

W. J. H. H. H.

The Municipal University of Akron

Akron, Ohio

April, 1920

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of Akron

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AKRON, OHIO
April, 1920

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AKRON, OHIO

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UNIVERSITY CALENDAR

1920

- January 5, Monday, 8:00 A. M.—Class Work resumed.
- January 14 and 15, Wednesday and Thursday, Classification for Second Semester.
- January 16, Friday, 9:45 A. M., Special Assembly in observance of Founder's Day (January 18); no afternoon classes.
- January 23, Friday, 9:45 A. M.—Senior Ashton Prize Contest.
- January 26-31, Monday to Saturday—Final Examinations.
- January 31, Saturday, 12:30 P. M.—First Semester closes.
- January 31, Saturday, 2:00-5:00 P. M. and 7:00-9:00 P. M.—Registration and Classification for Evening Courses.
- February 2, Monday, 8:30 P. M.—Senior Promenade.
- February 3, Tuesday, 8:00 A. M.—Second Semester begins.
- February 16, Registration and Classification for Engineering College, Section I.
- March 1, Registration and Classification for Engineering College, Section II.
- March 27, Saturday, 12:30 P. M.—Easter Recess begins.
- March 27, Saturday, 12:30 P. M.—Recess for Engineering College.
- April 6, Tuesday, 8:00 A. M.—Class Work resumed.
- May 13, Thursday—Student Elections.
- May 28, Tree Day.
- June 4, Friday, 9:45 A. M.—Junior Ashton Prize Contest.
- June 5, Saturday—Senior Vacation begins.
- June 7-12, Monday to Saturday—Final Examinations.
- June 13, Sunday, 3:30 P. M.—Baccalaureate Exercises in Crouse Gymnasium.
- June 13-16, Sunday to Wednesday—Celebration of the Fiftieth Anniversary of Buchtel College.
- June 14-19, Monday to Saturday—Recess for Engineering College.
- June 21, Monday—Summer Session for Engineering College begins.
- August 14, Saturday—Summer Session for Engineering College closes.

- September 11, Saturday, 2:00-5:00 P. M. and 7:00-9:00 P. M.—Registration and Classification for Evening Courses.
- September 13, Monday—Registration and Classification for Engineering College, Section I.
- September 13 and 14, Monday and Tuesday—Registration and Classification for Buchtel College of Liberal Arts and Curtis School of Home Economics.
- September 15, Wednesday, 8:00 A. M.—Class Works begins.
- September 24, Friday—Freshman Elections.
- September 27, Monday—Registration and Classification for Engineering College, Section II.
- November 25, 26, 27, Thursday, Friday and Saturday—Thanksgiving Recess.
- December 18, Saturday, 12:00 Noon—Christmas Vacation begins.

1921

- January 3, Monday, 8:00 A. M.—Class Work resumed.
- January 13 and 14, Thursday and Friday—Classification for Second Semester.
- January 14, Friday—Senior Ashton Prize Contest.
- January 18, Tuesday—Observance of Founder's Day.
- January 24-29, Monday to Saturday—Final Examinations.
- January 29, Saturday, 12:00 Noon—First Semester closes.
- February 1, Tuesday, 8:00 A. M.—Second Semester begins.
- February 22, Tuesday, Washington's birthday—a holiday.
- March 4, Friday—Sophomore Ashton Prize Contest.
- March 19, Saturday, 12:00 Noon—Easter Recess begins.
- March 29, Tuesday, 8:00 A. M.—Class Work resumed.
- May 12, Thursday—Student Elections.
- May 27, Friday—Tree Day.
- May 30, Monday, Memorial Day—a holiday.
- June 3, Friday—Junior Ashton Prize Contest.
- June 4, Saturday, 12:00 Noon—Senior Vacation begins.
- June 6-11, Monday to Saturday—Final Examinations.
- June 12, Sunday, 3:30 P. M.—Baccalaureate Exercises.
- June 13-15—Commencement.
- June 13-18, Monday to Saturday—Engineering College Recess.

THE BOARD OF DIRECTORS

P. W. LITCHFIELD	Term expires 1922
WM. H. EAGER	Term expires 1922
CLYDE F. BEERY	Term expires 1922
FRANK M. COOKE	Term expires 1924
JAMES P. LOOMIS	Term expires 1924
FRED M. HARPHAM	Term expires 1924
JOHN W. THOMAS	Term expires 1926
E. R. HELD	Term expires 1926
GEORGE M. ANDERSON	Term expires 1926

OFFICERS FOR 1920

F. M. COOKE	<i>Chairman</i>
CHARLES R. OLIN	<i>Clerk</i>

COMMITTEES FOR 1920

<i>Committee on Finance:</i>	HARPHAM, LOOMIS, HELD.
<i>Committee on Investments:</i>	COOKE, BEERY, ANDERSON.
<i>Committee on Buildings and Grounds:</i>	THOMAS, LITCHFIELD, EAGER.

ADMINISTRATIVE OFFICERS OF THE
UNIVERSITY

PARKE R. KOLBE, Ph. D.....	<i>President of the University</i>
CHARLES R. OLIN, M. S.....	<i>Secretary of the University</i>
GLADYS P. WEEKS	<i>Registrar</i>
OSCAR E. OLIN, A. M.....	<i>Vice President of the Faculty</i>
H. V. EGBERT, M. S.....	<i>Secretary of the Faculty</i>
ALBERT I. SPANTON, A. M.....	<i>Dean of Buchtel College of Liberal Arts</i>
FRED E. AYER, C. E.....	<i>Dean of the College of Engineering</i>
SARAH E. STIMMEL, B. S.....	<i>Director of the School of Home Economics</i>
ELIZABETH A. THOMPSON, A. M.....	<i>Dean of Women</i>
FREDERICK SEFTON, B. S.....	<i>Physical Director</i>
RENA B. FINDLEY	<i>Librarian</i>
JOSEPHINE A. CUSHMAN, B. L. S.....	<i>Associate Librarian</i>

GENERAL FACULTY AND OFFICERS

1919-1920

- ✓ PARKE R. KOLBE, Ph. D.,
President of the University
President's House
- ✓ CHARLES M. KNIGHT, A. M., Sc. D.,
Professor Emeritus of Chemistry
129 South Union Street
- ✓ JOSEPH C. ROCKWELL, Ph. D.,
Professor of Latin and Greek
58 Casterton Avenue
- ✓ OSCAR E. OLIN, A. M.,
*Messenger Professor of Philosophy and Sociology and
Vice President of the Faculty*
75 Nebraska Street
- ✓ ALBERT I. SPANTON, A. M.,
*Pierce Professor of English and Dean of Buchtel
College*
407 Vine Street
- ✓ HEZZLETON E. SIMMONS, M. S.,
Buchtel Professor of Chemistry
448 Henry Court
- ✓ FRED E. AYER, C. E.
*Professor of Civil Engineering and Dean of the College
of Engineering*
Tallmadge, Ohio
- ✓ SARAH E. STIMMEL, B. S.,
Director of the School of Home Economics
95 Corson Avenue
- ✓ FREDERICK SEFTON, B. S.,
Director of the Department of Physical Education
803 West Market Street
- ✓ CHARLES BULGER, A. M.,
Hilton Professor of Modern Languages
74 Mayfield Avenue
- ✓ AMON B. FLOWMAN, Ph. D.,
Professor of Biology
346 Crown Street

- MAX B. ROBINSON, M. E.,
Professor of Mechanical Engineering
27 Adams Street
- ELIZABETH A. THOMPSON, A. M.,
Professor of History and Dean of Women
146 South College Street
- FRED F. HOUSEHOLDER, M. A.,
Professor of Physics
56 Aqueduct Street
- GLEN H. ANDERSON, Captain, Infantry, U. S. A.,
Professor of Military Science and Tactics
611 Weber Avenue
- EARL WILLIS CRECRAFT, Ph. D.,
Professor of Political Science and Economics
1060 LaCroix Avenue
- LAWRENCE M. McDERMOTT, A. M.,
Professor of Business Administration
362 East Buchtel Avenue
- *JOHN L. JONES, Ph. D.,
Ainsworth Professor of Mathematics
145 Annadale Court
- CHARLES R. OLIN, M. S.,
*Assistant-Professor of Mathematics and Secretary of
the University*
421 Spicer Street
- †FRANK D. STURTEVANT, A. M.,
Assistant-Professor of English
840 Chalker Street
- ARDEN E. HARDGROVE, B. S.,
*Assistant-Professor of Chemistry and Director of the
Bureau of City Tests*
137 Highland Avenue
- RICHARD H. SCHMIDT, A. M.,
Assistant-Professor of Chemistry
Sawyerwood, East Akron, Ohio
- ††MAX MORRIS, A. M.,
Assistant-Professor of Mathematics
498 Crestwood Avenue

*Appointed February, 1920.

†Died February 2, 1920.

††Resigned February, 1920.

- KATHARINE M. REED, A. M.,
Assistant-Professor of Romance Languages
819 Ardmore Avenue
- HERMAS V. EGBERT, A. M.,
Assistant-Professor of Mathematics
817 Brown Street
- CARITA McEBRIGHT, A. B.,
Instructor in Public Speaking
896 East Market Street
- ALBERT PHELPS TULLER, A. B.,
Instructor in Modern Languages
197 Spicer Street
- ROSS C. DURST, C. E.,
Instructor in Civil Engineering
103 Brick Street, Cuyahoga Falls, Ohio
- JOSEPH W. MARCH, E. E.,
Instructor in Electrical Engineering
334 Koerber Place
- DOROTHY WALTERS BURTON, M. S.,
Instructor in Biology
235 Sumner Street
- JOHN W. BULGER, B. C. E.,
Instructor in Mathematics
457 Carroll Street
- ELMER V. HJORT, B. S.,
*Instructor in Chemistry and Assistant in Bureau of
City Tests*
56 Aqueduct Street
- *H. H. LENHART, A. B.,
Instructor in Business Training
Wauseon, Ohio
- EARLE BARTON HOWE, A. B.,
Instructor in English
513 West Market Street
- RITA E. STINSON, B. S.,
Instructor in Home Economics
426 Carroll Street
- FLORENCE N. SCHOTT, B. S.,
Instructor in Chemistry
346 Sumner Street

*MRS. L. W. MACKINNON,
Instructor in English
280 S. Portage Path

*MRS. H. E. KRIEGHAUM,
Instructor in French
57 Adams Street

ROY C. OLSON, 1st Sergeant, Infantry, U. S. A., Unassigned,
*Assistant in Department of Military Science and
Tactics*
212 East Buchtel Avenue

CLARENCE O. EGDAHL, A. B.,
Instructor in Engineering
Bernard Court

†MRS. CLAUDE E. CHAIN,
Instructor in English
995 Whittier Avenue

‡J. W. JORDAN, A. B.,
Instructor in Business Administration
10 North Forge Street

‡J. E. ROOT, C. E.
Instructor in Mechanical Drawing
95 Rhodes Avenue

‡R. O. JOHN,
Instructor in Business Administration
44 Fay Street

*Part-time instructors.

†Appointed February, 1920.

‡Part-time instructors in evening classes.

STUDENT ASSISTANTS

RAY A. BOHL	<i>Biology</i>
ROLLAND FOX	<i>Biology</i>
JOHN C. HENDERSON (1918-1919)	<i>Biology</i>
CARL S. GILBERT, '19.....	<i>Chemistry</i>
BERTHA FRAMPTON	<i>Chemistry</i>
NAOMI SAVIERS	<i>Chemistry</i>
EARL GUDIKUNST	<i>English</i>
PAUL RUPLE (1918-1919)	<i>English</i>
FRANK KNOWLTON	<i>Library</i>
WILLIAM KNOWLTON	<i>Library</i>
HELEN OSTERHOUSE	<i>Library</i>
ROBERT SCHOLL	<i>Library</i>
WILLIAM B. MELVIN	<i>Military Science and Tactics</i>
MAYNARD FLICKINGER	<i>Physics</i>
EUGENE HAAS	<i>Physics</i>

COMMITTEES OF THE FACULTY

1919-1920

Executive

KOLBE, O. E. OLIN, SPANTON, AYER

Classification

Buchtel College—BULGER, SPANTON, ROCKWELL, PLOWMAN,
MORRIS, EGBERT, DURST

College of Engineering—BULGER, ROBINSON, DURST

Curtis School of Home Economics—BULGER, STIMMEL

Evening Courses

SIMMONS AND ALL EVENING CLASS INSTRUCTORS

Public Speaking

McEBRIGHT, THOMPSON, McDERMOTT

Social

THOMPSON, STIMMEL, REED, TULLER, HOWE, MARCH

Holiday Observance

REED, STURTEVANT, BURTON, AND CLASS ADVISERS

Athletics

C. BULGER, SEFTON, C. R. OLIN

Assembly Observance

O. E. OLIN, ROCKWELL

University Publications

ROBINSON, MORRIS

Student Council and Honor System

SIMMONS, HOUSEHOLDER, SCHMIDT, BURTON

Library

CRECRAFT, STURTEVANT, FINDLEY, CUSHMAN

Extension Lectures

ROCKWELL

Faculty Representatives for Student Activities

BUCHTELITE	PLOWMAN
ELECTIONS	SIMMONS
WOMEN'S CLUB ROOM	THOMPSON
WOMAN'S LEAGUE	REED
FRESHMAN CLASS	SIMMONS
SOPHOMORE CLASS	AYER
JUNIOR CLASS	HARDGROVE
SENIOR CLASS	SPANTON

GENERAL INFORMATION*FOUNDATION*

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

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

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

The Municipal University of Akron, being supported in large part by public taxation, is entirely non-sectarian. The City of Akron has, however, agreed to carry out all provisions made by donors of funds to Buchtel College. Such funds were given in most cases to establish professorships and scholarships in the College of Liberal Arts.

AIM OF THE UNIVERSITY

As a representative of the new type of municipal institution, the University seeks to develop its units or departments into such schools as may train the high school graduate in various practical and technical callings. Generally speaking, the College of Liberal Arts will be used as the

basis for all the units or schools of the University. The College of Liberal Arts will also continue to give the regular four-year courses common to institutions of its kind.

DEPARTMENTS OF THE UNIVERSITY

Buchtel College of Liberal Arts.

The College of Engineering.

The Curtis School of Home Economics.

BUCHTEL COLLEGE OF LIBERAL ARTS

(See page 36)

The College of Liberal Arts will endeavor to carry out the wishes of the Founder of Buchtel College, namely, "to secure the highest grade of Classical, Scientific and Literary Culture." Four-year courses are offered leading to the degrees of Bachelor of Arts, Bachelor of Science and (in combination with the City Normal School) Bachelor of Science in Education.

THE COLLEGE OF ENGINEERING

(See page 71)

This College was opened in September, 1914. Courses in various branches of engineering and in manufacturing production are being developed.

THE CURTIS SCHOOL OF HOME ECONOMICS

(See page 93)

Like the College of Engineering, the School of Home Economics was opened to students in September, 1914. A four-year course is offered leading to the degree of Bachelor of Science in Home Economics.

EVENING COURSES

(See page 100)

The University offers evening work in a number of departments. College credit is given for this work, except in a few courses. The subjects are mostly those of the first two years of college work.

COMBINATION COURSES

(See page 112)

To those who wish to enter the learned professions such as law or medicine, the College of Liberal Arts offers opportunities of combination with the various professional schools of the country. By means of such combination courses a student may receive both the Arts and the professional degree, at the same time shortening by one year the period otherwise necessary.

A course for the preparation of teachers has also been arranged in combination with the City Normal School. (See page 118.)

COMMUNITY CO-OPERATION

(See page 120)

It is the desire of the Directors of the University to bring its various schools into close touch with municipal activities and to assist the work of various city interests in every possible manner by expert advice and service. Advanced students will be employed wherever possible in activities of this sort, receiving credit for work thus performed and gaining the additional advantage of a practical training in various phases of municipal affairs.

EQUIPMENT

At the time of the foundation of Buchtel College in 1870 a plot of six acres of ground was purchased at the outskirts of the village of Akron on a hill overlooking the valley. The growth of the city has included this site so that now the University campus lies at the head of College Street, only a short distance from the business center of the city.

In 1899 the old main building was destroyed by fire and in 1901 Buchtel Hall was completed as the first of a modern group of college buildings. From earlier times there already existed on the campus Crouse Gymnasium and the President's residence. Since the completion of Buchtel Hall there have been constructed the building first known as Buchtel Academy, and now used as an engineering recitation building; the central heating plant; Curtis Cottage, used as the home of the School of Home Economics; the Knight Chemical Laboratory, toward the construction of which

Andrew Carnegie gave \$25,000; the Carl F. Kolbe Hall, the gift of Mr. F. A. Seiberling and Mr. F. H. Mason; and the engineering laboratory.

BIERCE LIBRARY

The College Library had its origin in a collection of works donated in 1874 by the late General L. V. Bierce. During the early days of Buchtel College the Library was augmented by books purchased from the proceeds of a bequest received from General Bierce's estate. In recognition of this early gift the Library has been called the Bierce Library. It embraces about 15,000 volumes, exclusive of public documents, and occupies the Carl F. Kolbe Hall.

FUNDS, PRIZES AND SCHOLARSHIPS

The Katherine Claypole Loan Fund

This fund has been established by a number of women's organizations of the city and dedicated as a memorial to Mrs. Katherine Claypole, wife of Dr. E. W. Claypole, former Professor of Natural Science at Buchtel. Mrs. Claypole was the founder of organized women's work in Akron and always manifested a deep interest in the young people of the College.

The principal of the fund is loaned to students "who in mid-term, as often happens, find themselves without sufficient means to complete the year's work." Applications should be addressed to Mrs. E. F. Voris, Treasurer, 108 S. Union Street.

The Ashton Prizes

A fund consisting of \$3,000 has been established by the late Oliver C. Ashton, endowing the O. C. Ashton Prizes for excellence in reading and recitation.

The annual income of this fund will be paid, one-third to competitors from the senior class, one-third to competitors from the junior class, and one-third to competitors from the sophomore class, in a first and second prize to each class, in proportion of two to one.

These are public exercises, and will take place at stated times during the year.

The Senior Alumni Prize

A fund has been established by the Alumni Association for the purpose of awarding an annual cash prize of \$50.00 to that senior student in Buchtel College of Liberal Arts who has completed the regular four-year course with the highest average grade. Only students who have spent their entire course at Buchtel College are eligible.

The Tomlinson Prizes

Thru the kindness of Rev. Irving C. Tomlinson, Class of '80, of Boston, Mass., two prizes of \$30.00 and \$20.00 respectively will be offered each year to those two students of the University who present the best papers on a subject related to the work of the Municipal University. The subject is to be treated with especial reference to broadening the field and increasing the usefulness of the University, to its true character as a municipal university, and to its value, and need by the city.

The Loomis Cup

In 1916 Mr. James P. Loomis, of Akron, donated a silver cup, to be held annually by that High School in the City of Akron whose graduates during the preceding year had made the best scholastic record in the Freshman class at the Municipal University. The cup was to become the permanent possession of that school which first won its possession for three years.

For 1915-1916 the cup was won by West High School; for 1916-1917, 1917-1918, and 1918-1919 South High School was the winner, and by the terms of the award now owns the cup. However, Mr. Loomis has generously offered to purchase another cup.

Buchtel College Scholarships

(See page 38)

A number of scholarships have been endowed by friends of the College to aid worthy and deserving students. The donor of a scholarship may, at all times, designate one student who shall be entitled to the remission of a part of the tuition charges in the College of Liberal Arts. Scholarship benefits will be limited to \$50.00 per year to any one

student, and in the distribution of these scholarships by the University, preference will be given to the immediate descendants of the donor, if the donor is deceased.

Students thus receiving scholarships may be called upon to render services to the University for any part, or all, of such aid. They will be expected to maintain their standing in scholarship, and to conduct themselves in accordance with the rules of the institution. A scholarship is granted with the expectation that the student will complete his course of study at the University of Akron, and without a reason that shall be satisfactory to the Directors, honorable dismissal will not be granted until full tuition and all other college dues have been paid.

Rhodes Scholarships

Men who have completed their Sophomore year at Buchtel College are eligible to compete for the Cecil Rhodes Scholarships, tenable for three years at Oxford University, England, with a stipend of \$1500 each year. These scholarships are awarded on the combined basis of character, scholarship, athletics, and leadership in extra-curriculum activities. Further information may be obtained from any member of the Rhodes Scholarship Committee of Selection for Ohio: Chairman, President W. O. Thompson, Ohio State University, Columbus, O.; Professor B. E. Schmitt, Western Reserve University, Cleveland, O.; Cary R. Alburn, Esq., Attorney, Garfield Bank Building, Cleveland, O.; Secretary, Professor Leigh Alexander, Oberlin College, Oberlin, O.

Fellowships in Rubber Chemistry

Two fellowships have been established in the Department of Chemistry, one by The Goodyear Tire & Rubber Company and one by The Firestone Tire & Rubber Company, for the study of the chemistry of india rubber. These fellowships are open to graduates of standard American colleges and are of the value of \$500 per year each, with remission of all University fees.

Manufacturing Production Scholarships

Some thirty scholarships for the study of manufacturing production have been established by Akron industrial concerns. For details see page 72.

FREE TUITION

(Extracts from The By-Laws of the University Directors)

Tuition in Buchtel College of Liberal Arts shall be free to all students whose parents are residents of Akron.

Students whose parents are not residents of Akron must prove one year's *consecutive residence* in Akron before they can be considered as candidates for remission of tuition charges.

Tuition will be charged in the case of all students under twenty-one years of age (whose parents do not reside in Akron) who move into the city with the express purpose of attending college, even tho such students be self-supporting

Non-residents owning property taxed in 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 towards the University levy, upon presenting a certificate from the County Auditor or Treasurer, stating the amount so paid.

STUDENT ORGANIZATIONS

The following organizations have been formed among the students of the University:

The Student Council; the Student Forum; the Athletic Association; the Women's League; the Tel-Buch Association (Junior Class); the Reserve Officers Training Corps; the Buchtelite Association; the Dramatic Study Club; the Chemistry Club; the English Club; the Biology Club; the Engineers' Club; the class organizations.

Elections for a number of these are held on the same day and are controlled by a joint Board from the Faculty and the student body.

THE BUREAU OF STUDENT EMPLOYMENT

This bureau is established for the purpose of aiding self-supporting students in finding part-time work during the school year. Its organization is directed by the University and its services are free to all students.

PHI SIGMA ALPHA

Phi Sigma Alpha is an honorary fraternity, founded for the purpose of encouraging high scholarship among the Buchtel College students. Three students are chosen for membership from each senior class.

First:—That member of the senior class having the highest grades for three and one-half years.

Second:—The two members (one a man, the other a woman) having the next highest grades for three and one-half years.

These three students are elected for membership at the beginning of the second semester of their senior year, and are given at once the privilege of wearing the fraternity's badge and colors during the remainder of their senior year. The regular initiation takes place during Commencement week of the same year.

The badge of the fraternity is of gold in the shape of an ancient coin, bearing on the obverse side a serpent, a helmet and the Greek letters Phi Sigma Alpha, and upon the reverse side ten stars, the owner's name, the year of the class and "Buchtel College."

The colors of the fraternity are green and silver.

ATHLETICS

All participation in intercollegiate athletics is under the direct supervision of the Faculty and the Department of Physical Training. All teams representing the University are governed by the rules of the Ohio Conference.

ADMISSION

Methods of Admission

Students are admitted by examination, high school certificate, or honorable dismissal from other colleges or universities, or, if over 21 years of age, as special students not in candidacy for a degree.

Entrance Requirements

The requirement for unconditional entrance to any department of the University is 15 units. A unit is a full year's work in a subject, with four 1-hour or five 45-minute recitation periods a week.

Students with 14 units are admitted on condition that the deficiency be made up the first year.

Examinations are required in subjects presented for admission with grades below 70 per cent.

No student from an Akron high school who is not a graduate will be admitted with less than 16 units except upon recommendation of the Superintendent of Schools.

Admission by High School Certificate

Each candidate for admission to the freshman class is required to submit a certificate giving details of his high school work. This certificate should be addressed to Dean A. I. Spanton and sent as early as possible during the summer preceding entrance to the University.

Students presenting high school credits in a modern language or in mechanical drawing above and beyond the entrance requirements for college will be allowed college credit at the rate of fifty per cent in term hours for high school work, provided it results in a full credit in term hours and the student shows the ability to carry advanced work.

Admission from Other Colleges

Students from other colleges of recognized standing may be admitted to advanced standing on presentation of a certificate of work done and a statement of honorable dismissal.

Special Students

Students over 21 years of age, even tho they have not fulfilled the entrance requirement, may be admitted as special students, not in candidacy for a degree, to such studies as they are prepared to enter.

Subjects Required for Admission

For the subjects, required or elective, for admission to the several schools of the University, see the Entrance Requirements of these schools, as follows:

Buchtel College of Liberal Arts...	page 39
The Engineering College.....	page 75
Curtis School of Home Economics..	page 93
Evening Classes.....	page 100

Subjects Accepted for Admission

The subjects from which choice may be made, and the number of units which will be accepted in each subject, are as follows:

Foreign Language (not more than 6 units in all)	English	3 or 4 units
Greek	Mathematics	
Latin	Algebra	1½ or 2 units
French	Geometry	1 or 1½ units
German	History	
Spanish	Advanced U. S.	½ or 1 unit
Science (not more than 4 units in all)	General	1 or 2 units
Physics	English	½ or 1 unit
Chemistry	Civics	½ unit
Zoology	Political Economy	½ unit
Botany	Vocational subjects (not more than 4 units in all)	
Physiology	Manual Arts	1 to 3 units
Phys. Geog.	Domestic Science	1 to 3 units
	Commercial subj'ts	1 to 3 units
	Agriculture	1 unit

Entrance at Mid-year

Students graduating from high school at mid-year with one or more years of French, Spanish, or German or four years of Latin, may enter at once any department of the University. They may elect from the following subjects:

Latin (4 hrs.)
 French (3 hrs.)
 Spanish (3 hrs.)
 German (3 hrs.)
 Rhetoric 51 (3 hrs.)
 Literature 66 (3 hrs.)
 Speech (3 hrs.)
 College Algebra (4 hrs.)
 Current Events (1 hr.)

At the beginning of the following fall the student will be assigned to the regular freshman work of one of the courses and can pursue his studies without irregularity.

DESCRIPTION OF ENTRANCE UNITS

Following is a detailed statement of the requirements in each of the various subjects that may be offered for admission to college:

ENGLISH, 3 or 4 Units

The requirements include the College Entrance Requirements in English, practically uniform thruout the United States.

Three or four years, with five recitations a week, should be given to preparation, the work in Rhetoric and Composition being done simultaneously with the reading and study of the required English and American classics.

The applicant should bring a written statement from the principal or superintendent of the school attended, stating definitely the books read, and the amount of time given (1) to Rhetoric and Composition and (2) to the reading and study of the required classics.

The leading requirement, however, is the ability of the student to express his ideas in his mother tongue, clearly, forcefully, and accurately. Lacking this, his preparation to enter college is very inadequate, no matter how many books he may have read, or how much time he may have given to English in the grammar school and the high school.

*MATHEMATICS**Algebra, 1 1/2 or 2 Units*

The work in Algebra should include the following subjects: fundamental operations, factoring, fractions, linear equations in one and several unknowns, involution, evolution, surds, exponents, imaginary numbers, quadratic equations, simultaneous quadratics, binomial theorem for positive integral exponents, ratio, proportion, variation, progressions and logarithms.

Geometry, 1 or 1 1/2 Units

Plane or Plane and Solid Geometry. The set propositions required are those found in the older text books. Among the topics required may be mentioned: plane rectilinear figures; the circle and the measure of angles; similar polygons; areas, regular polygons; the relation of lines and planes in space; the properties and measure of prisms, pyramids, cylinders, and cones; the sphere, and the spherical triangle.

It is suggested that the last half-year's work, in both Algebra and Geometry, be done late in the preparatory school course, that there may be close and ready articulation with the required freshman mathematics in college. It is especially desirable that the student come to his college work with habits of neatness and accuracy well formed.

FOREIGN LANGUAGES

Latin, 1, 2, 3 or 4 Units

First Year. (One Unit.) Collar and Daniell's First Latin Book, or Bennett's Latin Lessons, with twenty-five pages of Viri Romae or an equivalent.

Second Year. (One Unit.) Cæsar's De Bello Gallico, Books I-IV, or an equivalent, with thirty lessons in Prose Composition.

Third Year. (One Unit.) Cicero's Orations: Four against Catiline, Poet. Archias, the Manilian Law, Verres and Roscius. For the last two an equivalent may be offered. Thirty lessons in Latin Prose Composition based upon Cicero.

Fourth Year. (One Unit.) Virgil's Eneid, Books I-VI. Grammar, including Prosody (New Allen and Greenough, Bennett, or Harkness).

Greek, 1 or 2 Units

First Year. Beginners' Lessons in Greek.

Second Year. Xenophon's Anabasis.

German, 1, 2, 3 or 4 Units

The following work should be offered for one, two, three or four years' credit, respectively:

One Year. Joynes-Meissner's Grammar (Part I). Fair equivalents in standard beginners' books will be accepted as substitutes. One hundred and fifty pages of simple German, in which should be embraced some of the best known songs and ballads and at least one longer story, such as Immensee, Germelshausen, or Hoher als die Kirche. The candidate should be able to pronounce German correctly, to understand and form simple sentences, and to write German script.

Two Years. In addition to the requirements for the first year, the candidate should by review have accurately familiarized himself with the principles of grammar, and should be able to translate with readiness easy connected English prose into German.

He should be able to write German from dictation, and should have read at least one of the easier classics besides two hundred pages of easy prose.

Three Years. In addition to the requirements for the first two years, the candidate should have read at least two more classic dramas, and at least one hundred pages of more difficult prose, such as *Die Harzreise* or selections from *Dichtung und Wahrheit*, and should be able to discuss these freely in the German language. He should show the results of an additional year's drill in translating more difficult English prose into German either by writing or orally, and should have had instruction in the literary history of Germany in the later Classic and Modern Period.

Four Years. The work of this year should be a continuation on the groundwork of the first three years, and should include at least eight hundred pages of reading, altho a less number may be presented if more difficult works have been attempted. In addition the candidate should have a knowledge of the history of German literature from the earliest periods, and should know something of Germany and modern German life.

It is advised that some subjects of general practical interest such as German schools, stores, meals and amusements be treated.

French, 1, 2, 3 or 4 Units

The following work should be offered for one, two, three or four years' credit, respectively:

One Year. A thoro knowledge of the leading principles of French grammar as set forth, for instance, in *Fraser and Squair*; an accurate acquaintance with the more common irregular verbs; the ability to translate easy English prose into French and to read easy French at sight; the ability to pronounce French, and the careful reading of two hundred pages of less difficult French.

Two Years. In addition to the above, the candidate should know accurately all irregular verbs in common use, and should be able to read a page of French with accurate pronunciation. He should have read at least four hundred pages of various authors, which should include one or two classic dramas. He should have had some practice in writing from dictation, and should be able to translate ordinary English prose into French.

Three Years. The work of the third year should comprise the reading of approximately five hundred pages of French of ordinary difficulty; memorizing the passages of matter read, either prose or poetry; writing from dictation; review of grammar.

Four Years. The work of the fourth year should include the reading of at least eight hundred pages of standard French, classical and modern; the writing of numerous short themes in French; a knowledge of the principal authors and works of French literature and of the important periods in French history; an ability to discuss in French the works read.

Spanish, 1 or 2 Units

The following work should be offered for one or two years' credit, respectively:

One Year. Drill in pronunciation, reading of not less than one hundred pages of easy Spanish, study of the elements of Spanish grammar, memorizing of poetry or prose, and dictation.

Two Years. In addition to the above, the pupil should have had at least two hundred pages of translation, exercises from English into Spanish, special drill on irregular verbs and constant work in grammar.

SCIENCES

Physics, 1 Unit

Recitations at least four times per week for a school year, together with a note-book, containing the description and results of at least fifty experiments, neatly recorded.

Chemistry, 1 Unit

Recitations three times a week for a school year, together with laboratory practice for two hours per week and a note-book containing an account of all experiments made by the student's own hands, with sketches of the apparatus used.

*Zoology, 1/2 or 1 Unit**Botany, 1/2 or 1 Unit**Physiology, 1/2 Unit*

Work in Botany, Human Physiology or Zoology should include laboratory studies amounting to at least one-fourth of the entire time devoted to the course. All laboratory exercises must be fully recorded by the student, and the note-book may be examined by the interested instructor before entrance credit is allowed. Not less than 1/2 unit will be counted in any one of the above subjects, and not more than two units will be allowed in the group. Any of the standard texts in these subjects will satisfy the requirements if taken along with the specified amount of laboratory work.

Physical Geography or Physiography, 1/2 or 1 Unit

Five times per week for one-half year. A good text-book, such as Davis' Physical Geography, should be supplemented by field excursions and laboratory, to cover about one-fourth of the time.

NOTE—In all science subjects at least two periods of laboratory or experimental work should count as the equivalent of one recitation.

*HISTORY, CIVICS AND POLITICAL ECONOMY**Advanced U. S. History, 1/2 or 1 Unit**General History, 1 or 2 Units**English History, 1/2 or 1 Unit**Civics, 1/2 Unit**Political Economy, 1/2 Unit*

One-half, one, or two years' work in high school, with any standard high school text book.

VOCATIONAL SUBJECTS

Manual Arts, 1 to 3 Units

Domestic Science, 1 to 3 Units

Commercial Subjects, 1 to 3 Units

Agriculture, 1 Unit

The place of vocational subjects in the high school curriculum is at present so indefinite as not to warrant the statement of specific requirements in these subjects for admission to college. Graduates of Akron high schools in the manual training, home economics, or commercial course, are admitted to the freshman class without conditions if they offer 15 units of work with grades of 70% or above. Graduates of other first grade high schools in similar courses will be admitted on the same terms provided they fulfill the specific requirements for admission to that school of the University which they wish to enter.

REGISTRATION

The registration days* for the beginning of the school year 1920-1921 will be Sept. 13 and 14; for the second semester, January 13 and 14.

All students, both old and new, are required to register and classify for work on these days between the hours of 8:30 A. M. and 5:00 P. M.

Procedure for registration and classification

1. Fill out registration card.
2.
 - a. If a new student, present yourself to the Committee on Entrance; then see the Classification Committee of the school to be entered.
 - b. If not a new student, take registration card to the Classification Committee of the School in which you are enrolled.
3. Take Classification slip to the Secretary's office, where term bills should be paid.

*This refers to registration for all work except evening classes. For these see page 100.

GENERAL REGULATIONS

The Term-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 "term hour."

Required for degree—128 term hours, except in the College of Engineering.

Failure—Any student failing to receive unconditional credit for at least eight term hours at the end of any semester shall be dropt from the University; but freshmen may be allowed to re-enter after passing entrance examinations in all subjects.

Any student electing fewer than eight hours must receive unconditional credit in all his work or be dropt from the University.

Election of Subjects in other Schools of the University—No student in one school or college shall be allowed to elect subjects in other schools until all freshman and entrance requirements are satisfied.

Curtis School of Home Economics—Students in Buchtel College may elect a maximum of twenty hours' work in the Curtis School to be applied toward the requirements for graduation from Buchtel College.

College of Engineering—Students in the scientific course in Buchtel College may elect the following subjects in the College of Engineering to be applied toward the requirements for graduation from Buchtel College. The subjects must ordinarily be elected in groups of two:

Mechanical Drawing 811	4	hours
Descriptive Geometry 812	4	"
Strength of Materials 841	3	"
Analytic Mechanics 842	3	"
Electricity 867-868	6	"
Electrical Lab. 869-870	4	"
Hydraulics 843	3	"

Total.....27 hours

Work thus elected must not interfere with required major and minor studies in the College of Liberal Arts, nor can it be substituted for them.

FEEES

Resident Students—All students who are residents of the City of Akron according to the rules adopted by the Board of Directors (see "Free Tuition," page 22), or whose parents are residents of Akron, are entitled to free tuition at the University. They are, however, required to pay an incidental fee of \$10.00 per semester, covering registration, incidentals and student activity fee. If not paid before September 25 of the first semester, or February 12 of the second semester, the fee is \$12.50 per semester. Fees to cover breakage and materials are also charged to all students in laboratory courses. (See page 44, 76, 95.)

Non-resident Students—The tuition for non-resident students is \$65.00 per semester in the College of Liberal Arts and the School of Home Economics, in addition to the incidental fee of \$10.00 per semester. The tuition for co-operative students in engineering is \$40.00 for the first semester, \$40.00 for the second semester and \$20.00 for the summer term plus the regular incidental fee of \$10.00 per semester. Fees to cover breakage and materials are also charged to all students in laboratory courses. If not paid before September 25 of the first semester or February 12 of the second semester the tuition fee is \$45.00 in the Engineering College and \$70.00 in other departments and the incidental fee is \$12.50.

SUMMARY OF FEES

The following table gives a summary of all fees for resident and non-resident students (except laboratory fees), also for students electing eight hours or less:

Tuition Fee—

For residents of Akron: Free.
 For non-residents per semester:

	If paid before Sept. 25 Feb. 12	If paid between Sept. 25 and Nov. 1 or Feb. 12 and April 1
More than 8 hours per week.....	\$65.00	\$70.00
From 5 to 8 hours per week.....	40.00	42.50
3 or 4 hours per week.....	25.00	27.50
1 or 2 hours per week.....	15.00	17.50

Incidental Fee—

Payable by resident and non-resident students.

	If paid before Sept. 25 Feb. 12	If paid be- tween Sept. 25 and Nov. 1 or Feb. 12 and April 1
More than 8 hours per week.....	\$10.00	\$12.50
From 5 to 8 hours per week.....	8.00	10.00
3 or 4 hours per week.....	5.00	6.50
1 or 2 hours per week.....	3.00	

All persons registering for work after the specified days of registration will be charged a fee of \$1.00 for the first day and twenty-five cents for each additional day of delay in registration.

Students whose entire fees are not paid by Nov. 1 for the first semester or by April 1 for the second semester will be suspended from further participation in class work until such fees are paid.

LIVING CONDITIONS

The University maintains no dormitories, but lists of rooms for men may be found at the general office. All women attending the University are under direct charge of the Dean of Women. No non-resident woman is allowed to select a rooming place not on the approved list of the Dean of Women. Non-resident women intending to enter the University should write beforehand to Mrs. E. A. Thompson, Dean of Women, who will gladly assist them in obtaining suitable living quarters.

Board may be secured in private families (often in connection with room), in boarding houses near by or at the Y. M. C. A. and Y. W. C. A.

The School of Home Economics serves a cafeteria luncheon in Curtis Cottage every noon during the school year.

SELF HELP

A large proportion of the men of the institution are self-supporting. Akron offers a great variety of work for men

students, such as clerking, soliciting, waiting on table, playing in orchestras, etc. The University maintains a Bureau of Student Employment which helps new students in getting work for odd hours, evenings and on Saturdays. The demand for such student aid on the part of Akron citizens is usually larger than the University can supply.

No student, however, should enter without sufficient money for payment of term bills and for living expenses for several months, since too much outside work often seriously hampers the beginning of a college course.

The opportunity for women in the matter of self help is more limited. It consists largely of work during certain hours of the day in private families in return for board and room, clerking and, to a limited extent, work in offices or libraries.

The University offers a number of student assistantships in various departments to upper classmen. Such positions pay from \$50 to \$150 per year. All inquiries regarding self help for men should be addressed to the Bureau of Student Aid; for women, to the Dean of Women.

BUCHTEL COLLEGE OF LIBERAL ARTS

Buchtel College was founded as a College of Liberal Arts in 1870 by the Ohio Universalist Convention in co-operation with the Hon. John R. Buchtel. It became a part of the Municipal University of Akron on December 15, 1913. The following is a list of the original incorporators of Buchtel College:

- *J. S. CANTWELL, D. D.
- *COL. GEO. T. PERKINS.
- *HENRY BLANDY.
- *REV. GEO. MESSENGER.
- *REV. B. F. EATON.
- *JUDGE NEWELL D. TIBBALS.
- *REV. J. W. HENLEY, D. D.
- *JUDGE E. P. GREEN.
- *O. F. HAYMAKER.
- *JOHN R. BUCHTEL.
- *REV. H. F. MILLER.
- REV. E. L. REXFORD, D. D.
- REV. H. L. CANFIELD, D. D.
- *WILLARD SPAULDING.
- *GEORGE STEESE.

PRESIDENTS OF BUCHTEL COLLEGE

S. H. McCOLLESTER, D. D., Litt. D.....	1872-1878
E. L. REXFORD, D. D.....	1878-1880
*ORELLO CONE, D. D.....	1880-1896
C. M. KNIGHT, Sc. D. (ad interim).....	1896-1897
I. A. PRIEST, D. D.....	1897-1901
*A. B. CHURCH, D. D., LL. D.....	1901-1912
P. R. KOLBE, Ph. D.....	1913-

*Deceased.

ENDOWMENTS

MESSENGER PROFESSORSHIP

The Messenger Professorship of Mental and Moral Philosophy was endowed by Mrs. Lydia A. E. Messenger, late of Akron, in memory of her deceased husband, Rev. George Messenger.

HILTON PROFESSORSHIP

The Hilton Professorship of Modern Languages was endowed by John H. Hilton, late of Akron.

PIERCE PROFESSORSHIP

The Pierce Professorship of English Literature was endowed by Mrs. Chloe Pierce, late of Sharpsville, Pa.

BUCHTEL PROFESSORSHIP

The Buchtel Professorship of Physics and Chemistry was named in honor of Mrs. Elizabeth Buchtel, late of Akron.

AINSWORTH PROFESSORSHIP

The Ainsworth Professorship of Mathematics and Astronomy was endowed by Henry Ainsworth, late of Lodi.

RYDER PROFESSORSHIP

The Ryder Professorship of Rhetoric and Oratory was established by the Board of Trustees in memory of Dr. William H. Ryder, late of Chicago.

MESSENGER FUND

The Messenger Fund was created by Mrs. Lydia A. E. Messenger, late of Akron. The fund consists of \$30,000.

ISAAC AND LOVINA KELLY FUND

The Isaac and Lovina Kelly Fund was created by Isaac Kelly, late of Mill Village, Pa. This fund consists of \$35,788.

WILLIAM PITT CURTIS FUND

This fund was established by William Pitt Curtis, late of Wadsworth, O. It now amounts to \$25,000.

CROSLEY LIBRARY FUND

This fund was established by the Rev. Lotta D. Crosley, late of Kent, O. It amounts to \$3,000.

**PERPETUAL SCHOLARSHIPS IN BUCHTEL
COLLEGE**

The following-named persons have established perpetual scholarships in Buchtel College:

*MISS E. V. STEADMAN	Marietta
*JAMES PIERCE	Sharpsville, Pa.
*ELIJAH DRURY	Girard, Pa.
*MRS. MARY C. MARTIN	Lebanon
*JAMES F. DAVIDSON	Brimfield
*MISS BETSEY THOMAS	Irwin
*JOHN PERDUE	Lafayette, Ind.
*ELI M. KENNEDY	Higginsville, Mo.
*JOHN K. SMITH	Ravenna
*N. S. OLIN	Ravenna
*JOHN B. SMITH	Urbana
*MRS. CANDIA PALMER	Painesville
*MRS. GEO. W. STEELE	Painesville
*GEORGE W. STEELE	Painesville
*MRS. BETSEY DODGE	McConnellsville
*JOHN ESPY	Kenton
*JOSEPH Hidy, Sr.	Jeffersonville
*MRS. HENRY BOSZAR	Brimfield
*HENRY BOSZAR (3)	Brimfield
*H. D. LOUDENBACK	Westville
*THOMAS KIRBY	Muncie, Ind.
*ISAAC AND LOVINA KELLY	Mill Village, Pa.
*S. T. AND S. A. MOON	Cuba
*GEORGE THOMAS	Greenwich
*MRS. E. W. TERRILL	Jeffersonville
*MRS. JOHN H. HILTON	Akron
*SAMUEL BIRDSSELL	Peru
*SAMUEL GRANDIN	Tidioute, Pa.
*N. B. AND A. E. JOHNSON	Mingo
*HENRY AINSWORTH (10)	Lodi
MR. AND MRS JOHN MILLER	Edgerton
*JOHN P. CHAPIN	New Philadelphia
*CHRISTIAN SWANK	Creston
*MRS. S. O. ACOMB	Tidioute, Pa.
*MRS. JANE BETZ (2)	Hamilton
*MISS HANNAH ALLYN	Akron
*MRS. ROSA G. WAKEFIELD	Green

*MARTHA A. BORTLEHamilton
 ††DELIA LORING MORRISBelpre

These scholarships are intended to aid worthy and deserving students, and are awarded by a Scholarship Committee under authority from the Board of Directors.

*Deceased.

†In honor of her father, Eliphas Burnham.

††In memory of her father and mother, Mr. and Mrs. Israel Allyn, and her sister, Lucy Allyn.

†††In memory of her father, Oliver Rice Loring.

ENTRANCE REQUIREMENTS

(For general entrance requirements to the University, see page 23).

A. B. COURSE

The candidate must present:

English (page 26)	3	units
Mathematics (page 26)	2½	units
*Foreign Languages (page 27)	4	units
General History (page 30)	1	unit
Elective (from the subjects on page 25)	4½	units

B. S. COURSE

The candidate must present:

English (page 26)	3	units
Mathematics (page 26)	3	units
*Foreign Languages (page 27)	4	units
Sciences (page 29) [one unit must be Chemistry or Physics]	2	units
Elective (from the subjects on page 25)	3	units

**Of the foreign language offered, at least two units must be in one language. Not less than a full unit in the beginning of any language will be accepted.*

For a major in Latin, or in Greek and Latin (see page 41), four years of Latin are required for entrance.

COURSES OF STUDY AND DEGREES

Two courses of study, each requiring 128 term hours for graduation, and leading respectively to the degrees A. B. and B. S., are offered in Buchtel College.* (For terms of admission to these courses see page 39.)

The studies of the freshman year are definitely assigned and required in each course.

First-year special students are not allowed to elect work above the freshman year.

FRESHMAN STUDIES (required)

I. The A. B. Course

First Half-Year	Term Hrs.	Second Half-Year	Term Hrs.
Rhetoric 51	3	Rhetoric 52	3
Chemistry 353 or	4	Chemistry 354 or	4
Biology 401		Biology 402	
Hygiene (women)	1	Current Events (women)	1
Physical Training and Military Drill (men)	2	Hygiene (women)	1
		Physical Training and Military Drill (men)	2

The above-mentioned subjects are required of all students in the A. B. course. Additional freshman studies in A. B. course leading toward Majors I and II (see page 41) are:

Greek 1	4	Greek 2	4
Latin 25	4	Latin 26	4

Additional freshman studies in A. B. course leading toward Majors III-VII (see page 41) are:

Foreign Language	4	Foreign Language	4
Greek 1, Latin 25, or	4	Greek 2, Latin 26, or	4
Mathematics 301		Mathematics 302	

*For combination courses and training course for teachers see pages 112 and 118.

II. *The Scientific Course

First Half-Year	Term Hrs.	Second Half-Year	Term Hrs.
Rhetoric 51	3	Rhetoric 52	3
Chemistry 353 or	} 4	Chemistry 354 or	} 4
Biology 401		Biology 402	
Hygiene (women)	1	Current Events (women)....	1
Physical Training and Mili- tary Drill (men)	2	Hygiene (women)	1
Mathematics 301	4	Physical Training and Mili- tary Drill (men)	2
French, Spanish or German	4	Mathematics 302	4
		French, Spanish or German	4

*Freshmen intending to major in Chemistry must take Chemistry 351 and 352 instead of 353 and 354, and will postpone Rhetoric until Sophomore year. See page 62.

Students intending to major in Biology must take Biology 401 and 402 in the Freshman year.

MAJORS AND MINORS

At the end of the freshman year the student is asked to indicate to the Committee on Classification whatever line of work he may wish to pursue. This subject is then known as the "major." Each major brings with it a number of required "minor" subjects. All work beyond the freshman year and outside of the major and minor requirements is elective, 16 hours per semester being counted as regular work.

I. MAJORS LEADING TO THE A. B. DEGREE

- I. *Greek and Latin.* A minimum of 40 hours, at least 14 of which must be Greek. Minors 1-8 inclusive, and 10.
- II. *Latin.* A minimum of 32 hours. Minors 1-8 inclusive and 10.
- III. *German and French.* A minimum of 20 hours of each. Minors 1 to 7 inclusive, and 10.
- IV. *Romance Languages.* A minimum of 40 hours (26 of French and 14 of Spanish). Minors 1 to 7 inclusive, and 10.
- V. *Philosophy and Sociology.* Thirty-two hours. Minors 1 to 4 inclusive, 6, 7, 9, and 10.
- VI. *Political Science.* Twenty-four hours. Minors 1 to 5 inclusive, 7, 9, and 10.

- VII. *Economics and Business Administration.* Twelve hours of each. Minors 1 to 4 inclusive, 5, 6, 9, and 10.
- VIII. *History.* A minimum of 24 hours. Minors 1 to 3 and 5 to 7 inclusive, 9, and 10.
- IX. *English Literature.* A minimum of 24 hours, exclusive of Rhetoric 51 and 52 and Classical Masterpieces. Minors 3, 5 to 7, and 9 to 11 inclusive, and 6 hours of English History.
- II. *MAJORS LEADING TO THE B. S. DEGREE*
- X. *Chemistry.* A minimum of 40 hours. Minors 1, 2, 4, 5, 6, 7, 10, 12, 14, 15.
- XI. *Mathematics.* A minimum of 32 hours. Minors 1, 2, 4, 5, 6, 7, 10, 13, 14, 15.
- XII. *Physics.* A minimum of 27 hours. Minors 1, 2, 4, 5, 6, 7, 10, 12, 13, 15, and Sophomore Mathematics.
- XIII. *Biology.* A minimum of 32 hours. Minors 1, 2, 4, 6, 7, 10, 13, 14, 15 and 6 hours of Psychology.

MINORS

	Term hrs.
• 1. Parliamentary Law (Rhetoric 53),	2
• 2. Literature 65 or 66	3
• 3. *Science (in a different department from that taken in freshman year).	8
4. History	6
• 5. Philosophy or Sociology	6
6. Political Science	6
7. Economics (including Commerce and Administration)	6
8. Modern Language (in addition to foreign language taken for freshman requirement)	6 or 8
9. Foreign Language (a minimum total of 22 hours in two languages, with not less than 8 in each)	22
10. Public Speaking	3
11. Classical Masterpieces 83 and 84	6
12. Biology	8
13. Chemistry	8
14. Physics 331 and 332	10
15. Scientific French or Scientific German	4

*Only courses which include laboratory work.

Thesis

A thesis showing original research by the student may be presented for graduation. It shall be taken in the subject chosen as the student's major, and shall count for two term hours if carried satisfactorily beyond the regular class-room work. The thesis must be handed to the instructor in charge on or before the beginning of the senior vacation.

Master's Degree

The degree of A. M. may be conferred upon those who have acquired the degree of A. B., and the degree of M. S. upon those who have acquired the degree of B. S. These degrees may be granted in not less than two years after graduation, unless the applicant, in residence, can devote his entire time to the work, when the degrees may be granted in one year. At least one year of residence is required of all candidates for a Master's degree.

The candidate must accomplish the equivalent of a full college year's work of thirty-two term hours, choosing his subjects as majors and minors, twenty-four of which must be in the major field.

In the minor the work may be partly unduplicated undergraduate, but the applicant will be expected to carry it beyond the lines of usual college work. In the major, the work must be confined to graduate subjects and methods, and in this a satisfactory thesis must be presented which will give evidence of original work in the investigation of some new field rather than of a mere re-statement of what is already known. The subjects and methods must have received the sanction of the instructors in the departments chosen.

An examination will be required in both subjects.

A candidate for either of these degrees at any given commencement must present his thesis and report for examination not later than June 1st.

FEES

For general statement see pages 33, 34. The following laboratory fees are charged for courses in the College of Liberal Arts. By action of the Directors these laboratory fees are collectable strictly in advance and are a necessary prerequisite to enrollment in classes.

Chemistry 353, 354, per semester	\$3.00
“ All other courses	4.00
“ Deposit for breakage in all courses per semester	5.00

The unused portion of this breakage deposit will be returned at the end of each semester.

Physics 341 and 342, each	\$2.50
Biology courses 401-412 inclusive, each	2.50
Surveying	2.00
Graduation fee—payable one week before graduation	5.00
Master's degree—Payable one week before graduation	10.00

Students who have not met all term bills by November 1 for the first semester, or April 1 for the second semester, may be suspended from classes until payment is made.

DEPARTMENTS OF INSTRUCTION

The general system of numbering and arrangement is according to the following groups:

Subject	Course Numbers
Ancient Languages	1- 50
English	51-100
German	101-150
Romance Languages }	151-200
Mental and Moral Philosophy	201-250
Economics, Political Science, History	251-300
Mathematics	301-330
Physics	331-350
Chemistry	351-400
Biology	401-450
Physical Training	

Courses starred in the following pages are open only to Juniors and Seniors.

GREEK

PROFESSOR ROCKWELL

Major: A minimum of forty hours is required for a major in Greek and Latin. At least fourteen hours must be taken in Greek.

1. *White's First Greek Book.*—(First Semester.) Four hours.
2. *Xenophon (Anabasis, 1 book).*—(Second Semester.) Four hours.
3. *Xenophon (Anabasis continued).*—(First Semester.) Three hours.
4. *Homer's Odyssey.*—(Second Semester.) Three hours.
83. *Greek Masterpieces thru English Translations.*—(First Semester.) Three hours.

A careful study will be made of the various forms of Greek literature and the chief works in the field of lyric and epic poetry, the drama, history, and philosophy.

84. *Latin Masterpieces thru English Translations.*—(Second Semester.) Three hours.

The continuation of the preceding course.

CLASSICAL ARCHEOLOGY

PROFESSOR ROCKWELL

Courses 19 and 20 are open to all students above the freshman year. Courses 17 and 18 will count toward either major offered in this department.

*17 *History of Greek Sculpture.*—(First Semester.)
Three hours. . Not given in 1920-1921.

*18. (Second Semester.)
Continuation of Course 17. Not given in 1920-1921.

21. *Hellenistic Period of Greek Sculpture.*—(First Semester.) Two hours. .

This course will consist largely of lectures and collateral reading, and may be taken independent of Courses 17 and 18.

22. (Second Semester.)
Continuation of Course 21.

24. *Greek and Roman Institutions.*—(Second Semester.)
Two hours. Not given 1920-1921.

LATIN

PROFESSOR ROCKWELL

Four units in Latin are required of all students entering freshman Latin.

Major: Thirty-two hours constitute a major in Latin.

Major: Forty hours constitute a major in Greek and Latin. At least fourteen must be taken in Greek.

25. *Cicero (De Amicitia); Plautus (Menaechmi).*—(First Semester.) Four hours.

Required of freshmen in Majors I and II.

During the freshman year a careful study is made of grammatical forms, syntax and idiomatic expressions, and written translations constitute a prominent feature of the work.

26. *Pliny (Selected Letters).*—(Second Semester.)
Four hours. Required of freshmen in Majors I and II.

27. *Livy (Books XXI-XXII); Plautus Trinummus.—*
(First Semester.)
 Three hours. Courses 27 and 28 are open to students
 who have completed 25 and 26.
28. *Terence (Andria); Horace (Odes and Epodes).—*
(Second Semester.)
 Three hours.

Advanced courses in Literature and Antiquities will be
 arranged for those desiring to continue the study of Latin.

ENGLISH

DEAN SPANTON

ASSISTANT-PROFESSOR STURTEVANT

MR. HOWE

MRS. CLAUDE E. CHAIN

RHETORIC

To meet the needs of all entering students, Freshman Rhetoric during the first semester will consist of a sub-freshman class and classes doing the work regularly prescribed for credit. Students assigned to the sub-freshman class must do the work without receiving for it regular college credit. They may, however, be promoted to one of the regular classes whenever their work seems to warrant such a change. Similarly, any student in a regular section of freshman rhetoric may be transferred to the sub-freshman class—with loss of credit—whenever his work ceases to be satisfactory to the instructor. Furthermore, to accommodate students entering at mid-year, Rhetoric 51 will be given the second semester.

S-51. *Sub-freshman Rhetoric.—(First Semester.)*

Required of all freshmen who show themselves unable to do the work of the regular sections of Rhetoric 51. Thoro drill in spelling, punctuation, correct grammar, and the principles of sentence structure.

51. *Freshman Rhetoric.—(First and Second Semesters.)* Three hours.

Required of all freshmen. A thoro review of the principles of style. Two themes each week. Monthly reading of short stories. Frequent conferences with instructors in regard to work in composition.

52. *Freshman Rhetoric.*—(Second Semester.)

Three hours.

Required of all freshmen. Weekly themes. Conference work continued. Reading of selected novels and modern plays.

53. *Parliamentary Law.*—(First Semester.) Two hours.

Required of all sophomores. The class is organized as an Assembly with the instructor as chairman. Study and practice of rules of order; the writing of minutes. Study of manual of debate. Text-book: Cushing's Manual of Parliamentary Practice (Revised edition).

54. *News Writing.*—(Second Semester.) Two hours.

Recitation and practice work. Writing of leads, heads, types of news stories, and editorial articles. As far as time permits, the student will do actual reporting on a "beat" assigned to him.

*55. *Advanced Composition.*—(First Semester.) Two hours.

Prerequisite: Courses 51, 52; but students are urged not to elect the course earlier than the junior year. Close study of the expository and descriptive essay. Wide reading in illustrative work of the best modern writers. A large amount of composition is required. Not offered in 1920-1921.

*56. *Advanced Composition.*—(Second Semester.) Two hours.

A continuation of course 55. Study of the short-story with wide illustrative reading. Text-book: Pitkin's Short-Story Writing. Not offered in 1920-1921.

57. *Argumentation and Debate.*—(First Semester.) Two hours.

Prerequisite: Courses 51, 52, 53. The class is organized as in Course 53. Text-book study is kept to a minimum to allow students to speak frequently in assigned talks and debates. The course will not be given for fewer than ten students.

59. *Senior English.*—(*First Semester.*) One hour.

A course in Rhetoric and Composition required of those seniors who, in the judgment of the faculty, are seriously deficient in their written work.

60. *Senior English.*—(*Second Semester.*) One hour.

Continuation of 59.

LANGUAGE AND LITERATURE

DEAN SPANTON

ASSISTANT-PROFESSOR STURTEVANT

MR. HOWE

Required work. In addition to the required work in Rhetoric, students in all courses must take, after the freshman year, at least three hours' work in the department of English Language and Literature.

Majors. The minimum for a major in English Literature is twenty-four term hours. Students choosing a major in English Literature must elect a year of Composition in addition to the required freshman and sophomore Rhetoric.

Order of Work. Courses 65 and 66 are prerequisite to the more advanced courses. Hence students who desire to take all or most of the work offered in English must elect these courses in their sophomore year, and in no case should they be postponed to the senior year unless a student be sure that he desires no further work in this department.

Either 65 or 66—preferably 65—may be taken to satisfy the minor requirement of three hours in literature.

65. *Modern English Literature.*—(*First Semester.*)—Three hours.

A study of the social forces which have shaped the development of modern English Literature, and of the expression of these forces in the works of leading writers since 1830.

66. *Development of English Literature.*—(*Second Semester.*)—Three hours.

A quick survey of Anglo-Saxon and Early English literature, followed by a careful study of the Elizabethan and the Puritan periods, and of the last half of the 18th century.

*67. *Chaucer.*—(*First Semester.*) Three hours.

A study of the best of the *Canterbury Tales*, and a rapid reading of other portions of Chaucer's poetry.

Given in 1920-1 and alternate years.

*68. *Word Study.*—(*Second Semester.*) Three hours.

After a few introductory lectures on language, the work centers in the study of words—their origin, development, significance, and habits.

Given in 1920-1 and alternate years.

*69. *Shakspeare.*—(*First Semester.*) Three hours.

A study of the development of Shakspeare as a dramatist and his place in the Elizabethan Age and in the history of English literature. Most of the plays are read, and a careful study is made of the great tragedies.

Given in 1919-20 and alternate years.

*70. *Shakspeare.*—(*Second Semester.*) Three hours.

A continuation of 69, which is pre-requisite.

Given in 1919-20 and alternate years.

71. *The English Bible as Literature.*—(*First Semester.*) Three hours.

To the student of literature the Bible has a two-fold interest entirely apart from its religious value: (1) It is itself noble literature; (2) It has influenced the literature of the English-speaking world more profoundly than has any other book. The object of this course is to help the student to see the beauty and the power of the Bible as literature; its narrative, exposition, poetry and song.

Not given in 1920-1921. Alternates with 73.

72. *Continuation of 71.*—(*Second Semester.*)

Not given in 1920-1921. Alternates with 74.

*73. *British Poets and Essayists of the Nineteenth Century.*—(*First Semester.*) Three hours.

Studies in Wordsworth, Coleridge, Scott, Byron, Shelley, Keats, Macaulay, Lamb, De Quincey.

Given in 1920-1 and alternate years.

*74. *Continuation of Course 73.*—(*Second Semester.*)

Studies in Tennyson, the Brownings, Arnold, Landor, Clough, Rossetti, Morris, Swinburne, Carlyle, Ruskin.

Given in 1920-1 and alternate years.

75. *American Literature.*—(*First Semester.*) Three hours.
After a somewhat rapid survey of the literature of the Colonial and Revolutionary Periods, the work centers in a study of the leading poets and prose writers of our later literature.

76. *American Literature.*—(*Second Semester.*)

Continuation of Course 75.

*79. *English Fiction.*—(*First Semester.*) Three hours.

The development of prose fiction to 19th century. Study of the evolution of the novel as a distinct literary type as illustrated in the stories popular in Saxon, Medieval, Elizabethan, Puritan, and Restoration Periods. The 18th century novel. Reading of important works.

Not given in 1920-1921. Alternates with 81.

*80. *English Fiction.*—(*Second Semester.*)

Continuation of Course 79.

Study of 19th and 20th century fiction with special emphasis upon the work of living writers.

Not given in 1920-1921. Alternates with 82.

*81. *English Drama.*—(*First Semester.*) Three hours.

Survey of play-writing in England till close of the 18th century, with special attention to the social conditions which created and shaped the plays of each period.

Given in 1920-21 and alternate years.

*82. *Modern Drama.*—(*Second Semester.*)

Continuation of Course 81.

Study of the life and work of the great modern dramatists, with some time devoted to the plays of writers not English or American.

Given in 1920-21 and alternate years.

83. *Greek Masterpieces thru English Translations.*—(*First Semester.*) Three hours.

A careful study will be made of the various forms of Greek Literature and the chief works in the field of lyric and epic poetry, the drama, history and philosophy.

Given in 1920-21 and alternate years.

84. *Latin Masterpieces thru English Translations.*—(*Second Semester.*) Three hours.

The continuation of the preceding course.

Given in 1920-21 and alternate years.

89. *Story Telling.*—(*First Semester.*) Three hours.

In recent years Story Telling has become a significant movement in the field of education. This is because of the growing feeling that the study and practice of story-telling, of how to tell the right story at the right time in the right way, probably develops in the student the power of self-expression more than does any other form of speech education.

The course covers the history, uses, materials, and technique of story-telling.

Recitations, speeches, conferences. Dramatization once a month.

90. *Story Telling.*—(*Second Semester.*) Three hours.
Continuation of 89.

SPEECH

MISS MCEBRIGHT

A three-years' course is offered in the department of Speech. Progressive educators recognize a well-trained voice with a well-trained mind to be an essential part of education. The voice is the reporter of the individual. A distinct and cultivated enunciation, a well-controlled and cultured voice, an effective and natural manner of speech, are all valuable assets in the business, educational and social world.

91. *Elementary Course.*—(*First and Second Semesters.*)
Three hours.

Fundamental principles. Voice technique, tone placing, tone building, enunciation, literary analysis, gesture, evolution of expression—vocal and physical.

92. (*First and Second Semesters.*) Continuation of 91.

Literary analysis, gesture, evolution of expression, development of imagination and sympathetic insight into literature.

*93. *Advanced Course.*—(*First Semester.*) Three hours.

Literary, dramatic, artistic interpretation, character study, Shakspeare's plays. Classic comedies.

*94. (*Second Semester.*)

Course 93 continued. Shakspeare's plays, extempore speeches, critiques, personal development.

*95. *Dramatic Study.*—(*First Semester.*) One hour.

The Dramatic Study Club meets once a week for class work. Only junior and senior students who have had at least the elementary course or its equivalent are eligible to this class. Any member of this class pledges himself not only to the class, but to all rehearsals called by the President of the Study Club, or by the Instructor in Speech. This club presents publicly all plays rehearsed. At least one play a semester will be presented.

*96. *Dramatic Study.*—(*Second Semester.*)

Continuation of Course 95.

Instruction will be given those students who enter the oratorical and prize speaking contests.

97. *Physical and Voice Work.*—(*First Semester.*) One hour.

Open to all upper-classmen.

Special attention is given to the needs of the individual student.

98. *Continuation of 97.*—(*Second Semester.*)

MODERN LANGUAGES

PROFESSOR BULGER

ASSISTANT-PROFESSOR REED

MR. TULLER

DR. KOLBE

It is the aim to make the foreign tongue the language of the class-room. An effort is made to reduce the amount of English used to a minimum. For the advanced courses all lectures and reports are in the foreign language. The intention is to accustom the student to using the language and hearing it used by others. Idiomatic and technical accuracy in the use of language, and, above all, care in pronunciation are insisted upon. Prose composition takes the form of free reproduction of foreign texts rather than of translation.

Major in German and French. German and French may be combined to make a major. Twenty hours of work in each language are required for this major.

Major in the Romance Languages. A minimum of fourteen hours of Spanish and twenty-six hours of French constitute a major in the Romance Languages.

FRENCH

151. *Beginning French.*—(First Semester.) Four hours.
 152. *Beginning French.*—(Second Semester.)
 Continuation of Course 151.
 153. *Second Year French.*—(First Semester.) Three hours.
 154. *Second Year French.*—(Second Semester.)
 Continuation of Course 153.
 167. *French Conversation.*—(First Semester.) Two hours.
 168. *French Conversation.*—(Second Semester.)
 Course 167 continued.
 155-164. *Advanced French.* Three hours thru the year.
 At least one course in advanced French will be given each year, which will be chosen from the following list: The French Drama of the 17th and 19th Centuries. The French Novel and Short Story. A Survey of French Literature.
 169. *Scientific French.*—(First Semester.) Two hours.
 Prerequisite, at least one year of French.
 170. *Scientific French.*—(Second Semester.)
 Continuation of Course 169.

SPANISH

171. *Beginning Spanish.*—(First Semester.) Four hours.
 172. *Beginning Spanish.*—(Second Semester.)
 Course 171 continued.
 173. *Second Year Spanish.*—(First Semester.) Three hours.
 174. *Second Year Spanish.*—(Second Semester.)
 Course 173 continued.

GERMAN

101. *First Year German.*—(First Semester.) Four hours.
 Courses 101 and 102 will not be given for fewer than fifteen pupils.
 102. *Continuation of 101.*—(Second Semester.)

103. *Second Year German.*—(*First Semester.*) Three hours.
104. *Continuation of 103.*—(*Second Semester.*)
129. *Scientific German.*—(*First Semester.*) Two hours. Prerequisite, 102.
130. *Continuation of 129.*—(*Second Semester.*)
- 107-123. *Advanced German.* Three hours thru the year. At least one of the following advanced courses will be offered: 107-108, Goethe; 111-112, History of German Literature; 115-116, Schiller; 123, Lessing; and 118, Modern Drama. Prerequisite, 103 and 104.

PHILOSOPHY AND SOCIOLOGY

PROFESSOR OLIN

Major: A full major is given in the department, consisting of Philosophy, Psychology, Ethics, Logic, Sociology and Sociological Problems. Thirty-two hours.

- *201. *Psychology.*—(*First Semester.*) Three hours. Text-book: Pillsbury's Psychology.
- *202. *Psychology.*—(*Second Semester.*) Three hours. Continuation of Course 201. One hour of seminar work a week is given in this semester.
- *203. *Ethics.*—(*First Semester.*) Three hours. Text-book: Mackenzie. Open only to those who have had Psychology.
- *204. *Ethics.*—(*Second Semester.*) Continuation of Course 203 with Natural Theology. Text-books: Mackenzie and Valentine.
- *207. *Philosophy.*—(*First Semester.*) Three hours. Text-book: Fletcher's Introduction.
- *208. *Continuation of 207.*—(*Second Semester.*)
205. *Logic.*—(*First Semester.*) Three hours.

SOCIOLOGY

213. *Sociology.*—(*First Semester.*) Three hours. Text-book: Blackmar and Gillen.
214. *Sociology.*—(*Second Semester.*) Three hours. Continuation of 213.
216. *Sociological Problems.*—(*Second Semester.*) Three hours. Lecture course with field work.

POLITICAL SCIENCE AND ECONOMICS

PROFESSOR CRECRAFT

Majors: Two majors are offered: one in Political Science, twenty-four hours; and one in Economics combined with Commerce and Administration, twelve hours each.

A. POLITICAL SCIENCE.

261. *American Government and Politics (1).*—(First Semester.) Three hours. This course gives a thoro knowledge of our national government and administration. It also includes a study of the political parties as they function in the Federal Government. Attention is paid to questions of constitutional law as they apply to the powers of the great branches of the government.

262. *American Government and Politics (2).*—(Second Semester.) Three hours. The second semester's work covers state and local government; popular control in state and local government; constitutional questions; city government; county government; practical problems of the government; functions and machinery of state and local government.

263. *The Governments of Europe.*—(First Semester.) Three hours. This is a comparative study of the principal governments of Europe. Students are advised to have completed the course in American Government before entering.

264. *The Government of Municipalities.*—(Second Semester.) Three hours. This includes practical problems of city government. It is intended to meet the demand for citizenship training courses as well as that of training for public service. Among the items included are municipal functions, government accounting, budget analysis, etc.

B. ECONOMICS.

251. *The Principles of Economics (1).*—(First Semester.) Three hours. This is an introduction to the science of economics. It is intended to familiarize the student with the organization and functions of economic society. Topics of current interest are also included where needed for illustrative purposes.

252. *The Principles of Economics (2).*—(*Second Semester.*) Three hours. This a continuation of Economics (1). Attention is given in this semester to the principles of distribution; money and banking; international trade; transportation; social reform; socialism.

*253. *Trust and Corporation Problems.* (*First Semester.*)

Three hours. This course takes up the organization of corporations and traces the main causes for their development and growth. It also includes the problems, economic, social, and legal, which have arisen thru the formation of trusts.

*254. *Labor Problems.*—(*Second Semester.*) Three hours.

This course includes a brief history of the great labor movements; also the problems of an economical, social, and governmental character which have arisen in this connection.

COMMERCE AND ADMINISTRATION

PROFESSOR MCDERMOTT

Major: Commerce and Administration may be combined with Economics for a major; twelve hours of each.

These courses of study, designed to assist in the preparation of young men and women planning to enter the field of business, are being introduced into most of the colleges of the United States. The courses scheduled are practical courses, somewhat general in scope, and will aid students in all professions. Business and economic courses may be combined for a major, twelve hours in each department.

265. *Salesmanship.*—(*First Semester.*) Three hours.

Introduction to the art of selling; wholesale and retail salesmanship; promotion and creation of the selling spirit; knowledge as an asset in selling; the psychology of selling; the special problems of the retail salesman.

266. *Economic Development of the United States.*—(*Second Semester.*) Three hours.

Development of colonial industries; early trade restrictions; availability of the resources of the United States and their development; effect of free trade and tariff on industries; our modern industries and their development.

267. *Business Finance*.—(*First Semester*.) Three hours.

Relation of finance to business administration; history and origin of financial transactions; introduction to banking practices; work of the banker; stocks and bonds; budgets and financial reports; financial standards.

269.* *Business Law*.—(*First Semester*.) Three hours.

Regular course in commercial law; a study of contracts, bills, and notes, bailments, agency, partnership, personal and real property, insurance, etc.

268. *Markets and Marketing*.—(*Second Semester*.) Three hours.

The manufacturer's and farmer's problem of marketing products; ancient markets; early trade routes; fairs; location of marketing centers in the United States. Advertising and sales systems; middlemen's relation to traffic problem of the country.

270.* *Business Administration*.—(*Second Semester*.) Three hours.

Origin and history of industrial and mercantile establishments; principles of organization; distribution of functions and the control of business; scientific management; new plans for bettering the labor situation.

HISTORY

PROFESSOR THOMPSON

Major: Twenty-four hours elected above freshman year constitute a major in History.

271. *Elementary History of Europe*.—(*First Semester*.)

Three hours. A prerequisite with 272 to all other courses in history when only one unit of history is offered for entrance to college.

272. *Continuation of 271*.—(*Second Semester*.)

273. *History of England to the Seventeenth Century*.—(*First Semester*.) Three hours.

The formation of the English race and civilization, the growth of a national government, economic and social conditions, influence of the church. Frequent readings from original sources, and from authorities other than the prescribed text-book.

274. *History of the British Empire from the Seventeenth Century to the Present Time.*—(Second Semester.) Continuation of 273.

Emphasis will be laid on the history of the various colonies, and the present problems of the British Empire.

275. *History of Europe. The Development of Europe from 1789 to 1870.*—(First Semester.) Three hours.

276. *History of Europe from 1870 to the Present Time.*—(Second Semester.) Continuation of 275.

277. *American History, 1789-1850.*—(First Semester.) Three hours.

278. *American History from 1850 to the Present Time.*—(Second Semester.) Continuation of 277.

290. *Current Events. (For Freshmen only.)*—(Second Semester.) One hour.

287. *History of Art.*—(First Semester.) Two hours.

288. *Continuation of 287.*—(Second Semester.)

In courses 273-4, 275-6, and 277-8, students will not be allowed to enter at the middle of the year, and credit will not be given for less than the full year's work.

MATHEMATICS—PURE AND APPLIED

PROFESSOR JONES

ASSISTANT-PROFESSOR MORRIS

ASSISTANT-PROFESSOR OLIN

ASSISTANT-PROFESSOR EGBERT

Major: Trigonometry, four hours; Algebra, four hours; Analytic Geometry, three hours; Calculus, ten hours; Analytical Mechanics, three hours; Elective, eight hours. Total, thirty-two hours.

301. *Trigonometry.*—(First Semester.) Four hours.

Functions of angles, trigonometric equations, identities, solutions of triangles, inverse functions, and de Moivre's Theorem.

302. *Algebra.*—(*Second Semester.*) Four hours.
Surds, quadratic equations, systems of quadratics, variation and proportion, logarithms, progressions, permutations and combinations, binomial theorem, theory of equations.
303. *Analytic Geometry.*—(*First Semester.*) Three hours.
Straight line, circle, conic sections, loci, general equation of second degree, polar co-ordinates and equations, transformation of co-ordinates, plane and straight line in space, and surfaces of second order.
Prerequisite: Math. 301.
304. *Calculus.*—(*Second Semester.*) Five hours.
Differentiation, maxima and minima, rates, curve tracing, integration, areas, volumes, surfaces, liquid pressure. Prerequisites: 301 and 303.
305. *Calculus.*—(*First Semester.*) Five hours.
Continuation of 305. Special methods of integration, partial differentiation, multiple integrals, curvature, Taylor's theorem, series, moments of inertia, centers of gravity, ordinary differential equations.
Prerequisites: 301, 303, 305.
- *308. *Analytical Mechanics.*—(*Second Semester.*) Three hours.
Velocity, acceleration in rectilinear and curvilinear motion, translation and rotation, laws of motion, constrained motion, moments of inertia, pendula.
Prerequisite: Calculus.

Courses will be offered from time to time from the following group, as need arises:

- 307. Differential Equations.
- 309. Mathematics of Investment.
- 310. Higher Algebra.
- 311. History of Mathematics.
- 312. Modern Algebra and Geometry.
- 313. Differential Geometry.

316. *Elementary Surveying.*—(Second Semester.) Three hours' credit.

Three recitations a week during the early part of the semester. Later, when the weather is good, the time is given to field work, nine hours a week including time for writing reports of work done. Required of scientific students with major in Mathematics. Elective for all others except freshmen. Prerequisite: Plane Trigonometry.

The work of the course covers the general principles of leveling and transit surveying, and the making of one map.

- *320. *Descriptive Astronomy.*—(Second Semester.) Three hours.

Elective for those who have completed Mathematics 301 and 302. Text: Young's Manual of Astronomy.

Celestial sphere, astronomical instruments, elementary celestial mechanics; solar system, fixed stars, double stars, nebulae, constellations.

Instruments in the observatory are used to illustrate the subject.

PHYSICS

PROFESSOR HOUSEHOLDER

Major: Students in the scientific course may major in Physics by taking the introductory course in the sophomore year and completing a minimum of twenty-seven term hours in the subject. The following courses are required:

331. *General Physics.*—(First Semester.) Five term hours.

An introductory course covering the topics of mechanics, wave motion, sound, and heat. Three recitations and two laboratory periods per week.

332. *General Physics.*—(Second Semester.) Five term hours.

Continuation of 331, covering magnetism, electricity and light.

333. *Heat and Elementary Thermodynamics.*—(First Semester.) Five term hours.

A study of the mechanical theory of heat and its applications in heating, ventilation and refrigeration systems, and power generation. Three recitations and two laboratory periods per week.

Prerequisites: 331 and 332.

334. *Electricity and Magnetism.*—(Second Semester.)

Five term hours.

A more thoro and extended course in magnetism and electricity than is possible in 332. Explanations and discussions based on the electron theory. Laboratory work concerned chiefly with theory and use of electrical measuring instruments.

Three recitations and two laboratory periods per week. Prerequisites: 331 and 332.

335. *Light.* Five term hours.

A study of the more fundamental theories of light and their application to the chief optical instruments. The measurement of light intensities of light sources, and discussion of lighting systems.

Three recitations and two laboratory periods per week. Prerequisites: 331 and 332.

336. *Thesis Course.* Two to four term hours.

An individual problem course. Last semester of senior year. Hours to be arranged.

Advanced work in the following courses will be offered as soon as conditions require it:

337. Illumination.

338. Illumination: Laboratory.

339. Electron Theory and Its Application.

340. Kinetic Theory of Matter.

341. Applied Optics.

CHEMISTRY

PROFESSOR SIMMONS

ASSISTANT-PROFESSOR SCHMIDT

MISS SCHOTT

FELLOWS { MR. WILLIAMS
MR. HARDMAN

Major: Forty hours of Chemistry. These courses must be included: 351, 352, 359, 360, 357, 358, 367, 368, 371, 372.

351. *A Study of General Inorganic Chemistry.*—(First Semester.)

Four recitations and three laboratory periods. (Seven term hours.)

352. *Qualitative Analysis.*—(Second Semester.)
Four recitations and three laboratory periods.
(Seven term hours.)
353. *General Inorganic Chemistry.*—(First Semester.)
Two recitations and two laboratory periods. (Four
term hours.)
354. *Continuation of 353.*—(Second Semester.)
(Four term hours.)
359. *Quantitative Analysis.*—(First Semester of sopho-
more year.)
One recitation and three laboratory periods. Four
term hours.)
360. *Quantitative Analysis.*—(Second Semester of sopho-
more year.)
Continuation of 359. (Four term hours.)
- *357. *Organic Chemistry.*—(First Semester of junior
year.)
Two recitations and one laboratory period. (Three
term hours.)
- *358. *Organic Chemistry.*—(Second Semester of junior
year.)
Continuation of 357. (Three term hours.)
- *369. *Advanced Analytical Chemistry.*—(First Semester.)
Two laboratory periods. (Two term hours.)
- *370. *Advanced Analytical Chemistry.*—(Second Se-
mester.)
Continuation of 369. (Two term hours.)
- *363. *Chemistry of India Rubber.*—(First Semester.)
One recitation and two laboratory periods. (Three
term hours.)
- *364. *Chemistry of India Rubber.*—(Second Semester.)
(Three term hours.)
- *367. *Organic Chemistry.*—(First Semester of senior
year.)
Two recitations and one laboratory period. (Three
term hours.)
- *368. *Organic Chemistry.*—(Second Semester of senior
year.)
Continuation of 367. (Three term hours.)

- *371. *Physical Chemistry*.—(First Semester of senior year.)
Two recitations, one laboratory period. (Three term hours.)
- *372. *Physical Chemistry*.—(Second Semester of senior year.)
Continuation of 371. (Three term hours.)

Chemical Course

FRESHMAN YEAR

	Term Hrs. each Semester
Gen. Chem. 351 and 352.....	7
Math.....	4
Mod. Lang.....	4
Physical Tr.....	2

SOPHOMORE YEAR

	Term Hrs. each Semester
Quan. Anal.....	4
Biol.....	4
Math.....	4
Mod. Lang.....	3
Physical Tr.....	2
English.....	3

JUNIOR YEAR

Org. Chem.....	3
Physics.....	5
Electives.....	

SENIOR YEAR

Organic Chemistry.....	3
Physical Chemistry.....	3
Electives.....	

BIOLOGY

PROFESSOR PLOWMAN

MRS. BURTON

Major: Thirty-two semester hours. The following courses must be included:—401, 402, 403, 404, 405, 407 or 409, 408 or 410, 416, 419 and 420.

Minor requirements are stated on page 42.

Students who wish to major in this department must carry Biology 401-402 as the first-year science. Pre-medical students will be obliged to take both Biology 401-402 and Chemistry 353-354 in the first year.

401. *General Biology*.—(First Semester.) Four hours.

Two lectures and two laboratory sessions per week.

A study of parallel groups of the more primitive plants and animals, seeking to familiarize the student with the fundamental laws and processes of living things, and to emphasize the essential unity of the whole realm of life.

402. *General Biology.*—(Second Semester.) Four hours.
Continuation of course 401.

Note:—No credit will be allowed for less than the entire year in General Biology.

Courses 401 and 402 are required as prerequisites for all other courses in this department, except 413 and 415.

403. *Vertebrate Zoology.*—(First Semester.) Four hours.
Two or three recitations and four to six hours of laboratory work per week. Required of pre-medical students.

Comparative studies of structures, life-histories, and fundamental life processes of a few types of vertebrate animals.

404. *Vertebrate Embryology.*—(Second Semester.) Four hours. Two or three recitations and four to six hours laboratory work per week. Required of pre-medical students.

Comparative studies of early developmental stages in vertebrate animals.

405. *Vascular Plants.*—(First Semester.) Four hours. Two or three recitations and three to five hours laboratory work per week. 1920-1921, and alternate years.

A study of the structure, physiology, and economic importance of selected types of vascular plants, particularly such as supply fibers, foods, drugs, and timber.

406. *Organic Evolution.*—(Second Semester.) Four hours. Three recitations, with laboratory work and reference reading.

A survey of the history and applications of the doctrine of organic evolution, including some discussion of heredity and eugenics. 1920-1921 and alternate years.

407. *Human Physiology.*—(First Semester.) Four hours. Three recitations and three hours of laboratory work per week. Men's course. 1920-1921 and alternate years.

A detailed study of the human mechanism and its functioning. A fair knowledge of physics and chemistry will be found highly essential in the work of this course. Open to college men only.

408. *Human Physiology.*—(Second Semester.)
Continuation of 407. Men's course.
409. *Human Physiology.*—(First Semester.) Four hours.
Three recitations and three hours of laboratory work per week. Women's course. 1919-1920 and alternate years. Required in Curtis School.
Similar to 407, but especially adapted to the needs of college women.
410. *Human Physiology.*—(Second Semester.)
Continuation of 409. Women's course.
411. *Histology.*—(First Semester.) Two hours.
A study of the minute structure of animals and plants. General laboratory technique, and methods of preparation of materials for study.
412. *Histology.*—(Second Semester.) Two hours.
Continuation of 411.
413. *Hygiene for Men.*—(First Semester.) One hour.
Required of all sophomore men.
415. *Hygiene for Women.*—(First Semester.) One hour.
Required of all first-year women.
416. *Hygiene for Women.*—(Second Semester.) One hour. Required of all first-year women. Continuation of 415.
417. *Physical Fitness.*—(First Semester.) Two hours.
Women's course.
An advanced course in hygiene and the physiology of exercise. One recitation and two hours of demonstration-laboratory work per week. Prerequisites: General Biology and Hygiene 415-416.
418. *Conservation.*—(Second Semester.) Two hours.
Recitations and lectures.
419. *Bacteriology and Sanitation.*—(First Semester.)
Three hours. Two lectures and about four hours of laboratory work per week.
A study of the history and growth of bacteriology, the relations of bacteria to man, laboratory technique, and the principles of sanitary science.
Required of all students in Curtis School of Home Economics.
420. *Bacteriology and Sanitation.*—(Second Semester.)
Three hours. Continuation of 419.

PHYSICAL EDUCATION

MR. SEFTON, DIRECTOR

Aims: Physical education is conducted under the direct supervision of an experienced physical director, who is a member of the college faculty.

The aims of the department are to develop organic power, the basis of vitality, the prerequisite to physical and mental efficiency; to secure and maintain good posture, a harmonious muscular development, and a certain degree of bodily skill and grace.

A thoro physical examination is given, and measurements taken of all students on entering and also on leaving the University. Physical defects, abnormalities, and weaknesses are noted, and judicious, healthful exercise is prescribed to fit the student's individual needs; this may include athletic sports or remedial gymnastics.

College students of the three upper classes desiring to specialize as coaches or instructors in certain sports, games, or events, may do so by conferring with the physical director.

All sophomores are required to take the course in Hygiene given by Dr. Plowman the first semester, one hour a week.

Equipment: The gymnasium is one hundred feet in length and fifty feet in width. On the ground floor are locker rooms and bath rooms. Above is the practice floor where exercises are conducted. Directly over the practice floor is the running track. The main floor of the gymnasium (80 feet by 50 feet) is well equipped with modern gymnastic apparatus.

A four-acre athletic field is provided for the use of the men students, and all intercollegiate and other games and meets are held there. The field is equipped with a grandstand, dressing rooms, cinder running track, baseball diamond, and football field with bleachers to accommodate 4000 spectators.

Control: The intercollegiate sports are under the government of the Ohio Athletic Conference, the faculty committee, appointed by the President, and a Board of Control, consisting of members from the faculty and representatives of the student body elected by the students.

A limited number of intercollegiate games is scheduled subject to the approval of the faculty.

Awards: The Athletic Association is honored by the gift of the Medal presented by Mr. Frank Talbot Fisher, of New York, and also by his very generous donation of prizes for the Track Meet. They consist of two cups of the value of \$50 each and a Medal, and are given under the following conditions:

The Individual Cup is to be awarded to the athlete making the greatest number of points in the Track Meet, and must be won by him three years in succession in order to become his permanent property.

The Class Cup is the permanent property of the Athletic Association and is to be competed for by classes each year. An honorary position upon the cup is awarded the name of the class scoring the greatest number of points in each annual Track Meet.

The medal is to be given to the athlete scoring the greatest number of points, and at once becomes his personal possession. One such Medal is to be offered for each annual Track Meet.

Requirements: Freshmen and sophomores are required to take Physical Training.

Students must register for Physical Training on entering the University and must take the full required work.

Courses: Classes are held twice a week throughout the year on Tuesday and Thursday from 10:30 A. M. till 12:30 P. M.

Outdoor exercises and games are given during the Fall and Spring terms at Buchtel Field. The Winter term is given up to boxing, wrestling, basketball, apparatus work, wand, dumb-bell and swinging club drills. In addition a lecture and recitation class is held on the history of Physical Education, the benefits derived from gymnastics and the theory of baseball, football, basketball and track.

These exercises are designed to bring about the erect carriage of the body, the development and strengthening of the muscular, circulatory and respiratory systems, and the maintenance of general good health and bodily vigor.

RESERVE OFFICERS' TRAINING CORPS

CAPTAIN GLEN H. ANDERSON

FIRST SERGEANT ROY C. OLSEN

Combined Military and Physical Training Course

Early in 1919 the United States Government established at the University of Akron a unit of the Reserve Officers' Training Corps. Regular army officers are in charge. The work is divided into two parts: the basic course of the first two years, compulsory for all freshman and sophomore men who are physically fit; and the advanced course of the last two years, elective for the men who have finished the basic course satisfactorily.

The Basic Course.

All freshman men not physically disqualified must take this course, unless they have been in the federal service more than one year. The work is given three hours per week for the first two years (three years for Engineers). In addition, they are required to take two hours' physical training each week under the supervision of the physical director.

During this course no compensation is paid the student by the War Department, but uniform and equipment are issued for his use. Each student is held responsible for loss or damage to government property issued to him. After the student has worn his uniform a full academic year, it is turned in to the department of military science and tactics, and he is given a new uniform to replace the one turned in.

The work of the basic course consists chiefly of training in close and extended order drill, familiarity with arms and their proper care, familiarity with the organization of the Army, military courtesy, map problems, small problems for infantry, first aid, personal hygiene, camp sanitation, gallery practice, range practice, ceremonies, inspections, and reviews.

The Advanced Course.

This course consists of five hours per week during the junior and senior years. It is open to all students who have satisfactorily completed the basic course, provided they have been elected by the President of the University and the Professor of Military Science and Tactics. During this

course the Government not only furnishes uniform and equipment, but also allows commutation of subsistence, which varies from time to time, at present being \$16.50 per month. Attendance at one summer camp of not more than six weeks' duration is required. On the satisfactory completion of the advanced course, the student is commissioned in the Reserve Officers' Training Corps as a Second Lieutenant. Promotions are made as in the Regular Army.

During the first year the advanced course consists chiefly of: camp sanitation, minor tactics, map problems, map reading, elements of common law, use of automatic rifle and special weapons of the infantry, acting as instructors and coaches, military policy of the United States, field engineering, bridge construction, demolitions and explosives, the telephone and telegraph, foreign maps, field orders, lamp signalling, ground wireless telegraphy. During the second year the work includes: company officers, musketry, military correspondence, rules of land warfare, reports, hippology, transportation of animals, company administration, courts martial, fire control, conduct of officers, handling of government property, international law, management of the American soldier, military history of the United States, map problems, combat and minor tactics, guard duty, fire discipline, road sketches; the battles of St. Mihiel, the Meuse, and the Argonne; messages and topography.

It has been the policy to give only a limited amount of close order drill; to take up in an interesting and instructive manner the real duties of an officer and the things that he should know. As the work progresses it grows more and more interesting and instructive. The students attending the University are indeed fortunate to have such a wide and advanced course open to them. It is the duty of every real American to know and cultivate the relation that exists between the civilian and the armed forces of the United States. No better opportunity exists for the education and training of the educated men in our country, either for those who will later serve as officers in times of peril, or for those who will serve as legislators.

COLLEGE OF ENGINEERING

FRED E. AYER., C. E., DEAN

GENERAL INFORMATION

The Directors of the Municipal University of Akron, established the College of Engineering in 1914 and adopted the five-year co-operative course, patterned after the "Cincinnati Plan."

The "Cincinnati Plan" aims to give the student a thorough training in both the theory and practice of engineering by requiring the practice to be learned under actual commercial conditions in local industrial organizations and the underlying science to be studied in the University under trained educators. To accomplish this the students are grouped in two sections, one of which is at work and the other in attendance at the University. For example, A, who is in section one, attends classes at the University for two weeks while B, who is paired with A and who is in section two, is at work. Then they change places and B attends the University for two weeks while A is at work. Of course this necessitates the giving of all University work twice, once for each section.

Five years of eleven months each are required to complete the course, each student being allowed a vacation of one week at Christmas time, one week at Easter or during commencement week, and two weeks in the latter part of the summer.

Candidates for admission are expected to spend the summer preceding their entrance at continuous work on a job provided by the University. This probationary period affords the student an opportunity to test his fitness and liking for the course and demonstrates his ability to satisfy his employer. Candidates who have definitely decided to take the course and who can present satisfactory evidence of their ability to do the outside work, may be excused during the first summer's probationary period. But, in order to provide a job for each entering student, it is

necessary that applications be received prior to July first. Students applying after that date will not be accepted unless there are vacancies due to resignations.

While a student is at work, he is subject to all the rules and regulations imposed by his employer upon the other employees. All existing labor laws and conditions, including those pertaining to liability for accident, apply to the student in the same way as to any other employee.

In order to operate a co-operative course in engineering, the Engineering College must be located in or near an industrial center and while there are over six hundred colleges and universities in the United States, yet comparatively few of them are so located that such a course is practicable. Akron is essentially a manufacturing center, and the President and Directors of the Municipal University of Akron selected this type of engineering education as being the latest and the one best adapted to the city's needs, therefore no other courses in engineering will be offered.

SEQUENCE OF COURSES

The profession of engineering can be divided into two parts, art and science. Engineering art includes that part of the work which requires manual as well as mental training and is taught by means of practice work in commercial industries, in drawing, surveying and different engineering laboratory courses. Engineering science includes all theory underlying good engineering practice, a few examples of which are mathematics, chemistry, physics, strength of materials and applied mechanics.

The curriculum is so arranged that the engineering student starts his college work with training in engineering art and progresses to the study of engineering science. He is thus enabled to approach his theoretical subjects with a proper realization of their importance and applications.

MANUFACTURING PRODUCTION

Three of the large rubber companies of this city have united in establishing at the Municipal University about 30 industrial scholarships for the purpose of training men by the co-operative plan in Manufacturing Production. The company will pay the University tuition and fees of the student, and employ him during his alternate two weeks

periods in the production departments of the factory, the work being carefully arranged so that he will spend some time in every department of the plant. His pay will be at the rate of \$75 per month for actual time worked and the length of the course will be four years of eleven months each. A student accepted for a scholarship will be selected by the Dean of the College of Engineering, and the selection must be approved by the firm granting the scholarship. The object of the companies in offering this inducement is to attract a few of the most desirable high school graduates each year, and train these men in the practical work of their own organization while the University is giving them a broad college training. Akron students who meet the requirements of these scholarships will be given preference over non-residents. The University course includes the essentials in Engineering and Business Training, together with the usual liberal arts subjects required in these courses. Applicants for Manufacturing Production scholarships should weigh at least 140, and preferably, 150 lbs.

There are no scholarships in the Engineering Courses.

The firms providing these scholarships are:

The Firestone Tire & Rubber Co.

The Goodyear Tire & Rubber Co.

The B. F. Goodrich Co.

SHOP WORK

The Dean of the College of Engineering and the employer so plan the work that the student gets a carefully graded training beginning with work requiring no skill or experience and ending with actual engineering work.

The shop work and the University work are co-ordinated by technically trained men experienced in engineering practice. Thruout the five years of University work they will give courses whose aim is twofold. First, they supplement the outside training by explaining the different operations, the sequence of work, the technicalities of the machines, and, in short, any part of the work which the student does not understand, and which the foreman has not time to explain. This shows the student the vast educational opportunities open to him in his outside work and makes him more useful to his employer. Secondly, these courses cover

the field of factory organization and cost accounting, routing of work for efficient production, study of the conditions leading to maximum production, and the influence of shop environment. The instruction given in all the courses is carefully planned to develop in each student the power of observation and the ability to analyze the problems arising in his work.

The outside work, properly co-ordinated with the University training, furnishes a large part of the technical detail required in engineering subjects.

Wages

Engineering students are paid for their work in the shops the same as other employees. Beginners are paid a little more than apprentices and are increased according to a rate agreed upon by the employer and the Dean of the Engineering College. Manufacturing production students are paid at the rate of \$75.00 per month and the minimum wage being received by engineering students during 1919-20 is 30c per hour. Students are paid only for the time actually employed, and receive their wages direct, as does any other employee.

ADMISSION

Candidates for admission must be at least sixteen years of age, and must present fifteen units of secondary school work. Students will be admitted with entrance conditions amounting to not more than one unit. Such conditions must be removed during the freshman year.

HONORABLE DISMISSAL

Engineering students desiring to transfer to another institution or to the College of Liberal Arts of the University of Akron, are required to present a letter of honorable dismissal from the Dean of the College of Engineering. To be entitled to such a letter, the student must notify the Dean's office and also his employer of his intention to leave at least one week before he withdraws.

ENTRANCE REQUIREMENTS

The following units must be presented without conditions:

*English	3	units
Mathematics	2½	units (½ unit of Solid Geometry required)
History	1	unit
Chemistry or Physics....	1	unit
Elective	7½	units

For further details relative to entrance requirements, see page 23 of the General Catalog.

COURSES OF STUDY

The courses of study given in the Engineering College are of the same grade as those required in any recognized technical institution. The student is required to maintain good standing in both his outside and University work, and the work in both places is so planned that he will be equipped at graduation to enter practice at once without further preliminary training by his employer.

DEGREES

The degrees of Civil Engineer, Mechanical Engineer, Electrical Engineer and Bachelor of Science in Manufacturing Production will be given to those students who satisfactorily complete the required work in those departments. In addition to his diploma, each student will receive a certificate showing his practical experience in detail.

FEES

Resident Students:—According to the rules adopted by the Board of Directors, all students who are residents of the City of Akron, or whose parents are residents of Akron, are entitled to free tuition at the University. They are, however, required to pay an incidental fee of \$10.00 per semester, covering registration, incidentals and student activity fee. If not paid within one week after registration, the fee is \$12.50 per semester. Small fees to cover breakage and materials are also charged to all students in laboratory courses.

*Graduates of the Commercial Course in Akron High Schools are admitted to the Manufacturing Production course without condition in English.

Non-resident Students:—The tuition for non-resident students is \$40.00 for the first semester, \$40.00 for the second semester and \$20.00 for the summer term in addition to the incidental fee of \$10.00 per semester. Small fees to cover breakage and materials are charged to all students in laboratory courses. If not paid within one week after registration the tuition fee is \$45.00 for the first and second semesters and the incidental fee is \$12.50 and the tuition for the summer term is \$22.50.

There are two registration days for students in the College of Engineering, one for each section. For example, students in section one will register on September 13, 1920, and those in section two on September 27, 1920. Students registering after these dates are charged an additional fee of one dollar for the first day and twenty-five cents per day for each succeeding day thereafter, but no one will be accepted later than five days after the date set for registration.

Laboratory Fees

The following laboratory fees are charged for courses in the College of Engineering. By action of the Directors these laboratory fees are collectable strictly in advance and are a necessary prerequisite to enrollment in classes.

Deposit for breakage in all courses, per semester . . .	\$5.00
Chemistry 741, 742, per semester	3.00
Surveying 830, 831, per semester	2.00
Materials, Laboratory, per semester	2.00
Cement Laboratory, per semester	2.00
Mechanical Laboratory, per semester	2.00
Electrical Laboratory, per semester	2.00

The unused portion of the breakage deposit will be returned at the end of each semester.

ESTIMATED EXPENSE OF FRESHMAN YEAR

First Semester

	Resident	Non-Resident
Tuition	Free	\$40.00
Fees	\$19.00	19.00
Books and Drawing Instruments	40.00	40.00
	\$59.00	\$99.00

Second Semester

	Resident	Non-Resident
Tuition	Free	\$40.00
Fees	\$17.00	17.00
Books	8.00	8.00
	\$25.00	\$65.00

Summer Term

Tuition	Free	\$20.00
Fees	\$2.00	2.00
Books	5.00	5.00
	\$7.00	\$27.00

Board and room can be obtained for \$10.00 per week.

OUTLINE OF COURSES

CIVIL ENGINEERING

1920-1921

FRESHMAN YEAR

First Semester	Exercises per alternate period	Second Semester	Exercises per alternate period
Military and Physical Training	2	Military and Physical Training	2
Trigonometry 727	6	Algebra 725	6
Surveying 809	5	Surveying 810	5
Mechanical Drawing 811	4	Elementary Mechanics 782	4
Cement Testing 861	4	Machine Drawing 822	2
Co-ordination 801	1	Co-ordination 802	1

Summer Term

Analytic Geometry 728	6
Railroads 853	16

SOPHOMORE YEAR

First Semester	Exercises per alternate period	Second Semester	Exercises per alternate period
Military and Physical Training	2	Military and Physical Training	2
Analytic Geometry 729	6	Calculus 732	6
Strength of Materials 841	6	Steam Engineering 848	6
Materials Laboratory 817	4	Engineering Lab. 808	4
Graphic Statics 821	4	Descriptive Geometry 812	4
Co-ordination 803	2	Co-ordination 804	2

Summer Term

Calculus 733	6
Biology 771	16

PRE-JUNIOR YEAR

First Semester	Exercises per alternate period	Second Semester	Exercises per alternate period
Military and Physical		Military and Physical	
Training	2	Training	2
Calculus 731	6	Analytic Mechanics 842... 6	
English Composition 701..... 4		English Composition 702... 4	
Roofs and Bridges 851..... 6		Structural Design 874..... 6	
Modern Language	6	Modern Language	6

Summer Term

Hydraulics 843	6
Reinforced Concrete 873	16

JUNIOR YEAR

First Semester	Exercises per alternate period	Second Semester	Exercises per alternate period
Chemistry and Lab. 741..... 8		Chemistry and Lab. 742... 8	
Hydraulics 849	2	Hydraulics 850	2
Modern Language	2	Modern Language	2
Economics 737	6	Economics 738	6
D. C. Electricity 867	6	A. C. Electricity 868..... 6	
D. C. Laboratory 869	2	A. C. Laboratory 870..... 2	

Summer Term

Water Supply 882	22
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SENIOR YEAR

First Semester	Exercises per alternate period	Second Semester	Exercises per alternate period
Physics 783	6	Physics 784	4
English Literature 711..... 2		English Literature 712.... 2	
Modern Language	2	Modern Language	2
Geology 774	6	Bookkeeping 910	4
Sewerage 881	8	Business Organ. 916	4
Engineering Design 883	2	Metallurgy 744	6
		Engineering Design 884... 2	

MECHANICAL ENGINEERING

1920-1921

FRESHMAN YEAR

First Semester	Exercises per alternate period	Second Semester	Exercises per alternate period
Military and Physical		Military and Physical	
Training	2	Training	2
Surveying 809	6	Algebra 725	6
Trigonometry 727	6	Steam Engineering 848... 6	
Engineering Lab. 807	4	Elementary Mechanics 782 4	
Co-ordination 801	1	Machine Drawing 822	2
Mechanical Drawing 811..... 4		Co-ordination 802	1

Summer Term

Analytic Geometry 728	8
Machine Drawing 822	15

SOPHOMORE YEAR

First Semester	Exercises per alternate period	Second Semester	Exercises per alternate period
Military and Physical Training	2	Military and Physical Training	2
Analytic Geometry 729	6	Calculus 732	6
D. C. Electricity 867	6	A. C. Electricity 868	6
D. C. Laboratory 869	4	A. C. Laboratory 870	4
Co-ordination 803	2	Co-ordination 804	2
Graphic Statics 821	4	Descriptive Geometry 812	4

Summer Term

Calculus 733	6
Biology 771	16

PRE-JUNIOR YEAR

First Semester	Exercises per alternate period	Second Semester	Exercises per alternate period
Military and Physical Training	2	Military and Physical Training	2
Calculus 731	6	Analytic Mechanics 842	6
Strength of Materials 841	6	Modern Language	6
Materials Laboratory 817	4	Mechanism 844	6
Modern Language	6	Mechanism Drawing 846	4
Gas Engineering 889	4	Engineering Lab. 858	9

Summer Term

Machine Design 845	10
Machine Shop Tools 865	4
Engineering Laboratory 858	6

JUNIOR YEAR

First Semester	Exercises per alternate period	Second Semester	Exercises per alternate period
Chemistry and Lab. 741	8	Chemistry and Lab. 742	8
Economics 737	6	Economics 738	6
English Composition 701	4	English Composition 702	4
Modern Language	2	Modern Language	2
Machine Design 877	4	Metallurgy 744	6

Summer Term

Hydraulics 843	6
Thermodynamics 872	6
Engineering Laboratory 859	6

SENIOR YEAR

First Semester	Exercises per alternate period	Second Semester	Exercises per alternate period
Physics 783	6	Physics 784	6
Modern Language	2	Modern Language	2
English Literature 711	2	Business Organ. 916	8
Production Engineering 885	3	English Literature 712	2
Thermodynamics 871	5	Hydraulics 850	2
Power Plant Design 875	4	Thesis	6
Hydraulics 849	2		

ELECTRICAL ENGINEERING

1920-1921

FRESHMAN YEAR

First Semester	Exercises per alternate period	Second Semester	Exercises per alternate period
Military and Physical Training	2	Military and Physical Training	2
Surveying 809	5	Algebra 725	6
Trigonometry 727	6	Mechanical Drawing 811 ..	4
Co-ordination 801	1	Co-ordination 802	1
D. C. Theory 867	6	A. C. Theory 868	6
D. C. Laboratory 869	4	A. C. Laboratory 870	4

Summer Term

Analytic Geometry 728	6
Machine Drawing 823	16

SOPHOMORE YEAR

First Semester	Exercises per alternate period	Second Semester	Exercises per alternate period
Military and Physical Training	2	Military and Physical Training	2
Analytic Geometry 729	6	Calculus 732	6
Graphic Statics 821	4	Descriptive Geometry 812 ..	4
Co-ordination 803	2	Co-ordination 804	2
Electrical Problems 891	6	Steam Engineering 848	6
Engineering Lab. 807	4	Elementary Mechanics 782 ..	6

Summer Term

Calculus 733	6
Biology 771	16

PRE-JUNIOR YEAR

First Semester	Exercises per alternate period	Second Semester	Exercises per alternate period
Military and Physical Training	2	Military and Physical Training	2
Calculus 731	6	Analytic Mechanics 842	6
English Composition 701	4	English Composition 702	4
Modern Language	6	Modern Language	6
Strength of Materials 841	6	Wiring for Light and Power 892	6
Materials Laboratory 817	4	Reading of Technical Literature 894	2

Summer Term

Hydraulics 843	6
Machine Shop Tools 865	4
Electrical Laboratory 893	6

JUNIOR YEAR

First Semester	Exercises per alternate period	Second Semester	Exercises per alternate period
Chemistry 741	8	Chemistry 742	8
Hydraulics 849	2	Metallurgy 744	6
Modern Language	2	Modern Language	2
Electric Power Transmis- sion 895	6	Economics 738	6
Economics 737	6	Electric Power Plants 896	2

Summer Term

Electric Power Plants including inspection trips 898	16
Thermodynamics 872	6

SENIOR YEAR

First Semester	Exercises per alternate period	Second Semester	Exercises per alternate period
Physics 783	6	Physics 784	6
English Literature 711	2	English Literature 712	2
Modern Language	2	Modern Language	2
Electric Railways 897	6	Business Organ. 916	4
Thermodynamics 871	5	Bookkeeping 910	4
Special Problems 899	4	Special Problems 900	6

MANUFACTURING PRODUCTION

1920-1921

FRESHMAN YEAR

First Semester	Exercises per alternate period	Second Semester	Exercises per alternate period
Military and Physical Training	2	Military and Physical Training	2
Trigonometry 737	6	Algebra 725	6
Surveying 809	5	Cost Accounting 912	5
Mechanical Drawing 811	4	Elementary Mechanics 782	6
Bookkeeping 911	4	Machine Drawing 822	2
Co-ordination 801	1	Co-ordination 802	1

Summer Term

Analytic Geometry 728	6
Accounting Problems 913	16

SOPHOMORE YEAR

First Semester	Exercises per alternate period	Second Semester	Exercises per alternate period
Military and Physical Training	2	Military and Physical Training	2
Analytic Geometry 729	6	Statistics 914	6
Economics 737	6	Economics 738	6
Modern Language	6	Modern Language	6
Co-ordination 803	2	Co-ordination 804	2

Summer Term

Biology 771	16
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JUNIOR YEAR

105

First Semester	Exercises per alternate period	Second Semester	Exercises per alternate period
Military and Physical Training	2	Military and Physical Training	2
Chemistry 741	8	Chemistry 742	8
Modern Language	2	Modern Language	2
English Composition 701.....	4	English Composition 702..	4
Materials Laboratory 817....	4	Engineering Lab. 808	4
Business Organization 915..	6	Commercial Law 920	6

Summer Term

Transportation Problems 917	22	26	52
			70

SENIOR YEAR

First Semester	Exercises per alternate period	Second Semester	Exercises per alternate period
Physics 783	6	Physics 784	6
Modern Language	2	Modern Language	2
D. C. Electricity 867	6	A. C. Electricity 868	6
D. C. Laboratory 869	2	A. C. Laboratory 870	2
Banking 919	6	Corporation Finance 918..	6
Thesis	4	Thesis	4

26 52
219

DEPARTMENTS OF INSTRUCTION

The general system of numbering and arrangement is according to the following order:

English	701-712
French	717-724
Mathematics	725-736
Economics and Political Science	737-740
Chemistry	741-770
Biology and Geology	771-779
Physics and Mechanics	780-790
German	790-800
Engineering Subjects	801-900
Manufacturing Production Subjects	901-999

ENGLISH

701. *English Composition.*

Study of correct and forceful thought arrangement in sentences, paragraphs, and long compositions. Strict insistence upon correctness in punctuation, spelling and grammar.

702. *English Composition.*

Continuation of Course 701 with study of exposition of technical subjects.

711-712. *Literature.*

The chief purpose of this course is to give the student such information and training as will enable him to know what good literature is and to read it with greater intelligence and keener delight. Much reading is required, and still more is recommended.

GERMAN

Two years of modern language are required of all engineering students. Those presenting two, three or four years of secondary school German for entrance may take German.

713. *German.*

A review of Grammar, Prose composition and reading of Scientific German.

714. Continuation of 713.

715. The reading of German Technical Journals, Engineering Texts and Transactions of German Engineering Societies.
716. Continuation of 715.
717. Continuation of 716.
718. Continuation of 717.

FRENCH

717.
Fraser and Squair's French Grammar. Francois and Giroud's Simple French Reader. Practice in pronunciation, dictation and composition.
718.
In addition to the reader begun in the first semester, the class will read Bowen's First Scientific French Reader.
719.
Reading of French technical books and journals.
720. Continuation of 719.
721. Continuation of 719.
722. Continuation of 719.

SPANISH

917.
Allen's Elementary Spanish Grammar and selected readers. As soon as practicable, the students will be given work of definite commercial value in translation and composition.
918. Continuation of 917.
919. Continuation of 918.
920. Continuation of 919.
921. Continuation of 920.
922. Continuation of 921.

MATHEMATICS

725. *College Algebra.*

This course aims to give a general review of advanced algebra. The work includes quadratics with graphical representations, variation, binomial theorem, logarithms, complex numbers and progressions.

727. *Plane Trigonometry.*

The work includes trigonometric equations, solution of plane triangles and inverse functions. Effort is made to acquaint the student with the means of testing the accuracy of his work and to develop habits of neat arrangement and rough checking in his computations. Numerous applications to practical problems are made.

728-729. *Plane Analytic Geometry.*

The work includes:—The straight-line and general equations of the first degree, polar co-ordinates, transformation of co-ordinates, conic sections and equations of the second degree, tangents, normals, loci, parametric equations, poles and polars, the general equation of the second degree, and a few higher plane curves.

732. *Differential Calculus.*

The work includes theory of limits, differentiations, series, expansion of functions, indeterminate forms, maxima and minima of functions of one or more variables, partial derivatives, curvatures, tangents and normals.

731. *Integral Calculus.*

The work includes integration of standard forms, integration of rational fractions, integration by various devices, summations and definite integral, application to surfaces and volumes of revolution.

733. *Integral Calculus.*

Continuation of 731.

ECONOMICS

737. *Economics.*

A consideration of the fundamental concepts of economics; definition of terms, theory of value, production, consumption, distribution, etc.

738. *Economics.*

A study of practical economic problems such as wages, interest, rent, currency, banking, taxation, trusts, tariff and socialism.

CHEMISTRY

741.

A study of the newer theories of chemistry with special attention to their application to commercial problems.

742. A continuation of 741.

During the last half of the semester each student is required to make, and test before the class, at least one salt of each metal.

This course is planned to develop originality in the student rather than cover a large field. He is thrown upon his own resources as much as possible and taught how to attack a problem.

744. *Metallurgy.*

The general metallurgy of common metals with special emphasis on iron and steel.

A review of the properties of metals and ores and the principles underlying the present practice of metallurgy.

BIOLOGY

771. *Hygiene and Sanitation.*

A four weeks' intensive course.

Two hours of lecture or recitation, three hours of laboratory work, and two hours of reference reading, daily.

A rapid survey of the fundamental laws and principles of biology, followed by a more detailed study of selected problems in nutrition, personal hygiene, first aid, sanitation and public health.

GEOLOGY

772. *Engineering Geology.*

A survey of the essential facts of historical, dynamic and structural geology, followed by a more detailed consideration of those earth features that are of particular interest from the engineering point of view. Economic geology is strongly emphasized throughout the course. Geological map-making and map-reading are prominent features of the laboratory and field work.

PHYSICS

782. *Elementary Mechanics.*

The force triangle including the resolution and composition of forces. Parallel forces, moments and beam reactions. Lectures, problems and laboratory work.

783. *General Physics.*

The work includes dynamics, work and energy, projectiles, mechanics of liquids and gases, the properties of matter and its internal forces, wave motion, general principles of sound and of heat with necessary laboratory work.

784. *General Physics.*

A continuation of 782 and 783.

Light, electricity and magnetism. Recitations, lectures and laboratory.

ENGINEERING

801. *Co-ordination.*

Discussion of question arising in students' outside work. Observation sheets, detailed reports and problems.

802, 803, 804, 805, 806. *Co-ordination.*

Continuation of 801.

807-808. *Engineering Laboratory.—(Elementary.)*

This course includes the maximum of practice in the operation and maintenance of mechanical and electrical equipment, including furnace and boiler plants, steam and gas engines, compressors, motors and generators. For practice in pipe fitting, and wiring, the students will make all necessary connections for steam, water, air, gas and electricity. Further laboratory instruction exemplifying the theory underlying the design of such equipment will be given in later years.

809. *Surveying.*

The theory and use of the transit and level. The surveying of areas and computations of the same. Maps and profiles.

810. *Surveying.*

A continuation of 809.

Tests and adjustments of instruments. Topographic Surveying.

811. *Mechanical Drawing.*

Standard details of structural shapes, bolts, nuts, screws, etc. Free hand lettering and sketching. Projections.

813. *Descriptive Geometry.*

Projections of lines, intersections of planes, projections of solids with practical applications. Free hand lettering and sketching.

812. *Descriptive Geometry.*

Continuation of 813.

817-818. *Materials Laboratory.*

Tensile, compressive, transverse and torsional tests of the common kinds of wood, iron and steel. Standard tests of paving brick, rubber and other materials.

821. *Graphic Statics.*

The graphical solution of elementary problems in mechanics, and dead and wind load stresses in typical trusses.

822. *Machine Drawing.*

Detail drawings from measurements of machines.

837. *Strength of Materials.*

Tensile, compressive and shearing stresses. Stress-strain diagrams.

841. *Strength of Materials.*

Theory and design of beams, columns and shafts.

842. *Analytic Mechanics.*

Kinematics, kinetics and dynamics with numerous problems.

843. *Hydraulics.*

Flotation, pressures on gates and dams. Theory of the flow of water thru orifices, tubes, pipes and channels. Hydraulic machinery.

849-850. *Hydraulics.*

A continuation of 843.

844. *Mechanism.*

A study of the various means of transmitting and modifying machine motions.

845. *Machine Design.*

Elementary problems in the design of gearing, shafting, bearings, flywheels, cylinders and other machine parts.

846. *Graphics of Mechanism.*

Graphic representation of common methods of transmitting and modifying motion by means of cams, links and toothed wheels.

848. *Steam Engineering.*

An elementary course.

Elements and economy of simple and complete steam plants. Laboratory exercises.

851. *Roofs and Bridges.*

Calculation of stresses in framed structures under static and moving loads by both graphic and analytic methods.

853. *Railroads.*

An intensive course in railroad construction and surveying given eight hours per day, five and one-half days per week. Includes field and office work in simple, compound and spiral curves.

858-859. *Engineering Laboratory.*

The standardization of instruments, the testing of boilers, steam and gas engines, and special tests.

861. *Cement.*

Theory and manufacture. Standard laboratory tests of cement, mortar and concrete. Experimental investigations.

865. *Machine Shop Tools.*

The theory and analysis of present accepted practices of cutting metal by lathe and planer tools, milling cutters, twist drills, and abrasive wheels. Advanced methods of machine production. Jigs, fixtures and attachments.

867. *Direct Current Theory.*

Principles of electricity and magnetism; electric and magnetic circuits; direct current generators and motors; storage batteries; industrial applications of direct current machinery.

869. *Direct Current Laboratory.*

This course includes the various practical tests on direct current machines and supplements the theoretical work given in 867.

868. *Alternating Current Theory.*

Alternating electromotive force and current; resistance, inductance and capacity in alternating current circuits, graphical and analytical treatment; theory of alternating current generators and motors; industrial applications of alternating current machinery.

870. *Alternating Current Laboratory.*

This course includes the various practical tests on alternating current machines and supplements the theoretical work given in 868.

871-872. *Thermodynamics.*

Thermodynamics of gases, saturated vapors and superheated steam. Application of thermodynamics to engines, compressors and refrigerating machinery.

873. *Reinforced Concrete.*

Recitation, laboratory and design, eight hours per day, five and one-half days per week.

874. *Structural Design.*

The design of a roof truss, plate girder and pin-connected truss, including the details of the important joints. Contracts, specifications, shop inspection trips.

875. *Power Plant Design.*

Problems connected with the design and layout of a complete steam power plant.

877. *Machine Design.*

Complete design of an assigned machine.

881. *Sewerage.*

Text: Folwell's Sewerage. Recitations and design.

882. *Water Supply.*

Text: Folwell's Water Supply. Recitations and design.

883-884. *Engineering Design.* Special problems.

885. *Production Engineering.*

A study of the principles underlying production management, including motion study and time setting, wage systems, time and stock systems, routing of work and factory lay-outs.

888. *Heating and Ventilation.*

Systems and equipment for heating and ventilating buildings and industrial plants. Exhaust systems.

889. *Gas Engineering.*

A study of designs of modern gas and oil engines. Power, efficiency and losses. Producer gas equipment.

891. *Electrical Problems.*

This course is devoted to the solution of special problems in direct and alternating current circuits and machinery under the direction of an instructor.

892. *Wiring for Light and Power.*

Methods of wiring, size of wires and installation to conform to underwriter's requirements.

893. *Electrical Laboratory.*

Continuation of Courses 869 and 870.

894. *Reading of Technical Literature.*

Reading and discussing electrical topics of timely interest.

895. *Electric Power Transmission.*

Systems of transmission and distribution, general requirements, mechanical design, poles, towers, insulators, conductors, erection, control and protection.

896. *Electric Power Plants.*

Location of central and substations; general arrangement of prime movers and auxiliary apparatus for steam-electric and hydro-electric plants; selection of generating units; switch gear, station wiring.

897. *Electric Railways.*

Forces acting on a train; speed-time curves; energy requirements; motor capacity; systems of control; direct versus alternating current; electricity versus steam.

898. *Electric Power Plants.*

Continuation of Course 896 including inspection trips to power plants in this vicinity.

899. *Special Problems.*

Solution of special problems in electrical engineering or Thesis.

900. *Special Problems.*

Continuation of Course 899.

MANUFACTURING PRODUCTION

910-911. *Bookkeeping and Accounting.*

The common principles underlying all systems of accounts. Practice in working out complete sets of transaction in books of account.

912. *Cost Accounting.*

Cost Accounting principles and methods. Practical problems from the factories employing the students.

913. Continuation of 912.

914. *Statistics.*

A study of averages. Criticism of data. Applications to practical problems in economics, sociology, census reports etc.

915-916. *Business Organization.*

Types of business and plant organizations. Organization plans and efficiency fundamentals.

917. *Transportation.*

An intensive course including recitations from text, supplementary reading, observations and reports.

918. *Corporation Finance.*

Methods of financing industrial organizations with special attention to corporations in the immediate vicinity.

919. *Banking.*

The origin and uses of money. Principles of banking from the standpoint of the user of banks.

920. *Commercial Law.*

The laws governing ordinary business transaction. Notes, mortgages, deeds, partnerships and corporations.

CURTIS SCHOOL OF HOME ECONOMICS

DIRECTOR, SARAH E. STIMMEL, B. S.

GENERAL INFORMATION

The Curtis School of Home Economics was established as a unit of the Municipal University in 1914. It occupies the building known as Curtis Cottage, made possible by gifts from the late William Pitt Curtis, of Wadsworth, Ohio, and from many citizens of Akron. Besides the necessary laboratories for work in Home Economics, the building has a cafeteria.

Admission

Candidates for unconditional admission must present at least 15 units of secondary school work. No student will be admitted with entrance conditions amounting to more than one unit. Such deficiency must be made up during the freshman year. For general entrance requirements to the University see page 23.

Entrance Requirements

English	3	units
Mathematics	2½	units
*Foreign Language	4	units
†Physics	1	unit
Elective	4½	units

*Two units at least must be of one language. Not less than a full unit in the beginning of any language will be accepted toward this requirement.

†A year of Physics at entrance or in the University is required for a degree.

Course of Study

The course in Home Economics requires four years of regular university work and is planned to meet the practical needs of women students. It combines a thoro training in those branches of science essential to intelligent home management with the broadest possible cultural education and forms a basis for those who wish to specialize in Home Economics or other lines of work. Especial attention will be given to providing training for those who may wish to become teachers of the subject. Besides the major in general home economics, a major in bacteriology may be chosen at the beginning of the junior year.

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OUTLINE OF REQUIRED STUDIES
FOR A MAJOR IN GENERAL HOME ECONOMICS

First Year

First Semester	Term hrs.	Second Semester	Term hrs.
Chemistry 353	4	Chemistry 354	4
English 51	3	English 52	3
*Modern Language	3 or 4	*Modern Language	3 or 4
Textiles 603	2	Textiles 604	2
Designing 601	1	Designing 602	1
General Course in Home Economics 629	1	General Course in Home Economics 630	1
14 or 15		14 or 15	

Second Year

Organic Chemistry 621.....	3	Organic Chemistry 622	3
Biology 401	4	Biology 402	4
Foods 605	4	Foods 606	4
*Modern Language	3	*Modern Language	3
English 65, 71 or 75	3	English 66, 72 or 76.....	3
17		17	

Physics 350, 5 hours in the first semester, and Public Speaking, 3 hours in the second semester, are required this year instead of Foods for those who did not present a unit of Physics as entrance credit.

Third Year

Household Chemistry 623....	3	Household Chemistry 624....	3
Economics 251	3	Economics 252	3
Bacteriology and Sanitation 419	3	Bacteriology and Sanitation 420	3
Art 607	1	Art 608	1
Dress 609	2	Dress 610	2
Mechanical Drawing 625.....	1	House Planning 626	1
†Physiology 409	4	†Physiology 410	4
17		17	

Fourth Year

Dietetics 613	4	Seminar 618	2
Sociology 213	3	Sociology 214	3
House 615	3	House 616	3
History 271	3	History 272	3
13		Table and Meal Service 632	2
13		13	

Students intending to teach should elect the following courses:
 Teachers' Course 619

Psychology

*Modern language must consist of two years in one language.
 †Offered 1919-1920 and alternate years.

Major in Bacteriology

For a major in bacteriology the course includes in addition to the strictly home economics courses, animal histology, pathogenic bacteriology, and laboratory work in the Public Health Department of the City.

Degrees

For the completion of the four-year course in Home Economics (128 term hours required for graduation) the degree of Bachelor of Science in Home Economics will be conferred. By means of a five-year combination course degrees may be gained from both the College of Liberal Arts and the School of Home Economics, but candidates for such combination course must announce their intention at the end of the junior year.

Fees

The regular incidental and student activity fee of \$10.00 per semester will be charged to all students. The tuition in this school is free to all residents of Akron. The tuition for non-residents of Akron is ~~\$10.00~~ per semester. A graduation fee of five dollars is charged all graduates. 65.

Laboratory Fees

Chemistry 353, 354, per semester	\$3.00
Chemistry, all other courses, per semester	4.00
Chemistry, deposit for breakage in all chemistry courses	5.00
The unused portion of this breakage deposit will be returned at the end of the semester.	
Biology 401, 402, 409, 410	\$2.50
Bacteriology, per semester	4.00
Bacteriology, deposit for breakage	5.00
Foods, per semester	7.50
Dietetics, per semester	7.50
Table and meal Service, per semester	6.00

NOTE.—Students provide their own materials in the following courses; Designing, Textiles, Mechanical Drawing and House Planning, Art, Dress, and Seminar.

SUBJECTS OF INSTRUCTION

All courses numbered over 600 are offered primarily only for students in the school of Home Economics and may be elected by students in the College of Liberal Arts only under the restrictions imposed by that College. For description of courses mentioned only by number, see pages 45-70 of general catalog.

HOME ECONOMICS

PROFESSOR STIMMEL

MISS STINSON

603. *Textiles.—(First Semester.)*

(Two term hours.) One lecture and one laboratory period.

Concurrent, Designing. A study of fibres and fabrics. Laboratory work includes the proper selection of materials, the making of suitable designs, the making of wearing apparel, the judging of cloth and the comparison of laboratory and commercially prepared garments.

604. *Textiles.—(Second Semester.)*

Continuation of 603 with chemistry of textiles.

605. *Foods.—(First Semester.)*

(Four term hours.) Two lectures and two laboratory periods.

Prerequisite, Chemistry 353-4. The selection and preparation of foods. Their ordinary occurrence; their nutritive values and their comparative costs. The laboratory work, the basis for certain methods of food preparation, is correlated with the lecture work.

606. *Foods.—(Second Semester.)*

Continuation of 605.

609. *Dress.—(First Semester.)*

(Two term hours.)

Prerequisite, Textiles 603-4; concurrent, Art 607. The making of a simple unlined wool dress. Drafting and modification of pattern; selection and combination of suitable materials. A study of dress from the historical, hygienic and economical standpoints.

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610. *Dress.*—(*Second Semester.*)
(Two term hours.)
Continuation of 609 with the making of a silk blouse and a silk dress.
613. *Dietetics.*—(*First Semester.*)
(Four term hours.) Two recitations and two laboratory periods.
Prerequisites, Foods, 605-6. Physiology 407-8, Household Chemistry 623-4. A study of the chemical, physical and physiological value of the nutrients. Dietary standards, infant and invalid cookery.
615. *The House.*—(*First Semester.*)
(Three term hours.)
Prerequisite, Art 607-8, Economics 251-2, Sociology 213-4, Home Economics 605-6, Home Economics 603-4, Home Economics 625-6. The care and management of the home in relation to its purpose and its arrangement and decoration from a practical and attractive standpoint. Laboratory work.
616. *The House.*—(*Second Semester.*)
A continuation of 615.
619. *Teachers' Course.*—(*First Semester.*)
(Three term hours.)
Methods of presenting foods and textiles. Planning courses of study and practice teaching. Prerequisites, senior standing in Home Economics.
620. *Teachers' Course.*—(*Second Semester.*)
Continuation of 619.
618. *Seminar.*—(*Second Semester.*)
(Two term hours.)
Open only to seniors.
625. *Mechanical Drawing.*—(*First Semester.*)
(One term hour.)
626. *House Planning.*—(*Second Semester.*)
(One term hour.)
Prerequisite, Mechanical Drawing 625.
601. *Designing.*—(*First Semester.*)
(One term hour.)
To develop a taste for harmony in color, line and space. Work done in pencil, pen, charcoal and water color.

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602. *Designing.*—(Second Semester.)

Continuation of 601.

607. *Art.*—(First Semester.)

(One term hour.)

Prerequisite, Designing. A continuation of Designing with advanced problems in color and line.

608. *Art.*—(Second Semester.)

(One term hour.)

Continuation of 607.

629. *General Course in Home Economics.*—(First Semester.)

(One term hour.)

The work will consist of lectures and demonstrations with some recitations.

630. *General Course in Home Economics.*—(Second Semester.)

(One term hour.)

A continuation of 629.

632. *Table and Meal Service.*—(Second Semester.)

(Two term hours.)

Setting of table. Table decorations. Planning, buying and serving of balanced meals. Computing cost of serving one person; the number in the class; and from these calculating the cost of serving fifty.

Prerequisites: Foods and Dietetics.

ENGLISH

Courses: 51, 52, 65, 66, 75, 76, 71, 72.

GERMAN

Students may enter any course offered for which they are prepared. Classes in Beginning German will not be offered for fewer than fifteen students.

FRENCH

Courses: 151, 152, 153, 154.

SPANISH

Courses: 171, 172, 173, 174.

ECONOMICS

Courses: 251, 252.

SOCIOLOGY

Courses: 213, 214.

HISTORY

Courses: 271, 272.

CHEMISTRY

Courses: 353, 354.

621. *Organic Chemistry.*—(First Half-Year.)

Five hours per week.

(Three term hours.)

The course is designed to give a thoro knowledge of the principal classes of organic compounds and their most important derivatives. The laboratory practice consists of the preparation of typical compounds.

Prerequisite. One year of general chemistry.

622. *Organic Chemistry.*—(Second Half-Year.)

Continuation of 621.

623. *Household Chemistry.*—(First Semester.)

Six hours per week.

(Three term hours.)

This course includes the chemistry of foods and testing for adulterations; also the chemistry of cooking and cleaning. This course is open to students who have completed Course 622.

624. *Household Chemistry.*—(Second Semester.)

Continuation of 623.

BIOLOGY

Courses: 401, 402, 409, 410, 419, 420.

PHYSICS

350. *General Physics.*—(First Semester.)

(Five term hours.)

A non-mathematical course in General Physics. Chief emphasis on heat, light, and electricity. Special topics—calorimetry, heating systems, ventilation, and lighting systems.

Four recitations and one laboratory period per week.

EVENING CLASSES

1919-1920

The University offers during the college year 1919-20 a number of courses for the especial benefit of teachers, employed persons, and citizens in general who may wish to enter the work. These courses are, as far as possible, of college grade. They are divided into two classes.

Class A. Study courses, for which college credit is given to those who successfully complete the requirements.

Class B. Non-study courses, where the instruction is mainly given by lecture work and for which no college credit is given.

ADMISSION

Class A courses are open:

1. To all persons who have completed the course of a first grade high school.
2. To all other persons over 21 years of age, subject to the approval of the instructor in charge as to ability and preparation. Those working for an eventual college degree must complete the regular college entrance requirements, before they can be considered candidates for a degree.

Class B courses are open to all persons who care to attend.

REGISTRATION

Registration will take place on the following days:

For the first Semester:

Saturday, September 13, 1919, 2:00 to 5:00 and 7:00 to 8:30 p. m. To all registering after September 16, a late-registration fee will be charged. (See statement under Fees.) **No registrations for entry to any class will be allowed after the second session of the class.**

For the second Semester:

Saturday, January 31, 1920, 2:00 to 5:00; and 7:00 to 8:30 p. m. To all registering after February 2 a late-registration fee will be charged. (See statement under Fees.) **No registrations for entry to any class will be allowed after the second session of the class.**

Class work for the first semester will begin Tuesday, September 16, 1919, and will close on January 29, 1920.

Class work for the second semester will begin Tuesday, February 3, 1920, and will close on June 10, 1920.

CREDIT

College credit will be given in Class A courses on the basis of one credit hour for the successful completion of a one hour per week course for one semester.

FEES (FOR 1920-21)

Incidental and Tuition Fees

	*Incidental Fee (to all)	*Tuition to non- residents
For 1 or 2 hours (weekly) per semester..	\$5.00	\$15.00
For 3 hours, per semester	8.00	20.00
For 4 hours, per semester	10.00	25.00
For 5 hours, per semester	12.00	30.00
For 6 hours, per semester	14.00	35.00

Late Registration Fee

All persons registering for work after the specified time of registration will be charged a fee of \$1.00.

No tuition or incidental fees are refunded. In case of absence on account of protracted sickness a proportionate credit may be given on a subsequent course.

All fees are payable at the college office before entering classes.

All inquiries should be addressed to Prof. H. E. Simmons, Chairman of Committee on Evening Courses.

The office of the Director of the Evening Courses is located in the Knight Chemical Laboratory and will be open each evening from 7:45-8:45.

*Only the incidental fee will be charged to residents of Akron, and to teachers in Summit Co. Non-residents will pay both incidental and tuition fees.

COURSES FOR 1919-1920

CLASS A COURSES

ROMANCE LANGUAGES

PROFESSOR BULGER

ASSISTANT-PROFESSOR REED

MR. TULLER

French

1801. *First Year French.*—(*First Semester.*)
Grammar, reading, simple conversation. Tuesday,
6:45-8:45.
(Two credit hours.)
1802. *First Year French.*—(*Second Semester.*)
This course is a continuation of the first semester's work
and will consist mainly of selected readings, dictation, memo-
rizing and conversation. Tuesday, 6:45-8:45.
(Two credit hours.)
1803. *Second Year French.*—(*First Semester.*)
Open only to those who have had First Year French here
or elsewhere. Grammar and composition work continued,
with reading of modern works. Thursday, 6:45-8:45.
(Two credit hours.)
1804. *Second Year French.*—(*Second Semester.*)
Continuation of the work of the first semester. Thurs-
day, 6:45-8:45.
(Two credit hours.)

[The subject matter of Second Year French will differ from that
offered last year thus enabling former students to continue their
French the third year.]

Spanish

1805. *First Year Spanish.*—(*First Semester.*)
Grammar, reading, simple conversation. Tuesday, 6:45-
8:45.
(Two credit hours.)
1806. *First Year Spanish.*—(*Second Semester.*)
This course is a continuation of the first semester's work
and will consist mainly of selected readings, dictation, com-
position and conversation. Tuesday, 6:45-8:45.
(Two credit hours.)

1807. *Second Year Spanish.—(First Semester.)*

Open only to those who have had First Year Spanish or its equivalent. Grammar and composition work continued. Selected texts for reading. Thursday, 6:45-8:45.

(Two credit hours.)

1808. *Second Year Spanish.—(Second Semester.)*

Continuation of the work of the first semester. Composition, conversation, dictation, anecdotes, Spanish daily life, commercial Spanish and correspondence. Especial emphasis will be placed upon the commercial side of the language. Thursday, 6:45-8:45.

(Two credit hours.)

ENGLISH

DEAN SPANTON

ASSISTANT-PROFESSOR STURTEVANT

MRS. MAC KINNON

Masterpieces of Fiction: This series of lectures will present the work of great writers of fiction in order to show the influences which lead them to write and the effect that their work had upon their generation. Consideration will be given to the novelists of Russia and of France as well as to those of England and America. A course of illustrative readings will be recommended to those who care to follow it. (*Second Semester.*) (Two credit hours.) Tuesday, 6:45-8:45.

1809-10. *Story Telling.—(Both Semesters.)*

(Two credit hours.)

In recent years Story Telling has become a significant movement in the field of education. This is because of the growing feeling that the study and practice of story-telling, of how to tell the right story at the right time in the right way, probably develops in the student the power of self-expression more than does any other form of speech education.

The course covers the history, uses, materials, and technique of story-telling. Tuesday, 6:45-8:45.

EXPRESSION

MISS MC EBRIGHT

1813-14. *Public Speaking and Dramatic Work.—(Both Semesters.)*

Fundamental principles, voice technique, tone placing, tone building, enunciation, literary analysis, gestures, evolution of expression, vocal and physical. Thursday, 6:45-8:45.

(Two credit hours.)

1842. *Greek Masterpieces through English Translations.*
(*Second Semester.*)

PROFESSOR ROCKWELL

A careful study will be made of the various forms of Greek Literature, and the chief works in lyric and epic poetry, in the drama, history and philosophy.

Tuesday, 6:45-8:45. (Two credit hours.)

SOCIAL SCIENCE

PROFESSOR O. E. OLIN

PROFESSOR CRECRAFT

1815-16. *Political Economy*—(*Both Semesters.*)

This is an introductory course, designed for the study of the leading principles of the science, and aiming to acquaint the student with the data of economic inquiry and the nature of economic laws.

Thursday, 6:45-8:45.

BUSINESS LAW AND ADMINISTRATION

PROFESSOR MC DERMOTT

1817-18. *Business Law*.—(*Both Semesters.*)

This course includes the laws governing ordinary contracts, notes, mortgages, deeds, partnerships and corporations. Thursday, 6:45-8:45.

(Two credit hours.)

1819-20. *Accounting and Business Administration*.—(*Both Semesters.*)

The course will deal with the theory of accounting, practical accounting, and also applied economics, organization and finance.

Attention will be given to the construction of records and statements, corporation accounting and balance sheets, also partnership and corporate organizations. Tuesday, 6:45-8:45.

HYGIENE

PROFESSOR PLOWMAN

1829. *Hygiene for Women.*—(First Semester.)

The Department of Biology offers for the year, two courses in Hygiene. Topics for consideration are: nutritional physiology, the physiology of exercise, natural and acquired immunity to disease, sex health, social hygiene, eugenics, euthenics, and human conversation. Lectures and class discussions will be kept as free as possible from unnecessary technicalities, but a standard of absolute scientific accuracy will be insisted upon. The purpose of the study is to bring out clearly and pointedly the vital facts regarding personal health.

Text-book: "How to Live," by Fisher and Fisk, together with selected reference reading in standard works on hygiene.

The course for the first semester is open only to women. Tuesday, 6:45-8:45.

(Two credit hours.)

1830. *Hygiene for Men.*—(Second Semester.)

This course is of the same general nature as the preceding course, except that it is open only to men. Tuesday, 6:45-8:45.

(Two credit hours.)

MATHEMATICS AND ENGINEERING

ASSISTANT-PROFESSOR EGBERT

MR. BULGER

MR. ROOT

1831. *College Algebra.*—(First Semester.)

The work will begin with the theory of exponents, and will include quadratic equations, simultaneous quadratics, progression, variation and proportion, the binomial theorem, logarithms and exponential equations.

Prerequisite: high school algebra. Tuesday, 6:45-8:45.

(Two credit hours.)

1832. *Plane Trigonometry.*—(Second Semester.)

The work includes trigonometric functions of an angle in any quadrant, solution of plane and oblique triangles, trigonometric equations, identities and inverse functions. Tuesday, 6:45-8:45.

(Two credit hours.)

1855-56. *Astronomy.*—(Both Semesters.)

The courses in Astronomy will be of a popular nature and will not require a previous knowledge of Mathematics. Attention will be given to an outdoor study of the constellations and to a telescopic examination of interesting objects.

I. The first course will take up a study of Telescopes, Fundamental Problems, the Earth, the Moon, the Sun, Eclipses, Celestial Mechanics.

II. The second course will be a continuation of the first and will take up general study of the Planetary System, detailed study of the Planets, Comets and Meteors, the Stars, Practical Problems of Astronomy. Text book will be Young's Elements of Astronomy. Thursday, 6:45-8:45.

1857-58. *Mechanical Drawing.*—(Both Semesters.)

A course for beginners and designed to equip the student to qualify for a position as tracer or detailer in engineering offices or drafting rooms.

Lettering and the use of drafting instruments and tools will be studied; detailing of machine parts; the preparation of working drawings and tracings; problems in mapping and sketching. Tuesday, 6:45-8:45.

(One term hour.)

HOME ECONOMICS

PROFESSOR STIMMEL

MISS STINSON.

1837-38. *Foods.*—(Both Semesters.)

Laboratory work in foods, their preparation, nutritive values and comparative costs. Thursday, 6:45-8:45.

(One credit hour.)

1839-40. *Sewing.*—(Both Semesters.)

The making of plain garments, hand and machine sewing. Making of a dress of cotton or linen in the second semester. Tuesday, 6:45-8:45.

(One credit hour.)

CLASS B COURSES

These are lecture courses in which no study is required and no college credit given:

First Semester

B1851. *Current Events and Related Topics.*

Tuesday, 7:45-8:45.

DEAN ELIZABETH A. THOMPSON.

B1853. *Psychology.*

Foundations of psychology; psychology and knowledge; psychology and vocation; psychology and business; psychology and life.

Thursday, 7:45-8:45.

PROFESSOR O. E. OLIN.

Second Semester

B1852. *Household Science.*

A. Problems in Household Management.

1. The Daily Routine.
2. The Household Budget.
3. Equipment of the Home.
4. Interior Decoration.
5. Clothing.

B. Food Discussions.

1. Planning of Meals I.
2. Planning of Meals II.
3. Marketing.
4. Food for Children.
5. Special Problems in Preparation of Foods.

C. Sanitation of the Home.

1. The Construction and Location of the House.
2. The Care of the House.
3. Sanitation and Personal Hygiene.
4. The Mother.
5. Care of Children.

Tuesday, 7:45-8:45.

Both Semesters

B1855-56. *The Chemistry of Familiar Things.*

Tuesday, 7:45-8:45.

PROFESSOR SIMMONS.

SCHEDULE OF CLASSES

1919-1920

First Semester

- Tuesday, 6:45-8:45—First Year French, 1801.
Tuesday, 6:45-8:45—First Year Spanish, 1805.
Tuesday, 6:45-8:45—Accounting and Business Administration, 1819.
Tuesday, 6:45-8:45—Hygiene for Women, 1829.
Tuesday, 6:45-8:45—Algebra, 1831.
Tuesday, 7:45-8:45—Current Events, B1851.
Tuesday, 6:45-8:45—Mechanical Drawing, 1857.
Tuesday, 6:45-8:45—Story Telling, 1809.
Tuesday, 6:45-8:45—Sewing, 1839.
Tuesday, 7:45-8:45—Chemistry of Familiar Things, 1855.
Thursday, 6:45-8:45—Political Economy, 1915.
Thursday, 6:45-8:45—Second Year French, 1803.
Thursday, 6:45-8:45—Second Year Spanish, 1807.
Thursday, 6:45-8:45—Business Law, 1817.
Thursday, 6:45-8:45—Foods, 1837.
Thursday, 6:45-8:45—Astronomy, 1855.
Thursday, 7:45-8:45—Psychology, B1853.
Thursday, 6:45-8:45—Public Speaking, 1813.

SCHEDULE OF CLASSES

1919-1920

Second Semester

- Tuesday, 6:45-8:45—First Year French, 1802.
Tuesday, 6:45-8:45—First Year Spanish, 1806.
Tuesday, 6:45-8:45—Accounting and Business Administration, 1820.
Tuesday, 6:45-8:45—Hygiene for Men, 1830.
Tuesday, 6:45-8:45—Trigonometry, 1832.
Tuesday, 7:45-8:45—Household Science, B1852.
Tuesday, 6:45-8:45—Mechanical Drawing, 1858.
Tuesday, 6:45-8:45—Story Telling, 1810.
Tuesday, 6:45-8:45—Masterpieces of Fiction.
Tuesday, 6:45-8:45—Greek Masterpieces, 1842.
Tuesday, 6:45-8:45—Sewing, 1840.
Thursday, 6:45-8:45—Second Year French, 1804.
Thursday, 6:45-8:45—Second Year Spanish, 1808.
Thursday, 6:45-8:45—Astronomy, 1856.
Thursday, 6:45-8:45—Public Speaking, 1814.
Thursday, 6:45-8:45—Business Law, 1818.
Thursday, 6:45-8:45—Foods, 1838.
Tuesday, 7:45-8:45—Chemistry of Familiar Things, 1856.
Thursday, 6:45-8:45—Political Economy, 1916.

THE UNIVERSITY LECTURES

1919-1920

THE Municipal University desires to offer to the people of the city the opportunity annually of hearing, free of charge, certain talks and lectures by members of the University Faculty—not in the class room, nor even in the college buildings, but rather at such times and places as may be best suited to the needs of the citizens. This plan has been adopted in response to numerous calls received for lectures on various subjects, and represents an effort on the part of the University to serve the community to the best advantage by systematizing the work thus offered.

For the season of 1919-1920 a list of lectures has been prepared from which any lecture or lectures may be chosen. They will be given before any society or organization or responsible body of citizens who may desire to hear them. The conditions are as follows:

1. The lectures are to be given at dates to be mutually agreed upon with the Chairman of the Lecture Committee.
2. The Chairman of the Lecture Committee must be notified by the organization at least two weeks before the time of giving the lecture.
3. The organization requesting the lectures shall provide a suitable place for holding them and no admission fee shall be charged.
 1. The Evolution of Education.
 2. The Municipal University and the City.
PRESIDENT P. R. KOLBE
 3. The Value of a College Education.
DEAN F. E. AYER
 4. What the Chemist of the Future Will Do.
 5. Relation of Oxygen to Life.
PROFESSOR H. E. SIMMONS
 6. What's the Trump?

7. The Civic Consciousness.
PROFESSOR O. E. OLIN
8. Mark Twain.
PROFESSOR C. L. BULGER
9. A Modern Roman Gentleman.
10. Painting and Relief of Greek Art (illustrated).
PROFESSOR J. C. ROCKWELL
11. The Business of Being a Housekeeper.
PROFESSOR SARAH E. STIMMEL
12. A Historical Subject.
DEAN E. A. THOMPSON
13. The Philippine Islands.
14. International Law of the Future.
PROFESSOR L. M. McDERMOTT
15. Americanizing the Americans.
PROFESSOR E. W. CRECRAFT

All requests for these lectures should be addressed to Dr.
J. C. Rockwell, Chairman University Lecture Committee,
Municipal University, City.

COMBINATION COURSES

No student will be recommended for a combination course with any other institution unless his average grade for his three years' work in the University of Akron is at least 85%.

1. AT THE UNIVERSITY OF AKRON*The Arts-Home Economics Combination Course*

A combination may be made between the Arts and Home Economics courses by which degrees may be obtained from both schools in a minimum period of five years. This may best be accomplished by spending four years in the Curtis School of Home Economics and an additional year in the College of Liberal Arts. If such combination course be desired the elective work in the fourth year must be shaped toward the fulfillment of the major and minor requirements in the College of Liberal Arts.

An arrangement is also possible by which the student may spend three years in the College of Liberal Arts and two years in the Curtis School of Home Economics, receiving both degrees. Those planning this combination should consult the Classification Committee at the beginning of the sophomore year in order that the subjects to be taken may be definitely determined, according to the major subject chosen.

2. WITH THE OHIO STATE UNIVERSITY

By special arrangement concluded with the Ohio State University, the University of Akron is enabled to offer combination courses in its own College of Liberal Arts with certain professional schools of the State University. By means of such a course, the student is enabled to shorten by one year the six to eight year period otherwise necessary for the acquirement of both college and professional degrees and training. Generally speaking, the plan contemplates an attendance of three years at the University of Akron with an additional two or three years (depending on the subject chosen) at the State University. During the fourth year of his course (i. e., the first year at the State University) the student is counted as a senior in absentia by the University of Akron and at the end of this year returns to receive his Bachelor's degree with his class.

The following combinations have been arranged:

THE ARTS-LAW COMBINATION COURSE

This course comprises a total of six years, three years at the Municipal University of Akron and three years at the Law School of the Ohio State University. At the end of four years the degree of Bachelor of Arts is conferred by the University of Akron for the satisfactory completion of 128 term hours of work. At the end of six years the student may become a candidate for the degree of Bachelor of Laws at the Ohio State University.

Requirements in Buchtel College of Liberal Arts

1. No student is eligible for the combined Arts-Law Course who has not been a resident student at the University of Akron for at least three years and who has not gained at least 96 term hours' credit in Buchtel College. In order to receive the Bachelor's Degree from the University of Akron at the end of the fourth year, the student must complete 101 term hours of work in Buchtel College before entering the Ohio State University.
2. No student shall be eligible for a degree from Buchtel College of the University of Akron in the combined Arts-Law Course who has not received sufficient credit at the State University to complete a total of 128 term hours of work.
3. A major must be chosen in Buchtel College of Liberal Arts in a course leading to the degree of Bachelor of Arts.
4. All of the major and minor requirements in the course chosen must be completed at the University of Akron.

THE ARTS-AGRICULTURE COMBINATION COURSE

Total time required, five years, three of which are to be spent at the University of Akron and two at the Ohio State University. At the end of four years' time, the degree of Bachelor of Science will be conferred by the University of Akron and at the end of five years the degree of Bachelor of Science in Agriculture by the Ohio State University.

General Requirements in Buchtel College of Liberal Arts

1. No student is eligible for the Combined Arts-Agriculture Course who has not been a resident student at the

University of Akron for at least three years and who has not gained at least 96 term hours' credit in Buchtel College.

2. No student shall be eligible for a degree from Buchtel College of the University of Akron in the combined Arts-Agriculture Course who has not received sufficient credit at the Ohio State University to complete a total of 128 term hours of work.

Combination Arts-Agriculture Course

Three years at the University of Akron

First Year

First Semester		Second Semester	
• English 51	3	• English 52	3
• Mod. Lang.	4	• Mod. Lang.	4
• Chem. 353	4	• Chem. 354	4
• Hygiene	1	• Current Events	1
• Mathematics 301	4	• Mathematics 302	4
Physical and Military Training	2	Physical and Military Training	2
	18		18

Second Year

First Semester		Second Semester	
• English 53	2	• English 54	2
• Biology 401	4	• Biology 402	4
• Mod. Lang.	3 or 4	• Mod. Lang.	3 or 4
• History 275 or 277	3	• History 276 or 278	3
• Chem. 365	3	• Chem. 366	3
Physical and Military Training	2	Physical and Military Training	2
	17 or 18		17 or 18

Third Year

First Semester		Second Semester	
• Polit. Economy 251	3	• Polit. Economy 252	3
• Physics 331	5	• Physics 332	5
• Vascular Plants 405	4	• Embryology 404	4
• Geology 417	3	• Astronomy 320	3
	15		15

In addition enough elective work to complete at least 96 hours.

Two years at the Ohio State University

A student must complete thirty-four semester hours of work during each of the two years at Ohio State University.

This time is to be devoted entirely to agricultural subjects and must include at least one semester's work in agricultural chemistry, agricultural engineering, animal husbandry, dairying, entomology, farm crops, horticulture, rural economics, and soils. He must also select a major subject in which he takes four consecutive semesters of work. In addition he will elect sufficient agricultural work to complete at least sixty-eight hours.

3. WITH WESTERN RESERVE MEDICAL SCHOOL*

By arrangement concluded on February 2, 1914, a combination course has been established between the University of Akron and Western Reserve Medical School.

The completion of this course requires seven years, the first three of which are to be spent at the University of Akron and the last four at Western Reserve University. At the end of four years, the degree of Bachelor of Science will be conferred by the University of Akron; at the end of seven years, the degree of Doctor of Medicine will be given by Western Reserve University.

General Requirements in Buchtel College of Liberal Arts

1. No student is eligible for the Combined Arts-Medicine Course who has not been a resident student at the University of Akron for at least three years and who has not gained at least 96 term hours' credit in Buchtel College.

2. No student shall be eligible for a degree from Buchtel College of Liberal Arts in the combined Arts-Medicine Course who has not received sufficient credit at the Western Reserve University to complete a total of 128 term hours of work.

Subject Requirements in Buchtel College of Liberal Arts

1. A major must be chosen in Buchtel College leading to the degree of Bachelor of Science.

2. All of the major and minor requirements in the course chosen must be completed at the University of Akron.

*This course is here detailed as typical of a combination possible with the large majority of medical schools.

(The following are requirements of subjects to be taken at Buchtel necessary for entrance to the Medical School.)

(A) Chemistry: The equivalent of at least one and a half years of college work of a value of not less than 12 semester hours, of which at least 3 semester hours must be Organic Chemistry. The 12 semester hours must include at least 5 semester hours of laboratory work of which 1 hour must be Organic Chemistry.

(B) Physics: The equivalent of at least one year of collegiate work of a value of not less than 8 semester hours, of which at least 2 semester hours shall be laboratory.

(C) Biology, Zoology and Botany: The equivalent of at least one year of collegiate work of a value of not less than 8 semester hours, of which at least 4 semester hours shall be laboratory work.

It is strongly urged that prospective medical students take, in addition to the required minimum of Biology as stated, a course of at least three semester hours in Comparative Vertebrate Anatomy, inasmuch as this course is not given in the medical curriculum.

Work done in Embryology will excuse the student from attendance on the equivalent part of the required course in Embryology in the first year of the medical curriculum.

(D) German or French: A total of not less than 8 semester hours. One unit of High School work may be counted as two semester hours of this requirement, but there shall be at least 6 semester hours of collegiate work in one language.

(E) English: A total of not less than 6 semester hours. All of the requirements indicated above may be fulfilled in a space of three years. The following plan is suggested:
First Year: Regular Freshman Scientific Course.
Second Year: Zoology and Botany, 8 hours, Chemistry, 4 hours, Physics with Lab., 10 hours, German or French sufficient to make with freshman work a total of at least 8 term hours.

(This completes the requirements made by the Medical School. The remainder of time should be given to the completion of the major and minor requirements of Buchtel College.)

4. COMBINATION COURSES WITH OTHER SCHOOLS

The Arts-Nursing Course

Any student who has been in residence at the University of Akron for at least three years, and who has made an average grade of 85% in at least 96 hours in the regular course in Buchtel College, with major in Biology, may receive the degree of B. S. from the University of Akron upon the satisfactory completion of the course in any first-grade training school for nurses.

By this arrangement it is made possible for the candidate to secure both the college degree and the Nurse's Certificate in six years.

Such an arrangement has been definitely entered into with Lakeside Hospital Training School for Nurses, Cleveland.

With Medical Schools

The University of Akron will enter into combination courses with any of the medical schools of the highest class, as fixed by the standards of the American Medical Association.

With Other Professional and with Technical Schools

The University of Akron is willing to give the opportunity for combination courses with any approved technical or professional school making graduation from a first-grade high school a prerequisite for entrance (except medical schools, see above). The approval of such courses rests with the committee on classification. In making such combinations, the University of Akron will insist on the fulfillment of the general requirements of three years' residence at Akron, the completion of 96 term hours there and of a total of 128 term hours for graduation—also of the completion of all required majors and minors.

Students are warned against haphazard work in Buchtel College of Liberal Arts with the vague idea that a course chosen at random can be combined with any professional school to which their inclination may later direct them. The choice of school with which the combination is desired should never be delayed beyond the close of the freshman year. The committee on classification is at all times ready to be of assistance to students in making combinations with reputable professional and technical schools.

TRAINING COURSE FOR TEACHERS

In harmony with action taken in December, 1915, by the Board of Education of the City of Akron and the Board of Directors of the Municipal University of Akron, the University and the City Normal School undertake jointly the academic and professional preparation of teachers in accordance with the following regulations:

FOUR YEAR COMBINATION COURSE

Graduates of this course will be accepted as Elementary School Teachers but not as High School Teachers in the Akron schools. They are, however, entitled to a provisional state high school certificate, giving them the legal right to teach in any high school in the state of Ohio.

Students who have completed three years of work (103 hours) in a satisfactory manner, at the University shall be allowed to enter the City Normal School with the prospect of completing the course there in one year.

Such students shall elect at the University adequate courses in United States History and Government, Sociology, Psychology and Ethics.

During the three years at the University the student shall complete a minimum of 103 term hours of work. On satisfactory completion of the fourth year's work at the City Normal School the degree of Bachelor of Science in Education will be given by the University.

FIVE YEAR COMBINATION COURSE

A five year combination course will be offered for those desiring to become high school teachers in the Akron school system. The conditions are as follows:

The candidate for the combination five-year course shall spend the first four years at the University. During this period the election of a maximum of ten semester hours at the City Normal School shall be allowed and these hours shall be credited toward the college degree.

The student shall pursue as a major in the college course that subject in which he wishes to qualify as a High School teacher.

TRAINING COURSE FOR TEACHERS 119

On the successful completion of four years' work (128 credit hours) at the University, the student shall receive the college degree to which he is entitled by the nature of his major subject.

The fifth year shall be spent at the City Normal School and in observation and practice teaching, but only those students will be eligible for the combination course who have given evidence of high scholarship and have been duly recommended on this basis by the major professor and accepted by the Superintendent of Schools and the Principal of the City Normal School.

On the successful completion of the fifth year's work the City Normal School will grant a Teacher's Diploma in Elementary or Secondary Education.

Graduates of this course are eligible to appointment to high school positions in Akron after a reasonable probationary period in elementary school work.

COMMUNITY CO-OPERATION

The work in community co-operation has been undertaken for the purpose of bringing the University in all its departments into close touch with the activities of the city of Akron. The Directors of the University feel that an institution of higher learning, supported in large part by municipal taxation, should give freely to the city all possible practical aid by means of its instructors and equipment.

While the work of community co-operation is not primarily organized for the purpose of teaching, yet one of its important objects is to bring students into contact with the work of the city and to train them along various lines of practical usefulness to the community. Whenever possible, the actual problems of civic life and administration are substituted in the various courses for purely theoretical work, since the University considers this training as one of the most important branches of its activity.

DIVISIONS OF CO-OPERATIVE WORK

The work properly falls under two heads.

- I. Special organizations or Bureaus.
- II. Co-operative work by various departments of the University.

I. SPECIAL ORGANIZATIONS

The Bureau of City Tests

A. E. HARDGROVE, B. S., DIRECTOR.

In accordance with a proposal made by the Directors of the University and accepted by the Akron City Council, the University assumes entire charge of the chemical and physical testing work of the city. The Bureau of City Tests was created and took charge of this work January 1, 1914. All analytical and diagnostic work of the city was done by the Bureau until November, 1916, when a diagnostic bacteriological laboratory was created at the Board of Health office, and assumed this work. The Bureau continues to do bacteriological milk and water analysis, and all other physical and chemical tests for the various city departments, together with brick testing for Summit County.

The Director of the Bureau of City Tests has charge of the laboratory control of Akron's sewage disposal plant.

The Bureau is located in the Knight Chemical Laboratory and co-operates with the Department of Chemistry in bringing students in advanced courses in chemistry into touch with city work by giving them actual problems of the city for solution as a part of their regular class work.

II. CO-OPERATIVE WORK BY DEPARTMENTS OF THE UNIVERSITY

The following list covers activities of the past few years:

Department of Social Sciences

Housing survey by students under direction of Board of Health and Charity Organization; work by students with Charity Organization; (political science) field work in city departments under direction of Bureau of Municipal Research; research problems for the United States Department of Labor.

School of Home Economics

General activities in food conservation movement; conducted demonstration with diet squad; published menus and recipes; held public demonstrations in canning and drying fruits and vegetables; gave talks on food conservation to women's societies and clubs; arranged food exhibits; gave courses in Food Conservation.

Director served as member of Federal Food Administration Committee for Summit County; students conducted extension class work.

Department of Physical Education

Summer playground work by Director and students.

Department of English

Field work in journalism on local newspapers.

Department of Biology

Close co-operation with the City Health Department. Direction of Public Health education, under authority of the Akron Board of Health. Organized and conducted a twenty-four weeks' course in Public Health Nursing. Delivered more than thirty lectures and informal talks on health topics before groups of the Home and School League, Y. W. C. A., Y. M. C. A., Men's Clubs, etc.

College of Engineering

Students work alternate two week periods in foundries, machine shops, and on construction and railroad work. Students in civil engineering assigned to municipal work under direction of city engineer. Report on Akron pavements prepared and published at request of city council (*Akron Pavements*, 74 pp. Fred E. Ayer, Dean of College of Engineering).

Local rubber factories have co-operated with the College of Engineering by establishing from twenty to thirty scholarships in manufacturing production, by which men are trained on the co-operative basis for the rubber industry, the expense of all college fees being borne by the companies, and the student being assured of a minimum income of from \$35.00 to \$40.00 per month during his college course.

Department of Chemistry

Two fellowships in the chemistry of india rubber, open to graduates of standard American colleges, have been established at the Municipal University by Akron rubber companies, for the purpose of training men for service in their laboratories.

During the war period a branch laboratory of the U. S. Bureau of Standards was located in the Knight Chemical Laboratory for the testing of rubber tires.

Extension Work

Evening classes in the following subjects (for 1919-20): French, Spanish, Accounting and Business Administration, Hygiene for Women, Hygiene for Men, Algebra, Trigonometry, Current Events, Mechanical Drawing, Household Science, Story Telling, Masterpieces of Fiction, Sewing, Greek Masterpieces, Chemistry of Familiar Things, Political Economy, Astronomy, Business Law, Public Speaking, Foods, Psychology.

In addition to this, the University conducted, during the month of September, an Americanization institute for the benefit of the teachers engaged in this work.

University Lecture Course presented to various clubs and organizations of the city by faculty members, also lectures on technical subjects.

Co-operation with the Board of Education

A combination course for the purpose of training teachers has been arranged by agreement between the Board of Education and the Directors of the University.

REGISTER OF STUDENTS

BUCHTEL COLLEGE

1919-1920

GRADUATE STUDENTS

Araki, Toichiro	Japan
Imperial University of Tokio.	
Gilbert, Carl Schloss	Akron
Municipal University of Akron.	
Gilliland, Charlotte P.	Portsmouth
Ohio Wesleyan University.	
Hardman, Albert Foster	Jane Lew, W. Va.
University of West Virginia.	
Hjort, Elmer V.	Akron
Penn College.	
O'Brien, Leonard Guy	Akron
Lehigh University.	
Schott, Florence Nightingale	Chicago, Ill.
Northwestern University.	
Stanton, Guy K.	Streetsboro
Hiram College.	
Williams, Ira	Wilson, Kansas
Cooper College.	

SENIOR CLASS

Andreas, Anna Rosalind	A. B.	Akron
Bierce, Bruce Wallace	B. S.	Cuyahoga Falls
Boedicker, Earl Otto	B. S.	Akron
Bordner, Robert	B. S.	Akron
Butler, Whitney E.	B. S.	East Akron
Cable, John E.	B. S.	Akron
Calvin, Ruth	A. B.	Akron
Christy, Robert T.	A. B.	Akron
Cooper, Leslie	B. S.	Akron
Haas, Eugene George	B. S.	Akron
Haley, Arthur Read	A. B.	Cuyahoga Falls
Hawk, Ethel	A. B.	Akron
Henegan, Olive A.	A. B.	Akron
Knowlton, Arthur S.	A. B.	Akron
Kohn, Leona	A. B.	Akron
Pfahl, Charles Alton	A. B.	Akron
Pfahl, Wilbert C.	B. S.	Akron
Rogers, Virgil Edwin	A. B.	Akron
Roas, Donald R.	A. B.	Akron
Shaffer, Helen Harriett	A. B.	Akron
Swigart, Clarence M.	B. S.	Akron
Swinehart, Clyde Leroy	B. S.	East Akron
Urpman, Nina Elizabeth	A. B.	Akron
Wendt, Aubrey A.	B. S.	Akron

Werner, Herman Edward	A. B.	Akron
Whalen, Charles F.	A. B.	Akron
Williams, Mary Jeannette	A. B.	Akron
Woodruff, Jay B.	A. B.	Akron
<i>Williams, Glenn B.S.</i>		Seniors—29

SENIORS IN ABSENTIA

Griffith, Jack L.—Combined Arts-Law Course with Western Reserve Law School	Akron
Kendall, Victor—Combined Arts-Agriculture Course with Ohio State University	Akron
Motz, Clarence—Combined Arts-Law Course with Western Reserve Law School	Cuyahoga Falls
Total Seniors—Men	24
Women	8

JUNIOR CLASS

- Berrodin, Henry C.	B. S.	Akron
- Blower, William	A. B.	Akron
- Brockett, Warren	B. S.	Akron
- Bruner, Harold E.	A. B.	Akron
- Carmichael, Frances	B. S.	Akron
- Christensen, Chester W.	B. S.	Akron
- Close, Stanford	B. S.	Akron
- Deans, Alvah, Jr.	B. S.	Coshocton
- Emmons, Claude V.	A. B.	Akron
- Frase, Ralph Lewis	B. S.	Akron
- Fogle, Karl	B. S.	Akron
- Fox, Rolland	B. S.	Akron
- Griffin, Earl	B. S.	Akron
- Gudikunst, Earl	A. B.	Akron
- Hixon, Carl	B. S.	Brazil, Ind.
- Hoffman, Lorin	B. S.	Akron
- Keck, Isa L.	B. S.	Akron
- Knowlton, William Hardy	A. B.	Akron
- Lancaster, Emmmer	A. B.	Akron
- Lowe, Burdette H.	B. S.	West Salem
- Ludeman, Eleanor Taylor	A. B.	Springfield
- McIlwain, Mary	A. B.	Akron
- Marsh, Dorothy Lillian	A. B.	Akron
- Mull, Julia A.	A. B.	Akron
- Osterhouse, Helen	A. B.	Akron
- Rich, Raymond C.	B. S.	Sterling
- Rowley, William	A. B.	Akron
- Saviers, Naomi Angeline	B. S.	Akron
- Sawyer, Robert Voris	B. S.	Akron
- Snyder, Harold	B. S.	Akron
- Stevenson, Hazel	A. B.	Akron
- Sutton Rodney C.	A. B.	Akron
- Timmins, Margaret	A. B.	Akron
- Vernon, Ruth Endsley	A. B.	Akron

- Wagner, Florence	A. B.	Akron
Waldkirch, Earl	B. S.	Akron
Waltz, Leland	A. B.	Akron
Washburn, Margaret	A. B.	Akron
Weeks, James Alexander	B. S.	Akron
Wentz, Edward P.	A. B.	Akron
- Willyard, Warner L.	B. S.	Ravenna
- Wilson, Harold	A. B.	Akron
Wright, Frances Helen	A. B.	Akron
Total Juniors—Men		29
		Women 14

SOPHOMORE CLASS

Allaman, Mary E.	A. B.	Akron
Barnhardt, Richard	A. B.	Akron
Beer, Alice	A. B.	Akron
Betz, Albert R.	A. B.	Homerville
Blackburn, Alene M.	A. B.	Akron
Bliss, Helen	A. B.	Akron
Bohl, Ray A.	B. S.	Akron
Brewer, G. Lucile	A. B.	Akron
Brewster, Albert J.	B. S.	Akron
Bruner, Byron	A. B.	Akron
Busenburg, Earl	B. S.	Akron
Cunnington, Amy B.	B. S.	Akron
Dashevsky, Harry	A. B.	Akron
Daum, Carl V.	A. B.	Akron
Davies, John M.	B. S.	Akron
Eckert, Herman K.	A. B.	Akron
Flickinger, Maynard L.	B. S.	Akron
Froebe, Albert John	A. B.	Piqua
Ganyard, Gladys	A. B.	Everett
Green, Alice L.	A. B.	Granger
Harpster, Mildred	A. B.	Akron
Horn, Dorothy May	A. B.	Akron
Hower, Isabel	A. B.	Akron
Kaufman, Ruth	A. B.	Akron
Horner, Fayette	B. S.	Akron
Kepler, Lois	A. B.	Akron
Kincaid, Frederick	B. S.	Akron
Lancaster, Raymond D.	B. S.	Akron
Leland, Maxine	A. B.	Akron
Markle, Geraldine	A. B.	Akron
Melvin, Willard	B. S.	Akron
Miller, Rolland S.	B. S.	Kent
Mills, James B.	A. B.	Akron
Morganstern, Adolph	B. S.	Akron
Morganstern, Bernard	B. S.	Akron
Moore, James Howard	B. S.	Akron
Moore, Katharine A.	A. B.	Akron
Myers, Parke H.	B. S.	Akron
Palmer, Ralph D.	A. B.	Akron
Redinger, Elizabeth	A. B.	Akron

Reed, Roland F.	A. B.	Akron
Rothrock, Mary Jane	A. B.	Kenmore
Schaufele, Lucille	A. B.	Barberton
Smith, Sidney	A. B.	Akron
Steltz, Peter	B. S.	Akron
Sutliff, Ray C.	A. B.	Akron
Thesing, Anna M.	A. B.	Barberton
Thomas, Harold I.	A. B.	Millersburg
Thornbury, Purla	A. B.	Jenkins, Ky.
Tisdale, Chester	A. B.	Akron
VanHyning, Conrad	A. B.	Akron
Wagner, Anna	A. B.	Akron
Waldkirch, Gladys	A. B.	Akron
Weaver, Marion	B. S.	Akron
Wentink, P. Herbert	A. B.	Akron, R. F. D.
Whigam, Vivian	B. S.	Akron
Wilder, Gordon B.	B. S.	Winslow, Ind.
Willard, James A.	B. S.	Akron
Wise, Elias Paul	B. S.	Akron
Total Sophomores—Men		35
		Women 25

FRESHMAN CLASS

Alden, Evelyn	Akron
Allen, David B.	Akron
Andrus, James	Akron
Barber, Adelaide	Akron
Barnes, Harold W.	Akron
Barrick, George D.	Canton
Bayles, Ralph O.	Powell
Bennett, Luther H.	Akron
Berman, Lillian	Akron
Bishop, Alfred E.	East Akron
Biiley, Clarence J.	Akron
Bond, Jess	Akron
Brown, Richard P.	Sharon Center
Brown, Ross C.	Lexington, Ky.
Bunts, Helen A.	Akron
Carter, Kenneth E.	Akron
Chacey, Floyd A.	Cuyahoga Falls
Clark, Genevieve	Akron
Chamberlain, Gladys	Akron
Coates, Charles	Akron
Colley, Harold	Akron
Cook, Theodore L.	Akron
Cook, Vernon	Akron
Cox, Elmer	Akron
Crawford, Cheryl A.	Akron
Cummings, Mildred	Elgin, Ill.
Cummins, Edith	Akron
Cunningham, Ernest	Akron
Darraha, Donald	Akron
Davis, Anna	Akron

Dellenberger, Ruth	✓	Akron
Dewey, Robert		Lakemore
Dice, Dorothea		Akron
Dilley, Louise	✓	Akron
Douglas, Mildred		Akron
Ellis, Robert D.		East Akron
Fletcher, Helen A.	✓	Akron
Fornecker, Helen	✓	Akron
Foust, Robert		Akron
Frew, Floyd		Akron
Fuggitt, William		Akron
Fulton, Neil		Rittman
Gaines, John G.		Georgetown, Ky.
Garver, Earl F.		Akron
Goodyear, George		Akron
Green, Lela T.		Kenmore
Gregory, Helen	✓	Akron
Harper, Robert		Wadsworth
Harry, Glenard J.		Akron
Havre, Sylvia		Akron
Hawk, Ada	✓	Akron
Heckler, M. Howard		Freedom
Heller, Dorothy	✓	Akron
Hess, Carl Adelbert		Akron
Hill, Clarence		Akron
Hoelzer, Edward		Akron
Hunt, Schuyler		Akron
Irish, Everett		Akron
Johnson, Henry B.		Akron
Johnson, Merritt		Youngstown
Jontz, Melvin L.		New Hampshire
Kaplan, Louis H.		Newport, Ky.
Kaufman, Ralph		Akron
Kean, Steward		Carrollton
Keating, Sara F.	✓	Akron
Kildow, Charles		Shadyside
Knowlton, Frank W.		Akron
Krotzer, Walter F.		Akron
Lawrence, Don S.		Akron
Leffer, Carl		Akron
Lindenau, Harry		Akron
Lizawetsky, Bessie	✓	Akron
Long, Lucille	✓	Copley
McAdoo, Don		Akron
McCormick, C. Edward		Akron
McCormish, Thomas		Akron
McDonough, Cecil		Akron
McKinney, George L.	✓	Akron
Markle, B. George		Akron
Mason, Ruth E.	✓	Akron
Meeker, Lawrence		Akron
Metzger, Marie		Akron
Miller, Philip		Akron
Miller, R. Clinton		Akron

Moore, Fred	Akron
Morris, Irvin	Akron
Morris, William	Akron
Murphy, Mabel	Akron
Osterstock, Ruth	Akron
Palmer, Alice	Akron
Palmer, William H.	Barberton
Porter, Nelson	Akron
Poulson, Carl W.	Akron
Purdy, Nellie	Akron
Randall, Merrill	Akron
Rawlinson, William L. ..	Akron
Reed, Clarence	Howard
Ries, Richard	Akron
Robart, Wilbur C.	Minerva
Robb, William J.	Akron
Rose, Margaret	Akron
Rowley, John G.	Akron
Ruch, Elden	Akron
Russell, Cora	Akron
Sanders, Robert	Akron
Sanders, Sara	Akron
Schachner, Harry	Akron
Schaffner, Roger	Akron
Schrader, L. Lester	Akron
Scott, William E.	Salem, W. Va.
Seaver, Raymond	Akron
Secrest, Harold C.	Pleasant City
Shafer, Stuart	Akron
Shaffer, Joshua C.	Antwerp
Shank, Dorothy	Paulding
Short, Waldo	Akron
Shreiner, Claude L.	Barberton
Smith, Gloria C.	Akron
Smith, Evelyn	Cuyahoga Falls
Snyder, Catherine	Akron
Spencer, Addison	Cleveland
Spicer, Raymond	Akron
Stover, Gross H.	Akron
Swigart, Sherman	Akron
Taber, William A.	Akron
Tetlow, Mildred	Akron
Tobin, Dallas	Lancaster
Town, Arno	Barberton
Triplett, Dorothy	Akron
VanBuskirk, Donovan	Cuyahoga Falls
Venters, R. Bunnell	Akron
Waite, Evelyn	Akron
Weber, Rhea	Akron
Whalen, Clayton Bonnell ..	Monroe City, Ind.
Williams, Hollie	Wilson, Kans.
Williams, Joe M.	Akron
Wilt, Roy	Kenmore
Wood, Baxter	Akron

Woozley, Florence	.....	Akron
Wuchter, Eli	.....	Barberton
Total Freshmen—Men		99
		Women 41

SPECIAL STUDENTS

Akers, Marjorie	.....	Akron
Anderson, Morton Edwin	.....	Mill Shoals, Ill.
Appelget, Norma M.	.....	Akron
Baker, Mrs. H. R.	.....	Long Beach, Calif.
Baker, Leah M.	.....	Akron
Brown, Herbert F.	.....	Potterburg
Buslinger, Edward T.	.....	Newport News, Va.
Buslinger, Benjamin A.	.....	Newport News, Va.
Carney, Lynn	.....	Akron
Chambers, Auten	.....	Akron
Cheval, Marie Louise	.....	Paris, France
Cowen, Theodore	.....	Cambridge, Mass.
Cox, Russell I.	.....	Byesville
Crosby, Frank	.....	Normal, Ill.
Cross, Howard	.....	Winslow, Ind.
DePue, Jonathan W.	.....	Akron
Douthitt, Caroline	.....	Akron
De Pontes, Ilo Feijo	.....	Akron
Dunford, Emerson	.....	Akron
Fuller, Mrs. Gartha V.	.....	New York City
Glatthar, Ruth	.....	Akron
Greenwald, John Jr.	.....	Akron
Guckeyson, Harry C.	.....	Akron
Harder, Keith C.	.....	Wilkesville
Hess, Jay Ross	.....	Akron
Hilbish, Russell	.....	Akron
Hoffman, John R.	.....	New York City
Humphreys, Ray	.....	Brockwayville, Pa.
Inman, Joseph	.....	Williamsburg, Pa.
Isbister, Thomas A.	.....	Jersey City, N. J.
Jones, Carl H.	.....	Akron
Jones, Robert	.....	Akron
Kessler, Norman	.....	Anderson, Ind.
Larcomb, Richard	.....	Columbus
Long, Mac Dennis	.....	Charlestown, Ind.
Love, Van B.	.....	Akron
Mathewes, William B.	.....	Seattle, Wash.
Mathias, Harry L.	.....	Granville
Neag, Demetrius	.....	Akron
Ozier, James	.....	Akron
Palmer, Rolland	.....	Akron
Post, Thomas	.....	Cuyahoga Falls
Ralston, Forrest H.	.....	Akron
Rapp, Walter	.....	Akron
Rosenman, Beatrice	.....	Akron
Ryan, Robert	.....	Akron
Sage, Victor	.....	Akron

Schell, Dorothy	Akron
Shank, Seth C.	Paulding
Stark, Ralph	Russellville, Ind.
Steel, Raymond	Akron
Switzer, Charles C.	Williamsfield
Townes, Charles D.	Madisonville, Ky.
Wamboldt, Mrs. Lina	Akron
Warren, Arthur	Kingston, N. Y.
Weeks, Marvin J.	Holley, N. Y.
Werner, Jessie	Greenville, Mich.
Werner, Lucy M.	Akron
Whitaker, Lorenzo R.	Rochelle, Fla.
Wilkinson, George H.	Lancaster
Wilson, Nora E.	Akron
Witwer, William D.	Akron
Woddell, Florence	Akron
Woodruff, Percy	Akron
Total—Men	49
Women	15

COLLEGE OF ENGINEERING

FIFTH YEAR CLASS

Bordner, Robert (transferred to Liberal Arts College, Feb., 1920)	Akron
Halpern, Philip	Akron
Joel, Floyd E.	Akron
Judy, Lowell L.	Kent
Kuszmaul, Corliss	Akron
	Fifth Year—5

FOURTH YEAR CLASS

Carlin, Charles	Kent
Dieterich, Harold	Akron
Fletcher, Robert F.	Ravenna
Foster, George W.	Pearl River, N. Y.
O'Brien, Robert	Akron
Robinson, A. B.	Akron
	Fourth Year—6

THIRD YEAR CLASS

Braucher, Fred J.	Akron
Lynn, James	Akron
Kittelberger, Howard	Akron
Peterson, Amos	Coeur d'Alene, Ida.
Thorp, Edgar	Ravenna
	Third Year—5

SECOND YEAR CLASS

Bischoff, Ivan C.	Akron
Donatton, Donald S.	Akron
Cox, Richard G.	Cleveland

Grimm, George B.	Akron
Hoelzer, John T.	Akron
Hungerford, Courtland	Akron
Kalaher, Arthur J.	Akron
Kasch, Allan	Akron
Lawrence, Kenneth	Akron
Moehr, Louis H.	Akron
Moore, George A.	Lakewood
Pike, Kenneth	Ravenna
Remmy, Fred W.	Akron
Russ, Henry A.	Akron
Smith, Harold F.	Akron
Straub, Harold	Akron
Spalding, Fred	Akron
Tritt, Forest G.	Barberton
Wagner, C. P.	Marshallville
Wert, Carl D.	Akron
Wheeler, Henry E.	Akron

Second Year—21

FIRST YEAR CLASS

Adams, Herman G.	Akron
Allaman, Herbert C.	Akron
Allison, Scott	Hickory, Pa.
Arnold, J. S.	Nashville, Tenn.
Barnholth, M. C.	Akron
Blake, Roy	Monticello, Utah
Brand, Noble G.	Cuyahoga Falls
Broderick, Thomas R.	Cuyahoga Falls
Brown, Joseph D.	Akron
Carlson, E. O.	Buffalo, N. Y.
Converse, James P.	Mantua
Cope, John	Akron
Cutler, James	Akron
Daggett, Walter	Lewiston, Ida.
Daughtry, Hampton	Jackson, Ga.
Donnelly, P. A.	Gloucester, N. J.
Evans, James A.	Berwick, Pa.
Fletcher, Laurel	Ravenna
Garrison, R. M.	Greenville
Goodman, Adolph	Akron
Griffin, J. H.	Cleveland
Hagans, Carl	Kenmore
Hanawalt, J. D.	Akron
Harden, Mark	Barberton
Hazle, Clyde	Akron
Heerlein, J. Hubert	Corry, Pa.
Hitchcock, James M.	New Rochelle, N. Y.
Hoover, Roy M.	Myrtle Creek, Ore.
Jones, James	Cuyahoga Falls
Jordan, Francis J.	Yonkers, N. Y.
Kavanaugh, Raymond V.	Philadelphia, Pa.
Kreinberg, Harold	Akron

Kreiner, O. G.	East Akron
Langer, Arthur	Pearl River, N. Y.
Lemasters, Austin O.	Ravenna
Lopeman, Walter E.	Bellevue
Loulan, James A.	Dennison
Martin, Robert M.	Akron
Moran, Richard	Akron
Myers, Herbert B.	Akron
Naugle, Jacob V.	Akron
Nidus, Max N.	New York City
Olin, Albert D.	Ravenna
Olson, Leland A.	Jamestown, N. Y.
O'Meara, Charles J.	Wadsworth
Patterson, William	Coalport, Pa.
Pearson, Harry	Newark, N. J.
Pfeifle, Earl C.	Akron
Plesofsky, Charles	Akron
Price, Edward	Akron
Priest, Carroll A.	Portland, Me.
Rauschenberger, M. Fred	Akron
Robinson, John E.	Akron
Scholl, Robert H.	Tenafly, N. J.
Schultz, David T.	Philadelphia, Pa.
Schumacher, William A.	Akron
Scott, Robert F.	Elkins, W. Va.
Sisler, Donovan G.	Akron
Smith, Newman	New Haven, Conn.
Snider, Edwin R.	Ravenna
Snyder, Russell F.	Williamsport, Pa.
Spindler, Oscar O.	Chillicothe
Stauffer, Harold	Akron
St. John, Bertram	Athol, Mass.
Steel, Francis E.	Akron
Stevens, Paul	Fairmont, W. Va.
Suloff, Sidney	Akron
Teulings, Rudolph	New Haven, Conn.
Thomas, Russell W.	Akron
Thomas, William	Akron
Thorp, Clarence W.	Ravenna
Tiley, Clyde F.	Meridian, Miss.
Tibbetts, Albert L.	Portland, Me.
Trescott, Paul A.	Berwick, Pa.
Ulrich, Albert	Akron
Viall, Arthur W.	Bellevue
Wallace, Paul	Akron
Walters, William	Wheeling, W. Va.
Weatherstone, Harlan B.	Omak, Wash.
Wilson, Ross E.	Akron
Wise, William R.	Streetsboro
Wittkopf, William	Devil's Lake, N. D.
Wolfe, Ernest E.	Pomeroy
Yantis, Haldon V.	Mowcadua, Ill.
Zimmerman, Herbert	Harrisburg, Pa.

SPECIAL STUDENTS

(Not candidates for degree.)

Corvington, Oscar H.	Akron
DeHaven, Louis H.	Akron
Ely, Dwight	Philadelphia, Pa.
Gerberding, Rudy C.	Ft. Wayne, Ind.
Harris, Leroy	Akron
Hausgen, Harry	Akron
Loomis, Raymond C.	Akron
Ruch, Raymond W.	Akron
Singer, James	Albany, N. Y.
Sir Louis, Harry	Akron
Whalen, Albert B.	Akron
Whalen, George L.	Akron
Total Specials—12	

CURTIS SCHOOL OF HOME ECONOMICS

GRADUATE STUDENTS

Robinson, Irma Viola	Akron
Municipal University of Akron.	

SENIOR CLASS

Frampton, Bertha R.	Akron
Garver, R. Katherine	Akron
Kerch, Hazel	Akron
Seniors—3	

JUNIOR CLASS

Bierce, Marion Frances	Cuyahoga Falls
Capron, Miriam Rachel	Akron
Freedlander, Rosalind Gertrude	Akron
Kraus, Luise	Akron
Smith, Maud Elaine	Akron
Whalen, J. Louise	Akron
Juniors—4	

SOPHOMORE CLASS

Iredell, Elizabeth Esther	Akron
Schaufele, Lucile (transferred to Liberal Arts College, Feb., 1920)	Barboston
Waltz, Lois A.	Akron
Sophomores—3	

FRESHMAN CLASS

Bailat, Esther	Akron
Braley, Eloise York	Akron
Buchman, Esther	Akron
Caulfield, Rachel Doris	Akron
Parley, Gladys Slater	Portsmouth, N. H.

Garrett, Margaret	✓	Akron
Halter, Gertrude	✓	Akron
Keating, Mary	✓	Akron
Keck, Olive	✓	Akron
Lord, Margaret	✓	Akron
Noble, Louise	✓	Akron
Shaffer, Gahnelle	✓	Akron
Swinehart, Grace S.	✓	Kent
Palmer, Elna Irene	✓	Kent
Pfeifle, Bessie	✓	Akron
		Freshmen—16

SUMMARY OF STUDENTS IN DAY CLASSES

BUCHTEL COLLEGE OF LIBERAL ARTS

	Men	Women	Total
Graduate Students	7	2	9
Seniors	24	8	32
Juniors	29	14	43
Sophomores	35	25	60
Freshmen	99	41	140
Specials (entrance requirements completed)	38	11	
Specials (entrance requirements not completed)	11	4	
Total Specials			64
Total Men			249
Total Women			105
Total Students in Buchtel College			348

COLLEGE OF ENGINEERING

Fifth Year (including one transfer)	5
Fourth Year	6
Third Year	5
Second Year	21
First Year	85
Specials (not candidates for degree)	12
Total Students in College of Engineering	134

CURTIS SCHOOL OF HOME ECONOMICS

Graduate Students	1
Seniors	3
Juniors	6
Sophomores (including one transfer)	3
Freshmen	15
Total Students in Curtis School	28

EVENING CLASSES

Aasen, George
 Abendshane, Irene
 Allen, Margaret J.
 Allison, Eva V.
 Allison, G. Lloyd
 Andreoli, Andre
 Andrews, Ruth P.
 Babcock, Mabel J.
 Baer, Lyall P.
 Baird, Carl J.
 Baker, Delphos W.
 Baker, Howard
 Bannen, J. Ruth
 Barnes, Raymond Hale
 Barnett, Donald C.
 Bass, Gabriel
 Bauer, Albert C.
 Bauer, Walter J.
 Beach, Mary L.
 Beck, Donna F.
 Belden, Dona A.
 Bensay, Robert S.
 Billeter, Jessie O.
 Bingham, Mayme A.
 Binkley, Fred D.
 Binkley, Howard K.
 Binkley, Samuel F.
 Blackman, Mrs. C. L.
 Blackmore, Margaret
 Blair, Alice
 Blakeney, Ella M.
 Blizzard, Walter J.
 Bohl, Ray A.
 Bozo, Jesse A.
 Born, Harlan F.
 Borway, Ray
 Bowman, Louis B.
 Boyd, Joseph H.
 Braun, Karl C.
 Bremser, Philip K.
 Bridenstine, John H.
 Brinkerhoff, Augusta
 Brown, Bertha
 Brown, Marian
 Brown, R. Charles
 Brown, Jas. Monroe
 Brown, Robert T.
 Brown, Theodore
 Bronsnewell, William I.
 Brubaker, Carlos B.
 Brubaker, Raymond G.
 Burford, William R.
 Burns, Mildred M.
 Buxbaum, Albert B.
 Byrna, George C.
 Byron, Emmet C.
 Cable, Rena N.
 Cable, William S.
 Calkins, Frank S.
 Calvin, Ernest
 Camp, Elizabeth
 Camp, O. G.
 Campbell, James
 Carnahan, Dana
 Capobianco, Michael
 Cardin, Henry L.
 Carroll, John J.
 Carver, Mrs. J. C.
 Castle, Frances
 Cathers, Lillian
 Chalfant, Anna B.
 Chambers, Leslie M.
 Church, Dorothy
 Church, Mrs. Mary
 Clark, Elizabeth
 Clark, Paul
 Clifford, Earl C.
 Clifford, Howard C.
 Constam, A. F.
 Cook, Bertha
 Cook, Louis A.
 Cowgill, Elvyn Spencer
 Cratty, Stella
 Creeger, C. Albert
 Culberson, Franklin C.
 Culberson, Otho D.
 Cummins, Edith
 Darst, Louise
 Davidson, Irene
 Day, William J.
 Deen, Rebecca E.
 DeGeorge, Benjamin
 Demetre, Louise N.
 Derrig, Dorothea
 Dievdahl, Conrad
 Dixon, Charles V.
 Dickinson, Elizabeth G.
 Dodd, S. W.
 Dorman, Henry P.
 Douthitt, Margaret
 Dunbar, Frank B.
 Dunukie, George S.
 Dunn, Ammon C.
 Dupler, Cora M.
 Dutt, Lydia B.
 Dutt, Andrew William
 Eberhart, Harold
 Eberman, W. M.
 Ellifritz, Fred
 Elwood, Jas. Mitchell
 Elwood, John W.
 England, Charles D.
 Eric, Henry
 Eroskey, Mary L.
 Farr, Alvira
 Farver, Weldon E.
 Farver, Warren L.
 Feckley, Frank E.
 Fenton, Grace
 Fiddymont, Katherine S.
 Fischer, Jesse G.
 Fischer, Mrs. Mary E.
 Fitch, Winifred
 Flaugh, Edna M.
 Fletcher, Williard
 Folio, Val L.
 Foltz, Adelaide
 Foltz, Esger B.
 Fontaine, Russell B.
 Foulke, C. M.
 Fowler, Harold G.
 Fowle, Carl F.
 Fox, Roland D.
 Fraser, Norman A.
 Frashure, Phyllis A.
 Freeman, Sidney A.
 French, Oakley R.
 Fritschler, Amelia

Fuchs, Norman H.
 Fuller, Elmer
 Fuller, Helen A.
 Gantt, Lillian
 Garner, Amy K.
 Garver, Harland D.
 Gessler, Myra
 Getchell, Daniel H.
 Gilbert, Paul
 Gillen, Francis
 Gilliland, Clair A.
 Giroux, Harry A.
 Gladwin, Neonetta
 Glover, E. W.
 Goodyear, George
 Graham, George N.
 Graves, Harold Elton
 Gray, Kenneth
 Gray, Wayne
 Green, Charles
 Green, Lamont M.
 Gregor, William
 Griffith, Mrs. Helen
 Goff, Paul Maitland
 Goode, Ralph C.
 Gordon, Jennie B.
 Gugler, Carrie
 Guinea, Sever L.
 Guren, Myron
 Gwin, C. L.
 Haas, Elma
 Haldy, Gertrude
 Halpern, Philip
 Hammond, Mrs. Sue M.
 Harper, Ivan S.
 Harris, Annie Laurie
 Harris, Eben
 Harris, Mrs. Esther
 Hartman, Elvah
 Hartschuh, Clayton E.
 Hartz, Grace
 Hawkins, Geo.
 Hawley, Howard H.
 Haynes, Leo W.
 Hayworth, Russell A.
 Heckman, Edward F.
 Heckman, S. L.
 Heine, Walter F.
 Heiser, Edward
 Hendrickson, Paul D.
 Henke, Hubert W.
 Henry, Catherine
 Henry, Sara B.
 Hentzell, Grace
 Hersman, William S.
 Hester, Joseph
 Hickok, George
 Hill, Rolland E.
 Hinkle, Paul R.
 Hoffman, John N.
 Hoffman, Lela
 Hoffman, William F.
 Hogan, Joseph T.
 Horelick, Harry
 Hostetler, LeRoy
 Houch, Floyd
 Houser, Carl C.
 Hubbard, Edith M.
 Huntley, Dorothy
 Huntley, Vesta A.
 Hunter, Thelma
 Hurst, Robert E.
 Hyer, J. Mack
 Jameson, Arthur R. D.
 Johnston, J. W.
 Jones, Edna
 Jones, Herbert K.
 Jones, Loretta
 Jones, Stanley M.
 Kahnheimer, Josephine
 Kazimer, Salis
 Kellstadt, Charles
 Kennedy, C. Blanche
 Kennedy, Cecile
 Kennedy, Dorothy A.
 Kennedy, Ruth E.
 Kingsbury, Earl K.
 Kirtley, Lorin E.
 Kittredge, Mrs. J. W.
 Klahr, H. A.
 Knapp, Mabel E.
 Krager, Lillian G.
 Krause, Elmer A.
 Kraus, Martha B.
 Kress, Alfred R.
 Kunkel, M. Goldo
 Kuzmaul, Corliis
 Lance, Harold J.
 Lane, Cora C.
 Larson, Sue
 Lasher, Margaret E.
 Lawrence, Mabel
 Leach, Mae
 Leavitt, Asenath
 Leonard, Bert E.
 Leonard, Homer C.
 Leib, Myrtle
 Leonhiser, Wilomine
 Lessiter, Charles H.
 Lewis, Frieda G.
 Lichter, Jacob
 Lewis, Lindley Dodd
 Loewy, Harriet
 Long, Watt A.
 Love, I. R.
 Lutz, F. W.
 McCutcheon, Elizabeth
 McDermott, Eugene
 McIntyre, Donald
 McLallen, Maude
 McLaren, Robert W.
 McNees, Joshua M.
 McLaughlin, Anna Mary
 McVean, Etta
 MacDonald, LaVerne
 Madden, Lillian
 Maguire, Clara
 Malone, Camilla
 Malone, Marie R.
 Maloney, Louise
 Maricohy, Mary
 Marsh, Donald E.
 Martin, William L.
 Martin, Charles J.
 Mason, Anita L.
 Matthews, Ellen S.
 Mattingly, Bernard R.
 Maxson, Maude A.
 Michel, A. Mae
 Miller, Isaac J.
 Miller, John Earle
 Miller, John F.

Miller, Julia R.
 Miller, Sidney O.
 Miner, Ralph H.
 Mishler, Florence M.
 Mishler, Russell L.
 Mohler, John A.
 Mohr, Hugh N.
 Molner, Julia F.
 Molenaar, Logan
 Moore, George A.
 Moore, Harold Glenn
 Moore, Jack
 Moore, Ruth
 Morehouse, Hubert H.
 Morgan, Alta Jane
 Morgan, Stewart
 Moor, Clarence
 Morris, Cecilia K.
 Morrow, Anna Leona
 Morrow, Custer A.
 Moyer, Wade
 Moyer, William G.
 Mulligan, James E.
 Murphy, Scott Helen
 Myers, Paul Ivan
 Naber, Louise
 Naugher, Clarence
 Neuman, Beatrice
 Neuman, Miriam
 Newell, M. Grace
 Newkirk, Paxton B.
 Nicholas, Harry G.
 Nishaus, Roy G.
 Oakley, Alfred T.
 Oakley, Louise
 Olla, Edward R.
 Olin, Grace G.
 Orin, William C.
 Paddington, Horace J.
 Palmer, Jack
 Pennebaker, Edward H.
 Pennell, Ray B.
 Peterson, A. H.
 Peterson, A. William
 Perrin, Henry B.
 Pethick, Russell
 Pierce, Ethel M.
 Pletcher, Harold
 Plummer, Harry C.
 Poe, Loren L.
 Poe, Lucille T.
 Poland, Edna H.
 Porter, Onesta
 Post, E. Sherwood
 Post, Bessie J.
 Proehl, B. L.
 Purdy, Earl
 Purdy, John F.
 Quillen, Charles
 Rau, Edwin T.
 Raub, Susie
 Rauch, Sadie C.
 Ream, Lewis T.
 Ream, John Milton, Jr.
 Redinger, Mary
 Reinke, Mina
 Remy, Grace M.
 Remy, Mildred
 Rentschler, Callie E.
 Rhodes, Marguerite
 Rice, Alma Louise
 Rice, Marvin B.
 Richardson, R W
 Richmond, Paul
 Rinehart, Olive
 Robinson, Irma Adele
 Robinson, Irma Viola
 Robinson, Leslie L.
 Robinson, Mrs. W.
 Roether, Harry H.
 Rollins, Eleanor
 Rook, Margaret
 Ross, Agnes
 Rosell, Olive
 Rothe, Mildred S.
 Rothe, Virgil W.
 Roush, Prudence
 Roush, R. A.
 Rowan, John W.
 Ruedi, Mrs. Eunice C.
 Russell, Nell
 Royer, Phyllis
 Sage, Victor
 Sanches, A. G.
 Sanderson, Wm. L.
 Sapp, Lillie L.
 Sartorius, Louis R.
 Sauerbrey, Albert H.
 Saunders, Harold R.
 Saxton, Bessie N.
 Schell, Mervin S.
 Scherrer, Paul
 Schlegel, Lillian M.
 Schmieg, Gertrude M.
 Schrack, Flora
 Schrack, Leta
 Schwartz, Marie
 Schwinn, Helen L.
 Scott, M. Elsie
 Sebrell, Mrs. Lorin
 Seymour, Ruth W.
 Shawan, Wilbur G.
 Sherbondy, Grant
 Shinkle, Freda
 Shrene, Dorothy
 Siegfried, Charles K.
 Simmons, Mrs. H. E.
 Slossower, Harry
 Slusser, Grace M.
 Slusser, Mrs. Harvey
 Smith, Garrett H.
 Smith, Jessie G.
 Smith, Thomas C.
 Snavely, Daisy Mae
 Somerville, William
 Sours, H. Gladys
 Spencer, Clifford R.
 Squires, Owen
 Staats, Suzanne
 Stark, Claude H.
 Starr, Ethel M.
 Staver, Rodna L.
 Stebbins, Carrie E.
 Stebbins, Charles
 Stebbins, Edna H.
 Steel, Earl
 Steel, Raymond J.
 Stees, Fannie R.
 Steidle, Walter M.
 Stein, Homer
 Steinhouser, Rose K.
 Stemann, Kirby A.

Stevens, Leonard V.	Walter, John H.
Stevens, Maude	Ward, Gladys E.
Stevens, Lee	Ward, May
Stiles, Helen	Warner, Florentina
Stone, Elizabeth	Warner, Pearl
Stork, Oscar H.	Warner, Elmer
Streit, Arthur M.	Warner, Jeanette
Strenick, Hazel	Warner, Laura J.
Stump, Royal F.	Warrick, H. W.
Sullivan, Margaret	Waters, Joseph
Sullivan, Mary B.	Weaver, Estella
Sumner, Beatrice	Weaver, Ivan N.
Sven, David Saudin	Weaver, Sarah
Swain, Ralph	Wegmiller, Ruth
Sweet, Naomi	Weilbrenner, Marie
Tatch, Ray	Weltner, Dora
Templer, May	Werckshagen, Paul
Tham, Wilbert	Wertz, Grace Alveria
Theiss, Lily M.	Whiteman, Grace
Thoma, Ernest E.	Whiton, Edith
Tier, Anna	Whittaker, Ruth
Thomas, Carl J.	Wilcox, Margene
Thomas, Laura G.	Wilcox, Maurine
Thornton, Gladys R.	Wilkie, Charles B.
Tingley, Harleigh	Willford, Earl J.
Todd, Grace A.	Williams, Bruce
Trigg, W. N.	Williams, Edward C.
Twynman, Katherine E.	Williamson, Harry L.
Twynman, Melvin N.	Wilson, Jessie M.
Tyrrell, Eunice	Wingenter, Charlotte W.
Van Cott, John L.	Wood, Oma L.
Van Buskirk, Forest J.	Wood, Thomas B.
Van Hyning, Irene	Wolf, William B.
Vaughn, Mildred M.	Wortman, Eldred
Vaughan, Trevor	Wright, Fred A.
Vincent, Elsie V.	Wright, Helen B.
Vincent, Ethel R.	Wright, Mrs. J. B.
Von Gunten, W. E.	Wright, James Purcell
Votaw, Ernest W.	Yaw, William
Wagner, Bernard	Yonson, Mabel
Wagner, Charles	York, Jessie Poland
Wagner, Francis A.	Young, E. Roy
Walker, Hazel	Zabst, Dora
Walker, Paul R.	Zeiter, Earl F.
Wallace, Don C.	Zink, William J.
Wallace, Ruby	Zook, D. B.

Total	516
Students regularly enrolled in University taking evening courses, deduct	7
Total Evening Students	509

SUMMARY OF ALL STUDENTS IN UNIVERSITY

	Men	Women	Total
Graduate Students	7	3	10
Total Seniors	29	11	40
Total Fourth Year (Engineering)	6	---	6
Total Juniors	29	20	49
Total Third Year (Engineering)	5	---	5
Total Sophomores and Second Year (Engineering)	56	28	84
Total Freshmen and First Year (Engi- neering)	184	56	240
Specials (candidates for degree)	38	11	49
Specials (not candidates for degree)	23	4	27
<hr/>			
Total in Day Classes	377	133	510
Students counted twice (deduct)	1	1	2
Total in Evening Classes	509		
(On basis that five evening students are equivalent to one full time student)			161
<hr/>			
Total Full Time Students in University			609

EXTENSION WORK

Students enrolled in Public Health Nursing Class (24 lec-
tures), 1919

38

Students enrolled in classes in Americanization Institute
during the month of September, 1919

145

The following students entered the University the second se-
mester, 1918-1919, too late to have their names recorded in the
1919 catalog:

Kimishima, Takio
Pfahl, Charles Alton
Rogers, Virgil
Wortman, Eldred
Zinder, Leah

DEGREES CONFERRED

BUCHTEL COLLEGE

Class of 1919

BACHELOR OF ARTS

Wendell H. Arnold	Akron
Reed O. Fosnight	Akron
Katherine Ruth Graham	Akron
Edith May Hollingsworth	Akron
Oscar Aaron Hunsicker	Akron
Lila Eleanor Marvin	Ravenna
Pauline Barbara Rowley	Akron
Louise Taylor	Akron

BACHELOR OF PHILOSOPHY

Loretta May Jones	Akron
Joseph Crosby Osborne	Corry, Pa.

BACHELOR OF SCIENCE

Carl S. Gilbert	Akron
John Warren Grafton	Barberton
John Charles Henderson	Akron
Howard W. Hottenstein	Akron
Harold S. Holloway	Akron
*Saul Makman	Akron
Walter W. Purdy	Akron
Carl R. Shaffer	Akron

BACHELOR OF SCIENCE IN HOME ECONOMICS

Helen V. Hardie	Akron
Helen M. Kepler	Akron
Irma Viola Robinson	Akron

MECHANICAL ENGINEER

J. Earl Gulick	Akron
Ernest Christian Mitchell	Akron
Carl Soderlund	Akron

BACHELOR OF CIVIL ENGINEERING

Lucius F. Converse	Mantua
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BACHELOR OF SCIENCE IN MANUFACTURING
PRODUCTION

Emmett V. Daniel	Waverly, Tenn.
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*In combined Arts-Medicine Course with Western Reserve Medical School.

PUBLIC ADDRESSES—1919

- January 7 Edgar J. Banks—"One Thousand Miles Down the Tigris River."
 February 28 Miss Mary Gladwin, '87—"Experiences as Red Cross Nurse During the Great War."
 March 13 Charles Crawford Gorst—"Birds."
 May 2 W. E. Young—"League of Nations."
 June 24 Dr. Donald J. Cowling—"The Foundations of Lasting Peace."
 October 26 Professor L. M. McDermott—"Experiences in the Philippines."
 November 14 Marshall H. Sorrick—"Birds of Summit County."
 December 11 Dr. Mitchell Carroll—"Greece, Our Youngest Ally."
 December 19 President P. R. Kolbe—"The Hawaiian Islands."

PRIZES AND HONORS*The Ashton Prizes*

Sophomore Ashton Prize contest, March 21, 1919. First prize to Luise Kraus; second to Alleyne Weaver.

The Senior Alumni Prize

The Senior Alumni Prize was awarded to Joseph C. Osborne.

The Tomlinson Prizes

The Tomlinson Prizes were awarded to the following students: James A. Weeks, '21, first prize; Oscar Hansicker, '19, second prize.

The Loomis Cup

The Loomis Cup was won by West High School in 1915-1916, by South High School in 1916-1917, 1917-1918 and 1918-1919, which makes it the permanent possession of South High School.

Phi Sigma Alpha

The three students chosen for membership in Phi Sigma Alpha fraternity from the senior class of 1919 were: Joseph C. Osborne, Edith M. Hollingsworth, Wendell H. Arnold.

BUCHTEL COLLEGE ALUMNI ASSOCIATION

Organized July, 1874

Incorporated October 19, 1899

OFFICERS FOR 1919-1920

President, CHARLES BULGER, '08	Akron
Vice Presidents, MAUDE HERNDON, '01	Akron
FORD L. CARPENTER, '09	Akron
Secretary, AMELIA SCHOENINGER, '98	Akron
Treasurer, A. E. HARDGROVE, '11	Akron

ALUMNI BOARD OF TRUSTEES

Officers

CHARLES BULGER, '08	President ex-officio
AMELIA SCHOENINGER, '98	Secretary ex-officio
A. E. HARDGROVE, '11	Treasurer ex-officio

Term Expiring June, 1920

RACHEL FLEMING MERTZ, '17	Akron
F. GLENN ALEXANDER, '14	Akron
MRS. E. W. BARTON, '98	Akron
CHARLES JAHANT, '09	Akron

Term Expiring June, 1921

MRS. H. E. SIMMONS, '06	Akron
THAD RICE, '97	Akron
INEZ PARSHALL, '03	Akron
MARGUERITE PLACE ALLEN, '18	Akron

Term Expiring June, 1922

FRANK GOEHRING, '08	Akron
ALFRED HERBERICH, '11	Akron
C. C. McNEIL, '09	Akron
JOSEPH HANAN, '10	Akron

Annual meeting of the Association during Commencement.

Stated meetings of the Alumni Board of Trustees on the Thursday evening of the week following Commencement week, the third Thursday evening of November, February and May.

SUMMARY OF ALUMNI

NUMBER OF GRADUATES

Men	339
Women	275
Total	614

Geographical Distribution

Deceased	58
Unknown	4
In California	13
In Colorado	4
In Connecticut	1
In Florida	1
In Georgia	3
In Idaho	3
In Illinois	9
In Indiana	14
In Iowa	3
In Massachusetts	10
In Michigan	12
In Minnesota	1
In Mississippi	1
In Missouri	3
In Montana	1
In Nebraska	2
In N. Carolina	1
In N. Dakota	1
In New Jersey	2
In New Mexico	1
In New York	28
In Ohio	407
In Oklahoma	1
In Oregon	2
In Pennsylvania	19
In Tennessee	1
In Texas	1
In Utah	1
In Vermont	3
In Washington	2
In Wisconsin	1
In Wyoming	1
In Panama	2
In France	5

Occupations of Alumni

Actors	2
Architects	1
Artists	1
Authors	3
Bankers	4
Charity Organization Work	3
Chemists	25
Clergymen	12
Clerical Work	55
Commercial Work	52
Contractors	1
Decorators	1
Dietitians	3

Engineers	15
Farmers	10
Forestry	1
Government Employ	8
Insurance and Real Estate	9
Lawyers	41
Librarians	4
Living at Home	46
Lyceum Bureau Work	1
Manufacturers	4
Married Women	82
Merchants	4
Musicians	4
Newspaper Work	7
Nurses	4
Physicians	18
Promoters	4
Public Service	2
R. R. Agents	1
Salesmen	7
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Students	23
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Unknown	10
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