Gladys P. Weeks

The Municipal University of Akron

Akron, Ohio *April, 1921*

ANNUAL CATALOG

1921

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And Fiftieth
Annual Catalog
of Buchtel College

AKRON, OHIO
April, 1921

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UNIVERSITY CALENDAR

1921

January 3, Monday, 8:00 A. M.—Class work resumed.
January 12 and 13, Wednesday and Thursday—Classification for Second Semester—Buchtel College of Liberal Arts and Curtis School of Home Economics.
January 18, Tuesday—Founder's Day.
January 18, Tuesday—Senior Ashton Prize Contest.
January 24-29, Monday to Saturday—Final Examinations.
January 29, Saturday, 12:00 M.—First Semester closes.
February 1, Tuesday—Second Semester begins.
February 5, Saturday, 2:00-5:00 and 7:00-8:30 P. M.—Registration and Classification—Evening College.
February 14, Monday—Classification—Engineering College, Section I.
February 22, Tuesday—Washington's Birthday—a holiday.
February 28, Monday, Classification—Engineering College, Section II.
March 18, Friday, 11:00 A. M.—Sophomore Ashton Prize Contest.
March 19, Saturday, 12:00 M.—Easter vacation begins. Engineering College Recess. One Section.
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, 11:00 A. M.—Junior Ashton Prize Contest.
June 4, Saturday, 12:00 M.—Senior vacation begins.
June 6-11, Monday to Saturday—Final Examinations.
June 12, Sunday, 3:30 P. M.—Baccalaureate Exercises.
June 13-15, Monday to Wednesday—Commencement.
June 20 to August 13, Summer Session for Engineering College.

September 12, Monday, Registration and Classification—Engineering College, Section I.
September 12 and 13, Registration and Classification:
Buchtel College of Liberal Arts
Curtis School of Home Economics
September 14, Wednesday, 8:00 A. M.—Class work begins.
September 17, Saturday, 2:00-5:00 and 7:00-8:30 P. M.—Registration and Classification—Evening College.
September 23, Friday—Freshman Elections.
September 26, Monday—Registration and Classification—Engineering College, Section II.
November 24, 25, 26, Thursday, Friday and Saturday—Thanksgiving Recess.
December 21, Wednesday, 4:00 P. M.—Christmas vacation begins.

1922

January 4, Wednesday, 8:00 A. M.—Class work resumed.
January 11 and 12, Wednesday and Thursday—Classification for Second Semester.
January 14, Saturday—9:00-12:00 A. M. and 2:00-5:00 P. M.—Registration and Classification of new students.
January 18, Wednesday—Founder's Day.
January 18, Wednesday—Senior Ashton Prize Contest.
January 23-28, Monday to Saturday—Final Examinations.
February 1, Wednesday—Second Semester begins.
February 4, Saturday, 2:00-5:00 and 7:00-8:30 P. M.—Registration and Classification—Evening College.
February 22, Wednesday—Washington's Birthday—a holiday.
March 7, Friday—Sophomore Ashton Prize Contest.
April 8, Saturday, 12:00 M.—Easter vacation begins.
April 17, Monday, 8:00 A. M.—Class work resumed.
May 11, Thursday—Student Elections.
May 26, Friday—Tree Day.
May 30, Tuesday—Memorial Day—a holiday.
June 2, Friday—Junior Ashton Prize Contest.
June 3, Saturday, 12:00 M.—Senior vacation begins.
June 5-10, Monday to Saturday—Final Examinations.
June 11, Sunday—Baccalaureate Exercises.
June 12-14, Monday to Wednesday—Commencement.

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 1921

F. M. COOKE .....*Chairman*
CHARLES R. OLIN .....*Clerk*

COMMITTEES FOR 1921

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

ADMINISTRATIVE OFFICERS OF THE UNIVERSITY

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

GENERAL FACULTY AND OFFICERS

1920-1921

PARKE R. KOLBE, Ph. D.
President of the University
President's House

CHARLES M. KNIGHT, A. M., Sc. D.
Professor Emeritus of Chemistry
583 Weber Avenue

JOSEPH C. ROCKWELL, Ph. D.
Professor of Latin and Greek
58 Casterton Avenue

OSCAR E. OLIN, A. M., LL. D.
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 and Director of Evening College
331 Beechwood Drive

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
175 Merriman Road

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. PLOWMAN, Ph. D.
Professor of Biology
346 Crown 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
323 Park Street

GLEN H. ANDERSON, Lieutenant, Infantry, U. S. A.
Professor of Military Science and Tactics
619 Lumiere Street

EARL WILLIS CRECRAFT, Ph. D.
Professor of Political Science and Economics
1060 LaCroix Avenue

LAWRENCE M. MCDERMOTT, A. M.
Professor of Commerce and Business Administration
362 East Buchtel Avenue

JOHN L. JONES, Ph. D.
Ainsworth Professor of Mathematics
49 Kathron Avenue, Cuyahoga Falls Ohio

THOMAS L. MCJOYNT, LL. B., B. C. S.
Professor of Coordination
120 South Union Street

ARDEN E. HARDGROVE, B. S.
Assistant-Professor of Chemistry and Director of the Bureau of City Tests
1190 Jefferson Avenue

RICHARD H. SCHMIDT, A. M.
Assistant-Professor of Chemistry
Sawyerwood, East Akron, Ohio

KATHARINE M. REED, A. M.
Assistant-Professor of Modern Languages
900 Elmore Avenue

HERMAS V. EGBERT, A. M.
Assistant-Professor of Mathematics
309 Mills Avenue

ROSS C. DURST, C. E.
Assistant-Professor of Civil Engineering
103 Brick Street, Cuyahoga Falls, Ohio

BRUCE WELKER MCCULLOUGH, Ph. D.
Assistant-Professor of English
167 South Union Street

HENRY P. GAUSS, M. E.
Assistant-Professor of Mechanical Engineering
132 Springfield Road, R. R. 24

RALPH W. ROGERS, M. E.
Assistant-Professor of Mechanical Engineering
Hudson, Ohio

JOHN T. WALTHER, B. S.
Assistant-Professor of Electrical Engineering
384 Reed Avenue

CARITA MCEBRIGHT, A. B.
Instructor in Speech
396 East Market Street

ALBERT PHELPS TULLER, A. B.
Instructor in Modern Languages
197 Spicer Street

JOHN W. BULGER, B. C. E.
Instructor in Mathematics
457 Carroll Street

EARLE BARTON HOWE, A. B.
Instructor in English
235 Bernard Court

RITA E. STINSON, B. S.
Instructor in Home Economics
426 Carroll Street

IMOGENE J. MYRLAND, B. S.
Instructor in Chemistry
447 East Market Street

MAY TWEEDIE, A. M.
Instructor in Modern Languages
349 Carroll Street

DAVID MAX SHARER, A. B.
Instructor in Commerce and Business Administration
430 Perkins Street

IDA JOSEPHINE WHITAKER, B. S.
Instructor in Mathematics
349 Carroll Street

MAE FRIEDLANDER, M. S.
Instructor in Biology
343 Carroll Street

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

FRANCESCO B. DELEONE, Mus. D.
Director of Music
199 West Market Street

ROY C. OLSON, 1st Sergeant, Infantry, U. S. A., Unassigned
Assistant in Department of Military Science and Tactics
481 Wheeler Street

T. ROBERT SCHWEITZER, B. S.
Assistant in Bureau of City Tests
205 Spicer Street

HENRY W. ROBINSON
Mechanician, Engineering Laboratory
728 Kolb Street

OLIVE A. HENEGAN, A. B.
Graduate Assistant in Biology
589 Crosby Street

MRS. CLAUDE T. CHAIN, B. S.
Instructor in English
881 Sichley Avenue

*VIRGIL E. ROGERS, A. B.
Assistant in Department of Physical Education
194 Spicer Street

EDWARD P. DAVIS
Sergeant, U. S. Infantry
344 Union Place

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

‡ALVIN S. VOGELGESANG
Instructor in Business Administration
925 Shorb Avenue, N. W., Canton, Ohio

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*Part-time instructors
‡Part-time instructors in Evening College

FELLOWS IN CHEMISTRY

HERBERT ARTHUR ENDRES, M. S., Leland Stanford Junior University
268 Wheeler Street

CLINTON G. YARTER, B. S., St. Lawrence University
373 Carroll Street

GRADUATE STUDENT ASSISTANT

GLADYS F. DAVIS, A. B. ..... *Economics*

STUDENT ASSISTANTS

RAY A. BOHL ..... *Biology*
ROLLAND FOX ..... *Biology*
HENRY C. BERRODIN ..... *Bureau of City Tests*
HARRY C. GUCKEYSON ..... *Business Administration*
J. SEBRING ACKERMAN ..... *Chemistry*
OLIVE KECK ..... *Chemistry*
WARREN BROCKETT ..... *Chemistry*
EARL GUDIKUNST ..... *English*
MARION K. WEAVER ..... *History*
BEULLA K. KINNA ..... *Library*
WALLACE MACKINNON ..... *Library*
FLOYD O. MAJOR ..... *Library*
HELEN OSTERHOUSE ..... *Library*
JOHN E. DAVIES ..... *Physics*
EARL GRIFFIN ..... *Physics*

COMMITTEES OF THE FACULTY
1920-1921

Executive
KOLBE, O. E. OLIN, SPANTON, AYER, SIMMONS

Classification
Buchtel College—BULGER, SPANTON, PLOWMAN, MCDERMOTT, EGBERT, CRECRAFT, SCHMIDT, HOUSEHOLDER
College of Engineering—BULGER, MCJOYNT, DURST
Curtis School of Home Economics—BULGER, STIMMEL
Evening College—SIMMONS, REED, TULLER, MCCULLOUGH, HOWE, MCEBRIGHT, SHARER, TWEEDIE

Public Speaking
MCEBRIGHT, THOMPSON, MCDERMOTT

Social
THOMPSON, MCDERMOTT, TULLER, REED, WHITAKER

Holiday Observances
REED, JONES, DELEONE, STINSON, AND CLASS ADVISERS

Athletics
C. BULGER, SEFTON, C. R. OLIN

University Publications
MCJOYNT, MCCULLOUGH

Student Affairs
(Council, Honor System, Elections, Advisers, etc.)
SIMMONS, J. BULGER, PLOWMAN, CRECRAFT, MYRLAND

Library
CRECRAFT, JONES, FINDLEY, CUSHMAN, HOWE

Scholarship and Honors
ROCKWELL, STIMMEL, JONES

Extension Lectures
ROCKWELL

University Assembly
HOUSEHOLDER, DURST

Faculty Representatives for Student Activities

FRESHMAN	SIMMONS
SOPHOMORE	CRECRAFT
JUNIOR	HARDGROVE
SENIOR	SPANTON
BUCHTELITE	MCCULLOUGH
MEN'S CLUB ROOMS	SEFTON
WOMEN'S CLUB ROOMS	THOMPSON
WOMEN'S LEAGUE	WHITAKER

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 gradu-

ate 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 and Commerce.
The Curtis School of Home Economics.
The Evening College.

BUCHTEL COLLEGE OF LIBERAL ARTS

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 AND COMMERCE

The College of Engineering and Commerce offers courses in various branches of engineering, in manufacturing production and in commerce and finance.

THE CURTIS SCHOOL OF HOME ECONOMICS

A four-year course is offered leading to the degree of Bachelor of Science in Home Economics. Especial attention is given to preparation for teaching and other vocations.

THE EVENING COLLEGE

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

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.

COMMUNITY CO-OPERATION

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 are 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.

STANDARDS

The Municipal University of Akron maintains in all its departments courses of standard grade and is in every sense a standard American College, as is evidenced by its member-

ship in such standardizing organizations as the Ohio College Association and the North Central Association of Colleges and Secondary Schools. It is included in the approved list of the Association of American Universities for recommendation of the bachelor's degree to foreign universities and is approved for pre-medical work by the American Medical Association. Its women graduates are eligible to membership in the Association of Collegiate Alumnae.

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. The winner for 1919-1920 was West High.

Buchtel College Scholarships

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 $1,500 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 industrial engineering have been established by Akron industrial concerns.

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 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 Home Economics Club; the Physics Club; the Musical Organizations; 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:

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)
- Greek ....1 or 2 units
- Latin ....1 to 4 units
- French ....1 to 4 units
- German ....1 to 4 units
- Spanish ....1 or 2 units

Science (not more than 4 units in all)
- Physics ....1 unit
- Chemistry ....1 unit
- Zoology ....½ or 1 unit
- Botany ....½ or 1 unit
- Physiology ....½ unit
- Phys. Geog. ....½ or 1 unit

English ....3 or 4 units

Mathematics
- Algebra ....1½ or 2 units
- Geometry ....1 or 1½ units

History
- Advan'd U. S. ½ or 1 unit
- General ....1 or 2 units
- English .... ½ or 1 unit

Civics ....½ unit

Political Economy ....½ unit

Vocational subjects (not more than 4 units in all)
- Manual Arts....1 to 3 units
- Domestic Science....1 to 3 units
- Com'l subjects....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:

- 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 Hoeher 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 ½ 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 1921-1922 will be Sept. 12 and 13; for the second semester, January 11 and 12.

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.

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*This refers to registration for all work except evening classes. For these see page 109.

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 select a maximum of twenty hours' work in the Curtis School to be applied toward the requirements for graduation from Buchtel College.

College of Engineering and Commerce—Students in Buchtel College may elect a maximum of twelve hours' work in the Department of Commerce and Administration of the College of Engineering and Commerce. Such credit may be used toward the elective requirements for graduation, but may not be used to fulfill the major or minor requirements. Other subjects in the College of Engineering may be elected by Liberal Arts students only on the consent of the Classification Committee.

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.

FEES

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 pages 44, 78, 104.)

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 between 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 to 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. Terril ..... Jeffersonville
*Mrs. John H. Hilton ..... Akron
*Samuel Birdsell ..... 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. BORTLE .....Hamilton
‡‡DELIA LORING MORRIS .....Belpre

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

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

B. S. COURSE

The candidate must present:

English .....3 units
Mathematics .....3 units
*Foreign Languages .....4 units
Sciences [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, 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.

Students are not allowed to begin two languages at the same time.

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	4	Chemistry 354	4
• Physics 331		Physics 332	
Biology 401		Biology 402	
Physical Training (women)	1	Current Events (women)	1
• Physical Training and Military Drill (men)	2	Physical Training (women)	1
• Freshman Lectures	½	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-VIII (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 123 and 129.

II. *The Scientific Course

First Half-Year	Term Hrs.	Second Half-Year	Term Hrs.
Rhetoric 51	3	Rhetoric 52	3
Chemistry 353	4	Chemistry 354	4
Physics 331		Physics 332	
Biology 401		Biology 402	
Physical Training (women)	1	Current Events (women)	1
Physical Training and Military Drill (men)	2	Physical Training (women)	1
Mathematics 301	4	Physical Training and Military Drill (men)	2
French, Spanish or German	4	Mathematics 302	4
Freshman Lectures	½	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.*

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.

II. *Latin.* A minimum of 32 hours.

III. *German and French.* A minimum of 20 hours of each.

IV. *Romance Languages.* A minimum of 40 hours (26 of French and 14 of Spanish).

V. *Philosophy and Sociology.* Thirty-two hours.

VI. *Economics and Political Science.* Twelve hours of each.

VII. *History.* A minimum of 24 hours.

VIII. *English Literature.* A minimum of 24 hours, exclusive of Rhetoric 51 and 52.

II. MAJORS LEADING TO THE B. S. DEGREE

IX. *Chemistry.* A minimum of 40 hours.

X. *Mathematics.* A minimum of 32 hours.

XI. *Physics.* A minimum of 25 hours.

XII. *Biology.* A minimum of 32 hours.

III. MINORS REQUIRED WITH EACH MAJOR

(The figures indicate semester-hours required)

MINORS	Greek and Latin Major 40 hrs.	Latin Major—32 hrs.	German and French Major 40 hrs.	Romance Lang. Major 40 hrs.	Philos. and Sociology Major 32 hrs.	Econ. and Pol Sci. Major 24 hrs.	History Major—24 hrs.	Eng. Lit. Major—24 hrs.	Chemistry Major—40 hrs.	Math. Major—32 hrs.	Physics Major—25 hrs.	Biology Major—32 hrs.
1. Lit. 65 and 66, 69 and 70, or 75 and 76.	6	6	6	6	6	6	6		6	6	6	6
2. Human Biology	4	4	4	4	4	4	4	4				
3. History	6	6	6	6	6	6		6[1]	6	6	6	6
4. Philos. or Sociology	6	6	6	6		6	6	6	6	6	6	6[2]
5. Econ. or Pol. Sci.	6	6	6	6	6		6	6	6	6	6	6
6. *Modern Language	6 or 8	6 or 8										
7. ‡Foreign Language					22	22	22	22				
8. Public Speaking	3	3	3	3	3	3	3	3	3	3	3	3
9. Biology									8		8	
10. Chemistry										8	8	8
11. Physics 331 and 332									8	8		8
12. Sci. German (4) or Sec. Yr. French (6)									4 or 6	4 or 6	4 or 6 9	4 or 6
13. Soph. Math												

*In addition to foreign language for freshman requirement.

‡Must include two languages, with not less than 8 hours of each.

[1]Must be History of England.

[2]Must be Psychology.

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 331 and 332, each	$2.50
Physics, Advanced courses, each semester	4.00
Biology 401-404, 407-412, and 417	2.50
Biology 419-420	4.00
Biology 423-424, per semester-hour	1.00
Biology 419-420, breakage deposit	5.00
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	
Music	

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. Not given in 1921-1922.

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. Not given in 1921-1922.

The continuation of the preceding course.

CLASSICAL ARCHEOLOGY

PROFESSOR ROCKWELL

Courses 17 and 18 will count toward either major offered in this department.

*17-18. *History of Greek Sculpture.—(Both Semesters.)* Three hours.

19. *Classical Mythology.—(First Semester.)* Two hours.

24. *The Influence of Greece and Rome on Modern Life.—(Second Semester.)* Two hours.

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 (Manaechmi).—(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).—(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 McCULLOUGH

MR. HOWE

MRS. MACKINNON

MRS. CHAIN

RHETORIC

51. *Freshman Rhetoric.—(First Semester.)* Three hours. Repeated the Second Semester.

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. Also given the First Semester.

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

53-54. *News Writing.—(Both Semesters.).* 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.

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

Prerequisite: Course 55. Study of the short-story with wide illustrative reading. Text-book: Pitkin's Short-Story Writing.

58. *Argumentation and Debate.—(Second Semester.)* Two hours.

Prerequisite: Courses 51, 52. 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.

LANGUAGE AND LITERATURE

Required work. In addition to the required work in Rhetoric, students in all courses must take at least six hours' work in the department of English Language and Literature. This requirement may be met by electing Courses 65 and 66, 69 and 70, or 75 and 76.

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

Order of Work. Courses 65 and 66 are prerequisite to the more advanced courses, and must be taken in the sophomore year by students desiring to major in English. The course in English History should also be taken in the sophomore year.

65. *Development of English Literature.—(First 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.

66. *Modern English Literature.—(Second 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.

*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. Prerequisite: Courses 65 and 66.

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.

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

A study of the development of Shakspere as a dramatist and his place in the Elizabethan Age and in the history of English literature. Most of the plays are read.

70. *The English Bible as Literature.—(Second 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.

*73-74. *British Poets and Essayists of the Nineteenth Century.—(Both Semesters.)* Three hours. Not given in 1921-1922.

75-76. *American Literature.—(Both Semesters.)* 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.

*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.

*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.

*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.

Not given in 1921-1922.

*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.

Not given in 1921-1922.

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.

Not given in 1921-1922.

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

The continuation of the preceding course.

Not given in 1921-1922.

*85-86. *Advanced Course.—(Both Semesters.)* Two hours.

A more detailed study of some one literary type or period, or the work of some one author, than is possible in the other courses. As the work of this course varies from year to year, it may be taken two years in succession.

89-90. *Story Telling.—(Both Semesters.)* 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.

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 Semester.)* Three hours. Repeated the Second Semester.

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

92. *(Second Semester.)* 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, Shakspere's plays. Classic comedies.

*94. *(Second Semester.)*

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

*95-96. *Dramatic Study.—(Both Semesters.)* 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.

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

97-98. *Physical and Voice Work.—(Both Semesters.)*

One hour.

Open to all upper-classmen.

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

MODERN LANGUAGES

PROFESSOR BULGER

ASSISTANT-PROFESSOR REED

MR. TULLER

MISS TWEEDIE

DR. KOLBE

Language in General. (a) Candidates for entrance presenting but one year of modern language may take the second year on trial if they made a grade of 85%. If their grade is lower than 85%, they must take the first year over with a credit of 50%, unless, by examination, they satisfy the head of the department of their ability to enter the second year.

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

151-152. *Beginning French.—(Both Semesters.)* Four hours.

153-154. *Second Year French.—(Both Semesters.)* Three hours.

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.*

SPANISH

171-172. *Beginning Spanish.—(Both Semesters.)* Four hours.

173-174. *Second Year Spanish.—(Both Semesters.)* Three hours.

GERMAN

101-102. *First Year German.—(Both Semesters.)* Four hours.

103-104. *Second Year German.—(Both Semesters.)* Three hours.

129-130. *Scientific German.—(Both Semesters.)* Two hours. Prerequisite, 102.

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.

*201-202. *Psychology.—(Both Semesters.)* Three hours.
Text-book: Pillsbury's Psychology.

One hour of seminar work a week is given in the second semester.

*203-204. *Ethics.—(Both Semesters.)* Three hours.
Text-books: Mackenzie and Valentine.

Open only to those who have had Psychology. The second semester's work includes Natural Theology.

205. *Logic.—(First Semester.)* Three hours.

*207-208. *Philosophy.—(Both Semesters.)* Three hours.
Text-book: Fletcher's Introduction.

SOCIOLOGY

213-214. *Sociology.—(Both Semesters.)* Three hours.
Text-book: Blackmar and Gillen.

216. *Sociological Problems.—(Second Semester.)* Three hours. Lecture course with field work.

ECONOMICS AND POLITICAL SCIENCE

Major. Twenty-four hours constitute a major, twelve of Economics and twelve of Political Science.

POLITICAL ECONOMY

251. *Principles of Economics. (First Semester.)* Three hours.

Introduction to important economic theories and concepts: wealth, production, consumption, exchange, distribution, value, profits, rent, wages, interest, etc.

252. *Principles of Economics.—(Second Semester.)* Three hours.

Elementary consideration of the following economic problems: money, credit and banking, foreign exchange, the tariff, trusts, railroads, taxation, tax reform, labor legislation, labor co-partnership, social reform.

253. *Corporations and Trust Problems.—(First Semester.)* Three hours.

The growth of corporations and the problems of an economic and political nature which have attended such growth.

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

Given 1921-1922 and alternate years thereafter.

Includes brief history of the labor movement; also the problems of an economical and political character that have arisen therefrom.

255. *Public Finance.—(Second Semester.)* Three hours.

Given 1920-1921 and alternate years thereafter.

A survey of the field of national, state, and municipal taxation. Other public revenues. Also a survey of the field of public expenditure. Problems in the administration of taxation.

In addition to these courses, students in the Liberal Arts College may elect a total of 12 hours in courses offered in Commerce and Business Administration in the Engineering College. (See page 94.)

POLITICAL SCIENCE

261. *American Government and Politics (1.)—(First Semester.)* Three hours.

Course aims to give a thoro knowledge of the origin, growth, structure, and activities of the national government. Special attention paid to problems of administration and politics.

262. *American Government and Politics (2).—(Second Semester.)* Three hours.

Continuation of course 261.

Covers state and local government; problems of administration; description of government functions and structure.

263. *The Governments of Europe.—(First Semester.)* Three hours.

Given 1922-1923 and alternate years.

A comparative study of the principal governments of Europe.

265. *The Elements of International Law.—(First Semester.)* Three hours.

Given 1921-1922 and alternate years.

Study of the rules and customs which determine the conduct of nations in peace, war, and neutrality. Past, present, and proposed methods of international co-operation. The protection of persons and property abroad.

264. *Municipal Government and Administration.—(Second Semester.)* Three hours.

A survey of the general field of American municipal government, including structure, functions, and problems.

267. *Seminar in Political Science.—(First Semester.)* Three hours.

Two hours weekly conference with extra time allotted to field work. Course given in co-operation with the Bureau of Municipal Research under the joint direction of the department and the bureau. All topics for study are approved by both the department and the bureau.

HISTORY

PROFESSOR THOMPSON

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

271-272. *Elementary History of Europe.—(Both Semesters.)* Three hours. A prerequisite with 272 to all other courses in history when only one unit of history is offered for entrance to college.

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.

287-288. *History of Art.—(Both Semesters.)* Two hours.

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 EGBERT

MISS WHITAKER

Major. Trigonometery, four hours; Algebra, four hours; Analytic Geometry, four hours; Calculus, ten hours; Elective, ten hours. Total, thirty-two hours.

302. *Algebra.—(First Semester.)* Four hours.

Surds, quadratic equations, systems of quadratics, variation and proportion, logarithms, progressions, permutations and combinations, binomial theorem, theory of equations.

This course is repeated the Second Semester.

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

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

This course is repeated the First Semester.

303. *Analytic Geometry.—(First Semester.)* Four 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 and 302.

304. *Calculus.—(Second Semester.)* Five hours.

Differentiation, maxima and minima, curve tracing, curvature, indeterminate forms, expansion of functions, and applications.

Prerequisite: Math. 303.

305. *Calculus.—(First Semester.)* Five hours.

General and special methods of integration, determination of lengths, areas, volumes, center of gravity, moment of inertia, and other applications.

Prerequisite: Math. 304.

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

307. Mathematics of Investments.
308. Mathematics of Insurance.
309. History of Mathematics.
310. Methods of Teaching Secondary Mathematics.
311. Differential Equations.
312. Analytical Mechanics.

313. Advanced Calculus.

314. Theory of Functions.

315. Higher Algebra and Geometry.

316. Differential Geometry.

*320-321. *Descriptive Astronomy.—(Both Semesters.)* Two hours.

Prerequisite: Math. 303.

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 wishing to major in Physics must take the general course in the first or second year and complete in addition a minimum of 17 term hours of work in the subject. Such students will be required to take both freshman and sophomore mathematics, and are urged to arrange their work so that they can get in one semester's work in Mechanical Drawing in the freshman year.

The Physics major is especially adapted to those students wishing to prepare themselves for technical work or who later intend to take up engineering work. The following courses are required. Students not majoring in Physics may take the advanced courses without the laboratory work, if they desire.

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

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

332. *General Physics.—(Second Semester.)* Four 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

MRS. MYRLAND

FELLOWS { MR. ENDRES
MR. YARTER

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.)

353-354. *General Inorganic Chemistry.—(Both Semesters.)* Two recitations and two laboratory periods. (Four term hours.)

359-360. *Quantitative Analysis.—(Sophomore Year, Both Semesters.)*

One recitation and three laboratory periods. (Four term hours.)

*357-358. *Organic Chemistry.—(Junior Year, Both Semesters.)*

Two recitations and one laboratory period. (Three term hours.)

*369-370. *Advanced Analytical Chemistry.—Both Semesters.)* Two laboratory periods. (Two term hours.)

*363-364. *Chemistry of India Rubber.—(Both Semesters.)*

One recitation and two laboratory periods. (Three term hours.)

*367-368. *Organic Chemistry.—(Senior Year, Both Semesters.)*

Two recitations and one laboratory period. (Three term hours.)

*371-372. *Physical Chemistry.—(Senior Year, Both Semesters.)*

Two recitations, one laboratory period. (Three term hours.)

Chemical Course

FRESHMAN YEAR	Term Hrs. each Semester
Gen. Chem. 351 and 352	7
Math.	4
Mod. Lang.	3 or 4
Physical Tr.	2

SOPHOMORE YEAR	Term Hrs. each Semester
Quan. Anal.	4
Biol.	4
Math.	4 or 5
Mod. Lang.	3
Physical Tr.	2
~~English~~ Rhetoric	3

JUNIOR YEAR	
Org. Chem.	3
Physics	4
Electives.	

SENIOR YEAR	
Organic Chemistry	3
Physical Chemistry	3
Electives.	

BIOLOGY

PROFESSOR PLOWMAN

MISS FRIEDLANDER

MISS HENEGAN

Major: Thirty-two semester hours. The following courses must be included:—401, 402, 403, 404, 407 or 409, 408 or 410, 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, for combination with A-grade medical schools.

401-402. *General Biology.—(Both Semesters.)* 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.

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 413-414 and 415-416.

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. *Heredity and Thremmatology.—(First Semester.)* Four hours. Recitations, lectures, and reference reading.

A study of the principles of heredity and breeding, and some of the problems of human eugenics.

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

A survey of the history and applications of the doctrine of organic evolution.

407-408. *Human Physiology.—(Both Semesters.)* 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.

409-410. *Human Physiology.—(Both Semesters.)* Four hours.

Three recitations and three hours of laboratory work per week. Women's course. 1921-1922 and alternate years. Required in Curtis School. Similar to 407-408, but especially adapted to the needs of college women.

411-412. *Histology.—(Both Semesters.)* Three hours.

A study of the minute structure of animals and plants. General laboratory technique, and methods of preparation of materials for study.

413-414. *Human Biology.—(Both Semesters.)* Two hours.

Recitations, lectures, laboratory work and reference reading, two hours per week. A study of the human mechanism, considering its essential internal processes and broader environmental relationships, with special reference to personal health and fitness for the task of efficient living. Required of all sophomore men, candidates for the A. B. degree, except such as elect to take Physiology 407-408.

415-416. *Human Biology.—(Both Semesters.)* Two hours.

Similar to 413-414, but especially adapted to meet the needs of college women. Required of all sophomore women, candidates for the A. B. degree, except such as elect to take Physiology 409-410.

417. *Economic Botany.—(First Semester.)* Four hours.

Two or three recitations and three to five hours laboratory work per week. A study of the structure,

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

418. *Conservation.—(Second Semester.)* Two hours. Recitations and lectures.

419-420. *Bacteriology.—(Both Semesters.)* 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 elements of pathology. Required of all students in Curtis School of Home Economics.

421. *History of Biology.—(First Semester.)* Three hours.

422. *Sanitation and Public Health.—(Second Semester.)* Three hours.

423-424. *Biological Problems.—(Both Semesters.)* Two to four hours. Thesis course.

PHYSICAL EDUCATION

MR. SEFTON, DIRECTOR

Aims: Physical education is conducted under the direct supervision of experienced physical directors, who are members 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 and medical 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.

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.

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 five-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 4,000 spectators.

PHYSICAL TRAINING FOR MEN

Requirements: All freshman and sophomore men are required to take two hours of physical training each week as a part of the combined course in Military and Physical Training. In addition, all candidates for the A. B. degree must take the course in Human Biology 413-414, two hours a week for a year, unless they elect Physiology 407-408.

Intercollegiate Sports: 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.

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

The Class Cup: A prize cup, which is the permanent property of the Athletic Association, is competed for each

year by the four college classes. An honorary position upon the cup is awarded the name of the class scoring the greatest number of points in each annual Track Meet.

PHYSICAL TRAINING FOR WOMEN

All freshman women are required to take two hours of physical training each week. In addition, all candidates for the A. B. degree must take the course in Human Biology 415-416, two hours a week for a year, unless they elect Physiology 409-410.

RESERVE OFFICERS' TRAINING CORPS

GLEN H. ANDERSON, 1ST LIEUT. INFANTRY

ROY C. OLSON, 1ST SERGT. D. E. M. L.

EDWARD P. DAVIS, SERGT. D. E. M. L.

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 Armory, 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; for this attendance pay at the rate of $1.00 a day is allowed. 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.

SCHEDULE OF WORK

In order to give a comprehensive idea of the work covered in the R. O. T. C., the entire content of both the basic course and the advanced course, with percentage of time given to each part of the work, is herewith outlined:

Basic Course, First Year. Theoretical Work—Principles of Organization and Administration of a Company, Military Hygiene, First Aid and Sanitation, Military Courtesy and Customs of the Service, Interior Guard Duty; Practical Work—Organizing the Unit, Practical Application, Demonstrations and Tests, Performance of Guard Duty, 12%; Physical Training, Theoretical and Practical, 11%; Infantry Drill, Theoretical and Practical, 60%; Infantry Weapons and Equipment, 17%.

Basic Course, Second Year. Military Sketching and Map Reading, 40%; Physical Training, 5%; Infantry Drill, 15%; Infantry Weapons, 20%; Minor Tactics, 20%.

Advanced Course, First Year. Field Engineering, 40%; Physical Training, 5%; Infantry Drill, 15%; Infantry Weapons, 15% (Including Rifle, Pistol, Auto Rifle, and Machine Gun Rifle, and Hand Grenades, Mortars, and One-Pounders); Minor Tactics, 25%.

Advanced Course, Second Year. Military History and Policy of the United States, 10%; Physical Training, 5%: Infantry Drill, 10%; Military Law and Rules of Land Warfare, 10%; Minor Tactics, 40%; Administration, 10%; Musketry, 15%.

Standard text-books for each year's work are on sale at the book store.

Summer Camps.

A summer camp is held each year for the benefit of those students who desire to attend. The last camps were held at Camp Custer; the next will be held at Camp Knox, Kentucky, about twenty-five miles from Louisville. Attendance at the summer camps is not compulsory for students taking the basic course, but to those who attend, the Government pays mileage both ways from their homes to the Camp at the rate of five cents per mile. All clothing, equipment, and subsistence are furnished at the Camp at no expense to the student. Athletics, hops, and other forms of social amusement play a part in these camps, as well as shooting on the rifle range, troop maneuvers, etc. Those desiring to attend should signify their intention at the completion of the first semester so that proper arrangements may be made for them at the Camp.

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 be-

tween 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.

MUSIC

FRANCESCO DE LEONE, DIRECTOR

The work in Music is open to election by members of all four college classes. A credit of two hours each semester is given students electing the Study of Music and either Glee Club or Orchestra, but no credit is given students for Glee Club or Orchestra work unless the Study of Music is elected also.

Students may elect Glee Club or Orchestra work without credit, but are subject to exclusion from further participation in the work if absent more than twice in any semester.

All students desiring to participate in the class room work in Music, or in Orchestra or Glee Club, must arrange for it on registration days as part of their regular assignment of work for the semester.

The Study of Music.—(Both Semesters.) This course is carried on as class room work and is chosen from the following subjects:

Rudiments and essentials of music.

Theory of music and elementary harmony.

Thorough bass.

Ear training and solfeggio.

First year history of music.

Biographical history of music.

Musical appreciation—study of operas, etc.

Men's Glee Club.—(Both Semesters.)

Women's Glee Club.—(Both Semesters.)

Orchestra.—(Both Semesters.)

FRESHMAN LECTURES

These lectures, which all freshmen are required to attend, are given Saturday mornings thru the first semester in order to help the freshman start right in his college life.

The first half of the semester they are by members of the faculty on such topics as How to Study, The Privilege and Responsibility of Being a College Student, The Honor System, What Is a Liberal Education? The Value of Good English, If I Were a Freshman Again, and Our History, Traditions, and Customs.

The second half of the semester they consist of a series of lectures by the Associate-Librarian of the University on How to Use a Library. In connection with these talks on library work, definite problems are assigned.

One half-hour credit is given.

COLLEGE OF ENGINEERING AND COMMERCE

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."

In 1921 the Department of Commerce and Administration became a department of the Engineering College and the name of the latter was changed to the College of Engineering and Commerce.

The "Cincinnati Plan" aims to give the student a thoro 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, the 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.

THE 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.

INDUSTRIAL ENGINEERING

A co-operative course has been inaugurated for the student who wants to take up the business side of engineering activity. It comprises the essentials of engineering and a thorough course in business training. The work covers five years and leads to the degree, Industrial Engineer. This plan takes the place of the so-called Manufacturing Production course. Students entered in the latter may continue their work as originally planned, or take up the Industrial Engineering course, receiving advanced standing for work already completed.

COMMERCE AND ADMINISTRATION

For those desiring a purely commercial training, there is a full time course covering four years. This course is open to both men and women and leads to the degree, Bachelor of Science in Commerce and Administration.

SECRETARIAL COURSE

The Secretarial Course is open to both men and women. It prepares especially for private secretarial work. To those completing the first two years, a certificate of proficiency will be given. The degree, Bachelor of Secretarial Science, will be granted to those who satisfactorily complete the four years' work. Students will be required to attain a high degree of proficiency in typewriting and shorthand. This latter work must be taken outside the regular college course.

SHOP WORK

The Dean of the College of Engineering and Commerce 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

The primary object of requiring outside work is to give the student practical experience and not to enable him to earn money. In many cases the student's earnings are not sufficient to pay his expenses.

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. 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 dis-

missal 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.

COURSES OF STUDY

The courses of study given in the College of Engineering and Commerce 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, Industrial Engineer, Bachelor of Science in Commerce and Administration, and Bachelor of Science in Secretarial work will be given to those students who satisfactorily complete the required work. In addition to his diploma, each student will receive a certificate showing in detail his practical experience.

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.

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. 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 12, 1921, and those in section two on September 26, 1921. 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
Railroads	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	$12.00	12.00
Books	8.00	8.00
	$20.00	$60.00

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

1921-1922

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
Elementary Mechanics 781	4	Elementary Mechanics 782	4
Mechanical Drawing 811	4	Projections 822	2
Cement Testing 861	2	Co-ordination 802	2
Co-ordination 801	2		

Summer Term

Analytic Geometry 728	6
Railroads 853	8
Highways 855	8

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 Training	2	Military and Physical 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

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
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

1921-1922

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	Steam Engineering 848	6
Elementary Mechanics 781	4	Elementary Mechanics 782	4
Engineering Lab. 807	4	Projections 822	2
Mechanical Drawing 811	4	Co-ordination 802	2
Co-ordination 801	2		

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
D. C. Electricity 867	6	A. C. Electricity 868	6
D. C. Laboratory 869	4	A. C. Laboratory 870	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 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	2

Summer Term

Machine Design 845	10
Machine Shop Tools 865	6
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	10

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	English Literature 712	2
Hydraulics 849	2	Business Organ. 916	4
Production Engineering 885	3	Hydraulics 850	2
Thermodynamics 871	5	Thesis	6
Power Plant Design 875	4		

ELECTRICAL ENGINEERING

1921-1922

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
Elementary Mechanics 781	4	Elementary Mechanics 782	4
D. C. Theory 867	6	A. C. Theory 868	6
D. C. Laboratory 869	4	A. C. Laboratory 870	4
Co-ordination 801	2	Co-ordination 802	2

Summer Term

Analytic Geometry 728	6
Machine Drawing 824	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
Electrical Problems 891	6	Steam Engineering 848	6
Engineering Lab. 807	4	Co-ordination 804	2
Co-ordination 803	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 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	12

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 Transmission 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

INDUSTRIAL ENGINEERING

1921-1922

FRESHMAN YEAR

First Semester	Exercises per alternate period	Second Semester	Exercises per alternate period
Military and Physical Training	2	Military and Physical Training	2
Bookkeeping and Accounting 1027½	6	Bookkeeping and Accounting 1028½	6
Surveying 809	6	English Composition 701	5
Mechanical Drawing 811	4	Projections 822	2
Trigonometry 727	6	Algebra 725	6
Co-ordination 801	2	Co-ordination 802	2

Summer Term

Analytic Geometry 728	6
Machine Drawing 824	4

SOPHOMORE YEAR

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
Economics	6	Economics 738	6
Co-ordination 803	2	Co-ordination 804	2

Summer Term

Industrial and Commercial Geography 1019½	11
Economic Development of England and the United States 1021½	11

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
Modern Language	6	Modern Language	6
General Physics 783	8	General Physics 784	8
Money and Banking 1045½	6	Statistics 1047½	6
Co-ordination 805	2	Co-ordination 806	2

Summer Term

Railroads and Traffic Problems 1049½ 16

JUNIOR YEAR

First Semester	Exercises per alternate period	Second Semester	Exercises per alternate period
Modern Language	6	Modern Language	6
D. C. Theory 867	6	A. C. Theory 868	6
D. C. Laboratory 869	2	A. C. Laboratory 870	2
Literature 711	4	Literature 712	4
Industries and Resources of Akron 1057½	2	Industries and Resources of Akron 1508½	2
Materials Laboratory 817	4		

Summer Term

Markets, Domestic Commerce 1043½ 22

SENIOR YEAR

First Semester	Exercises per alternate period	Second Semester	Exercises per alternate period
Elementary Law 1039½	4	Business Law 1040½	6
Accounting Problems and Cost Accounting 1051½	6	Accounting Problems and Cost Accounting 1052½	6
Business and Industrial Problems 1055½	6	Business and Industrial Problems 1056½	6
Business Finance 1035½	6	Thesis	4
Thesis	4		

COMMERCE AND ADMINISTRATION

1921-1922

FRESHMAN YEAR

First Semester	Cr. Hrs.	Second Semester	Cr. Hrs.
*Military and Physical Training	2	*Military and Physical Training	2
Freshman Rhetoric 51	3	Freshman Rhetoric 52	3
Physics, Chemistry, or Biology	4	Physics, Chemistry, or Biology	4
Modern Language	4	Modern Language	4
Industrial and Commercial Geography 1019	3	Economic Development of the United States 266	3
Electives	2	Electives	2

SOPHOMORE YEAR

First Semester	Cr. Hrs.	Second Semester	Cr. Hrs.
*Military and Physical Training	2	*Military and Physical Training	2
Bookkeeping and Accounting 1027	3	Bookkeeping and Accounting 1028	3
Economics 737	3	Economics 738	3
Modern Language	3	Modern Language	3
History or Government	3	History or Government	3
Industries and Resources of Akron 1057	2	Money and Banking 1045	2
Electives	2	Electives	2

JUNIOR YEAR

First Semester	Cr. Hrs.	Second Semester	Cr. Hrs.
English 65	3	English 66	3
Elementary Law 1039	3	Business Law 1040	3
Markets, Domestic Commerce 1043	4	Railroad and Traffic Problems 1049	4
Psychology	3	Psychology	3
Electives	5	Statistics 1047	3
		Electives	5

SENIOR YEAR

First Semester	Cr. Hrs.	Second Semester	Cr. Hrs.
Government or Sociology	3	Government or Sociology	3
Business Finance 1035	3	Accounting Problems and Cost Accounting 1052	2
Accounting Problems and Cost Accounting 1051	2	Business and Industrial Problems	2
Foreign Commerce 1053	2	Electives	6
Electives	6	Thesis	2
Thesis	2		

SECRETARIAL COURSE

1921-1922

FRESHMAN YEAR

First Semester	Cr. Hrs.	Second Semester	Cr. Hrs.
*Military and Physical Training	2	*Military and Physical Training	2
Freshman Rhetoric 51	3	Freshman Rhetoric 52	3
Secretarial Duties and Ethics 1023	3	Business Mathematics, Filing and Charting 1025	3
Chemistry or Biology	4	Chemistry or Biology	4
Industrial and Commercial Geography 1019	3	Economic Development of United States 266	3
Hygiene	1	Hygiene	1

SOPHOMORE YEAR

First Semester	Cr. Hrs.	Second Semester	Cr. Hrs.
*Military and Physical Training	2	*Military and Physical Training	2
Bookkeeping and Accounting 1027	3	Bookkeeping and Accounting 1028	3
Economics 737	3	Economics 738	3
English	3	English	3
Spanish 917	4	Spanish 918	4

JUNIOR YEAR

First Semester	Cr. Hrs.	Second Semester	Cr. Hrs.
English 65	3	English 66	3
History or Government	3	History or Government	3
Index and Filing 1031	3	Business Correspondence and Secretarial Practice 1033	3
Psychology	3	Psychology	3
Spanish 919	3	Spanish 920	3
Elective	3	Elective	3

SENIOR YEAR

First Semester	Cr. Hrs.	Second Semester	Cr. Hrs.
Business Finance 1035	3	Business Administration 1037	3
Office Practice 1041	3	Office Practice 1042	3
History or Government	3	History or Government	3
Sociology	3	Sociology	3
Thesis	2	Business Law 1040	3
Elective	4	Elective	4

*Military and Physical Training—For men only.

DEPARTMENTS OF INSTRUCTION

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

English	701-712
German	713-716
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
Engineering Subjects	801-900
Commerce Subjects	1001-1099

ENGLISH

701. *English Composition.*
Study of correct and forceful thot 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.

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 720.

722. Continuation of 721.

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 plans 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. *Chemistry.*

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

742. *Chemistry.*

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 to 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 assigned 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

781. *Elementary Mechanics.*

A short study of the field of mechanics, and an intensive study of systems of parallel forces and simple machines, and engineering problems based thereon. Four exercises per week.

782. *Elementary Mechanics.*

A continuation of 781 and discussion of non-parallel forces, force polygons, and solution of problems based on this principle. Study of simple frames and calculation of stresses and compression by graphical and analytical methods. Four exercises per week.

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 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.

812. *Descriptive Geometry.*

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

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. *Projections.*

Beginning graphic representation.

823. *Machine Drawing.*

Working drawings, drafting room practice.

824. *Machine Drawing.*

Projections. Beginning graphic representation, working drawings, drafting room practice.

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. Includes field and office work in simple, compound and spiral curves.

855. *Highways.*

Study and design of all hard-surfaced roads, as well as dirt roads; street paving; traffic censuses; testing road materials.

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.

COMMERCE

Industrial and Commercial Geography.

1019. Full time.

1019½. Half time.

Growth and factors of commerce and industry; study of the most important industries of the United States; physical features of the world in their relation to the development of commerce and industry; mineral industries and their relation to the development of the state; centers of great industry, transportation, communication; relation of government to industry and trade; foreign commerce of the United States and all other important countries of the world.

Economic Development of the United States.

1021. Full time.

1021½. Half time.

Development of colonial industry with a careful survey of the industrial history of England; early trade restrictions; availability of the resources of the United States and their developments; movement of trade and industry in the early history of the country as well as present movements; effect of trade and tariff on industry; labor movements and the development of the labor union; our modern industries and their development.

Secretarial Duties and Ethics.

1023. Full time.

1023½. Half time.

Origin and history of the modern secretary; education and development of the private secretary of the modern business man; what a position as secretary means to the outside world; how to learn the needs of the employer and his friends; the modern office, office appliances and mechanical devices as time savers; the duties of an office manager; wage systems; methods of securing efficiency in the office; welfare work; letter writing; how to handle a caller.

Business Mathematics, Filing and Charting.

1025. Full time.

1025½. Half time.

Short cuts in business mathematics: business forms necessary for the secretary to know; familiarity with interest and annuity tables, present worth and partial payment and insurance rates; making of simple charts and graphs of most of the problems of the business man; filing of office papers, a study of the latest filing systems.

Bookkeeping and Accounting.

1027. Full time.

1027½. Half time.

Science of constructing systematic records of business transactions; study of the double entry bookkeeping; critical examination of the typical factors in capital and revenue accounts; development of forms used in business;

forms and records used in different industrial enterprises; many illustrative problems used; partnership and corporation accounting completed. C. P. A. problems used.

1028. Continuation of 1027.

Industrial and Business Economics.

1029. Full time.

1029½. Half time.

A study of the laws of production, exchange, distribution, and consumption, combined with an analysis of the industrial actions of men as regards land, labor, capital, money, credit, rent, interest, wages, etc. Special emphasis laid on the industrial and business side of the economic organization of society.

Indexing and Filing.

1031. Full time.

1031½. Half time.

The modern business office, its filing cases and appliances; a more advanced course in filing for the big office; latest methods for short cuts in filing material; visits to factories and lectures by practical men in charge of filing departments. Various systems for indexing; a practical course for those interested in this character of work.

Business Correspondence and Secretarial Practice.

1033. Full time.

1033½. Half time.

An advanced course in business letter writing; development of business forms necessary to modern business; the modern business letter and report from the business man's side; work of the secretary in making reports and schedules for the office; a practical course to meet the needs of modern business. Problems and visits to offices.

Business Finance.

1035. Full time.

1035½. Half time.

Relation of finance to business; the financial side of 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, promotion, dividends, and reorganization.

Business Administration.

1037. Full time.

1037½. Half time.

Origin and history of industrial and mercantile establishments; principles of organization; distribution of functions and the control of business; factors accounting for the location of industries; localization; segregation; and integration; scientific management, its development and effect on the business of the modern world; effect of war on business; labor unions and their relation to capital; job analysis; mental tests; latest forms of welfare work.

Elementary Law.

1039. Full time.

1039½. Half time.

The fundamental principles of American jurisprudence; outline and elements of statutory and common law and equity.

Business Law.

1040. Full time.

1040½. Half time.

Introduction to the customs and laws of trade, business, and finance; detailed study of contracts, bills and notes, bailments, agency, partnership, personal and real property; a study of the common carrier, insurance deeds, mortgages, wills, etc. Many cases are studied to show the application of law to business. The case system is used.

Office Practice.

1041. Full time.

1041½. Half time.

A study of the problems that come up in the work of the secretary; laboratory work in the application of the work of an office; practical experience in the offices of the administrative officers of the university; students' work in outside offices of the various industries of the city.

1042. Continuation of 1041.

Markets, domestic commerce.

1043. Full time.

1043½ Half time.

Development of the early types of markets; early trade routes; fairs, location of colonial marketing centers; development of modern markets and the factors affecting their development; advertising and sales systems; co-operation, its development and importance; the middleman, his functions and problems; the future of the middleman; location of the wholesale centers of the United States; the retailer, the consumer, and modern problems of the buyer and seller.

Money and Banking.

1045. Full time.

1045½. Half time.

Form and function of currency and credit; state and federal laws of banking; Federal reserve banking system and its relation to the monetary system of the United States; a brief study of the history of our banking institutions; the fluctuations of the money market, note issue, and the Clearing House; a brief study of the banking systems of foreign countries and a comparison with the Federal Reserve System.

Statistics.

1047. Full time.

1047½. Half time.

Elementary principles of statistics as a means to scientific study and interpretation of the measurable phenomena of economic and social life. A study of characteristics of statistical methods; sources and collections of statistical data; errors and approximation; classification and frequency distribution; averages; index numbers; criteria of association, cause and effect.

Railroads and Traffic Problems.

1049. Full time.

1049½. Half time.

Economic significance of modern development, organization and combination of railway systems; the development of the means of transportation; railway growth and

consolidation; problems of railway traffic and rate making; rate theories and practice, legislative control, inland and coastwise commerce of the United States; railway commissions and public control; Government ownership and its relation to the public.

Accounting Problems and Cost Accounting.

1051. Full time.

1051½. Half time.

An exposition of the utility and methods of cost accounts; the problems, elements, and units of cost of various types of business, sources of cost data; measurement of direct costs; methods of apportioning and distributing overhead expenses; organization of cost systems; presentation and utilization of cost data; studies and reports of cost accounting systems; study of practical problems in local businesses; C. P. A. Problems.

1052. Continuation of 1051.

Foreign Commerce.

1053. Full time.

1053½. Half time.

Development of early commerce and commercial nations; theory of international trade; historic policies, mercantile theory, free trade and protection; volume and character of imports and exports; governmental regulation, consular service, commercial methods and regulations for trade; aids to the development of trade, recent and prospective; position of the United States in the commercial world and our future needs.

Business and Industrial Problems.

1055. Full time.

1055½. Half time.

A study of economical and industrial problems of importance to the business man; antecedents of modern industrialism; the industrial revolution; social control in modern industrialism; pecuniary basis of economic organization; the business cycle; problems of international trade; the railway problem, nature and extent of regulation, rate making; government ownership; the problem of capitalistic

monopoly; the study of population, economic insecurity, trade unions, social reform and legal institutions, taxation, and modern problems of business.

1056. Continuation of 1055.

Industries and Resources of Akron.

1057. Full time.

1057½. Half time.

A study of the city of Akron as an industrial and commercial center; its railroad and water communications; the rubber industry, the products manufactured and exported; clay product industry, products and possibilities of the industry; motor truck industry; machine shops; cereal and other important industries; visits to factories; reports on processes.

1058. Continuation of 1057.

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 24.

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.

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	2	Public Speaking	3
Physical Training	1	Physical Training	1
	15 or 16		16 or 17

Second Year

Organic Chemistry 621	4	Household Chemistry 622	4
Biology 401	4	Biology 402	4
*Modern Language	3	*Modern Language	3
House Planning	2	Dress	3
English 65, 71 or 75	3	English 66, 72 or 76	3
	16		17

Third Year

Sociology 213	3	Sociology 214	3
Psychology 201	3	Psychology 202	3
Foods 605	4	Foods 606	4
‡Physiology 409	4	‡Physiology 410	4
History 271	3	History 272	3
	17		17

Fourth Year

Dietetics 613	4	Seminar 618	2
Art 607	2	House 616	3
Bacteriology and Sanitation 419	3	Bacteriology and Sanitation 420	3
†Teachers' Course 619	3	†Teachers' Course 620	3
		Table and Meal Service 632	2
	12		13

Elective studies must be chosen sufficient in number to complete a total of 128 term hours.

*Modern language must consist of two years in one language.
‡Offered 1921-1922 and alternate years.
†Required only for Students intending to teach.

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 $40.00 per semester. A graduation fee of five dollars is charged all graduates.

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 and 604. *Textiles.—(Both Semesters.)*

(Two term hours each semester.) 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, and chemistry of textiles.

605 and 606. *Foods.—(Both Semesters.)*

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

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

610. *Dress.—(Second Semester.)*

(Three term hours.)

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

613. *Dietetics.—(First Semester.)*
(Four term hours.) Two recitations and two laboratory periods.

Prerequisites, Foods, 605-6. Physiology 407-8, Household Chemistry 621-2. A study of the chemical, physical and physiological value of the nutrients. Dietary standards, infant and invalid cookery.

616. *The House.—(Second Semester.)*
(Three term hours.)

Prerequisite, Art 607, Sociology 213-4, Home Economics 605-6, Home Economics 603-4, Home Economics 625. 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.

619 and 620. *Teachers' Course.—(Both Semesters.)*
(Three term hours each semester.)

Methods of presenting foods and textiles. Planning courses of study and practice teaching. Prerequisites, senior standing in Home Economics.

618. *Seminar.—(Second Semester.)*
(Two term hours.)
Open only to seniors.

625. *House Planning.—(First Semester.)*
(Two term hours.)

601. *Designing.—(First Semester.)*
(Two term hours.)

To develop a taste for harmony in color, line and space. Work done in pencil, pen, charcoal and water color.

607. *Art.—(First Semester.)*
(Two term hours.)

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

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.

SOCIOLOGY

Courses: 213, 214, 201, 202.

HISTORY

Courses: 271, 272.

CHEMISTRY

Courses: 353, 354.

621. *Organic Chemistry.—(First Half-Year.)*
Eight hours per week.
(Four 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. *Household Chemistry.—(Second Half-Year.)*
Continuation of 621.
Eight hours per week.
(Four 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 621.

BIOLOGY

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

PHYSICS

331-332. *General Physics.—(Both Semesters.)*

(Four term hours each semester.)

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

Two recitations and two laboratory periods per week.

EVENING COLLEGE

1920-1921

The University offers in the Evening College during the college year 1920-21 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 18, 1920, 2:00 to 5:00 and 7:00 to 8:30 p. m. To all registering after September 30, 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, February 5, 1921, 2:00 to 5:00 and 7:00 to 8:30 p. m. To all registering after February 9 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, October 5, 1920, and will close on February 3, 1921.

Class work for the second semester will begin Tuesday, February 8, 1921, and will close on June 2, 1921.

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

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

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, Director of the Evening College.

The office of the Director of the Evening Courses is located in the Knight Chemical Laboratory.

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

COURSES FOR 1920-1921

CLASS A COURSES

ROMANCE LANGUAGES

PROFESSOR BULGER

ASSISTANT-PROFESSOR REED

MR. TULLER

MISS TWEEDIE

French

1801. *First Year French.—(First Semester.)*
Grammar, reading, simple conversation, Tuesday, 7:00-9:00.
(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, memorizing and conversation. Tuesday, 7:00-9:00.
(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, 7:00-9:00.
(Two credit hours.)

1804. *Second Year French.—(Second Semester.)*
Continuation of the work of the first semester. Thursday, 7:00-9:00.
(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, 7:00-9:00.
(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, composition and conversation. Tuesday, 7:00-9:00.

(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, 7:00-9:00.

(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, 7:00-9:00.

(Two credit hours.)

ENGLISH

DEAN SPANTON

DR. McCULLOUGH

MR. HOWE

MRS. MACKINNON

Shakespeare.—(First Semester.) The course includes the reading and study of fifteen plays, with considerable additional reading in Shakespeare criticism and appreciation. Persons unable or unwilling to give an average of at least four hours a week to preparation are not desired in this class. The plays covered are:

A Midsummer Night's Dream	Julius Cæsar
Romeo and Juliet	Hamlet
Merchant of Venice	Othello
Henry IV, Part One.	King Lear
Much Ado About Nothing	Macbeth
As You Like It	Coriolanus
Twelfth Night	Cymbeline
	The Winter's Tale

(Two credit hours.) Tuesday, 7:00-9:00.

Business English.—(Second Semester.)

This course is designed to give students practice in business correspondence. In all writing, careful attention is given to accuracy of form, terseness of expression and clearness of thought. Spelling, punctuation, and grammatical sentence-structure receive constant drill. A large number of written exercises supplements the study of the text. Tuesday, 7:00-9:00.

(Two credit hours.)

1809. *Story Telling.—(First Semester.)*

A course for women only. The class is limited to twenty members. 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. The requirements are: The oral presentation of one three-minute story, one five-minute story, one classic adapted to ten minutes, one ten-minute talk, and other stories, talks, and discussions as the work demands. Thursday, 7:00-9:00.

(Two credit hours.)

1810. *Story Telling.—(Second Semester.)*

A course for men. Class limited to twenty members. Story Telling is not the story of The Three Bears or The Great Stone Face, but it is *your* story, the thing *you* are interested in—your occupation.

For the most effective presentation of your story, the class will study the construction and interpretation of every story-interest brought to its attention. Stories, anecdotes, discussions and extempore speeches, will comprise the course. Thursday, 7:00-9:00.

(Two credit hours.)

EXPRESSION

MISS McEBRIGHT

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, 7:00-9:00.

(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, 7:00-9:00.

COMMERCE AND ADMINISTRATION

PROFESSOR McDERMOTT

MR. D. M. SHARER

MR. A. S. VOGELGESANG

1. *Bookkeeping and Accounting.—(Both Semesters.)* Beginning Course.

Science of constructing systematic records of business transactions; study of double entry bookkeeping; critical examination of the typical factors in capital and revenue accounts; development of forms used in business; forms and records used in different industrial enterprises. Many illustrative problems used. Tuesday, 7:00-9:00.

(Two credit hours.)

2. *Accounting.—(Both Semesters.)* Advanced Course.

Principles of bookkeeping reviewed; new forms used in accounting introduced; partnership and corporation studied and analyzed; corporation accounting completed; much of the material used gives a fair working knowledge of the simple elements in cost accounting. Thursday, 7:00-9:00.

(Two credit hours.)

3. *Cost Accounting.—(Both Semesters.)* Beginning Course. A working knowledge of Accounting required for entrance. Tuesday, 7:00-9:00.

(Two credit hours.)

An exposition of the utility and methods of cost accounts; the problems, elements, and units of cost of various types of business, sources of cost data; measurement of direct costs; methods of apportioning and distributing overhead expenses; organization of cost systems; presentation and utilization of cost data; studies and reports of cost accounting systems; C. P. A. Problems.

4. *Business Law.—(First Semester.)* Beginning Course.

Introduction to the customs and laws of trade, business, and finance, detailed study of contracts, bills and notes, bailments, agency, partnership, personal and real property, common carrier, insurance, deeds, mortgages, wills, etc. Many cases are studied to show the application of business law. This is a business man's course and is adapted to conditions here in Akron. Thursday, 7:00-9:00.

(Two credit hours.)

5. *Salesmanship.—(Second Semester.)* Beginning Course.

The role of salesman in modern business; relation of salesmanship and advertising; analyzing the goods; the market and the customer for advertising and selling campaigns; construction of oral and written selling talks; conduct of selling campaigns; sales equipment, sales records and tests of efficiency; essential qualifications of a salesman in various types of manufacturing and wholesale and retail institutions; choosing, training, organizing and supervising salesmen; ethics of salesmanship. Tuesday, 7:00-9:00.

(Two credit hours.)

PHYSICS

PROFESSOR HOUSEHOLDER

1. *Mechanics.—(Both Semesters.)*

A development of the conditions necessary for equilibrium and the methods of calculating beam reactions and the tensions and compressions in the members of simple trusses and frames. Lectures, problems and graphical solutions. Tuesday, 7:00-9:00.

(Two credit hours.)

BIOLOGY

PROFESSOR PLOWMAN

MISS FRIEDLANDER

Heredity.—(First Semester.)

Open to both men and women. This course will take up for consideration the facts and principles of heredity as brought out by observation and breeding experiments in the last twenty years. Special emphasis will be laid on scientific accuracy, though the course will be kept as free from technicalities as possible. No prerequisite. Tuesday, 7:00-9:00.

(Two credit hours.)

Evolution.—(Second Semester.)

Open to both men and women. The theories of evolution, taken up in historical order for consideration of their relative merits. The status of the theory of evolution today. No prerequisite. Tuesday, 7:00-9:00.

(Two credit hours.)

MATHEMATICS AND ENGINEERING

ASSISTANT PROFESSOR EGBERT

MR. BULGER

MR. DURST

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, 7:00-9:00.

(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, 7:00-9:00.

(Two credit hours.)

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

The courses in Astronomy will be of a popular nature and will not require a previous knowlege 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, 7:00-9:00.

(Two credit hours.)

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, 7:00-9:00.

(One credit hour.)

CLASS B COURSES

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

(First Semester.)

DEAN ELIZABETH A. THOMPSON

A series of lectures on the History of the Small Nations of the World. Tuesday, 8:00-9:00.

PROFESSOR O. E. OLIN

(Second Semester.) Psychology.

Foundations of psychology; psychology and knowledge; psychology and vocation; psychology and business; psychology and life. Thursday 8:00-9:00.

SCHEDULE OF CLASSES

1920-1921

First Semester

First Year French—Tuesday—Room 22, Buchtel Hall.

First Year Spanish—Tuesday—Room 26, Buchtel Hall.

Shakespeare—Tuesday—Room 13, Buchtel Hall.

Bookkeeping and Accounting—Tuesday—Room 33, Buchtel Hall.

Cost Accounting—Tuesday—Room 22, Chemistry Bldg.

Mechanics—Tuesday—Engineering Building.

Heredity—Tuesday—Room 32, Buchtel Hall.

Algebra—Tuesday—Engineering Building.

Mechanical Drawing—Tuesday—Engineering Building.

History of Small Nations of the World—Tuesday—Room 25, Buchtel Hall.

Second Year French—Thursday—Room 22, Buchtel Hall.

Second Year Spanish—Thursday—Room 26, Buchtel Hall.

Story Telling—Thursday—Room 22, Chemistry Bldg.

Public Speaking—Thursday—Room 36, Chemistry Bldg.

Political Economy—Thursday—Room 32, Buchtel Hall.

Accounting—Thursday—Room 33, Buchtel Hall.

Business Law—Thursday—Room 12, Buchtel Hall.

Astronomy—Thursday—Room 15, Buchtel Hall.

SCHEDULE OF CLASSES

1920-1921

Second Semester

First Year French—Tuesday—Room 22, Buchtel Hall.

First Year Spanish—Tuesday—Room 25, Buchtel Hall.

Business English—Tuesday—Room 13, Buchtel Hall.

Bookkeeping and Accounting—Tuesday—Room 33, Buchtel Hall.

Cost Accounting—Tuesday—Room 22, Chemistry Bldg.

Mechanics—Tuesday—Engineering Building.

Evolution—Tuesday—Room 32, Buchtel Hall.

Plane Trigonometry—Tuesday—Engineering Building.

Mechanical Drawing—Tuesday—Engineering Building.

Second Year French—Thursday—Room 22, Buchtel Hall.

Second Year Spanish—Thursday—Room 25, Buchtel Hall.

Story Telling—Thursday—Room 22, Chemistry Bldg.

Public Speaking—Thursday—Room 36, Chemistry Bldg.

Political Economy—Thursday—Room 13, Buchtel Hall.

Accounting—Thursday—Room 33, Buchtel Hall.

Salesmanship—Thursday—Room 12, Buchtel Hall.

Astronomy—Thursday—Room 32, Buchtel Hall.

Psychology—Thursday—Room 26, Buchtel Hall.

THE UNIVERSITY LECTURES

1921-1922

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 1920-1921 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.
3. Hawaii.
   PRESIDENT P. R. KOLBE
4. An Educational or Engineering Subject.
   DEAN F. E. AYER
5. Relation of Oxygen to Life.
   PROFESSOR H. E. SIMMONS
6. The Chemistry of Digestion.

7. The Chemistry of Explosives.
   PROFESSOR R. H. SCHMIDT

8. "Bond or Free?"

9. The Builders.
   PROFESSOR O. E. OLIN

10. An Historical Subject.
    DEAN E. A. THOMPSON

11. Why Go to College?
    DEAN A. I. SPANTON

12. The Business of Being a Housekeeper.
    DIRECTOR SARAH E. STIMMEL

13. The Present Return to Classical Types of Architecture.
    PROFESSOR J. C. ROCKWELL

14. An Economic Subject.

15. Vocational Training.
    PROFESSOR THOMAS L. McJOYNT

16. Fitting the Man for the Job.
    PROFESSOR L. M. McDERMOTT

17. The Administration of County Welfare Work.
    PROFESSOR E. W. CRECRAFT

18. Biological and Public Health Topics.
    PROFESSOR A. B. PLOWMAN

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

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
Physical and Military Training	2	Physical and Military Training	2
	11 or 12		11 or 12

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		12
	15		

In addition enough elective work to complete at least 96 hours, including major and minor requirements.

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 select 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. Admission to the School of Medicine is not guaranteed to all applicants, since only a limited number can be accommodated. Application not later than June 15 for the following academic year is desirable.

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.

(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.

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.

THE COLLEGE FOR TEACHERS

An arrangement is being discussed between the Board of Education and the Directors of the University during the time of publication of this catalog for the establishment of a College for Teachers, at the University under the joint control of the two Boards. This new college will receive its first students in September, 1921. Details of courses will be issued as a separate pamphlet before that time.

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.

1. 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 analyses, 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 Sociology

Housing survey by students under direction of Board of Health and Charity Organization; work by students with Charity Organization.

Department of Political Science and Economics

Six students last year worked at odd hours at the Bureau of Municipal Research under close supervision of the Department and the Bureau; studies completed in certain phases of juvenile delinquency, city health, public safety; one student assisted in survey on county welfare activities made during the summer; three spot maps completed and brought to the attention of the public officials in charge of the departments concerned; arrangements now complete for co-operative work to be done regularly. A Seminar Class will commence in September, 1921. Students receive credit for acceptable work done in this way.

School of Home Economics

General activities in food conservation movement; conducted demonstration with diet squad; published menus and recipes; held public demonstration 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 affiliation with City Health Department. Direction of Public Health education, under authority of the Akron Board of Health. Organized and conducted courses in physiology, hygiene and sanitation for nurses and teachers. Gave numerous informal talks on health topics before various civic organizations. Completed preliminary arrangements with local hospitals, providing for the instruction of pupil nurses at the University, in the basic sciences of their course. In accordance with this plan, courses in anatomy, physiology, hygiene, chemistry, and bacteriology have been given to classes made up of pupil nurses from the City Hospital and People's Hospital.

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 industrial engineering, 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 1920-21): 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.

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.

For the past two summers the University in co-operation with the Board of Education has carried on an Americanization Institute for the instruction of teachers working in this branch under the direction of the Public School system. Among subjects treated are: Organization and Administration, Racial Backgrounds, Citizenship, Methods of Teaching English to the Adult Foreign-born, etc.

The Board of Education has co-operated with the University by furnishing architectural service and building supervision at cost through its department of architecture.

Affiliation with Local Hospitals

By common agreement the University has assumed the duties of instruction in such scientific subjects as anatomy, physiology, hygiene, bacteriology and applied chemistry for the students in the nurses' training schools of the Akron City Hospital and the People's Hospital. The nurses in training attend the University for a considerable part of their work during the first year of the course.

REGISTER OF STUDENTS

BUCHTEL COLLEGE

1920-1921

GRADUATE STUDENTS

Alderfer, Ruth Emma ..... Akron
A. B., Western Reserve University.
Christy, Robert T. ..... Akron
B. S. Municipal University of Akron.
Endres, Herbert Arthur ..... Los Angeles, Cal.
M. S. Leland Stanford Junior University.
Jacobs, Myrom W. ..... Akron
LL. B., Ohio Northern University.
Manthey, Edwin L. ..... Akron
Ph. B., Municipal University of Akron.
McDonald, Graham ..... Hope Mills, N. C.
A. B., Davidson College.
Siske, Manley A. ..... Pleasant Garden, N. C.
M. A., Davidson College.
Tener, Rees Ferneau ..... Akron
A. B., Marietta College.
Yarter, Clinton George ..... Hartford, N. Y.
B. S., St. Lawrence University.

Total—Men 8
Women 1

SENIOR CLASS

	Course	
Berrodin, Henry C.	B. S.	Akron
Blower, William	A. B.	Akron
Bordner, Robert	B. S.	Akron
Brockett, Warren	B. S.	Akron
Bruner, Harold E.	A. B.	Akron
Cheval, Marie Louise	A. B.	Paris, France
Close, Stanford D.	B. S.	Akron
Deans, Alvah W., Jr.	B. S.	Coshocton
Emmons, Clande V. D.	A. B.	Akron
Fox, Rolland D.	B. S.	Akron
Griffin, Earl	B. S.	Akron
Gudikunst, Earl G.	A. B.	Akron
Keck, Isa Lillian	B. S.	Akron
Knowlton, William Hardy	A. B.	Akron
Lancaster, Martin Emmer	A. B.	Akron
Laushell, Edward Lee	B. S.	Louisville, Ky.
McIlwain, Mary A.	A. B.	Akron

Marsh, Dorothy Lillian ..... A. B. ..... Akron
Melvin, Willard ..... B. S. ..... Akron
Musser, Harold C. ..... A. B. ..... Akron
Osterhouse, Helen ..... A. B. ..... Akron
Rich, Raymond C. ..... B. S. ..... Sterling
Rotruck, Anne Ellis ..... A. B. ..... Akron
Rowley, William Arthur ..... A. B. ..... Akron
Sawyer, Robert Voris ..... B. S. ..... Akron
Snyder, Harold L. ..... B. S. ..... Akron
Stevenson, Hazel M. ..... A. B. ..... Akron
Timmis, Margaret ..... A. B. ..... Akron
Wagner, Florence ..... A. B. ..... Akron
Waldkirch, Earl ..... B. S. ..... Akron
Weber, George Fred ..... A. B. ..... Akron
Wentz, Edward P. ..... A. B. ..... Akron
Willyard, Warner L. ..... B. S. ..... Ravenna
Wilson, Harold Martin ..... A. B. ..... Akron

SENIORS IN ABSENTIA

Carmichael, Frances—Combination Arts-Nursing Course with Lakeside Hospital, Cleveland, Ohio ..... Akron
Kendall, C. Victor—Combination Arts-Agriculture Course with Ohio State University ..... Columbus
Sutton, Rodney C.—Combination Arts-Law Course with Western Reserve University ..... Akron
Weeks, James Alexander—Combination Arts-Law Course with Western University ..... Akron

Seniors—Men 28
Women 10

JUNIOR CLASS

	Course		
Ackerman, J. Sebring	B. S.	... Poughkeepsie, N. Y.	
Allaman, Mary	A. B.	.....	Akron
Beer, Alice A.	B. S.	.....	Akron
Betzler, Alma Elizabeth	A. B.	.....	Akron
Bohl, Ray A.	B. S.	.....	Akron
Bruner, Byron	A. B.	.....	Akron
Busenburg, Earl B.	B. S.	.....	Akron
Carney, Lynn	A. B.	.....	Akron
Christensen, Chester W.	B. S.	.....	Akron
Daum, Carl V.	A. B.	.....	Akron
Davies, John Morris	B. S.	.....	Akron
DePue, Jonathan W.	A. B.	.....	Akron
Dunford, Emerson	A. B.	.....	Akron
Eckert, Herman Kraft	B. S.	.....	Akron
Froebe, Albert John	A. B.	.....	Akron
Ganyard, Gladys M.	A. B.	.....	Akron
Green, Alice Lorena	A. B.	.....	Akron
Guckeyson, Harry C.	A. B.	.....	Akron
Harpster, Mildred	A. B.	.....	Akron

Harrington, Vera	A. B.	Akron
Ladd, Robert H.	B. S.	Akron
Lancaster, Raymond D.	B. S.	Akron
Leland, Maxine	A. B.	Akron
Markle, Geraldine	A. B.	Akron
Miller, Rolland Snyder	B. S.	Kent
Moore, James Howard	B. S.	Akron
Myers, Parke Harlon	B. S.	Akron
McKay, Reuben	Irregular	Akron
Olin, Robert R.	Irregular	Akron
Palmer, Ralph D.	Irregular	Akron
Rothrock, Mary Jane	A. B.	Akron
Schaufele, Lucille	A. B.	Barberton
Stump, Walter H.	A. B.	Akron
Thomas, Harold Irwin	A. B.	Jenkins, W. Va.
Thornbury, Purla	A. B.	Akron
Van Hyning, Conrad	A. B.	Akron
Wagner, Anna	A. B.	Akron
Waldkirch, Gladys	A. B.	Akron
Warren, Arthur	A. B.	Akron
Washburn, Margaret	B. S.	Akron
Weaver, Marion	A. B.	Akron
Wentink, Paul Herbert	A. B.	Akron
Whigam, Vivien Jeannette	B. S.	Akron
Williams, Hollie	B. S.	Wilson, Kansas

Juniors—Men 28
Women 16

SOPHOMORE CLASS

	Course	
Alden, Evelyn Mae	A. B.	Akron
Andrus, James R.	B. S.	Akron
Avery, Allen S.	B. S.	Akron
Barnes, Harold W.	B. S.	Akron
Bishop, Alfred Elden	B. S.	Akron
Blackburn, Alene Metta	A. B.	Akron
Bliley, Clarence James	A. B.	Akron
Bliss, Helen N.	A. B.	Akron
Bond, Jesse H.	B. S.	Akron
Brewster, Albert James	A. B.	Akron
Burr, Marian	A. B.	Akron
Burt, Harriet	Irregular	Akron
Carter, Kenneth Earl	B. S.	Akron
Caspari, Marie B.	A. B.	Akron
Chamberlain, Gladys	A. B.	Akron
Colley, Charles Harold	A. B.	Akron
Cook, Theodore Louis	A. B.	Akron
Darrah, Donald Carlton	Irregular	Akron
Davis, Anna	A. B.	Akron
Dellenberger, Ruth	Irregular	Akron
Dilley, Louise	Irregular	Akron

Ellis, Robert David	B. S.	Akron
Fidler, Tillie	B. S.	Akron
Fletcher, Helen	A. B.	Akron
Fornecker, Helen	A. B.	Akron
Fuller, Mrs. Gartha V.	A. B.	Akron
Goodyear, George, Jr.	A. B.	Akron
Harper, Robert	A. B.	Wadsworth
Harry, J. Glenard	B. S.	Akron
Hawk, Ada	A. B.	Akron
Heckler, M. Howard	A. B.	Akron
Heller, Dorothy Jeannette	A. B.	Akron
Hess, Carl Adelbert	A. B.	Akron
Hilbish, Russell	A. B.	Akron
Hill, Clarence F.	B. S.	Akron
Hoelzer, C. Edward	A. B.	Akron
Hooper, Dorothy	A. B.	Akron
Hooper, Grace Elizabeth	A. B.	Akron
Huren, Genevieve	A. B.	Cuyahoga Falls
Innis, Fred Freeland	B. S.	Akron
Irish, Everett	B. S.	Akron
Jellison, Horace	A. B.	Rockford, Illinois
Johnson, Henry B.	A. B.	Akron
Kaufman, Ralph	A. B.	Akron
Keating, Sara Florine	A. B.	Akron
Kessler, Norman	Irregular	Akron
Kinna, Beulla Kellogg	Irregular	Akron
Klahre, Edith M.	Irregular	Akron
Klingensmith, Barclay Arthur	A. B.	Akron
Knowlton, Frank W.	A. B.	Akron
Kreighbaum, Millard	A. B.	Akron
Krotzer, Walter Farnham	Irregular	Akron
Larkins, Thomas Hartt	B. S.	East Liverpool
Lawrence, Don St. Clair	Irregular	Akron
Leffler, Carl	Irregular	Akron
Lizawetzky, Bessie	A. B.	Akron
Long, Lucille Margaret	Irregular	Copley
Long, Mac Dennis	Irregular	Akron
Major, Floyd	A. B.	Akron
Mason, Ruth Elizabeth	A. B.	Akron
Miller, James DeMar	Irregular	Akron
Morganstern, Adolph D.	Irregular	Akron
McCormick, Edward	A. B.	Akron
Naugle, Jacob V.	B. S.	Akron
Newson, Philip	B. S.	Akron
Porter, Nelson W.	A. B.	Akron
Pouchot, Helen	A. B.	Akron
Poulson, Carl W.	A. B.	Akron
Purdy, Nellie L.	A. B.	Akron
Reed, Roland F.	A. B.	Akron
Robart, Wilbur C.	B. S.	Akron
Ruch, Elden H.	B. S.	Akron
Sanford, Frances Emma	Irregular	Akron

Schachner, Harry ..... A. B. ..... Akron
Shafer, Stuart D. ..... A. B. ..... Akron
Shaffer, Joshua Casper ..... B. S. ..... Akron
Shank, Dorothy D. ..... A. B. ..... Akron
Sheiner, Claude LaMonte ..... B. S. ..... Akron
Smith, Evelyn ..... B. S. ..... Cuyahoga Falls
Spencer, Addison Deigh ..... A. B. ..... Akron
Thesing, Anna Mary ..... A. B. ..... Barberton
Thompson, Carrie Marie ..... Irregular ..... Akron
Town, Arno Emerson ..... B. S. ..... Barberton
Triplett, Dorothy ..... A. B. ..... Akron
Van Buskirk, Donovan L. ..... A. B. ..... Akron
Waite, Evelyn ..... A. B. ..... Akron
Weary, Parke Alden ..... Irregular ..... Akron
Williams, Joe Martin ..... Irregular ..... Akron
Wilt, Roy W. ..... Irregular ..... Kenmore
Witherstay, Elsie V. ..... Irregular ..... Akron
Wooddell, Florence ..... A. B. ..... Akron
Woozley, Florence ..... A. B. ..... Akron

Sophomores—Men 55
Women 37

FRESHMAN CLASS

Abbott, Paul M. ..... Akron
Ackley, Ruth Virginia ..... Akron
Alexander, Inez Pauline ..... Akron
Amans, Lloyd ..... Akron
Appleget, Norma Marguerite ..... Akron
Armstrong, Walter W. ..... Akron
Averell, Natalie Eleanor ..... Akron
Bachman, Anthony ..... Akron
Barnes, Sidney Wilson ..... Akron
Barth, J. Kling ..... Akron
Bennett, Luther Harold ..... Akron
Beyerle, Rhea ..... Akron
Bierly, Pauline ..... Akron
Bonz, L. Doris ..... Akron
Bordner, Ada ..... Akron
Brandt, Carson B. ..... Akron
Breiner, William Louis ..... Akron
Bridgewater, Boyd ..... Cuyahoga Falls
Brown, Charles William ..... Akron
Brown, Martha ..... Akron
Brown, Ross C. ..... Akron
Buckio, Cloyd Charles ..... Akron
Bunts, Nellie Mary ..... Akron
Cady, Henry O. ..... Akron
Carmichael, Walter ..... Akron
Carruthers, William C. ..... Akron
Certain, Neil V. ..... Akron
Chambers, Arthur ..... Akron

Clarke, Charles Norman ..... Akron
Cole, Elizabeth ..... Norwalk
Cook, Vernon ..... Akron
Cooper, Atlee Z. ..... Akron
Cope, Harold D. ..... Bridgeport
Crawford, Cheryl Aileen ..... Akron
Crews, Violet ..... Akron
Cunningham, Ernest ..... Akron
Daily, Mrs. A. D. ..... Akron
Davidson, Ethel R. ..... Akron
Denison, Mildred ..... Akron
Dewey, Robert F. ..... Akron
Dickerhoof, Ralph ..... Akron
Dietzold, Robert ..... Akron
Dilley, Gilbert ..... Akron
Dix, Lawrence B. ..... Akron
Dowell, Frank P. ..... Orrville
Duff, John R. ..... Akron
Egbert, Viola J. ..... Barberton
Engwall, Ebba ..... Akron
Enright, M. Francis ..... Akron
Epstein, Bessie ..... Akron
Evans, Wesley Sterling ..... Akron
Frampton, Eulalia ..... Akron
Frank, Charles Theodore ..... Akron
Garver, F. Earl ..... Akron
Geis, Frederic ..... Akron
Goodman, Nettie ..... Akron
Greenberg, Leonard W. ..... Akron
Gregory, Helen ..... Akron
Haas, Walter C. ..... Akron
Hall, Robert P. ..... North Fairfield
Hanson, Arthur S. ..... Akron
Harper, B. Cornelia ..... Akron
Harper, Karl Kirke ..... Akron
Hauenstein, Mildred ..... Akron
Heller, Glen H. ..... Tallmadge
Hershinow, Harry ..... Akron
Hershinow, Relinda L. ..... Akron
Hill, Florence E. ..... Akron
Hilliard, Harry P. ..... Wadsworth
Himes, Barbara ..... Akron
Hollingsworth, Esther ..... Akron
Holsinger, Harris William ..... New Enterprise, Pa.
Horner, Fayette ..... Akron
Houk, Paul W. ..... Akron
Hubbard, Ruth Alice ..... Akron
Hunt, Schuyler ..... Akron
Hurwitz, Simon ..... Cleveland
Hutchison, John Edward ..... Akron
Hutson, Anna Mary ..... Barberton
Hyde, Charles P. ..... Bristolville

Immler, Frederick ..... Barberton
Jemison, Andrew ..... Akron
Jenkins, Verlin ..... Akron
Johnson, Albert Hilmar ..... Akron
Jones, Robert B. ..... Akron
Jordan, Adeline ..... Akron
Jordan, Virginia ..... Akron
Karcher, Harry Charles ..... Akron
Kasch, Allan B. ..... Akron
Kauffman, Lenore Amanda ..... Akron
Kline, Dorothy E. ..... Akron
Kniffin, Hazen G. ..... Stryker
Knoske, Mildred Kathryn ..... Cuyahoga Falls
Krager, Lenore Ethel ..... Akron
Kraus, Edward Henry ..... Akron
Kregenow, Edwin ..... Boston Mills
Labovitz, Abe J. ..... Akron
Laudenslager, May ..... Akron
Ledbetter, William Ellis ..... Akron
Lee, Mary Grace ..... Akron
Leonhard, Gladys ..... Akron
Levy, Charlotte H. ..... Akron
Lilliedale, Garnett ..... Akron
Loftus, William ..... Akron
Lombardi, Leonard ..... Akron
Lower, Orpha M. ..... Akron
McChesney, Mark F. ..... East Akron
MacCracken, Allan ..... Akron
MacKinnon, Wallace LeRoy ..... Akron
Margulis, Harry ..... Akron
Masterson, Kathleen Marie ..... Akron
Meeker, Lawrence ..... Akron
Milford, Howard Gomer ..... Akron
Millar, James ..... Akron
Miller, Raymond Clinton ..... Akron
Miller, S. Philip ..... Akron
Minnich, Harold A. ..... Barberton
Moore, Caroline L. ..... Akron
Morris, Irvin S. ..... Akron
Myers, Thelma L. ..... Akron
Ohl, Bernice L. ..... Akron
Olmstead, Mary E. ..... Akron
Omansky, Ida C. ..... Akron
Palmer, Alice ..... Akron
Palmer, Elno ..... Kent
Palmer, George A. ..... Akron
Parker, Agnes M. ..... Akron
Penrose, Lawrence ..... Akron
Place, Pauline ..... Akron
Pontius, Mary S. ..... Akron
Potts, Ruth ..... Akron
Quick, Ralph E. ..... Akron

Raasch, Virgil ..... Akron
Raynow, Anna K. ..... Akron
Ream, George R. ..... Akron
Reid, Minor Charles ..... Akron
Rhodenbaugh, Charles ..... Akron
Rice, Robert Marshall ..... Akron
Rimer, Robert Hall ..... Kenmore
Ritchie, Emerson Ralph ..... Akron
Ritter, Harold ..... Akron
Robb, William J. ..... Akron
Robison, Howard ..... Akron
Romestant, Jean ..... Barberton
Ross, Mary ..... Akron
Rowley, John Grether ..... Akron
Sanders, Robert Stewart ..... Akron
Schachner, Joseph M. ..... Akron
Schaffner, Roger R. ..... Akron
Schrank, Harry ..... Akron
Short, Emerson Waldo ..... Akron
Shott, Winnifred ..... New Philadelphia
Shuman, Mary ..... Akron
Smith, Edward ..... Akron
Smith, Gloria Cotton ..... Akron
Smith, Ralph K. ..... Akron
Sneddon, Alexander ..... Akron
Snyder, Catherine ..... Akron
Spessard, Dwight ..... Akron
Stevenson, Elizabeth ..... Akron
Stilwell, Byron William ..... Akron
Stouffer, Eunice Kathryn ..... Akron
Stover, Helen ..... Akron
Strottner, Leonard ..... Akron
Stump, Carl M. ..... Akron
Suloff, John ..... Akron
Swigel, Emilie Marie ..... Akron
Taylor, Eleanore ..... Akron
Thumm, Louise Josephine ..... Salem
Tilton, E. Roscoe ..... Akron
Tolan, Reid Manning ..... Akron
Tomes, Leona Viola ..... Akron
Van Berg, Harry ..... Akron
Vaughan, Hannah ..... Akron
Waltz, Ruth ..... Akron
Waterman, Allyn J. ..... Akron
Weaver, Margaret Elizabeth ..... Akron
Weitzel, Edward ..... Akron
Werner, Paul Edward ..... Akron
White, Frank G. ..... Akron
Williams, Harrison ..... Akron
Williams, Mabel ..... Akron
Williams, Theodore ..... Akron
Willyard, Eldrid ..... Ravenna

Wilson, Rebecca Howard ..... Akron
Winer, Sylvia R. ..... Akron
Wise, Crile N. ..... Akron
Wolfe, David B. ..... Akron
Wortman, John ..... Akron
Yonson, Amelia ..... Akron
Young, Hayden J. ..... Akron
Zickafoose, Dana Marie ..... Akron
Zindle, Clara ..... Akron
Zindle, Edna Marie ..... Akron

Freshmen—Men 116
Women 77

SPECIAL STUDENTS

Apel, Esther ..... Akron
Baker, Mrs. E. H. ..... Akron
Borcoman, P. Joseph ..... Canton
Carlson, Joel S. ..... Akron
Copp, Charles F. ..... Akron
Corbett, William Henry ..... Akron
Davis, Mrs. Paul ..... Akron
Goodwin, Spencer ..... Akron
Hartzell, Elmer William ..... Akron
Koplin, Wade I. ..... Cuyahoga Falls
Long, Robert T. ..... Akron
Long, Walter ..... Akron
Miller, Margaret ..... Akron
Naugher, T. W. ..... Akron
Nice, Dora A. ..... Akron
Richmond, Mrs. Lute ..... Akron
Schartenberg, Leah ..... Akron
Schell, Minnie ..... Akron
Steel, Raymond ..... Akron
Stokich, Donald ..... Akron
Swenson, Joseph ..... Akron
Taylor, Charles, Jr. ..... Akron
Timmis, John ..... Akron
Wise, Elizabeth ..... Akron

Men 15
Women 9

COLLEGE OF ENGINEERING

FIFTH YEAR CLASS

Carlin, Charles ..... Kent
Dieterich, Harold ..... Akron
Fletcher, Robert F. ..... Ravenna
Foster, George W. ..... Pearl River, New York

Fifth Year— 4

FOURTH YEAR

Braucher, Fred J. ..... Akron
Easton, James Archer ..... Akron
Lynn, James ..... Akron
O'Brien, Robert T. ..... Akron
Robinson, A. B. ..... Akron
Thorp, Edgar ..... Ravenna

Fourth Year— 6

THIRD YEAR

Grimm, George B. ..... Akron
Hoelzer, J. Timothy ..... Akron
Hoffman, Lorin ..... Akron
Kalaher, Arthur Joseph ..... Akron
Kittelberger, Howard ..... Akron
Moehr, Louis Herman ..... Akron
Pike, Kenneth ..... Ravenna
Russ, Henry Augustus ..... Akron
Smith, Harold Frederick ..... Akron
Tritt, Forest Gale ..... Barberton
Wagner, Charles Paul ..... Marshallville
Wheeler, Henry Enos ..... Akron

Third Year—12

SECOND YEAR

Allaman, Herbert C. ..... Akron
Barnholth, Marcus ..... Akron
Converse, James Pliny ..... Mantua
Covington, Oscar Henri ..... Akron
Cox, Richard G. ..... Cleveland
Cutler, James ..... Akron
Evans, James Alfred ..... Berwick, Pa.
Fletcher, Laurel E. ..... Ravenna
Goodman, Adolph E. ..... Akron
Harris, Thomas LeRoy ..... Akron
Hitchcock, James McNeil ..... New Rochelle, New York
Hungerford, Courtland ..... Akron
Jordan, Francis Joseph ..... Yonkers, New York
Kreinberg, Harold LeRoy ..... Akron
Langer, Arthur Adolph ..... Pearl River, New York
Loomis, Raymond Clifton ..... Akron
Olin, Albert Doolittle ..... Ravenna
Olson, Leland Alfred ..... Jamestown, New York
Patterson, William George ..... Akron
Pfeifle, Earl Chester ..... Akron
Plesofsky, Charles ..... Akron
Price, Edward Everette ..... Akron
Rauschenberger, M. Fred ..... Akron
Remmy, Fred ..... Akron
Robinson, John Everett ..... Akron

Ruch, Ray W. ..... Akron
Smith, Newman ..... East River, Conn.
Snider, Elwin Robert ..... Ravenna
Snyder, Russell F. ..... Williamsport, Pa.
Spencer, Thomas A. ..... Eastover, S. C.
Stevens, Paul ..... Metz, W. Va.
St. John, Bertram Peter ..... Athol, Mass.
Suloff, Sidney ..... Akron
Teulings, R. Lawrence ..... New Haven, Conn.
Thomas, Russell Webster ..... Akron
Thomas, William H. ..... Akron
Thorp, Clarence ..... Ravenna
Tiley, Clyde Foltz ..... Meridian, Miss.
Ulrich, Albert Jennings ..... Akron
Wert, Carl D. ..... Akron
Wilson, Ross Ellsworth ..... Akron
Wise, William Robert ..... Akron

Second Year—42

FIRST YEAR

Alexander, William H. ..... Thomson, Indiana
Alleman, Boyd ..... Akron
Anderson, Axel L. ..... Akron
Atwater, Elliott B. ..... Cleveland
Baldwin, Jack ..... Akron
Bausher, Louis ..... Akron
Benson, Courtney Edward ..... Athol, Mass.
Blackwell, Arthur ..... Pearl River, New York
Brooks, Earl F. ..... Akron
Chestnutt, Ralph Harper ..... Washington, D. C.
Chrisman, Warren ..... Sharon Center
Conger, Frank E. ..... Dunn's Station, Pa.
Cooper, Ralph F. ..... Akron
Cowling, Richard J. ..... Akron
Daggett, Walter ..... Lewiston, Idaho
Dietrich, Carl P. ..... Akron
Glass, William John ..... Akron
Glasheen, Francis David ..... Athol, Mass.
Hanawalt, Joseph Donald ..... Akron
Harrington, F. Theodore ..... Akron
Herbruck, Howard Willard ..... Akron
Hobson, Lewis Howard ..... Akron
Jacob, Byron Harold ..... Kent
Keller, W. Stanley ..... Sharon Center
Kinney, Roland Leroy ..... Akron
Lesh, Leon Meryl ..... Akron
Lilliedale, Marvin ..... Akron
MacDonald, Levi Alexander ..... Canada
McMichael, E. Donald ..... Kenmore

Marshall, George A. ..... Ravenna
Michelson, Louis ..... Akron
Miller, Edmund Bruce ..... Akron
Miner, Claude Loren ..... Akron
Moody, Dwight L. ..... Akron
Moore, Frank Richard ..... Kent
Munteanu, Jonel ..... Akron
Myers, Herbert B. ..... Akron
Nelcamp, Lester Miles ..... Akron
O'Brien, Joseph Ernest ..... Midland, Mich.
Parker, Lawrence Donald ..... Corry, Pa.
Patterson, Earl ..... Akron
Pickton, Willis H. ..... Akron
Prior, William Randall ..... Williamsport, Pa.
Reuscher, George ..... Akron
Ross, Elmer E. ..... Indianapolis, Indiana
Salber, Eugene Joseph ..... Akron
Schnurr, Bert A. ..... Akron
Schumacher, William Albert ..... Akron
Stroup, Floyd H. ..... Atwater
Stroup, Lloyd ..... Atwater
Swanson, George C. ..... Akron
Swartz, Orrello D. ..... Dixon, Illinois
Tame, Stewart ..... Cleveland
Van Brimmer, Ralph M. ..... Delaware
Vanica, Pearl R. ..... Akron
Vincent, Leo Wellington ..... Athol, Mass.
Waggoner, Charles Theodore ..... Akron
Watson, Adrian Donald ..... Coshocton
Watson, Noel F. ..... Coshocton
Whiteman, Henry H. ..... Akron
Williams, Raymond Allen ..... Richmond, Ill.
Yantis, Holden Verne ..... Mowcagua, Ill.

First Year—62

SPECIAL

Cole, Lester M. ..... Springfield
Hersman, Elton C. ..... Glenville, W. Va.
Howe, F. Donald ..... Kent
Jackson, Robert Marsh ..... Akron
Miller, Charles William ..... Akron
Singer, James ..... Akron
Sir Louis, Harry J. ..... Akron
Steel, Francis Earl ..... Akron
Whalen, George L. ..... Akron

Specials— 9

CURTIS SCHOOL OF HOME ECONOMICS

GRADUATE STUDENTS

Davis, Gladys F. ..... Akron
A. B., Ohio Wesleyian University.

SENIOR CLASS

Capron, Miriam Rachel ..... Akron
Freedlander, Rosalind Gertrude ..... Akron
Kraus, Luise ..... Akron
Smith, Maude Elaine ..... Akron
Whalen, Louise J. ..... Akron

Seniors— 5

JUNIOR CLASS

Iredell, Elizabeth ..... Akron
Waltz, Lois A. ..... Akron

Juniors— 2

SOPHOMORE CLASS

Braley, Eloise York ..... Akron
Cauffield, Rachel Doris ..... Akron
Garrett, Margaret ..... Akron
Keating, Mary ..... Akron
Keck, Olive ..... Akron
Kolbe, Lydia V. ..... Akron
Lord, Margaret ..... Akron
Machia, Elizabeth McCune ..... Akron
Pfeifle, Bessie ..... Akron
Swinehart, Grace S. ..... Kent

Sophomores—10

FRESHMAN CLASS

Hillman, Carolyn ..... Akron
Copp, Louise ..... Akron
Davis, Freda Ruth ..... Akron
Gross, Orra ..... Akron
Hallinan, Dorothy ..... Akron
Hanson, Helen ..... Akron
Jones, Edna ..... Akron
Petre, Winifred ..... Peninsula
Pfahl, Hilda ..... Akron
Roth, Cordelia Kathryn ..... Akron
Urpman, Helena M. ..... Akron

Freshmen—10

SPECIAL

Jones, Mrs. Ethel ..... Akron

SUMMARY OF STUDENTS IN DAY CLASSES

BUCHTEL COLLEGE OF LIBERAL ARTS

	Men	Women	Total
Graduate Students	8	1	9
Seniors	28	10	38
Juniors	28	16	44
Sophomores	55	37	92
Freshmen	116	77	193
Specials (entrance requirements not completed)	15	9	24
Total Men			250
Total Women			150
Total Students in Buchtel College			400

COLLEGE OF ENGINEERING

Fifth Year	4
Fourth Year	6
Third Year	12
Second Year	42
First Year	62
Specials (entrance requirements not completed)	9
Total Students in College of Engineering	135

CURTIS SCHOOL OF HOME ECONOMICS

Graduate Students	1
Seniors	5
Juniors	2
Sophomores	10
Freshmen	10
Specials (entrance requirements not completed)	1
Total Students in Curtis School	29

EVENING COLLEGE

Agranoff, Sol S.
Allen, Margaret J.
Altland, Gertrude
Amer, Louis H.
Ammon, Marguarite
Anderson, Morton E.
Andrews, Ralph W.
Andreoli, Andre H.
Arenson, Louis H.
Arthur, Gladys B.
Astrup, Chas. J.
Atkinson, Edna F.
Babcock, Leah
Backer, Albert I.
Baker, Leah M.
Barnette, Mrs. Helen.
Barrett, Wm. J.
Baughin, Maude
Bayer, Edwin H.
Bayes, Florence M.
Beach, Mary L.
Beal, Faerie Gladys
Beck, Anna Mabel
Becker, Arthur V.
Belden, Don A.
Bingham, Mayme A.
Bishop, Anna
Blackstone, Lloyd F.
Blackstone, Ray C.
Boblet, Myrtle B.
Bohl, Ray A.
Bojo, Elizabeth M.
Bolton, Hazel L.
Bonazzi, Edward
Bonnoront, Corien
Bonstedt, Ferdinand A.
Borcoman, Joseph
Borway, Ray L.
Bowden, Martha R.
Boyd, Elvin Ernest
Boyle, Regena
Braverman, Sigmund
Brenner, Lillian E.
Breyfogle, Myrtle B.
Bright, H. P.
Bright, M. A.
Brogan, Margaret
Brown, Dorothy G.
Brown, Marion G.
Brown, H. Willard
Brown, Ralph J.
Bunker, Ruth
Bunts, Helen A.
Busch, William E.
Byerly, Raymond R.
Carlton, B. B.
Carnahan, Dana W.
Carpenter, Leota L.
Carson, George
Carver, Mary
Caskie, William A.
Caudill, Mildred
Caudill, Hattie
Chestnutt, Ralph H.
Clapper, D. W.
Clark, E. E.
Clark, Mrs. Lillian M.
Coates, Wm. S.
Cabb, Robert S.
Coker, J. Raymond
Collins, Eliza
Conklin, Lyndal
Constam, Alyn F.
Cook, Cary
Corrigan, Beatrice L.
Corson, Wm. G.
Craig, Horace E.
Cramer, Edna Bernice
Crawford, E. C.
Creeger, C. Albert
Cromwell, William F.
Curtis, George H.
Cvetich, Michael
Daily, Mrs. A. D.
Dale, Ralph A.
Darrah, Helen J.
Darrow, Lois
Davis, Mark P.
Davis, Ralph Charles
Deeds, Mrs. Emily E.
Dempsey, Thomas B.
Diggs, Vernal A.
Dixey, William C.
Dougherty, Elizabeth V.
Dow, Ellis L.
Dresher, Elizabeth R.
Dunbar, Clare G.
Duncan, Richard T.
Dunckley, Sarah E.
Dueyer, Gerald F.
Dupler, Cora M.
Durlin, George K.
Dye, Donald L.
Easton, James A.
Easton, Theodore D.
Eckstein, Karl J.
Edwards, W. A.
Egdahl, Clarence O.
Elliott, John W.
Elwood, John W.
Engwall, Conrad A.
Evans, Helen L
Evans, James
Everett, Harvey A.
Farver, Warren L.
Fenneman, Harry F.
Fernsner, Hazel M.
Fiers, Pearl
Fink, Carolyne
Fink, Zoe
Firick, Florence L.
Fitch, Lloyda Fay
Fitzpatrick, Julia
Fletcher, Shirley I.
Foley, Thomas T.
Foltz, Esgar B.
Foul, George William
Fowls, Carl F.
Frank, Charles T.
Frashure, Phyllis A.
Frees, Clarence G.
French, Charles W.

Friend, Owen
Fuller, Elmer G.
Fuller, J. E.
Fulmer, Fred G.
Gable, Norris L.
Gardner, Whitney S.
Garrer, Earl F.
Garrett, Edith
Gaskins, Horace L.
Geit, Ruth
Gher, Reginald O.
Gibson, William G.
Gillen, Edward T.
Gillen, Francis D.
Goldman, Elma E.
Glock, Mrs. F. A.
Goldman, Rose
Goodman, Samuel I.
Gray, James B.
Griffin, John H.
Gross, Benjamin
Grote, Ernest A.
Gruebele, Edna M.
Gruebele, Mary E.
Hall, Foster E.
Hallett, Wm. D.
Hallinan, Ellen Z.
Harpster, M. E.
Harrington, H. L.
Harrington, Vera M.
Harris, Betsy L.
Harris, Cassie
Harris, Margaret
Hartsook, Millard
Haskins, Alice E.
Hassenzahl, K.
Hawthorne, Wm. B. I.
Hayden, Clara I.
Hazel, William F.
Hazelet, Bruce A.
Heid, Marie H.
Hansel, Ino David
Henry, Catherine
Herman, LeRoy L.
Hersman, Wm. A.
Hiatt, Harold A.
Hibbs, Albert S.
Hibbs, Alberta R.
Hill, Dorothy B.
Hines, Laura
Hinman, Mattie L.
Hinton, Alva M.
Hitchcock, Georgie
Hitchcock, Helen
Hodges, George D.
Hoffman, Carl
Hoffman, David D.
Hoffman, Lela
Holder, O. B.
Holdsworth, A. M.
Holz, W.
Homier, O. K.
Homeier, G. V.
Householder, Bessie
Hout, Charles J.
Howard, Harry C.
Howes, Alfred M.
Howland, Frank C.
Hughes, Mary
Hunt, Schuyler
Hurcomb, Ernest J.
Hurst, R. E.
Huston, C.
Irish, Everett A.
Irvine, Alice S.
Jacobs, Myron W.
Janssen, M. E.
Jenny, Charles W.
Jobes, Maynard P.
Johnson, Helen E.
Johnson, M. Helen
Johnston, Walter A.
Jones, Earl L.
Jones, Harriet M.
Jones, P. C.
Justice, Norma H.
Kahnheimer, Josephine
Kellerman, Annabel
Kenealy, Marie
Kessler, Norman M.
Knapp, Fred J.
Knauss, Helen
Kohn, Leona
Kottke, Wm. A.
Kozma, Emil I.
Krasch, Mary
Krash, Marguerite
Kratt, Barbara
Kraus, John E., Jr.
Kraus, Joseph P.
Kuszmaul, Corlis
Kyle, John C.
Ladd, Robert H.
Langer, Harriet .T
Larsen, Isaac A.
Lasher, Margaret E.
Laushell, Edward L.
Lantzenliser, Fred B.
Leach, Mae
Leonard, Harold L.
Leonheiser, W.
Lerch, Dr. Guy S.
Loewy, Harriet
Loomis, Wendell S.
Lybarger, Mabel J.
McDonough, Loretta
McDowell, Anna
McDowell, R. Dent
McGonagle, Emily
McBride, Frederick L.
McChristie, Minor E.
McKinney, Lela F.
McMillen, Neva
Maag, Elsie
Maass, Milo
Maier, Bertha L.
Masteller, Orlo G.
Maurer, Frederick W.
Meeker, Maybell M.
Melton, Thornton C.
Miles, Agnes M.
Miller, Bert
Miller, George E.
Miller, Leland S.
Mills, Julia M.
Minnick, George H.
Mintz, Florence
Mishler, Dora

Montgomery, Charles E.
Mooney, A. W.
Mooney, Sara M.
Moore, Clyde F.
Moore, Ralph B.
Moreland, Eloise
Morris, Jane I.
Myers, Dan S.
Myers, Paul I.
Myrick, Aldah
Newlin, Paul C.
Newton, Mary M.
Nicholls, Stanley
Norton, Bessie
Nau, Heber B.
Nungesser, Carl
Nye, Norman
Nyholm, Arne R.
Nyholm, Sidney A.
Oser, Frank J.
Palmer, Helen F.
Palmer, Luella M.
Palmer, Newell
Palmquist, James B.
Pattox, Sadie
Paulus, Edward
Payne, Eva
Peffers, William W.
Pence, Samuel A.
Pennebaker, Edward H.
Pennebaker, William B.
Peters, Arthur
Pethick, Russell A.
Pfeiffer, Don M.
Phillips, Mary
Picard, Mrs. Edna
Pierce, Ella
Pierce, Ethel M.
Pilliod, Frank
Plageman, Lee W.
Plane, M. Mary
Plant, Paul B.
Plumb, Theodore G.
Poe, Lucille T.
Poland, Edna H.
Pollock, Kathleen
Post, Bessie J.
Price, Wilbur A.
Prior, Margaret M.
Porosky, Margaret
Quick, Frank M.
Quick, Roger J.
Ramsay, Dwight M.
Ranck, Sadie C.
Rastall, Daisy L.
Ratchford, Isabelle
Ream, Lewis T.
Redinger, Mary
Remmy, Grace M.
Rentschler, Callie E.
Repac, Tressa
Rice, Marvin B.
Richards, Thomas C.
Riley, Herbert G.
Ritchey, Rosco V.
Robinson, William B.
Roll, Marion Everett
Ross, Mary
Ruff, Nelle
Sabin, Frank G.
Samson, L.
Sandin, S. D.
Sandsberry, Emma M.
Sapp, Lillie L.
Sawyer, Neil Olney
Sauerbrey, Albert H.
Saunders, Gertrude
Sauvain, Geo. M.
Schell, Minnie S.
Scherrer, Paul
Schlegel, Christine
Schmieg, Gertrude
Sehwem, Mabel H.
Seman, Edward W.
Seitz, Etta
Selzer, John
Shafer, Paul C.
Shafer, Emiline M.
Shark, J. A.
Shawan, Wilbur G.
Sheldon, Robert E.
Sherbondy, Grant
Shively, Hayden W.
Shrene, Catherine
Shrene, Dorothy
Shultz, William S.
SiKora, Ann
Silverman, Elizabeth
Simpson, Anna
Sisler, Gerald W.
Slick, Viola
Slosower, Harry
Smith, Clifford D.
Smith, Ethel
Smith, Florence M.
Smith, Helen
Smith, Jessie G.
Smith, Louis W.
Smith, Orsella
Smith, Pearl Alvira
Snavely, Daisy M.
Snyder, Celia R.
Solomon, Benjamin
Spafford, Beryl
Spalding, Eugenia
Spaulding, Irving W.
Spencer, C. R.
Spencer, James
Spencer, Wilmah
Sprangue, Stella H.
Spriggle, Leland C.
Springer, Julia M.
Stanley, Chester D.
Stark, Helen F.
Stark, Virginia
Stein, Homer
Steinhauser, Rose K.
Stephens, Charles E.
Sterley, John M.
Stinson, Rita E.
Stone, Elizabeth G.
Stoner, Othor W.
Stuckey, Emma
Strahan, Marie V.
Sullivan, Margaret
Sumner, Beatrice

Supmore, Mrs. Belle B.
Swann, Harriet M.
Sweeny, Edith
Swenson, Joseph
Tanz, Walter B.
Thesing, John W.
Thomas, William M.
Ticknor, Earl
Todd, John
Tucker, Robert E.
Turgow, Frank
Turnbull, Thomas R.
Turner, Margaret M.
Turner, Olive C.
Valsing, Anna N.
Vandersall, Clara E.
VanHyning, Irene
Wagner, Francis A.
Wahl, James C.
Waite, Helen
Walker, Arlie G.
Wallace, Don I.
Ward, Gladys E.
Washer, L. E.
Webb, Kenneth
Weilbrenner, Marie
Weitzel, Edward C.
Welsh, Tressa M.
Wessell, Francis Henry
Wessell, F. L.
Whitmore, Harold M.
Whiton, Edith
Whittier, Chas. W.
Whittington, Dorothy
Whitty, John
Wilder, Sara
Wilhelm, Velma E.
Wilson, Ernest L.
Wilson, James B.
Wilson, Mary L.
Winemiller, Margaret
Wolcott, Fannie
Wolfe, Erdie
Wood, Thos. B.
Woody, Irene.
Word, Ima L.
Worron, Kathryn
Wright, H. A.
Wright, Margaret
Youngs, Myrtle
Young, Randall Blair
Zeiger, Herbert
Zurbrugg, Mary E.

Total	459
Students regularly enrolled in University taking evening courses, deduct	10
Total Evening Students	449

SUMMARY OF ALL STUDENTS IN UNIVERSITY

	Men	Women	Total
Graduate Students	8	2	10
Total Seniors	32	15	47
Total Fourth Year (Engineering)	6	—	6
Total Juniors	28	18	46
Total Third Year (Engineering)	12	—	12
Total Sophomores and Second Year (Engineering)	97	47	144
Total Freshmen and First Year (Engineering)	178	87	265
Specials	24	1	25
Total in Day Classes	385	170	555
Total in Evening Classes 449 (On basis that five evening students are equivalent to one full time student)			90
Total Full Time Students in University			645

The following students entered the University the second semester, 1919-1920, too late to have their names recorded in the 1920 catalog:

Stoltz, Spencer G., Akron
M. S., University of Chicago.

Hagelin, Karl Fredrik, Sweden

Irregular students are those who have completed entrance requirements but have not chosen a major.

Special students are those who have not completed entrance requirements and are not candidates for a degree.

EXTENSION WORK

COURSE FOR PUPIL NURSES

Barrett, Rosemary Eulalia
Blatter, Emma Priscella
Bloesinger, Lydia Henrietta
Clapp, Ruth Mary
Cranz, Doris Esther
Halter, Helen
Herman, Catherine
Hogsett, Irene
Hoyt, Ethel B.
Kingsbury, Irene
Lehr, Beulah E.
Oakes, Elizabeth Florence
Redfox, Clara E.
Rogers, Gladys
Wall, Lenore Rae
Warren, Ruth
Wyant, Ruth Margueritte

Total—17

LIBRARY COURSE

Bachtel, Harriet Elizabeth
Bell, Katherin Raynolds
Brown, Betty
Cosler, Mrs. Frederica
Ekelberry, Mary
Hawk, Lenna
Kohn, Leona
Long, Gladys A.
Owen, Mrs. F. S.
Smith, Gloria C.
Spencer, Margaret A.
Swinehart, Esther

Total—12

TEACHERS' HEALTH COURSE

Black, Mabel
Bolton, Hazel
Bricker, Frances
Camp, Elizabeth
Curfman, Bessie
Davis, Mary A.
Dunckley, Sara E.
Flower, Maud E.
Grigsby, Mrs. Myrtle E.
Haymaker, Nellie B.
Keck, Blanche I.
Kittinger, Nell J.
Koph, William H.
Lager, Helen R.
Leeper, Laura
Leib, Myrtle C.
Matz, Ida J.
Meyer, Gertrude
Miller, Grace J.
Moloney, Anna F.
Randolph, Louise
Rivkin, Rose
Robinson, Irma A.
Rumsey, E. Rebecca
Serfass, Addie M.
Smith, Jessie G.
Sullivan, Margaret
Yonson, Mabel I.

Total—28

STUDENTS IN VOCATIONAL GUIDANCE

ELEMENTARY TEACHERS' COURSE

Bexes, S. A.
Brownscombe, Earl T.
Crothers, Daniel H.
Dodd, S. W.
Gregory, John B.
Ingerson, Henry W.
Kissane, Hugh H.
Lenke, Edw.
Nagel, Bernard G.
Newell, Roscoe C.
Patterson, E. L.
Porter, Martin L.
Porter, Raymond E.
Robinson, A. E.
Stebbins, Chas. S.
Swan, Otis A.
Tener, L. E.
Wheeler, Jacob F.
Willemsen, Jacob W.

TRADE ANALYSIS COURSE

Babcock, Ernest L.
Bingham, Frank
Borhringer, Carl W.
Brewbaker, Charles E.
Bumgarner, Earl R.
Crawford, M. Lee
Goff, Arthur H.
Halsey, Ray A.
Mitchell, Marian W.
Ludholm, Gustaf
Schlagenhauf, W. H.
Ticknor, Earl H.
Wilson, Benjamin V.

RELATED SUBJECTS COURSE

Allen, Ella M.
Babcock, Beulah
Bartlett, H. L.
Brecht, Ethel L.
Butler, Marian
Calnon, Catherine
Dibble, Alice E.
Emery, Bess
Fitzpatrick, Julia A.
Flood, John W.
Gilbride, Rose M.
Gorman, Gertrude
Hilbish, Charles E.
Jackson, Maude
Koontz, Mary E.
McArtor, Alice N.
McDowell, Alta M.
McGarvey, Anna F.
McKnall, S.
Mooney, Mary A.
Mooney, Sara M.
Pack, Isabel K.
Pfaff, Rhea
Rich, Mabel M.
Rogers, Annie F.
Schmidt, Norma
Selber, Olive
Sheehan, Mary E.
Smith, Lena E.
Smith, Lulu I.
Stebbins, Mildred E.
Streeter, Etelka
Theobald, Mrs. John
Valsing, Anna N.
Wachter, Rose C.
Waterhouse, Ralph H.
Weber, Esther M.
Williams, Laura
Witthoeft, Dorothy

DEGREES CONFERRED

Class of 1920

BACHELOR OF ARTS

Anna Rosalind Andreas ..... Akron
Ruth Calvin ..... Akron
*Jack Leonard Griffiths ..... Akron
Arthur Read Haley ..... Cuyahoga Falls
Ethel Hawk ..... Akron
Olive Anna Henegan ..... Akron
Arthur S. Knowlton ..... Akron
Leona Therese Kohn ..... Akron
*Clarence E. Motz ..... Cuyahoga Falls
Charles Alton Pfahl ..... Akron
Virgil Edwin Rogers ..... Akron
Donald Rothaker Ross ..... Akron
Helen Harriet Shaffer ..... Akron
Nina Elizabeth Urpman ..... Akron
Herman Edward Werner ..... Akron
Mary Jeannette Williams ..... Akron
Jay Black Woodruff ..... Akron

BACHELOR OF SCIENCE

Bruce Wallace Bierce ..... Cuyahoga Falls
Earl O. Boedicker ..... Akron
Whitney Elmer Butler ..... East Akron
John Edgar Cable ..... Akron
Robert T. Christy ..... Akron
Leslie Vail Cooper ..... Akron
Eugene George Haas ..... Akron
Wilbert C. Pfahl ..... Akron
Clarence Marsh Swigart ..... Akron
Clyde Leroy Swinehart ..... East Akron
Aubrey Ashe Wendt ..... Akron
Glenn Arthur Williams ..... Akron

BACHELOR OF SCIENCE IN HOME ECONOMICS

Bertha Regina Frampton ..... Akron
Rhea Katherine Garver ..... Akron
Hazel Kerch ..... Akron

CIVIL ENGINEER

Lucius F. Converse ..... Kenmore
Philip Halpern ..... Akron
John S. Kennedy ..... Akron
Corliss Kuszmaul ..... Akron

*In combined Arts-Law Course with Western Reserve University.

MECHANICAL ENGINEER

Floyd E. Joel ..... Akron
Lowell L. Judy ..... Kent

ADVANCED DEGREES

Master of Science, in Course

Ira Williams ..... Wilson, Kansas

HONORARY DEGREES

Doctor of Laws

Oscar Eugene Olin
Mary Elizabeth Gladwin

PUBLIC ADDRESSES—1920

January 13	Dr. Raymond Moley—"Americanization."
March 5	Rev. F. G. Behner—"Character Building."
March 12	Coburn Musser—"The Honor System at Princeton."
April 16	Dr. R. G. Paterson—"Red Cross Work since the War."
April 23	Mr. E. C. Shaw—"Public Health."
June 3	Dr. Glen Levin Swiggett, Specialist in Commercial Education—"Business Education."
June 4	Mr. W. J. Bankes—"Teacher Training."
October 15	Mr. Carroll R. Reed, Supt. of Schools—"Relation of the University to the Public Schools."
October 29	Mr. Frank E. Burleson, Secretary, Better Akron Federation.
November 12	Dr. Sigmund Spaeth, Music Critic and Lecturer.
December 3	Mr. Ross Crane—"Preempt Your Claim."

PRIZES AND HONORS

The Ashton Prizes

No contests held 1919-1920.

The Senior Alumni Prize

The Senior Alumni Prize was awarded to Nina Elizabeth Urpman.

The Tomlinson Prizes

No prizes awarded 1919-1920.

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. The winner of a second cup for 1919-1920 was West High School.

Phi Sigma Alpha

The three students chosen for membership in Phi Sigma Alpha fraternity from the senior class of 1920 were:
Nina Elizabeth Urpman, Eugene George Haas, Leona Therese Kohn.

BUCHTEL COLLEGE ALUMNI ASSOCIATION

Organized July, 1874

Incorporated October 19, 1899

OFFICERS FOR 1920-1921

PRESIDENT, A. I. SPANTON, '99 ..... Akron
VICE-PRESIDENTS, CHAS. BULGER, '08 ..... Akron
AMELIA SCHOENINGER, '98 ..... Akron
SECRETARY, MRS. A. A. KOHLER, '93 ..... Akron
TREASURER, A. E. HARDGROVE, '11 ..... Akron

ALUMNI BOARD OF TRUSTEES

Officers

A. I. SPANTON, '99 ..... President ex-offico
MRS. A. A. KOHLER, '98 ..... Secretary ex-officio
A. E. HARDGROVE ..... Treasurer ex-officio

Term Expiring June, 1921

MRS. H. E. SIMMONS, '06 ..... Akron
THAD RICE, '97 ..... Akron
INEZ PARSHALL, '02 ..... 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

Term Expiring June, 1923

W. T. SAWYER, '87 ..... Akron
J. C. FRANK, '99 ..... Akron
MRS. HAROLD FLEMING, '11 ..... Akron
MRS. FRANK PAUL, '08 ..... 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	364
Women	286
Total	650

Geographical Distribution

Deceased	66
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	432
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

Occupations of Alumni

Actors	2
Architects	1
Artists	1
Authors	3
Bankers	4
Charity Organization Work	2
Chemists	25
Clergymen	11
Clerical Work	25
Commercial Work	69
Contractors	1
Decorators	1
Dietitians	5
Engineers	19
Farmers	10
Forestry	1
Government Employ	8
Insurance and Real Estate	9
Lawyers	42
Librarians	5
Living at Home	46
Lyceum Bureau Work	1
Manufacturers	4
Married Women	90
Merchants	4
Musicians	4
Newspaper Work	7
Nurses	4
Physicians	18
Promoters	4
Public Service	2
R. R. Agents	1
Salesmen	9
Secretarial Work	12
Students	6
Teachers and Professors	108
Unknown	20