OHIO NORTHERN UNIVERSITY BULLETIN



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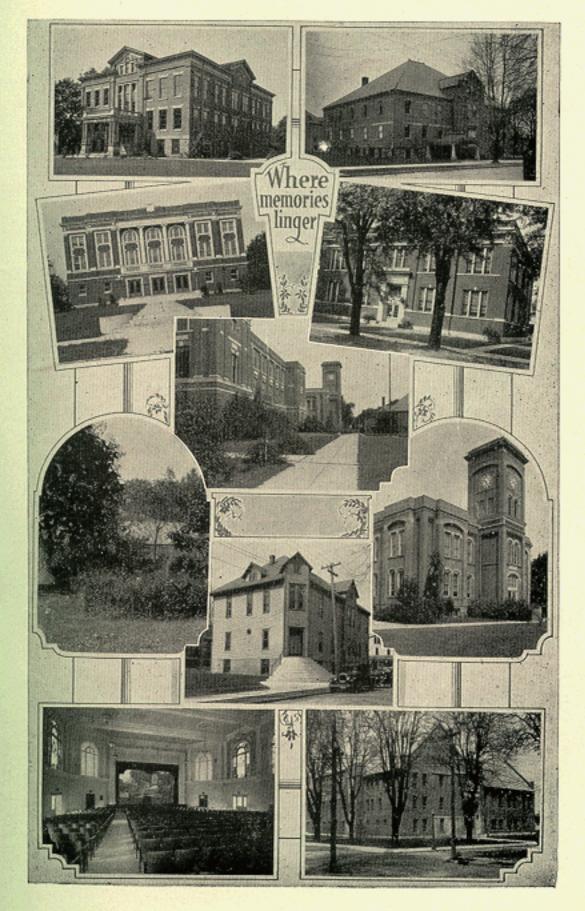
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Application for Admission

I hereby apply for admission to Ohio Northern University		
at the opening of Quarter, 193		
Fall, Winter, Spring, Summer		
Name in full		
Street Address		
Postoffice State		
Parent or Guardian		
High School		
Address of High School		
Name of Principal		
Date of Graduation		
What College have you attended?(This question is important)		
Check the department in which you are interested:		
LIBERAL ARTS 3. Teacher Engineering		
1. General 1. Chemical		
2. Pre-Professional (a) Senior High School 2. Civil		
(a) Pre- (b) Tunion Winh 3. Electrical		
Medical School 4. Mechanical		
(b) Pre-Dental (c) Intermediate LAW		
(c) Pre-Law 2 Yr 4 Yr.		
(d) Pre-Theo- (d) Primary PHARMACY		
logical A Music		
(e) Business 5. Physical Education		
What degree do you expect to receive?		
List your high school credits below: Units Units Units		
Ti i'i		
Foreign Language History Social Science		
MATHEMATICS		
Algebra		
Geometry Miscellaneous		
SCIENCE		
General Science Biology		
Chemistry		
Physics		
Give scholarship rating in high school		
Special activities in high school		





OHIO NORTHERN UNIVERSITY BULLETIN



ANNUAL CATALOGUE
SIXTY-THIRD YEAR

January, 1934 Ada, Ohio

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Calendar, 1934-1935

Fall Quarter, 1934

September 17, MondayFreshman Preregistration
September 18, TuesdayUpper Class Preregistration
September 19, WednesdayRegistration and Payment of Fees
September 20, ThursdayClasses Begin
September 21, FridayFirst Convocation
October 20, SaturdayHomecoming Day
November 27, Tuesday (5:10 P. M.)
Thanksgiving Vacation Begins
December 3, Monday (7:50 A. M.)Classes Resume
December 10, 11, 12, 13, Monday to Thursday, inclusive
Final Examinations
December 13, Thursday (5:10 P. M.)Fall Quarter Ends
Winter Quarter, 1935
January 2, Wednesday (8:30 A. M.)
January 3, ThursdayRegistration and Payment of Fees
January 4, FridayClasses Begin
March 13, 14, 15, 16, Wednesday to Saturday, inclusive
Final Examinations
March 16, Saturday (5:10 P. M.)Winter Quarter Ends
Spring Quarter, 1935
March 25, MondayPreregistration
March 26, TuesdayRegistration and Payment of Fees
March 27, WednesdayClasses Begin
April 9, Tuesday Founder's Day
May 30, Thursday
June 3, 4, 5, 6, Monday to Thursday, inclusive
Final Examinations
June 8, SaturdayAnnual Meeting of Board of Trustees
June 8, SaturdayClass Day and Alumni Day
June 9, Sunday (3:00 P. M.)Commencement Exercises
Special Spring Term, 1935
April 29, Monday, six weeks to June 7, Friday
(Exclusively for Teachers)

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	The second of the second second	- Table
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1021		
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Member, American Alumni Council

The association consists of all Alumni, Alumnae, and nongraduates whose entering class has been graduated.

The business meeting of the association is held on the morning of Alumni Day, which is Saturday preceding Commencement Day. The Alumni Dinner occurs on Alumni Day. Homecoming is held in October.

Permanent office of the Alumni Secretary is located in Room No. 8, Hill Building. The official paper, the *Ohio Nor*thern Alumnus, is issued quarterly in January, April, July, and October.

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1934-1935

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summer; M. A., Ohio State University; Ohio State University, one summer.

*CLARA EVE SCHIEBER, Ph. D.

Professor of History 609 South Main Street B. S. in Ed., Ohio University; M. A., Ph. D., Clark University.

HERSCHEL LITHERLAND, PH. D.

Professor of Education 219 Union Street B. O., B. A., Greenville College, Ill.; M. A., University of South Dakota; Ph. D., University of Cincinnati.

HORACE GERALD DEWEES, B. M. E., M. S. IN ED.

Professor of Voice 325 West University Avenue Diploma in Voice, Eureka College, School of Music; B. A., Eureka College; B. M. E., Northwestern University School of Music; M. S. in Ed., Northwestern University. Private voice study with F. J. Sucher of Los Angeles, one year; Norval Brelos of New York City, one year; G. W. Gunn of Eureka College, three years L. P. Shawe of Northwestern University, two years.

LOUIS ROWELL HERRICK, PH. D.

Professor of Modern Languages 304 South Gilbert Street
B. S., Amherst College: M. A., University of Wisconsin;
Ph. D., University of Wisconsin; University of Paris, one summer.

RAYMOND ANSON DOBBINS, M. S.

Assistant Professor of Biology 620 Union Street B. S., Ohio Northern University; B. A., M. S., Ohio State University; Graduate Student, Ohio State University, two years.

HARRIS ARTHUR LAMB, M. A.

Assistant Professor of Health and Physical Education 809 South Simon Street

B. A., Coe College; M. A., Columbia University.

On leave year of 1933-34.

ROBERT CHALMERS GIBSON, PH. D.

Assistant Professor of Chemistry

437 South Johnson Street

B. S., Adrian College; M. S., Ph. D., University of Michigan.

LAWRENCE FREEMAN, B. A.

Instructor in English 724 South Gilbert Street
B. A., Ohio Northern University; Graduate Student, University of Michigan, three summers.

ELLA IRICK

Instructor in Junior Music Department

521 South Gilbert Street

Music Student in Ohio Northern University; Lake Chautauqua, four summers with William Sherwood, Miss Georgia Kober, Miss Eliza Woods; Normal training with Mrs. Tobey and Miss Woods; Course in Dunning System with Miss Eddy.

MARSHALL E. D. CLOSE, B. S. in Phar.

Instructor in Pharmacy 701 South Johnson Street
B. S. in Phar., Ohio State University; Graduate Student,
Ohio State University, two summers; Purdue University
School of Pharmacy, two summers.

*JOHN WESLEY MCBRIDE, M. A.

Instructor in Economics and Business Administration

424 South Gilbert Street

B. A., Ohio University; M. A., Princeton University; Graduate study, American University, one year.

CLAIRE REDDINGTON, B. S.

Instructor in Health and Physical Education

112 Turner Avenue

Diploma, Savage School for Physical Education; B. S., Teachers' College, Columbia University.

FREDERICK WOODBRIDGE, LL. B

Instructor in Law 537 North Main Street LL. B., University of Cincinnati.

ROBERT AUGUSTUS MELCHER, Bach. of School Music

Instructor in Music 409 South Johnson Street
B. S. in School of Music, Oberlin Conservatory of Music.

MYRON HANNA, Ph. G., M. D.

Lecturer in Pharmacology Findlay, Ohio Ph. G., Ohio Northern University; M. D., Eclectic Medical College.

WALTER SCOTT JACKSON, B. A., LL. B.

Lecturer in Bankruptcy Lima, Ohio B. A., Kenyon College; LL. B., Western Reserve University.

MILLER HARRIS WARD, B. S. in Ed., B. A.

Assistant in the Department of

Mechanical Engineering 207 West Ballard Avenue B. S. in Ed., B. A., Ohio Northern University.

*Resigned to accept position with the United States Government.

Faculty Committees 1934-1935

ACADEMIC COUNCIL: Huber, Pettit, Loy, Needy, Raabe, Whitworth, Wilder, Potter.

ADMISSION: Huber, Raabe, Whitworth, Pettit, Needy.

ARTIST-LECTURE: Smull, Deming, Dewees, Daring.

CATALOGUE: C. H. Freeman, Huber Smull.

CHAPEL: Potter, Deming, Dewees, Schoonover.

CLASSROOM ASSIGNMENTS: Whitted, Harrod, Close,

COMMENCEMENT COMMITTEE: Loy, Whitted, Deming, Melcher.

DISCIPLINE: Binkley, Campbell, Geeting. Smith, Deming.

GENERAL ADVISERS: Huber, Pettit, Loy, Needy, Raabe.

GRADUATE INTERESTS: Binkley, Gibson, Litherland.

HEALTH SERVICE: Raabe, Reddington, Hanna, Potter, Wilder, Clyde Lamb.

INTELLIGENCE TESTS: Loy, Gray, Litherland.

INTER-COLLEGIATE DEBATE: Deming, Binkley, C. H. Freeman, Woodbridge.

PLACEMENT BUREAU: Loy, Pettit, Huber, Needy, Raabe.

SECTIONS: Whitworth, Close, Herrick, Dobbins, L. Freeman, Harrod, H. Lamb, Webb, Deming, Lamale.

STUDENT PUBLICATIONS: L. Freeman, Berger, Campbell, Smith, Daring.

STUDENT WELFARE AND SOCIAL CALENDAR: Potter, Wilder.

SUMMER SCHOOL: Loy, Berger, C. H. Freeman, Huber, Smull.

OHIO NORTHERN UNIVERSITY BULLETIN

New Series

Ada, Ohio

Vol. XXVI, No. 1

ORIGIN AND DEVELOPMENT

HISTORICAL SKETCH

On August 14, 1871, in a three-story brick building erected on the campus where the Lehr Memorial now stands, the Northwestern Ohio Normal School, with Henry Solomon Lehr at its head, was formally opened "for the instruction and training of teachers in the science of education, the art of teaching and the best method of governing schools." On May 19, 1885, the state issued a charter to the school under the name of Ohio Normal University.

The school was under private control until September, 1898, when the owners sold to the Central Ohio (now the Ohio) Conference of the Methodist Episcopal Church, the real estate and equipment belonging to the University. At the same time instruction was made departmental with the head teacher in each department as director thereof. The new charter was dated May 24, 1898.

In 1904 the institution was re-named the Ohio Northern University, and the charter was amended December 31, 1907.

LOCATION

Ohio Northern University is located in Ada, an attractive village in Hardin county, northwestern Ohio. Lying on the great watershed that separates the tributaries of the Ohio and Mississippi from those of the Great Lakes, Ada, with its population of three thousand, has an elevation of nearly one thousand feet above sea level. The town is noted for its healthful climate and its freedom from epidemics. Owing to the enterprise of its citizens, Ada has nearly every modern convenience and public utility.

Situated on the Pittsburgh, Fort Wayne, and Chicago Division of the Pennsylvania Railroad, and on State Route 69, two miles north of the Harding Highway (Route 30S) and four miles south of the Lincoln Highway (Route 30N) Ada is easily accessible by rail or motor bus.

OHIO NORTHERN'S MISSION

Ohio Northern University opens her doors to all worthy young people, especially the self-dependent, who are ambitious to secure either a liberal or a professional education. Her purpose has been, and is, to create and maintain an atmosphere inspirational and congenial to all those whose lot in life has taught them the worth of industry and economy. A distinct characteristic of Ohio Northern is the spirit of democracy and good fellowship among the students, many of whom are making their own way through college. At a minimum of expense to the student all departments provide thorough and practical instruction.

AFFILIATIONS

Ohio Northern University holds membership in the Ohio College Association. The College of Pharmacy belongs to the American Association of Colleges of Pharmacy. The University enjoys membership in the Association of American Colleges.

CAMPUS BUILDINGS AND EQUIPMENT

The University owns over 100 acres of ground in and around Ada, providing ample room for expansion.

The Central Campus lies a few blocks south of the railroad. Here in this central quadrangle, easily accessible from any part of the village, are located the following buildings:

Lehr Memorial, a modern three-story fireproof building, housing the offices of the administration, the Lehr auditorium, Young Women's Christian Association, Alumnae Hall, and the Northern Review office, is located in the center of the quadrangle. Lehr auditorium, with a seating capacity of 1,600, provides an ample lecture and concert hall. It is equipped with stage settings, a pipe organ, and moving picture booths. In this hall regular convocations of the student body are held. The building was erected in 1915 and dedicated to Henry Solomon Lehr, the founder of the University.

John Wesley Hill Memorial, a two-story fireproof building, housing the administrative offices and classrooms of the College of Liberal Arts and Division of Teacher Training, and the offices of the Alumni Secretary, lies to the north of Lehr Memorial. The Young Men's Christian Association rooms are in this building.

Dukes Memorial, located at the south end of the campus, contains commodious classrooms, offices and laboratories devoted to chemistry, physics, mathematics, and engineering.

The Brown Memorial Library, situated at the north end of the front campus, is admirably adapted to the work of a modern college. Spacious and well lighted, it is capable of accommodating two hundred students. There are also opportunities at private tables for advanced study and research.

The library at present possesses about 21,000 live and well administered volumes, and affords opportunity for every student to find literature in his own and other fields for reference, reading, and study.

The University subscribes to all the needed reviews, magazines and newspapers so that any student may keep abreast of current knowledge and thought.

An annual appropriation for binding and for the purchase of new volumes is made in conformity with the suggestions of the standardizing associations and in harmony with the best practice of the educational world.

Pharmacy Hall, situated in the northwest corner of the Campus quadrangle, is well arranged and equipped for the study of pharmacy.

Adjacent to Pharmacy Hall and in the rear of Hill Memorial is the Power Plant, a unit of modern design, including a large, well-lighted laboratory for both Electrical and Mechanical Engineering students.

The Warren G. Harding College of Law occupies a splendid new building north of the Central Campus on the corner of Main street and University avenue. It contains five class rooms, together with a library, study room, court room and offices. This building was erected and dedicated in 1925.

The Department of Biology occupies the hall at the corner of Gilbert street and College avenue. The building is a two-story structure suited for its purpose. Near the department of Biology is an experimental Greenhouse.

The Theodore H. Presser Music Hall, erected in 1929, is a thoroughly modern three-story structure with splendid auditorium, eighteen sound proof practice rooms, choral room and studios, for the use of the Department of Music.

The John H. Taft Gymnasium, named in honor of the principal donor, is a building with a frontage of 106 feet and a depth of 132 feet. It is an ideal physical education plant.

In the Taft Gymnasium there are twenty-six rooms. In addition to the main basketball court with its galleries and bleachers, having a seating capacity of 1,800, there are a volley ball court, two auxiliary playing courts, a fencing room with bleachers, examination rooms with first aid equipment, a running track, faculty club room, offices for coaches and members of the faculty of Physical Education, and the Physical Education classrooms.

The cluster lights at the entrances are the memorial gift of the Class of 1928. The building is erected on ground purchased in part as a memorial gift by the Classes of 1926 and 1927.

ATHLETIC FIELD

Adjacent to the Taft Gymnasium is the *University Athletic Field*, containing a well-drained and heavily sodded football gridiron, encircled by a cinder running track with 120-yard straightaway. There are also two auxiliary gridirons, a baseball diamond, and nine tennis courts.

LABORATORIES

The various laboratories of the University have modern equipment. Special laboratories are located in the following buildings: Pharmacy Hall, Dukes Memorial, Hill Memorial, Biology Building and the Power Plant.

GIFT CASES

Through good will and generosity there has come into the possession of Ohio Northern University a private collection of geological specimens, the result of years of enthusiastic study and research on the part of the donor, Mr. E. R. Webber, of Kenton, Ohio. In the geological case are found many of the common minerals and ores, together with many rare ones; meteorites, plant and animal fossils representing several of the chief orders of geological importance; the shells and skeletons of many molluscs and vertebrates.

A valuable collection of Chinese antiques and curios also belongs to the University, the generous gift of Dr. and Mrs. M. Ross Charles, former residents of Ada, and medical missionaries to China for twenty-five years.

The University is also indebted to Henry E. Neff, former instructor in the University, for a splendid collection of birds and fishes.

These collections have been placed in suitable display cases for the pleasure, convenience, and instruction of the public as well as the student body.

RESIDENCES FOR WOMEN

All non-resident women students are required to live in Turner Hall. (This regulation does not apply to a woman who is commuting or to one who is doing work in exchange for her room.) If the Hall is filled a list of Approved Residences will be furnished upon application to the office of the Dean of Women. Freshmen women are required to live in Freshmen Residences. No agreement between student and housemother is recognized by the University until arrangements have been approved by the Dean of Women.

TURNER HALL

Turner Hall, a stately residence, rich in its university associations, is assigned to Freshmen women. This home, which was built by Henry Solomon Lehr, has just come into the possession of the University from Mr. and Mrs. Perry W. Turner, in whose honor it is named. It will accommodate twenty-two women and housemother. Throughout it has been furnished so as to make an attractive, comfortable home, all equipment being selected to meet the social and intellectual needs of the students. The rooms are beautifully equipped with single day beds (three feet, three inches in width), mattresses, pillows, ample dressers with mirrors, study tables, Windsor desk chairs, Windsor rockers, curtains, rugs. The entire house has excellent hardwood floors. Each student furnishes and launders all of her bedding, towels, dresser scarfs, and other accessories.

Residents are permitted laundry privileges, built-in tubs, pressing boards, electric iron, and a drying room, composing the equipment. Certain kitchen privileges are also permitted under the supervision of the housemother.

Three privately owned homes will also be used in connection with Turner Hall for housing Freshmen women.

Applications should be submitted promptly.

The fraternities for women rent their own residences and maintain them under the supervision of the Dean of Women and an approved resident housemother. Freshmen women are not permitted to live in the fraternity houses.

GENERAL INFORMATION

ASSEMBLIES

Convocations are held three times weekly, Mondays, Wednesdays and Fridays. The aim is not only to recognize the duty and privilege of regular devotions, but to foster a university spirit by bringing together in one assembly the students of the several departments to listen to practical addresses and talks from members of the faculty and others, and to be entertained by those connected with the departments of Music and Speech. Attendance is compulsory.

CLASS PERIODS

First Period	(1)	. 7:50 to 8:40
Second Period	(2)	. 8:45 to 9:35
Third Period	(3)	9:40 to 10:30
Fourth Period	(4)	10:35 to 11:25
e de la constante	if a fall to the second second second	
Chapel	1	1:30 to 12:00
Fifth Period	(5)	1:30 to 2:20
Sixth Period	(6)	. 2:25 to 3:15
Seventh Period	(7)	3:20 to 4:10
Eighth Period	(8)	4:15 to 5:05

Following the description of each course offered in the University the days and period of class assemblies are indicated.

MORAL AND RELIGIOUS CULTURE

Much attention is given to awakening and fostering an aspiration to attain the highest type of Christian manhood and womanhood.

Although the University is the property of the Ohio Conference of the Methodist Episcopal Church, it is in no sense sectarian. Students of all religious denominations are received on equal terms and treated with equal consideration. They are urged to identify themselves with the work and participate regularly in the services of the church of their choice. The six churches of the city cordially welcome students to their religious and social meetings and Bible classes. The following denominations are represented: Methodist Episcopal, Presbyterian, Lutheran, Church of Christ, Baptist, and Roman Catholic.

The Department of Religion and Philosophy, mentioned elsewhere, gives opportunity to those who wish to take up the study of religious problems to fit themselves for life's work.

Christian Associations. The Young Men's and Young Women's Christian Associations have enthusiastic organizations in the University and wield a most wholesome influence on the lives and habits of the students.

Omega Phi Kappa. Organized by the World Fellowship Group of the Young Women's Association. Its aim is "Every woman of the University world today a leader of the Church of Tomorrow."

The Young Women's Christian Association has a membership including about ninety per cent of all the young women in attendance at the school.

The Y. M. C. A. and the Y. W. C. A. meet every Wednesday evening at seven o'clock in their respective rooms. Membership in these organizations is open to all students.

The Student Volunteers for Foreign Missions, and for Christian Life Service in the homeland, meet every Tuesday evening in the Y. W. rooms at six o'clock, to study texts written on vital problems of the day in both home and foreign fields, or to hear addresses from leaders in various fields of Christian work.

LECTURES AND CONCERTS

It has been the aim of the University to secure the best talent in the lecture and music field and to present at least two numbers each quarter of the year.

Lectures and Concerts

Dr. George F. Barber
Bishop Lester H. Smith
Rabbi Philip W. Jaffa
Rev. Elmer C. Roessner
Rev. Emil Baumann
Dr. J. I. Jones
Dr. Donald Tippett
Rev. Norman Sweat
Attorney C. R. Price
Supt. R. E. Offenhauer
Russell Weisman

Dr. Elmer A. Leslie
Dr. Thomas B. Roberts
Rev. Paul Welshimer
Dr. E. S. Weaver
Judge Neal Lora
Rev. Don H. Copeland
Hon. Grant Mouser
Hon. Brooks Fletcher
Warden P. E. Thomas
Judge Homer Ramey
John W. Hoover

Concerts, Recitals and Entertainment

Max Krohn
Dr. Royal D. Hughes
G. C. Bainum
Lucille Magill Weems

Gladys Winterrode Ruth Basden Diana Dipson Shakespearean Players

MUSICAL ORGANIZATIONS

Choral Society. The Ohio Northern University Choral Society is made up of both University students and townspeople, and membership is open to all singers who love and appreciate good music. They present the Messiah every December and a leading oratorio each commencement.

They have attended the Northwestern Ohio Eisteddfod the last two years, and distinguished themselves by winning the ladies' chorus prize at both of these contests, competing against the best choruses in northwestern Ohio.

Men's Glee Club. A Glee Club of thirty men's voices is organized each year for the purpose of giving home concerts and touring the state. They also attend the Ohio Intercollegiate Men's Glee Club contest each year and have always been rated very high in comparison with other glee clubs of their class in the state.

Girls' Glee Club. This club is composed of thirty of the best girls' voices in the University, and their purpose is to sponsor the best music in their class. They give a home concert each year and make an extended tour of the state.

University Orchestra. A large orchestra is organized each year to take up standard works of the great composers, and to play at the concerts of the Choral Society.

University Band. Ohio Northern has a fine band of forty members. Competition for the band is keen and a beginner's section is maintained throughout the year. The band affords a splendid opportunity for practice to students playing brass or reed instruments. The band gives concerts in statewide tours. A concert is also given in Lehr Auditorium each quarter.

DEBATING AND DRAMATICS

The Ohio Northern Debating Association is a member of the Ohio Intercollegiate Debate Conferences for both men and women. There are other intra and inter-state forensic contests for either men's or women's teams. Membership is open to any student interested in the object of the association. A per cent of the student activity fee is allotted for the maintenance of debate. Teams are selected and assisted in their training by a faculty committee.

The Northern Players, a dramatic club sponsored by the Department of Speech, presents several plays each year. Enrollment in this club is open to all students of the University who pass the try-outs. The following major productions were given public presentation during the years 1932 and 1933:

Three-Act Plays

"The Lady From Argentina" "Light House Nan"
"The King Rides By" "Mrs. Beverly's Bifocals"
"Tommy" "The Heathers at Home"

One-Act Plays

"The Mouse Trap" "The Vulture" "Dregs" "The Sequel"

TECHNICAL ORGANIZATIONS AND LITERARY CLUBS

The following organizations have regular meetings. Topics pertaining to the several departments are discussed, and addresses are given by people prominent in their respective fields.

The Ohio Northern Mathematical Society.

The American Institute of Electrical Engineers.

The American Society of Civil Engineers.

The American Society of Mechanical Engineers.

The Chemists' Club.

The Chemical Engineering Society.

The Pharmaceutical Association.

The Law Association.

The Educational Association.

The Pre-Medical Assocation.

The International Club.

Among other clubs are the following: Radio, Press, French, Social Science, Business Administration, State and County Clubs.

HONOR SOCIETIES

Alpha Phi Gamma. Students who have shown ability in Journalism as evidenced by meritorious work on the student publications are eligible to membership in this national society.

Theta Alpha Phi. A national honorary dramatic organization to which students showing promise of histrionic ability are eligible.

Kappa Kappa Psi. A national honorary band organization to encourage study in this phase of musical endeavor. To those who have completed four years' service in the band a gold key is given, the award being made at the formal spring concert and presented by the President of the University.

Sigma Kappa Pi. An honorary foreign language society, open to superior students from all language fields, who have done very good work in the language in which they major and above average in all subjects, and who hold a standard of 1.75 quality points per hour.

Phi Lambda Pi. An honorary fraternity whose purpose is to create greater interest in the study of biology, and to promote high scholarship in the department of biology.

Nu Theta Kappa. An honorary society for men in the College of Engineering. Students in the junior and senior years who have made 1.7 quality points per hour, and who stand well in class and campus activities, are eligible.

FRATERNITIES

This group comprises seven national social fraternities, three national professional fraternities for men and four local fraternities for women.

STUDENT PUBLICATIONS

The Northern, the annual yearbook published by the students of the University, contains a record of student activities for the year. Each student receives a copy of the book at the close of the Spring quarter as a part of the University activity program. The Northern Review is a weekly newspaper published throughout the regular year by the students of the University. Positions on the staff of the newspaper are open to all students on a competitive basis. Scholarships are awarded annually to the editor-in-chief and business manager.

The Northern Handbook is published annually by a staff comprised of members of the Y. M. C. A. and the Y. W. C. A. and is the gift of these organizations to the freshman class.

All student publications are controlled by the Faculty Committee on Student Publications, and are under the direct supervision of the chairman of the committee.

ATHLETICS

Ohio Northern is a member of the Ohio Athletic Conference and is represented by strong teams in football, basketball, baseball and track. A well-rounded program of intramural sports is carried out, under proper direction, which aims to provide some form of activity for each student. The completion of the new Taft Gymnasium and recent additions to the athletic fields provide Ohio Northern with facilities for many forms of sports.

The Department of Health and Physical Education, in addition to being a service department for the entire University, is accredited by the State Department of Education for the training of teachers of Physical Education.

For description of courses in Health and Physical Education, see Liberal Arts section of this catalogue.

ENDOWED SCHOLARSHIPS

The interest on \$2,500.00 will provide tuition expenses of a student. The University has two such scholarships in addition to others of smaller denominations, all of which are aiding worthy students to prepare themselves better for life's work. The amount shown in parentheses represents the fund donated to and invested by the University in perpetuity.

 The Mr. and Mrs. Serge F. Edwards Scholarship (\$2,500.00) provides an annual income of \$125.00. The beneficiary to be chosen by the donors from the graduates of the Leipsic High School.

- The Mrs. J. H. Edwards Scholarship (\$2,500.00) provides an annual income of \$125.00. The beneficiary to be a student preparing for the ministry or some other special work of the church.
- 3. The George Franklin Getty Scholarship (\$1,000.00) provides an annual income of \$50.00.
- 4. The James E. and Caroline Purvis Scholarship (\$1,000.00) provides an annual income of \$50.00.
- The Ralph Parlette Scholarship (\$1,000.00) provides an annual income of \$50.00.
- The Pleasant Hill Society of the Roundhead Circuit of the M. E. Church Scholarship (\$1,000.00) provides an annual income of \$50.00.
- The Justin Brewer Scholarship (\$1,000.00) provides an annual income of \$50.00.
- 8. The Rutter-Taggart Scholarship (\$1,000.00), provides an annual income of \$50.00. Students who are in need of financial assistance, and who have attained scholastic standing in the upper third of their college class are eligible for the income from this scholarship. Preference in awarding this scholarship will be given to students in the College of Law.
- 9. The Ralph Sealand Scholarship, established by Mrs. Arabella Canfield Sealand, in memory of her son, of \$2,394.00 provides an annual income of \$71.82 which may be awarded by the President of the University to any undergraduate beyond the freshman year in any college of the University on the basis of need, character, ability, promise of usefulness, and scholastic attainment.

LOAN FUND

A limited number of worthy students, members of the Methodist Episcopal Church, may secure loans from the Student Loan Fund administered by the Board of Education of that Church. Christian character, satisfactory scholarship, promise of usefulness, financial responsibility, and the recommendation of the church to which the applicant belongs are essential to a loan. Each borrower must sign an interest bearing promissory note.

The International Club maintains an Emergency Loan Fund for benefit of any of its members who may be temporarily embarrassed. This fund is kept on interest in the Building and Loan Society and is controlled by a Faculty Advisory Committee and the Executive Committee of the club.

SELF-HELP

It is strongly recommended that every student entering the University should arrange to finance at least one quarter's expenses before entering. This will afford the student an opportunity to come in personal touch with the employers of Ada and provide ample time to begin his academic or professional work. For information concerning scholarships, loans, employment, etc., make application at the offices of the Dean of Men and the Dean of Women.

GENERAL AND DEPARTMENTAL HONORS FOR SCHOLARSHIP

The names of recipients of general and departmental honors are announced publicly each year on University Recognition Day.

Mr. Charles S. Ashbrook, of Cleveland, Ohio, gives a medal to the person proving himself superior in practical pharmacy.

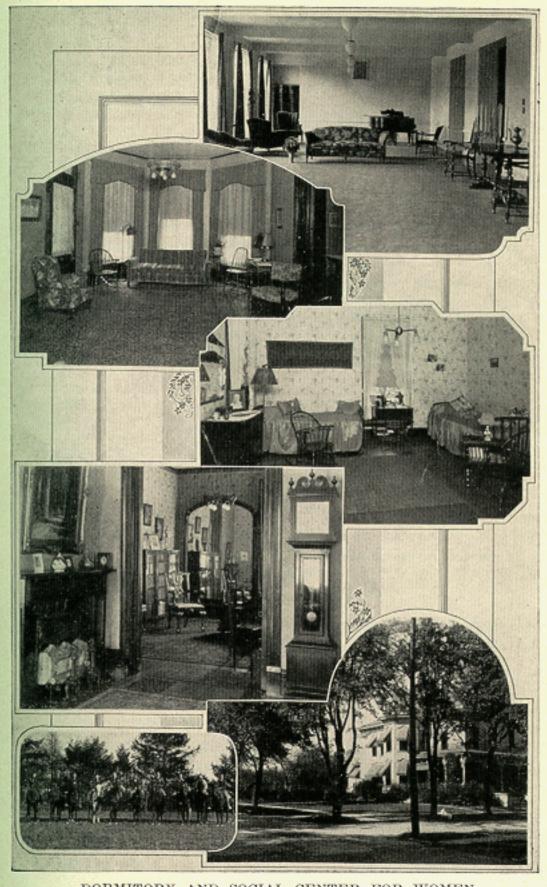
Lehn and Fink, Inc., New York, gives a gold medal to the pharmacy student accomplishing the most toward the advancement of pharmaceutical science.

Mrs. Avanell Stambaugh, of Ada, Ohio, gives \$20.00 a year for winners in the song contest.

Two prizes of \$12.50 each are awarded to the man and woman who excel in scholarship, campus activities, and personal qualities.

G. Frederick Pfeiffer, Akron, Ohio, gives \$25.00 to the engineer having the highest number of quality points.

A prize of \$25.00 is awarded to the student having the highest number of quality points in the College of Law.



DORMITORY AND SOCIAL CENTER FOR WOMEN

A prize of \$25.00 is awarded to the student having the highest number of quality points in the College of Liberal Arts.

A prize of \$25.00 is awarded to the student having the highest number of quality points in the College of Pharmacy.

GOVERNMENT

Students of the University are expected to possess qualities of character and to maintain certain levels of scholarship. The rules and regulations of the University pertaining to conduct and scholarship are enforced. Students may be dismissed for moral delinquencies and for continued low scholarship. Students who obviously are at variance with the spirit and ideals of the institution may be dismissed for the good of the University, even though no specific offense be charged against them.

The diploma, certificate, or transcript of any student may be withheld by the University for delinquency in accounts payable either to the University or to organizations connected in any way with the University.

WARNING AND PROBATION

It should be the aim of each student to maintain a scholship rating equivalent to at least one quality point for each credit hour for which he is registered. This is the minimum graduation standard throughout the university.

The average scholarship rating in terms of quality points is found by dividing the total number of scheduled hours for which the student has registered into the total number of quality points earned. For example, 50 scheduled hours and 75 quality points indicate a scholarship rating of 1.5; 16 scheduled hours and 8 quality points indicate a scholarship rating of 0.5.

Freshmen making a scholarship rating of less than 0.5 quality points per scheduled hour, sophomores and juniors making less than 0.7 quality point per scheduled hour, and seniors making less than 1.0 quality point per scheduled hour during the quarter are sent a notice of warning from the office of the Dean. If the student should again fail to meet the standards in the quarter for which he is warned, he is placed on probation for

the following quarter of residence, with the request that his scholarship be brought up to at least one quality point average for each hour scheduled. Failure to meet this academic requirement will subject the student to the action of the Academic Council.

ELIGIBILITY

Students on probation for any cause shall not represent in a public manner, the University, their class, or any University organization in any extra-curricular activity.

PRIZES IN DEBATE AND ORATORY

The Hoskins Debate Prize for Men, given by Mr. S. A. Hoskins: first prize, \$15.00; second prize, \$10.00. The prizes to go to the two best individual debaters.

The Hoskins Debate Prize for Women, given by Mr. S. A.

Hoskins: first, \$15.00; second, \$10.00.

EXPENSES

No matriculation or entrance fee is required to enter the University.

TUITION

Tuition for instruction in the University is \$30.00 per quarter in the College of Liberal Arts, and the Divisions of Teacher Training, and Public School Music; and \$35.00 per quarter in the Colleges of Law, Engineering and Pharmacy.

GENERAL FEE

A general fee of \$25.00 per quarter is charged for all colleges at the time tuition is paid. This fee is not refundable and includes in general all costs exclusive of instruction such as cost of administration, maintenance of plant, general library, and such other expenses as are incidental to the operation of the University.

SUMMARY OF TUITION AND OTHER FEES

One Quarter - Twelve Weeks

TUITION -

AUTHOR —	
Liberal Arts, 11 to 16 credit hours	200.00
Education, 11 to 16 credit hours	30.00
Engineering, 11 to 18 credit hours	35.00
Law, 11 to 16 credit hours	35.00
Pharmacy, 11 to 17 credit hours	35.00
Public School Music-B. S. in Education	30.00
	30.00
TUITION for each credit hour above the maximum or be- low the minimum as indicated above	5.00
GENERAL FEE in all colleges	25.00
FEES —	
Biology 101, 102, 103, 106, 107, 108, 109, 218, 219	3.00
Biology 113	5.00
Biology 222	3.50
Chemistry 101, 102, 103, 101a, 102a, 103a	4.00
Chemistry 104, 105, 106, 206, 207, 208, 211a,	
211b, 212 Physics 104, 105, 106, 109a, 110a, 111a, 216, 217, 218	5.00
Physical Education	3.00
2 13 March Education	2.00
Engineering	
2. ginvering	
Surveying, I, II	3.50
R. R. Engineering I	3.50
Mechanical Engineering Lab. 1, 2	4.00
Machine Shop	3.00
Testing Materials	3.50
Direct Currents	4.00
Alternating Currents	4.00
Electrical Transmission	4.00
A. C. Machines	4.00
H. F. Currents, I, II	4.00
Welding	4.00
Law Library	2.00
	5.00
Pharmacy	
Physiology	1.00
Pharmacology	1.00
Pharmacognosy	1.00
Pharmacy (all laboratory courses)	3.00
Practice Teaching	25.00
Public School Music	1.00
Change of Schedule Special Examination	1.00
Graduation	2.50 10.00
	10.00

In addition to the non-returnable fees in Chemistry and Pharmacy, a breakage ticket costing \$1.50 to \$7.00 must be purchased to reimburse the department for broken apparatus and non-returnable chemicals and supplies. The unused portion of the ticket will be refunded to the student upon completion of the course.

MUSIC (Private Lessons)

Per Quarter

Voice, Piano, Organ, Violin, Reed or Brass

Two lessons per week\$ One lesson per week	15.00
Theory Two lessons per week	9.00
Three lessons per week	13.00
Organ Rent (One hour per day)	12.00
Practice Rooms (One hour per day)	1.06

High school students will be charged \$20.00 per quarter for two lessons per week, and \$12.00 per quarter for one lesson per week; single lesson \$1.25.

No diploma, certificate, transcript, letter of honorable dismissal or recommendation will be granted to students who have an unadjusted indebtedness to the University.

A student suspended or dismissed from college, or withdrawing when under investigation for misconduct, is not entitled to any refund of tuition.

Students failing to pay tuition on the assigned days will be penalized \$3.00. This does not apply to new registrants.

A refund of 80% will be made on tuition only to students withdrawing from the college within two weeks from registration date. No refunds are made on fees.

No refunds are made after six weeks. Written notice of withdrawal must be sent to the Treasurer's Office; refunds are made as of date of receipt of notice.

ROOMS AND BOARD

Rooms are available in Ada at very reasonable prices, ranging from \$1.25 to \$3.00 per week. Board may be secured at prices from \$3.50 to \$5.00 per week.

In order to insure good, wholesome food and plenty of it at the very least possible cost to the student, board at the Cafeteria, which is operated under private management, is furnished at a remarkably low fee, by the day or week, average costs per week ranging from \$3.50 to \$4.00.

Very many students when members of fraternities or sororities find comfortable room and good board in the various fraternity and sorority houses.

Rooms are obtainable in Turner Hall from \$25.00 to \$33.00 per quarter for each student, payable in advance. A deposit of \$5.00 should be sent with application. The deposit will be kept as a fee to cover breakage until the end of the college year or until the expiration of residence. No room will be leased for less than one quarter.

Upon application the University will furnish tuition, room and board for \$360 per year in the College of Liberal Arts (including Division of Teacher Training) and \$375 per year in the Colleges of Engineering, Law and Pharmacy.

Note: Immediately upon arrival, women should report to the Dean of Women and men to the Dean of Men for an official list of recognized householders. Women are required to furnish their own linens.

ADMINISTRATION

ADMISSION

Application for admission should be made on the blank which will be found at the back of this catalogue. This should be filled out in full and mailed to the office of the Registrar.

All necessary information not contained in this catalogue will be mailed to the prospective student.

Graduates of first grade high schools, approved academies, or preparatory schools, who present fifteen certified and properly distributed units will be admitted to any of the colleges of the University except the College of Law. (See individual college section for proper distribution of units and other entrance requirements.)

Only men and women of good moral character are admitted to the University. Students submitting transcripts from other colleges or universities must furnish evidence of honorable dismissal. Work from schools of lower rank will be evaluated by the Committee on Admissions. Students transferring from another school will not be granted admission in the absence of official transcript.

The credited statement of entrance units sent by the principal of the school directly to the University must be in the office of the University Entrance Examiner at least ten days prior to the opening of the quarter, to avoid delay in registration.

Students who are deficient in credits may take entrance examinations the first day of the quarter if they make application in advance.

Mature students not working for a degree may be admitted to the University provided they give satisfactory evidence that they are qualified to pursue the subjects in which they are interested. If such "special students" desire to become candidates for a degree they must qualify before the end of the first year's residence.

ADVISERS

Upon admission to the University each student is placed in charge of an adviser. The adviser, a member of the faculty, is appointed by the Dean of the College.

The duty of the adviser is to counsel the student in regard to the planning of courses, the selection of studies, and to aid him in the problems of his college life and work.

After completing 90 quarter hours the student must elect the department in which he desires to major, and the professor in charge of that department then becomes his adviser.

PRE-REGISTRATION AND REGISTRATION

Pre-registration and registration days are indicated in the calendar. Pre-registration day is devoted to conferences with advisers and making the student's schedule of classes for the quarter. Registration day is given over to the transfer of the schedule of classes to the permanent cards, the payment of tuition, and securing of tickets of admission to classes. Failure to attend to these duties on the proper day will subject the student to the penalty of a \$3.00 fee for late registration.

AIMS

The opportunities and advantages of the University are offered to all sincerely desiring to develop the best in themselves, and aiming at a broad culture and a thorough preparation for useful service.

The University aims to develop a wholesome type of physical, social, intellectual, moral, and religious life. It believes the best preparation for life is that which furnishes opportunity during college days for students to come in contact with men and women of high ideals, broad culture, and sympathetic understanding of life. All the activities of the University therefore are devoted to the development of men and women so that they may find places of real happiness and usefulness in the modern world.

With this objective in mind the University does not seek to impose burdensome restrictions, but it does seek and expect full cooperation on the part of faculty and students in the achievement of these ideals.

ATTENDANCE

Regular and prompt attendance at all class and laboratory exercises is expected of every student. The student is responsible to the instructor for all work missed on account of absence. Instructors make a daily report of all absences to the Dean of Men or the Dean of Women.

Requests for excuses must be presented in writing to the Dean of Men or the Dean of Women within 24 hours after class or laboratory work is resumed. Instructors are not authorized to grant excuses for absences from their classes.

For each unexcused absence from class or laboratory appointments, the total number of quality points earned during the quarter is reduced by one-half point. Absences the day before or the day after a regular college holiday or recess involve the deduction of one quality point for each absence.

Chapel attendance is required except when excused by the Dean of Men or Dean of Women. Five unexcused absences are allowed each quarter.

One-fifth hour credit is deducted from the student's total credit for each convocation missed above five.

WITHDRAWING A COURSE

The student is held responsible for the work scheduled on the registration card. No course may be dropped or changed except by consent of the Dean and the instructors concerned. Withdrawal from a course without proper procedure shall be checked as a failure in the course.

In case a student wishes to drop or change a course, it must be done within the first week of the quarter, and with the consent of the Dean and the professor concerned. A charge of \$1.00 is made for each withdrawal or addition of a course.

Any student wishing to withdraw from the College in which he is registered must notify the Dean of his intentions. Failure to do this will jeopardize the standing of the student.

ELIGIBILITY

To be eligible for the office of President or Vice President of the Sophomore, Junior or Senior Class, Editor or Business Manager of the Northern Review, Editor or Business Manager of the University Annual, Student Member of the Discipline Board, President of the Y. M. C. A. or Y. W. C. A., the candidate must have a scholarship rating of at least one and one-half (1½) quality points per hour.

GRADE MARKS AND QUALITY POINTS

The credit value of a course is expressed in hours, an hour of credit being given for the satisfactory completion of work requiring one class exercise a week for one quarter. It is equivalent to two-thirds of a semester hour.

The following grade and point system is in effect:

Grade	Significance	Points
A	Excellent	3
В	Good	2
C	Fair, average	1
D	Passing, but unsatisfactory	0
F	Failed	0
I	Incomplete	
X	Absent from examination	

EXAMINATIONS

- Mid-term examinations are held at the discretion of the instructor. Final examinations are held at the close of each quarter.
- All students must be present at final examinations.
 Absence from any final examination, unless caused by sickness or other unavoidable conditions, will result in no credit for the course.
- A student absent from examinations may on presenting a satisfactory excuse receive permission from the Dean to take the examination at a later time.

- All required courses in which a grade of F is made must be taken again in class the first quarter in which the subject is given after the failure occurs.
- 5. All incompletes must be removed within eight weeks of the beginning of the next quarter in attendance in order to obtain credit without again taking the work in class. In case this matter is not attended to, the mark will lapse into a failure.

ORGANIZATION FEATURES

The University year is divided into three quarters of approximately equal length, designated as Fall, Winter and Spring. Early in the fall quarter, the Freshman, Sophomore, Junior and Senior classes are formally organized under the direction of a member of the faculty. Student classification is based upon credit hours. Each student is required to present a certificate from the Registrar showing his eligibility to participate in class organization and honors.

SUMMER SCHOOL

Ohio Northern University has been one of the pioneer institutions in maintaining a summer session. The Summer Session is composed of two terms of six weeks each. The first term of the 1934 Summer Session opens June 12 and closes July 14; the second term begins July 16 and closes August 18.

The purpose of the Summer Session is to provide opportunity for regular college students to work towards a college degree or other professional goals and thus shorten the time required for the completion of their program. Many teachers in public schools desire to take additional work in order to renew their certificates and to improve their professional standing or to pursue regular collegiate courses leading to a degree, thus avoiding the necessity of withdrawing from their regular work.

All departments in the College of Liberal Arts offer academic courses for those desiring courses in their field of major interest. The Division of Teacher Training offers an extensive program of professional courses for elementary teachers, high school teachers, and teachers and supervisors of health and physical education and public school music. The training schools in Ada and Lima afford opportunity for a limited number of students in observation and student teaching under the supervision of experienced critic and demonstration teachers. The maximum amount of credit which a student may earn during the Summer Session is eighteen quarter hours or nine quarter hours during each term.

DEPARTMENTS OF INSTRUCTION

The organization of the departments of instruction in the University is as follows:

The George Franklin and Sarah Catherine Getty College of Liberal Arts, including:

(a) Division of Teacher Training.

(b) A. D. Juilliard Department of Music.

(c) Department of Health and Physical Education.

The College of Engineering.

The Warren G. Harding College of Law.

The College of Pharmacy.

DEGREES

The work of the University is entirely undergraduate, In order to graduate in any course the student must have

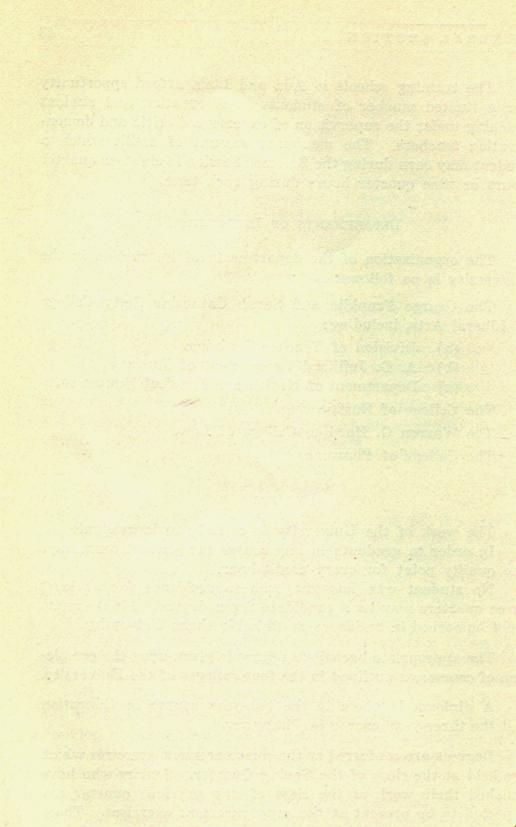
one quality point for every credit hour.

No student who has not been in residence for at least three quarters may be a candidate for a degree. Final credits must be earned in residence at Ohio Northern University.

The appropriate bachelor's degree is given upon the completion of courses as outlined in the four colleges of the University.

A diploma is given in the two-year course in Education and the three-year course in Pharmacy.

Degrees are conferred at the commencement exercises which are held at the close of the Spring Quarter. Seniors who have finished their work at the close of any previous quarter are expected to be present at the commencement exercises. Those whose work will be finished by the close of the Summer School are entitled to the privileges of the senior class, but their diplomas are not issued until the requirements for graduation are fully met.



THE GEORGE FRANKLIN AND SARAH CATHERINE GETTY COLLEGE OF LIBERAL ARTS

HARVEY EVERT HUBER
Dean

ADMISSION TO COLLEGE OF LIBERAL ARTS

Candidates of good moral character may apply for admission upon the following plans:

- Certificate. Graduates from first grade high schools or accredited academies whose credits show proper distribution of units are admitted, without examination, on presentation of properly signed entrance certificates. Blanks for this purpose may be had by addressing the Registrar. Students deficient in some of the units for admission may be admitted upon examination.
- Advanced Standing. An applicant from another college seeking advanced standing must present evidence of honorable dismissal, and an official transcript of his college record.
- 3. Special Students. Mature persons without special preparation not desiring to earn a degree may enter any department and pursue the studies they choose, if, on consultation, the head of the department is satisfied that they have sufficient preparation to pursue the work successfully. Such applicants are classified as special students.

ENTRANCE REQUIREMENTS

Fifteen units of high school work are required for unconditional admission to the college, eleven units of which must be in the following groups of subjects:

- (a) English Composition and English Literature.
- (b) Foreign Language (ancient or modern).
- (c) Natural Science.
- (d) History and Social Science.
- (e) Mathematics (algebra and geometry).

The remaining four units may be offered from the above groups or from any other subjects accepted toward graduation from the high school.

Students with fourteen units are admitted on condition that the deficient unit may be made up during the first three quarters of residence. No student is admitted to freshman rank with less than fourteen units. The deficient unit may be removed by examination, or by substituting certain freshman collegiate courses. If the student presents fifteen acceptable units for entrance but is deficient in certain of the prescribed units, the deficiencies as far as possible shall be made up as part of the regular work of the freshman year. Deficiencies must be made up outside the college schedule, necessitating a reduction of the number of college courses carried while making up entrance deficiencies.

DIVISIONS AND DEPARTMENTS

For purposes of administration, correlation and integration the departments of the college are organized into divisions as follows:

Division I - Language, Literature and Arts.

- (a) Classical Language and Literature.
- (b) English Language, Literature and Speech.
- (c) Modern Language and Literature.
- (d) Music.

Division II - Natural Sciences.

- (a) Biology.
- (b) Chemistry.
- (c) Mathematics.
- (d) Physics.

Division III - Social Sciences.

- (a) Economics and Business Administration.
- (b) History and Political Science.
- (c) Health and Physical Education.
- (d) Psychology and Sociology.
- (e) Religion and Philosophy.

Division IV - Teacher Training.

- (a) Elementary Education.
- (b) Secondary Education.
- (c) Health and Physical Education.
- (d) Public School Music.

Under each division heading in the Liberal Arts section of this bulletin dealing with description of courses is found a general statement which is of great importance to the student. This statement calls attention to the courses that should be selected as a background preparation for advanced and intensive work in that particular division. Likewise, under the appropriate departmental heading there is a more detailed statement referring to the various courses that should be elected (some of them during freshman and sophomore years) to prepare the student for work in that department. The curriculum, therefore, will be shaped to meet as far as possible the needs, interests, and abilities of the individual student.

DIVISION ELECTIVES

Freshmen and Sophomores are given considerable freedom in the choice of courses. It is possible for the student to select such subjects for study as will serve his best interests and capacities.

In order that the curriculum may be interesting, broad and cultural, yet flexible enough to allow preparation for the various professions and needs of life, the student during his first two years in college, is required to select two courses in each of the first three divisions outlined above, the remainder of the work in these years being elective from any course open to a student of this rank. Ordinarily the first year schedule will include at least one course from each group plus one or more electives.

The group electives are to be made as follows:

From Division I-Language, Literature and Arts 18 Hrs.

Nine hours of English Composition must be scheduled during the freshman year. The remaining nine hours may be elected from Literature, Speech or Music.

From Division II—Natural Sciences 18 Hrs.

Complete year courses must be elected. Physical education is required of all students during the first six quarters in residence, with one hour of credit each quarter, but cannot be used toward satisfying this group requirement.

FROM DIVISION III-SOCIAL SCIENCES

18 Hrs.

Complete year courses must be elected. Six hours of Bible are required and should be scheduled during Sophomore or Junior year. Bible cannot be used toward satisfying the social science requirement unless nine hours are completed.

FROM DIVISION IV-TEACHER TRAINING

Students preparing to teach in the public schools are required to meet the professional requirements in Education as indicated under this division.

MAJOR AND MINOR

At the beginning of the third year the student is ready to choose, if he has not already done so, one division and the department or departments within this division in which he desires to complete his major and minor, or the field of concentration.

The candidate for a degree must complete in a logical sequence a major of not less than 36 quarter hours and a minor of not less than 24 quarter hours. The adviser will assist the student in planning the major and minor, or the field of concentration. Candidates for the Bachelor of Arts degree who expect to teach in the public schools must meet the requirements for a major and two minors as specified in the Division of Teacher Training.

ELECTIVES IN OTHER COLLEGES OF THE UNIVERSITY

In the College of Engineering, the College of Pharmacy, and the College of Law there are many courses described, a limited number of which may be elected by students registered in the College of Liberal Arts, thus enabling them more fully to prepare for specific vocational objectives. The student must have junior rank before electing courses in the College of Law. Students who have professional ends in view should not overlook the opportunity to elect some courses in other colleges of the University.

GRADUATION

As a condition of graduation, a student must complete 186 quarter hours, including six hours of physical education, this being the equivalent of fifteen or sixteen class exercises a week for twelve quarters. The student must have an average scholarship rating of at least one quality point for each credit hour.

A residence period of three quarters and the completion of 45 quarter hours, elected largely from "200" courses, in the College of Liberal Arts of this University are minimum requirements for a student admitted on advanced standing. Students of unusual ability may, with the consent of the faculty of the College of Liberal Arts, complete their work in eleven quarters. Applicants for this privilege must have an average of 2.6 quality points per hour.

Note: By continuing in residence during summers the entire college course may be completed in three years.

GENERAL REGULATIONS

- The student may not register for more than sixteen hours of work unless he has received a rating of B or better in the preceding quarter. If the previous record of the student shows that he is able, the Dean may grant extra hours.
- No course in which a student has received a grade of D is accepted toward a major.
- The student must notify the Dean of his choice of a major before registering for the junior year. The Dean will then name an adviser for the student.
- Seniors taking certain freshman courses are not given full credit. Seniors electing freshman courses should consult the Dean.
- 5. Juniors and seniors are requested to schedule a majority of their courses from the "200" group.
- Final credits offered toward graduation must be earned in residence, except for students completing arts-professional combination courses.

SENIOR HONORS

Two kinds of senior honors are recognized and conferred at graduation: honors (with distinction) granted to those who have a quality point average of 2.3 with no grade below D; and honors (with high distinction) granted to those who have a quality point average of 2.6 with no grade below C. These honors in scholarship are recorded on the diplomas, recognition is given at commencement, and the names of the recipients are printed in the catalogue. To receive senior honors a student must be in residence at Ohio Northern at least six quarters.

COURSES OPEN TO FRESHMEN

Botany 107-109
Chemistry 101a-103a
Chemistry 101-103
Economics 110-112
Education (Elementary and Intermediate)
English 101, 102, 102a
French 101-103
French 104a-106a
(as prepared)
German 101-103
German 104a-106a
(as prepared)
Health Education 117

History 104-106
Hygiene 115
Latin 110-112
Mathematics 101a, 102a, 112
Mathematics 101, 103, 105
Mechanical Drawing
Music (Theoretical and
Applied)
Physical Education 101-103
Physics 109-111
Political Science 104-106
Speech 101-103
Zoology 101-103

SUGGESTED CURRICULA FOR SEVERAL ACADEMIC AND PRE-PROFESSIONAL COURSES

The courses in this college may be grouped and correlated so that the student may prepare not only for the life work indicated in the curricula outlined below but also for nursing, public health, social and public service, journalism, engineering, teaching, and other fields.

PRE-MEDICAL COURSE

For admission to medical schools at least 90 quarter hours (60 semester hours), exclusive of physical education, are required. Although 90 quarter hours of high quality work may admit the student to the study of medicine, it is highly recommended that 135 quarter hours (90 semester hours) should be completed. If it is at all possible the student should plan to complete work for the Bachelor of Arts degree.

A medical aptitude test, prep ed under the auspices of the American Medical Association, is given during the college year to students who plan to enter medical schools the following fall.

First Year

FALL QUARTER		WINTER QUARTER	
Physical Education 101	1	Physical Education 102	1
English 101	3	English 102	3
French or German	3	French or German	3
Chemistry 101	5	Chemistry 102	- 5
Biology 101	3	Biology 102	3
Elective	2	Elective	2

SPRING QUARTER

Physical Education 103	1
English 102a	3
French or German	3
Chemistry 103	5
Biology 103	3
Elective	2

Second Year

FALL QUARTER		WINTER QUARTER		
Physical Education 104	1	Physical Education 105	1	
Biology 106	5	Biology 113	5	
Chemistry 206	5	Chemistry 207	5	
Physics 109 or 104	5	Physics 110 or 106	5	

SPRING QUARTER

Physical Education 106	1
French or German	3
Physics 111 or 105	5
Electives	8

Suggested elective subjects are: English, history, sociology, political science, mathematics, philosophy and economics.

ARTS-MEDICINE COMBINATION COURSE

Upon the completion of nine quarters of work in the College of Liberal Arts, the student may be granted a leave of absence for the senior year, and receive the Bachelor of Arts degree upon the successful completion of the first year of work in the medical school. This means a saving of at least one year of time. Pre-medical students are urged to give favorable consideration to the combination course and receive both the Bachelor of Arts degree from this institution and the professional degree from the medical school. The following regulations obtain:

At least 140 quarter hours, exclusive of physical education, are required, which must include the required and group elective courses for the Bachelor of Arts degree. A scholarship average of at least 1.5 points per hour is desired for recommendation to a medical school. At least 90 quarter hours must be completed in this institution.

PRE-DENTAL COURSE

Dental schools require two years of collegiate work, consisting of at least 90 quarter hours (60 semester hours). The

required courses are incorporated in the two-year curriculum outlined below. Suggested electives are political science, mathematics, English Literature or Speech, drawing, ethics, psychology, history and foreign language.

	First	Year	
FALL QUARTER		WINTER QUARTER	
Physical Education 101 English 101 Chemistry 101 Biology 101	1 3 5	Physical Education 102 English 102 Chemistry 102 Biology 102	1 3 5 3
Electives SPI	4-5 RING Q	Electives UARTER	4-5
Physical English Chemistr	102a ry 103	3	
Biology Elective	8	3 4-5	
	Second	Year	

FALL QUARTER		WINTER QUARTER	
Physical Education 104	1	Physical Education 105	1
Chemistry 206	5	Chemistry 207	5
Physics 109	5	Physics 110	5
Biology 106	5	Electives	5-6
SPRI	NG Q	UARTER	
Physical I	Zdmes.	tion 106 1	

Physics 111 Ethics 3 7 - 8Electives

ARTS-DENTAL COMBINATION COURSE

Upon the completion of nine quarters of work in the College of Liberal Arts, the student may be granted a leave of absence for the senior year, and receive the Bachelor of Arts degree upon the successful completion of the first year of work in the dental school. These nine quarters of work must total 140 hours, including the required and group elective courses.

The general regulations are the same as for the Arts-Medicine combination course.

ECONOMICS AND BUSINESS ADMINISTRATION COURSE

With the increasing complexity of industry and commerce, the system of apprenticeship as a method of business training has become less satisfactory. Greater opportunity in business is therefore open to the college man with business training.

The following curriculum has been planned to meet the

needs of students who expect to do graduate work in economics or business administration as well as those who intend to enter industry after graduating from college.

First Year

	WINTER QUARTER	
1	Physical Education 102	1
3	English 102	3
-5	Mathematics 102a or 103	3-5
2	Political Science 105	2
	Speech 102 or	
-5		3-5
3	Economics 111	3
	1-5 2 3-5	Physical Education 102 English 102 Mathematics 102a or 103 Political Science 105 Speech 102 or Natural Science

SPRING QUARTER

Physical Education 103	1
English 102a	3
Mathematics 112	3
Political Science 106	2
Speech 103 or	
Natural Science	3-5
Economics 112	3

Second Year

FALL QUARTER		WINTER QUARTER	
Physical Education 104	1	Physical Education 105	1
Economics 121	3	Economics 122	3
English or Speech or		English or Speech or	
Natural Science	3-5	Natural Science	3-5
Psychology 101	5	Psychology 102	5
Elective	3	Elective	3

SPRING QUARTER

Physical Education 106	1
Economics 123	3
English or Speech or	
Natural Science	3-5
Social Science	3
Electives	5-6

Third Year

FALL QUARTER	WINTER QUARTER
Bible 151	Bible 152
Economics and Business 204	Economics and Business 207
or Economics and Business	or Economics and Business
251 3	241 3
Economics and Business 131 3	Economics and Business 132 3
Economics and Business 214 3	Economics and Business 215 3
Elective 3	Elective 3

SPRING QUARTER

Economics				
or Econo	mics	and Bus	ines	8
242		4,700		3
Economics	and	Business	133	3
Economics				
Elective				5

Fourth Year

FALL QUARTER Economics and Business 204 or Economics and Business 207 or Economics and Business 251 Contracts I(College of Law) 5 Electives WINTER QUARTER Economics and Business 207 or Economics and Business 241 Contracts II (College of Law) 4 Electives Electives

SPRING QUARTER

Economics and Business 208 or Economics and Business 242 3 Electives 13

PRE-THEOLOGICAL COURSE

The suggested outline of pre-theological studies which follows will be found to meet the entrance requirements of practically all theological schools. Most leading seminaries urge that the student have a thorough knowledge of the social sciences and include in their suggestions at least one natural science, such as biology or geology. This outline includes a broad and liberal course which will enable the student to appreciate his graduate studies to the fullest extent. The courses given plus the emphasis throughout upon Christian idealism will bring about a realization of the most important aim of this department which is to produce for the world well equipped, spiritually minded young men who will minister to the needs of their communities in every possible way.

First Year

FALL QUART	TER	WINTER QUARTER	
Physical Education	101 1	Physical Education 102	1
English 101	3	English 102	3
Biology 101	3	Biology 102	3
Speech 101	3	Speech 102	3
History 104	3	History 105	3
Elective	3	Elective	3

SPRING QUARTER

Physical Education 103	1
English 102a	3
Biology 103	3
Speech 103	. 3
History 106	3
Elective	3

Second Year

FALL QUARTER		WINTER QUARTER	
Physical Education 104	1	Physical Education 105	1
English 121	3	English 122	3
Political Science 101	3	English 102	3
Psychology 101	5	Psychology 102	5
Bible 151	3	Bible 152	3
Electives	2	Electives	2

SPRING QUARTER

Physical Education 106	1
English 122a	3
Political Science 103	3
Psychology 104	3
Bible 153	3
Electives	3-4

Third Year

FALL QUARTER	WINTER QUARTER
Philosophy 201 3	Philosophy 202 3
Sociology 151 3	Sociology 152 3
Bible 231 or	Bible 232 or
Religious Education 221 3	Religious Education 222 3
Electives . 6-7	Electives . 6-7

SPRING QUARTER

Philosophy 203		3
Sociology 153		3
Bible 233 or		
Religious Education	223	3
Electives		6-7

Fourth Year

FALL QUARTER		WINTER QUARTE	R
English 214 . Principles of Education Electives .	3 207 3 9-10	English 215 . Principles of Education Electives	208 3 9-10

SPRING QUARTER

English	216	3	
History	of Education 138	3	
Elective	s	. 9-10	

CURRICULUM FOR MAJORS IN CHEMISTRY

The teaching profession and the industries as well as the field of research offer many fine opportunities to persons who have good preparation in this and related divisions of learning. The curriculum herein recommended is intended to prepare the student, who is scientifically inclined, to avail himself of these opportunities, and to create in his mind the desire to continue advanced study in the graduate school or research laboratory. Adjustment of the curriculum, to accommodate the student who desires to qualify as teacher of chemistry in the public schools,

will be made, provided this desire is indicated prior to the beginning of the junior year.

	First Y	ear	
FALL QUAI	RTER	WINTER QUARTER	
Physical Education		Physical Education 102	1
English 101		English 102	3 5 5 8
Chemistry 101-101		Chemistry 102-102a	5
Mathematics 101	5	Mathematics 103	5
Social Science	3	Social Science	3
	SPRING QUA		
	hysical Educatio		
	nglish 102a	3 5 5	
	hemistry 103-105 athematics 105	ia b	
	ocial Science	3	
	ociai Science	THE RESIDENCE OF THE PARTY OF T	
	Second Y		
FALL QUAI		WINTER QUARTER	
Physical Education		Physical Education 105	1
Chemistry 104	5	Chemistry 105	
Mathematics 107 Mechanical Drawi	ng I 4	Mathematics 108	3 3
Economics 121	ng 1 4	Economics 122 Elective	3
Economics 121			9
TO	SPRING QU. hysical Educatio	n 100	
	athematics 109	n 106 1	
	hemistry 106	5	
	echanical Drawi		
E	conomics 123	3	
	Third Y	'ear	
FALL QUA		WINTER QUARTER	
			1
Chemistry 206 Physics 104	5	Chemistry 207 Physics 105	5
Modern Language	3	Modern Language	3
Elective	2-3	Elective	2-3
	SPRING QUA		
C	hemistry 208		
	hysics 106	5	
	odern Language	3	
E	lective	2-3	
	Fourth Y	ear	
FALL QUAL	RTER	WINTER QUARTER	
Chemistry 212	5	Chemistry 211a	5
Chemistry 215	3	Chemistry 216	3
Physics 216	3	Physics 217	2
Modern Language	3	Modern Language	3
Elective	2-3	Elective	5 3 2 3 2-3
	SPRING QUA		
	emistry 211b	5	
Che	emistry 217	3	
	ysics 218	3	
	dern Language ective	2-3	
1516			

CURRICULUM FOR MAJORS IN PHYSICS

The curriculum as given is suggested for those expecting to do graduate work in physics. For those wishing to teach the physical sciences in the public schools, the curriculum may readily be modified if psychology is taken in the second year, and the professional courses in Education during the junior and senior years.

First Year

FALL QUARTER		WINTER QUARTER		
Physical Education 101 1		Physical Education 102	1	
English 101	3	English 102	3	
Chemistry 101-101a	5	Chemistry 102-102a	5	
Mathematics 101	5	Mathematics 103	5	
Physics 109a	2	Physics 110a	2	

SPRING QUARTER

Physical Education 103	1
English 102a	3
Chemistry 103-103a	5
Mathematics 105	5
Physics 111a	2

Second Year

FALL QUARTER	FALL QUARTER WINTER QUA		ARTER	
Physical Education 104	1	Physical Education 105	1	
Physics 104	- 5	Physics 106	5	
Mathematics 107	4	Mathematics 108	4	
Social Science	3	Social Science	3	
English	3	English	3	
SPR	ING Q	UARTER		

Physical Education 106	1
Physics 105	5
Mathematics 109	4
Social Science	3
English	3

Third Year

FALL QUARTER		WINTER QUARTER		
Physics 213	5	Physics 220	3	
Mathematics 216	4	Mathematics 212	3	
Modern Language	3	Modern Language	3	
Bible 151	3	Bible 152	3	
		Physics 217	3-4	

SPRING QUARTER

Physics 214	5
Mathematics 215	3
Modern Language	3
Bible 153	3
Physics 218	2

Fourth Year

FALL QUARTER		WINTER QUARTER	
Physics 216	3	Physics 217	3
Chemistry 206	5	Chemistry 207	5
Modern Language	3	Modern Language	3
Elective	4-5	Elective	4-5
SP	RING Q	UARTER	
Physics	218	4	
Chemist	try 208	5	
Modern	Langua	ge 3	
Elective)	3-4	

PRE-LAW COURSE

For admission to standard law schools at least 90 quarter hours (60 semester hours), exclusive of physical education, are required. If there is a probability that the student may become a candidate for the Bachelor of Arts degree, it is recommended that the general schedule of prescribed and group elective courses be followed. Students who plan to take only two years of pre-law work may omit some of the regularly prescribed courses in order to make possible the election of additional courses in history, political science, and economics.

First Year

FALL QUARTER		WINTER QUARTER		
Physical Education 101	1	Physical Education 102	1	
English 101	3	English 102	3	
Mathematics 101a or 101	3-5	Mathematics 102a or 103	3-5	
History 104	3	History 105	3	
Electives	3-5	Electives	3-5	

SPRING QUARTER

Physical Education 103	1
English 102a	3
Mathematics 112	3
History 106	3
Electives	3-6

A year course in laboratory science (biology, chemistry or physics) may be elected instead of mathematics.

Second Year

FALL QUARTER		WINTER QUARTER			
Physical Education 104	1	Physical Education 105	1		
Speech 110 or English 121	3	Speech 111 or English 122	3		
Political Science 101	3	Political Science 102	3		
Psychology 101	5	Psychology 102	5		
Economics 121	3	Economics 122	3		
	3-3	History	2-3		

SPRING QUARTER

Physical Education 106	1
Political Science 103	3
Psychology 104	3
Economics 123	3
History	2-3
Elective	3

Alternatives for either Economics 121, 122, 123 or History 113, 114, 115, or both, are History 104, 105, 106 and History 131, 132, 133.

ARTS-LAW COMBINATION COURSE

It is strongly recommended that the student plan to take at least nine quarters of work in the College of Liberal Arts, completing a total of 140 quarter hours, exclusive of physical education, and covering the prescribed and group elective courses as well as a number of "200" courses in the social sciences. Many very desirable and highly important courses preliminary to a thorough legal training are offered. The fourth year is taken as the freshman year in a standard law school. Upon the successful completion of the freshman year in law with a quality point average of 1.0 or better the degree of Bachelor of Arts is granted. After two more years of successful work in the law school the degree of Bachelor of Laws is granted.

It should be noted that a student admitted upon advanced credit from another college must be in residence three quarters (the third year) and complete a minimum of 45 quarter hours in the College of Liberal Arts of this University.

Students entering upon the Arts-Law Combination course must meet the regular entrance requirements and conform to the rules and regulations of the College of Liberal Arts.

Groups and Departments of Instruction

All courses in the "100" group are primarily for Freshmen and Sophomores. All courses in the "200" group are primarily for Juniors and Seniors. Courses may be withdrawn or other changes made at the discretion of the Board of Trustees and the Faculty.

Division I. Language, Literature and Arts

RICHARD H. SCHOONOVER, Chairman

Students who expect to complete a major in any of the departments of this group other than English are advised to take a minimum of 18 hours in English or Speech, or both; to elect courses in history and philosophy; and to continue the study of foreign language as a preparation for advanced study.

Classical Language

PROFESSOR SCHOONOVER

It is the aim to utilize as fully as possible the efficiency of Latin as an instrument of education and a means of culture. Each author is studied in historical and literary relation to his period. The works of any other author, of equal value, may be substituted for any course in the schedule at the wish of the class and with the approval of the Dean and instructor.

Students who major in Latin ordinarily should have a good working knowledge of a modern foreign language. English and speech are suggested as minors. Certain courses in history are recommended, the title of the courses depending upon the aims and objectives of the student.

LATIN

107. CICERO—SELECTED ORATIONS (Fall) 3 Hrs.
108. CICERO—ORATIONS; VIRGIL—AENEID (Winter) 3 Hrs.
109. VIRGIL—AENEID (Spring) 3 Hrs.

Courses 107-109 are open to students who have presented two units of Latin for college entrance. T. Th. F., 6.

110.	CICERO-DE	SENECTUTE	ET DE	AMICITIA	(Fall)	3 Hrs.
		and the same of		/777		0 TY

111. LIVY-BOOK XXI OF THE HISTORY (Winter) 3 Hrs.

112. Horace—Odes and Satires (Spring) 3 Hrs.

Courses 110-112 are open to students who have presented three or four units of Latin for college entrance. M. W. F., 5.

*115. CICERO-DE ORATORE, ORATOR, BRUTUS (Fall) 3 Hrs.

*116. PLINY-LETTERS (Winter)

3 Hrs.

*117. Ovid—Metamorphoses (Spring)

3 Hrs.

A goup of extensive reading courses for juniors and seniors. T. W. Th., 3.

120. TACITUS—GERMANIA ET AGRICOLA (Fall) 3 Hrs.

121. QUINTILIAN-DE INSTITUTIONE ORATORIA

3 Hrs.

122. VIRGIL—GEORGICS

3 Hrs.

A group of extensive reading courses for juniors and seniors. T. W. Th., 3.

(Winter)

^{*} Not given in 1934-35.

ENGLISH LANGUAGE, LITERATURE AND SPEECH

PROFESSOR FREEMAN, PROFESSOR DEMING
ASSISTANT PROFESSOR WILDER
AND MR. LAWRENCE FREEMAN

The work is arranged with three chief ends in view: first, to provide the student with such skill in writing and speaking that, regardless of what field of business or what profession he may later enter, he may express his ideas clearly and adequately; second, to give the student a knowledge of two great literatures, the English and the American, so that he may, after he has finished his college work, read with some critical ability, understanding, and appreciation of literature as an art and as an interpretation of life; and third, to offer advanced work to those who are planning to specialize in the field of English or American literature as teachers.

Students majoring in English are advised to minor in French, Latin, or German, and to elect a year of English history. A minor may be completed in history.

COMPOSITION

		(Fall, Winter)	3 Hrs.
	COMPOSITION		3 Hrs.
102a.	COMPOSITION	(Spring)	3 Hrs.

These three courses constitute a year of work for freshmen. A thorough drill in the mechanics of written English, exposition and argumentation: description and narration. Considerable attention is given to the study of the structure of the short story. Daily themes. Students who show a high degree of proficiency in English, may elect English 122a or English 105 in the place of Composition 102a. Four sections, M. W. F., 2, 4, 5; T. Th. F., 6.

201. COLLEGE GRAMMAR (Winter)

3 Hrs.

An intensive study of English grammar. Required of students majoring in English who expect to teach. T. Th. F., 7. 204. THE SHORT STORY (Winter)

2 Hrs.

224. THE SHORT STORY (Spring)

2 Hrs.

A study of the technique of the short-story and its relation to other forms of prose fiction. Practice in writing the short-story. Criticism and analysis of the principal types of the short-story. Permission of the instructor required. T. Th., 3.

205. EXPOSITORY WRITING (Fall)

2 Hrs.

225. EXPOSITORY WRITING (Winter)

2 Hrs.

A study of the various types of the essay and the writing of short themes together with longer fortnightly themes. Considerable attention is given to the familiar essay. In order to receive credit both courses must be completed. Open to all juniors and seniors. Required of all students who major in English. T. Th., 3.

JOURNALISM

128. NEWS WRITING (Fall)

3 Hrs.

Basic course. Theory and practice in preparing news stories; methods of news gathering, and newspaper ethics. Open to members of the Northern Review staff and students majoring in English. T. Th. F., 1.

129. NEWS WRITING (Winter)

3 Hrs.

Continuation of the above. Special attention is given to the feature and human interest stories; comparison of methods of different papers in handling news, and practice in writing news stories and reviews. T. Th. F., 1.

130. COPY READING AND EDITING (Spring)

3 Hrs.

Headline writing; use of style sheets and style books; terms and phrases used in handling copy. Lectures on the duties of members of an editorial staff. Visits to modern newspaper offices. Prerequisite: English 128 and 129. T. Th. F., 1.

ENGLISH LITERATURE

*103. FROM THE BEGINNING TO THE ROMANTIC MOVEMENT

(Fall) 3 Hrs.

*104. From the Romantic Movement to 1920 (Winter) 3 Hrs.

These two courses constitute a survey of English literature, excepting the novel and drama, in which the works of the chief English writers are stressed. Attention is given to the political, social, and intellectual backgrounds of the various periods. Some emphasis is placed upon the various types of poetry and of prose, and upon versification. Prerequisites: English 101 and 102. M. W. F., 3.

* Not given in 1934-1935.

*105. AN INTRODUCTORY SURVEY OF ENGLISH DRAMA

(Spring) 3 Hrs.

The aim of the course is to introduce the student to the various types of English drama. The following plays are the minimum for reading and study: "Everyman," "Doctor Faustus," "Anthony and Cleopatra," "Henry IV," Part I, "All for Love," "She Stoops to Conquer," "The School for Scandal," and "Lady Windemere's Fan." Prerequisites: English 101 and 102. M. W. F., 3.

106. EIGHTEENTH CENTURY PROSE (Fall)

3 Hrs.

107. EIGHTEENTH CENTURY PROSE (Winter)

3 Hrs.

In these courses a study is made of the prose of Defoe, Swift, Steele, Addison, Fielding, Burke, Gibbon, Johnson, Goldsmith, and Boswell. An attempt is made to interpret eighteenth century thought through the chief prose writers of the period. M. W. F., 2.

108. EIGHTEENTH CENTURY POETRY (Spring)

3 Hrs.

The poetry of the Restoration and the Eighteenth Century. A study of the poetry of Dryden, Pope, Collins, Burns, Cowper, Blake and Crabbe, together with some of the minor writers of the period. English 106 and 107 together with this course constitute a year's work in sophomore English. M. W. F., 2.

121. AMERICAN POETRY (Fall)

3 Hrs.

A study chiefly of the nine great American poets of the nineteenth century, but attention is given to work of the recent and contemporary poets. An attempt is made to show what America has done in poetry, the greatest of the fine arts. M. W. F., 3.

122. AMERICAN PROSE (Winter)

3 Hrs.

Some attention is paid to the prose of the Colonial period, but the following writers are stressed: Edwards, Franklin, Irving, Hawthorne, Poe, Thoreau, Lowell, Emerson, Holmes, Calhoun, Webster and Lincoln. M. W. F., 3.

122a. AMERICAN PROSE (Spring)

3 Hrs.

A continuation of English 122 with special emphasis on the development of the American novel. English 121, 122, and 122a constitute a year's work of sophomore rank. Prerequisite: English 101 and 102, M. W. F., 3.

210. SHAKESPEARE:

HISTORIES (Fall)

3 Hrs.

211. SHAKESPEARE:

TRAGEDIES (Winter)

3 Hrs.

212. SHAKESPEARE: 0

COMEDIES (Spring)

3 Hrs.

In these courses Shakespeare is studied as a dramatist, poet, interpreter of his age and of human life. Attention is

^{*} Not given in 1934-35.

given to the technique of the Elizabethan drama. Open to juniors and seniors. M. W. F., 4.

214. NINETEENTH CENTURY POETRY (Fall)

3 Hrs.

A study of the poetry of Wordsworth, Coleridge, Scott, Byron, Keats, and Shelley. Attention to versification.

NINETEENTH CENTURY POETRY (Winter) 215.

3 Hrs.

A study of the poetry of Tennyson, Morris, Swinburne, Arnold, Landor, Clough, and Rossetti. Especial attention is given to Tennyson as an interpreter of the social trend of his era.

NINETEENTH CENTURY POETRY (Spring) 216.

3 Hrs.

A study of the poetry of Browning. Special attention is given to the study of Browning as a portrayer of character and to his philosophy. In English 214, 215, and 216 a study is also made of the various types of poetry and of versification and criticism. These three courses constitute a year's work and are open to juniors and seniors. M. W. F., 7.

*217. NINETEENTH CENTURY ESSAYISTS (Fall)

3 Hrs.

*218. NINETEENTH CENTURY ESSAYISTS (Winter) 3 Hrs.

In English 217 and 218 the following essayists are studied: Coleridge, Lamb, Hazlitt, Landor, DeQuincey, Macaulay, Carlyle, Newman, Ruskin, Huxley, Pater, and Stevenson. T. Th. F., 2.

*219. THE ENGLISH NOVEL (Spring)

3 Hrs.

The development of the novel of the nineteenth century and its place in prose fiction. Study and criticism. English 217, 218, and 219 constitute a year's work and have as prerequisites 12 hours of English. T. Th. F., 2.

231. ENGLISH PROBLEMS

1-3 Hrs.

Minor investigation for qualified seniors who are majoring in English. Consult head of department.

SPEECH

101. Public Speaking (Fall, Winter)

3 Hrs.

The technical side of speech is emphasized; the fundamentals of voice production, action and platform deportment; speech construction, principles and practice; selection and arrangement of material; and the development of self-confidence in thinking while before an audience. M. W. F., 1. Winter, M. W. F., 5.

Not given in 1934-35.

102. PUBLIC SPEAKING (Winter)

3 Hrs.

A continuation of Public Speaking 101. Emphasis is put on preparation and delivery of speeches. Analysis of speech conditions and application of speech principles in exercises and problems. Preparation and delivery of ten speeches. M. W. F., 1.

103. LITERARY INTERPRETATION (Spring)

3 Hrs.

The analysis of literary selections for thought and emotion content; practice in the use of the voice to interpret mental and emotional states. The work of the course deepens the student's own literary appreciation and helps him to awaken others to a fuller sense of the beautiful in literature. M. W. F., 1.

105. Interpretative Reading and Speech Improvement

(Fall) 2 Hrs.

Use of carefully chosen prose and poetry selections suitable to be read to primary pupils. Suggestions for interpretation are given. A study of the correct moulding of English sounds and suggestions for the correction of such speech errors as stammering, stuttering, lisping, nasal twang, dialect, localisms, etc. This course is designed for primary teachers. T. Th., 1.

106. Interpretative Reading and Speech Improvement

(Fall) 2 Hrs.

A course similar to Speech 105, but designed for teachers of the intermediate grades. T. Th., 8.

110. ARGUMENTATION (Fall)

3 Hrs.

111. ARGUMENTATION (Winter)

3 Hrs.

Two courses given to a detailed study of the principles of argumentation; practice in brief-making and debating. No credit is given unless both courses are completed. Prerequisite: English 101, 102. M. W. F., 6.

112. DRAMATIC TECHNIC (Fall)

2 Hrs.

A study of the problems of the actor in voice and action. A review of the stage art and modern tendencies. Presentation of classical and modern scenes. Prerequisite: Speech 103. T. Th., 7.

220. Interpretative Reading (Fall)

3 Hrs.

The art of effective oral reading. Analysis of forms of literature; technical and psychic exercises and problems; modulations of voice; speech correction; and presentation of the intellectual and emotional content of the printed page. Each student is assigned literary selections for vocal interpretation. This course is especially recommended for those who expect to teach English. M. W. F., 2.

221. PLAY DIRECTING (Winter)

3 Hrs.

A laboratory course dealing with the problems of the actor of amateur plays. Practice in organizing players and presenting plays. It is expected that those who desire membership in the Northern Players will register for this course. Prerequisite: Speech 103, 220. T. W. Th., 7.

222. EXTEMPORE SPEAKING (Spring)

2 Hrs.

This course for advanced students aims at developing facility in organization and presentation of various kinds of speech material, for example: Expository, after-dinner, pulpit, campaign, and commemorative. Platform ettiquette and practice in speech are stressed. Prerequisite: Speech 101, 102. T. Th., 6.

230. Intercollegiate Debate (Fall)

2-3 Hrs.

Members of the debate teams are selected by competitive tryouts to which any student in good standing is eligible. Intensive study, investigation and practice on intercollegiate questions. The work is carefully supervised and credited according to the quality and quantity of work done.

231. SHAKESPEAREAN READING (Winter)

3 Hrs.

Plays are critically studied from standpoint of platform presentation; relation of personation and impersonation; plot, incident and character analysis. Expressional reading of selected speeches and scenes from the platform. Prerequisite: Speech 103. M. W. F., 2.

232. HIGH SCHOOL DRAMATICS (Spring)

2 Hrs.

A careful study of the problems of amateur dramatics relating to the technique of acting and stagecraft as they affect the teacher who is called upon to direct high school plays. The director's responsibilities and opportunities in the public school and community. Prerequisite: Some training in the speech arts or by consent of the instructor. T. Th., 7.

3 Hrs.

3 Hrs.

3 Hrs.

MODERN LANGUAGES

PROFESSOR HERRICK

The modern languages are designed to meet both cultural and practical needs. The advanced courses afford opportunity for students to major or minor in French. If a student expects to do graduate work, or to specialize in science, he should have a working knowledge of French or German, or both.

Major in French. Requirements, three years of college French in addition to Elementary French or the equivalent, and two quarters of French Phonetics; a total of 38 hours.

For a minor in French, the requirement is two years in addition to Elementary French.

Students majoring in this department should elect courses in English literature, history, Latin, and Speech.

FRENCH

Introductory Courses

ELEMENTARY FRENCH (Fall)

ELEMENTARY FRENCH (Winter)

ELEMENTARY FRENCH (Spring)

101.

102.

103.

	The elements of pronunciation and phonetics, essentials of grammar and easy reading. Conversation suited to the needs and abilities of the class. M. W. F., 5.
104a.	INTERMEDIATE FRENCH (Fall) 3 Hrs.
105a.	INTERMEDIATE FRENCH (Winter) 3 Hrs.
106a.	INTERMEDIATE FRENCH (Spring) 8 Hrs.
	Further elements of grammar, practice in phonetics, pronunciation, dictation, conversation based on lantern slides and occasional illustrated lectures on salient points of French history, architecture, art, and civilization. Prerequisite: French 101-103. T. Th. F., 3.

Advanced Courses

*223.	MODERN LITERATURE	(Fall)	3 Hrs.
*224.	MODERN LITERATURE	(Winter)	3 Hrs.
*225.	MODERN LITERATURE	(Spring)	3 Hrs.

The study of typical and selected texts, illustrative of modern literary movements, such as Romanticism, Realism, Naturalism, accompanied by illustrated lectures on French life, customs, architecture, art, etc., intended as a background for assigned readings. Prerequisite: French 104a-106a. In alternate years with French 206a-208a. M. W. F., 4.

Not given in 1934-35.

206a.	GENERAL	SURVEY	OF	FRENCH	LITERATURE		
		Secretary (The second	(Fall)	3	Hrs.
207a.	GENERAL	SURVEY	OF	FRENCH	LITERATURE		
					(Winter)	8	Hrs.
208a.	GENERAL	SURVEY	OF	FRENCH	LITERATURE		
TO SEE					(Spring)	3	Hrs.

A study of the main literary currents and characteristic monuments of the great periods of French literature. Lectures, class discussions, assigned readings. Prerequisite: French 104a-106a. Given in alternate years with French 223-225. M. W. F., 4.

224a.	FRENCH	PHONETICS	(Fall)	1	Hr.
225a.	FRENCH	PHONETICS	(Winter)	1	Hr.
226a.	FRENCH	PHONETICS	(Spring)	1	Hr.

The scientific study of French pronunciation based on texts like the "Passy-Rambaud" "Chrestomathie Francaise" and Nyrop's "Manuel du Francais Parie," accompanied by lectures on historical grammar. Especially designed for prospective teachers. Hour to be arranged. Prerequisite: French 101-103.

GERMAN

Introductory Courses

101.	ELEMENTARY GERMAN (Fall)	3 Hrs.
102.	ELEMENTARY GERMAN (Winter)	3 Hrs.
103.	ELEMENTARY GERMAN (Spring)	3 Hrs.
	Essentials of pronunciation, grammar and verb drill, and easy graded texts for reading.	
104a.	Intermediate German (Fall)	3 Hrs.
105a.	INTERMEDIATE GERMAN (Winter)	3 Hrs.
106a.	INTERMEDIATE GERMAN (Spring) Moderate grammar, pronunciation and with the reading of graded texts. Prerequisi 101-103, or the equivalent. T. Th. F., 2.	3 Hrs. conversation te: German

118. SCIENTIFIC GERMAN (Winter)

3 Hrs.

The reading of scientific texts with particular emphasis on individual needs. Required of pre-medical students. Given on sufficient demand instead of 105a. Pre-requisite: German 101-103. T. Th. F., 2.

MUSIC

PROFESSOR DEWEES PROFESSOR LAMALE, MR. ROBERT MELCHER MRS. ELLA IRICK

AIMS

Instruction is provided for those who desire to become musicians, either as performers or as teachers, and an opportunity is afforded to those who wish to devote themselves to the literature of music. Because training in music should be based upon a broad and thorough general education, the curricula have been so constructed as to secure a symmetrical balance between musical and academic subjects.

EQUIPMENT

Presser Hall, the home of the Department of Music, built in memory of Theodore Presser, an early faculty member, cost nearly \$145,000. It contains the Willis Auditorium, with a seating capacity of 500, a large stage, 7 fine studios, 18 practice rooms, 3 classrooms, and 14 upright pianos. In Lehr auditorium is a large organ and a grand piano.

SPECIAL STUDENTS

A student who desires to register for work in applied music or theoretical subjects without having graduation in view, may register as a special student. There are no requirements for registration as a special student other than evidence of talent and the ability to pursue a selected course with success.

JUNIOR DEPARTMENT

The Applied Music Department is open to children of public school age without any restriction other than an interest and a willingness to study. In all teaching the ideal of musical feeling is sought in companionship with those of beautiful tone, and accurate intonation. Group playing is stressed as much as possible and students of orchestral instruments are encouraged to enter the local high school orchestra.

Classes are formed in Piano, Voice, and Orchestral Instru-

ments provided that a minimum of five pupils enroll,

The usual private lesson periods of all instructors are available at special rates for those who prefer individual instruction.

BACHELOR OF ARTS WITH MAJOR IN MUSIC

A major of 45 hours of music or a minor of 25 hours of music is accepted towards the Bachelor of Arts degree. The major consists of the following courses of Theoretical and Applied Music: Sight Singing and Ear Training, History of Music, Harmony, Musical Form, Applied Music and Ensemble Participation. Theoretical Music should constitute about 30 hours of this major.

The courses listed above are not inflexible but may be changed to meet the requirements of the individual by consulting the

Dean and the Head of the Department.

PUBLIC SCHOOL MUSIC COURSE

This course is approved by the State Department of Education for the training of teachers and supervisors of Public School Music. The degree of Bachelor of Science in Education is granted to students completing the Public School Music curriculum, and such persons are granted the state four-year provisional certificate.

See curriculum under Division of Teacher Training.

GRADUATE IN MUSIC

Students who are unable to offer the required number of entrance credits permitting work towards a degree may follow a course of professional studies in music and earn a Diploma as Graduate in Music. The course may be completed in about three years. A public graduation recital must be given.

THEORETICAL MUSIC

PROFESSOR DEWEES, PROFESSOR LAMALE, AND MR. MELCHER

101. ELEMENTARY SIGHT SINGING AND EAR TRAINING (Fall) 8 Hrs.

2 Hrs.

140. CONDUCTING (Fall)

T. Th., 3.

102.	ELEMENTARY SIGHT SINGING AND EAR TRAINING (Winter) Continuation of 101. Daily, 2.	3 Hrs.
103.	ELEMENTARY SIGHT SINGING AND EAR TRAINING (Spring) Continuation of 102. Daily, 2.	8 Hrs.
104.	Advanced Sight Singing and Ear Training (Fall) Daily, 3.	3 Hrs.
105.	ADVANCED SIGHT SINGING AND EAR TRAINING (Spring) Continuation of 104. Daily, 3.	3 Hrs.
106.	Advanced Sight Singing and Ear Training (Spring) Continuation of 105. Daily, 3.	3 Hrs.
111.	ELEMENTARY HARMONY (Fall) Prerequisite: the ability to play common hy sight on the plano. M. W. F., 4.	3 Hrs.
112.	ELEMENTARY HARMONY (Winter) The use of secondary triads and seventh che harmonizing melodies. M. W. F., 4.	3 Hrs. ords in
113.	ELEMENTARY HARMONY (Spring) Tonic and subdominant seventh chords. chords. M. W. F., 4.	3 Hrs. Altered
114.	ADVANCED HARMONY (Fall) Transition and modulation. M. W. F., 6.	3 Hrs.
115.	ADVANCED HARMONY (Winter) Further study of modulation. M. W. F., 6.	3 Hrs.
211.	FORM AND ANALYSIS (Fall) The musical sentence, its subdivisions and extended periods, two and three-part song forms. Posite: Harmony 115. M. W. F., 3.	
212.	FORM AND ANALYSIS (Winter) The theme and variations, the suite, and the Analysis of selected Beethoven sonatas. M. W. F.,	2 Hrs. sonata.
251.	SCHOOL ORCHESTRATION (Winter) Prerequisites: Harmony 115; Advanced Sight 106. M. W. F., 2.	3 Hrs.
252.	ADVANCED ORCHESTRATION (Spring) A continuation of 251, with scoring for full be orchestra. Prerequisite: School Orchestration 251. F., 2.	

Principles of conducting. Prerequisite: Harmony 113.

141.	Conducting (Winter) Continuation of 140. T. Th., 3.	2 Hrs.
142.	CONDUCTING (Spring) Conducting full band and orchestra scores. T.	2 Hrs. Th., 3.
153.	HISTORY AND APPRECIATION (Fall) The origin and development of music, studied is appreciative basis. M. W. F., 2.	3 Hrs.
154.	HISTORY AND APPRECIATION (Winter) Continuation of 153. M. W. F., 2.	3 Hrs.
155.	HISTORY AND APPRECIATION (Spring) Continuation of 154. M. W. F., 2.	3 Hrs.
220.	ORCHESTRAL INSTRUMENTS (Fall) Stringed instruments. A preparation for conschool orchestras. T. Th., 5.	2 Hrs.
221.	ORCHESTRAL INSTRUMENTS (Winter) Continuation of above. T. Th., 5.	2 Hrs.
222-	ORCHESTRAL INSTRUMENTS (Spring) Brass and wood-wind instruments. A prepara conducting school orchestras and bands. T. Th., 5	2 Hrs.
202.	PRIMARY MUSIC METHODS AND OBSERVATION (Fall) Four observations each week are required. P site: Advanced Sight Singing 106; Harmony 114. F., 5.	rerequi-
203.	INTERMEDIATE MUSIC METHODS AND OBSERVATION	
	(Spring) Materials and methods. Four observations each are required. Prerequisite: Primary Methods 202. F., 5.	4 Hrs. ch week M. W.
204.	JUNIOR AND SENIOR HIGH SCHOOL METHODS AND	
	OBSERVATION (Winter) The adolescent voice and its care. Four obseeach week are required. Prerequisite: Intermediate Methods 203. M. W. F., 5.	rvations
213.	SUPERVISED TEACHING IN THE PRIMARY GRADES	
	(Spring) Prerequisite: Primary Music Methods 202.	3 Hrs.
214.	SUPERVISED TEACHING IN THE INTERMEDIATE GRADES (Fall) Prerequisite: Intermediate Methods 203.	3 Hrs.
215.	SUPERVISED TEACHING, JUNIOR AND SENIOR HIGH SCHOOL (Winter) Prerequisite: Methods 204.	3 Hrs.

APPLIED MUSIC

VOICE

PROFESSOR DEWEES

These courses aim primarily to establish correct principles of breathing, tone production, diction, style, and all those phases of the work essential to success in any branch of the art of singing. A considerable amount of memorizing is required throughout the course. All vocal students are advised to study at least one modern language: French or German.

Voice 151, 152, 153

Breathing. Tone production. Exercises. Easy songs in English and foreign languages.

VOICE 154, 155, 156

Continuation of first year. Vocalises. Easier recitatives and arias from standard operas and oratorios. Songs in several languages.

Voice 251, 252, 253

More advanced work in technique. Opera and oratorio. Lieder by Schubert, Schumann, Brahms, and other composers. Modern American, English, and French songs.

Voice 254, 255, 256

Advanced technique. Repertory. Opera. Program making. Teaching methods. Preparation of graduation recital numbers.

PIANO

PROFESSOR LAMALE AND MRS. IRICK

Instruction in piano playing involves a special adaptation to the needs of the individual. A minute study of each student's deficiencies and previous habits of work is made and technical studies and selections best adapted to his needs are given him. Music is a means of intellectual culture and artistic enjoyment; the works of the best masters are therefore employed through all grades.

Piano 151, 152, 153

Selected Pianoforte Studies from Czerny, Germer. Part I, Hanon. Development of Velocity, Bk. 1, Rogers. Twenty-four Brilliant Preludes, Concone. First Lessons in Bach-Carroll. Little Preludes, Bach. Sonatinas by Clementi. Sonatas by Haydn.

PIANO 154, 155, 156

School of Velocity, Czerny. Development of Velocity, Bk. 2, Rogers. Preliminary School of Dexterity, Op. 636, Czerny. Two-part Inventions, Bach. Etudes, Cramer. Octave Studies, Doring. Sonatas by Mozart and Beethoven. Selected Pieces.

PIANO 251, 252, 253

School of Dexterity, Op. 740, Czerny. La Difficulte, Le Couppey. Preludes, Chopin. Three-part Inventions, Bach. Preludes and Fugues, Well-Tempered Clavichord, Bach. Sonatas by Beethoven. Compositions by Mendelssohn, Schubert, Schumann, Grieg, MacDowell, Rachmaninoff, etc.

PIANO 254, 255, 256

Forty Daily Studies, Czerny. Etudes, Chopin. Octave Studies, Kullak. Difficult Solo Work by Schumann, Chopin, Liszt, Henselt, Brahms, Franck, Debussy, Ravel. Concertos by Hummel, Mozart, Beethoven, Mendelssohn, Grieg, Liszt, St. Saens, Rachmaninoff.

ORGAN

PROFESSOR LAMALE

No student will be accepted who has not reached the fourth grade in piano.

The course of study provides for thorough training in preparation for church and concert work. The course has been arranged to give a knowledge of the French school of organ music through the study of the works of the best composers in this particular school.

ORGAN 151, 152, 153

The Technique and Art of Organ Playing by Dickinson. Bach Chorales. Studies by Merkel and Whiting. Easy Hymns.

ORGAN 154, 155, 156

Rheinberger Trios. Eight Short Preludes and Fugues by Bach. Nilsson Pedal Studies. The easier pieces by Guilmant, Dubois, Batiste, Faulkes, Lemare, and others. Hymns of any difficulty.

ORGAN 251, 252, 253

Trios by Bach. Preludes and Fugues by Bach. Choral preludes. Sonatas by Mendelssohn. Pieces of medium difficulty by Guilmant, Dubois, Gigout, Widor, Lemare, Hollins.

ORGAN 254, 255, 256

Preludes and Fugues, Books III and IV, Bach. Pieces by Thiele, Lemmens, Vierne, Gigout, Franck, Bonnet, Reger. Choral Preludes by Franck. Sonatas by Rogers, Merkel, Rheinberger, Guilmant. Symphonies by Widor.

VIOLIN

MR. MELCHER

Elementary

A thorough grounding in the fundamentals. Fischer's Graded Course, Books I and II.

Intermediate

Fischer's Graded Course, Books III and IV. Maza's Etudes, Schradieck's School of Technic are used.

VIOLIN 151, 152, 153

Kreutzer's Etudes, Fischer's Scales, Casorti's "Technique of the Bow," Handel's Sonatas, Mozart's Sonatas, Kreutzer and Viotti's concertos.

VIOLIN 154, 155, 156

Fiorillo and Rode's Etudes, Concertos by Mozart, Mendelssohn, Bruch, and Bach. Recital material by Wieniawski, Leonard, Corelli, and others.

VIOLIN 251, 252, 253

Rode and Gavinies' Etudes, Wieniawski and Vieuxtemp's Concertos, Sonatas and solo material from nineteenth and twentieth century repertoire.

VIOLIN 254, 255, 256

Bach's sonatas, Beethoven and Saint Saen's concertos, Lalo "Symphonic Espagnole." Solos by Vieuxtemps, Wieniawski, Sarasati, Spalding, Kreisler, Brahms, Grieg.

REED AND BRASS INSTRUMENTS

The course of instruction includes both private and class lessons, and daily band rehearsals. Private instruction on a solo instrument to be selected by the student, constitutes the major subject. Class instruction in which the student is given a playing knowledge of every band instrument is also included.

Division II. Natural Sciences

JAMES A. WHITTED, Chairman

A student who chooses one of the departments in this division for his major is advised to schedule two laboratory sciences during the freshman and sophomore years, and in most cases a course in mathematics, and acquire a reading knowledge of a foreign language, if advanced work is anticipated.

BIOLOGY

PROFESSOR HUBER AND ASSISTANT PROFESSOR DOBBINS

The aims of this department are to enable the student to understand the life world in which he lives, to prepare for the teaching field, to obtain a biological foundation for the study of medicine, dentistry, and nursing, and to qualify for admission to graduate work.

A student who plans to complete a major in biology is advised to include a course in chemistry, one in physics, an introduction to statistical methods, courses in psychology and sociology, and have a reading knowledge of German and French if he intends to enter upon graduate work. A course in philosophy is strongly recommended.

101.	ZOOLOGY	(Fall)	3	Hrs.
102.	ZOOLOGY	(Winter)	3	Hrs.
103.	ZOOLOGY	(Spring)		Hrs.

These courses are designed for students who desire a general acquaintance with some of the biological laws and theories evidenced by the animal world. A general survey of the animal kingdom based on classification, morphology, physiology, and ecology. Especial attention is given to the problems of the organism, with emphasis on development, reproduction, genetics, and evolution. Section 1, M. W., 3,4; F., 3. Section 2, T. Th., 3, 4; F., 4. Section 3, T. Th., 5, 6.; F., 6. Section 2, Spring, T. Th., 7, 8; F., 8.

106. Comparative Vertebrate Anatomy (Fall) 5 Hrs.

A comparative study of the anatomy of fishes and amphibians. Careful dissections are made of the different systems and the relationships noted. Recitations three hours: laboratory six hours. M. W. F., 2; T. Th., 2, 3, 4.

113. MAMMALIAN ANATOMY AND PHYSIOLOGY (Winter) 5 Hrs.

A thorough dissection of a typical mammal with a careful correlation of structure and function. The course is designed especially for physical education and pre-medical students. Prerequisite: Comparative Vertebrate Anatomy. M. W. F., 2; T. Th., 2, 3, 4.

107. BOTANY (Fall)
108. BOTANY (Winter)

3 Hrs.

109. BOTANY (Spring)

3 Hrs.

These courses are presented largely as cultural courses with emphasis placed on careful observation and logical conclusion. The processes, structure, classification, environmental relations, distribution, and evolution of plants are considered. M. W., 6, 7; F., 7.

*110. LOCAL FLORA (Spring)

3 Hrs.

A systematic study which acquaints the student with many of the native and introduced plants. A field course supplemented by greenhouse and herbarium studies. S., 1, 2, 3, 4; T. Th., 1.

218. VERTEBRATE EMBRYOLOGY (Spring)

5 Hrs.

This course is fundamentally important to students who expect to teach zoology, study medicine, or from a cultural standpoint wish to know something of the origin and development of the human body. Laboratory work is confined largely to the chick, with occasional reference to the pig. Prerequisite: Zoology 101, 102, 103. M. W. F., 2; T. Th., 2, 3, 4.

219. HISTOLOGY AND TECHNIQUE (Winter)

3 Hrs.

Methods of collecting, killing, preserving and preparing material for demonstration and laboratory purposes are considered. A detailed microscopic study of various plant or animal tissues is made. Lecture and class work one hour, laboratory six to eight hours. Time schedule to be arranged. Open to seniors majoring in biology.

220. BIOLOGICAL PROBLEMS

1-3 Hrs.

Minor investigations for qualified seniors who are taking a major or minor in biology. By arrangement any quarter. Fee depends on nature of work done.

*222. PLANT PHYSIOLOGY (Winter)

3 Hrs.

224. PLANT MORPHOLOGY (Winter)

3 Hrs.

These courses are designed for students majoring in biology whose prime interest is in the botanical field. Course 222 consists of a critical study of some of the physiological processes of plants. Course 224 consists of a study of the structures and life histories of typical plants of various phyla. Prerequisite: Botany 107, 108, 109. M. W., 3, 4; F., 3.

* Not given in 1934-35.

230. HEREDITY (Spring)

3 Hrs.

A study of the principles of inheritance in plants and animals. The inheritance of human traits is given considerable emphasis, and the problems of eugenics are considered. Laboratory exercises with plant and animal materials are included. Prerequisite: Zoology 101, 102, 103 or Botany 107, 108, 109.

*235. EVOLUTION (Spring)

3 Hrs.

A course dealing with the development of the organic world, and an examination of the evidences of evolution and of the theories attempting to explain the method of evolution. Prerequisite: A year course in Biology. T. Th. F., 1.

Note: Courses in Bacteriology are listed in the College of Pharmacy.

CHEMISTRY

PROFESSOR HARROD AND ASSISTANT PROFESSOR GIBSON

The aim is to lay the foundation for an understanding of this basic science. The four fundamental courses, general chemistry, quantitative chemistry, organic chemistry, and physical chemistry studied in the order mentioned, together with allied courses in physical and social sciences, prepare the student for industrial work. In addition, by completing required courses in teacher training, preparation may be made for the teaching of chemistry in secondary schools. In anticipation of continued work in chemistry, courses in mathematics through calculus and a reading knowledge of German and French are required.

101a. Introductory Chemistry (Fall) 5 Hrs. 102a. Introductory Chemistry (Winter) 5 Hrs.

103a. Introductory Qualitative Analysis (Spring) 5 Hrs.

A series of courses designed for students who do not present chemistry for entrance credit. Courses 101a and 102a consist of a careful study of the fundamental laws of chemistry and of the properties of the common metallic elements and their compounds: course 103a is an introductory study in qualitative analysis of acids and metals, based upon the principles of ionization, mass action and chemical equilibrium. A brief study is made of the common metallic elements and their compounds.

Lecture and quiz, M. W. F., 3. Laboratory, T. Th., 2,

3, 4 or 6, 7, 8.

101. GENERAL CHEMISTRY (Fall, Winter, Summer) 5 Hrs.

102. GENERAL CHEMISTRY (Winter, Spring, Summer) 5 Hrs.

QUALITATIVE ANALYSIS (Spring, Summer)
 Hrs.

^{*} Not given in 1934-35.

Basic courses in General Chemistry. Prerequisite: One unit of high school chemistry. Lecture and quiz, M. W. F., 2. Laboratory, T. Th., 2, 3, 4 or 6, 7, 8.

104.	QUANTITATIVE	ANALYSIS	(Fall)	5	Hrs.
105.	QUANTITATIVE	ANALYSIS	(Winter)	5	Hrs.

106. QUANTITATIVE ANALYSIS (Spring) 5 Hrs.

These courses deal with the theory and practice of gravimetric and volumetric analysis. The use of the fundamental principles of modern theoretical chemistry, as well as the attainment of the ability to make quantitative separations and determinations, is emphasized. Prerequisite: Chemistry 103a or 103. Lecture T. Th., 5 or 6; laboratory, M. W. F., 5, 6, 7.

206. ORGANIC CHEMISTRY (Fall) 5 Hrs. 207. ORGANIC CHEMISTRY (Winter) 5 Hrs. 208. ORGANIC CHEMISTRY (Spring) 5 Hrs.

These courses consist of a fundamental study of the compounds of carbon. Careful attention is given to group structure, group relationship, group properties, isomerism

and nomenclature. Prerequisite: Chemistry 103a or 103. Lecture and quiz, M. W. F., 5; laboratory, T. Th., 5, 6, 7.

INDUSTRIAL INORGANIC CHEMISTRY (Winter) 4 Hrs.
 Not open to students who have credit for Chemistry 214. Formerly course 214.

210. INDUSTRIAL ORGANIC CHEMISTRY (Spring) 4 Hrs.

These courses in Industrial Chemistry are a descriptive

These courses in Industrial Chemistry are a descriptive survey of industrial chemical processes and their products.

In addition to regular class work, visits at appropriate periods are made to industrial plants in neighboring cities. Daily, 1.

211a. Advanced Qualitative Analysis (Winter) 5 Hrs. 211b. Advanced Qualitative Analysis (Spring) 5 Hrs. 212. Inorganic Preparations (Fall) 5 Hrs.

The fundamental purpose of these courses is to teach Inorganic Chemistry. Courses 211a and 211b deal with systematic analysis on a semi-quantitative basis, and are more comprehensive than 103 in both theoretical consideration and number of elements studied. Course 212 consists of a preparation of pure inorganic compounds, and a study of the theoretical principles involved. In all these courses the Periodic Law is used as the basis for the classification of the elements and their properties.

Prerequisite: Chemistry 104 and 105. Lecture, T. Th.,

3; laboratory, M. W. F., 5, 6, 7.

215. Physical Chemistry (Fall) 3 Hrs. 216. Physical Chemistry (Winter) 3 Hrs. 217. Physical Chemistry (Spring) 3 Hrs.

> A series of courses designed to develop a comprehensive conception of chemical change and the structure

of matter. In the interest of the pre-medical student, special attention is given to osmosis, equilibrium, colloids and hydrogen ion determination. Prerequisite: Quantitative Analysis, Organic Chemistry, General Physics and Mathematics 109. Lecture and quiz, M. W. F., 4.

231. CHEMISTRY PROBLEMS (Credit to be arranged)

Minor investigations for qualified seniors who are majoring in chemistry. This course may be elected any quarter in the senior year by any student who is qualified to carry it. It may be started in the Fall quarter and continued through the year. Credit will be evaluated when the work is finished. This is an honor course. Consult head of department.

MATHEMATICS

PROFESSOR WHITTED AND ASSISTANT

The aim is to offer courses primarily as part of a liberal education, as requirements for engineering students, and for prospective graduate students in mathematics and physics. In all courses the theory developed is followed by application to the exercises and practical problems when possible.

Students majoring in mathematics are advised to follow the sequence of courses 101 to 109 inclusive and to complete at least five quarter hours from other offerings in this department. Those planning to do graduate work in this field should complete courses 212, 215, and 216 with enough additional courses to bring the total to a minimum of forty-five hours. Physics is recommended as a minor. A reading knowledge of German or French is advised.

101a. Freshman Mathematics (Fall) 102a. Freshman Mathematics (Winter)

3 Hrs.

This course is offered to those who present one unit of algebra and one unit of geometry for entrance. It treats a considerable portion of the material comprised in the study of algebra, trigonometry and analytical geometry with sufficient thoroughness to enable the student to pursue subsequent courses with profit. M. W. F., 2.

100. COLLEGE ALGEBRA (Fall)

5 Hrs.

This course covers much of the material of the traditional course in algebra with emphasis upon number theory, quadratic forms, functions and their graphs, and the theory of determinants as applied to the solution of simple sets of equations. Prerequisite: Plane geometry and one unit of high school algebra. Daily, 4.

101. COLLEGE ALGEBRA (Fall)

5 Hrs.

This course covers much of the material of the traditional course in algebra with emphasis upon number theory, quadratic forms, functions and their graphs, and the theory of determinants as applied to the solution of simple sets of equations. Prerequisite: Plane geometry and one and one-half units of high school algebra. Daily 5.

103. TRIGONOMETRY (Winter, Spring)

5 Hrs.

The fundamental principles of the subject are developed and applied to trigonometric reductions and to the solutions of triangles. Numerous exercises in the field of geometry, physics, and mechanics are studied. Prerequisite: Plane geometry and one and one-half units of high school algebra. Winter, 5. Spring, 6.

103b. TRIGONOMETRY (Winter)

5 Hrs.

The fundamental principles of the subject are developed and applied to trigonometric reductions and to the solutions of triangles. Numerous exercises in the field of geometry, physics, and mechanics are studied. Prerequisite: Plane geometry and one unit of high school algebra. Daily 4.

105. Analytical Geometry (Spring)

5 Hrs.

The purpose of this course is to acquaint the student with analytical methods of investigation and to make him more skilful in the use of algebraic processes as applied to geometric loci. Special attention is given to the equations of the right line, circle, conic sections, and the higher plane curves. Prerequisite: Mathematics 103 or 103b. Daily, 4 or 5.

106. Analytical Geometry of Space (Winter) 3 Hrs

This offering is planned to give the student a good working knowledge of coordinate geometry in three dimensional space. Equations of the first and second degree of two and three unknowns are stressed. Prerequisite: Mathematics 105. M. W. F., 3.

107. CALCULUS: DIFFERENTIAL (Fall)

4 Hrs.

The fundamental theorems for the differentiation of algebraic, trigonometric, logarithmic, and exponential functions are taken up with numerous applications to problems in geometry, mechanics, and physics. Prerequisite: Mathematics 105. M. T. W. Th., 4.

108. CALCULUS: DIFFERENTIAL AND INTEGRAL (Winter) 4 Hrs.

This course is a continuation of Mathematics 107, but giving a more extended use of differentiation to analytical functions of two or more variables with an introduction to the indefinite integral. Prerequisite: Mathematics 107. M. T. W. Th., 4.

109. CALCULUS: INTEGRAL (Spring)

4 Hrs.

This is an continuation of Mathematics 108, but giving a more detailed account of methods of integration by the aid of substitution, parts and reduction formulae. Integration as a summation and the definite integral with its application to problems in surfaces, volumes, moments of inertia, center of gravity and fluid pressure is studied. Prerequisite: Mathematics 108. M. T. W. Th., 4.

*111a. PRACTICAL ASTRONOMY

3 Hrs.

This course covers spherical trigonometry with numerous applications to the fields of geodesy and astronomy. Prerequisites: College Algebra and Plane Trigonometry. M. W. F., 3.

112. STATISTICAL METHODS (Spring)

3 Hrs.

This is an elementary survey of statistical methods designed to meet the needs of students in education, economics, sociology, and science. It includes sampling, tabulation, graphs, averages, probability and error, dispersion, trends, cycles, correlation, and index numbers. Prerequisite: Freshman Mathematics or equivalent. M. W. F., 2.

212. DIFFERENTIAL EQUATIONS (Winter)

3 Hrs.

This is a study of the more common types of ordinary differential equations, especially those of the first and second orders, with emphasis on geometrical interpretations and applications to geometry, elementary mechanics and physics. Prerequisite: Mathematics 109. M. W. F., 3.

*215. VECTOR ANALYSIS (Spring)

3 Hrs.

This is an account of the methods of elementary vector analysis in two and three dimensional space, followed by simple applications to geometry and physics. Prerequisite: Mathematics 109. M. W. F., 3.

216. CALCULUS: ADVANCED INTEGRAL (Fall)

4 Hrs.

This course takes up plane areas by means of double integration; volume by triple integration; moment of inertia; center of gravity; fluid pressure; centroid of solids and hyperbolic functions. Prerequisites; Mathematics 108. 109. M. T. W. Th., 6.

*217. THEORY OF EQUATIONS AND DETERMINANTS

(Winter) 3 Hrs.

The theory of equations is necessary in subsequent mathematical courses and furnishes light upon certain algebraic and analytical functions. Prerequisite: Mathematics 105, 107. Alternates with Mathematics 106. M. W. F., 3.

^{*} Not given in 1934-35.

5 Hrs

PHYSICS

PROFESSOR BERGER

The primary aim of this department is to train the student to reason from fundamental experimental facts in solving the problems of physics. In conjunction with this the department aims to give a training sufficiently broad to:

- a. Appreciate the physics of popular scientific articles.
- b. Teach physics in the public schools.

GENERAL PHYSICS (Fall)

- c. Apply physics in engineering, medicine, etc.
- d. Pursue graduate work to the best advantage.

The physics major must include courses 213, 214, and 220. A year of general chemistry should be completed. A year of economics is recommended.

For those contemplating graduate work in physics 45 hours each of physics and mathematics should be completed. An introductory course in philosophy and a reading knowledge of German are strongly recommended.

TO.T.	GENERAL LILIBIOS	(I wee)	o min.
105.	GENERAL PHYSICS	(Spring)	5 Hrs.
106.	GENERAL PHYSICS	(Winter)	5 Hrs.
	For engineers	and science majors.	Prerequisites:
		es and trigonometry. M.	T. Th. F., 2.
	One 2-hour laborat	tory period.	

109.	GENERAL PHYSICS	(Fall)	3 Hrs.
110.	GENERAL PHYSICS	(Winter)	3 Hrs.
111.	GENERAL PHYSICS	(Spring)	3 Hrs.
	Open to fresh	men. Prerequisites: One year	each of
	high school algebr	a and plane geometry. M. W.	F., 8.

109a.	GENERAL PHYSICS		2	Hrs.
110a.	GENERAL PHYSICS		2	Hrs.
111a.	GENERAL PHYSICS		2	Hrs.
	Laboratory to precede or accompany T. Th., two 2-hour periods. Any quarter.	109,	110,	111.

213. MECHANICS (Fall) 5 Hrs. A course in mechanics problems. Prerequisites: Physics 106 or 111 and Calculus Daily, 3.

214. MATHEMATICS OF PHYSICS (Spring)

5 Hrs.

A course dealing with the application of mathematics to physics and related sciences. Prerequisites: Physics 105 or 111 and calculus. Daily, 7.

- 216. ADVANCED LABORATORY: MECHANICS 1-6 Hrs.
- 217. ADVANCED LABORATORY: LIGHT, HEAT, SOUND 1-6 Hrs.
- 218. ADVANCED LABORATORY: ELECTRICITY 1-6 Hrs.

Credit is given in courses 216, 217, and 218 according to the amount of work done. A quiz is given on assigned readings for each experiment. Not more than 6 hours of credit may be carned in any one of the three courses. Offered every quarter. Prerequisites: Physics 106 or 111 and Mathematics 109. Two three-hour periods each week.

220. MODERN PHYSICS (Winter)

3 Hrs.

A lecture and quiz course involving fundamental questions on the nature of things, such as atomic structure, electron theory, quantum theory, and the theory of relativity. Prerequisites: General Chemistry and General Physics. T. Th. F., 6.

Division III. Social Sciences

WALTER GRAY, Chairman

A student who plans to make his major elections from a department in this group should complete at least two year courses in the social sciences during the freshman and sophomore years. Proficiency in English is indispensable. A course in statistical methods will prove useful, and a reading knowledge of French or German is essential if graduate work is anticipated.

ECONOMICS AND BUSINESS ADMINISTRATION

PROFESSOR MCBRIDE

The aim is to help the student acquire a sympathetic understanding of the origin and functions of our business institutions. Aside from its cultural value, such an understanding should enable the student to adjust himself intelligently to his industrial environment, and to prepare himself for the wise performance of the duties of a citizen in an industrial democracy.

It is recommended that the course in Principles of Economics be completed during the first two college years. Students majoring in this department are expected to take courses in history, political science, and sociology, especially such courses as coordinate with the field of economics. An acquaintance with the physical sciences is also important.

110. INDUSTRIAL SOCIETY (Fall)

3 Hrs.

111. INDUSTRIAL SOCIETY (Winter)

3 Hrs.

Designed primarily for freshmen as an introduction to the general field of economics. The course begins with the historical approach to the present economic order. It then deals with some outstanding features of the existing system and aims to give the student the concrete subject matter necessary for the adequate study of the principles of economics in the general course. M. W. F., 7.

112. ECONOMIC HISTORY OF THE UNITED STATES

(Spring) 3 Hrs.

A study of the economic development of the United States. M. W. F., 7.

121.	PRINCIPLES O	OF ECONOMICS	(Fall)	3 Hrs.
	- HILL O'NE AMERIC	OK MEGONION	/	V mann.

122. Principles of Economics (Winter) 3 Hrs.

123. PRINCIPLES OF ECONOMICS (Spring)

3 Hrs.

Wants, scarcity, and economy; economic history; organization of production; value and price; monopoly and its control; financial organization; distribution of wealth and income; inequality and social reform; public finance; and international trade. Not open to freshmen. M. W. F., 5.

131. Principles of Accounting (Fall) 3 Hrs.

132. Principles of Accounting (Winter) 3 Hrs.

133. PRINCIPLES OF ACCOUNTING (Spring)

3 Hrs.

Principles of the double-entry system; asset and equity accounts; journal and ledger; expense and revenue accounts; periodic adjustment of accounts; working sheets; income statements; balance sheets; valuation and income determination; trading and manufacturing accounts; and partnership and corporate accounting. M. W. F., 3.

204. LABOR PROBLEMS (Fall)

3 Hrs.

The Industrial Revolution and the workers; wages; standard of living; population and immigration; hours of labor; unemployment; the aged worker; labor organization; employers' associations; industrial disputes; arbitration and conciliation; scientific management; personnel administration; and programs of reconstruction. Prerequisite: Economics 121, 122, and 123. M. W. F., 6.

207. Money and Banking (Winter) 3 Hrs.

208. Money and Banking (Spring) 3 Hrs.

Nature and functions of money and credit; banking operations; development of banking; Federal Reserve System; clearing and collection; foreign exchange; financing foreign trade; business cycle; trust companies; investment banking; savings banks; investment trusts; agricultural credit institutions; and recent tendencies in banking. Prerequisite: Economics 121, 122, and 123. M. W. F., 6.

*214. BUSINESS FINANCE (Winter)

3 Hrs.

*215. Business Finance (Spring)

3 Hrs.

Stocks and bonds; promotion; capitalization plan; marketing of securities; short-term borrowing; budgeting; financial forecasting; tests of successful operation; treatment of earnings; expansion; and failure and reorganization. Prerequisite: Economics 121, 122, and 123. M. W. F., 6.

*217. Public Finance (Spring)

3 Hrs.

Public expenditures in nation, state and municipality; causes of increasing expenditures and the means of controlling them; meaning and development of taxation; means of escape from taxation; some requisites of a sound tax system; redemption, refunding and conversion of debt; financial administration and legislation; the budget. Prerequisites: Economics 121, 122, 123. M. W. F., 6.

241. MARKETING (Winter)

3 Hrs.

242. MARKETING (Spring)

3 Hrs.

Marketing functions and institutions; consumers' buying motives and demand; methods and costs of marketing;
and marketing problems of the farmer, manufacturer,
wholesaler, retailer, and other middlemen. Required of
all majors. Courses 241 and 242 alternate with courses
207 and 208. Prerequisite: Economics 121, 122, 123.
M. W. F., 1.

*251. RISK, RISK-BEARING, AND INSURANCE (Fall) 3 Hrs.

The theory of risk; methods and institutions of riskbearing, including insurance; kinds of insurance; types of policies; reserves; investment of funds; buying and selling insurance; and state regulation. Required of all majors. Course 251 alternates with 204. Prerequisite: Economics 121, 122, 123. M. W. F., 1.

^{*} Not given in 1934-35.

HEALTH AND PHYSICAL EDUCATION

PROFESSOR C. A. LAMB, Director

ASSISTANT PROFESSOR H. A. LAMB, AND

MISS CLAIRE REDDINGTON

GENERAL STATEMENT

Some form of physical activity is required of all students during their first two years in the University. The nature and amount of work to be taken depends upon physical condition as revealed by a careful examination, and by efficiency tests given at the beginning of the school year. A varied program of elective and required activities is provided, which aims to secure and maintain the highest degree of individual and social efficiency both during and after college life.

The elective courses are of both a theoretical and practical nature. A strong intramural sports program is designed to provide some form of activity for nearly every student on the campus; while for those who wish to specialize in the physical education field, a four-year professional curriculum is offered, leading to the Bachelor of Science in Education degree and to a special state four-year provisional certificate.

REQUIRED COURSES

Physical education two hours a week. One credit hour each quarter for the first six quarters.

First Year. This work is given both out-of-doors and in the gymnasium. It is systematically graded and arranged to fit the needs and interest of the individual. Corrective work, for those who need it, and the fundamentals of natural gymnastics and games are stressed.

Second Year. A continuation of the first year program, with greater emphasis on play activities.

ELECTIVE COURSES

Intramural Sports

Ample athletic fields and a splendid new gymnasium afford exceptional facilities for an intramural program that is sufficiently broad and varied as to offer some form of activity for practically all University students. In their proper seasons, the following sports are offered: Football, basketball, baseball, speedball, handball, playground ball, volley ball, tennis, wrestling, boxing, and track.

Intercollegiate Athletics

The Ohio Northern University is a member of the Ohio Intercollegiate Athletic Conference, and has gained an enviable reputation for the quality and character of her teams. In football, basketball, baseball, and track the University has consistently been rated among the stronger members of the conference. The teams are always neatly and well equipped. Additions to the coaching staff insure well-trained and well-coached representatives in all sports. In fact, Ohio Northern offers a wide opportunity for indoor and outdoor sports, and takes just pride in maintaining varsity teams and an intramural program of high order.

FOUR-YEAR PROFESSIONAL COURSE

The curriculum for the four-year professional course for teachers and supervisors of physical education will be found under the Division of Teacher Training.

DESCRIPTION OF COURSES

101.	PHYSICAL EDUCATION	(Fall)	1	Hr.
102.	PHYSICAL EDUCATION	(Winter)	1	Hr.
103.	PHYSICAL EDUCATION	(Spring)	MANUEL OF THE PARTY OF THE PART	Hr.

Men—Gymnasium and outdoor classes in season, natural gymnastics, informal play. Six sections. M. W., 1, 2, 3, 4, 5, or 6.

Women—A course in natural gymnastics including games and sports in season, dancing and tumbling. Four sections. T. Th., 1, 2, 3, 4.

104.	PHYSICAL EDUCATION	(Fall)	1 Hr.
105.	PHYSICAL EDUCATION	(Winter)	1 Hr.
106.	PHYSICAL EDUCATION	(Spring)	1 Hr.

Men—Continuation of course 103 with team games and apparatus added. Six sections. M. W., 1, 2, 3, 4, 5, or 6. Women—A continuation of course 103. Four sections. T. Th., 1, 2, 4, 6.

101a. PHYSICAL	EDUCATION	FOR	MAJORS	(Fall)	1	Hr.
102a. PHYSICAL	EDUCATION	FOR	MAJORS	(Winter)	1	Hr.
103a. PHYSICAL	EDUCATION	FOR	Majors	(Spring)	1	Hr.
104a. PHYSICAL	EDUCATION	FOR	Majors	(Fall)	1	Hr.
105a. PHYSICAL	EDUCATION	FOR	Majors	(Winter)	1	Hr.
106a. PHYSICAL	EDUCATION	FOR	MAJORS	(Spring)	1	Hr.

Courses 101a to 106a inclusive are required of all students majoring or minoring in physical education in place of courses 101 to 106. These courses consist of natural activities in season, including games, stunts, tumbling, clogging, folk and characteristic dancing, natural dancing, pageantry for women, and combat activities for men. These courses apply toward physical education major. Men and Women. T. Th., 5.

115. PERSONAL AND GENERAL HYGIENE

(Fall, Winter, Spring) 2 Hrs.

A course designed to cover the various phases of personal hygiene and health, from the individual aspect, with emphasis on preventive measures. T, Th., 3.

117. HEALTH EDUCATION (Fall)

3 Hrs.

A course for the special teacher and supervisor of physical education, dealing with the sanitation of school buildings, surveys of various school systems, teachers' health, and other health problems arising in a school system. M. W. F., 5.

151. HEALTH EDUCATION (Spring)

3 Hrs.

This course deals with the health program of the public schools, and the teaching of habits, attitudes and knowledge conducive to good health. M. W. F., 5.

152. HEALTH EDUCATION (Winter)

3 Hrs.

The relation of hygiene to home and community life, including a study of sewage disposal, refuse disposal, transmission and control of diseases. M. W. F., 4.

156. THEORY AND PRACTICE OF PLAYS AND GAMES

(Spring) 3 Hrs.

The need, purpose, and functions of play in education are studied. Activities adaptable to various age levels of the elementary and secondary schools are studied. Two hours of theory and two hours of laboratory per week. M. T. W. Th., 6.

201. PRINCIPLES AND METHODS OF PHYSICAL EDUCATION

(Fall) 4 Hrs.

202. PRINCIPLES AND METHODS OF PHYSICAL EDUCATION

(Winter) 4 Hrs.

203. METHODS OF PHYSICAL EDUCATION (Spring) 4 Hrs.

Lectures, demonstrations and practice. An examination of the principles underlying modern practices in physical education, from the standpoint of general education. The methods used in the natural program of physical education, such as the teaching of fundamental skills of tumbling and stunts, basketball, indoor baseball, speedball, volleyball, handball. Class, M. W., 4; practice, T. Th., 5.

221a. METHODS IN COACHING FOOTBALL (Fall)

3 Hrs.

A course covering in detail, equipment, fundamentals of the game, kicking, passing, handling the ball, tackling, blocking, etc; individual position play; discussion of various types of offensive and defensive formations now in use, and the merits of each; strategy and generalship. T. Th. F., 4.

221b. METHODS IN COACHING FOR WOMEN (Fall)

3 Hrs.

This course is to prepare major and minor students in physical education to coach athletics in secondary schools. The course covers presentation of technique, basic principles, team play and methods for instruction of hockey, soccer and speedball. M. W. F., 6.

222. METHODS IN COACHING BASKETBALL (Winter) 3 Hrs.

Men—Special emphasis is given to the fundamentals, passing, shooting, dribbling, feinting, and pivoting; to the various styles of offense and defense used by the leading coaches; to equipment; to the conditioning of a team; and to the handling of a team in games. Lectures, reports, demonstration and practice. T. Th. F., 4.

Women - Volleyball, basketball and handball. M. W.

F., 6.

223. METHODS IN COACHING BASEBALL AND TRACK

(Spring) 3 Hrs.

This course covers pitching, catching, batting, fielding, baserunning, individual position and team play in baseball. It takes up the best methods and forms for all of the events in track and field. Lectures, reports, demonstration and practice. T. Th. F., 4.

Women-Baseball, tennis, track and field sports. M.

W. F., 7.

252. NORMAL DIAGNOSIS (Winter)

2 Hrs.

This course will include: Recording of personal and family history, methods of making general health examinations, including special methods of examining the eyes, ears, nose, throat, spine, feet, and weighing and measuring. T. Th., 3.

254. ORGANIZATION AND ADMINISTRATION OF PHYSICAL EDUCATION—MEN AND WOMEN (Fall) 2 Hrs.

A course dealing with the objectives, principles, and methods of organization and administration of physical education in elementary and secondary schools and colleges. It includes management of athletic sports, games, and contests, and intramural athletics. T. Th., 2.

255. INDIVIDUAL GYMNASTICS (Winter)

2 Hrs.

Lectures, demonstrations and practice in the organization and administration of corrective exercises for special physical defects. This course deals with the selection and prescription of exercises designed to correct various postural defects and deformities. T. Th., 2.

258. FIRST AID AND ATHLETIC TRAINING (Spring) 2 Hrs.

Lectures, discussion and practice in the giving of first aid in cases of emergency. Methods of scientific training and conditioning of athletic teams. The American Red Cross First Aid Certificate may be obtained by students who pass a satisfactory examination. T. Th., 3.

260. HISTORY OF PHYSICAL EDUCATION (Spring) 2 Hrs.

This course traces the evolution and development of physical education through ancient and modern times. It demonstrates the close relationship existing between certain elements in civilization and the status of physical education in that civilization. T. Th., 2.

263. STUDENT TEACHING-PHYSICAL EDUCATION

(Fall, Winter, Spring) 6 Hrs.

Students taking the four year course for the training of physical education supervisors and teachers are required to prepare a syllabus of the work covered, write lesson plans, hold conferences with the professor in charge and teach in the University, Junior and Senior High School and Elementary School.

271. ADVANCED COACHING PRACTICE	(Fall)	1 Hr.
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272. ADVANCED COACHING PRACTICE (Winter) 1 Hr.

273. ADVANCED COACHING PRACTICE (Spring) 1 Hr.

These courses are designed to give students who have had Courses 221, 222, and 223 an opportunity to do actual coaching under supervision, in all sports in season. Hours arranged.

HISTORY AND POLITICAL SCIENCE

PROFESSOR BINKLEY AND MR. LAWRENCE FREEMAN

The history courses stress the evolution of human institutions with a view to developing an understanding of our present civilization. Students majoring in history must take courses in both American and European history and in the allied social sciences, particularly political science, sociology, psychology and economics. The department will recommend no graduate for the teaching of history who has not taken nine hours in American Government.

The courses in political science are designed to prepare the student for the intelligent performance of the functions of citizenship, for entrance into public service, for the study of law, and for graduate study in this field. Those majoring in political science are advised to pursue courses in sociology, psychology, history and economics.

HISTORY

		(Spring)	3	Hrs.
106.	ENGLISH	HISTORY: 1783 TO THE PRESENT TIME		
105.	ENGLISH	HISTORY: 1558-1783 (Winter)	3	Hrs.
		HISTORY TO 1558 (Fall)	3	Hrs.

A general introductory study of the English people in their political, social and institutional development, followed by a survey of the growth of the British Empire and the evolution of the British Commonwealth of Nations. Open to freshmen. M. W. F., 2.

113.	HISTORY OF THE UNITED STATES TO 1815	
	(Fall)	3 Hrs.
114.	HISTORY OF THE UNITED STATES: 1815 TO 1865	
	(Winter)	3 Hrs.
115.	HISTORY OF THE UNITED STATES: 1865 TO THE	

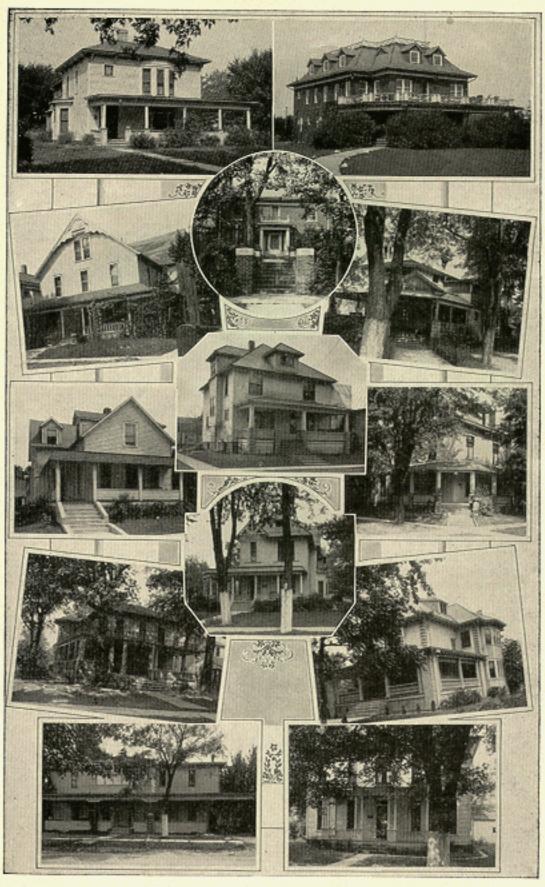
A study of the political, social, and economic development of the United States from the discovery to the present time. Not open to freshmen. T. Th. F., 4.

PRESENT TIME (Spring)

3 Hrs.

	3 Hrs.
131. HISTORY OF EUROPE: 1500-1660 (Fall) 132. HISTORY OF EUROPE: 1660-1815 (Winter)	3 Hrs.
133. HISTORY OF EUROPE: 1815 TO THE PRESENT	TIME
(Spring)	3 Hrs.
An introductory survey of modern Euro	
The mediaeval background, the Renaissance	and Reforma-
tion the revolutionary movements, the rise of	internation-
al rivalry, the World War and its aftermat to freshmen. T. Th. F., 5.	n. Not open
to freshmen. 1. In. F., 5.	
the regulation adverses, sociality payon long, and	val, suppreint
216. RECENT AMERICAN HISTORY (Fall)	2 Hrs.
217. RECENT AMERICAN HISTORY (Winter)	2 Hrs.
218. RECENT AMERICAN HISTORY (Spring)	2 Hrs.
An investigation and intensive study of	some of the
major movements of the United States since t Prerequisite: History 113, 114, 115. T. Th.,	he Civil War.
Frerequisite. Instory 110, 110, 110, 1. A.	Last replace
wat to their edrach solven all the state of the	
*224. CONSTITUTIONAL HISTORY OF THE UNITED ST	
(Fall)	
*225. CONSTITUTIONAL HISTORY OF THE UNITED ST	
(Winter)	
*226 CONSTITUTIONAL HISTORY OF THE UNITED ST	
(Spring)	
A survey of the constitutional develop	ment of the
United States from the colonial period to the Prerequisite: Political Science 101, 102, 103	and History
113, 114, 115. T. Th., 6.	
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*235. BOURBON FRANCE AND THE REVOLUTIONARY (Fall)	2 Hrs.
*235. BOURBON FRANCE AND THE REVOLUTIONARY	2 Hrs. Era
*235. BOURBON FRANCE AND THE REVOLUTIONARY (Fall) *236 BOURBON FRANCE AND THE REVOLUTIONARY (Winter)	2 Hrs. Era 2 Hrs.
*235. BOURBON FRANCE AND THE REVOLUTIONARY (Fall) *236 BOURBON FRANCE AND THE REVOLUTIONARY	2 Hrs. Era 2 Hrs. Era
*235. BOURBON FRANCE AND THE REVOLUTIONARY (Fall) *236 BOURBON FRANCE AND THE REVOLUTIONARY (Winter) *237. BOURBON FRANCE AND THE REVOLUTIONARY (Spring)	2 Hrs. ERA 2 Hrs. ERA 2 Hrs. e history of
*235. BOURBON FRANCE AND THE REVOLUTIONARY (Fall) *236 BOURBON FRANCE AND THE REVOLUTIONARY (Winter) *237. BOURBON FRANCE AND THE REVOLUTIONARY (Spring) Three courses presenting in detail the Europe during the period of the absolute management of the statement of the stat	2 Hrs. ERA 2 Hrs. ERA 2 Hrs. e history of nonarchy, the
*235. BOURBON FRANCE AND THE REVOLUTIONARY (Fall) *236 BOURBON FRANCE AND THE REVOLUTIONARY (Winter) *237. BOURBON FRANCE AND THE REVOLUTIONARY (Spring) Three courses presenting in detail the Europe during the period of the absolute management regime, the revolutionary era and National Revolutionary era	2 Hrs. ERA 2 Hrs. ERA 2 Hrs. e history of nonarchy, the
*235. BOURBON FRANCE AND THE REVOLUTIONARY (Fall) *236 BOURBON FRANCE AND THE REVOLUTIONARY (Winter) *237. BOURBON FRANCE AND THE REVOLUTIONARY (Spring) Three courses presenting in detail the Europe during the period of the absolute management of the statement of the stat	2 Hrs. ERA 2 Hrs. ERA 2 Hrs. e history of nonarchy, the
*235. BOURBON FRANCE AND THE REVOLUTIONARY (Fall) *236 BOURBON FRANCE AND THE REVOLUTIONARY (Winter) *237. BOURBON FRANCE AND THE REVOLUTIONARY (Spring) Three courses presenting in detail the Europe during the period of the absolute mancient regime, the revolutionary era and Na requisite: History 131, 132, 133. T. Th., 7.	2 Hrs. ERA 2 Hrs. ERA 2 Hrs. e history of nonarchy, the apoleon. Pre-
*235. BOURBON FRANCE AND THE REVOLUTIONARY (Fall) *236 BOURBON FRANCE AND THE REVOLUTIONARY (Winter) *237. BOURBON FRANCE AND THE REVOLUTIONARY (Spring) Three courses presenting in detail the Europe during the period of the absolute mancient regime, the revolutionary era and Narequisite: History 131, 132, 133. T. Th., 7. 251. RECENT EUROPEAN HISTORY (Fall)	2 Hrs. ERA 2 Hrs. ERA 2 Hrs. e history of nonarchy, the apoleon. Pre-
*235. BOURBON FRANCE AND THE REVOLUTIONARY (Fall) *236 BOURBON FRANCE AND THE REVOLUTIONARY (Winter) *237. BOURBON FRANCE AND THE REVOLUTIONARY (Spring) Three courses presenting in detail the Europe during the period of the absolute mancient regime, the revolutionary era and Narequisite: History 131, 132, 133. T. Th., 7. 251. RECENT EUROPEAN HISTORY (Fall) 252. RECENT EUROPEAN HISTORY (Winter)	2 Hrs. ERA 2 Hrs. ERA 2 Hrs. e history of nonarchy, the apoleon. Pre-
*235. BOURBON FRANCE AND THE REVOLUTIONARY (Fall) *236 BOURBON FRANCE AND THE REVOLUTIONARY (Winter) *237. BOURBON FRANCE AND THE REVOLUTIONARY (Spring) Three courses presenting in detail the Europe during the period of the absolute mancient regime, the revolutionary era and Narequisite: History 131, 132, 133. T. Th., 7. 251. RECENT EUROPEAN HISTORY (Fall) 252. RECENT EUROPEAN HISTORY (Winter) 253. RECENT EUROPEAN HISTORY (Spring)	2 Hrs. ERA 2 Hrs. e history of nonarchy, the apoleon. Pre- 2 Hrs. 2 Hrs. 2 Hrs. 2 Hrs. 2 Hrs.
*235. BOURBON FRANCE AND THE REVOLUTIONARY (Fall) *236 BOURBON FRANCE AND THE REVOLUTIONARY (Winter) *237. BOURBON FRANCE AND THE REVOLUTIONARY (Spring) Three courses presenting in detail the Europe during the period of the absolute mancient regime, the revolutionary era and Narequisite: History 131, 132, 133. T. Th., 7. 251. RECENT EUROPEAN HISTORY (Fall) 252. RECENT EUROPEAN HISTORY (Winter) 253. RECENT EUROPEAN HISTORY (Spring) Three courses presenting the background war the War, the Peace and the new	2 Hrs. ERA 2 Hrs. e history of nonarchy, the apoleon. Pre- 2 Hrs. 2 Hrs. 2 Hrs. 2 Hrs. 2 Hrs.
*235. BOURBON FRANCE AND THE REVOLUTIONARY (Fall) *236 BOURBON FRANCE AND THE REVOLUTIONARY (Winter) *237. BOURBON FRANCE AND THE REVOLUTIONARY (Spring) Three courses presenting in detail the Europe during the period of the absolute mancient regime, the revolutionary era and Narequisite: History 131, 132, 133. T. Th., 7. 251. RECENT EUROPEAN HISTORY (Fall) 252. RECENT EUROPEAN HISTORY (Winter) 253. RECENT EUROPEAN HISTORY (Spring)	2 Hrs. ERA 2 Hrs. e history of nonarchy, the apoleon. Pre- 2 Hrs. 2 Hrs. 2 Hrs. 2 Hrs. 2 Hrs.

* Not given in 1934-35.



GROUP OF FRATERNITY HOMES

POLITICAL SCIENCE

101. AMERICAN GOVERNMENT (Fall) 3 Hrs.
102. AMERICAN GOVERNMENT (Winter) 3 Hrs.
103. AMERICAN GOVERNMENT (Spring) 3 Hrs.

A study of the origin, development, structure, and functions of national and state governments in the United States. Sophomore course. M. W. F., 1.

- 104. Introduction to Political Science (Fall) 2 Hrs.
- 105. Introduction to Political Science (Winter) 2 Hrs. 106. Introduction to Political Science (Spring) 2 Hrs.

An approach to the field of political science through the study of current problems both domestic and foreign. Cannot be used to satisfy the requirement of eighteen hours in Social Science. T. Th., 2.

- *204. MUNICIPAL GOVERNMENT (Winter) 3 Hrs.

 A study of the principal problems of Municipal Government in the United States. Prerequisite: Political
- Science 101, 102, 103. M. W. F., 3.

 208. Comparative Government (Fall)

 209. Comparative Government (Winter)

 3 Hrs.

A study of the governments of England, France, Germany, Italy, Switzerland, and Russia. Prerequisite: Political Science 101, 102, 103, or the consent of the instructor.

M. W. F., 3.

*210. AMERICAN POLITICAL PARTIES (Fall) 3 Hrs.

A brief survey of the development of political parties in the United States followed by an investigation of the psychological, sociological, and practical aspects of the phenomena of political parties. Prerequisite: Nine hours of political science or the consent of the instructor. M. W. F., 3.

- 211. POLITICAL SCIENCE PROBLEMS

 Individual investigation in the field of political science.

 Open to qualified seniors majoring in this department.
- *212. AMERICAN POLITICAL THEORIES (Spring) 3 Hrs.

 The development of American political theories from the Colonial period to the present with a view to providing a basis for rational approach to the solution of our present political problems. Prerequisite: Nine hours of political science or the consent of the instructor. M. W. F., 3.
- 230. EUROPEAN POLITICAL THEORIES (Spring) 3 Hrs.

 A survey of the development of political philosophy from the period of Ancient Greece to Modern times. Prerequisite: Political Science 101, 102, 103, or the consent of the instructor. M. W. F., 3.
 * Not given in 1934-35.

PSYCHOLOGY AND SOCIOLOGY

PROFESSOR GRAY

The purpose of this department is to acquaint the student with a study of the traits of human nature and the problems of social organization in order that he may become a better citizen, a more efficient teacher, and be better able to further his interests and studies either in private life or in institutions of learning.

Students who desire to major in this department will find it profitable to take courses in biology and such courses in mathematics as will aid in the use of statistical data. For those desiring to place major emphasis on sociology a good background of history is essential.

PSYCHOLOGY

101. GENERAL PSYCHOLOGY (Fall)

5 Hrs.

A general study of mental processes, aiming to train the student to observe these processes in his own and the experiences of others. Prerequisite: One year of college work. Two sections. Daily, 1 or 7.

102. APPLIED PSYCHOLOGY (Winter)

5 Hrs.

A course dealing with the relationship of modern psychology to the personality and competence of individuals regardless of their activity. Daily, 1.

104. SOCIAL PSYCHOLOGY (Spring)

3 Hrs.

This course treats of the processes of intersocial relations and their resultants by analyzing personal experiences. Prerequisite: Psychology 101. M. W. F., 7.

135. EDUCATIONAL PSYCHOLOGY (Winter) 3 Hrs.

A course designed for students who wish to continue the study of educational psychology; heredity and environment, physical basis of behaviour; intelligence; instincts; emotions, attitudes; learning process; association; memory; transfer of training; mental work and fatigue. Prerequisite: General Psychology 101. M. W. F., 5.

136. ADOLESCENT PSYCHOLOGY (Spring) 3 Hrs.

An intensive study of the problems of growth; systematic psychology and personality of adolescence; applied problems in junior and senior high schools. Formerly course 204. Prerequisite: General Psychology 101, or Educational Psychology 135. M. W. F., 5.

210. ABNORMAL PSYCHOLOGY (Spring)

5 Hrs.

This course is an introduction to the study of problems of mental health, and is designed to meet the needs of students of education and pre-professional courses. Prerequisite: Psychology 101, 102. Daily, 1.

212. PSYCHOLOGICAL PROBLEMS

1-3 Hrs.

Open only to qualified seniors taking a major or minor in psychology.

SOCIOLOGY

151. GENERAL SOCIOLOGY (Fall)

3 Hrs.

152. GENERAL SOCIOLOGY (Winter)

3 Hrs.

A study of the phenomena of human relations including the nature and import of sociology, social evolution, socialization, social ideals and social control. Serious consideration is given the question, "How does human life in general become what it is, what values does it actuary contain, and under what conditions can those values be more completely realized?"

Not open to freshmen. Courses 151 and 152 are pre-

requisite to other courses in sociology. M. W. F., 2.

153. AMERICAN SOCIETY (Spring)

3 Hrs.

Social pathology as it concerns our own society including the study of such problems as child labor, poverty, crime, the family, public health, etc. Prerequisite: Sociology 151 and 152. M. W. F., 2.

*211. CRIMINOLOGY (Spring)

3 Hrs.

A consideration of the problem of crime and criminals. Special attention is given to the factors conductive to the making of criminals, together with a suggested program of treatment and prevention. The work also includes some study of the history of punishment and penal institutions, Prerequisites: Sociology 151 and 152. M. W. F., 8.

212. THE FAMILY (Spring)

3 Hrs.

A discussion course on the history of marriage and the family. A detailed study of the normal family, the conditions which interfere with the normal functioning of the family, and the means of social control. Prerequisites: Sociology 151 and 152 or consent of the instructor. M. W. F., 8.

^{*} Not given in 1934-35.

RELIGION AND PHILOSOPHY

PROFESSOR POTTER

The courses in Biblical Literature seek to serve students interested in work of a religious nature. The sociological, historical and religious interpretations of the Biblical material are stressed in order that a sound point of view may be obtained. The courses are intended to prepare students for graduate work, to enable students to meet more effectively the needs of their home communities, and also to enable them to constantly reconstruct their religious experiences in the light of the high religious and ethical idealism of the prophets and Jesus.

Students preparing for the ministry are urged to work out their majors in the social sciences, especially psychology and sociology, and also to obtain a good background in the natural sciences and philosophy.

BIBLICAL LITERATURE

151. OLD TESTAMENT (Fall)

3 Hrs.

The history of the Hebrew people from early times to the Division of the Hebrew Kingdom. The purpose of the course is to introduce the student to the essential features of the political, social and religious life of this interesting people with special emphasis upon their religious activities. Not open to freshmen. M. W. F., 6.

152. OLD TESTAMENT (Winter)

3 Hrs.

The history of the Hebrew and Jewish people from the Division of the Hebrew Kingdom to the Death of Herod the Great. Not open to freshmen. M. W. F., 6.

153. THE LIFE OF CHRIST (Spring)

3 Hrs.

A study of the life and teaching of Christ together with some consideration of the social and political setting into which he was born and their relation to the success of his message. Not open to freshmen. M. W. F., 6.

231. THE SOCIAL TEACHING OF THE BIBLE (Spring) 3 Hrs.

An inquiry into the development of social ideals in the Old and New Testaments with special emphasis upon the social teachings of the prophets and Jesus. M. W. F.,3.

232. THE LIFE OF PAUL (Fall)

3 Hrs.

A study of the development of the early church and the relation of Paul to this work as revealed in the book of Acts and the Pauline Epistles. M. W. F., 3.

233. LATER NEW TESTAMENT LITERATURE (Winter) 3 Hrs.

This course deals with the book of Revelation, the Johannine Epistles, the fourth Gospel, Hebrews, and the General Epistles. An analysis of their essential teachings is made together with the circumstances which caused their production. M. W. F., 3.

RELIGIOUS EDUCATION

*221. Principles and Methods of Religious Education

(Fall) 3 Hrs.

A study of the fundamental aspects of religious experience. The history and development of the present religious education movement. Special attention is given to the different age levels of the individual. M. W. F., 3.

*222. Curriculum of Religious Education (Winter) 3 Hrs.

A study of the materials now available; those being used; the various series now being published; and the principles which should govern the curriculum. Prerequisite: Religious Education 221. M. W. F., 3.

*223. RELIGION OF CHILDHOOD AND YOUTH (Spring) 3 Hrs.

A psychological study in religion and education. The child's native equipment, his native abilities, the laws of learning, the development of the physical, mental and personal traits, attitudes, interests, and the general character formation are studied. The importance of religion at the different ages and its best adaptation to these ages are analyzed. M. W. F., 3.

PHILOSOPHY

201. Introduction to Philosophy (Fall)

3 Hrs.

A survey of the workings of the mind. A study is made of the characteristics of effective thinking, and the various methods involved. Resourcefulness in thinking, classifications of knowledge and how conclusions are reached are studied. A desirable course to parallel a study of the sciences and philosophy. M. W. F., 1.

^{*} Not given in 1934-35.

202. Logic (Winter)

3 Hrs.

A constructive study of mental processes, the laws of learning, mental fallacies, methods of proof, the proper organization and presentation of ideas, and the limitation and expression of knowledge. M. W. F., 1.

203. ETHICS (Spring)

3 Hrs.

A study of morality and the problems of conduct; their historical development and social and political relationships. Especially designed for teachers and students in professional schools. M. W. F., 1.

205. HISTORY OF PHILOSOPHY (Fall)

3 Hrs.

206. HISTORY OF PHILOSOPHY (Winter)

3 Hrs.

207. HISTORY OF PHILOSOPHY (Spring)

3 Hrs.

These three courses in philosophy trace the movements of philosophical thought up to and including (a) the time of Christ, (b) the close of the nineteenth century, and (c) recent and present philosophy. The courses must be taken in sequence. T. Th. F., 7.

RELIGION

210. HISTORY OF RELIGION (Fall)

3 Hrs.

A study of the origin and development of the primitive and historic religions of mankind. The fundamental religious beliefs and customs and the institutions which have grown up around these beliefs are studied. A knowledge of the general aim and nature of religion is sought. T. Th. F., 5.

211. PSYCHOLOGY OF RELIGION (Winter)

3 Hrs.

This is a study of a special subject based on an elementary course in psychology. Two main topics are treated: (1) The beginning of religion in the individual, involving a study of adolescence and the types of religious experience; and (2) analysis of mature religious consciousness with reference to the nature and place of religious emotion and the character and function of religious ideas and concepts. Prerequisite: Psychology 101. T. Th. F., 5.

212. PHILOSOPHY OF RELIGION (Spring)

3 Hrs.

An analysis of religious knowledge, its validity, and supremacy. The grounds for the Theistic beliefs and their assumptions and evidences are investigated. Special study is made of the Christian religion. Prerequisite: Religion 210. T. Th. F., 5.

Division IV. Teacher Training

PROFESSOR FRANK L. LOY, Director of Teacher Training
PROFESSOR HERSCHEL LITHERLAND, PROFESSOR WALTER GRAY
PROFESSOR WINONA PEARL GEETING

The Teacher Training work at Ohio Northern University, organized within the College of Liberal Arts, is designed to aid its students in forming clear conceptions of the dignity and importance of the teacher's work; to trace in the history of education the origin and development of modern principles of teaching; to present in theory and practice approved and rational methods of instruction; to create and maintain high professional standards among present and prospective teachers; and to offer such courses for the professional training of teachers as will broaden their horizon and advance them to higher planes of usefulness, ability and service.

The Ohio Northern University is accredited by the State Department of Education to train teachers in the regular Elementary and Secondary Fields and to train supervisors and teachers of Health and Physical Education and Public School Music. Those who complete the courses described in the following pages will be granted the state Four-Year Provisional Certificate, and, after twenty-four months of successful teaching experience, the certificate may be made permanent by the State Board of School Examiners of Ohio.

Students who have graduated from the Ada High School must notify the Director of Teacher Training before enrolling in any teacher training course or curriculum.

I. ELEMENTARY EDUCATION

Grades One to Six

Ohio Northern University offers two and four-year curricula for the training of elementary teachers. The two-year curriculum leads to a diploma, and the four-year curriculum leads to the degree, Bachelor of Science in Education. Either curriculum entitles the student to the State Elementary Four-Year Provisional Certificate.

During the freshman year, the student will be required to take diagnostic tests in arithmetic, geography, history and English to determine his knowledge of the content of the subjects. Students failing in any of these tests will be assigned to noncredit courses until their deficiencies are made up.

TWO-YEAR CURRICULUM FOR ELEMENTARY TEACHERS

First Year

FALL QUARTER		WINTER QUARTER	
Physical Education 101 English 101 Zoology 101 Mathematics 101a or	3 3	Physical Education 102 English 102 Zoology 102 or	3 3
Introduction to Political Science 104 Teaching of Reading in	2	Mathematics 102a or Introduction to Political Science 105	3 2
Elementary Grades 117 Public School Music 124	5 2	Teaching of Literature in Elementary Grades 118 Public School Music 125	5 2

SPRING QUARTER

Physical Education 103	1
Zoology 103	3
Introduction to Political	
Science 106	2
or	
Elective	
Teaching Elementary	
Arithmetic 119	3
Health Education 117	3
Geography 155	3
Public School Music 126	1

Second Year

WINTER QUARTER FALL QUARTER 1 Physical Education 105 1 Physical Education 104 Student Teaching and *Student Teaching and Technique of Teaching 170 Technique of Teaching 170 3 English 122 3 English 121 3 History 114 3 History 113 Educational Psychology 112 General Psychology 101 Organization and Administra-Professionalized Course in tion 107 Industrial Arts 140 Professionalized Course in Principles of Education 153a 3 1 Industrial Arts 141 Teaching of Elementary Principles of Teaching 154 3 Geography 156

FALL QUARTER

FALL QUARTER

SPRING QUARTER

Physical Education 106 Student Teaching and Technique of Teaching 170 6 English 122a 3 History 115 3 Child Psychology 152 3 Elective Theory and practice of Plays and Games 156 Professionalized Course in Industrial Arts 142 1 Teaching of Elementary

3

WINTER QUARTER

WINTER QUARTER

History 176

Graduates from the Two-Year Elementary Curriculum may receive the degree, Bachelor of Science in Education, by completing the following courses:

Third Year

Economics 121 or Amer-		Educational Psychology 136	3
ican Government 101	3	Economics 122 or Ameri-	
History 131	3	can Government 102	3
Botany 107	3	History 132	3
Electives	7	Botany 108	3
		Electives	4

SPRING QUARTER

Economics 123 or Ameri-	
can Government 103	3
History 133	3
Botany 109	3
Electives	7

Fourth Year

English	3		
Educational Measurements		English	3
and Statistics 229	3	Electives	13
Electives			

SPRING QUARTER

Student	Teaching	4
Elective	3	12

For sequence of major and minor courses see later pages in this section.

^{*} Student Teaching offered each quarter during senior year. Only six hours required.

FOUR-YEAR CURRICULUM FOR ELEMENTARY TEACHERS

First Year

	FALL QUARTER		WINTER QUARTER	
	Physical Education 101	1	Physical Education 102	1
	English 101	3	English 102	3
	History 104	3	History 105	3
	Zoology 101	3	Zoology 102	3
	Mathematics 101a	3	Mathematics 102a	3
	or		or	
	Introduction to Political		Introduction to Political	
	Science 104	2	Science 105	0
		or 5	Elective 4 or	2
				Đ
		ING QU		
	Physical			
	English 1		3 3	
	History		3	
	Zoology	103	3	
	Health E			
	Introduct	ion to P	olitical	
	Science		2	
	or			
	Electiv	e	2	
	Elective		2 or 4	
	1	Second :	Year	
	FALL QUARTER		WINTER QUARTER	
	Physical Education 104	1	Physical Education 105	1
	English 106 or 121	3	English 107 or 122	3
	History 113	3	History 114	3
í	General Psychology 101	5	Educational Psychology 112	3
	Professionalized Course i	n	Professionalized Course in	2335
	Industrial Arts 140	1	Industrial Arts 141	1
	Elective	4	Organization and	
			Administration 107	3
			Elective	3
	ann	TATO OT		0
		ING QU		
	Physical			
	English 1			
	History 1		3	
	Theory a			
		and Gar		
	Professio			
		rial Arts		
	Geograph	y 155	3	
	Elective			

Third Year

3

Elective

FALL QUARTER		WINTER QUARTER	
Principles of Education 153s	1 3	Literature for Elementary	
Teaching of Reading in		Grades 118	5
Elementary Grades 117	5	Public School Music 125	2
Public School Music 124	2	Economics 122	- 3
Economics 121	3	or	
or		American Government 102	3
American Government 101	3	Teaching Elementary	
Elective	3	Geography 156	3
		Elective	3

SPRING QUARTER

Teaching of Elementary	
Arithmetic 119	3
Public School Music 126	1
Teaching of History 176	3
Economics 123	3
or	
American Government 103	3
Elective	6

Fourth Year

FALL QUARTER

*Student Teaching and Technique of Teaching 170 6 Educational

Measurements 229 3 Principles of Teaching 154 3 Electives 3 or 9

WINTER QUARTER

Student Teaching and
Technique of Teaching 170 6
History of Education 138 3
Electives 7 or 12

SPRING QUARTER

Student Teaching and
Technique of Teaching 170 6
History of Education 139 2
Electives 7 or 13

* Student Teaching offered each quarter during senior year. Only six hours required.

In the four-year curriculum a rich choice of electives is offered. The purpose of this is two-fold: first, to permit choice of subjects closely related and leading to specialization; second, to give an opportunity for broadening education beyond the field of the major and minors.

MAJORS AND MINORS

Electives must be chosen so that when combined with required work they will offer a major consisting of a minimum of 36 quarter hours in one field and a minor consisting of at least 18 quarter hours in another field.

The teacher in the elementary schools is responsible for teaching several subjects. A major and two or more minors is therefore advised.

REQUIREMENTS FOR A DEGREE IN ELEMENTARY EDUCATION

Upon the satisfactory completion of 186 quarter hours, including 6 hours of physical education, the student will be recommended for the degree of Bachelor of Science in Education. The student must have an average scholarship rating of at least one quality point for each scheduled hour.

II. SECONDARY EDUCATION

REQUIREMENTS FOR THE BACHELOR OF SCIENCE IN EDUCATION
DEGREE

(Requirements for the Bachelor of Arts degree will be found in earlier pages of this bulletin.)

A. PRESCRIBED COURSES

1. English 9 Hrs.

English Composition 101, 102, 102a.

Biological Science
 Hrs.

A biological science shall mean Zoology 101, 102, 103 or Botany 107, 108, 109.

3. Social Science 9 Hrs.

The completion of any one of the following courses will meet the social science requirement: History 104, 105, 106; History 113, 114, 115; Political Science 101, 102, 103.

4. Physical Education 6 Hrs.

Physical education is required in addition to the one hundred eighty quarter hours required for graduation.

Constants for Freshman year in all four-year curricula leading to the Bachelor of Science in Education degree follow:

FALL QUARTER		WINTER QUARTER	
Physical Education	1	Physical Education	1
English 101	3	English 102	3
Biological Science	3	Biological Science	3
Social Science	3	Social Science	3

SPRING QUARTER

Physical Education	1
English 102a	3
Biological Science	3
Social Science	3

B. PROFESSIONAL REQUIREMENTS

1. GENERAL PSYCHOLOGY

5 Hrs.

Required as prerequisite to the professional courses in Education.

2. EDUCATIONAL PSYCHOLOGY

3 or 6 Hrs.

Psychology 135, 136.

 PRINCIPLES OF EDUCATION Principles 207, 208. 3 or 6 Hrs.

4. SCHOOL ADMINISTRATION
Administration 252.

3 Hrs.

- 5. SPECIAL METHODS OR PROFESSIONALIZED SUBJECT
 MATTER COURSES IN TEACHING MAJOR 3 to 5 Hrs.
 Education 250.
- 6. STUDENT TEACHING, INCLUDING TECHNIQUE OF TEACHING. Education 270.

6 Hrs.

 ELECTIVES. The following courses are offered as electives in Education: Education 136, or 137, 138, 139, 229.

The above courses meet the professional requirements of the Ohio Department of Education-

The minimum professional requirements are 30 quarter hours.

The professional requirements of the various states may be secured from the Director of the Division of Teacher Training.

In order to secure the proper correlation with academic courses the student is expected to distribute the work in education over several quarters. The following sequence is very desirable:

Second Year: General Psychology 101, Educational Psychology 135 or 136.

Third Year: Principles of Education 207, 208; Special Methods and Observation.

Fourth Year: Administration 252; Special Methods (if not completed), and Student Teaching.

C. MAJOR AND MINOR SUBJECTS

All candidates for the degree of Bachelor of Science in Education or Bachelor of Arts, who expect to teach must have a teaching major of 36 quarter hours and two minors of 18 quarter hours each. Students should confer with their advisers before electing their major and minor subjects.

LIST OF MAJORS AND MINORS

Prerequisit	
High School	Units
English, public speaking, composition, literature	3
History, political science, constitution	2
Sociology, economics	1
Biology, physiology, botany, zoology, agriculture	1
Physics, chemistry	2
Geography, geology, physiography	1
Home economics, related subjects	1
Commerce, related subjects	2
Mathematics, astronomy, surveying	2
Each modern language	2
Latin	4
Physical education, hygiene, health games, coaching,	
swimming	0
Music, voice, instrumental, composition, harmony,	
counterpoint	0
Manual arts, related subjects	1
Art	0
	U

Students should take the courses in their major and minor subjects in the order given below. Failure to follow the major and minor sequences may result in loss of credit.

ENGLISH

Major

First Year—English 101, 102, 102a. Second Year—English 121, 122, 122a, or Speech. Third Year—English 217, 218, 219, 205, 225; 250. Fourth Year—English 211, 215, 216, or 204, 224.

Minor

First Year—English 101, 102, 102a. Second Year—121, 122, or Speech 110, 111. Third Year—English 210, 211. Fourth Year—English 216. Note: Entrance requirement 3 or 4 units.

FRENCH

Major

First Year-French 104a, 105a, 106a. Second Year-French 206a, 207a, 208a. Third Year-French 223a, 224a, 225a; 250. Fourth Year-French 224a, 225a, 226a.

Minor

First Year-French 104a, 105a, 106a. Second Year-French 206a, 207a, 208a. Third Year-French 224a, 225a, 226a; 250. Note: Entrance requirement 2 units.

LATIN

Minor

First Year-Latin 110, 111, 112. Second Year-Latin 115, 116, 117. Third Year-Latin 120, 121, 122, 250. Note: Entrance requirement 4 units.

HISTORY

Major

First Year-History 104, 105, 106. Second Year-History 113, 114, 115 or 131, 132, 133. Third Year-History 216, 217, 218 or 235, 236, 237, 250. Fourth Year-History 224, 225, 226 or 251, 252, 253.

Minor

First Year-History 104, 105, 106. Second Year-History 113, 114, 115 or 131, 132, 133. Third Year-History 216, 217, 218. Note: Entrance requirement 2 units.

HISTORY-POLITICAL SCIENCE

Major

First Year-History 104, 105, 106; Political Science 104, 105. 106.

Second Year-Political Science 101, 102, 103 or History 113, 114, 115. Third Year—Political Science 208, 209, 210; 250.

Fourth Year-Political Science 212 and History 216, 217, 218, or 251.

Entrance requirement 2 units. Note:

Combined major 50 hours, 30 hours of which must be Note: History.

ECONOMICS - SOCIOLOGY

Minor

Second Year-Economics 121, 122, 123 or Sociology 151, 152, 153. Third Year-Economics 131, 132, 133 or 204, 207, 208; 250. Fourth Year-Economics 214, 215, 217 or Philosophy 201, 202, 203; 205, 206, 207.

Note: Entrance requirement, 2 units. Note: Combined major 50 hours, 30 hours of which must be Economics.

MATHEMATICS

Major

First Year-Mathematics 101, 103, 105; 112. Second Year-Mathematics 107, 108, 109. Third Year-Mathematics 106, 111, 212. Fourth Year-Mathematics 215, 216, 217.

Minor

First Year-Mathematics 101, 103, Second Year-Mathematics 105, 112. Third Year-Mathematics 107, 108, 109, Note: Entrance requirement 21/4 units.

PHYSICS

Major

First Year-Physics 104, 105, 106. Second Year-Physics 213, 214, 220. Third or Fourth Year-Physics 216, 217, 218 (6 to 18 hours). 250.

Minor

First Year-Physics 109, 110, 111. Third Year-Physics 213, 214, 220,

Note: Entrance requirement, mathematics 21/6 units and physics 1 unit.

CHEMISTRY

Major

First Year-101, 102, 103. Second Year-Chemistry 104, 105, 106. Third Year - Chemistry 206, 207, 208; 250. Fourth Year-Chemistry 215, 216, 217.

Minor

First Year—Chemistry 101, 102, 103. Second Year—Chemistry 104, 105. Third Year—Chemistry 206, 207.

Note: Entrance requirement, 2 units, (physics and chemistry.)

CHEMISTRY - PHYSICS

Major

First Year—Chemistry 101, 102, 103. Second Year—Physics 109, 110, 111. Third Year—Chemistry 206, 207, 208; 250. Fourth Year—Chemistry 211a, 211b, 212 and Physics 220.

Note: Entrance requirement, mathematics 2 units, physics 1 unit. It is recommended that students electing this major take mathematics during the Freshman year.

Note: Combined major 50 hours, 30 of which must be Chemistry.

BIOLOGY

Major

First Year—Biology 107, 108, 109, or 101, 102, 103. Second Year—Biology 101, 102, 103 or 107, 108, 109, 110. Third Year—Biology 106, 113, 218 or 222, 224, 230; 250. Fourth Year—Biology 219, 220, 235.

Minor

First Year—Biology 107, 108, 109. Second Year—Biology 101, 102, 103. Third Year—Biology 110, 230. Fourth Year—Biology 219, 235.

Note: Entrance requirement, 1 unit of biological science.

PHYSICAL EDUCATION

Major

Note: See the four-year curricula for the training of physical Education teachers and supervisors.

Minor

First Year—Physical Education 115, 116. Second Year—Physical Education 151, 152, 156. Third Year—Physical Education 201, 202, 203, and 221 or 222 or 223.

Fourth Year-Physical Education 252, 258.

HEALTH AND PHYSICAL EDUCATION

The purpose of this curriculum is the preparation of teachers and supervisors of physical education, athletic coaches, and recreation directors. Students majoring or minoring in physical education must have their schedules approved by their adviser in the Department of Health and Physical Education. Students completing the following curriculum will be granted the degree of Bachelor of Science in Education with a major in Health and Physical Education.

The department recommends that all majors in physical education secure minors in some of the sciences, such as mathematics, physics or chemistry.

This curriculum is fully approved and accredited by the Ohio Department of Education, and students who complete it in a satisfactory manner are eligible to receive the State High School Provisional Certificate for the teaching and supervision of physical education.

CURRICULUM FOR STUDENTS MAJORING IN HEALTH AND PHYSICAL EDUCATION

First Year

FALL QUARTER		WINTER QUARTER	
Physical Education 101a	1	Physical Education 102a	1
Biology 101	3	Biology 102	3
English 101	3	English 102	3
Hygiene 115	2	Mathematics,	
Mathematics,		Foreign Language, or	
Foreign Language, or		Social Science	9
Social Science	7		
SPRI	NG Q	UARTER	
Physical 1	Educa	tion 103a 1	

SPRING QUARTER	
Physical Education 103a	-1
Biology 103	3
English 102a	3
Theory and Practice of	
Plays and Games 156	3
Mathematics,	
Foreign Language, or	
Social Science	6

Second Year

FALL QUARTER		WINTER QUARTER
Physical Education 104a Comparative Anatomy 106	1 5	Physical Education 105a 1 Anatomy and Physiology 113 5
Health Education 117	3	Health Education 152 3
General Psychology 101 Electives	5	Educational Psychology 135 3 Electives 4

SPRING QUARTER

Physical Education 106a	1
Heredity or Evolution	3
Health Education 151	-3
Adolescent Psychology 136	3
Electives	6

Third Year

FALL QUARTER		WINTER QUARTER	
Principles and Methods of Physical Education 201	4	Principles and Methods of Physical Education 202	4
Football Coaching 221 or	3	Basketball Coaching 222 or Coaching (Women) 222	3
Principles of Education 207		Educational Methods 250	3
Sociology 151	3	Sociology 152	3
Electives	3	Electives	3

SPRING QUARTER

Methods of Physical	
Education 203	4
Baseball and Track Coach	ing
223 or Coaching (Wome	
223	3
Sociology 153	3
Electives	6

Fourth Year

FALL QUARTER		WINTER QUARTER	
Organ, and Admin, of		Individual Gymnastics 255	2
Phys. Education 254	2	Normal Diagnosis 252	2
Advanced Coaching 271	1	Advanced Coaching 272	1
Student Teaching 263a	2	Student Teaching 263b	2
Educational		History of Education 133	3
Measurements 229	3	Electives	6
Electives	8		

SPRING QUARTER

First Aid and Athletic	
Training 258	2
History of Phys. Ed. 260	2
High School	
Administration 252	3
Advanced Coaching 273	1
Student Teaching 263c	2
Electives	6

Twenty-seven hours of credit in educational subjects are required of all teachers in secondary education.

Students offering less than one unit of chemistry for entrance must schedule Chemistry 101a, 102a, and 103a, not later than the sophomore year.

It is recommended that students majoring in Health and Physical Education complete a minor in some field such as physical or biological science.

PUBLIC SCHOOL MUSIC

This course is designed for students who wish to prepare themselves for the teaching and supervision of music in public schools. Applicants for admission are expected to possess a reasonable amount of musical intelligence. Students completing this course receive the degree of Bachelor of Science in Education and the Four-Year Provisional Certificate from the State Department of Education-

CURRICULUM FOR TEACHERS AND SUPERVISORS OF PUBLIC SCHOOL MUSIC

First Year

	WINTER QUARTER	
1		1
3	English 102	3
	Sight Singing and Ear	
3	Training 102	3
3	Harmony 112	3
3	Applied Music	3
3	Liberal Arts Elective	3
	3 3 3	Sight Singing and Ear Sight Singing and Ear Training 102 Harmony 112 Applied Music

SPRING QUARTER

The state of the s	
Physical Education 103	1
English 102a	3
Sight Singing and	
Ear Training 103	3
Harmony 113	3
Applied Music	3
Liberal Arts Elective	3

Second Year

FALL QUARTER		WINTER QUARTER
Physical Education 104	1	Physical Education 105 1
General Psychology 101	5	Educational Psychology 135 3
Sight Singing and		Sight Singing and
Ear Training 104	2	Ear Training 105 2
History and Appreciation 153	3	History and Appreciation 1543
Harmony 114	3	Harmony 115 3
Conducting 140	2	Conducting 141 2
Applied Music	1	Applied Music 2

SPRING QUARTER

Physical Education 106	1
Adolescent Psychology 136	3
Sight Singing and	
Ear Training 106	2
History and Appreciation 155	3
Conducting 142	2
Applied Music	2
Form and Analysis 211	3

Third Year

FALL QUARTER		WINTER QUARTER	
Primary Methods 202	4	Student Teaching 213	3
Public Speaking 101	3	Public Speaking 102	3
Orchestral Instruments 220	2	Orchestral Instruments 221	2
Principles of Education 207	3	Applied Music	2
Form and Analysis 212	2	Elective	6
Applied Music	2		

SPRING QUARTER

Intermediate Methods 203	4
Orchestral Instruments 222	2
Applied Music	
Child Psychology 152	3
Elective	3

Fourth Year

FALL QUARTER		WINTER QUARTER	
Student Teaching 214 Educational Methods 250	3	Junior and Senior High School Methods 204	4
Applied Music	3	School Orchestration 251	3
Elective	0	Applied Music Elective	6
SPRI	NG QU	ARTER	
Student T	eaching	215 3	

Student Teaching 215 3 High School Administration 252 3 Advanced Orchestration 252 3 Applied Music 3 Elective 3

DESCRIPTION OF PROFESSIONAL COURSES IN EDUCATION

EDUCATIONAL PSYCHOLOGY

112. EDUCATIONAL PSYCHOLOGY, INTRODUCTORY

(Winter) 3 Hrs.

Introductory courses for students of education. A study of the basic facts and principles of psychology which have a bearing upon educational problems. T. W. F., 6.

135. EDUCATIONAL PSYCHOLOGY (Winter) 3 Hrs.

A course designed for students who desire to continue the study of educational psychology; heredity and environment; physical basis of behavior; intelligence, instincts, emotions, attitudes; learning process; association, memory; transfer of training; mental work and fatigue. M. W. F., 5.

152. CHILD PSYCHOLOGY (Spring)

3 Hrs.

3 Hrs.

Source and characteristics of original nature; social and non-social instincts; attention, sense perception, imagination, thinking habit, play, moral development, physical development; exceptional children. M. W. F., 4.

PRINCIPLES AND HISTORY OF EDUCATION

152. PRINCIPLES OF ELEMENTARY EDUCATION (Fall) 3 Hrs.

This course will analyze modern educational procedures to discover the principles involved. Consideration will be given to the theories and their realization in current educational practice of such leaders as Comenius, Pestalozzi, Froebel, Dewey, Kilpatrick, and others. Prerequisite: Psychology 112. M. W. F., 7.

154. PRINCIPLES OF TEACHING IN THE ELEMENTARY

Grades (Fall)

Consideration will be given to the various types of lessons and the most approved methods of teaching in the elementary schools; an evaluation of the present-day curriculum in furthering the child's growth; power and appreciation; needed changes in the organization and administration of the elementary school. Prerequisite: Principles of Education 153a. M. W. F., 5.

153a. PRINCIPLES OF EDUCATION -

KINDERGARTEN-PRIMARY THEORY (Fall) 3 Hrs.

Survey of the psychology of the kindergarten-primary child; new types of school organization based on children's needs as interpreted by psychology; principles of education applied; modern methods based on children's experiences including the game, the story, the project, constructive and artistic training; concluding with the organizing of a philosophy for the teaching of kindergarten-primary children. M. W. F., 6.

207. PRINCIPLES OF SECONDARY EDUCATION (Fall) 3 Hrs.

The object of this course is to give a fundamental conception of the secondary school; the function of the school in meeting the needs of adolescent years; a study of the educative process and the contributions of modern educational philosophers to educational theory and practice; and observations in training school. Prerequisite: Psychology 136. M. W. F., 2.

136. Adolescent Psychology (Spring)

3 Hrs.

An intensive study of the problem of growth, reaction, systematic psychology and personality of adolescence; applied problems in junior and senior high schools. Prerequisite: Phychology 101 or 135. M. W. F., 5.

208. PRINCIPLES OF TEACHING (SECONDARY) (Winter) 3 Hrs.

This course deals with the different types of teaching in secondary schools; the selection and arrangement of subject matter; economy in class room management; the conduct of the recitation under various plans; the disciplinary problem; the use of text books; the most approved methods of teaching in high school; and observations in training school. Prerequisite: Principles of Education 207. M. W. F., 2.

138. HISTORY OF EDUCATION (Winter)

3 Hrs.

A survey of ancient, mediaeval, and modern education with the object of acquiring a better understanding of modern educational problems. M. W. F., 7.

139. HISTORY OF EDUCATION IN THE UNITED STATES

(Spring) 2 Hrs.

This course traces the development of public education in the United States. T. Th., 3.

SCHOOL ADMINISTRATION AND ORGANIZATION

107. ORGANIZATION AND ADMINISTRATION OF ELEMENTARY SCHOOLS (Winter)

3 Hrs.

A study and discussion of the organization and control of elementary schools, relation of the elementary schools to higher schools, economy of time and effort, the larger problems of the elementary schools as a preparation of the student for service in the elementary field. Attention will be given to Ohio school laws relating to elementary schools and elementary teachers. M. W. F., 3.

252. HIGH SCHOOL ADMINISTRATION (Spring) 3 Hrs.

Problems of major importance; the high school principal and his duties; the staff; the curriculum; program building; extra-curricular activities; problems of management; systems of grading; records and reports are considered; and observations in training school. Prerequisite: Education 207 or 208. M. W. F., 3.

229. EDUCATIONAL MEASUREMENTS (Fall) 3 Hrs.

Standardized tests as a means of classifying and promoting pupils; use of standard tests in improving instruction; elementary principles of statistical methods in education; and observations in training school. Required of all persons registered for student teaching during any quarter of school year. Prerequisite: Education 207 or 208. M. W. F., 3; T. Th. F., 5.

PROFESSIONALIZED SUBJECT MATTER COURSES

105. Interpretative Reading and Speech Improvement

(Fall) 2 Hrs.

Use of carefully chosen prose and poetry selections suitable to be read to primary pupils. Suggestions for interpretation are given. A study of the correct moulding of English sounds and suggestions for the correction of such speech errors as stammering, stuttering, lisping, nasal twang, dialect, localisms, etc. The course is designed for primary teachers. T. Th., 1. Mr. Deming.

106. Interpretative Reading and Speech Improvement

(Fall) 2 Hrs.

A course similar to Speech 105, but designed for teachers of the intermediate grades. T. Th., 8. Mr. Deming.

117. TEACHING OF READING IN ELEMENTARY GRADES

(Fall) 5 Hrs.

Arousing right attitudes; a study of children's readiness for reading; discovering special reading interests; materials and methods best adapted to teach children how to read and to increase interest in reading; history of the development of the subject; a thorough study of two systems of teaching reading; comparison and contrast with at least six other present day systems of teaching reading; reference reading; observation and class discussions; supervised practice in teaching reading to the class; treatment of remedial cases; comparison of courses of study; evaluation of textbooks.

Brief history of the English language; principles of selecting material for teaching language; preparation of materials for teaching; relation of language and spelling to other subjects in the curriculum; methods of procedure most helpful in securing growth in oral and written ex-

pression. Daily, 5.

118. TEACHING OF LITERATURE IN ELEMENTARY GRADES

(Winter) 5 Hrs.

Principles of selecting materials for the teaching of literature; preparation of these materials for teaching; comparison of curricula in progressive schools; creative work; observation and class discussion; supervised practice in teaching literature, in elementary grades, to class. Daily, 5

119. TEACHING ELEMENTARY ARITHMETIC (Spring) 3 Hrs.

Modern methods of teaching arithmetic to elementary children; psychology of the teaching of arithmetic; diagnostic and remedial work; literature of the subject; comparison of courses of study; evaluating of text books; observation and class discussion; supervised practice in teaching to class. M. W. F., 5.

Geography for Elementary Teachers (Fall) 4 Hrs.

Weather observations; geographical controls; continent study of North America, South America, and Europe; relationship between man and his environment; industry as the key to a region; a brief history of the growth of geography. M. T. W. Th., 4.

156. TEACHING GEOGRAPHY IN ELEMENTARY GRADES

(Winter) 3 Hrs.

Modern methods of teaching geography in the elementary grades; principles of selecting materials for teaching geography; preparation of this material for teaching purposes; experimental studies made in the teaching of geography; writing lesson plans; activities suitable for children to gain an understanding of geographical principles; comparison of courses of study; evaluation of textbooks. M. W. F., 6.

176. HISTORY FOR ELEMENTARY TEACHERS (Spring) 3 Hrs

Principles of selecting material for teaching history in each of the six elementary grades; preparation of this teaching material; comparison of courses of study; study of modern methods of teaching history; a study of the application of these methods with groups of children, through observation; the use and value of aids of all kinds; library references; tests and remedial work; evaluation of textbooks. T. Th. F., 4.

117. HEALTH EDUCATION (Spring)

3 Hrs.

This course deals with the health program of the public schools, and the teaching of habits, attitudes and knowledge conducive to good health. M. W. F., 5.

156. THEORY AND PRACTICE OF PLAYS AND GAMES

(Spring) 3 Hrs.

The need, purpose and function of play in education are studied. This includes a consideration of the social, educational and biological aspects of play and recreation. Activities adaptable to various age levels of the elementary and secondary schools are learned. Two hours of theory and two hours of laboratory per week. M. T. W. Th., 6.

140. PUBLIC SCHOOL DRAWING AND INDUSTRIAL ARTS

(Fall) 1 Hr.

This course includes a brief survey of the history of the fine arts, a history of industrial arts, the relation of fine arts to industrial arts, a recognition of and appreciation for better pictures. Home industries are used as a means of personal contact, and to develop an understanding and an appreciation of the subject. M. W., 5.

141. Public School Drawing and Industrial Arts

(Winter) 1 Hr.

The psychology of the teaching of art, the principles of education applied to the teaching of art; the relation of industrial arts to nature study, reading, literature, arithmetic, geography, and history. M. W., 5.

142. PUBLIC SCHOOL DRAWING AND INDUSTRIAL ARTS

(Spring) 1 Hr.

Selection of the materials to be used in the teaching of drawing and industrial arts, organizing their material for teaching purposes, study of textbooks in art, study of courses of study and concluding with the making of a course of study for the elementary grades. M. W., 5.

124. Public School Music (Fall)

2 Hrs.

This course begins with the presentation of notation and develops independent sight-reading ability through the use of Public School Music materials presented according to the class methods employed in public schools. M. W. F., 4 and M., 6.

125. Public School Music (Winter)

2 Hrs.

A study of the use of the child's voice in singing, including the treatment of defective singers; methods of selecting and presenting rote songs and sight-reading material for grades 1, 2, 3, and 4. Some acquaintance with methods of rhythmic development and materials for the listening lesson. Observation is required. Prerequisite: Public School Music 124. M. W. F., 4, and M., 6.

126. Public School Music (Spring)

1 Hr.

A study of the child's singing voice in grades 5 and 6; selection and presentation of rote, listening and sight-reading material for these grades. Observation is required. Prerequisite: Public School Music 126, M. W., 4.

SPECIAL METHODS IN HIGH SCHOOL SUBJECTS

These courses are professionalized subject-matter courses and deal with subject-matter that is necessary for the successful teaching of high school subjects. They also cover the selection of materials, methods of instruction, and the organization of the work in each subject under consideration. Observation in training school is required. Prerequisite: Education 207 or 208. Credit 3 to 5 hours. Fall, Winter, Spring.

- 250. TEACHING ENGLISH
- 250. TEACHING HISTORY AND SOCIAL SCIENCES
- 250. TEACHING MATHEMATICS
- 250. TEACHING LATIN
- 250. TEACHING MODERN LANGUAGES
- 250. TEACHING BIOLOGY
- 250. TEACHING PHYSICS AND CHEMISTRY

Note: These courses in special methods do not count toward the academic major.

OBSERVATION AND PARTICIPATION

The work in observation and participation is integrated with the courses in Educational Theory and Student Teaching.

STUDENT TEACHING

Student Teaching will be required of all candidates for the degree, Bachelor of Science in Education or Bachelor of Arts, who expect to teach, and of all candidates for the diploma in elementary education. The Training School is the center around which all courses are organized.

PREREQUISITES

- Students preparing for teaching in the elementary field, may do student teaching in the sophomore year, or in later years of their college course. High school student teaching may be done in the senior year.
- 2. The student is required to have a general scholarship rating of one and one-fourth (1%) quality points per hour. This means that a student must have a rank of C plus before student teaching can be done in any training school.
- 3. A student who wishes to do student teaching in the elementary field, must be able to make a score of 80 on the Ayers Scale for Handwriting.
- 4. Those wishing to do student teaching in the elementary schools must have completed the following academic and professional courses as outlined in the curricula for the preparation of Elementary teachers: English, 6 hours; social science, 6 hours; Educational Psychology, 3 hours; Principles of Education, 3 hours; and at least 12 quarter hours of professionalized subject matter or method courses in the elementary school subjects, 5 quarter hours of which must be in reading.
- 5. A senior who wishes to do student teaching in the high school, must have completed 24 hours of work including special methods in his major subject, or not less than 18 hours in a minor subject. It is highly recommended that student teaching

be done in a major subject in which the student's scholarship ranks highest. A rating of less than C plus or B should be looked upon as disqualifying one for student teaching.

6. The student must have the recommendation of both his major and minor professors and the Director of Teacher Training. Continuance in student teaching depends upon the attitude, preparation, and progress of the student teacher.

170. STUDENT TEACHING-GRADES 1, 2, 3

(Fall, Winter, or Spring) 6 Hrs.

A course for students specializing in the primary grades. Students are required to write a syllabus of the work to be covered; prepare lesson plans and teach them in the Training School; hold conferences with critic teacher; and spend two hours per week on the campus in studying the technique of teaching.

171. STUDENT TEACHING-GRADES 4, 5, 6

(Fall, Winter, or Spring) 6 Hrs.

This is a course for students specializing in the teaching of the intermediate grades. A syllabus and bibliographies for both children's and teachers' use will be worked out by the practice teacher along with the teaching units used in the class-room. The technique of teaching will be discussed in general conferences two hours per week.

270. STUDENT TEACHING—JUNIOR AND SENIOR HIGH SCHOOL (Fall, Winter, or Spring) 6 Hrs.

Students will prepare a syllabus of work to be covered; write lesson plans; prepare a bibliography of teaching helps; study the technique of teaching two hours per week; and attend conferences.

263. STUDENT TEACHING—PHYSICAL EDUCATION STUDENTS (Fall, Winter, or Spring) 6 Hrs

Students taking the four-year course for the training of physical education supervisors and teachers will be required to prepare a syllabus of work to be covered, write lesson plans, hold conferences with the professor in charge in the department, and teach in the University, Junior and Senior High School, and Elementary School.

215. STUDENT TEACHING-MUSIC

(Fall, Winter, or Spring)

For description of course see Department of Music.

COLLEGE OF ENGINEERING

JOHN ALFRED NEEDY
Dean

HISTORY

The first catalogue of the University included a course in surveying. In 1880, a department of Civil Engineering was organized. Later, departments in Mechanical and Electrical Engineering were established. In 1906, the Department of Chemical Engineering was inaugurated. Since then all the courses of the various curricula have been revised and greatly strengthened.

PURPOSE

Engineering has been defined as "the art and science of directing the great sources of power in nature for the use and convenience of mankind." As a rule engineering appeals to the student who is especially interested in science and mathematics. With this in mind, the aim of the College of Engineering of Ohio Northern University is to give ambitious young men of ability an opportunity to secure a thorough training in this field of education.

TIME TO ENTER

Those desiring to enter at the beginning of any quarter other than the Fall quarter are advised to correspond with the Dean of the College relative to the advisability of admission at that particular time.

ADMISSION

Candidates of good moral character may apply for admission upon the following plans:

 Certificate. Graduates from first grade high schools or accredited academies whose credits show proper distribution of units are admitted without examination on presentation of properly signed entrance certificates. Distribution of fifteen units must be as follows:

English			3
Mathematics, i	neluding solid	geometry	3
Physics			1
Electives			6
Two units to	be chosen from	the following	list:
Chemist			

Chemistry

Language History Applicants deficient in advanced algebra, solid geometry, or physics are required to make up deficiencies.

- Examination. Candidates who are not graduates of first grade high schools or academies and are therefore deficient in some of the units for admission may be admitted upon examination.
- 3. Advanced Standing. An applicant from another college seeking advanced standing must present evidence of honorable dismissal and an official transcript of his college record. Some credit may be allowed for practical experience in drafting, surveying, and shop work. Applicants for such credit must submit a satisfactory statement from their employer, giving time of service, nature of work, name and address of employer.

Advance credit will not be given for more than 162 quarter hours (108 semester hours).

4. Special Student. Mature persons not candidates for a degree may be admitted, if on consultation the Dean is satisfied that they have sufficient preparation to pursue the work successfully. Such applicants are classified as Special Students. Upon completion of their work, a certificate showing the course of study pursued and the amount of work covered is presented to them.

The standard load in the College of Engineering is 18 hours, no student being permitted to carry less than 15 hours. Extra hours based upon scholarship attainments may be granted by the Dean.

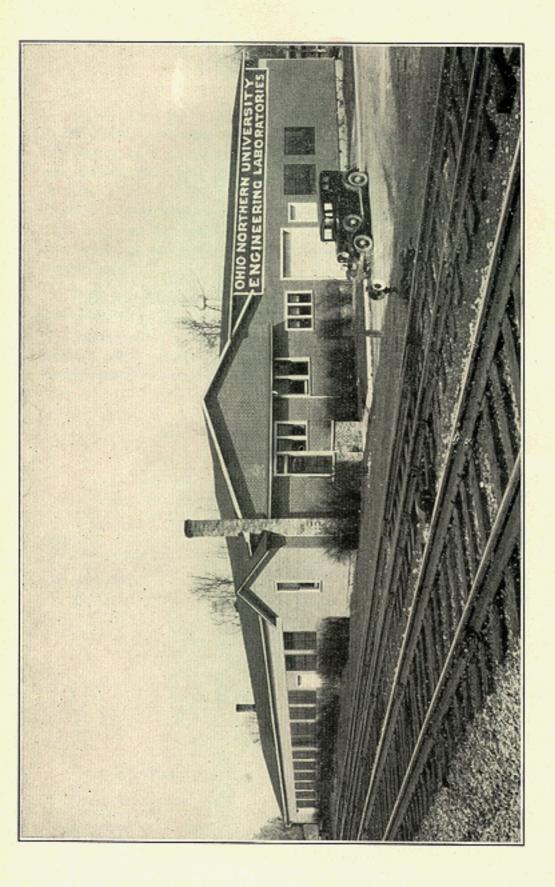
GRADUATION AND DEGREES

Two hundred and sixteen (216) credit hours are required for graduation. The student must have a scholarship rating of at least one quality point for each credit hour. A student cannot be a candidate for more than one degree at any one time. Final credits toward graduation must be earned in residence.

The University is empowered to grant the customary scholastic degrees, which in the College of Engineering are Bachelor of Science in Civil Engineering, (B. S. in C. E.); Bachelor of Science in Mechanical Engineering, (B. S. in M. E.); Bachelor of Science in Electrical Engineering, (B. S. in E. E.; and Bachelor of Science in Chemical Engineering, (B. S. in Chem. E.). Three years after graduation, upon the presentation of evidence of a creditable record, an approved thesis and a comprehensive examination, the professional degree may be conferred.

SENIOR HONORS

Two kinds of senior honors are recognized and conferred at graduation: honors (with distinction) granted to those who have a quality point average of 2.3 with no grade below D; and honors (with high distinction) granted to those who have a quality point average of 2.6 with no grade below C. These honors in scholarship are recorded on the diplomas, recognition is given at commencement, and the names of the recipients are printed in the catalogue. To receive senior honors a student must be in residence at Ohio Northern at least six quarters.



CIVIL ENGINEERING

In the broader sense civil engineering includes all divisions of the field. Although many of the former divisions have grown into separate departments, civil engineering offers greater opportunities than ever before. No sharp line of distinction can be drawn in the fundamental training of civil, mechanical, electrical, and chemical engineering, for the reason that the basic engineering sciences — mathematics, physics, chemistry, and some applied science — are essential in all departments of engineering.

The department is supplied with high grade instruments and appliances necessary for first class instruction and practice. The laboratories are well equipped, the drafting room large and modern, the scientific library excellent. A fully equipped senior design room has recently been completed.

CIVIL ENGINEERING CURRICULUM

First Year

FALL QUARTER		WINTER QUARTER	
Physical Education 101 College Algebra 101 Engineering Drawing I Chemistry 101a or 101 English 101	1 5 4 5 3	Physical Education 102 Engineering Problems Trigonometry 103 Chemistry 102a or 102 English 102	5
SPRI	NG QU	ARTER	
Physical I Analytical Engineeri Qualitativ or 103 English 1	ng Dra e Analy	etry 105 5 wing II 4	
~			

Second Year

FALL QUARTER		WINTER QUARTER	
Physical Education 104 Economics 121 Differential Calculus 107 Physics 104 Surveying I	1 3 4 5 5	Physical Education 105 Economics 122 Differential and Integral Calculus 108 Physics 106 Engineering Drawing III	1 3 4 5 5

SPRING QUARTER

Physical Education 106	1
Economics 123	3
Integral Calculus 109	4
Physics 105	5
Surveying II	5

Third Year

FALL QUARTER		WINTER QUARTER	
Advanced Mechanics 213 Railroad Engineering I Highway Engineering Practical Astronomy 111a	5 5 3 5	Mechanics of Materials I Hydraulics Mechanism Geology	5 5 5 3

SPRING QUARTER

Mechanics of Materials II	5
Testing of Materials	2
Elementary Electric	135
Machines	5
Elective	6

Fourth Year

FALL QUARTER		WINTER QUARTER	
Structural Engineering I	6	Structural Engineering II	6 4 5 3
Reinforced Concrete I	4	Reinforced 'Concrete II	
* Financial Engineering	3	Water Supply	
*Sewerage	5	Foundations	

SPRING QUARTER

Structural Engineering III	6
Reinforced Concrete III	4
Hydraulic Machinery	5
Contracts and Specifications	3

Total number of hours required for graduation 216. Attendance at special engineering lectures is required. Attendance on Inspection Trip is required during third year.

^{*} Not given in 1934-1935.

ELECTRICAL ENGINEERING

The courses offered in this branch of engineering require a thorough study of theoretical and applied electricity. The first half of the course of study consists of basic engineering subjects. In the second half an intensive study is made of direct current circuits and machinery, alternating current circuits and machinery, electrical power transmission, electrical machine design, electronics, and high-frequency currents. Carefully chosen laboratory experiments supplement class instruction in theory.

The University power plant supplies both direct and alternating currents for laboratory test purposes. The laboratory equipment includes direct current motor-generator sets, compound and series direct current motors, rotary converters, squirrel-cage and wound-rotor induction motors, transformers, vacuum tube oscillators, capacity bridges, teletypewriters, an artificial communication line, an oscillograph, and all the necessary auxiliary equipment and instruments for thorough laboratory instruction.

ELECTRICAL ENGINEERING CURRICULUM

First Year

FALL QUARTER		WINTER QUARTER	
Physical Education 101	1	Physical Education 102	1
College Algebra 101	5	Engineering Problems	4
Engineering Drawing I	4	Trigonometry 103	5
Chemistry 101a or 101	5	Chemistry 102a or 102	- 5
English 101	3	English 102	3

SPRING QUARTER

Physical Education 103	1
Analytical Geometry 105	5
Engineering Drawing II	4
Qualitative Analysis	
103a or 103	5
English 102a	3

Second Year

FALL QUARTER		WINTER QUARTER	
Physical Education 104 Differential Calculus 107	1 4	Physical Education 105 Differential and Integral	1
Physics 104	5	Calculus 108	4
Surveying	5	Physics 106	5
Economics 121	3	Engineering Drawing III Economics 122	5

SPRING QUARTER

Physical Education 106	1
Integral Calculus 109	4
Physics 105	5
Elementary Electric	
Machines	5
Economics 123	3

Third Year

FALL QUARTER		WINTER QUARTER
Advanced Mechanics 213 5 *Alternating Current Circuits 5	Stea	hanics of Materials I 5 m Power Plants I 4 ernating Current
Elective or Mathematics 216 3 Shop Projects I 1 Thermodynamics	Elec	achines 5 ctive or Mathematics 212 3 p Projects II 1

SPRING QUARTER

Mechanics of Materials II	5
Steam Power Plants II	4
*Electrical Transmission	5
Elective or Mathematics 215	3
Shop Projects III	1

Fourth Year

FALL QUARTER		WINTER QUARTER
†Direct Currents Elective or Advanced	5	†High Frequency Currents I 5 Electrical Machine
Electrical Laboratory I	3-5	Design I 4
Electronics	3	Hydraulics 5
Financial Engineering	3	Elective or Advanced
Electric Railways or		Electrical Laboratory II 3
Elective	3	

SPRING QUARTER

†High Frequency	
Currents II	5
Elective or Electrical	
Machine Design II	3
Hydraulic Machinery	5
Machine Design I	4

Total number of hours required for graduation 216. Attendance at special engineering lectures is required.

Attendance on Inspection Trip is required during third year.

One-half credit hour per quarter will be allowed as elective credit for attendance and participation in the O. N. U. Student Branch of the A. I. E. E.

^{*} Not given in 1934-1935

MECHANICAL ENGINEERING

Mechanical engineering deals with the transformation and transmission of energy, and with the theory and construction of mechanism and machinery.

The first half of the curriculum consists of basic engineering subjects. In the latter half an exhaustive study is made of all phases of heat engineering, together with the design, erection and maintenance of power plant apparatus. Thorough training is given in machine drafting, machine design, thermodynamics, steam engines, steam boilers, gas engines, electrical machinery, and steam power plants.

The University has its own steam and gas-engine driven lighting plant and a central steam heating plant, lighting and heating all the University buildings. The equipment is installed with special conveniences for making laboratory tests on boilers, heating and power apparatus under operating conditions.

A machine shop supplements the laboratory equipment, giving opportunity for training in the use of tools and general machine shop practice.

MECHANICAL ENGINEERING CURRICULUM

First Year

FALL QUARTER		WINTER QUARTER	
Physical Education 101 College Algebra 101 Engineering Drawing I Chemistry 101a or 101 English 101 A. S. M. E. Student Branch Meetings	1 5 4 5 3	Physical Education 102 Engineering Problems Trigonometry 103 Chemistry 102a or 102 English 102 A. S. M. E. Student Branch Meetings	1 4 5 5 3 3

SPRING QUARTER

Physical Education 103	1
Analytical Geometry 105	5
Engineering Drawing II	4
Qualitative Analysis	
103a or 103	5
English 102a	3
A. S. M. E. Student	200
Branch Meetings	1/6

WINTER QUARTER

Second Year

FALL QUARTER

Physical Education 104 Economics 121	1 3	Physical Education 105 Economics 122	3
Differential Calculus 107	4	Differential and Integral	
Physics 104	5 .	Calculus 108	5
Surveying I	5	Physics 106 Engineering Drawing III	5
A. S. M. E. Student	14	A. S. M. E. Student	
Branch Meetings	1/2	Branch Meetings	1/2
SPRI	NG QU	ARTER	
Physical E	ducatio	on 106 1	
Economics	123	3	
Integral C		109 4	
Physics 10	15	. 5	
Elementar		ric 5	
Machine			
A. S. M. E Branch			
Branch	Meetin	6.	
CALL TO UP THE LAND ASSESSMENT		•	
1	'hird I	ear	
TILL OWINDS		WINTER QUARTER	
FALL QUARTER		The state of the same of the s	
Advanced Mechanics 213	5	Mechanics of Materials I	5 4
Thermodynamics	5	Steam Power Plants I Hydraulics	5
Calculus 216 or Direct	4-5	Mechanism	5
†Mechanical Laboratory I	3	†Mechanical Laboratory II	3
A. S. M. E. Student	The Court	A. S. M. E. Student	
Branch Meetings	1/2	Branch Meetings	1/2
SPRI	NG QU	JARTER	
		aterials II 5	
Steam Pov	ver Pla	ants II 4	
Testing o		rials 2	
*Machine	Shop	- 3 maria de la Santa de la California	
Machine I	Design	I 4	
A. S. M. F			
Branch	Meetir	igs ½	
1 2 To 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			
F	'ourth	Year	
FALL QUARTER		WINTER QUARTER	
Structural Engineering I		Hydraulics	5
or A. C. Machines	6-5	Machine Design II	4
Metallurgy		*Steam Turbines Power Plant Operation or	
*Gas and Oil Engineering	5	Electric Welding	5
Financial Engineering	1	A. S. M. E. Student	
Shop Projects A. S. M. E. Student		Branch Meetings	1/2
Branch Meetings	1/2		
• Not given in 1935-36	Section 1	† Not given in 1936	-37

SPRING QUARTER

Gas Engine Design	5
Hydraulic Machinery	5
*Heating, Ventilation and	
Refrigeration	5
Elective	2
A. S. M. E. Student	
Branch Meetings	1/2

Total number of hours required for graduation 216. Attendance at special engineering lectures is required. Attendance on Inspection Trip is required during third year.

CHEMICAL ENGINEERING

Fundamental chemistry has in recent years become a vital factor in the industrial world and its application to the processes of manufacturing has become indispensable. It is the purpose of the curriculum in chemical engineering to give to the student adequate training in science, both pure and applied, so that he may successfully pursue as his life's vocation this division of the world's work. Because of its purpose, the curriculum must be definitely fixed, but by substitution of appropriate courses for certain applied courses listed, it will be possible to meet the needs of the student who desires special preparation for a particular type of work.

CHEMICAL ENGINEERING CURRICULUM

First Year

FALL QUARTER		WINTER QUARTER	
Physical Education 101	1	Physical Education 102	1
English 101	3	English 102	3
Engineering Drawing I	4	Engineering Problems	4
Chemistry 101a or 101	5	Chemistry 102a or 102	5
College Algebra 101	5	Trigonometry 103	5

SPRING QUARTER

Physical Education 103	1
English 102a	3
Engineering Drawing II	4
Chemistry 103a or 103	5
Analytical Geometry 105	5

Second Year

FALL QUARTER		WINTER QUARTER	
Physical Education 104	1	Physical Education 105	1
Economics 121	3	Economics 122	3
Calculus 107	4	Calculus 108	4
Physics 104	5	Physics 106	5
Chemistry 104	5	Chemistry 105	5

SPRING QUARTER

Physical Education 106	1
Economics 123	3
Calculus 109	4
Physics 105	5
Chemistry 106	5

Third Year

FALL QUARTER		WINTER QUARTER	
Chemistry 206 German 101 Advanced Mechanics 213 Thermodynamics	5 3 5	Chemistry 207 German 102 Mechanics of Materials I Engineering Drawing III	5355

SPRING QUARTER

Chemistry 208	5
German 103	3
Mechanics of Materials II	5
Elementary Electric	
Machines	5.

Fourth Year

WINTER QUARTER	
3	
5	
4	
3	
. 3	

SPRING QUARTER

Chemistry 217	3
Chemistry 211b	5
Chemistry 210	4
Physics 218	1
Physics 214	5

Total number of hours required for graduation 216. Attendance at special engineering lectures is required. Attendance on Inspection Trip is required during third year.

TECHNICAL ORGANIZATIONS

The Ohio Northern Student Chapter of the American Society of Civil Engineers holds semi-monthly meetings. All civil engineering students are eligible for membership. The O. N. U. Society of Chemical Engineers holds meetings every two weeks. Technical papers pertaining to chemical engineering are read and chemical and metallurgical subjects discussed. All students of chemical engineering are eligible to membership.

The Ohio Northern Branch of the American Institute of Electrical Engineers holds semi-monthly meetings. At these meetings original papers and papers printed in the Proceedings of the American Institute of Electrical Engineers are read and discussed. All students interested in electrical engineering are eligible for membership.

The Ohio Northern Branch of the American Society of Mechanical Engineers holds semi-monthly meetings at which original papers in this field of engineering are read and discussed by the members of the society. Students enrolled in the department of mechanical engineering are eligible for membership.

The Ohio Northern University Radio Club maintains a short-wave station, 8-PP, gives code practice and short-wave operating experience and holds semi-monthly meetings at which papers and talks on radio subjects are presented.

The Chemists' Club of Ohio Northern University holds meetings every month. Scientific men of national and often international renown appear before this group from time to time.

THE ANNUAL INSPECTION TRIP

The junior class devotes one week to an extended visit to some large commercial center. The class spends its time profitably in the study of various phases of engineering and industrial activity in Chicago, Milwaukee, South Bend, Detroit, Pittsburgh, or the Cleveland areas.

POSITIONS

Past experience shows that the demand for graduates of the College of Engineering exceeds the supply. Often representatives of leading utilities and industries visit the University to interview seniors relative to employing them upon graduation. However, the University does not guarantee positions to its graduates.

DESCRIPTION OF COURSES

PROFESSORS NEEDY, HARROD, WEBB, BERGER AND WHITTED, AND ASSISTANT PROFESSOR GIBSON

CHEMISTRY

The courses in chemical engineering are, for the most part, described in the Liberal Arts section of the catalogue which deals with the Department of Chemistry.

CIVIL ENGINEERING /

1. SURVEYING I (Fall) 5 Hrs.
Use of chain, level, and transit. Prerequisite: Trigo-

nometry. Recitations, M. W. F., 3; Laboratory, T. Th., 5, 6. 7, or M. W., 6, 7, 8.

- 2. RAILROAD ENGINEERING (Fall) 5 Hrs.

 Simple curves, compound curves, reverse curves, spirals, switches and turnouts. Prerequisite: Surveying II. Recitations, M. T. W. Th., 4; Laboratory, F., 5, 6, 7.
- HIGHWAY ENGINEERING (Fall)
 Design, construction and maintenance of earth roads, paved roads and streets. Prerequisite: Geology and Surveying II. Recitations, M. W. F., 1.
- 4. Geology (Winter)

 A study of the earth's crust dealing with rock formation and structure, and the formation of mineral deposits, mountain folds, and faults. Prerequisite: General Chemistry. Recitations, M. W. F., 1.
- SEWERAGE (Fall) 5 Hrs.
 General course on sewerage system and disposal of sewerage. Prerequisite: Hydraulics. Daily, 3.
- HYDRAULIC MACHINERY (Spring)
 Water power, hydrology. Types of turbines and setting, tangential water wheels, reaction turbines, governors, testing, selection of type. Centrifugal pumps, description, installation and operation, theory and classification. Prerequisite: Hydraulics I. Daily, 3.
- 7. HYDRAULICS (Winter) 5 Hrs.

 Static water pressure, flotation, buoyancy, laws of falling bodies applied to hydraulics, measurement of flow. Prerequisite: Physics, Calculus 109 and Mechanics. Daily, 3 or 4.

8. MECHANICS (Fall)

5 Hrs.

This course covers concurrent forces, nonconcurrent forces, center of gravity, moment of inertia. Prerequisite: Physics 104 and Calculus 109. Daily 3.

9. MECHANICS OF MATERIALS I (Winter)

5 Hrs.

General principles of stresses, elastic limit, shear, riveted joints, torsion, beams, stresses in beams, deflection in beams. Prerequisite: Calculus 109 and Mechanics. Daily, 2 or 4.

10. MECHANICS OF MATERIALS II (Spring)

5 Hrs.

Beams with more than two supports, shear in beams, special beams, bending combined with tension or compression, column theory, column formulas used by engineers, resilience in bending or shear, combined stresses, theory of elastic limit and failure, curved beams and hooks. Prerequisite: Mechanics of Materials I. Daily 2 or 4.

11. STRUCTURAL ENGINEERING I (Fall)

6 Hrs.

An introductory course covering by analytical and graphical methods the determinations of reactions, moment, shears and stresses in simple trussed structures for fixed and moving loads. Design steel and wood beams, and design and make detail drawings of simple roof truss. Prerequisite: Mechanics of Materials I, II. M. W. F., 5, 6, 7.

12. STRUCTURAL ENGINEERING II (Winter)

6 Hrs.

A continuation of Structural Engineering I. Credit 6 hours, covering the use of influence lines and the design of plate girders and columns. Design and make detail drawings of a plate girder viaduct. Prerequisite: Structural Engineering I. M. W. F., 5, 6, 7.

13. STRUCTURAL ENGINEERING III (Spring)

6 Hrs.

A continuation of Structural Engineering II. Covering analytical and graphical methods of determining stresses due to fixed and moving loads in simple span railway bridge trusses of the larger type. Design and make detail drawings of a railway pin-truss span. Prerequisite: Structural Engineering II. M. W. F., 5, 6, 7.

14. Reinforced Concrete I (Fall)

4 Hrs.

Design of concrete beams, girders, slabs, columns, and footings. Prerequisite: Mechanics of Materials, M. T. W. Th., 2.

15. REINFORCED CONCRETE II (Winter)

4 Hrs.

Design of buildings and retaining walls. Prerequisite: Reinforced Concrete I. Recitation 2 hours; drafting room 4 hours. T. Th., 5, 6, 7.

16. Reinforced Concrete III (Spring)

4 Hrs.

Design of retaining walls and bridges. Prerequisite: Reinforced concrete II. Recitations, 2 hours; drafting room 4 hours. T. Th., 5, 6, 7.

17. WATER SUPPLY (Winter)

5 Hrs.

Requisites of a water supply, quality of water, collecting and distributing works, studies of rainfall and runoff, works for treating water. Theory of dams. Prerequisite: Hydraulics and Sewerage. Daily, 2.

18. Testing Materials (Spring)

2 Hrs.

Testing cement mortars, tests of small wooden beams and columns with deflection instrument, tension test of steel and iron with extensometer, tests for impurities in concrete aggregates, sieve analysis of concrete aggregates. Prerequisite: Mechanics of Materials I. Laboratory, T. Th., 5, 6 and 7, 8.

19. FOUNDATIONS (Winter)

3 Hrs.

A descriptive course dealing with pile foundations, pile driving, sheet piling cofferdams, open and pneumatic caissons, open wells, types of piers and abutments and underpinning. Prerequisite: Reinforced Concrete I. M. W. F., 3.

20. Contracts and Specifications (Spring)

3 Hrs.

A study of the principle of specification writing and law of contracts. Examination and criticism of different current standard contracts and specifications. Cannot be taken before the seventh quarter. M. W. F., 2.

21. FINANCIAL ENGINEERING (Fall)

3 Hrs.

An analysis of the problems of investment, with discussion of interest, depreciation, first costs and business statistics. M. W. F., 4.

DRAWING

1. Engineering Drawing I (Fall, Winter)

4 Hrs.

Use of instruments. Applied geometry, lettering, orthographic projections, and pictorial drawing. Ten hours drafting room work each week. Daily, 1, 4 and M. W. F., 6, 8.

2. Engineering Drawing II (Spring)

4 Hrs.

Developments, intersections, perspective and working drawings. Prerequisite: Engineering Drawing I. Ten hours work in drafting room each week. Daily, 1, 4 and M. W. F., 6, 8.

3. Engineering Drawing III (Winter)

5 Hrs.

Descriptive geometry, advanced orthographic projections, problems of point, line, plane, and curved surfaces. Shades and shadows. Prerequisite: Engineering Drawing II. Recitations, 3 hours. Six hours drafting room work each week. T. Th. F., 3; M. W., 6, 7, 8.

ELECTRICAL ENGINEERING

Elementary Electric Machines (Spring) 5 Hrs.

Introductory or survey course for all engineering students. The electric and magnetic circuit, D. C. and A. C. generators and motors as well as transformers, storage batteries and illumination will be treated. Prerequisites: Physics 106. Daily, 1.

2. Direct Currents (Fall)

5 Hrs.

This is a thorough course in the theory, characteristics, application and control of direct current circuits and machinery. Prerequisites: Elementary Electric Machines. Recitations M. T. W. Th., 1; Laboratory T. Th., 6.

ALTERNATING CURRENT CIRCUITS (Fall) Hrs.

A fundamental course in alternating current circuit theory. Vector representation, the calculation of impedance in series and parallel circuits, polyphase circuits and elementary transients are studied. Prerequisite: Elementary Electric machines. Recitations, M. T. W. Th., 1; Laboratory, T. Th., 6.

4. Electrical Transmission (Spring)

5 Hrs.

This is a course in the electrical transmission of energy. Overhead and underground systems and high voltage phenomena. Prerequisite: Alternating Current Circuits. Recitations, M. T. W. Th., 4; Laboratory, T. Th., 6.

ALTERNATING CURRENT MACHINES (Winter) Hrs.

The theory, characteristics and control of transformers, induction motors, synchronous motors, converters and alternating current generators. Prerequisite: Elementary Electric Machines. Recitations, M. T. W. Th., 4; Laboratory, T. Th., 6.

6. Electronics (Fall)

5 Hrs.

This is a course in the theory of electronic flow in vacuum tubes. Characteristics and application of newer types of tubes. Prerequisite: Alternating Current Circuits. Recitations, M. W. F., 2.

7. ELECTRICAL MACHINE DESIGN I (Winter) 4 Hrs.

A course in the detailed electrical calculation of direct current generators and controllers. Prerequisite: Direct Currents. Recitations, M. T. W. Th., 2.

8. Electrical Machine Design II (Spring) 3 Hrs.

The electrical design of alternating current generators, motors and transformers. Prerequisite: Alternating Current Machines. Recitations, M. W. F., 2.

9. High Frequency Currents I (Winter)

5 Hrs.

This is a course in the theory and calculation of circuits and apparatus performance at communication frequencies. Prerequisite: Alternating Current Circuits. Recitations, M. T. W. Th., 4; Laboratory, T. Th., 6.

HIGH FREQUENCY CURRENTS II (Spring)

5 Hrs.

This is a continuation of the above course involving the mathematical and experimental analysis of equipment characteristics and circuit performance at radio frequencies. Prerequisites: High Frequency Currents I. Recitations, M. T. W. Th., 4; Laboratory, T. Th., 6.

11. Shop Projects (Fall, Winter, Spring)

3 Hrs.

Required for graduation. Practical projects involving calculation, drafting, engineering judgment and skill in construction or repair work. These projects may vary from armature winding and motor repairing to the design and construction of laboratory apparatus. This course involves no class room or text book work and the course is usally covered in one hour per quarter for three quarters. Individual assignments are made to each student. M. T. W. Th., 6-8.

12. ADVANCED ELECTRICAL LABORATORY I, II, III

3 Hrs.

Elective in the senior year. Special laboratory problems and investigations more intricate and advanced than included in the required courses. Minor research projects may be undertaken. Hours to be arranged to suit balance of schedule.

13. ELECTRIC RAILWAY (Fall)

3 Hrs.

Theory and application of railway electrification. Economics of operation. Prerequisite: Elementary Electric Machines. T. Th., 4; F., 1.

MECHANICAL ENGINEERING

1. Thermodynamics (Fall)

5 Hrs.

Theory of heat, gases, vapors, steam engine cycles, and practical applications of thermodynamics, entropy and entropy diagrams. Prerequisite: Physics 105 and Calculus 108. Daily, 2.

2. STEAM POWER PLANTS I (Winter)

4 Hrs.

A study of the combustion, handling and storage of fuel, and of steam generating machinery, including boilers, stokers, steam engines, and condensers. Prerequisite: Physics 105 and Thermodynamics. M. T. W. Th., 3.

3. STEAM POWER PLANTS II (Spring)

4 Hrs.

A continuation of Steam Power Plants I with consideration given to complete installations, the cost of power, typical specifications and the power test codes. M. T. W. Th., 2.

4. STEAM TURBINES (Winter)

4 Hrs.

Nozzle and blade design, mechanical losses, impulse turbines, reaction turbines, impulse reaction turbines, governing, economics of turbine operation, and the gas turbine. Prerequisite: Thermodynamics. M. T. W. Th., 2.

5. GAS AND OIL ENGINES (Fall)

5 Hrs.

Liberation of heat energy, combustion, engine burning gas, kerosene and gasoline, semi-Diesel and Diesel engines, automobile engines, carburction, ignition and testing. Prerequisite: Thermodynamics. M. W. F., 3.

6. METALLURGY (Fall)

4 Hrs.

The manufacture of pig iron, wrought iron, and steel, mechanical treatment of steel, iron and steel founding, physical and chemical constitution of iron and steel, alloy metals, metallography. Prerequisite: Chemistry 103. M. T. W. Th., 4.

7. HEATING AND VENTILATING (Spring)

5 Hrs.

Heating and ventilation. Heat losses from buildings, methods of heating, boilers, radiators, and accessories, steam systems, hot water systems, automatic temperature control, hot air furnace heating, fan systems, air washers, and air conditioning. Prerequisite: Thermodynamics. M. T. W. Th., 6.

8. MECHANISM (Winter)

5 Hrs.

Mechanisms, motion and velocity, kinematic chains, instantaneous centers, velocity diagrams, parallel and straight line motion, cams, gearing, bevel gears, gear trains, belting, and intermittent motions. Daily, 6.

9. MACHINE DESIGN I (Spring)

4 Hrs.

Design and drawing of details as proportioned by stress. Energy of machines, riveted joints, shafts, bearings, clutches, belts, brakes, fly-wheels, gears, springs, and frames. Prerequisite: Mechanism, Mechanics of Materials I and II. M. T. W. Th., 5.

MACHINE DESIGN II (Winter)

4 Hrs.

Complete design and detail of machine units. M. T. W. Th., 4.

GAS ENGINE DESIGN (Spring)

5 Hrs.

Design of gas or oil engine. Complete calculations and detail drawings required of each member of the class. Prerequisite: Gas and Oil Engines and Machine Design I. Daily, 4.

12. MECHANICAL LABORATORY I (Fall)

3 Hrs.

Calibration of instruments, use of planimeter, study of engine indicators and their use, determination of steam quality, approximate coal analysis, heating value of coal by use of bomb calorimeter, flue gas analysis, testing of lubricating oils for flash point, fire point, and viscosity. Prerequisite: Thermodynamics. T. Th., 5, 6.

13. MECHANICAL LABORATORY II (Winter)

3 Hrs.

Boiler evaporative test, engine indicator and brake horsepower tests, indicator card analysis, efficiency tests of injector, electric motor, ventilating fan, centrifugal pump and automobile motor. Prerequisite: Mechanical Laboratory I. T. Th., 5, 6.

14. MACHINE SHOP (Spring)

3 Hrs.

Bench work in filing, chipping, and fitting. Machine work in threading, turning, boring, drilling, milling, shaping, tool grinding. M. W. F., 6, 7, 8.

15. POWER PLANT OPERATION (Winter, Spring)

5 Hrs.

Practical work in the operation and maintenance of the University Power Plant, Prerequisites: Steam Power Plants I and II. Daily, 7:00 a.m. to 5:00 p.m.

16. A. S. M. E. STUDENT BRANCH MEETINGS

1/2 Hr.

Fall, Winter and Spring quarters. Professional proseminary meeting of the Student Branch of the American Society of Mechanical Engineers to hear lectures by prominent engineers, to read and discuss papers presented by members of the Branch, and to gain some experience in conducting such meetings.

17. ELECTRIC WELDING (Spring)

5 Hrs.

The uses and principles of construction of arc welding equipment. Actual operation of arc welding and spot welding machines, including a study of lap, butt and perpendicular welding. Hours to be arranged.

18. Engineering Problems (Winter)

4 Hrs.

Practical problems in the different branches of engineering illustrating the use of logarithms and the slide rule. M. T. W. Th., 3.

COLLEGE OF PHARMACY

RUDOLPH HENRY RAABE Dean

HISTORY

The College of Pharmacy of Ohio Northern University had its beginning in the departments of Science and Medicine. Following the passage of a law in Ohio in 1884, which required registration with the Ohio Board of Pharmacy of all who wished to engage in the practice of the profession, Pharmacy was changed from a sub-department to a separate and distinct division of the institution.

In 1885 the courses of study covered a period of thirty weeks, three terms of ten weeks each. From time to time the requirements for admission, the courses of study and facilities for instruction have been increased. These changes are concurrent with the progress in medical, pharmaceutical, health, and the allied sciences.

On August 24, 1925, the Ohio Northern University College of Pharmacy was admitted to membership in the American Association of Colleges of Pharmacy.

Graduates from either of the courses offered enjoy broad and liberal recognition.

PURPOSE

This College of Pharmacy aims to prepare men and women to meet not only the legal requirements of the profession but also the increasing public demand for educated and trained pharmacists. Majors are offered in biology, chemistry, pharmacology and pharmacy.

Through organized courses of study instruction is given in the sciences pertaining to the selection, standardization, preservation, and dispensing of drugs, medicines, and chemicals used in the promotion of personal and public health, and in the service of the pharmacist to the public, to the medical practitioners, and to the profession.

A knowledge of the business methods involved in the successful distribution of medicinal materials is essential to the successful pursuit of the profession. Through a series of courses in business administration and drug store business methods, the student is given excellent opportunity to elect courses suited to his particular needs in this field.

LABORATORIES AND EQUIPMENT

In addition to the general biological, chemical, and physical laboratories of the University, the College of Pharmacy has three pharmaceutical and dispensing laboratories. The desk arrangement is such as to afford the student every facility for complete and thorough work, and the tables are supplied with an entire outfit of apparatus, including storing closet.

There are three chemical laboratories: General Inorganic, Organic, and Analytical. Each laboratory is equipped with individual lockers and with the necessary apparatus and supplies to do modern work in the courses offered. Chainomatic balances are the predominating type of analytical balances used.

The microscopic laboratory is equipped with tables, compound microscopes, microtome, projection lantern, and accessories.

Each individual locker in the pharmaceutical laboratories is equipped with apparatus and accessories necessary to do practice and experimental work in the courses offered, covering the entire range from the introductory courses for freshmen to the advanced courses in drug assay and the compounding of medicines. The special pharmaceutical dispensing laboratory is equipped with tables made by one of the leading drug store fixture manufacturers and each work table is equipped with a complete set of such apparatus as is needed in extemporaneous compounding and dispensing.

TIME TO ENTER

The College of Pharmacy opens on Monday, September 17, 1934, and continues three quarters. All matriculants must enter the College of Pharmacy on opening date and attend the introductory exercises unless excused by proper authority.

Students who are entitled to advanced standing shall enter at the time approved by the Dean.

ADMISSION

Candidates who are at least seventeen years of age and of good moral character may apply for admission upon the following plans:

- Certificate. Evidence of the satisfactory completion of four years of high school work or its equivalent and a certificate of preliminary education issued by the Entrance Examiner of the Ohio Board of Pharmacy. Blanks for these purposes may be had by addressing the Ohio Northern University Entrance Examiner.
- Examination. Candidates for admission who are deficient in high school units may be admitted upon examination. Entrance examinations are given by a regularly appointed examiner, as provided by law, known as the Entrance Examiner of the Ohio Board of Pharmacy.
- 3. Advanced Standing. Persons desiring to transfer from another college must present a transcript of record and a certificate of honorable dismissal from the college he is leaving. He should submit a catalogue of his college. Full credit will be given for work satisfactorily completed in recognized institutions of higher learning and parallel the requirements for graduation in this institution.

Advanced credit is given for not more than 135 quarter hours (90 semester hours) exclusive of physical education in the four-year course, and 90 quarter hours (60 semester hours) exclusive of physical education in the three-year course.

4. Special Student. Persons who can qualify to take the examination for pharmacist under the laws existing on or before July 1, 1917, and who do not desire to earn a degree may enter any department and pursue the studies they choose, if, on consultation, the head of the department is satisfied that they have sufficient preparation to pursue the work successfully. Such applicants are classified as special students.

Persons who meet the requirements for admission as indicated in the preceding paragraphs are issued a Permit to Enter the College of Pharmacy. To enter any of the regular courses of study the candidate, after being granted a *Permit to Enter*, must matriculate, prepare a schedule of study with the aid of an adviser and approval of the Dean, and pay tuition and fees as stated elsewhere in this catalogue.

SENIOR HONORS

Two kinds of senior honors are recognized and conferred at graduation: honors (with distinction) granted to those who have a quality point average of 2.3 with no grade below D; and honors (with high distinction) granted to those who have a quality point average of 2.6 with no grade below C. These honors in scholarship are recorded on the diplomas, recognition is given at commencement, and the names of the recipients are printed in the catalogue. To receive senior honors a student must be in residence at Ohio Northern at least six quarters.

REQUIREMENT FOR GRADUATION

Every person upon whom a degree is conferred must: be of good moral character; sa. sfactorily complete all prescribed work; spend the last year in resident study in this college; have as many quality points as credit hours; and be present at the commencement exercises unless officially excused.

That the curriculum may be flexible enough to allow preparation in specialized activities of the profession, in addition to a group of courses which are constants for all candidates for the degree of Bachelor of Science in Pharmacy (B. S. in Pharm.), several groups of electives are offered.

Persons who entered the College of Pharmacy and completed one or more quarters of work prior to July 1, 1932 may continue their studies and graduate from the three-year course or the old four-year course, provided all the requirements for graduation can be completed by the end of the 1934-35 session. Courses designated as constants are required. A sufficient number of credit hours must be chosen from the elective group to bring the total number of credit hours up to the requirement for graduation. All subjects will be assigned in logical sequence.

CONSTANTS

Physical Education 101-106	6	Hrs.
Pharmacognosy 151, 152, 153	15	Hrs.
Pharmacology 202, 203, 204		
Chemistry 101, 102, 103, 104, 105, 206, 207		
Pharmacy 102, 104, 151, 152, 251, 252, 299		

ELECTIVES

Sciences - Biology, Chemistry, Pharmacology	,			
Pharmacy			35	Hrs.
Economics and Business Administration	9	to	36	Hrs.
Language — English	9	to	36	Hrs.
German or French			12	Hrs.

Students who elect the sciences may be assigned to courses in German or French, or both, in order to acquire ability to read scientific texts and periodicals published in these languages. Those who elect economics and business administration will choose the language which best serves their needs. All students are advised to elect at least nine hours of English. All elections are subject to the approval of the Dean.

CURRICULA

The great demand from the pharmacists for a degree that is distinctly pharmaceutical and not likely to be confused with other degrees led the American Association of Colleges of Pharmacy to adopt the degree of Pharmaceutical Graduate, Ph. G., as the appropriate degree for the minimum three-year course.

For beginning students registering for the academic year 1932-33 and thereafter, all colleges holding membership in the American Association of Colleges of Pharmacy shall require for graduation the satisfactory completion of not less than four full college years.

*THREE-YEAR COURSE IN PHARMACY

DEGREE: PHARMACEUTICAL GRADUATE

First Year

FALL QUARTER		WINTER QUARTER	
Physical Education 101 Pharmacognosy 101 Chemistry 101 or 101a Pharmacy 101	1 5 5 5	Physical Education 102 Pharmacognosy 102 Chemistry 102 or 102a Pharmacy 102	1 5 5 5
	NG Q	UARTER ion 103 1	

Second Year

3 or 5

3 2

5

Chemistry 103 or 103a Pharmaceutical Latin

Pharmacy 104

FALL QUARTER		WINTER QUARTER	
Physical Education 104	1	Physical Education 105	Ļ
Pharmacognosy 151	5	Pharmacognosy 152 5	Ś
Chemistry 104	5	Chemistry 105 5	į.
Pharmacy 151	5	Pharmacy 152 5	Ś
SPI	RING Q	UARTER	
Physical	Educat	tion 106 1	
Pharmac	cognosy	153 5	
Chemistr		5	
Pharmac	y 201	5	
Pharmac		5	

Third Year

FALL QUARTER	WINTER QUARTER	
Pharmacology 203 Pharmacology 204 3 C Chemistry 104 or 206	3 Pharmacology 202 or 5 Chemistry 105 or 207 5 Pharmacy 208 or 5 Pharmacy 252	5 3 2
	ING QUARTER	
Bacteriolo Chemistry	ogy 3 or 5 y 106 or 208 5	

At least 3,018 clock-hours are required to complete this course, 1,000 clock-hours in lectures and recitations and 2018 clock-hours in the laboratory.

Pharmacy 203 Pharmacy 253

Pharmacy 299

Note: Electives may be substituted for certain prescribed courses in the curriculum above.

* THE OLD FOUR-YEAR COURSE IN PHARMACY DEGREE: BACHELOR OF SCIENCE IN PHARMACY

7000	- 1	7.7	-	
Fir	st	Y	ea	r

FALL QUARTER		WINTER QUARTER	
Physical Education 101	1	Physical Education 102	1
Zoology 101	3	Zoology 102	3
Physics 109	5	Physics 110	5
German or French	3	German or French	3
Chemistry 101 or 101a	5	Chemistry 102 or 102a	5
SPRI	NG O	UARTER	

SPRING QUARTER
Physical Education 103 1
Zoology 103 3
Physics 111 5
German or French 3
Chemistry 103 or 103a 5

Second Year

FALL QUARTER		WINTER QUARTER	
Physical Education 104	1	Physical Education 105	1
Pharmacognosy 101	5	Pharmacognosy 102	5
Chemistry 104	5	Chemistry 105	5
Pharmacy 101	5	Pharmacy 102	5
		AND THE RESIDENCE OF THE PARTY	

SPRING QUARTER
Physical Education 106 1
Pharmacology 101 5
Chemistry 106 5
Pharmacy 104 3 or 5
Pharmacy 103 2

Third Year

FALL QUARTER		WINTER QUARTER	
Pharmacognosy 151	5	Pharmacognosy 152	5
Chemistry 206	5	Chemistry 207	5
Pharmacy 151	5	Pharmacy 152	5

SPRING QUARTER
Pharmacognosy 153, 5
Chemistry 208 5
Pharmacy 153 5

Fourth Year

	FAL	L Q	UAR	TER			WINTER QUART	ER		
1	harmacol	ogy	203			3	Pharmacology 202			5
1	harmacol	ogy	204	and the same of		3	Pharmacy 208	3	or	5
1	harmacy	207		3	or	5	Pharmacy 252			2
1	harmacy	251				2	Elective			5
1	Elective					5			-	

SPRING QUARTER

Bacteriology 203 5
Pharmacy 299 3
Pharmacy 253 2
Elective 5

At least 4,036 clock-hours are required to complete this course. 1,200 clock-hours in lectures and recitations and 2,836 clock-hours in laboratory.

* Note: Electives may be substituted for certain prescribed courses in the curriculum above.

THE NEW FOUR-YEAR CURRICULUM

Not less than one hundred eighty-six credit hours, including physical education, are to be selected from the schedule below.

	REC	QUIR	ED	OPT	NOI	T C	REDIT
BASIC SUBJECTS:	Class			Class			Credit
	Hrs.	Hrs.	Hrs.	Hrs.	Hrs.	Hrs.	Hrs.
Biology 101, 102, 103		35	37 TO	60	120	180	9
Biology 107, 108, 109	90	90	180				9
Business Administration	108		108	7.5			9
Chemistry 101, 102, 103	108	216	324				15
Chemistry 104, 105				48	216	264	10
Chemistry 206, 207, 208		216	324				15
English 101, 102, 102a	108		108				. 9
French 101, 102, 103				108		108	9
German 101, 102, 103 or 118				108		108	9
Mathematics	96		96				9
Physics 109, 110, 111				108	144	252	15
Physical Education		'a'm	144				6
Physiology and Zoology	See	Depa	rtmen	t of B	iolog	У	
PROFESSIONAL AND APPLIED SU	BJECT	S:					
				- 10			
Accounting				40	80	120	6
Bacteriology 207, 208		72	120				6
Bio-Assaying (Ph'col. 251)				12	96	108	5
Pharmaceutical Chemistry:	24	20	co				•
Pharmacy 201Pharmacy 202		36	60				3
Pharmacy 207		36	48 60				2 3
Pharmacy 208		36 36	60		9		3
Flarmacy 200	64	30	60				۰
Pharmacognosy:							
Course 101		12234		36	48	84	5
Courses 102, 151, 152		144	252				15
Course 153				36	48	72	5
				0.023	DE CO		
Pharmacology:							
Course 101 (Physiology)	. 36	48	84	100			5
Course 102 (Physiology)				36	1		3
Course 201	36	48	84	CHE W			5
Course 202	36		36		48	48	3, 5
Courses 203, 204	72		72				6
Course 251 (See Bio-Assaying)							
Pharmacy:							
	20	20	100				
Course 101 (Technique)			108				5
Course 103 (Latin)			36				3
Course 104 (Arithmetic)		900	36				3
Courses 204 205 206 (Man'f)	. 144	288	432	90	216	250	20
Courses 204, 205, 206 (Man'f.) Courses 251, 252, 253 (Dispensing)	72	144	916	36	216	252	9
Course 105 (History)	36	144	216				12
Course 254 (Jurisprudence)	36		36				3
course set (surreprudence)	30		36				٥
Public Health:							
Courses 115, 152, 258	48		48	36		36	4, 7
200, 200, 200, 200	10		40	90		30	2, 1

WINTER QUARTER

* THE NEW FOUR-YEAR COURSE IN PHARMACY

DEGREE: BACHELOR OF SCIENCE IN PHARMACY

First Year

FALL QUARTER

Physical Education 101 1 Pharmacy 101 5 Chemistry 101 or 101a 5 Biology (Botany) 107 3 English 101 3	Physical Education 102 1 Pharmacy 102 5 Chemistry 102 or 102a 5 Biology (Botany) 103 3 English 102 3
SPRING Q	UARTER
Physical Educat	
Pharmacy 103 (Latin) 3
Pharmacy 104 (
Chemistry 103 c	r 103a 5
Biology (Botany	7) 109 3
English 102a	3
Second	Year
FALL QUARTER	WINTER QUARTER
Physical Education 104 1	Physical Education 105 1
Pharmacognosy 102 5	Pharmacognosy 151 5
Chemistry 206 5	Chemistry 207 5
Mathematics 5	Mathematics 4
Health 115 2	Health 152 (Optional) 3
SPRING Q	UARTER
Physical Educa	
Pharmacognosy	
Chemistry 208	5
Pharmacology 1	
mi	**************************************
Third	Year
FALL QUARTER	WINTER QUARTER
Pharmacy 151 5	Pharmacy 152 5
Chemistry 104 or Elective 5	Chemistry 105 or Elective 5
Business Administration 3	Pharmacology 207 3
Pharmacy 203 3	Business Administration 3
SPRING Q	UARTER
Pharmacy 153	5
Pharmacy 201	3
Pharmacy 202	2
Business Admin	
Pharmacology 2	08 8
Fourth	Year
FALL QUARTER	WINTER QUARTER
Pharmacy 207 3	Pharmacy 208 3
Pharmacy 251 4	Pharmacy 252 4
Pharmacology 201 5	Pharmacy 252 4 Pharmacy 254 3 Pharmacology 202 3 or 5
Pharmacology 203 3	Pharmacology 202 3 or 5 Health 258 2

SPRING QUARTER

Pharmacy 253		4
Pharmacy 299		5
Pharmacology	204	3
Elective		3

*Note: Electives may be substituted for certain prescribed courses in the curriculum above.

DESCRIPTION OF COURSES

BIOLOGY

The subject of immunology includes the principles underlying the use of biological products in the prevention and treatment of disease. Terms involving biological and bacteriological information are used in the United States Pharmacopoeia and National Formulary. In order that the pharmacist may be able to read the U. S. P. and N. F. intelligently and to sell biologicals, disinfectants, germicides, antiseptics, preservatives, sterilized solutions for hypodermic and intravenous use, to disseminate information about common communicable diseases and to know the general principles involved in biological standardization, it is essential that he acquire the fundamentals of the science of biology and bacteriology.

One of the specific aims of this department is to prepare students for the study of medical sciences and to give them foundation courses to qualify themselves for affiliation with clinical and research laboratories.

101.	ZOOLOGY	(Fall)	3	Hrs.
102.	ZOOLOGY	(Winter)	3	Hrs.
103.	ZOOLOGY	(Spring)	3	Hrs.

These courses are designed for students who desire a general acquaintance with some of the biological laws and theories as evidenced by the animal world. A general survey of the animal kingdom based on classification, morphology, physiology, and ecology. Especial attention is given to the problems of the organism, with emphasis on development, reproduction, genetics, and evolution. Section 1, M. W., 3, 4; F., 3. Section 2, T. Th., 3, 4; F., 4. Section 3, T. Th., 5, 6; F., 6. Section 2, Spring, T, Th., 7, 8; F., 8.

Professor Huber.

107. BOTANY (Fall)

3 Hrs.

108. BOTANY (Winter)

3 Hrs.

109. BOTANY (Spring)

3 Hrs.

These courses are presented largely as cultural courses with emphasis placed on careful observation and logical conclusion. The time is devoted to a consideration of the physiological processes, ecology, structure, reproduction, genetics, distribution, and evolution of plants. M. W., 6, 7; F., 7.

. Assistant Professor Dobbins

110. LOCAL FLORA (Spring)

3 Hrs.

A systematic study which acquaints the student with many of the native and introduced plants. A field course supplemented by greenhouse and herbarium studies. S., 1, 2, 3, 4; T. Th., 1.

Assistant Professor Dobbins.

219. HISTOLOGY AND TECHNIQUE (Winter)

3 Hrs.

Methods of collecting, killing, preserving and preparing material for demonstration and laboratory purposes are considered. A detailed microscopic study of various plant or animal tissues is made. Lecture and class work one hour, laboratory six to eight hours. Time schedule to be arranged. Open to seniors majoring in biology.

Professor Huber

220. BIOLOGICAL PROBLEMS

1-3 Hrs.

Minor investigations for qualified seniors who are taking a major or minor in biology. By arrangement any quarter. Fee depends on nature of work done.

Professor Huber

*222. PLANT PHYSIOLOGY (Winter)

. 3 Hrs.

224. PLANT MORPHOLOGY (Winter)

3 Hrs.

These courses are designed for students majoring in biology whose prime interest is in the botanical field. Course 222 consists of a critical study of some of the physiological processes of plants. Course 224 consists of a study of the structure and life histories of typical plants of phyla. Prerequisite: Botany 107, 108, 109. M. W., 3, 4; F., 3.

Assistant Professor Dobbins

^{*} Not given in 1934-35.

CHEMISTRY

In order to read various texts in pharmacy, official and non-official, and to be able to identify, manufacture, preserve, and compound certain types of pharmaceuticals, the pharmacist needs a knowledge of chemistry.

All students who are candidates for graduation from the College of Pharmacy will be required to complete Chemistry 101, 102, 103, 104, 105, 206, 207, and 208, or the equivalent. Those wishing to work in chemistry beyond the constants as listed for all pharmacy students, should take Chemistry 211a, 211b, and 212.

Additional courses in chemistry may be elected, subject to the recommendation of the student adviser and approval of the Dean.

101a. Introductory Chemistry (Fall) 5 Hrs. 102a. Introductory Chemistry (Winter) 5 Hrs. 103a. Introductory Qualitative Analysis (Spring) 5 Hrs.

A series of courses designed for students who do not present chemistry credit. Courses 101a and 102a consist of a careful study of the fundamental laws of chemistry and of the properties of the common metallic elements and their compounds; course 103a is an introductory study in qualitative analysis of acids and metals. A brief study is made of the properties of the common metallic elements and their compounds.

Two sections. Lecture and quiz, M. W. F., 1 or 3. Laboratory for Pharmacy students, M. W., 6, 7, 8; Liberal Arts and Engineering students, T. Th., 2, 3, 4 or 6, 7, 8. Professor Harrod

- 101. GENERAL CHEMISTRY (Fall, Winter, Summer) 5 Hrs.
- 102. GENERAL CHEMISTRY (Winter, Spring, Summer) 5 Hrs.
- 103. QUALITATIVE ANALYSIS (Spring, Summer) 5 Hrs.

Basic courses in General Chemistry. Prerequisite: One unit of high school chemistry. Two sections. Lecture and quiz. M. W. F., 2 or 4. Laboratory, Pharmacy students M. W., 6, 7, 8; Liberal Arts and Engineering students, T. Th., 2, 3, 4 or 6, 7, 8. Professor Harrod

104.	QUANTITATIVE ANALYSIS	(Fall)	5	Hrs.
105.	QUANTITATIVE ANALYSIS	(Winter)	5	Hrs.
106.	QUANTITATIVE ANALYSIS	(Spring)	5	Hrs.

These courses deal with the theory and practice of gravimetric and volumetric analysis. The use of the fundamental principles of modern theoretical chemistry, as well as the attainment of the ability to make quantitative separations and determinations, is emphasized. Prerequisite: Chemistry 103a or 103. Lecture, T. Th., 5 or 6; laboratory, M. W. F., 5, 6, 7.

Assistant Professor Gibson

206.	ORGANIC	CHEMISTRY	(Fall)	5	Hrs.
207.	ORGANIC	CHEMISTRY	(Winter)	5	Hrs.
208.	ORGANIC	CHEMISTRY	(Spring)	5	Hrs.

These courses consist of a fundamental study of the compounds of carbon. Careful attention is given to group structure, group relationship, group properties, isomerism and nomenclature. Prerequisite: Chemistry 103a or 103. Lecture and quiz, M. W. F., 5; laboratory, T. Th., 5, 6, 7.

Professor Harrod

211a. ADVANCED QU	ALITATIVE ANALYSIS	(Winter)	5	Hrs.
211b. ADVANCED QU	ALITATIVE ANALYSIS	(Spring)	5	Hrs.
212. INORGANIC PRI	EPARATIONS (Fall)		5	Hrs.

The fundamental purpose of these courses is to teach inorganic chemistry. Courses 211a and 211b deal with systematic analysis on a semi-quantitative basis, and are more comprehensive than Chemistry 103 in both theoretical consideration and number of elements studied. Course 212 consists of a preparation of pure inorganic compounds, and a study of the theoretical principles involved. In all these courses the Periodic Law is used as the basis for the classification of the elements and their properties. Pre-requisites: Chemistry 104 and 105. Lecture T. Th., 3rd, 24 hours; laboratory, M. W. F., 5, 6, 7, 72 hours.

Assistant Professor Gibson.

215.	PHYSICAL CHEMISTRY	(Fall)	3 Hrs.
216.	PHYSICAL CHEMISTRY	(Winter)	3 Hrs.
217.	PHYSICAL CHEMISTRY	(Spring)	3 Hrs.

A series of courses designed to develop a comprehensive conception of chemical change and the structure of matter. In the interest of the pharmacy student, special attention is given to osmosis, equilibrium, colloids and hydrogen ion determination. Prerequisite: Quantitative analysis, organic chemistry and general physics. Trigonometry as a minimum mathematical preparation is strongly recommended. Lecture and quiz, M. W. F., 4.

Assistant Professor Gibson

231. CHEMISTRY PROBLEMS

3 Hrs.

Minor investigations for qualified seniors who are majoring in chemistry. Consult head of department.

Professor Harrod

ECONOMICS AND BUSINESS ADMINISTRATION

Ability to buy, sell and organize business efficiently is without doubt one of the essentials in the profession of pharmacy. General courses in the principles of accounting, economics, and business organization may be elected by those who wish to acquire a broader knowledge of sound business procedure.

Pharmacy 203 is a course in commercial pharmacy dealing specifically with drug store business methods.

121.	PRINCIPLES	OF	ECONOMICS	(Fall)	3	Hrs.
122.	PRINCIPLES	OF	ECONOMICS	(Winter)	3	Hrs.
123.	PRINCIPLES	OF	ECONOMICS	(Spring)	3	Hrs.

Wants, scarcity, and economic history, organization of production, value and price, monopoly and its control, financial organization, distribution of wealth and income, inequality and social reform, public finance, and international trade. Not open to freshmen. M. W. F., 5.

Assistant Professor McBride

131.	PRINCIPLES OF	ACCOUNTING	(Fall)	3 I	Irs.
132.	PRINCIPLES OF	ACCOUNTING	(Winter)	3 I	Irs.
133.	PRINCIPLES OF	ACCOUNTING	(Spring)	2 F	Irs

Principles of the double-entry system, asset and equity accounts, journal and ledger, expense and revenue, periodic adjustment, working sheets, income statements, balance sheets, valuation and income determination, trading and manufacturing accounts, and partnership and corporate accounting. Prerequisite or concurrent: Economics 121, 122, 123. M. W. F., 3.

Assistant Professor McBride

ENGLISH

The pharmacist must use both oral and written English. In order to communicate clearly and adequately with the whole-saler, manufacturer, medical practitioner, layman, state boards, the government, and to prepare papers for clubs, articles for magazines and local newspapers, or advertising, ability to speak and write English is essential.

102.

101. Composition (Fall, Winter)

(Winter)

3 Hrs.

102a. Composition (Spring)

COMPOSITION

3 Hrs.

These three courses constitute a year of work for freshmen. A thorough drill in the mechanics of written English, exposition and argumentation; description and narration. Considerable attention is given to the study of the structure of the short story. Daily themes. Students who show a high degree of proficiency in English, may elect English 122a or English 105 in the place of Composition 102a. Four sections, M. W. F., 2, 4, 5; T. Th F., 6. Assistant Professor Wilder and Mr. Freeman

128. NEWS WRITING (Fall)

3 Hrs.

Basic course. Theory and practice in preparing news stories; methods of news gathering, and newspaper ethics. Open to members of the Northern Review staff and students majoring in English. T. Th. F., 1. Mr. Freeman

129. NEWS WRITING (Winter)

3 Hrs.

Continuation of the above. Special attention is given to the feature and human interest stories; comparison of methods of different papers in handling news, and practice in writing news stories and reviews. T. Th. F., 1. Mr. Freeman

130. COPY READING AND EDITING (Spring)

3 Hrs.

Headline writing; use of style sheets and style books; terms and phrases used in handling copy. Lectures on the duties of members of an editorial staff. Visits to modern newspaper offices. Prerequisite; English 128 and 129. T. Th. F., 1.

Mr. Freeman

205. EXPOSITORY WRITING (Fall)

2 Hrs.

225. EXPOSITORY WRITING (Winter)

2 Hrs.

A study of the various types of the essay and the writing of short themes together with longer fortnightly themes. Considerable attention is given to the familiar essay. In order to receive credit both courses must be completed. Open to all juniors and seniors. Required of all students who major in English. T. Th., 3.

Mr. Freeman

HEALTH AND PHYSICAL EDUCATION

Some form of physical activity is required of all students during the first two years of residence in the University. The nature of the work will depend upon the needs of the individual as revealed by a careful examination.

The pharmacist should learn the fundamentals of personal and general hygiene that he may be able to maintain a high degree of efficiency during and after college life and to assist in the promotion of public health as outlined by the United States Public Health Service.

Courses 101, 102, 103, 104, 105, 106, 115, 152, and 258 as given in the Department of Health and Physical-Education, and Bacteriology 209 as given in the Department of Pharmacology are of special interest to the pharmacy student,

101.	PHYSICAL	EDUCATION	(Fall)	1	Hr.
102.	PHYSICAL	EDUCATION	(Winter)		Hr.
103.	PHYSICAL	EDUCATION	(Spring)		Hr.

Men - Gymnasium and outdoor classes in season, natural gymnastics, informal play. Six sections. M. W., 1, 2, 3, 4, 5, or 6.

Assistant Professor H. A. Lamb Women - A course in natural gymnastics including games and sports in season, dancing, and tumbling. Six sections. T. Th., 1, 2, 3, 4, 5, or 6. Miss Reddington

104.	PHYSICAL EDUCATION	(Fall)	1	Hr.
105.	PHYSICAL EDUCATION	(Winter)	1	Hr.
106.	PHYSICAL EDUCATION	(Spring)	1	Hr.

Men - Continuation of course 103 with team games and apparatus added. Six sections. M. W., 1, 2, 3, 4, 5, Assistant Professor H. A. Lamb

Women - A continuation of course 103. Six sections. T. Th., 1, 2, 3, 4, 5, or 6.

Miss Reddington

115. PERSONAL AND GENERAL HYGIENE

(Fall, Winter, Spring)

A course designed to cover the various phases of personal hygiene and health, from the individual aspect, with emphasis on preventive measures. T. Th., 3.

Miss Reddington

HEALTH EDUCATION (Winter) 152.

3 Hrs.

The relation of hygiene to home and community life, including a study of sewage disposal, refuse disposal, transmission and control of diseases. M. W. F., 4.

Miss Reddington

258. FIRST AID (Spring)

2 Hrs.

Lectures, discussion and practice in the giving of First Aid in cases of emergency. The American Red Cross First Aid Certificate may be obtained by students who pass a satisfactory examination. T. Th., 3.

Professor C. A. Lamb

MATHEMATICS

Inaccurate computations in pharmacy may lead to serious A course in mathematics especially designed for the student of pharmacy is required of all candidates for graduation. It includes the mathematical processes involved in operative pharmacy and in the compounding of prescriptions. limited amount of the mathematics involved in commercial pharmacy is included. This course is listed and described in the Department of Pharmacy, course 104. In addition to Pharmacy 104 at least nine credit hours in college mathematics or its equivalent will be required.

Those students who desire courses in chemistry beyond the prescribed constants will take additional courses in mathematics, subject to the recommendation of the student's adviser and approval of the Dean.

101a. FRESHMAN MATHEMATICS (Fall)

3 Hrs.

(Winter) 102a. FRESHMAN MATHEMATICS

3 Hrs.

This course is offered to those who present one unit of algebra and one unit of geometry for entrance. It is designed to enable the student to pursue subsequent courses Professor Whitted with profit. M. W. F., 2.

(Fall) 100. COLLEGE ALGEBRA

5 Hrs.

This course covers much of the material of the traditional course in algebra with emphasis upon number theory, quadratic forms, functions and their graphs, and the theory of determinants as applied to the solution of simple sets of equations. Prerequisite: Plane geometry and one unit of high school algebra. Daily, 4.

Professor Berger

101. COLLEGE ALGEBRA (Fall)

5 Hrs.

Prerequisite: Plane geometry and one and one-half units of high school algebra. Daily, 5.

Professor Whitted

103. TRIGONOMETRY (Winter, Spring)

5 Hrs.

The fundamental principles of the subject are developed and applied to trigonometric reductions and to the solutions of triangles. Numerous exercises in the field of geometry, physics, and mechanics are studied. Prerequisite: Plane geometry and one and one-half units of high school algebra. Winter, 5, Spring, 6. Professor Whitted

107. CALCULUS: DIFFERENTIAL (Fall)

4 Hrs.

The fundamental theorems for the differentiation of algebraic, trigonometric, logarithmic, and exponential functions are taken up with numerous applications to problems in geometry, mechanics, and physics. Prerequisite: Mathematics 105. M. T. W. Th., 4.

Professor Whitted

108. CALCULUS: DIFFERENTIAL AND INTEGRAL (Winter) 4 Hrs.

This course is a continuation of Mathematics 107, but giving a more extended use of differentiation to analytical functions of two or more variables with an introduction to the indefinite integral. Prerequisite: Mathematics 107. M. T. W. Th., 4.

109. CALCULUS: INTEGRAL (Spring)

4 Hrs.

This is a continuation of Mathematics 108, but giving a more detailed account of methods of integration by the aid of substitution, parts and reduction formulae. Integration as a summation and the definite integral with its application to problems in surfaces, volumes, moments of inertia, center of gravity and fluid pressure is studied. Prerequisite: Mathematics 108. M. T. W. Th., 4.

Professor Whitted

MODERN LANGUAGES

Many texts and periodicals pertaining to pharmacy and the allied sciences are published in a foreign language. In order to meet the demand of students who desire a knowledge of a foreign language for reading, conversational, or business purposes, appropriate courses in French and German are offered. If a student expects to do graduate work, he should have a working knowledge of at least two foreign languages, French and German.

German 118 is recommended for those who expect to enter graduate schools.

FRENCH

101.	ELEMENTARY FRENCH	(Fall)	3 Hrs.
102.	ELEMENTARY FRENCH	(Winter)	3 Hrs.
103	ELEMENTARY FRENCH	(Spring)	3 Hrs.

The elements of pronunciation and phonetics, essentials of grammar and easy reading. Conversation suited to the needs and abilities of the class, M. W. F., 5.

Professor Herrick

GERMAN

101.	ELEMENTARY GERMAN	(Fall)	3	Hrs.
102.	ELEMENTARY GERMAN	(Winter)	3	Hrs.
102	ELEMENTARY GERMAN	(Spring)	3	Hrs.

Essentials of pronunciation, grammar, and composition, verb drill, and easy graded texts for reading. M. W. F., 1. Professor Herrick

118. SCIENTIFIC GERMAN (Winter)

3 Hrs.

The reading of scientific texts and periodicals with particular emphasis on individual needs. Required of premedical students. Prerequisite: German 101-103. T. Th. F., 2.

PHARMACOGNOSY

DR. HANNA IN CHARGE

*101. PHARMACOGNOSY (Fall)

5 Hrs.

The aim of this course is to acquaint the student with the main group of plants, their characteristics, economic importance in medicine. The course is progressive, beginning with the lowest types and ending with the highest. Lectures and recitations, M. W. F., 5, 36 hours; laboratory, T. Th., 5, 6 or 7, 8, 48 hours. (To be supplied)

102. PHARMACOGNOSY (Fall)

5 Hrs.

The general anatomy of the parts of the plant, such as root, stem, leaf, flower, fruit and seed, are the subjects of this course. A few drugs from each classification are considered with special reference to the terminology used in the U. S. P. and N. F. Lectures and recitations, M. W. F., 5, 36 hours; laboratory, T. Th., 5, 6 or 7, 8, 48 hours.

(To be supplied)

151. PHARMACOGNOSY (Winter)

5 Hrs.

In this course the student is taught how to identify, select and value drugs microscopically. He learns the official names, habitat, and constituents of each U. S. P. drug. Lectures and recitations, M. W. F., 3, 36 hours; laboratory, T. Th., 1, 2 or 3, 4, 48 hours. (To be suplied)

152. Pharmacognosy (Spring)

5 Hrs.

The study of vegetable drugs is continued. The student learns the official names, habitat, and constituents of the crude vegetable drugs listed in the National Formulary. Attention is given to preservation, adulteration, and identification of powdered drugs. A liberal use of the compound microscope is required in this course. Lectures and recitations, M. W. F., 4, 36 hours; laboratory, T. Th., 1, 2, or 3, 4, 48 hours. (To be supplied)

*153. Pharmacognosy (Spring)

5 Hrs.

This course completes the study of crude vegetable drugs. The more important non-official drugs receive attention. Lectures and recitations, M. W. F., 4, 36 hours; laboratory, T. Th., 1, 2 or 3, 4, 48 hours. (To be supplied)

PHARMACOLOGY

DR. HANNA AND ASSISTANTS

PHARMACOLOGY (Spring)

5 Hrs.

A brief course in human physiology preparatory to the study of the action of drugs. The digestive, circulatory, respiratory, and nervous systems are the chief subjects considered. Lectures and recitation, M. W. F., 5, 36 hours; laboratory, T. Th., 5 and 6, 48 hours.

Dr. Hanna

102. PHARMACOLOGY (Fall)

3 Hrs.

A continuation of Pharmacology 101. Lectures and recitations, M. W. F., 5, 36 hours. Dr. Hanna

201. PHARMACOLOGY (Fall)

5 Hrs.

202. PHARMACOLOGY (Winter)

3 or 5 Hrs.

A course in the physiological action, therapeutics, and dosage of the official and other common organic and inorganic drugs. The study is based upon a therapeutic classification. Lectures and recitations, M. W. F., 1, 36 hours; laboratory, T. Th., 7 and 8, 48 hours. Dr. Hanna

Not given in 1934-35.

203. PHARMACOLOGY

3 Hrs.

In this course the U. S. P. and N. F. drugs of animal origin are studied. Attention is given to official names, definitions, source, action, and dosage. The course does not include the serums, antitoxins, and other substances commonly known as biological products. Lectures and recitations, T. Th., 1, 24 hours.

Dr. Hanna

204. Pharmacology (Spring)

3 or 5 Hrs.

A study of the principles of poisoning, classification of poisons, and effects of each class. Lectures and recitations, M. W. F., 1, 36 hours.

Dr. Hanna

207. BACTERIOLOGY (Winter)

3 Hrs.

208. BACTERIOLOGY (Spring)

3 Hrs.

A course in the fundamentals of applied bacteriology. Lectures and recitations, T Th., 1, 24 hours; laboratory, section 1, T., 2, 3, 4, section 2, Th. 2, 3, 4, 36 hours.

*209. BACTERIOLOGY (Spring)

3 or 5 Hrs.

A course in the fundamentals of bacteriology as applied to the pharmacist. Toxins, antitoxins, bacterins, vaccines and other recognized products of bacterial origin which are used for curative and prophylactic purposes are the chief topics of this course. Prerequisites: Bacteriology 207, 208, or a course in general bacteriology. Lectures, recitations and demonstrations, M. W. F., or daily, 4, 36 to 60 hours.

251. PHARMACOLOGY

5 Hrs.

Attention is given to biological assay methods and standardization of the U.S. P. drugs that are most satisfactorily valued by this method. Lectures and recitations, 12 hours; laboratory, 96 hours. Time schedule to be arranged.

Dr. Hanna

PHARMACY

DEAN RAABE, MR. CLOSE AND ASSISTANTS

101. PHARMACEUTICAL TECHNIQUE (Fall)

5 Hrs.

An introductory course in the principles upon which pharmaceutical operations are based. Lectures, demonstrated lectures and recitations, M. W. F., 1, 36 hours; laboratory, T. Th., 1, 2, and 3, 72 hours.

Dean Raabe

* Not given in 1934-1935.

102. PHARMACY (Winter)

5 Hrs.

The chief topics of this course are waters, infusions, decoctions, mucilages, syrups, liniments, mixtures, and other classes of preparations of quite similar nature. Lectures and recitations, M. W. F., 1, 36 hours. Laboratory, T. Th., 1, 2, and 3, 72 hours.

Mr. Close

103. PHARMACEUTICAL LATIN (Spring)

3 Hrs.

A course covering such essentials of inflection and syntax as to familiarize the student with the etymology and construction of the nomenclature used in the United States Pharmacopeia and National Formulary and to enable him to interpret intelligently prescriptions. Lectures and recitations, T. Th., 1, F., 4, 36 hours. Dean Raabe

104. PHARMACEUTICAL ARITHMETIC (Spring)

3 Hrs.

A course in calculations pertaining to pharmacy. The student is taught current weights and measures, applications of proportion, allegation, specific gravity, specific volume, thermometer scales, percentage solutions, and elementary chemical problems common to pharmacy. Lectures and recitations, M. W. F., 1, 36 hours.

Dean Raabe

105. HISTORY OF PHARMACY

3 Hrs.

A survey of the ancient, medieval, and modern practices and ideals of the profession of pharmacy. This course is mainly cultural. Lectures and discussions: 36 hours. To be given during the first two years and administered by various members of the faculty.

Dean Raabe

151. PHARMACY (Fall)

5 Hrs.

This course includes pharmaceutical preparations made by extraction, tinctures, fluid extracts, resins, oleoresins, fluid glycerates, emulsions, elixirs, and spirits. Prerequisite: Pharmacy 101. Lectures and recitations, M. W. F., 2, 36 hours; laboratory, T. Th., 6, 7 and 8, 72 hours.

Mr. Close

152. PHARMACY (Winter)

5 Hrs.

This course includes the ointment and powder type of pharmaceuticals official in the United States Pharmacopeia and National Formulary. Prerequisite: Pharmacy 101. Lectures and recitations, M. W. F., 2, 36 hours; laboratory, T. Th., 6, 7, and 8, 72 hours. Mr. Close

153. PHARMACY (Spring)

5 Hrs.

This course includes the official chemical type of pharmaceuticals and other official preparations not included in Pharmacy 101, 151, and 152. Prerequisite: Pharmacy 101 and Chemistry 103. Lectures and recitations, M. W. F., 2, 26 hours; laboratory T. Th., 6, 7 and 8, 72 hours. Mr. Close

201. PHARMACY (Spring)

3 Hrs.

Attention is given to the inorganic substances of the United States Pharmacopeia and National Formulary from the standpoint of the pharmacist. Prerequisite: Chemistry 103. Lectures and recitations, M. W., 5, 24 hours; laboratory, T. 2, 3, and 4, 36 hours.

Mr. Close

202. PHARMACY (Spring)

2 Hrs.

A study in the organic synthetic substances of the United States Pharmacopeia and the National Formulary. Prerequisite: Organic Chemistry 207. Lecture and recitation, F., 5, 12 hours; laboratory, Th., 2, 3 and 4, 36 hours. Mr. Close

203. PHARMACY (Fall)

3 Hrs.

A course in drug store business methods. Attention is given to arrangement of fixtures and stock sources of supplies, distribution to the physician, dentist, veterinarian, the public, hospitals, and to other phases of business essential to successful drug store management. Lectures and recitations, M. W. F., 2, 36 hours.

Dean Raabe

*204. PHARMACY (Fall)

3 Hrs.

*205. PHARMACY (Winter)

3 Hrs.

Manufacture of pharmaceuticals on a commercial basis. Lectures 12 hours, and laboratory 72 hours.

*206. PHARMACY (Spring)

3 Hrs.

This course is a continuation of Pharmacy 204 and 205. The student is required to visit the laboratory of at least one reputable pharmaceutical manufacturer and to write a thesis. The subject of the thesis and the manufacturer to be visited must be approved by the student's faculty adviser and the Dean.

207. PHARMACY (Fall)

3 Hrs.

208. PHARMACY (Winter)

3 Hrs.

Standardization of pharmaceutical preparations. Lectures and recitations, T. Th., 4, 24 hours; laboratory T. or Th., 1, 2, 3, 36 hours. Prerequisite: Chemistry 105 and Pharmacy 153.

Mr. Close

251. DISPENSING PHARMACY (Fall)

4 Hrs.

252. DISPENSING PHARMACY (Winter)

4 Hrs.

253. DISPENSING PHARMACY (Spring)

4 Hrs.

Prescriptions, compounding of prescriptions and recipes, incompatibilities, and dispensing are the subjects of

^{*} Not given in 1934-35.

this course. These courses are Pharmacy III (former catalogues) divided, slightly broadened and manipulated under new laboratory conditions. Five credit hours in Pharmacy III will be accepted as equivalent to Pharmacy 251, 252. Lectures, T. Th., 6, 24 hours; laboratory, T. Th., 7 and 8, 48 hours. Prerequisites: Pharmacognosy 151, 152, Chemistry 103 or 103a, Pharmacy 151, 152, 153. Dean Raabe

254. PHARMACY (Winter)

3 Hrs.

A course in the federal, state and local acts, laws and regulations governing the practice of Pharmacy and the sale of potent and habit forming drugs. Lectures and recitations, M. W. F., 3, 36 hours.

Dean Raabe

299. Pharmacy (Spring)

5 Hrs.

A technical survey of the latest U. S. P. and N. F. Prerequisites: The constants in General Chemistry, Quantitative Analysis, Organic Chemistry, Pharmacognosy, Pharmacology, and Pharmacy. Lectures and discussions, 60 hours. Time to be arranged.

Dean Raabe

PHYSICS

It is impossible to comprehend many of the changes which occur in the manufacture of pharmaceutical preparations and to understand the influences of heat and light in their preservation and stabilization without having a knowledge of the fundamentals of the science of physics. Many of the fundamentals of this science are presented in the courses in chemistry, pharmacognosy, and pharmacy. However, the student who expects to do more comprehensive work in the sciences should arrange his schedule so as to include one year of college physics.

Physics 109, 110, and 111 are recommended as a pre-medical science.

Electives in physics are subject to the recommendation of the student adviser and approval of the Dean.

109. GENERAL PHYSICS (Fall)

3 Hrs.

110. GENERAL PHYSICS (Winter)

3 Hrs.

111. GENERAL PHYSICS (Spring)

3 Hrs.

Open to freshmen. Prerequisites: One year each of algebra and geometry. M. W. F., 8.

109a. GENERAL PHYSICS 110a. GENERAL PHYSICS 2 Hrs. 2 Hrs.

111a. GENERAL PHYSICS

2 Hrs.

Laboratory to precede or accompany 109, 110, 111. T. Th., two 2-hour periods. Any quarter.

A year of work in college physics. Open to freshmen. Prerequisite: One year of high school algebra and plane geometry. Recitation, M. W. F., 8; laboratory, afternoons, two 2-hour periods. Professor Berger

214. MATHEMATICS OF PHYSICS (Spring)

5 Hrs.

A course dealing with the application of mathematics to physics and related sciences. Prerequisites: Physics 111 and Calculus. Daily 7. Professor Berger

220. MODERN PHYSICS (Winter)

3 Hrs.

A lecture and quiz course involving fundamental questions on the nature of things, such as atomic structure, electron theory, quantum theory, and the theory of relativity. Prerequisites: General Chemistry and General Physics. T. Th. F., 6.

Professor Berger

WARREN G. HARDING COLLEGE OF LAW

CLAUDE WESTCOAT PETTIT

Acting Dean

HISTORY

The College of Law was organized as a department of the University in 1885, and has been in continuous operation since that date. It numbers among its alumni and former students many of the most prominent lawyers in Ohio and other states. Its graduates have been successful beyond the average as candidates for admission to the Bar at the State Bar Examinations, and as practitioners afterwards.

PURPOSE

The aim of its founders, continued through the ensuing years, was to afford an opportunity for students, both men and women, of limited means, to obtain a collegiate training in Law, and by connection with the University to offer them the added opportunity for the general preliminary education indispensable to its successful study and practice. Tuition rates, therefore, are low and reasonable. The courses are planned primarily to train students for the practice of law, but they may also be pursued advantageously by any one desiring to acquire a knowledge of the principles and history of law, either as part of a liberal education, or as part of the foundation for a business career.

In training students for the practice of law, the College of Law has four chief aims:

- To inculcate a systematic and complete grounding in the history and fundamental principles of law, and a readiness and accuracy in the application of these principles to the complicated relations, rights, and duties arising in modern society.
- To impart a thorough and ready working knowledge of the common law and of statute law (particularly the statutes and decided cases of Ohio), to the end that the young lawyer may be prepared to serve his clients efficiently.
- To show the place, importance, and aims of the law in society.
- 4. To inculcate the principles of legal ethics and of the lawyer's public responsibility, so that the young lawyer may be prepared to take his place as a trusted leader, counselor, and guide in his community.

SCHOOLS REPRESENTED

An ever increasing proportion of our law students have secured their pre-legal education at colleges and universities other than Ohio Northern University. Many of these are coming with the bachelor's degree or its equivalent. Among the colleges and universities contributing to the pre-legal education of our students are the following: Baldwin-Wallace, Bowling Green, Defiance, Denison University, Geneva, Heidelberg, Hiram, John Carroll University, Kenyon, Marshall College, Miami, Mt. Union, Muskingum College, Ohio University, Ohio State University, Ohio Wesleyan University, Pittsburgh, Purdue, Rio Grande, Swarthmore, Toledo University, University of Cincinnati, University of Dayton, University of Kentucky, University of Michigan, University of Southern California, University of West Virginia, Virginia Military Institute, George Washington University, Washington and Lee University, Western Reserve University, Youngstown College.

BUILDING AND EQUIPMENT

The College of Law is located in a handsome two story building, built of ornamental brick in the classical style, erected in the year 1923. This building was especially designed to meet the requirements of the College of Law, and contains the classrooms, professorial offices, court room, library and reading rooms.

LIBRARY

The law library is up-to-date, modern, and well selected. It contains the reports of the courts of last resort of the States, the United States Supreme Court Reports, the Federal Reports, the Reporter System, a complete set of English Reports, the more important series of special reports and selected cases, a collection of the latest editions of standard text books, leading legal periodicals, digests, the leading encyclopedias of law, and other works of reference. The library is accessible each week day, the students being allowed free access to the books.

The material included in the library complies with law school library requirements of the American Bar Association.

METHODS OF INSTRUCTION

Instruction is based upon the case-book method. To the cases found in the case-book are added selected cases from Ohio and other jurisdictions. The lecture hour includes a thorough questioning of the student upon the cases studied and informal discussions by instructors and students upon the underlying and distinguishing principles illustrated by the cases.

PRACTICE COURT

There is a court room in the law building, completely and correctly furnished and equipped for modern court proceedings, and Practice Court, under the direct supervision of the faculty, forms a regular part of the work in which each student must participate. Students are required to prepare all the papers necessary in the case, and to follow the customary order of procedure. Pleadings, writs, motions and journal entries are thus prepared; juries impaneled, witnesses examined and crossexamined, arguments made to Court and jury, and in short, every step is taken in the moot case conforming to the procedure followed in a litigated action in a court of record; in a similar way, the Court requires practice in the Appellate courts, giving practical acquaintance with the proceedings and preparation of the necessary papers, in instituting and carrying on to completion cases appealed or brought up for review on petition in error.

ADMISSION

Students entitled to admission may enter the College of Law at the beginning of any quarter; but to receive the fullest benefit of the regular law course, students who are entering as candidates for a degree are urged to enter in September, the beginning of the University year.

Candidates of good moral character may apply for admission upon the following plans:

 Certificate. To enter the freshman year of law the requirements are (1) graduation from a first grade high school, and (2) two years of collegiate study in an approved College of Liberal Arts (60 semester hours or 90 quarter hours. exclusive of physical education.) A student desiring to enroll in the College of Law should cause to be sent to the University Entrance Examiner, at least ten days prior to the beginning of the quarter, his certificate of high school graduation and his transcript of collegiate work; these two papers must be on file, either for entrance to the College of Law or for registration as a law student upon the rolls of the Supreme Court; in no case can a deficiency in pre-law study be made up concurrently with the work of the College of Law.

- Advanced Standing. Advance credit is given for not more than two years of law study in residence at any reputable law school in the United States maintaining a three-year fulltime course.
- 3. Special Student. Persons who are not candidates for a degree and who have sufficient education and experience to study law with profit may enter the College of Law as special students with the approval of the Dean, even though they cannot meet the entrance requirements for a degree. Any one desiring to enter as a special student or to secure fuller information in regard to preliminary education should write to the University Entrance Examiner or the Acting Dean of the College of Law.

PRE-LAW AND ARTS-LAW COURSES

The College of Liberal Arts of this University offers exceptional opportunities to the student in preparing for the study of law.

The Pre-Law course offered not only meets the requirements set by the Supreme Court of the State of Ohio as to the preliminary education that every student must have before beginning the study of law, but is especially planned to help the student to prepare properly for such undertaking.

The Arts-Law course is designed for the student who desires the degree of Bachelor of Arts in the College of Liberal Arts and the degree of Bachelor of Laws in the College of Law. By taking this course, which extends over a period of six years, the student not only meets the requirements set by the Supreme Court of the State of Ohio but in addition thereto is entitled to receive the degrees indicated.

For further information about these courses, the student is referred to the Liberal Arts section of this catalogue.

GRADUATION

The degree of Bachelor of Laws is conferred on students who have completed satisfactorily a total of one hundred twenty-six quarter hours including all the prescribed courses, or who have received credit therefor in accordance with the section entitled Advanced Standing, and who have studied in residence at this College for at least three quarters immediately preceding graduation, and who have at least one quality point average for every credit hour.

GENERAL REGULATIONS

- Students may select from the courses offered such work as they desire, with the approval of the Dean, not to exceed a maximum of 16 credit hours per quarter. Special students may not become candidates for a degree.
- Hours above 16 are considered as excess and are subject to special tuition rates. Only in exceptional cases are regular students allowed excess hours.
- 3. In the section of the general catalogue dealing with Administration are found rules and regulations pertaining to chapel and class attendance, registration, and preregistration, government, withdrawing courses, warning and probation, eligibility for extra-curricular activities, examinations, grade marks, and quality points.
- Expenses, tuition, fees, living costs, and housing are likewise described in an earlier section of this catalogue.
- The Board of Trustees and Faculty of the University reserve the right to make such changes as they deem necessary without published notice.

OTHER ADVANTAGES

There are musical, debating, and dramatic societies and other organizations on the campus to which any student in the College of Law is eligible.

SUMMER SCHOOL

The College of Law offers several courses during the Summer Quarter. The subjects are taught by regular instructors who are in residence. For information write to the Dean, College of Law.

SENIOR HONORS

Two kinds of senior honors are recognized and conferred at graduation: honors (with distinction) granted to those who have a quality point average of 2.3 with no grade below D; and honors (with high distinction) granted to those who have a quality point average of 2.6 with no grade below C. These honors in scholarship are recorded on the diplomas, recognition is given at commencement, and the names of the recipients are printed in the catalogue. To receive senior honors a student must be in residence at Ohio Northern at least six quarters.

COURSES OF INSTRUCTION

PROFESSORS PETTIT AND SMITH, AND MR. WOODBRIDGE

FIRST YEAR

(All Courses are Required)

AGENCY (Winter)

5 Hrs.

The nature and purposes of the agency relation, parties, methods of creating the relationship, the nature and extent of the authority, the duties and liabilities of the agent to the principal and third persons, the duties and liabilities of the principal to the agent and third persons; also a consideration of workman's compensation legislation, and other phases of the subject of master and servant.

COMMON LAW PLEADING (Fall)

3 Hrs.

This course embraces a discussion of the nature and purposes of pleading, emphasizing the connection between pleading and the history and development of the Common Law.

CONTRACTS I (Fall)

5 Hrs.

CONTRACTS II (Winter)

3 Hrs.

Fundamental courses dealing with the nature of a contract; the capacity of the parties, offer and acceptance; consideration; requisites of contracts under seal; the performance of contracts, including conditions and impossibility of performance; the discharge of contracts; rights of beneficiaries, joint and several contracts; assignment of contracts; illegal contracts; and the statute of frauds.

CRIMINAL LAW AND PROCEDURE (Spring)

5 Hrs.

This course aims to give a comprehensive view of the general nature and theory of crimes, with a detailed study of the particular crimes against persons and property, and also of the machinery set up to enforce the criminal law, from the complaint and arrest through the trial to the execution of sentence.

DAMAGES (Spring)

2 Hrs.

In this course the rules governing the measure of damages in actions of contract and tort are considered.

Domestic Relations (Spring)

3 Hrs.

This course includes the law of marriage and divorce, parent and child, the rights and liabilities of husband and wife, the rights and liabilities of infants, and a thorough study of the statutes of Ohio in regard thereto.

LEGAL BIBLIOGRAPHY (Fall)

1 Hr.

This course is required but no credit is given for it towards graduation. The purpose is to give the student training in the use of law books and in finding the law.

PERSONAL PROPERTY (Fall)

3 Hrs.

This course deals with the distinctions between real and personal property; of the title to personal property and its transfer by convention and by law; its use and liabilities arising therefrom.

REAL PROPERTY I (Winter)

3 Hrs.

This course treats of the historical origin of land law, tenure, seisin, the differentiation of estates in land, rights in air, water, easements, covenants running with land, licenses, rents, waste, and public rights.

REAL PROPERTY II (Spring)

5 Hrs.

Titles and their transfer by act of parties and by operation of law.

THE LEGAL PROFESSION (Fall)

2 Hrs.

History, organization, and current problems of the legal profession; biographical study of leading jurists; the place, importance and aims of the law in the social structure; the qualifications and duties of an attorney in relation to society; professional conduct and ethics.

TORTS I (Fall) TORTS II (Winter)

3 Hrs.

4 Hrs.

Personal rights and duties, both absolute and those arising from social relations; violations of such rights, either by direct force or indirectly by fraud, negligence; different kinds and classes of torts; defenses, excuse, justification, and other defenses by way of confession and avoidance; self-defense, contributory negligence, its scope and limitations by modern Employer's Liability statutes; pleading, evidence and measure of damages.

SECOND AND THIRD YEAR

(Courses marked with a † are required)

BANKRUPTCY (Spring)

2 Hrs.

Procedure and practice in bankruptcy.

† BUSINESS ORGANIZATION I (Fall)

3 Hrs.

† BUSINESS ORGANIZATION II (Winter)

3 Hrs.

A study of the various types of business association, including partnership, business trust, and corporation.

CONFLICT OF LAWS (Winter)

2 Hrs.

This course treats of the principles of private international law; jurisdiction of courts; the law governing torts, contracts, divorce, transfers of property by deed, will and intestate succession; penal statutes; marriage, adoption, domicile; foreign judgments and such procedural matters as statutes of frauds and of limitations.

† CONSTITUTIONAL LAW I (Fall)

3 Hrs.

† CONSTITUTIONAL LAW II (Winter)

3 Hrs.

Courses include the interpretation of the constitutional limitations for the protection of life, liberty and property, police power, taxation, eminent domain, obligation of contracts; and a consideration of the law of the American federal system, with special reference to inter-state commerce, the powers of Congress and the jurisdiction of the federal courts.

† EQUITY I (Fall)

4 Hrs.

† EQUITY II (Winter)

4 Hrs.

This course involves the consideration of the rise of the court of equity; the powers of such court; principles governing the exercise of equitable powers.

† EVIDENCE I (Fall)

3 Hrs.

† EVIDENCE II (Winter)

3 Hrs.

Competency of witnesses at common law and under modern statutes; burden of proof, prima facie cases and presumptions of law; the best evidence rule, hear-say rule and exceptions, parole evidence rule and exceptions.

† FEDERAL JURISDICTION AND PROCEDURE (Spring) 3 Hrs.

A study of the jurisdiction of the federal courts.

† FUTURE INTERESTS (Fall)

3 Hrs.

A study of future interests, vested and contingent, in real property.

INSURANCE (Spring)

3 Hrs.

This course includes the nature and requisites of the contract, parties, insurable interest, premiums, representations and warranties, agents and their powers, waiver and estoppel, rights under the policy, a study of the standard fire policies, life insurance, marine and accident.

† LEGAL ETHICS (Spring)

1 Hrs.

This course treats of the rules of conduct governing the lawyer in the practice of his profession.

† MORTGAGES (Winter)

3 Hrs.

The various theories of the mortgage including the historical evolution thereof in equity; recording statutes; and other problems in connection with the law of mortgages.

MUNICIPAL CORPORATIONS (Winter)

3 Hrs.

This course treats of the general nature, and rights and liabilities of public corporations, (cities, villages, counties and townships.)

† NEGOTIABLE INSTRUMENTS (Fall)

5 Hrs.

This course involves the consideration of the general principles governing bills of exchange, promissory notes, and checks, and the uniform negotiable instruments law.

† PLEADING I (Fall)

3 Hrs.

† PLEADING II (Winter)

3 Hrs.

Common law pleading and code pleading, with outstanding differences in systems. Pleadings in appellate courts, in error proceedings and in criminal cases.

PUBLIC SERVICE CORPORATIONS (Spring)

3 Hrs.

This course treats of the history and development of the law regulating public utilities.

QUASI-CONTRACTS (Winter)

4 Hrs.

The nature of the obligation; restitution at law for benefits conferred under mistake of fact or mistake of law; benefits conferred under a contract where impossibility, illegality, the statute of frauds or wilful default is involved; benefits conferred without a contract; or benefits conferred under compulsion; waiver of tort.

† SALES (Spring)

4 Hrs.

The topics included in this course are formation of the contract, the statute of frauds, the passing of the property, fraud and retention of possession, illegality, condition and warranties, performance, rights of the seller and the buyer in case of breach.

† SURETYSHIP (Spring)

4 Hrs.

This course includes the creation of the relationship, the contract, the statute of frauds, the rights and remedies, the defenses, guaranty contracts and letters of credit, private and corporate sureties, and incidentally a consideration of the different kinds of bonds.

† TRIAL AND APPELLATE PRACTICE (Spring)

4 Hrs.

Principles controlling the trial practice of civil actions; laying a foundation for review; methods and procedure of review and disposition upon review.

† TRIAL PRACTICE (Spring)

1 Hr.

The actual litigation of legal controversies, including the use of witnesses and a jury; the preparation of pleadings and briefs; the presentation of oral arguments. The judge of each case is a visiting member of the Ohio Bench or Bar.

TRUSTS (Spring)

4 Hrs.

This course treats of the origin and development in courts of equity of the law of trusts and trustees.

† WILLS AND ADMINISTRATION OF ESTATES (Fall) 4 Hrs.

The course treats of the nature of testamentary dispositions.

PRIZES ANNOUNCED ON RECOGNITION DAY, 1932

GENERAL PRIZES

Hamilton E. Hoge Prize	Brandt S. Hervey
J. J. Pilliod Prize	Charles Robert Case
Lehn and Fink Gold Medal	- Myron E. Fish
Charles S. Ashbrook Medal	James N. Cavett
Avanell Stambaugh Prize	Cloyd Dale McIntyre
University Prize	Ruth Lois Krill
Visit to approxime Select	Charles Robert Case

DEPARTMENTAL PRIZES

Biblical Literature William L. Horst
Biology Russell J. Long
Chemistry Alfred G. Susie
Economics and Business Administration - George C. Hindall
English Charles E. Renninger
History Curtis E. Johnson
Latin Mary Bess Hauman
Mathematics Charles Robert Case
Modern Language Ruth H. Williams
Wilhelmina Arbogast
Political Science Ruth Lois Krill
Public Speaking Kathryn Poor
Physics, Walter F. Rittman Prize - Forest W. Mertz
Psychology Roma Runyan Collett
Physical Education, Alpha Epsilon Pi Prize - Mary Jane Miller
Civil Engineering John T. Kolb
Hoskins Debate Prize Ezra L. D'Isa
Robert Koski

COLLEGE OF PHARMACY HONORS

National Association of Drug Clerks' Certificates based upon Scholarship:

Materia Medica	-		Charles R. Van Keuren
Pharmacy -	-	-	- Paul Joseph Weiss
Chemistry -	-	-	Morris Katz

PRIZES ANNOUNCED ON RECOGNITION DAY, 1933

GENERAL PRIZES

University Prize		- Joseph R. Williams
University Prize		- Margaret Vera Early
J. J. Pilliod Prize -		- Maynard C. Yeasting
Hamilton E. Hoge Prize -	- •	- William D. Radeliff
John F. Stambaugh Prize	-	Gladys Reed Russell Milburn
Lehn and Fink Gold Medal		- Margaret Vera Early
Ashbrook Medal		- John Poe Newton

DEPARTMENTAL PRIZES

COLLEGE OF LIBERAL ARTS

Biblical Literature	- Bessie Brown
Biology	Ruth Loy
Chemistry	- Wendell Binkley
Economics and Business Administration	a - Mary E. Condon
Education	- Grace Stivers
English	- Maxine Mead
History and Political Science -	- Bernard Freeman
Latin	Milan Baker
Mathematics	- Mildred Cronbaugh
Modern Language	- Edna Burean
Music	- James Middleton
Physics	- Robert McMillen
Psychology and Sociology	- Dwayne Mengel
Physical Education	- Allison Young

COLLEGE OF ENGINEERING

Chemical Engineering	-	William S. Russell
Civil Engineering	-	Maurice C. Stacy
Electrical Engineering		Gordon C. Chappell
Mechanical Engineering	-	Donald E, DuPerow

COLLEGE OF PHARMACY

National	Association of	Drug	Clerks'	Certificates	Based
upon	Scholarship:				

	Materia .	Medica	-	-		LaVerne H. Hakes
	Pharmacy	-	-		-	Dana W. Floding
	Chemistry	-	-	-	-	David T. Camin
Materia	Medica		-	-	-	Clyde A. Fischer
Pharmac	eutical Cl	hemistry	-	-		Thomas L. Hedges
Pharmac	ry -	-		- 1	-	Clyde A. Fischer

COLLEGE OF LAW

First Year	-	-	-	-	-	Charlton Myers
Second Year	-	-	-	-	-	Fred L. Eberhart

Graduates of 1932

HONORARY DEGREES

MERTON S. RICE - - - Doctor of Laws
ROBERT LEONARD TUCKER - - Doctor of Divinity
R. E. Offenhauer - - - Doctor of Pedagogy

GRADUATES OF THE COLLEGE OF LIBERAL ARTS

BACHELOR OF ARTS

Allen, John Franklin	
Barry, Gladyce Martin Nev	
Bigler Marguerite	
Brace, Russell Floyd	Randolph, N. Y.
Brooks, Sarah Lauretta	
Cole, Robert Charles	Ada
Connelly, Victor LaMarr	Ney
Cox, Beulah Louise	Sidney
Dyer, Dwain Bugher	Caldwell
Eberhart, Fred Lewis	
Flood, James Murlin	Sayre, Pa.
Fugate, Clifford Forest	
Genevriere, Rose Marguerite	Bellaire
Goodman, Martha Judith	
Haber, Dan Burns	
Hammond, Lee Chester	
Harrod, Paul Monroe	Ada
Hilty, Florence Luella	
Horning, Opal May	
Horst, William Lloyd	
Johnson, Curtis Edward	Marinette, Wis.
* Krill, Ruth Lois	
Landon, Helen LeIrma	
Long, Russell John	
McClain, Sam Braidon	Bellaire
McHugh, James Harold	Smithfield
Mertz, Forest William	
Miller, Mary Jane	
Pees, Mervyn	
Pratt, Thelma Janet	
* With Distinction. ** With High	
Sientedon with IIIgi	. Distinction.

Pugsley, Irene Adeline	Cleveland Hts.
Reed, Anne Eileen	Ada
Roberts, Charles Doria	Youngstown
Rockwell, Gerald Park	Ada
Shafer, Lodena Elizabeth	Carrothers
Shepard, Joseph Lawrence	Rockford
Shultz, Ralph Hudson	Ada
* Slater, Russell Robert	Lima
Speer, Mildred Avinell	Ada
Stanfield, John Martin	
Suber, Leola Clara	Deshler
Sweet, Elizabeth Perry	Lebanon, Conn.
Valentine, Millie Stroh	Ada
Ward, Miller Harris	Ada
Whisker, Vaughn Edmond New I	Buena Vista, Pa.
Whitlock, Harold Edmund	Convoy
Williams, Ruth Hettle	Defiance
Williams, Wayne Henry	Elyria
Wood, Moston Weaner	Ada
Young, Leilah Grace	Anna

BACHELOR OF SCIENCE IN EDUCATION

Binkley, Walter Virgil	
Chrismer, Edna	Lima
Coats, Ora Jennings	Lima
* Dickman, Margaret Delores	New Philadelphia
Erbaugh, Aloysia May	CONTRACTOR OF THE CONTRACTOR O
Irick, Betty	
Jacobs, Oscar Raymond	
Love, Thomas William	Byesville
McCoy, Floyd Walter	Jackson
Marks, Margaret	Lorain
Marshall, Opal	Dola
Martin, Katherine Dorothea	
Peterson, Charles Ardus	
Rogers, Everit Clarence	
Spisak, Victor Joseph	Girard
Stewart, James Marshall	Warsaw
Strahm, Mamie Olive	Ada
Sutermeister, Everett Alan	Ada
* Tallman, Hazel	Ada
Thompson, Merle Roa	Toledo
* Walker, Alma Mercer	Ada
Winegardner, Chester Arthur	Time
Young, Ernest Dee	Lima
The state of the same of the s	Dillie

^{*} With Distinction. ** With High Distinction.

GRADUATES OF THE COLLEGE OF ENGINEERING

CHEMICAL ENGINEER

Ruckman, James Merritt _____ LaRue

CIVIL ENGINEER

Whipp, Wilton S. Springfield, Ill.

MECHANICAL ENGINEER

Lee, Chun C. China

BACHELOR OF SCIENCE IN CHEMICAL ENGINEERING

Kline, Russell Oliver ______ Gilboa
Knostman, Royal Louis _____ Lima
Luke, Leo Harold _____ Fayette
Noe, Glenn Wilson _____ Findlay
* Susie, Alfred George _____ Midland, Pa.

BACHELOR OF SCIENCE IN CIVIL ENGINEERING

Bolch, William Emmett Hickory, N. C. Carrier, Robert Tyrrell _____ Corfu, N. Y. ** Case, Charles Robert _____ Randolph Dougherty, Donald Fix _____ Dallastown, Pa. Foster, Joseph Andrew _____ Findlay * Glass, Wilbur Herman _____ Lima Hawk, Alfred Frederick _____ Kittanning, Pa. Hyde, Charles Joseph West Farmington ** Kolb, John Thomas _____ Pardoe, Pa. Laur, Arthur Adrian _____ Niagara Falls, N. Y. Lundberg, Herman Frederick _____ Pittsfield, Mass. MacCallum, J. D. _____ Lima Maier, Carl George _____ Salamanca, N. Y. Michel, Frederick John Springville, N. Y. Miller, Donald Clyde _____ Lima Moorhead, Max Daniel _____ Findlay Quinn, Thomas Daniel _____ Lima Skidmore, Claude Ferman _____ West Mansfield * Vincke, Elvin Ferdinand _____ Lima * With Distinction. ** With High Distinction.

BACHELOR OF SCIENCE IN ELECTRICAL ENGINEERING

BACHELOR OF SCIENCE IN MECHANICAL ENGINEERING

Baldwin, Charles Edwin	Springfield
	Shaker Hts.
	B Dunkirk
	Tiffin
	Barberton
	Warren

GRADUATES OF THE COLLEGE OF LAW

BACHELOR OF LAWS

* Adkins, Raymond Harlin	Lima
Boesch, Robert Charles D	ayton
Bradley, Lincoln Frederic White	house
Brague, Herben Azell Claric	ngton
Carmosino, Joseph Mario Clev	
Deare, Manfull Ashton Sharon	. Pa.
Gerhardt, George Edward Circl	
Glathart, Clifford Ellsworth Fi	
Harre, Paul Daniel Kan	
* Hervey, Brandt Smythe Martins	
Lease, Charles Franklin K	
Morrow, William James To	
Ray, Edwin Essex Fi	

GRADUATES OF THE COLLEGE OF PHARMACY

PHARMACEUTICAL CHEMIST

The second second	Lester		 Cleveland
			Lowellville
Burke,	Robert	Morris	 - Dayton

[·] With Distinction. · With High Distinction.

Canzonetta, Peter	
Domizi, David	Cleveland
Field, Charles Earl	Cuyahoga Falls
Finer, Harry Philip	Cleveland
** Fish, Myron Eugene	Youngstown
Grimm, Carl LeRoy	
Hanley, Paul J	Galion
Hart, Honor Edward	Sterling
Hurless, Lois Maxine	Willshire
Katz, Morris	
Kithy, Renzo Masson	Cambridge Springs, Pa.
Koehler, Raymond Frederick .	Upper Sandusky
Lehman, Floyd H	
Levy, Charles	Cleveland
McElroy, Harold Baird	Carrollton
Pew, Douglass Brannon	Cleveland
Richard, Robert Richard	Cleveland
Scheer, Frank William	Cleveland
Schneiderman, Meyer	Cleveland
Siegel, Morris	Cleveland
Smith, Ross Putnam	Wauseon
Souders, Edgar Byron	Crooksville
Tittle, William Benjamin	Akron
Trumbull, Clyde Orvill	Weston
Turner, George Allen	Ashtabula
Van Keuren, Charles Robert	Cleveland
Weiss, Joseph Paul	Akron
Weiss, William Samuel	Cleveland Hts.
Wright, Volney Samuel	DeGraff
Tannehill, William McMillen	Mt. Sterling

PHARMACEUTICAL GRADUATE

Cavett, James Norton _____ North Baltimore

BACHELOR OF SCIENCE IN PHARMACY

Barry, Ray William	McKeesport, Pa.
Carey, Thomas Joseph	Girard
Keils, Grace Lorene	Cleveland
Raabe, Haydn	Ada
Speice, Clarence Allen	Cleveland

GRADUATES OF THE TWO-YEAR COURSE IN

ELEMENTARY EDUCATION

Armentrout, Erma Della A	lger
Arn, Goldie Ke	nton
Arter, Helen Upper Sand	usky
Bailey, Frances Gray St. Petersburg,	Fla.

^{*} With Distinction. ** With High Distinction.

	Bateman, Ralph	Union City, Ind.
	Becker, Mildred	Spencerville
	Beem, Starling Christine	Richwood
	Bishop, Beryl Maurina	Ashland
	Boutwell, Mildred Gayle	Ada
	Candea, Eleanor	Niles
	Cannon, Yvonne	Wapakoneta
	Carmean, Evelyn May	Kenton
	Coats, Ellen Gail	Tiffin
	Cook, Opal Lucille	Jenera
	Copeland, Dorothy Heil	Wapakoneta
	Corbin, Lillian Mae	Wharton
	Corson, Martha Elizabeth	Hopewell
	Cox, Mildred Irene	Edison
	Dunn, Ruth Cronley	Sidney
	Duvall, Lula Edith	Wapakoneta
	Emerson, Sophia Christine	St. Johns
	Fields, Homer Lewis	Versailles
	Fisher, Helen Lucille	Lima
	George, Eugene	North Ston
	Greulach, Marie Elizabeth	Van Wert
	Grigsby, Opal Ault	Gomer
	Guyton, Mary Beldren	Alger
	Hall, Charles Ernest	Arlington
	Harshbarger, Margaret Esther	Sidney
	Hoel, Ruth Joan	Lima
	Jenkins, Roy R.	Haviland
	Kemper, Verna Katherine	Ada
	Kidd. Lenore Orpha	Bluffton
	Kidd, Neva Frances	Bluffton
	Kirchenbauer, Lester	Wren
	Kreischer, Marcille Margaret	Lima
	Krugh, John Taylor	Venedocia
	Kuhlman, Lillian Ella	Lima
	Leatherman, Pauline Leona	Wadsworth
	Lowrie, Helen Marie	Roundhead
	McAlpin, Mary Ellen	Ada
	McCloud, Avanelle Bernice	Kenton
	Mason, Aline Maria	Lima
	Miller, Caroline Elizabeth	Findlay
	Miller, George Adam	
	Miller, Mary Irene	Grover Hill
	Neal, David Smith	Roundhead
į	O'Roark, Mildred Naomi	Dunkirk
	Plack, Alice Carmoline	Galion
	Randolph, Juanita Janet	Ashley
	Reames, Mary Hughes	Columbus
Š	Rhoades, Bernice Yorkshire	Yorkshire
	Rimer, Rachel Wiseley	Kalida
ı	Rolston, Audrey Emma	McGuffey
	Rufenacht, Edna Mae	Archibald
N	Rundell, Ethel Josephine	Ada
1	Scarbrough, Carl Rex	Grover Hill
-	Schilling, Amelia Magdalena	Ada

Schubert, Vera Meredith	Sidney
Shaner, Mildred Alys	Circleville
Skillen, Ethel Gish	Houston
Smith, Myrtle Marie	Versailles
Smith, Ruby Ada	Buckland
Stienecker, Clement R	
Stockstill, Dorothea Ilene	
Thompson, Georgia Roberta	Lima
Warner, Pauline Cecelia	Dunkirk
Wheeler, Gertrude Reed	
Wierville, Grace Emily	St. Marys
Wilson, Hazel Orelda	Bucyrus
Winemiller, Mildred Elizabeth	Lima
Winget, Ilo Della	Wapakoneta
Wright, Georgia Burlin	Spencerville
Young, William Kinnison	Bellecenter
Toung, it milant zeminoon assessment	

SYNOPSIS OF CLASS OF 1932

M	(en	Women	Total
Bachelor of Arts	29	21	50
Bachelor of Science in Education	12	11	23
Bachelor of Science in Chemical Engineering	5	0	5
Bachelor of Science in Civil Engineering	19	0	19
Bachelor of Science in Electrical Engineering	14	0	14
Bachelor of Science in Mechanical Engineering	6	0	6
Chemical Engineer	1	0	1
Civil Engineer	. 1	0	1
Mechanical Engineer	1	0	1
Bachelor of Laws	13	0	13
Pharmaceutical Chemist	32	1	33
Pharmaceutical Graduate	1	0	1
Bachelor of Science in Pharmacy	4	1	5
Graduates of the Two-Year Course in Educ'n	12	62	74
Totals	150	96	246

Graduates of 1933

HONORARY DEGREES

CHARLES BERNARD JO	RDAN				Doctor of Science
HOWARD E. LLOYD		W - 1			Doctor of Divinity
JULIUS W. ROGOFF	-		-	-	Doctor of Science
EARL F. ZEIGLER	-		-	-	Doctor of Divinity

GRADUATES OF THE COLLEGE OF LIBERAL ARTS

BACHELOR OF ARTS

Archibald, William Birch
Boardman, James Henry
Balamenti, James Joseph
*Condon, Julia Margaret
Cunningham, David Sands
Hauman, Mary Bess
Hindall, George Clarence
Jones, Ollie Jane
Judkins, Lois Jean
King, Lawrence Henry
Kohn, John Walter
Kump, Mildred Leona
Lady, Joseph Emerson
Lavine, Elmont
LePage, Herbert William

Levengood, Elizabeth W.
Messenger, Robert Hale
Milburn, Russsell Thomas
Moyse, Craig Arden
Reed, Gladys Jean
Russell, Amos Pearl
Saphar, Edwin George
Shanks; Royal Eastman
Shepherd, Harless Morris
Silverthorn, Robert William
Templeton, Elizabeth Arabelle
Teple, Edwin Russell
*Williams, Joseph Ralph
Wolfrom, Mary Vickroy

BATHELOR OF SCIENCE IN EDUCATION

Balyard, George Russell
Behrns, Frederick Joseph
Brown, William Miller
Conde, Murlyn Kenneth
Cushman, Asa Bailey
Dimond, Robert Francis
Eaton, Darwin Curtis
Eldredge, Amy McGown
Fogle, Harland R.
Haase, William Frederick
Hawes, Orville William
Jacobs, Roy Kenneth
Kemp, Lewis Joy
Konrath, Perl George
Langshaw, Eleanor Elizabeth

McKibben, Ralph
Mead, Mildred Eloine
Musser, John Beaman
Pankow, Edmund
Patterson, James Paul
Priddy, John O.
Schilling, Paul Richard
Sandrock, Howard Taft
Tudor, Beulah Jane
Uhl, David Glen
Uhl, Joseph Stewart
Warner, Pauline Cecelia
Watkins, Gladys
Wright, Georgia Burlin

^{*} With Distinction

^{**} With High Distinction

GRADUATES OF THE COLLEGE OF ENGINEERING

BACHELOR OF SCIENCE IN CHEMICAL ENGINEERING

Croft, Maurice William Deniston, George Lowell Edwards, Thomas Charles Fry, Fred Jewell, Robert Klinedinst Kline, Russell Oliver Sherard, Charles John

CIVIL ENGINEER

Achki, Kemal Lamb, Ping Yin Scanlin, Ralph Harry Sheldon, Robert C.

BACHELOR OF SCIENCE IN CIVIL ENGINEERING

Alpaugh, Elvin
Anderson, Kenneth Boyer
Bennett, Robert Noble
Bowen, Roger Thomas
Castano, Manuel Schmidt
Castrence, Prudencio Caamped
Core, Edward Knight
Derr, Franklin Pierce
Dowling, Francis Raymond
Elder, Paul Franklin
Hofman, Charles Frederick
Irwin, Frederick Bruce
Lewis, Gordon Victor

Life, Harry Lewis
McCrady, Henry Taylor
MacLaren, Donald John
Palmer, Charles Wallace
Ramirez, Frank Milton
Rickenberg, Edward H.
Roberts, John Lewis
Rogers, Edward Ragan
Scott, Lester Gerald
Stiles, Leland Joseph
Studer, John Eugene
Warren, William Edwin
Witt, Elwood Hohmann

BACHELOR OF SCIENCE IN ELECTRICAL ENGINEERING

Arnold, Lloyd Henderson Dietrich, George Herbert Dreisbach, Robert James Hauber, Bernard Glenn Howard, John Wilbur Moorhead, John Otis Pees, Donald Russell
Schneider, Harlon Casper
Stiles, Bernard
Wagner, George Edgar
Williams, Calvin Marion
**Yeasting, Maynard Charles

BACHELOR OF SCIENCE IN MECHANICAL ENGINEERING

Berger, Robert Frederic Brown, Henry Herbert Hall, William Harold Hester, Ezra Gorham Johnson, Louis Frederick • With Distinction King, Burdette Monroe Landon, Richard Garwood Phelps, Cecil Arthur Sheets, Gilbert Stanley

.. With High Distinction

GRADUATES OF THE COLLEGE OF LAW

BACHELOR OF LAWS

Brickman, Arthur James
Carpenter, Robert Charles
Crunelle, John Richard
D'Isa, Ezra Louis
Downing, Robert Mallahan
Dunlap, Francis Howard
Francis, Lewis Marsh
Gallagher, John Joseph
Heltman, Joseph Paul

Henry, Roy Leslie
Houck, George Leonard
Howell, John Wood
Hughes, Morris Kent
*Radcliffe, William Dudley
Siverling, Alan Ross
Spahr, Thane M.
Spitler, Downs Calvin
Spitler, Emmett Van Burtis

GRADUATES OF THE COLLEGE OF PHARMACY

PHARMACEUTICAL CHEMIST

Baransy, Florine
Camin, David Terry
**Early, Vera Margaret
Eiseman, Nathan
Floding, Dana Willis
Gliemmo, Joseph Michael
Hakes, LaVerne Harold
Huguenin, Victor Emil
Levine, Benjamin Bert
McCarthy, Edward William
Meyer, Walter Harmon

Parrino, Louis Anthony
Primmer Harold Denton
Rygwalski, Frank Lawrence
Seifried, Frank
Shumaker, Robert Louis
Smith, Ernest Parmer
Speice, George Nelson
Stirn, Thurlo Vernon
Van Fleet, Robert Livengood
Warren, Gerald

BACHELOR OF SCIENCE IN PHARMACY

Newton, John Poe

Shepard, Earl Wesley

GRADUATES OF TWO-YEAR COURSE IN ELEMENTARY EDUCATION

Badertscher, Harvey Eugene Baker, Mary Marguerite Baker, Milan D. Baldwin, Mildred Lora Blosser, J. Harold Bowers, Lowell Anderson Bowsher, Ardrey

Brenneman, Timothy H. Brewer, Elmer Wayne Brown, Clarence A. Castle, Frances Lucile Coles, Dorotha Cooper, Myra Marguerite Daniels, Helen

Davis, Florence Ruth Dill, Adelia Elizabeth Downing, Roger Dunning, Dorothy Fields, Donald Ray Focht, Wilda Foster, Charles Hugh Fulks, Louisa Gantt, Velma Brian Gesling, Martha M. Giessler, Theophilus Gross, Harry Alton Hagerman, Bernice Luella Heil, Ruth Huey, Gladys Irene Hler, Lloyd H. Irons, Loine Ash Jenkins, Wanda Zielke Keiser, Ruth Louise Kreischer, Leroy Kunze, Margaret F. Lenhart, Edward Leroy Linder, Ruth McVey, Juanita Lucile Marquart, Lucille Marquart, Ruth Marshall, Carson J.

Mason, Blanche Juanita Mauller, Agnes Lucille Neville, William Burke Oates, Cleo Helen Pease, Mary Adell Raberding, Carolyn M. Read, Esther Elizabeth Reed, Ada Pauline Reed, Helen Ruth Rostron, Jane Shafer, Glenna Loretta Shumaker, Dorothy Elizabeth Stauffer, Lucile Stump, Ardray L. Sullivan, Grace Luclla Taylor, Frances Madaline Tracht, Josephine Underwood, Pearl Voltz, Amy Elizabeth Walters, Audrie Watkins, Thelma Josephine Windle, Florence Amanda Wood, Wilma Ruth Woolf, Dorothy Waneta Younkman, Estle Metty Zimmerman, Oren Ezra

SUMMARY OF CLASS OF 1933

Men	Women	Total
Bachelor of Arts 20	9	29
Bachelor of Science in Education 22	7	29
Bachelor of Science in Chemical Engineering 7	- 0	7
Bachelor of Science in Civil Engineering 26	0	26
Bachelor of Science in Electrical Engineering 12	0	12
Bachelor of Science in Mechanical Engineering 9	0	9
Civil Engineer 4	0	4
Bachelor of Laws 18	0	18
Bachelor of Science in Pharmacy 2	0	2
Pharmaceutical Chemist 19	2	21
Graduates in Two-Year Education 20	47	67
Total Graduates 159	65	224

Total Graduates _____ 159

SUMMER STUDENTS, 1932

Allensworth, Charles W	_A	Amsterdam
Andreko, John	_A	Universal, Pa.
Arbogast, Margaret Elizabeth		
Arn, Goldie A	_A	Kenton
Arter, Helen Marcille	_A	Upper Sandusky
Aungst, Norman Clyde		
Bachelder, Gale William		
Baden, Raymond Lawrence .		
Bailey, Frances Gray		
Bailey, Winona		
Baker, Milan Delmont		
Barnes, Willard Clark		
Barr, Glenn S.		
Barry, Ray W.		
Basinger, Marcella V.		
Bauman, Ruth Gladys		
Baumgardner, Bernice Clara		
Baxter, Betty		
Baxter, Mary		
Becker, Mildred Catherine		
Beem, Starling Christine		
Behrns, Frederick Joseph		
Benge, Mary Lou		
Bishop, Beryl Maurina		
Bixel, Harold Edison		
Bolton, Miriam Mabel		
Boroff, Alice Nancy		
Boutwell, Mildred Gayle		
Bowers, Lowell Anderson		
Bowles, Arthur Lee		
Bowyer, Mary Holliday		
Brewer, Elmer Wayne		
Brooks, Casper Allen		
Brown, Clarence A		
Brown, Lottie Albertine	A	Favotta
Brown, Miller William	A	Ada
Brown, William Edgar	A	Waynesfield
Browns, Howard Herschell	E	Lakeview
Buehler, Edna Joanna		
Burean, Edna Josephine		
Burnham, Mildred	A	Truin
Burson, Velma Gail	A	Senecaville
Butler, Grace Marie	A	Daghlar
Mark Committee of the Art Committee of the Committee of t		Desiler

A — Liberal Arts

L - Law

E - Engineering

	Wayana Cuba
Calderin, Andres Lasaga	Venton
Carmean, Evelyn May	A Kenton
Chalfin, Dorothy Helen	A McGuffer
Chalfin, Homer	A McGuffer
Chalfin, Lloyd W	A McGuiley
Chiles, Cleo	A Kenton
Chrismer, Edna	A Lima
Clark Nina Cook	A Ashtabula
Coats Gail Ellen	A Tiffin
Coats Ora J.	A Lima
Coles. Dorothea D	A Upper Sandusky
Combs. Lucille Evelyn	A Cloverdale
Conde Murlyn Kenneth	A Elmira, N. Y.
Condon Margaret Julia	A Ada
Connelly Victor LaMarr	A Ney
Contris, Lyman Ackerman	A Westminster
Cook, Opal Lucille	A Jenera
Cooper, Marguerite Myra	A Kenton
Cooper, William Brooks	A East Liverpool
Copeland, Cornell Elwood	A Wapakoneta
Copeland, Dorothy Heil	A Wapakoneta
Copeland, Richard Raymond _	A St. Johns
Corbett, Chester G	A Magnolia
Corbett, Chester G.	A Wharton
Corbin, Lillian Mae	A Hopewell
Corson, Martina Elizabeth	A Lima
Cotner, Mary Mildred	A Lima
Cox, Mildred Irene	AEdison
Cunningham, David Sands	A Hobart, N. Y.
Curl, Vivian Gertrude	A Zanesfield
Davies, Eva Irene	ASenecaville
Davis, Marian Louise	A Chicago, Ill.
Day, Harry Edward	E Upper Sandusky
Decker, Grace	A Dunkirk
DeWitt, Esther Camellia	A Dunkirk
Dickason, Oren Edward	A Ada
Dickelman, Martha Susan	A Forest
Diehl, Bessie	A Johnstone
D'Isa, Ezra Louis	L Youngstown
Dixon, Margery	A Lima
Dolbey, Margaret Mary	A Delphos
Doty LeVon Elwood	A Lima
Downing, Roger L.	A Wapakoneta
Dull Sarah Virginia	A Wren
Dunn Ruth Cronley	A Sidney
Duvell Lula Edith	A Wapakoneta
Eherhart Anna Rehecca	A Williamstown
Eldredge Amy McGown	A Piqua
Elliott Une P	A Ada
Elliott, Ona D	

Falk, Elizabeth Irene	_A	Mt. Corv
Falk, Mary Levon	_A	Mt. Corv
Fields, Homer Lewis		
Fish, Esther Aurelia		
Fisher, Helen Lucille		
Focht, Wilda Marie	A	Kenton
Fogle, Harland Ransom	A	East Fultonham
Fortunato, Frank	A	Pittehungh Do
Franklin, Muriel Ellen	A	Puorena
Fry, Donald Edgar		
Fulks, Louisa M.		
Gallagher, John Joseph		
Gesling, Martha Myra		
Gleason, Lola Mae	A	Lancaster
Goodbread, Ruth Suzanne -	A	Fayette
Greulach, Marie Elizabeth		
Griffin, Jane May	- 12	Van Wert
Grigsby, Opal Ault	_A	Gomer
Grimm, Carl LeRoy	A	St. Marys
Gross, Harry Alton	-A	Lakeview
Groves, Hiram Gregg	ы.	New Concord
Guyton, Mary Beldren	_A	Alger
Hall, Charles Ernest		
Harbourt, Ella Patience	_A	Mt. Pleasant
Harre, Paul Daniel	_L .	Kane, Pa.
Hatcher, Ella Jane		
Hawk, Alberta Carey		
Heil, Ruth Robinson	_A	Kenton
Henderson, Jessie L		
Henry, Roy Leslie		
Hersh, Alice Zoe	_A	Continental
Hesser, Juanita	_A	Ada
Holycross, Miriam Jean		Ada
Hubbell, Mary Catherine		
Huber, Joy Kidd		
Hughes, Morris Kent		
Huling, Frederick Samuel _	_E -	Bradford
Iler, Lloyd Henry	_A	Paulding
Irick, Betty	_A	Ada
Jacobs, Kenneth Roy	_A	Continental
Jacobs, Oscar Raymond	-A	Continental
Jaycox, Hartley Edwards		
Jeffrey, Maud Irene		
Jenkins, Roy R		
Jenkins, Wanda Zielke		
Johnson, Frances Annette _		
Johnson, Walter Francis		
Jones, Anna Elva		
	45055	

Jones, Leola GriffithA	Vaughnsville
Jones, Ollie JaneA	
Jones, Wilbur WilsonA -	
Kalp, Leona HannahA	
Kearns, Doris LuemmaA	
Kemp, Lewis JoyA	Magnolia
Kemper, Verna KatherineA .	
Kemper, verna KatherineA .	Calina
Kennedy, IreneA	The state of the s
Kerns, Herbert Rufus A -	Troy
Kessler, Anson ThomasA	Brookville
Kidd, Neva FrancesA	
Kirchenbauer, LesterA	
Kissling, Lacy AustinA	McGuffey
Kline, Russell OliverE .	Gilboa
Konrath, Perl GA	Toledo
Kreischer, Erma Elizabeth A	Wren
Krugh, John TaylorA	Venedocia
Kump, Mildred LeonaA	Atwater
Kutza, Edward DumontA	Lorain
Lady, Joseph EmersonA	Ridgeway
Landon, LeIrmaA	Ada
Lange, Luella BettyA	Maria Stein
Lange, Luella BettyA	Flide
Leis, HowardA	Manuatia Carings
Lemon, Esther IA	Magnetic Springs
Lenhart, Edward LeroyA	Lakeview
Levan, Leona MA	West Mansfield
Llewellyn, Blanche Marie A	
Love, Thomas WilliamA	
Lowrie, Helen MarieA	
Loxley, Harold HA	Arcanum
McAlpin, Mary EllenA	Ada
McClain, Sam BA	Bellaire
McCleary, RushA	Ada
McCloud, Avonelle Bernice A	
McCracken, Mary Louise A	Martel
McGee, Eldon EugeneA	
McKelvey, Thomas Willard -A	Bellaire
McKelvey, William Randolph A	Bellaire
McKibben, Robert HughE	Elvria
McKibben, Robert HughE	Kenton
McVey, PaulineA	Ada
McWilliams, Agnes Orinda A	Anna
Malahan, W. SA	Anna
Mall, Walter HermanA	Toledo
Manawis, JaimeE	Pang, P. 1.
Markley, Hazel	Kenton
Marshall, Opal EmmaA	Ada
Marshall, Ralph GordonL	New Concord
Martin, Lawrence Oliver A	St. Clairsville

Mason, Aline Maria	_A	Lima
Mason, Blanche Juanita	_A	Lima
Mauller, Agnes Lucille	. A .	LaRue
Maxwell, John L.		
May, James Robert		
Mead, Mary Maxine		
Mechling, Dorothy Jane		
Mentzer, Helen Louise		
Michael, Richard Carl		
Miller, George Adam		The state of the s
Moorehead, John Otis		
Murray, Ardy Ruth		
Musser, John B.		
Neeley, Helen Jane		
Neville, Wesley L.		
Newton, John Poe		
Nice, Louise Helen		
Niederhauser, John Orville .		
Nisonger, Charles Edward .		
Obenour, Virginia Belle		
O'Leary, Joseph James		
Overly, Florence Catherine .	_A .	Defiance
Palmer, Charles William	_E	Osborn
Parent, Merlin Charles	L	Spencer
Park, Paul Dalzell	_E	Kenton
Peterson, Charles Ardus	_A	Ada
Pfeiffer, Anna Mary	_A	Kenton
Pfeiffer, Avonelle		
Pfeiffer, Theodore John		
Pine, Clinton		
Plack, Alice Carmoline		
Pond, George		
Price, Russell H.		
Primmer, Harold Denton		
Quinn, Thomas Daniel	E	lima
Rakestraw, Ellen Theora		
Rakestraw, Thema Bernice		
Ramey, Grace Lela		
Ramga, Cecil A.		
Randolph, Juanita Janet		
Reed, Ada Pauline		
Reed, Frances Martha		
Reifenanyder, Joe Tyrus		
Reston, Neil Black		
Rhoades, Bernice Y.		
Richard, Richard Robert		
Rimer, Rachel Wisely		
Roberson, Litta Kimler	_A .	Ashley

Roberts, Charles Doria	A.	Youngstown
Rockwell, Gerald Park	-A	Ada
Rogers, Edward Ragan	E	Youngstown
Rogers, Everit Clarence	-A	Old Washington
Rolston, Audrey Emme		
Ross, Roderick N.	Α.	- Gilboa
Rufenacht, Edna Mae		
Rundell, Ethel Josephine	A	Manualla Caringa
Russell, Amos Pearl		
Russell, Richard Garrett		
Sackett, Wilbur Lee		
Santee, Ralph Homer		
Scarbrough, Rex Carl		
Schilling, Amelia Magdaline .	-A	Anna
Schneider, Harlon Casper	E	Marysville
Schubert, Vera Meredith		
Sell, Jesse Thurman		
Shaner, Mildred Alys		
Shepard, Earl Wesley		
Shively, Howard	Α.	Ada
Silverthorn, Robert William		
Simpson, Edith	-A	D. D. D.
Skerrett, Hector Ralph	-E	Ponce, P. R.
Skillen, Ethel Gish		
Sleesman, Margaret		
Smith, Opal Lena		
Smith, Ruby Ada	_A	Buckland
Smith, Walter Raleigh		
Smith, William Andrew	A	Lorain
Snook, Carolyn Elizabeth		
Southard, Kathryn		
Speer, Mildred Avinell		
Speice, Clarence Allen		
Stanfield, John Martin		
Stauffer, Lucille Lee	Α.	Celina
Stewart, James Marshall		Wareau
Stewart, James Marshall	- 1	New Vnovville
Stienecker, Clement R	-A	Clares
Stockstill, Dorothea Ilene -		
Stoolmiller, Charles Edward	_A	Rittman
Strahm, Norma Carol	_A	Ada
Stump, Audrey LaVaughn -	_A	Ft. Recovery
Stump, Ora Victor		
Sullivan, Grace Luella		
Sullivan, Margaret Belle	_A	Bloomville
Swartz, Margaret		
Switzer, Joe F.		
Tallman, Paul Adams		
Tannehill, William McMuller	A A	Mt. Sterling

Taylor, Frances Madeline		
Tedrick, Edward I	-A	Plain City
Temple, Donna Ruth	-A	Mt. Victory
Thompson, Thomas William	-A	Mechanicsburg
Tumblin, Faye Eloise	-A	Conesville
Underwood, Pearl Staats	-A	Ada
Varner, Hope Landis	-A	Continental
Voltz, Amy Elizabeth	-A	Glenmore
Wagner, Helen Chloe	-A	Ada
Walters, Audrie Pauline	-A	Alger
Warner, Pauline Cecelia	-A	Dunkirk
Webb, Alexander Ensign	-A	Ada
Wheeler, Gertrude Reed	_A	Wapakoneta
White, Maurine Emily	-A	Lima
Whiteman, Helen Luella	-A	Liberty Center
Wierwille, Grace Emily	-A	St. Marys
Williams, Thomas Jinks	_A	Cleveland
Wilson, Hazel Oralda	_A	Bucyrus
Windle, Florence Amanda -	-A	Leipsic
Windle, Joseph Henry	-A	Miller City
Winegardner, Chester Arthur	A	Lima
Winget, 1Io Della		
Wisner, Ernest Albert	-A	Kenton
Wood, Grace Ann	-A	Ada
Wright, Georgia Burlin	A	Spencerville
Wyland, Eulalie Georgia	-A	Ada
Young, Ernest Dee	-A	Lima
Young, William Kinnison	-Λ	Belle Center
Men — 13	0; Women — 18	1: Total — 311
men to	o, women - re	I, I otal — oll

REGISTER OF STUDENTS

1932-1933

SENIORS

Alpaugh, ElvinE	Clinton, N. J.
Anderson, Kenneth BoyerE	Lima
Archibald, William BirchA	Brewster
Arnold, Lloyd Henderson E	LaFayette
Balamenti, James Jos. (dup) A	Cleveland
Balyard, Russell GeorgeA	Ada
Baransy, FlorineP	Ada
Behrns, Frederic KA	Anna
Bennett, Robert NobleE	McComb
Berger, Robert Frederick E	Lima
Boardman, James HenryA	Niagara Falls, N. Y.
Bowen, Roger ThomasE	Cleveland
Brickman, Arthur JamesL	McComb

Brown, Henry Herbert E	Rochester, N. Y.
Brown, Miller William	Ada
Camin, David TerryF	
Carpenter, Robert Charles I	
Castrence, Prudencio Caamped I	Bolinao, P. I.
Conde, Murlyn KennethA	Montour Falls, N. Y.
Condon, Margaret JuliaA	Ada
Core, Edward Knight	Rushsylvania
Croft, Maurice WilliamE	Limo
Crunelle, John RichardI	
Cummins, Paul	
Cunningham, David Sands	
Cushman, Asa BaileyA	Woodstock
Deniston, George Lowell F	Lima
Derr, Franklin Pierce E	Bethlehem, Pa.
Detwiler, Paul LeonF	Kenton
Dietrich, George Herbert E	Salamanca, N. Y.
Dimond, Robert FrancisA	Lima
D'Isa, Ezra LouisI	
Dowling, Francis Raymond H	
Downing, Robert Mallahan I	
Dreisbach, Robert James I	
Dunlap, Francis Howard I	
Early, Margaret VeraI	
Eaton, Darwin Curtis	
Edwards, 'Thomas Charles I	
Eiseman, Nathan	
Elder, Paul FranklinI	
Eldredge, Amy McGown/	
Fackler, Georgia Jane	
Floding, Dana Willis	
Fogle, Harland Ransom	
Francis, Lewis MarshI	
Frasher, Paul HunterI	Geneva
Fry, FredI	
Gallagher, John JosephI	
Gliemmo, Joseph Michael I	
Hakes, LaVerne Harold I	
Hall, William Harold	
Hauber, Bernard GlennI	
Hauman, Mary Bess	Kenton
Hawes, Orville William	E A Quincy
Hedderly, Clyde Franklin I	E Akron
Heltman, Joseph PaulI	
Henry, Roy LeslieI	Coal Grove
Hester, Ezra Gorham1	
Hindall, George Clarence	
Hofman, Charles Frederick _1	

Houck, George Leonard	L	Massillon
Howard, John Wilbur	E	Dayton
Howell, John Wood		
Hughes, Morris Kent		
Huguenin, Victor Emil		The state of the s
Irwin, Frederick Bruce		
Jacobs, George		
Jacobs, Roy Kenneth		
Jewell, Robert Klinedinst		
Johnson, Lewis Fred		
Jones, Ollie J	A	Elida
Judkins, Lois Jean	A	Ada
Kemp, Lewis Joy	A	Magnolia
Kessler, Anson		
King, Burdette Monroe		
King, Lawrence		
Kline, Russell Oliver		
Kohn, John Walter		
Kump, Mildred		
Kutza, Edward Dumont		
Lady, Joseph Emerson (dup)		Mark the control of t
Landon, Richard Garwood		
Langshaw, Eleanor		
Lavine, Elmont		
LePage, Herbert	A	Ada
Levengood, Elizabeth W		
LeVine, Benjamin Bert		
Lewis, Gordon Victor		
Life, Harry Lovis		
McCarthy, Edward William		
McCrady, Henry Taylor		
McKibben, Ralph		
MacLaren, Donald John		
Mead, Mildred		
Messenger, Robert Hale		
Metzger, Lawrence Charles .		
Meyer, Walter Harmon		
Milburn, Russell Thomas	-A	Kensington
Moorhead, John Otis	E	Findlay
Moyse, Craig	A	Cleveland
Musser, John Beaman	.A	New Hampshire
Newton, John Poe		
Palmer, Charles Wallace		
Pankow, Edmund		
Parrino, Louis Anthony		
Patterson, Paul		
Pees, Ronald Russell		
Phelps, Cecil Arthur	- 10	Panama, N. Y.

Priddy, John		
Primmer, Harold Denton		
Radcliffe, William Dudley	L	Williamsport
Ramirez, Frank Milton	E	Mayaguez, P. R.
Reed, Gladys Jean	A	Ada
Rickenberg, Edward Henry	E	Napoleon
Riggs, Francis Lawrence	P	Cleveland
Roberts, Robert L		
Rogers, Edward Ragan		
Sandrock, Howard Taft		
Saphar, Edwin George (dup)		
Schilling, Paul R.		
Schmidt, Manuel Castano		
Schneider, Harlan Casper		
Scott, Lester Gerald		
Seifried, Frank Joseph		
Sexton, Roma Masters		
Shanks, Royal Eastman		
Sheets, Gilbert Stanley	E.	Lima
Shepard, Earl Wesley		
Shepherd, Harless Morris		
Sherard, Charles John		
Shively, Howard		
Shumaker, Robert Lewis		
Silbaugh, Verne Richard		
Silverthorn, Robert William	A	Forest
Siverling, Alan Ross	L	Salamanca, N. Y.
Smith, Ernest Parmer	P	Kenton
Spahr, Thane		
Speice, George Nelson		
Spitler, Downs Calvin	L	Tiffin
Spitler, Emmett VanBurtis		
Steinman, May Norma		
Stiles, Bernard		
Stiles, Leland Joseph		
Stirn, Thurlo Vernon		
Studer, John Eugene		
Templeton, Elizabeth Arabelle		
Teple, Edwin Russell (dup) .		
Tudor, Beulah Jane		
Uhl, David Glenn		
Uhl, Joseph Stewart		
Van Fleet, Robert Swengood		
Wagner, George Edgar		
Warner, Pauline		
Warren, Gerald		
Warren, William Edwin		
Watkins, Gladys	A	North Lewisburg

Williams, Calvin Marion E	Greenville
Witt, Elwood Hohmann E	
Wolfrom, Mary Vickroy (dup) A	Ada
Wright, Georgia Burlin A	Spencerville
Yeasting, MaynardE	

JUNIORS

Ackerman, Earl Vlack	-P .	Bucyrus
Allen, Clayton William	_E .	Phoenix, N. Y.
Arbogast, Wilhelmina K	-A -	Ada
Arnold, Theodore Wayne	-A .	Ada
Aschenbach, Lawrence Russe		
Assenheimer, Earl Henry .		
Bailes, Perry Jennings		
Baker, Elizabeth Frances		
Balamenti, James Joseph		
Baron, Reuben		
Baxter, Elizabeth		
Betts, Richard Alfred		
Bishop, Lewis Charles	_L .	Elyria
Blackford, James Mitchell .	_L .	Martin's Ferry
Brown, Bessie Opal	_A	Kansas
Brown, Ray Gilbert	_E .	Lima
Burean, Edna Josephine		
Calderin, Andres Lasaga	_P	Havana, Cuba
Caplea, Nicholas George	_L	Canton
Castrence, Jose Caamped	_E	Ann Arbor, Mich.
Cattey, Francis Bennett		
Chappell, Gordon Chester	_E .	Perrysburg
Clacer, Domingo Celso		
Clark, Jack Thomas		
Clemens, Erwin		
Condon, Mary Ellen	A	Ada
Condon, Robert Watt		
Cooper, William Brookes -		
Copeland, Cornell		
Critchlow, Jeanette Elliott		
Deare, Frank Allen		
Dill, Elizabeth Adelia		
Diller, Wade Maynard		
Doughten, Park Henry		
Doughten, Robert W		
Doughty, Herbert Clair		
Drury, Robert Louis		
Dunn, Kenneth Edward		
Eberhart, Fred Lewis		

Evans, Edwin Robley	***	- Later to the contract of the
Everett, William Howard _		
Eversole, Clifford		
Fazekas, Jess Joseph		
Fischer, Clyde Adam		
Folk, Curtis Johnson	_P	Findlay
Fornander, Harry Charles _	_P	Sharon, Pa.
Friedman, Daniel Lewis		
Garmon, Rox Joseph		
Gavette, Roger Lawrence	E	Athens, Pa.
Gesling, Martha Myra	_A	Lancaster
Goodman, LeRoy J		
Gritzmaker, Carl Pete		
Groves, Hiram Gregg		
Hartle, John Charles		
Hauenstein, Hilton Kent		
Hawk, Bernard James		
Headley, Gordon Roy		
Hedges, Tom Lawrence		
Heikowsky, Robert Charles .		
Housman, Harry	D	Tt. Wayne, Ind.
Huber, Joy Kidd	- 1	Parrell, Pa.
Huebner, Wolfgang Martin		
Hutcheson, Clyde Charles	.A	Slippery Rock, Pa.
Jacobs, Emanuel	P	Cleveland
Jehangiri, Baba Aslan Zadeh		
Kittle, Lionel Charles		
Krugh, John	. A	Venedocia
Kuenzli, Thad	L	Nevada
Lady, Joseph Emerson	L	Ridgeway
Lamb, John D. Jr.	P	Payne
Laubenstein, Craig Alexander	L	Ft. Wayne, Ind.
Lavine, Elmont (dup)	L	Canton
Lemmerman, Elmer George		
Little, Stanley West		
Lutz, Theodore Lyon	L	Ada
McCleary, Golda Mae		
McCloud, Avonell Bernice	A	Kenton
McGinnis, Evelyn	A	Ada
McIntire, Cloyd Dale	A	Venten
McKelvey, Randall William	P	Polloine
McKelvey, Willard Thomas		
McMahon, Roy Franklin		
Marsh, John		
Morehall Thomas Diday	P	Larayette
Marshall, Thomas Elder	p.	Sneridan, Wyo.
Mayer, Frank Joseph		
Mead, Mary Maxine		
Mengel, Dwayne Halley	A	Gibsonburg

Mickens, Robert George	A	Ada
Miller, Walter Samuel	P	Findlay
Moffett, Russell Eugene		
Moore, Walter Denton		
Myers, Charlton		
Neal, David Smith	A	Roundhead
Neiswander, Howard Edwin .	E	Bluffton
Neiswander, Martha	A.	Bluffton
Neville, Wesley Laurance -	L	Lima
Newton, North Henkle	E	Urbana
Nicholas, Stephen Alexander	L	Toledo
Nye, Horace Robert	E	Forest
Overmire, Florence Faye	A	Arcadia
Perlman, Isadore	P	Cleveland Hts.
Philips, Erna Margaret		
Piotter, Charles Leonard		
Pollak, Joseph Anton		
Proctor, Roger Ireland		
Ray Elena		
Reifensnyder, Joe Tyrus		
Renninger, Charles E		
Rise, John Louis		
Rodenbaugh, Herbert R		
Roemisch, Harry		
Roraback, Lewis Moore		
Roth, Saul Edward		
Rudolph, Harry	P	Cleveland
Rule, Ernest Fred		
Russell, William Sykes		
Saphar, Edwin George		
Schertzer, George		
Schifino, Gerald Vincent		
Schwartz, Harold Bernard	P	Cleveland
Shafer, Paul Donal	E	North Lewisburg
Sharpe, Burdette	E	Sandueke
Shepherd, Henry Clay		
Sheridan, Louis Francis		
Shipe, Phillip Leister		
Sholl, William Edward	Α.	E Mark Conton
Slanker, Miriam		
Smila, Rowena Amelia	A	Ada
Smith, Howard Larue		
Smull, Miriam Mae		
Stacy, Maurice Cyrus		
Teple, Edwin Russell		
Thiesing, Paul Louis		
Thompson George Waster		New Bremen
Thompson, George Wesley	D	Kenton
Toub, Hyman Leonard	P	Cleveland

Vinocur, Joseph	_A -	L Cleveland
Vlad, John George	_E	Warren
Wallace, Alice Rosetta	_A	Waterbury, Vt.
Wallace, Robert McJunkin -	_E	New Castle, Pa.
Ward, Miller Harris	_E	Ada
Warden, Virginia Margaret -		
Watts, Hadley Edgar		
Weatherly, Morgan George		
Webb, Alexander Ensign		
Welty, Louella		
Whitney, Wyrone Eugene -		
Williams, Thomas Jinks		
Wilson, Charles Harold		
Wolfrom, Mary Vickroy		
Worden, Herbert James		
Yingling, David		
Young, Grace Allison		
Yount, William Carlos		

SOPHOMORES

Allen, Charles Richard		
Andrews, Delbert Eugene	E -	Cridersville
Ayers, Joe Charles	A .	Van Wert
Badertscher, Harvey	A -	Bluffton
Bailey, Theodore Oakly	E	East Orange, N. J.
Baker, Mary Marguerite	A .	Sidney
Baker, Milan Delmont		
Baldwin, Mildred Lora		
Bales, Raymond Charles		
Banning, Alice Rowena	A	St. Marys
Bauman, Carl Martin	E	Linia
Berger, John Ward	A .	Ada
Betz, Alice Gertrude		
Binkley, Lowell Ellsworth		
Binkley, Wilfred Wendell		
Blackford, William Henry		
Blair, James Carl		
Blake, Harold		
Blosser, Harold	A	Jenera
Blosser, Noah O	A	Jenera
Bodkin, Marjorie Mae	A .	Chickasaw
Borders, Virginia Hazel	A	Lima
Botkin, Dorothea	A	Celina
Bowers, Lowell		
Brewer, Elmer Wayne	A -	Rossburg
Brown, Clarence	A	Versailles

Bumpus, Eurita Belle		
Carlin, Robert Edward		
Castle, Frances Lucille	-A	Lakeview
Chalfin, Dorothy Helen	-A	McGuffey
Chalfin, Loyd	_A	McGuffey
Clark, Edwin David	-A	Upper Sandusky
Clark, Glenn Lester		
Cockrell, Jess Fremont		
Cockerell, William Craig		
Coles, Dorothea		
Colliflower, Roberta Johnson		
Conrad, George Edward		
Converse, Rayda A.		
Cooper, Myra Marguerite		
Cornmesser, Donald Earl		
Cotner, Joe L.		
Cronbaugh, Mildred Marie -		
Cseh, Steve		
Davis, Dora Linda		
Davis, F. Ruth		
Day, Harry Edward	E	Upper Sandusky
DeMuth, Robert Hamilton _		
Ellis, Paul Wright	E	Alger
Elshoff, Clara	_A	New Bremen
Elzay, Menno Jack	_A	Ada
Feuer, Louis	_P	Cleveland
Fields, Donald Ray		
Fling, Gerald William	_E	Fostoria
Foster, Charles Hugh	_A	Sidney
Fox, Carl Eugene		
Freeman, Bernard Wesley .		
Gantt, Velma Brian		
Gould, Milo		
Greenstein, Morris Edward		
Hageman, Bernice Louella		
Hart, Ray Kenneth		
Hay, Betty		
Henkle, Claude Wilson		
Hoffman, H. Pauline		
Hooker, Vernon Harry		
Huber, Max Nevin		
Huey, Gladys Irene		
Hursh, Richard Henry		
Huston, Walter Ray		
Her, Lloyd		
Irons, Margaret Loine		
Irons, Winton Rushmore	-E	Linesville
Jacobs, Clarence Bunarr	_E	Continental

Jaric, Emmanuel Harrison A	Lowellville
Johnson, Donald Jennings E	Warren
Jones, WilburA	Columbus Grove
Keiser, Ruth LouiseA	Pioneer
Kissling, TressieA	
Knoblauch, Herbert CarlE	
Kuenzli, MorrisA	
Kunkle, Wayne BurtonA	
Kunze, Margaret FayeA	
Kyle, Elwood CourtneyA	
Lange, LuellaA	
Lauterbach, William Paul A	
Lenhart, Edward LeRoyA	
Lewis, Ladonna LA	Fulton
Loy, RuthA	Ada
McEltoy, CoraA	Ada
McGee, Eldon EugeneA	
McMillen, RobertE	
McVey, JuanitaA	
Main, Paul	
Marple, Paul GilbertE	
Marquart, LucilleA	
Marquart, RuthA	
Marshall, Carson JA	
Mason, BlancheA	
Mason, Edwin GordonE	
Mechling, DorothyA	Lima
Mitchell, Howard Lee E	Ada
Mitchell, Lois LaddA	Ada
Mohler, KathrynA	Ada
Mosher, Byrle EA	
Myers, Paul EdwinA	
Neiswander, AliceA	
Neville, William Burke A	
Nice, George WalterE	
Nisonger, Charles Edward A	
Nisonger, Jessie JaneA	
Oates, Cleo HelenA	
Obenour, ParkerA	
Obenour, Virginia BelleA	
Overly, FlorenceA	
Park, Paul DalzellE	Kenton
Parkhill, Edwin Hamilton E	
Patterson, John HuberA	Lima
Pease, Mary AdeleA	
Peters, Roland AlfredE	
Pfeiffer, Arnetta AvonelleA	
Pfeiffer, John TheodoreA	
1	

Poor, Kathryn		
Porosky, Thomas		
Purdy, Angus Lee		
Raabe, Mary Ruth	.A	Ada
Raberding, Carolyn Matilda .	.A	St. Marys
Ralston, Edna White	-A	Otway
Read, Esther Elizabeth	A	Westminster
Redick, Harlow John	A	Jenera
Reed, Ada Pauline	A	Belle Center
Reed, Bernice	A	Ada
Reese, Lowell Rowland	.A	Ada
Rhynard, Harold		
Rosenberger, Eugene		
Ross, Roderick MacKenzie		
Rostron, Jane		
Runser, Mary Evelyn		
Rutledge, William Walter		
Scharer, Stanley Leland		
Shafer, Glenna Loretta		
이 이 것 같아요. 그는 그 이 아이는 그는 아이를 하지 않아 그 것 같아 하는 것이 없다면		
Shaffer, Elmer Franklin		
Shepherd, Georgia		
Shumaker, Dorothy		
Sleesman, Carolyn Elizabeth		
Sloan, Bonnie Davenport		
Snyder, Joseph Clifford		
Sobers, Boyd Marion		
Speese, Gladden Edmond	.A.	Richwood
Stauffer, Lucille L		
Stump, Audrey	_A	Ft. Recovery
Stump, Ora V	- A	Ft. Recovery
Sunderman, Esther Elsa	-A	Decatur, Ind.
Tallman, Mozelle Garnet		
Tatham, Paul Leslie	E	Granville
Thomas, Lewis Edward	E	Lima
Thompson, Robert Bruce	-E	Findlay
Tracht, Layton Elwood		
Veach, Vivienne Esther		
Voltz, Amy Elizabeth		
Walters, Audrie		
Watkins, Thelma J.		
Wedgewood, John Webb		
Wertheimer, Max Harris	-A	Ada
White, Clara Opal		
White, Ruth Elizabeth		
Wills, Frederick Charles		
Wilson, Virginia		
Windle, Florence	-A	Leipsic
Wood, Wilma Ruth	-A	Ada

Woolf, DorothyA	Wapakoneta
Yoakam, Doyt ArthurA	_ LaFayette
Younkman, Estel MettyA	LaFayette
Younkman, WalterA	_ LaFayette
Zimmerman, Orren	Bluffton

FRESHMEN

Adams, Marvin Oswald	-A	Bellville
Armstrong, Robert Smith		
Bailey, Charles Alonzo		
Bailey, Junial Kenneth		
Baker, James Hutchinson -		
Balliett, Robert Lawrence -		
Barr, Glenn Stewart		
Barrett, Robert Doty		
Barson, John Daniel		
Bassichus, Jack Robert		
Baxter, Mary Jo		
Bell, Rex		
Bitters, Robert Trost		And the second section is a first of the second
Blackburn, Karl Richard		
Brinckerhoff, Janet		
Brown, Louis Elmer		
Carey, Justin Elwood		
Carlisle, Robert Moore		
Churchill, George Samuel		
Clark, Howard Curtis	.E	Alger
Conway, John James		
Cook, Lois Vivian	-A	LaFayette
Copeland, Richard Raymond		
Corbett, Geraldine		
Covell, George Willis	E	Springfield
Cox, George Richard		
Cronbaugh, Hazel Mae	-A	Ada
Danner, Brice C.	-A	Ada
Deerhake, Charles Albert		
Dilliard, Paul Daniel	_E	Sayre, Pa.
Dorney, Stacey Clark	_A	Dunkirk
Doughty, Carlton Boice		
DuPerow, Donald Eugene		
Edwards, John Robert	_A	LaFayette
Epley, Robert C		
Everhart, Robert Alfred		
Farrell, Elizabeth Grafton -		
Faulkner, Ruth B		
Fialla, Edward Michael	-A	Girard

Fowler, Lloyd Francis		
Freeman, Wayne		
Freund, Paul Franklin	_E-	A Ft. Jennings
Gant, Charles A	_A	Ada
Geiger, Edward Louis	_P	Youngstown
Glen, Donald Hofman		
Goldman, Joseph Perry		
Gorby, Dale		
Grimm, George John		
Gross, Harry Alton		
Gustason, Donald Herring		
Hatfield, Elizabeth Nell		
Herd, George		
Heth, Richard William		
Hodge, Herbert Elwood		
Holmes, Burdette Paul		
Hunter, Charles Milton		
Huston, Helen Roberta	_A	Alger
Insley, Merrill Jay	_P	Lakeview
Jerwers, Raymond Joseph _	_E	Lima
Jones, Margaret Eleanor		
King, Robert Humphrey		
Kline, Guy Kenneth		our paper of the first the fact that he has been a placed out and it is a finished any weak first date.
Kritzler, Clayton		
Liggett, Robert Alexander		
Lytle, Sara E.		
Maurer, Doris Carolina		
Meranda, Norman Eugene		
Metz, Ralph Woodrow		
Middleton, James Wesley		
Miller, Frank Gail	37	Lime
Miller, Irene		
Montalto, Sam Lorenzo		
Morgan, John		
Myers, Gordon Dale		
Neeley, Kathryn Alice		
Olsem, Raymond John		
Peters, Lewis Howard		
Peterson, Richard Eugene		
Phillips, Marshall		
Povenmire, Catherine Joseph		
Pudlinski, Edward		
Randall, Frank		
Ream, Oliver Arthur		
Reddick, Jack Stanley		
Reed, Robert Gordon		
Ritchey, William Creighton	_A	Belle Center
Rossetti, Albert Michael	_A	Canton

Roszman, Marvin Henry		
Rutter, Clifford Jack	APPLE CONTRACTOR DESCRIPTION	the first of the f
Ryan, Albert Dana	E	Cambridge
Sager, Donald Frederick	.A	Amsterdam, N. Y.
Santoni, Yolandi Emily	A	Cannonsburg, Pa.
Shearer, Willis Burson	A	Peoria
Simons, Homer Charles	. Е	Royal Oak, Mich.
Simons, Robert Richard	P	Lima
Sleesman, Carlos Henry	A	Ada
Snyder, Charles William	.A	Fostoria
Sprang, Austin	A	Kenton
Stauffer, Rex	A	Celina
Steiner, Ralph Eugene	A	Lima
Stevenson, Foster Raymond .	P	Galion
Stivers, Grace Elizabeth		
Stoolmiller, Charles Edward .	A	Rittman
Tallman, Wendell Melville		
Teple, Lawrence Stanley		
Thomas, Melvin		
Thompson, Hildegarde Caroly		
Tucker, Julius Jiles		
Turner, Perry		
Upp, Donald Jocelyn		
Vertino, Albert Thomas		
Vom Hofe, Edward George		
Warner, Karl Wesley		
Wellman, Victor Vincent	. Е	Leinsic
Welty, Dorothy		
Wheeler, Paul Eugene		
Wilson, Robert Eugene		
Winegardner, Earl Donald		
Wolfrom, Earl Richard		
Wollborg, Fred Otto		
Wurtsbaugh, Howard Everett		
Yost, William Kent		
Yount, Sarah Anna		
A VOICE PARTY PROPERTY		Ada

SPECIAL STUDENTS

Arbogast, Margaret Elizabeth A	Ada
Bera, John TA	Fairport
Bodalski, Theodore Ramon _L	Cleveland
Day, Robert HansonA	Wilmington
Dickman, MargaretA	New Philade phia
Dunbar, Bertha RuthA	Fremont, Ind.
Edwards, HaroldA	Dover
Fink, Albert AnthonyA	Kenton

Harrod, PaulA	Ada
Heffner, GeorgeA _	Lima
Horning, Opal MaeA _	New Bavaria
Lamale, William PeterA	Ada
Mertz, ForestA	Ada
Morton, BerthaA	East Marion
Price, Russell CessnaL	Forest
Searfoss, Clark WA	Harrod
Snyder, Emmett Albert A	Bucyrus
Wortman, Fred ByronA	Cecil

TRANSIENT STUDENTS

Adams, FlorenceA	New Riegel
Blake, IreneA	South Olive
Deckrosh, Lawrence LA	Defiance
Griffith, RuthA	Gomer
Harbaugh, ZaliaA	Lima
Kennedy, Reuel GA	Defiance
Morrow, EstherA	Rockford
Tuttle, Perl LA	Cardington

SUMMARY

	Men	Women	Total
Seniors	141	21	162
Juniors	128	25	153
Sophomores	102	73	175
Freshmen	102	21	123
Special	13	5	18
Transient	6	2	8
Duplicates	5	1	6
Total Enrollment	487	146	633
Enrollment (Summer School, 1932)	88	168	256
Grand Total (Resident)	575	314	889

EXTENSION STUDENTS, 1932-1933

Arbogast, Wilhelmina Catherine	Ada
Baldwin, Lelah Milford Ce	
Berryhill, Vada I	ima
Blosser, Noah Je	
Brenneman, Timothy Ha	rrod
Brooks, Casper Patte	
Bussert, Helen I	ima
Coats, Elizabeth Ke	

Cody, Josephine	Marsyville
Crider, Wendell	Lima
Cross, Leilah	Marysville
Cunningham, Mary	Lima
Cunningham, Noreen	Lima
Dolbear, Josephine	Marysville
Douglas, Ruth	
Downhower, Lester	LaFayette
Downing, Roger	
Eger, Vera	Fostoria
Feck, Marguerite	Kenton
Fisher, Katherine	Bucyrus
Fowler, Arthur	Lima
Geihart, Kenneth	Beaverdam
Gould, Milo	McGuffey
Gross, Ferd William	Lakeview
Hamilton, James	Kenton
Harding, Warren L.	Galion
Hatfield, Edna	
Heil, Ruth	Kenton
Herring, Burdette	
Higgins, H. A.	McClure
Hipp, Fred	Molinta
Hopp, Fred	Hamler
Huber, Maurice	Dogwordom
Hutchinson, Herbert	Caron
Johnson, Robert	Callon
Keller, Edna	Walleta
Kelley, Cleo	Maiinta
Kelley, Edna	Mainta
Knepley, A. W.	Napoleon
Knepper, G. D.	Fostoria
Kuenning, Walter	
Lankeman, Otto	Napoleon
La Ros, Mildred	Fostoria
Latham, Al	Fostoria
Laughrey, Coral	
Lonsway, Edmund	Fostoria
McCormick, Frances	Fostoria
McCracken, C. H	
McMahon, Jack	
Magly, Elle	Kenton
Maugans, Mrs. J. A	Marysville
Miller, Irene	Lima
Miller, Janet	Fostoria
Morse, Lulu	Marysville
Mosher, Burrell	Richwood
Mowry, Ethel	Fostoria
Muller, Gertrude	Kenton
Nichols, Gladys	Hepburn
Obenour, Parker	Kenton
Overholt, Mabel	Fostoria
Pearse, Nelle	Marysville
Pine, Clinton	Roundhead

Post, Edgar	Milford Center
Pullins, Bertha	Milford Center
Quay, Katherine	Galion
Ralston, Mary	
Reese, Ethel	
Rhynard, Harold	Union City
Roberts, C. E.	Napoleon
Secrist, J. H.	
Shea, Esther	Milford Center
Smith, R. L	Fostoria
Snapp, Mrs. H. L.	Milford Center
Snyder, Catherine	
Snyder, Mary E	Marysville
Stover, Chester	Galion
Struthers, Twila	Galion
Stubbins, Hazel	
Swartz, Kathleen	Napoleon
Swartz, Margaret	Shelby
Tallman, H. H.	Peoria
Taylor, Nellie	Marysville
Tidd, Margaret	
Underwood, Pearl	
VanDorn, Opal	
Van Meter, Loren	Lima
Warren, Virginia	Jewel
Welker, Devona	
West, George	
Willeman, Arthur	
Williams, Edith L	
Wolfe, Blanche	
Wood, Helen	and the second s
Yarnell, Inez	Napoleon

Men - 39; Women - 55; Total 94.

GEOGRAPHICAL DISTRIBUTION SUMMER, 1932, SPRING 1933 BY COUNTIES OF OHIO

Allen	104	Lorain	13	
Ashland	1	Lucas	6	
Ashtabula	2	Madison	2	
Auglaize	22	Mahoning	7	
Belmont	9	Marion	10	
Brown	1	Medina	2	
Butler	2	Mercer	16	
Carroll	1	Miami	2	
Champaign	6	Montgomery	7	
Clark	2	Morgan	1	
Clinton	1	Morrow	7	
Columbiana	4	Muskingum	5	
Coshocton	2	Noble	2	
Crawford	11	Ottawa	3	
Cuyahoga	39	Paulding	12	
Darke	10	Perry	1	
Defiance	7	Pickaway	3	
Delaware	6	Pike	1	
Erie	1	Portage	1	
Fairfield	2	Putnam	21	
Franklin	1	Richland	5	
Fulton	4	Sandusky	2	
Gallia	Sea State	Scioto	2	
Geauga		Seneca	11	
Greene	2	Shelby	17	
Guernsey	9	Starke	15	
Hancock	27	Summit	10	
Hardin	195	Trumbull	4	
Harrison	2	Tuscarawas	4	
Henry	10	Union	16	
Jefferson		Van Wert	16	
Lake	2	Wayne	1	
Lawrence	4	Williams	5	
Licking	5	Wood	2	
	24	Wyandot	10	
Logan	24	wyandot	10	
BY STATES				
Florida	1	New Jersey	5	
Illinois	. 3	New York	28	
Indiana	7	Pennsylvania	32	
Massachusetts		West Virginia	1	
Michigan		Wyoming	1	
BY FOREIGN COUNTRIES				
Cuba	. 2	Philippine Islands	3	
Persia	1	Porto Rico	2	

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