes a magazine, The Akron Alumnus, which is sent to all contributing members of the Memorial Foundation.

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 Bierce Library on the campus. A total of 38,000 have attended Buchtel College and The University of Akron; 4,788 have graduated.

In June of 1946 the University of Akron Alumni Association voted to withdraw all payments of dues and subscriptions to their organization in favor of the annual giving plan. All gifts, under this plan, are credited to the alumni share of the Memorial Foundation. Specific amounts are not requested. Gifts are solicited on the basis of alumni contributing amounts they can afford. The alumni share of the Memorial Foundation is $100,000 a year for five years. All donations should be sent directly to the Alumni Office, University of Akron, Akron 4, Ohio.

*Deceased.
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