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VALPARAISO UNIVERSITY
VALPARAISO UNIVERSITY
BULLETIN

FORTY-SIXTH
ANNUAL CATALOG
1919-1920

VALPARAISO, INDIANA
Expenses are less here than at any other institution of learning in the land.

Archives

Valparaiso University

The Forty-sixth Annual Catalog

Of

Valparaiso University

Valparaiso, Indiana

For the year

1919-1920

Published by the University
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CALENDAR FOR THE YEAR 1919-1920

FALL QUARTER

September 23, 1919, to December 11, 1919

September 23. Tuesday. Fall Quarter opens 8:30 a. m.
Organization of classes and assignments made.
November 27. Thursday. Thanksgiving Holiday.
December 11. Thursday. Fall Quarter closes.

WINTER QUARTER

December 16, 1919, to March 4, 1920

December 16. Tuesday. Winter Quarter opens 8:30 a. m.
Organization of classes and assignments made.
March 1. Monday. Quarterly examinations begin.
March 4. Thursday. Winter Quarter closes.

SPRING QUARTER

March 9, 1920, to May 27, 1920

March 9. Tuesday. Spring Quarter opens 8:30 a. m.
Organization of classes and assignments made.
27. Thursday. Forty-seventh Annual Commencement, 10:30 a. m. Spring Quarter closes.

SUMMER QUARTER

June 1, 1920, to August 19, 1920

June 1. Tuesday. Summer Quarter opens 8:30 a. m.
Organization of classes and assignments made.
TRUSTEES OF THE UNIVERSITY

OLIVER P. KINSEY ........................................... Valparaiso
HENRY O. SHUEY ........................................... Seattle, Washington
THOMAS W. PHILLIPS, Jr. ................................... Butler, Pennsylvania
WILLIAM E. PINNEY ........................................ Valparaiso
CHARLES C. CHAPMAN ...................................... Fullerton, California
JUDGE ED. JACKSON ......................................... Newcastle
JOHN M. STINSON ........................................... Hammond
HENRY KINSEY BROWN ..................................... Valparaiso
EDGAR M. BARBER ........................................... New York, New York
LEON L. LOEHR .............................................. Chicago, Illinois
EDGAR D. CRUMPACKER .................................... Valparaiso
### 1919

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ADMINISTRATION

HENRY KINSEY BROWN, A. M., President of the University.
JOHN W. MORLAND, A. M., LL. B., Registrar of the University.
CATHARINE CORBOY, A. M., Secretary of the University.
IDA M. POWELL, Ph. B., Dean of Women.
WILLIAM L. COPELAND, M. D., C. M., M. R. C. S., Secretary of the School of Dentistry.
CHARLES E. JONES, B. S., D. D. S., Registrar of the School of Dentistry.
LUCILE COLLETT, Registrar of the Conservatory.
HELEN KULL, Librarian.
ROBERT B. EWING, B. S., Auditor.
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HENRY KINSEY BROWN, A. M., President of the University.

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KATHERINE E. CARVER, A. M., Professor of Latin.

BENJAMIN F. WILLIAMS, A. M., Professor of English.

MANTIE E. BALDWIN, A. M., Professor of Literature and Rhetoric.

MRS. SARAH P. KINSEY, A. M., Professor of Geography.

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THORLEY VON HOLST, LL. B., Professor of Law.

HON. JOHN H. GILLET, LL. D., Professor of Law.

WILLIAM DALY, A. B., LL. B., Professor of Common Law Pleading.
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A. H. READING, Lecturer on Questioned Documents.

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BURTON HOWLETT, A. M., Professor of Physics.

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W. A. HOFFMAN, Professor of Penmanship.

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MYERS ZIMMERMANN, Pg. B., Professor of Shorthand.

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HELEN E. CARPENTER, Ph. C., Professor of Analytical Chemistry and Pharmacognosy.
J. M. LIEN, A. B., Special Professor for Foreigners.

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CLARENCE LOOMIS, Bac. Mus., Professor of Piano.

MRS. MABEL SPOONER-SCHULT, M. Mus., Professor of Piano.

GUSTAV STEPHAN, Bac. Mus., Professor of Violin and Cello.

MRS. J. E. ROESSLER, B. S., Professor of Guitar, Mandolin and Banjo.

HELEN AXE BROWN-STEPHENS, B. S., M. Mus., Assistant Director of the School of Music. Professor of Voice.

O. E. ROBINSON, Professor of Public School Music.

LOGAN EPPLE, B. S., Professor of Bacteriology.

GEORGE E. KEOGAN, M. D., Professor of Physical Education.

JESSIE DUNLAP, Ph. B., Professor of Physical Education.

EDUARDO AZUOLA, B. S., Professor of Spanish.

JOHN L. SAHM, Ph. G., Professor of Commercial Pharmacy.

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P. G. PUTERBAUGH, M. D., D. D. S., Professor of Physical Diagnosis and Anaesthetics.


T. P. BUCKLEY, Ph. G., D. D. S., Professor of Therapeutics.

R. E. HALL, D. D. S., Professor of Prosthetic Dentistry

C. F. B. SOWELL, D. D. S., Professor of Comparative Anatomy.

J. E. SCHAEFFER, D. D. S., LL. B., Professor of Dental Jurisprudence

C. M. CAHILL, D. D. S., Associate Professor of Materia Medica and Therapeutics.

T. L. GRISAMORE, Ph. G., D. D. S., Associate Professor of Orthodontia.

LEONARD C. BORLAND, M. D., L. P., Associate Professor of Anatomy.

STEPHEN L. EPPLE, A. B., Assistant Professor of Bacteriology.

MRS. CORA BENHAM, Pg. B., Assistant Professor of Elementary Branches and Instructor for Foreigners.

CHAS. E. LAPE, A. B., Assistant Professor of Manual Training.

REUBEN M. HAMILTON, Assistant Professor of Mathematics.

S. A. RIFENBERG, A. B., Assistant Professor of Biology.

INSTRUCTORS

BUNA BESHEARS, Pg. B., Graduate in Fine Art, Assistant Professor of Art.

LEONA WILES, A. B., Instructor in Latin.

EVELYN WOODMANSEE, A. B., Instructor in Algebra.

C. H. REIDER, B. S., Instructor in Civil Engineering.

H. T. FISHER, C. E., Assistant in Mechanical Drawing.

H. F. HANNEMAN, C. E., Assistant in Civil Engineering.

EMMIE DE NELER, Assistant in Folk Games.

JETT BARCLAY, Instructor in Typewriting.

C. T. WILLIAMS, Ph. G., Assistant in Chemistry Laboratory.
MOSES UBAN, Assistant in Chemistry Laboratory.
ANNETTE HORST, Instructor in Typewriting.
JOHN E. KOLAR, D. D. S., Instructor in Operative Technic.
W. A. DANIELSON, A. B., M. D., Instructor in Histology and Embryology.
A. VANDER VEURST DE VRIES, D. D. S., Demonstrator in Prosthetic Department.
R. H. MILLER, D. D. S., Demonstrator in Prosthetic Department.
M. O. LEPAK, D. D. S., Demonstrator in Infirmary.
Valparaiso University was founded September 16, 1873, by Henry Baker Brown, who was President of the Institution until his death, September 16, 1917.

President Brown was born October 6, 1847, at Mount Vernon, Ohio. At the age of fifteen he began to teach. From his small salary he saved enough to enable him to continue his education. After a course in Ohio Wesleyan University, Delaware, Ohio, he continued his studies in the National Normal University, Lebanon, Ohio, where he graduated.

President Brown realized very early in his career as a teacher that many young people are prevented from attending higher institutions of learning on account of the enormous expense and, in many cases, on account of the impractical courses of study. In 1873 he came to Valparaiso with the fixed determination of establishing a school where rich and poor would have an equal chance; where work, not wealth would be the standard; in fact, where all would have the opportunity of obtaining a thorough, practical education at an expense within the reach of those having the most limited means.

There was a school building at Valparaiso which had been used until 1870 as a Methodist college. President Brown made arrangements to purchase this property, and on September 16, 1873, he opened the Northern Indiana Normal School with three instructors and an enrollment of thirty-five students.

The duties were many and the work heavy, but President Brown carried the burden alone until 1881, when Oliver Perry Kinsey joined him and assumed the duties of Vice-President of the school.

In 1900 the name of the Institution was changed to Valparaiso College, and after the addition of the Medical and Dental Departments the name was again changed, in 1905, to Valparaiso University.

It is impossible to estimate the value and far-reaching results of the work and the life of this gifted educator, Henry Baker Brown. To the hundreds and thousands of men and women scattered throughout the world who came under the influence of
his marvelous personality, no word of praise is too strong, no monu-
ment too great, to commemorate his wonderful service to humanity. It was he who, more than any other man, placed an educa-
tion within reach of the poorest boy and girl. It was his life's ideal, and to the nurturing and fostering of it he gave his time, his energy and his life. All over the world there are thousands of prosperous men and women who owe their success to his genius. No other American educator has done so much for the cause of universal education as the Founder of Valparaiso University. No one has done more to develop the principles of democracy in an educational institution.

VALPARAISO UNIVERSITY will always remain an eloquent monument to his memory.

Growth—Each succeeding year the attendance has been greater than that of the previous year. From an enrollment of 35 students the attendance has increased to an annual enrollment of more than 5,000 students; from 3 departments to 12 depart-
ments; from 4 instructors to more than 100 instructors; from a part of the Old College Building to 9 large school buildings, in-
cluding the building in Chicago for Dental work; from very meager laboratories to laboratories that now accommodate 600 students working at one time, or 1,800 daily; from a library of a few hundred books to one of more than 25,000 choice works of reference.

Steady growth and unparalleled prosperity could not continue for nearly half a century unless the work offered and the equip-
ment furnished were such as to satisfy the real needs of the average student.

Location—The University is located at Valparaiso, a prosperous city of northern Indiana, fourteen miles south of Lake Michi-
gan and the world famous Sand Dunes. There is a chain of lakes almost at its very door, and the historic Kankakee forms the southern boundary of the county. Chicago, the metropolis of the West, is but forty-four miles away. Valparaiso is surrounded by a beautiful farming country, and is situated on one of the highest points in the northwestern part of the state.

The city has a population of nearly ten thousand people. It has well paved streets, interurban street car service, an extensive system of sewerage, and one of the most complete systems of waterworks anywhere to be found. The water, pronounced by chemists to be exceptionally pure, is obtained from a lake three miles north of the city.
How to Reach Valparaiso—Valparaiso has three railroads: the Pittsburg, Fort Wayne and Chicago (Pennsylvania), the Grand Trunk, and New York, Chicago and St. Louis (Nickel Plate). All North and South lines make easy connection with these roads, and trains can be obtained almost hourly to and from Chicago.

The City of Schools and Churches—Eight of the more prominent churches are represented in Valparaiso. They have beautiful and modern buildings, with a seating capacity ranging from 400 to 1,500. The Sunday Schools and Young People's Societies in connection with each are well attended. The students are always very welcome to all of the church services. The Young Men's and Young Women's Christian Associations in connection with the University are among the largest in the state.

Care of Students—Ever since the organization of the Institution, there have been dormitories for women and dormitories for men. The Institution has ample buildings and can provide all women with accommodations in dormitories and private houses. No woman is permitted to take rooms in a building not approved by the Dean of Women. Each of the large dormitories is in charge of an experienced matron, whose sole duty is the care of the occupants of the building.

The young women of the University are under the direct supervision of the Dean of Women, who gives her entire time in overseeing their social activities. From the time the young women enter the University until they leave for their homes they are under the care of the Dean; in fact, everything surrounding the life of the young women is carefully supervised, and always in a protecting way. The Dean co-operates with the Y. W. C. A., which is always prominent in University affairs, in helping to provide suitable entertainments. All social functions given by the students, or which students attend, are properly chaperoned.

The most careful mother may safely trust her daughter to the University and feel assured that she will receive painstaking care in her mental and moral growth and in her physical and social development.

Excellent care is given to the men of the University. Their dormitories are in charge of secretaries who look after their interests in every way. The Y. M. C. A. also has a secretary who, with certain members of the faculty, acts as a board to provide suitable entertainment and recreation.
The students and faculty are one, not only in their student life, but in their social life as well.

Should a student become sick while attending the University, he is given immediate and careful attention. If necessary a nurse is provided, or he is taken to the hospital, either of which involves very little additional expense. If the case is serious the parents or guardians are immediately notified. There need be no fear entertained that he will be neglected, or that his sickness will be kept secret.

The members of the faculty make reports of absentees, of those who are not progressing satisfactorily, of those who need private help, and of cases of sickness. Each case is given immediate and proper attention.

Societies—There are many literary societies in connection with the University. They give excellent literary and musical programs. Prominent among these are the Bethany Society, the Catholic Society, the Commercial Society, the Engineering Society, the Lithuanian Society, the Menorah Society, the Southern Society, the Prohibition League, the Student Congress, and many state societies.

Entertainments—A large number of entertainments are given every year in connection with the University work. Many of them are given by members of the University, students and faculty, and others are given by lecturers and entertainers of high rank from all over the United States. Thus the students are given an opportunity to hear the best music and the finest lectures.

Athletics—The University encourages all forms of athletics and maintains teams in football, basketball, baseball and track, under the direction of a competent coach. University Field comprises fifteen acres and contains a quarter-mile cinder track, football field, baseball diamond, and tennis courts. Adjoining the field is the gymnasium, which offers excellent facilities for basketball and other student events. The building seats 1,500 people.

The Student Council—The Student Council is an organization of students elected by the various classes of the University. This body meets once a week and controls in a very large measure the activities of the student. The faculty is represented by one member who is annually appointed by the President of the University.

Student Publications—"The Torch" is a weekly publication owned and published by the students. The control of the paper is vested in the Student Council. Students who are interested in
newspaper work will find "The Torch" an excellent opportunity for practical experience in newspaper writing. The paper has several departments and requires the help of many students.

"The Record" is an annual publication. It is also under the control of the Student Council. It is written and arranged by students selected from the senior class, and contains a record of the principal events of the college year. It is the "year book" of the senior class and is much prized by all of the graduates.

The University Year—The University year is divided into four quarters of twelve weeks each.

New classes are formed in a majority of the subjects each quarter. This makes it possible for a student to enter the University at the beginning of any quarter and get such work as he may desire. In the Music and Preparatory Departments students may begin work at any time, but even here it is advised, if possible, to enter at the first of the quarter.

The above does not apply to the Schools of Law and Dentistry, in which admission is permitted only at the beginning of each year.

Requirements for Entrance—For admission to the various schools or the University graduation from a standard High School is required. For those who are unable to fulfill these requirements the University maintains complete and thoroughly equipped Preparatory and High School Departments. In the college departments, such as Arts and Sciences, Education, Law, Engineering, and Pharmacy, certain requirements for entrance are demanded which are set forth under the head of each department. Students are advised to familiarize themselves with the entrance requirements of the department in which they expect to do work before entering the University.

The University has no arrangements for the accommodation of colored students nor for children under sixteen years of age.

Registration—All students are required to register before beginning work. By registering is meant the payment of tuition fees and the presentation of preliminary education credits. Upon entering the University the student must present all his credentials to the Registrar unless they have been previously sent. His course of study for the quarter is then made out by one of the faculty advisors, and, after approval by those in charge of the courses chosen, is submitted to the Registrar for final approval.
A preliminary education blank may be had by addressing The Registrar, Valparaiso University, Valparaiso, Indiana. Students are requested to have this blank filled out before entering.

Requirements for Graduation—Under the headings of the various schools of the University will be found the requirements for graduation. The word *term hour* is used as a basis of measurement of recitations. *Term hour* means one hour a week for twelve weeks. Two hours of laboratory work are considered equivalent to one term hour. In the various schools of the University the standard amount of work required for graduation is 180 term hours. This is equivalent to 144 weeks—four college years, in addition to four years of High School work.

The time required for the completion of any one course of study depends entirely upon the previous preparation made by the student. In order, however, to receive a degree from any of the higher courses, it is necessary for the student to be a resident of the University at least one school year, no matter how much work has been done elsewhere. No bachelor's degree is conferred by any of the departments or schools until the student has completed four full years of college work.

Extra Studies—The regular amount of work each student is expected to carry is fifteen term-hours per quarter. In exceptional cases, however, the student is allowed to take extra work not ordinarily to exceed eighteen hours per term. The student who desires to take extra work fills out and hands to the Registrar an application for extra work. The committee on extra work then investigates the record of the student, and if the student has done superior work, his application is granted, provided it is not for an excessive amount of work. Credit for extra work is given only when permission to take the work has been given and the average of the quarter's work in which the extra work is done is not lower than B.

Diplomas—The University is regularly chartered and confers the usual degrees.

Courses of Study—The regular courses of study will be found in the following pages. It is not necessary that students remain consecutive years (although this is always desirable) as the classes are so arranged that the student may drop out for a quarter, or a year, as the case may be, then return, and take up his studies where he left off, with very little inconvenience.

Time Given—It must be remembered that school is in session here full forty-eight weeks each year, with recitations in each sub-
ject of fifty-two minutes each. There are short vacations and few holidays. This enables the student to do one and one-third year’s school work in each calendar year.

Examinations for Advanced Standing—Any student desiring to take an examination for advanced standing will apply not later than Saturday of the tenth week of any quarter at the College office for such examination. He will pay $3.00 examination fee for each subject to be taken. The examination will cover four hours. The date will be Friday immediately following the end of any quarter or at such other time that the teacher before whom the examination is taken may select. A passing grade from this examination will be accepted by the University as a credit. Rules for the conduct of this examination may be had at the office at any time.

No credit will be issued to a candidate who is not already qualified to take work in the department in which he takes the examination.

The above does not apply to examination for the removal of conditions nor to subjects in the Preparatory and High School Departments.

Special Students—There are many persons who have not had a High School training and who have neither time nor money to complete a High School course, and who wish to do special college work in some one or two particular lines of study. They must prepare themselves in the shortest possible time. The University wishes to encourage these. They may enter any college classes as special students. A special student is one who is regularly enrolled in a college class and who will receive all of the privileges of this class but will receive no degree for the work done, because he has not had the four years’ high school course which is regularly required for entrance into college work.

University Regulations—I. Students may enter the University at any time by paying tuition for one quarter from time of entrance. II. Should students pay for more than one quarter, and be obliged to leave, all tuition excepting for the quarter then in progress will be refunded. Tuition for a broken quarter is not refunded. This does not apply to the School of Law and the School of Dentistry, in which tuition for the current year is not refunded. III. When money is paid in advance and the student is obliged to leave before the time expires for which payment
is made, weekly rates are charged to the time of leaving, the balance refunded. IV. In case of sickness, or an absence of more than three weeks, the student will receive from the Secretary of the Board of Trustees a certificate which will entitle him to the unused time, which may be made up at any quarter. No certificate is transferable. V. Should it be necessary for a student to be absent from a class he must secure an excuse from the President. VI. The University holds itself accountable for the morals of the student as far as possible, and the utmost care is used that no improper associations may be formed. VII. Students will be dismissed for neglect of duty or for improper conduct. The authorities reserve the right to interpret what shall be considered improper conduct. VIII. Inasmuch as the success and welfare of the student depends upon the University having entire control of his time and associations, he will also be dismissed for engaging, without permission of the President, in any course of instruction, study, or business enterprise outside of the University. IX. All students will be received, or dismissed, at the discretion of the President.

Public announcements concerning these regulations are made at the opening of every quarter, so that students may always be thoroughly informed concerning them.

The University realizes that it can have its greatest prosperity only when other institutions of learning are prospering, and it has always been its policy to work in harmony with all other schools.
EXPENSES

Tuition—The tuition is $20 per quarter of twelve weeks or $75, if paid in advance, for the entire year of forty-eight weeks. This includes the work in all of the departments except Law, Dentistry, Music, and Art, and private lessons in Penmanship and Elocution.

When, however, the full tuition ($80) is paid for the year in advance, Art and private lessons in Penmanship are included, so that in fact, the one tuition pays for everything except Law, Dentistry, Music and Elocution.

The expenses connected with the above exceptions are as follows:

Law, $75.00 per year of thirty-six weeks.
Dentistry, $175.00 per year of thirty-six weeks.
Music, $36.00 per quarter of twelve weeks.
Art, $24.00 per quarter of twelve weeks.

Private lessons in Penmanship cost $2.50 per quarter of twelve weeks, and private lessons in Elocution cost $1.00 per lesson.

When tuition for the year has been paid and the student is obliged to leave, all tuition excepting for the quarter then in progress is refunded. Tuition for a broken quarter is not refunded.

A diploma fee of $7.50 is charged all graduates of the University excepting those in the Commercial Department and the Department of Phonography and Typewriting. The diploma fee of these departments in $5.00.

Board and Rooms—The University gives a good grade of board for $46 per quarter of twelve weeks. When paid by the week the price is $4.00 per week paid in advance. There are a number of good private boarding halls for students which afford practically the same rates as the University.

Rooms may be had for from $10 to $18 per quarter. The University makes an additional charge of 25 cents per week when
its rooms are rented by the week. During the Fall, Winter and Spring quarters, $5.00 per quarter additional is charged for heat.

At the lower rates, two students have a single room and wardrobe; at the higher rate, two students have a suite of rooms; that is, a study room, bed room and wardrobe. All the newer dormitories have hot and cold water in the rooms, and all dormitories have bath rooms. All rooms, whether single or in suites, are furnished with beds, bedding, chairs, tables and rugs.

The students pay for their light and laundry. The laundry work for the rooms is done by the University. The light need not exceed $8 per year. Laundry may be had at from 35 cents to 50 cents per dozen articles. In connection with all the larger dormitories there are laundries where students may do their own laundry work at very little expense.

Athletics—At the beginning of each of the first three quarters all students will pay $1.00 for the maintenance of athletics. In return they will be given a ticket which will admit them to all athletic contests at one-half the regular price of admission.

The Torch—The students of the University desire to have the best possible college paper. A first requisite is an assured subscription list. By request of the Student Council each student will pay 50 cents at the beginning of each of the first three quarters for The Torch. This is payable at the University Office at the same time as the tuition and athletic fees.

Summary—An idea of the expenses may be had from the following summary:

For one quarter—Tuition, $20; Athletic and Torch fees, $1.50; Board, $46; Room, $10 to $20.

For four quarters—Tuition, $75, if paid in advance; Athletic and Torch fees, $4.50; Board, $184; Room, $55 to $87.

Remittances—All remittances should be made by draft, postal money order or express money order. Please do not use personal checks. There is always delay in collection, besides there is always cost for the same.

Students are advised to bring enough money to pay their expenses for at least one quarter of twelve weeks.
What to Do on Arriving at Valparaiso—On reaching the city, come directly to the President’s office, which will be found in the University building. Here all necessary information will be given with reference to studies, classes, rooms and boarding.

Students are advised to make no contracts for rooms until the University office has been reached.

Trunk checks should be retained until rooms are selected.

By adhering to these suggestions much time and annoyance may be saved the student.
A Preparatory Department is maintained because the University desires to assist all who are seeking an education. The University believes that the student should have adequate training in the common branches, as these form the foundation for advanced work. Many are inclined to neglect this important part of a true education.

The only preparation necessary to enter this department is that the student be able to read the common school texts. Those who are not prepared to enter these beginning classes may receive private instruction until they are able to take class work. This department, as well as others, is in charge of experienced teachers, and just as careful attention is given to the instruction as in the highest department of the University. It is the purpose of this department to give the student a thorough knowledge of the fundamental points of the subjects studied and thus lay a careful foundation for the higher courses of study. Beginning classes are organized in all subjects at the first of every quarter.

Special attention is given to the teaching of foreigners. The work is carefully graded, and the latest and best books for the teaching of English are used.

All courses in this department are twelve weeks in length, five hours a week.

DESCRIPTION OF COURSES

ARITHMETIC—Five different courses are offered in Arithmetic. Three of the classes are in Practical Arithmetic; one beginning at the first; one with Fractions; and another with Percentage. There are two classes in Higher Arithmetic. One begins directly after Division of Simple Numbers and completes the subject as far as and including True and Bank Discount. Another begins with Percentage and in one quarter completes the work.

Besides these courses, there is a class in Commercial Arithmetic, a class which reviews the entire subject of Arithmetic, and
a class in Mental Arithmetic and Rapid Calculation. These three classes are given in the Commercial, High School, and Teachers' Review Departments.

**LANGUAGE LESSONS AND GRAMMAR**—The Language lessons give special attention to correct forms of expression and the choice of words and their meaning. There are four classes in English Grammar. The first three are in Elementary Grammar. One begins at the first and covers half of the text. The second finishes the text. The third covers the entire text in one quarter. The fourth class is in Advanced Grammar and belongs to the High School and Teachers' Review Department.

**GEOGRAPHY**—This is a course in Descriptive Geography. Special attention is given to the physical features, the commercial rank and the political and educational standing of each country.

Map-drawing is taught by sketching, by enlarging maps and by moulding. Twenty-four weeks are given to this subject.

**UNITED STATES HISTORY**—Twenty-four weeks are given to this course. The first quarter of twelve weeks covers the period from the Discovery of America to the close of Washington's administration. Special attention is given to the Causes and Results of the Revolution, and the formation of the Constitution.

The second quarter deals with the Period of the Administrations: The Growth of Political Parties, Industrial and Territorial Expansion, the Civil War, Reconstruction, and the recent Industrial and Territorial Expansion are the topics especially emphasized.

**PHYSIOLOGY**—An elementary course in Human Anatomy, Physiology and Hygiene. Emphasis is placed upon the studies of those structures and activities which arouse an interest in personal hygiene and sanitation. A laboratory fee of 50 cents is charged.

**LETTER WRITING AND PUNCTUATION**—Classes in Letter Writing and Punctuation are formed at the beginning and middle of each quarter. These classes are for students who wish to learn correct forms in Business Correspondence and in Social Usages.

**READING AND SPELLING**—Special attention is given to these subjects, so often neglected in preparatory schools. No one who is not accurate in spelling and a careful reader can hope to accomplish much in business or professional life. Every student,
whether in the Preparatory Department or not, has the privilege of entering these classes.

CIVICS—The student gets an insight into what the Government is, and its relation to the citizen. A careful analysis is made with a view of giving to the student a better appreciation of citizenship.

PENMANSHIP—This work is in charge of a specialist who gives his entire time to this department.

VOCAL MUSIC—The rudiments of music are studied with a view of properly opening the way to the student for advanced work.

DRAWING—Twenty-four weeks are given to the study of Drawing. Beginning with elementary work, the student is brought to an appreciation of the subject with a good foundation for carrying the work much further if desired.
THE UNIVERSITY HIGH SCHOOL

There are many young people who have not been situated where they could have High School advantages, or who for some reason have not been able to complete their High School course of study. The University maintains a High School Department for such people, and through its charter it is allowed by the State of Indiana to issue official certificates of High School equivalency.

This Department is maintained to meet the needs of persons who wish to become teachers or enter professional schools or colleges, or who, for any cause, wish the advantages of a High School education.

Fifteen Units or forty-five credits are required for graduation. A unit is defined as thirty-six weeks' work in one subject, with recitations five times per week and the recitation periods fifty-two minutes in length. A credit is one-third of a unit.

REQUIRED WORK

(1) Three units consisting of English.

(2) Two units selected from each of two of the subjects: Mathematics, Foreign Language, Science and History.

(3) One unit in each of the following subjects must be included in the above, or taken as additional work:

(a) Mathematics, one unit.

(b) Science, one unit.

(c) History, which may include Civics, one unit.

ELECTIVES—The other units or credits may be selected from: Chemistry, Physics, Commercial Law, Bookkeeping and Actual Business, Language, Physiology, Geometry, Biology, Phonography and Typewriting, Commercial Arithmetic, and Music.

The certificate granted upon the completion of this course is equivalent to a diploma from a Commissioned High School.

Full credit will be given for work done in any accredited High School. This enables the student to begin where he left off in another school and finish his course just as soon as the required number of units of work has been completed.
The number of quarters required to finish the course will depend upon the student's previous education and general mental advancement. In order to obtain the best results it is necessary that a definite sequence of studies be pursued.

It is the aim of the University to prepare well all graduates of this department to enter future college or professional work. No diploma is issued without six months' resident work.

**DESCRIPTION OF COURSES.**

**MATHEMATICS.**

COURSE A—*Twelve Weeks. Five hours.*

ALGEBRA I—Elementary work to and including factoring and fractions.

COURSE B—*Twelve weeks. Five hours.*

ALGEBRA II—Fractions, simple equations, simultaneous equations and some work in involution.

COURSE C—*Twelve weeks. Five hours.*

ALGEBRA III—Involution, evolution, surds, surd equations, quadratic equations, simultaneous equations involving higher degrees.

COURSE D—*Twelve weeks. Five hours.*

PLANE GEOMETRY 1—Books I and II. Exercises.

COURSE E—*Twelve weeks. Five hours.*

PLANE GEOMETRY 2—Books III and IV. Exercises.

COURSE F—*Twelve weeks. Five hours.*

PLANE GEOMETRY 3—Book V with many original exercises and problems.

COURSE G—*Twelve weeks. Five hours.*

SOLID AND SPHERICAL GEOMETRY.

COURSE H—*Twelve weeks. Five hours.*

COMMERCIAL ARITHMETIC—A thorough drill in percentage, interest, discount, brokerage, accounts, commission and insurance.

**HISTORY**

COURSE D—*Twelve weeks. Five hours.*


Frequent oral and written reports on special topics.
COURSE E—Twelve weeks. Five hours.

MEDIEVAL AND MODERN HISTORY—This course consists of the Dark Ages, the Age of Revival of Culture and Industries, and a study of the Intellectual and Political Evolutions of Modern Nations.

Frequent oral and written reports on special topics.

COURSE F—Twelve weeks. Five hours.

MODERN EUROPEAN HISTORY—A general survey of the re-adjustment of Modern Europe since 1815; the evolution of Political and Social problems and the great issues of the present World Struggle.

Frequent reports on special topics.

COURSE A—Twelve weeks. Five hours.

U. S. HISTORY I—Covers the period from the Discovery of America to the War of 1812. The more salient features emphasized are the Discoveries, Settlements, Formation of the Government, and Establishment of a Stable Nation. Frequent reports.

COURSE B—Twelve weeks. Five hours.

U. S. HISTORY II—Emphasizes the Struggle for Liberty on the High Seas, National Expansion, the Rise of the Slave Issues, War with Mexico and the Civil War; Reconstruction, the Second Period of National Expansion, the Spanish War, and the Era of Great International Activities, including our part in the World War. Frequent reports.

COURSE C—Twelve weeks. Five hours.

CIVICS—The aim is to lead the student to a deeper sense of citizenship through a careful study of the Functions of our Local and National Governments.

Written reports on each one’s local government.

NOTE: The best results are obtained by taking the courses in the order arranged.

All the courses will be given every quarter if there is a demand for them.

ENGLISH

The High School Course in English follows closely the work outlined by the Indiana State Board of Education. The courses are arranged in the order in which they should be taken. Courses A to J inclusive are required. From the others a fourth year of work may be chosen.
COURSE A—Twelve weeks. Five hours.

**First Rhetoric.**

The elements of Rhetoric; punctuation, diction, sentence structure, paragraph writing, letter writing.

COURSE B—Twelve weeks. Five hours.

**First Classics.**

Study—(1) Longfellow, Tales of a Wayside Inn; (2) Stevenson, Treasure Island; (3) Dickens, Christmas Carol.

Outside Reading—(1) Irving, Tales of a Traveller; Hawthorne, Tanglewood Tales. (2) Twain, Tom Sawyer; Dickens, Oliver Twist. (3) Dickens, Christmas Stories; Mary Wilkins Freeman’s Christmas Jenny.

COURSE C—Twelve weeks. Five hours.

**Second Classics.**

Study—(1) Scott, Lady of the Lake; (2) Burroughs, Birds and Bees; (3) Parkman, The Oregon Trail.

Outside Reading—(1) Scott, Marimon; Scott, Quentin Durward. (2) Porter, Freckles; Bryant, To a Waterfowl; Warner, My Summer in a Garden. (3) Cooper, Last of the Mohicans; Roosevelt, Winning of the West.

COURSE D—Twelve weeks. Five hours.

**Second Rhetoric.**

A continuation of Course A. A study of the principles of composition, the theme as a whole, the outline, prosody, description and narration. Long and short themes required.

COURSE E—Twelve weeks. Five hours.

**Third Classics.**

Study—(1) Homer, The Odyssey; (2) Macaulay, Lays of Ancient Rome; (3) Shakespeare, As You Like It.

Outside Reading—(1) Church, Story of the Iliad; Defoe, Robinson Crusoe. (2) Davis, Soldiers of Fortune; Hawthorne, The Marble Faun. (3) Shakespeare, Much Ado About Nothing; Shakespeare, Romeo and Juliet.
COURSE F—Twelve weeks. Five hours.

HISTORY OF ENGLISH LITERATURE.

Historical survey of English literature with emphasis on the periods, movements, literary types and the work of the greater writers.

COURSE G—Twelve weeks. Five hours.

FOURTH CLASSICS.

Study—(1) Heydrick, Types of the Short Story; (2) Irving, The Sketch Book; (3) Burns, The Cotters' Saturday Night.

Outside Reading—(1) Short Stories by Bret Harte, Mrs. Mary Wilkins Freeman, Mrs. Alice Brown, and Mary Esther Mitchell. (2) Twain, Innocents Abroad; Irving, The Alhambra. (3) Eliot, The Mill on The Floss; Dickens, Pickwick Papers.

COURSE H—Twelve weeks. Five hours.

FIFTH CLASSICS.

Study—(1) Goldsmith, The Deserted Village; (2) Dickens, A Tale of Two Cities; (3) Tennyson, The Princess.

Outside Reading—(1) Mitchell, The Last American; Lytton, The Last Days of Pompeii. (2) Hugo, The Toilers of the Sea; Scott, Guy Mannering. (3) Tennyson, Enoch Arden; Thackeray, Henry Esmond.

COURSE I—Twelve weeks. Five hours.

THIRD RHETORIC.

A continuation of Course D. Note taking, exposition and argumentation, long and short themes.

COURSE J—Twelve weeks. Five hours.

SIXTH CLASSICS.

Study—(1) Scott, Woodstock; (2) Hawthorne, Twice Told Tales I; (3) Eliot, Silas Marner.

Outside Reading—(1) Major, When Knighthood Was in Flower; Scott, The Talisman. (2) Hawthorne, Twice Told Tales II; Old Testament Narratives. (3) Dickens, Old Curiosity Shop; Goldsmith, The Vicar of Wakefield.

COURSE K—Twelve weeks. Five hours.

HISTORY OF AMERICAN LITERATURE.

Brief historical survey, using special study of several representative American authors.
COURSE L—Twelve weeks. Five hours.

SEVENTH CLASSICS.

Study—(1) Franklin, Autobiography; (2) Emerson, Essays on Compensation and Self Reliance; (3) Lincoln, Speeches and Addresses; (4) Burke, Speech on Conciliation.


COURSE M—Twelve weeks. Five hours.

EIGHTH CLASSICS.

Study—(1) Shakespeare, Macbeth; (2) Lowell, The Present Crisis; (3) Milton, Minor Poems; (4) President Wilson, Address to Congress, April 2, 1917.

Outside Reading—Shakespeare, Richard III; Kingsley, Westward Ho! (2) Selections: Rienze’s Address to the Romans, King Henry’s Address to His Soldiers, Webster’s Bunker Hill Orations. (3) Washington’s Farewell Address, Lowell’s Commemoration Ode.

FRENCH

The six courses in High School French are designed to be the equivalent of four courses in College French, so that the pupil having completed Courses A-F is eligible for French V. Classes in High School French are distinctly separate from those in College French.

COURSES A, B, C—Thirty-six weeks. Five hours.

Angus—Fundamentals of French.
Le Francais et sa Patrie.
Voyage de M. Perrichon.

COURSES D, E, F—Thirty-six weeks. Five hours.

Bruce—French Composition.
Historical French Reader—Weill.
Le Petit Chose, or Le Roman d’un Enfant.
Les Oberles.
Poemes et Chants de France—Daniel et Travers.
LATIN

Classes in High School Latin are usually organized each quarter and are taken in the following sequence:

COURSE A—Twelve weeks. Five hours.
Elementary Latin I.

COURSE B—Twelve weeks. Five hours.
Elementary Latin II.

COURSE C—Twelve weeks. Five hours.
Elementary Latin III.

COURSE D—Twelve weeks. Five hours.
Cæsar I. Book I, about thirty-five chapters.

COURSE E—Twelve weeks. Five hours.
Cæsar II. Book I, completed. Book II.

COURSE F—Twelve weeks. Five hours.
Cæsar III. Books III and IV.

Classes in High School Cicero and Virgil will be organized as demanded.

BIOLOGY

COURSE A—Twelve weeks. Five hours. Two hours laboratory.

BOTANY I—The Morphology and Ecology of Seed Plants. Special attention is given to the subjects which pertain to Agriculture.

A laboratory fee of $1.00 is charged. Given first and third quarters.

COURSE B—Twelve weeks. Five hours. Two hours laboratory.

BOTANY II—The Histological Structure of plants in general and the study of type forms of the Spore plants. Identification of some of the more common weeds, trees and cultivated plants.

A laboratory fee of $1.00 is charged. Given Second and Fourth quarters.

COURSE C—Twelve weeks. Five hours. Two hours laboratory.

ZOOLOGY I—The Invertebrate Phyla of the animal kingdom are studied in detail. The meaning of animal relationships is emphasized and an introduction to the study of Evolution is given.

The laboratory work consists of dissecting animals representing the different Phyla studied. Complete notes are kept of all laboratory work.
A laboratory fee of $1.00 is charged. Given every quarter if required.

COURSE D—Twelve weeks. Five hours. Two hours laboratory.

Zoology II—The Phylum Chordata is studied, with special attention given to birds and mammals. Each student is required to write a short paper upon the life of some eminent zoologist.

The laboratory work represents a continuation of that given in Course A.

A laboratory fee of $1.00 is charged. Given Second, Third and Fourth quarters.

COURSE E—Twelve weeks. Five hours.

Physiology—An elementary course in Human Anatomy, Physiology and Hygiene. Emphasis is placed upon the study of those traits and activities which arouse an interest in personal Hygiene and Sanitation.

A laboratory fee of 50 cents is charged. Given First and Third quarters.

PHYSIOGRAPHY

COURSE A—Twelve weeks. Five hours.

Special emphasis is placed on the study of atmospheric phenomena and their effects. The distribution of land and water, the position of mountains, plateaus, and lowlands, and their meaning are given careful attention. Classes organized as demanded.

CHEMISTRY

COURSE A (Should be taken sixth or seventh term of High School work). Twelve weeks. Five hours recitation and one two hour period of laboratory work per week.

This is a High School course intended to give the student preliminary work in Chemistry. The fundamental principles are carefully considered in regard to their practical applications.

Text—Hessler and Smith.

Laboratory fee, $2.00. Given First and Third quarters.
COURSE B—Twelve weeks. Five hours recitation and one two-hour laboratory period per week.
This is a continuation of the study of High School Chemistry covering essentially the common metals.
Pre-requisite: Course A. Text—Hessler and Smith.
Laboratory fee, $2.00. Given Second and Fourth quarters.

COURSE C—Twelve weeks. Two hours per week recitations and four hours per week laboratory.
This is an elementary course in Synthetic and Analytic Chemistry.
Pre-requisite: Course B.
Laboratory fee, $2.00. Given First and Third quarters.
A breakage fee of $1.00 is added to all the above fees. This is returned less the individual breakage at the close of each term.

PHYSICS

COURSE A—Twelve weeks. Five hours. Two hours laboratory.
This course consists of a brief introduction to the subject, a study of the fundamental properties of matter, dynamics and mechanics of solids and fluids.
Pre-requisite: Algebra I.
A laboratory fee of $1.50 is charged. Given every quarter.

COURSE B—Twelve weeks. Five hours. Two hours laboratory.
This course is also an elementary course, a continuation of Course A. The topics pursued are waves, thermometry, expansion, and transfer of heat energy.
Pre-requisite: Course A.
A laboratory fee of $1.50 is charged. Given every quarter.

COURSE C—Twelve weeks. Five hours. Two hours laboratory.
This course is a continuation of Course B, completing the High School work in Physics. The subject matter consists of selected studies in magnetism, electricity, sound and light.
Pre-requisite: Course B.
A laboratory fee of $1.50 is charged. Given Second, Third and Fourth quarters.
COLLEGE OF ARTS AND SCIENCES

The College of Arts and Sciences is designed to offer a liberal cultural course as a preparation for any life work.

The requirement for entrance is the completion of the standard four year high school or an equivalent attainment of fifteen units.

The graduate is given the degree of Bachelor of Arts or Bachelor of Science upon the successful completion of one hundred eighty (180) term hours* in his chosen course of study. In the Freshman and Sophomore years certain subjects are prescribed, but in the Junior and Senior years all courses are elective except that the equivalent of forty-two (42) term hours must be selected from one department, called his "Major", and twenty-one (21) term hours must be selected from another department, designated as his "Minor".

The Major may be elected in any of the following departments: Latin, French, English, Public Speaking, Physics, Mathematics, Chemistry, History, Political Science, Biology or Education. The Minor will be selected after consultation with the head of the department from which the Major is taken.

Students should plan their work so that 90 term hours are completed by the end of the Sophomore year.

* By a term hour is meant one recitation per week for twelve weeks. A two-hour period of laboratory work per week for twelve weeks is equivalent to one term hour credit.

REQUIREMENTS FOR THE BACHELOR DEGREES

FOR BACHELOR OF ARTS

Freshman and Sophomore Years

*English ................................................................. 12 term hours
Foreign Language .................................................. 30 term hours
Laboratory Science ............................................... 30 term hours
†Gymnasium.
Elective ............................................................. 18 term hours

Total........................................................................... 90 term hours
### Junior and Senior Years

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<tr>
<td>A Minor Subject to total</td>
<td>21 term</td>
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<tr>
<td>Electives</td>
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</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>180 term</strong></td>
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### FOR BACHELOR OF SCIENCE

Requirements are the same as for the Bachelor of Arts, except that the major must be elected from Science or Mathematics.

*Freshman English may not be included in an English or Public Speaking major.

†Gymnasium is required 2 hours per week through 36 weeks in addition to the other required courses.

### MATHEMATICS.

#### COURSE I—Twelve weeks. Five term-hours.

**SOLID GEOMETRY**—Required of all Freshman students of mathematics who have not had solid geometry in the high school. The course is given from a different text and includes enough work to make it worthy of a college credit.

#### COURSE II—Twelve weeks. Three term-hours.

**ALGEBRA**—This course reviews quadratic equations and develops ratio, proportion, variation, progressions and the binomial theorem.

Pre-requisite: High School Mathematics.

#### COURSE III—Twelve weeks. Three term-hours.

**PLANE TRIGONOMETRY**—An elementary course treating only the simple principles of plane trigonometry. Required of all students who do not present trigonometry for entrance.

Pre-requisite: High School Mathematics.

#### COURSE IV—Twelve weeks. Three term-hours.

**ADVANCED ALGEBRA**—This is a course designed for A. B. and Engineering students. Emphasis is placed on series, logarithms, general theory of equations and determinants.

Pre-requisite: Mathematics II and III.
COURSE V—Twelve weeks. Two term-hours.

Advanced Trigonometry—This course reviews the more difficult parts of Course III and develops the subject of Spherical Trigonometry. Numerous problems are given preparing the students for Astronomy, Surveying and Celestial Mechanics.

Pre-requisite: Plane Trigonometry.

COURSE VI—Twelve weeks. Three term-hours.

Elementary Analytical Geometry—This course treats the analytical geometry of the straight line, transformation of coordinates, and the conic sections.

Pre-requisites: College Algebra and Plane Trigonometry.

COURSE VII—Twelve weeks. Two term-hours.

Advanced Analytical Geometry—This course takes up loci of the second order, higher plane curves, and develops Solid Analytical Geometry.

Pre-requisite: Mathematics VI.

COURSE VIII—Twelve weeks. Three term-hours.

Differential Calculus—An introduction to calculus treating the theory of limits, differentiation, maxima, minima and curve tracing.

Pre-requisite: Analytical Geometry.

COURSE IX—Twelve weeks. Three term-hours.

Elementary Integral Calculus—This course takes up some topics in differential calculus omitted from Course VIII and gives a general introduction to the various methods of integration.

Pre-requisite: Differential Calculus.

COURSE X—Twelve weeks. Two term-hours.

Integral Calculus—This course is a continuation of Course IX, taking up attractions, motion in a resisting medium, center of gravity, moment of inertia, partial integration and other topics omitted from Course IX.

Pre-requisite: Course IX.

COURSE XI—Twelve weeks. Two term-hours.

Advanced Calculus with Application—Selected topics; much time is given to the solution of practical problems.

Pre-requisite: Mathematics X.
COURSE XII—Twelve weeks. Three term-hours.

DIFFERENTIAL EQUATIONS—Involving equations of the first order and higher degree, singular solutions, equations of the second order and so on, following the outlines of Differential Equations by Cohen.

Pre-requisite: Integral Calculus.

COURSE XIII—Twelve weeks. Two term-hours.

PARTIAL DIFFERENTIAL EQUATIONS OF MATHEMATICAL PHYSICS—A continuation of Course XII, taking up the Partial Differential Equation with special application to physics problems.

Pre-requisites: Mathematics XII and Physics XXXII.

COURSE XIV—Twelve weeks. Three term hours.

ANALYTICAL MECHANICS—This course follows the outline of some standard text, such as Bowser, Dadourian or Martin. The text in use at present is Martin.

Pre-requisite: Mathematics X and Physics XII.

COURSE XV—Twelve weeks. Two term-hours.

ADVANCED ANALYTICAL MECHANICS—A continuation of Course XIV with numerous applications.

Pre-requisites: Mathematics XIV and Physics XII.

COURSE XVI—Twelve weeks. Three term-hours.

VECTOR ANALYSIS—This course follows the subject as presented in the text-book on Vector Analysis by Coffin.

Pre-requisites: Mathematics XIII and XV.

ASTRONOMY.

The courses in Astronomy are designed to give students who undertake this work a working knowledge of general astronomy and to serve as an adequate foundation for those students who desire to pursue more technical courses in astronomy and celestial mechanics. At present the number of courses offered is too small to permit students to select Astronomy as their major subject. The subject of Astronomy is intimately connected with the Departments of Physics and Mathematics and the courses in Astronomy are given by members of the staff of Physics and Mathematics.

The telescopic and visual observations are made from the roof of the Domestic Science building.
COURSE I—Twelve weeks. Three term-hours.

DESCRIPTIVE ASTRONOMY—This course treats in an elementary way of the earth, its motions and atmosphere, constellations and the moon.

Introduction to Astronomy by Moulton is the text in use at present.

Pre-requisites: High School Physics and Trigonometry.

COURSE II—Twelve weeks. Three term-hours.

DESCRIPTIVE ASTRONOMY—This course is a continuation of Course I dealing with the solar system, plants, comets, meteors and the sun.

Pre-requisites: Same as Course I.

COURSE III.

DESCRIPTIVE ASTRONOMY—This course concludes with the evolution of the solar systems and the sidereal universe.

Pre-requisites: Same as Course I.

PHYSICS.

COURSE I—Twenty-four weeks. Ten term-hours.

GENERAL PHYSICS—This is a first course in Physics required of all students of college physics who do not offer High School Physics for entrance. The course consists of lectures and recitations and includes enough work to make it worthy of a college credit.

(a) MECHANICS AND HEAT—Twelve weeks. Five term-hours.
(b) ELECTRICITY, SOUND AND LIGHT—Twelve weeks. Five term-hours.

COURSE II—Twenty-four weeks. Two term-hours.

GENERAL PHYSICAL LABORATORY PRACTICE—To accompany Course I.

(a) MECHANICS AND HEAT—Twelve weeks. One term-hour.
(b) ELECTRICITY, SOUND AND LIGHT—Twelve weeks. One term-hour.

COURSE III—Thirty-six weeks. Nine term-hours.

GENERAL PHYSICS—This is a course in college physics. It is not intended as a review of high school physics. It consists of lectures and recitations.
(a) **Mechanics and Heat**—Twelve weeks. Three term-hours.
(b) **Electricity**—Twelve weeks. Three term-hours.
(c) **Sound and Light**—Twelve weeks. Three term-hours.


**COURSE IV**—Thirty-six weeks. Six term-hours.

**General Laboratory Practice**—This course supplements Course III.

Four hours weekly, to be arranged.
(a) **Mechanics and Heat**—Twelve weeks. Two term-hours.
(b) **Electricity**—Twelve weeks. Two term-hours.
(c) **Sound and Light**—Twelve weeks. Two term-hours.

Pre-requisite or parallel: Course III.

**COURSE V**—Twelve weeks. Three term-hours.

**Problems in Physics**—The work of this course includes the solution of numerous problems omitted from Course III.

Pre-requisite or parallel: Course III.

**COURSE VI**—Twelve weeks. Three term-hours.

**Electro-Chemistry**—This is a special course intended for students of Chemistry. It consists of electro-chemical topics omitted from IV.

Pre-requisite: High School Physics and Chemistry.

**COURSE VII**—Twelve weeks. Three term-hours.

**Heat**—This course is intended for Sophomore college students of Physics. It consists of demonstrated lectures and recitations. Quantitative observations leading to the solution of problems are taken by the students.

Pre-requisites: Courses III and IV.

Text for 1919-1920 is Heat for Advanced Students by Edser.

**COURSE VIII**—Twelve weeks. Three term-hours.

**Light**—In this course the subject of light receives about the same treatment that heat does in Course VII.

Pre-requisites: Courses III and IV.

Text: Light for Students by Edser.
COURSE IX—Twelve weeks. Three term-hours.

Analytical Mechanics—This is the same as Course XIV in Mathematics.

Pre-requisites: Mathematics X and Physics III.

COURSE X—Twelve weeks. Two term-hours.

Advanced Analytical Mechanics—See Mathematics XV.

Pre-requisites: Mathematics XIV and Physics III.

COURSE XI—Thirty-six weeks. Six term-hours.

Theory of Electricity—This course consists of lectures and recitations.

Pre-requisites: Physics III and IV.

Given First, Second and Third quarters.

COURSE XII—Twelve weeks. Two term-hours.

Partial Differential Equations of Mathematical Physics—See Mathematics, Course XIII.

Pre-requisites: Mathematics XII and Physics XI.

COURSE XIII—Twenty-four weeks. Four term-hours.

Physical Optics—An advanced course following Wood's Optics.

Pre-requisite: Physics XI.

COURSE XIV—Thirty-six weeks. Three term-hours.

Modern Theory—This course consists of discussion and papers by students, covering special topics of modern theoretical physics.

Pre-requisite: Physics XI.

COURSE XV—Thirty-six weeks. Three term-hours.

Journal Reading—Reports by students on physical articles in current magazines.

Weekly through the year.
CHEMISTRY

This science is always taught in connection with experiments demonstrating the subject under consideration. Aside from the work in the classroom, each student is required to work in the laboratory under the direction of a special instructor from two to five hours a day, the time required depending upon the nature and advancement of the course. The laboratories are fully equipped with all modern appliances and afford an excellent opportunity for carrying on practical work.

For further information write for special catalog of the School of Chemistry and Pharmacy. The following general courses are offered, together with special courses in Domestic Science, Pharmacy, Chemistry, and Chemical Engineering.

GENERAL CHEMISTRY

COURSE I—Thirty-six weeks. Twelve term-hours.
CHEMISTRY (a)—Twelve weeks. Five term-hours. Three hours recitation, four hours laboratory.

This is a college course in Chemistry consisting of a study of the fundamental theories and laws underlying this science. It should be elected only by mature students or by those who have completed High School Chemistry.

Text: Smith’s College Chemistry. First and Third quarters. Laboratory fee, $3.00.

CHEMISTRY (b)—Twelve weeks. Five term-hours. Three hours recitation, four hours laboratory.

This is a continuation of course (a), treating of the acid forming elements.

Text: Smith’s College Chemistry. Second and Fourth quarters. Pre-requisite: Chemistry (a).

Laboratory fee, $3.00.

CHEMISTRY (c)—Twelve weeks. Two term-hours. Two hours recitation.

This is a continuation of Inorganic Chemistry, treating of the metals.

Text: Smith’s College Chemistry. First and Third quarters. Pre-requisite: Chemistry (b).

COURSE II—Twelve weeks. Three term-hours. Three hours recitation.

ARITHMETICAL CHEMISTRY.

This is arranged to cover practical chemical problems. It is
quite essential for the student who wishes to become proficient in any branch of Chemistry.

No text required. Problems arranged by instructor.

Pre-requisite: Chemistry (a). Third quarter.

COURSE III—Twelve weeks. Six term-hours. Three hours recitation, six hours laboratory.

PHARMACEUTICAL CHEMISTRY.

This is a course devoted, primarily, to the needs of Pharmacy and Pre-Medic students. Special stress is laid upon the Inorganic Chemicals of Pharmacopoeia. These are discussed from the standpoint of methods of manufacture, mineral sources, physical and chemical properties, identification and uses. The student has access to samples of all the important salts and is expected to be able to identify these by means of their physical properties. A great many of these salts are manufactured in the laboratory work accompanying this course.

Text: Arny's Principles of Pharmacy. Pre-requisite: Chemistry (a), (b). Third quarter.

Laboratory fee, $7.00.

COURSE IV—Thirty-six weeks. Fifteen term-hours.

ORGANIC CHEMISTRY (a)—Twelve weeks. Five term-hours. Three hours recitation, four hours laboratory.

An introduction to Organic Chemistry covering the points of Physical Chemistry essential to this subject. The aliphatic series is dealt with during this time, but not completed.

Text: Haskin's Organic Chemistry. Pre-requisite: Chemistry (a), (b), (c). First quarter.

Laboratory fee, $3.00.

ORGANIC CHEMISTRY (b)—Twelve weeks. Five term-hours. Three hours recitation, four hours laboratory.

The Aliphatic series is completed and the remainder of the time is spent on the Cyclic series. Albumen, sugar, and Uric acid determination will be made in the laboratory.


Laboratory fee, $4.00.

ORGANIC CHEMISTRY (c)—Twelve weeks. Five term-hours. Two hours recitation, six hours laboratory.

The list of chemicals to be manufactured is selected with a view of giving the student a great variance in chemical technique.
Both the Aliphatic and the Cyclic series are dealt with. Free use of
the Library is required.

Pre-requisite: Organic Chemistry (a), (b). Fourth quarter.
Laboratory fee, $7.50.

COURSE V—_{Twelve weeks. Three term-hours. Three hours recita-
tion.}

PLANT CHEMISTRY.
This course deals with the various plants that produce im-
portant chemicals either in root, stem, leaf, or fruit. Their habitat,
collection, storage, methods of extraction and general relation to
Chemical Industries are thoroughly discussed.

Pre-requisite: Organic Chemistry (a), (b). Botany (a), (b).
Third quarter.

COURSE VI—_{Twelve weeks. Three term-hours. Three hours recita-
tion.}

HISTORY OF CHEMISTRY.
This course involves a thorough study of the development of
the chemical theories from the earliest times to the present day.
Considerable time is spent on the biographies of men who have con-
tributed most to the development of Chemistry during the past
century.

Text: Moore's History of Chemistry. Pre-requisite: Chemistry
(a), (b), (c). Second quarter.

COURSE VII—_{Twelve weeks. Five term-hours. Three hours reci-
tation, four hours laboratory.}

HOUSEHOLD CHEMISTRY.
A study of foods, their composition and values. It covers the
detection of adulterants and preservatives, and the study of soaps,
cleansers and other matters pertaining to the Chemistry of the
Household.

Text: Vulte. Pre-requisite: Qualitative Analysis (a). Third
quarter.
Laboratory fee, $3.50.

COURSE VIII—_{Twelve weeks. Three term-hours. Three hours per
week, lecture and recitation.}

TEACHER'S CHEMISTRY.
A thorough knowledge of the fundamental principles of Gen-
eral and Analytical Chemistry is necessary in order to elect this
course.
Fourth quarter.
This course treats of the best methods of presenting the foundation principles of General Chemistry, especially to High School classes. The best methods of laboratory work will also have attention, especially the location of the laboratory in relation to other rooms, the arrangement of laboratory furniture, the planning and buying of laboratory equipment, etc. The Chemistry Library is also considered from the standpoint of the best books to buy, how and where to get them, and how to keep in touch with the current books and literature on the subject.

**ANALYTICAL AND APPLIED CHEMISTRY**

**COURSE IX—Twenty-four weeks. Ten term-hours.**

**Qualitative Analysis (a)—Twelve weeks. Five term-hours. Two hours recitation, six hours laboratory.**

An elementary course in chemical analysis dealing with solutions of common metallic salts, and the determination of positive and negative radicals.

Text: Timmon's Qualitative Analysis. Pre-requisite: Chemistry (a), (b). Given every quarter.

Laboratory fee, $4.00.

**Qualitative Analysis (b)—Twelve weeks. Five term-hours. Three hours class, four hours laboratory.**

An advanced course in qualitative analysis with particular attention given to the methods of dry analysis. The determination of fifty inorganic unknowns completes this course.


Laboratory fee, $4.00.

**COURSE X—Twelve weeks. Seven term-hours. Two hours recitation, nine hours laboratory.**

**Quantitative Analysis.**

This is a course majoring gravimetric and volumetric work. Special determination of sugar and ammonia are considered, such as one might meet in making an analysis of urine.


Laboratory fee, $7.00.
COURSE XI—Twelve weeks. Seven term-hours. Two hours recitation, nine hours laboratory.

Advanced Quantitative Analysis.
In this course is given the quantitative analysis of iron, steel, slag, cement, limestone, and the common ores. Technique is emphasized. The blowpipe is used to identify the ores analyzed.

Laboratory fee, $6.00.

COURSE XII—Twelve weeks. Two term-hours. One hour lecture, four hours laboratory.

Water Analysis.
This is a laboratory course which covers the chemical examination of water.

Text: Leffman. Pre-requisite: Should be preceded by, or may accompany Quantitative Analysis. Fourth quarter.
Laboratory fee, $2.50.

COURSE XIII—Twelve weeks. Three term-hours. Six hours laboratory.

Alkaloid Analysis.
This is a laboratory course including both the Qualitative and the Quantitative work on the Chemistry of Alkaloids. Free use is made of the Chemistry Library, to which the student has easy access. The course is quite largely one of original investigation on the part of the student.

Text: Notes by instructor. Pre-requisite: Organic Chemistry (a), (b). Third quarter.
Laboratory fee, $3.50.

COURSE XIV—Twelve weeks. Ten term-hours. Twenty hours laboratory.

Food and Drug Analysis.
This course covers varieties of Foods and Drugs with a view to detecting adulteration, which covers such a wide range of chemical technique that it should not be elected by any who are not well advanced in Chemistry. It includes microscopic examination of drugs, chemicals and foods, as well as their chemical examination. Free use of the Chemistry Library is made.

Text: Notes by instructor. Pre-requisite: Organic Chemistry (a), (b), Quantitative Analysis. Fourth quarter.
Laboratory fee, $12.00.
COURSE XV—Twenty-four weeks. Eleven term-hours.

INDUSTRIAL CHEMISTRY (a)—Twelve weeks. Six term-hours.

Three hours recitation, six hours laboratory.

This course covers the manufacture of the important acids, bases and salts, lime, cement, glass, and other important inorganic materials.

Text: Thorpe’s Industrial Chemistry. Pre-requisite: Chemistry (a), (b), (c). Third quarter.

Laboratory fee, $7.00.

INDUSTRIAL CHEMISTRY (b)—Twelve weeks. Five term-hours.

Three hours recitation, four hours laboratory.

A careful study of the manufacturing processes and appliances for the production of the important organic chemicals of the market. Explosives, textile, paper, and other industries are also thoroughly covered.

Text: Thorpe’s Industrial Chemistry. Pre-requisite: Organic Chemistry (a), (b). Fourth quarter.

Laboratory fee, $4.00.

COURSE XVI—Twelve weeks. Three term-hours. Three hours recitation.

*METALLURGY.

A study of the methods of obtaining iron, copper, lead, zinc, tin, silver, gold, platinum, mercury, aluminum, and nickel from their ores.

Pre-requisite: Advanced Quantitative Analysis. Third quarter.

COURSE XVII—Twelve weeks. Two term-hours. Four hours laboratory.

*ASSAY OF ORES.

May be taken alone, or as a laboratory accompanying Metallurgy. Assays will be made of gold, silver, copper, and other important ores.

Pre-requisite: Advanced Quantitative Analysis. Third quarter.

Laboratory fee, $4.00.
COURSE XVIII—Twelve weeks. Two term-hours. Four hours laboratory.

*Alloys.

A consideration of the various alloys and their uses, brass, Babbitt's metal, solders, typemetal, bronze, will be carefully studied.

Pre-requisite: Advanced Quantitative Analysis. First quarter.

Laboratory fee, $3.00.

COURSE XIX—Twelve weeks. Two term-hours. One hour recitation, four hours laboratory.

*Gas and Fuel Analysis.

Examinations of gases, gas mixture, flue gases, and fuels.

Pre-requisite: Advanced Quantitative Analysis. Second quarter.

Laboratory fee, $3.50.

COURSE XX—Twelve weeks. Five term-hours. Five hours recitation.

Electro Chemistry.

A course in Theoretical and Applied Electro Chemistry, with emphasis on the technical side of the subject. This course is also listed as Physics 25 and taught in that department.

A breakage fee is added to each laboratory fee. This will be returned less individual breakage.

Pre-requisite: Chemistry (a), (b). Third quarter.

* May be elected only by special permission this year.

BOTANY

COURSE I. General Botany—Twelve weeks. Five term hours; three classroom, four laboratory and field.

This course includes a study of the roots, stems, leaves, flowers and fruits of the seed plants, and a few representative forms of the lower groups.

It is given the first, third, and fourth terms.

Laboratory fee, $2.00.
COURSE II. CRYPTOGRAMIC BOTANY—Twelve weeks. *Five term-hours; three classroom, four laboratory and field.*

This course includes the study of the morphology, physiology, and evolution of the groups of plants, beginning with the lowest form.

First and third terms. Laboratory fee, $2.00.

COURSE III. PLANT ECOLOGY—Twelve weeks. *Five term-hours; three classroom, four laboratory and field.*

This course includes the study of roots, stems and leaves of the seed plants, giving special attention to the influences of environment.

It is given the second and fourth terms. Laboratory fee, $2.00.

COURSE IV. PLANT ECOLOGY—Twelve weeks. *Five term-hours; three classroom, four laboratory and field.*

This course includes the study of symbiotic and saprophytic plants; flowers, fruits, seeds, germination and plant societies.

It is given the first and fourth terms. Laboratory fee, $2.00.

COURSE V. PLANT HISTOLOGY—Twelve weeks. *Five term-hours; two classroom, six laboratory.*

This course includes a study of the various methods of fixing, section-cutting, staining and mounting, microscopic preparations of plant tissues.

It is given the third term. The laboratory fee is $3.00.

COURSE VI. PLANT PHYSIOLOGY—Twelve weeks. *Four term-hours; three classroom, four laboratory and field.*

This course includes a study of the absorption and transfer of raw material, photosynthesis, digestion, assimilation, and accumulation of food; respiration, transportation, growth and movements of plants.

It is given the second term. The laboratory fee is $3.00.

COURSE VII. TAXOKOMY—Twelve weeks. *Four term-hours; one classroom, six laboratory and field.*

This course consists largely of field excursions for the purpose of observing plants in their natural environment, and the collecting of specimens to illustrate the various systematic and ecologic groups.

It is offered the fourth term. Laboratory fee $2.00.
 COURSE VIII. BACTERIOLOGY—Twelve weeks. Five term-hours; two classroom, six laboratory.

This course includes lectures and laboratory work on the preparation of the various media used in bacteriological cultures, the isolation and identification of a number of the more common pathogenic and nonpathogenic micro-organisms, the bacteriology of milk, water and other foods; sterilization, innoculation, infection, immunity, toxins, antitoxins, etc.

It is given the fourth term. The laboratory fee is $4.50.

PHYSIOLOGY

COURSE I. GENERAL PHYSIOLOGY—Twelve weeks. Four term-hours; three classroom, two laboratory.

This course consists of lectures, recitations and laboratory work covering the anatomy physiology and hygiene of the human body in an elementary way. It or its equivalent must precede courses III and IV.

Given the first, second and third terms. Laboratory fee, $1.50.

COURSE II. TEACHERS' PHYSIOLOGY—Twelve weeks. Three term-hours; two classroom, two laboratory.

This course comprises lectures, demonstrations and laboratory work on the fundamental principles of the anatomy, physiology, and hygiene of the human body.

Given the second and fourth terms. Laboratory fee, $1.50.

COURSE III. ADVANCED PHYSIOLOGY—Twelve weeks. Five term-hours; three classroom, four laboratory.

This course includes a study of the chemical composition of the human body, the tissues, the osseous system, circulatory system and respiratory system.

It is given the second and fourth terms. Laboratory fee, $2.00.

COURSE IV. ADVANCED PHYSIOLOGY—Twelve weeks. Five term-hours; three classroom, four laboratory.

This course includes the study of digestion, nutrition, excretion, body heat, the nervous system and special senses.

It is given the third term. The laboratory fee is $2.00.
COURSE V. HYGIENE AND SANITATION—Twelve weeks. Three term-hours.

This course includes lectures, recitations, and demonstrations on the subject of personal hygiene, public hygiene and sanitation, and domestic hygiene and sanitation.

It is offered the second and fourth terms.

ZOONOLOGY

COURSE I. INTRODUCTORY ZOOLOGY—Twelve weeks. Five term-hours; three recitation, four laboratory.

Lectures, discussions and laboratory work to illustrate the general principles of Animal Biology.

First and Fourth quarters.

A laboratory fee of $2.00 is charged.

COURSE II. INVERTEBRATE ZOOLOGY—Twelve weeks. Five term-hours; three recitation, four laboratory.

Lectures, discussions and laboratory work on the first ten phyla of the Animal Kingdom; a study of many of the typical representatives of each group. Pre-requisite: Course I or its equivalent.

First, Second and Fourth quarters.

A laboratory fee of $2.00 is charged.

COURSE III. VERTEBRATE ZOOLOGY—Twelve weeks. Five term-hours; three recitation, four laboratory.

Lectures, discussions, and laboratory work on the Phylum Chordata. This course includes the careful dissection and study of a fish, frog, turtle, bird and mammal. Pre-requisite: Course I.

Second and Third quarters.

A laboratory fee of $2.50 is charged.

COURSE IV. COMPARATIVE ANATOMY—Twelve weeks. Five term-hours; three recitation, four laboratory.

A general study of the comparative anatomy of the vertebrates. The laboratory work is Animal Histology, in which the student is taught how to mount, to study and to identify animal tissues.
Pre-requisites: Courses I, II and III.
Third quarter.
A laboratory fee of $3.00 is charged.

COURSE V. ENTOMOLOGY—Twelve weeks. Five term-hours; two recitation, six laboratory.

A classification of the Insect Orders. Particular attention is given to the economic relation of insects, how they affect cultivated plants and domestic animals, and also their relation as disease carriers in respect to man. The student is required to make a collection and a classification of one hundred species of insects. These insects must represent all of the larger orders. Pre-requisite: Course I.

Fourth quarter.
A laboratory fee of $2.00 is charged.

COURSE VI. GENETICS—Twelve weeks. Three term-hours; three recitation.

Lectures on maturation, fertilization and segmentation are given as introductory work. Variation is discussed in detail, and the laws of hereditary are explained and illustrated by numerous problems. The students are required to give reports taken from current magazines and standard works on heredity and evolution. Pre-requisite: Course I.

Second and Fourth quarters.

COURSE VII. EVOLUTION—Twelve weeks. Three term-hours; three recitation.

The history of the Evolution Idea. Its factors and proofs are studied in detail. An attempt is made to show that the evolution viewpoint has entered into all fields of human thought. Pre-requisites: Courses I, II, and III.

Third quarter.
ENGLISH

The instruction given in English has three objects: First, proficiency in English composition; second, a general acquaintance with English literature; third, a more minute knowledge of certain authors whose works illustrate the development, not only of the English language, but also of English literature.

The courses offered embrace advanced English composition, designed to stimulate original productions; Oratory, embracing exercises in writing and delivering orations, speeches and addresses on given subjects; English literature, embracing an outline of its history and development, with a careful study of certain representative authors, both American and English; Old and Middle English and Metrics receive sufficient attention to meet the wants of all ordinary students. Their study is a material aid to all seeking a thorough knowledge of our English language and literature. Etymology and Philology receive sufficient attention to enable a student to understand carefully and thoroughly the formation, growth and development of the English language from its beginning down to the present time.

COURSE I. FRESHMAN ENGLISH—Thirty-six weeks. Nine-term hours.

(a) The purpose of this course is the training of college freshmen to write correctly and clearly about the things he already knows; to use books as a means of enlarging his knowledge, and to increase his powers of expression.

(b) A Continuation of I. (a)

(c) A Continuation of I. (b)

COURSE II. COMPOSITION—Twelve weeks. Two term-hours.

Exposition. Themes and Discussions based on contemporary events.

COURSE III. SHORT STORY WRITING—Twelve weeks. Three term-hours.

Description and Narration. Especial attention is given to the writing of short stories.

COURSE IV. INTRODUCTION TO THE STUDY OF LITERATURE—Twelve weeks. Three term-hours.

A study of the types of literature, with special attention to appreciation and criticism.
COURSE V. HISTORY OF ENGLISH LITERATURE—Twenty-four weeks. Two term-hours.

(a) A general survey of the development of the language and literature. Lectures, readings and reports. (During the summer this course will be given four hours a week for the one term.)
(b) A continuation of V (a).

COURSE VI. HISTORY OF AMERICAN LITERATURE—Twelve weeks. Three term-hours.

A philosophical and historical study of the development and significance of American literature.

COURSE VII. EMERSON—Twelve weeks. Two term-hours.

Detailed study of Emerson's prose and poetry.

COURSE VIII. SHAKESPEARE—Twelve weeks. Three term-hours.

Critical and textual study of four of Shakespeare's plays. Different plays are read in alternate years so that students may repeat the course for additional credit.

COURSE IX. MYTHOLOGY—Twelve weeks. Two term-hours.

Myths of Greece and Rome together with those of other nations are studied as to interpretation, development, and relation to literature and art.

COURSE X. CHAUCER—Twelve weeks. Three term-hours.

A detailed textual study of six or more of the Canterbury Tales.

COURSE XI. MILTON—Twelve weeks. Three term-hours.

A general consideration of Milton as a whole with a special study of "Paradise Lost".

COURSE XII. CARLYLE AND RUSKIN—Twelve weeks. Three term-hours.

A study of representative essays and lectures.

COURSE XIII. TENNYSON AND WORDSWORTH—Twelve weeks. Three term-hours.

A study of representative poems.

COURSE XIV. ANGLO-SAXON—Twenty-four weeks. Two term-hours.

(a) A study of Old English. Translations. Syntax.
(b) Continuation of XIV (a).
COURSE XV. MIDDLE ENGLISH—Twelve weeks. Two term-hours. Selections read from the Ancren Riwle, the Ormulum and the Canterbury Tales.

COURSE XVI. HISTORY OF THE ELIZABETHAN DRAMA—Twelve weeks. Two term-hours. Lectures; readings, reports and a thesis by the student.

COURSE XVII. BROWNING—Twelve weeks. Two term-hours. Lectures, readings and reports.

COURSE XVIII. THE NOVEL—Twelve weeks. Three term-hours. A study of the structure of the novel based on the analysis of several works, and the reading and discussion of others.

COURSE XIX. THE MODERN DRAMA—Twelve weeks. Three term-hours. A study of representative modern dramas. Extensive reading. Reports.

COURSE XX. METHODS OF TEACHING HIGH SCHOOL ENGLISH—Twelve weeks. Three term-hours. Lectures, readings, observations and practice.

COURSE XXI. ARGUMENTATION—Twelve weeks. Three term-hours. Argument building. Lectures and criticism by the instructor. Written briefs and arguments. Conferences. Oral presentation of complete arguments. This course is the same as Public Speaking XVII.

COURSE XXII. FORMAL DEBATE—Twelve weeks. Three term-hours. Weekly practice in formal debate. Team work in preparation of briefs. A study of Refutation. Fallacies. This course is the same as Public Speaking XIX.

COURSE XXIII. ADVANCED FORENSICS—Twelve weeks. Three term-hours. A more detailed study of team work in debate. Legal debate. Political debate. More intensive study of debate problems than Course XXIII offers. This course is the same as Public Speaking XXI.
COURSE XXIV. JUVENILE LITERATURE—Twelve weeks. Three term-hours.

A course in the study and presentation of literature suitable to the grades. Offered to meet the requirements for teachers in the State of Indiana.

COURSE XXV. SEMINAR—Twelve weeks. Two term-hours.

Research, reports and thesis.

NORMAL OR SUB-COLLEGE COURSE IN LATIN

These courses are intended for High School graduates who have had no Latin or not enough for regular college classes. They command full college credit but may not apply on major or minor credit in Latin.

COURSE I—Twenty-four weeks. Ten term-hours.

Elementary Latin.

COURSE II—Twenty-four weeks. Ten term-hours.

Cæsar.

COURSE III—Twenty-four weeks. Ten term-hours.

Cæsar, Orations.

COURSE IV—Twenty-four weeks. Ten term-hours.

Virgil, Aeneid. Given Third and Fourth quarters only.

COURSE V—Twelve weeks. Three term-hours.

Latin Prose Composition. This course offers a drill in the writing of comparatively easy Latin and is especially recommended to students who need a review of forms and syntax before beginning to teach Latin or to enter college courses in the following year. With Course VI it makes a good five hour course for young prospective teachers of Latin. Given Fourth quarter.

COURSE VI—Twelve weeks. Two term-hours.

Teaching of High School Latin. This course treats of the methods of handling High School Latin, the text books, the aims of the study, supplementary and illustrative material, etc. Fourth quarter.

COLLEGE COURSES IN LATIN

COURSE VII—Twelve weeks. Four term-hours.

Livy, Book I and Selections. This, with Courses IX and X, forms a Freshman reading course. Given First quarter.

COURSE VIII—Twelve weeks. One term-hour.

A more advanced course than Course V. Required of students taking Courses VII, IX and X.
COURSE IX—Twelve weeks. Four term-hours.
Cicero, De Senectute; Terence, Phormis. Given Second quarter.

COURSE X—Twelve weeks. Three term-hours.
Catullus and Martial, Selections. Given Third quarter.

COURSE XI—Twelve weeks. Three term-hours.
Ovid, Metamorphoses. Given Fourth quarter.

COURSE XII—Twelve weeks. Three term-hours.
Virgil, Bucolics and Georgics. This with Courses X and XI forms a poetry reading course for Sophomores. Given First quarter.

Horace, Odes. Given Second quarter.

COURSE XIV—Twelve weeks. Three term-hours.
Horace, Satires and Epistles. Given Third quarter.

COURSE XV—Twelve weeks. Two term-hours.
Advanced Latin Grammar. Open to Sophomores, Juniors and Seniors. Given Second quarter.

COURSE XVI—Twelve weeks. Two term-hours.

COURSE XVII—Twelve weeks. Three term-hours.

COURSE XVIII—Twelve weeks. Three term-hours.
Tacitus, Germania and Agricola. Given Second quarter.

COURSE XIX—Twelve weeks. Three term-hours.
Juvenal, Satires. Given Third quarter.

FRENCH

COURSE I—Twelve weeks. Five term-hours.

COURSE II—Twelve weeks. Five term-hours.
ELEMENTARY FRENCH (CONTINUED)—Continued study of grammar and of pronunciation. The regular and twenty-five ir-
regular verbs. Fraser and Squair, French Grammar, Part I completed; Labiche and Martin, le Voyage de M. Perrichon; Ballard, Short Stories for Oral French, completed.

COURSE III—Twelve weeks. Five term-hours.

INTERMEDIATE FRENCH—A review of grammar and practical phonetics. The study of the irregular verbs is completed. Class reading from these texts: Labiche and Martin, la Poudre aux yeux; Sand, la Mare au diable.

COURSE IV—Twelve weeks. Five term-hours.

INTERMEDIATE FRENCH (CONTINUED)—Grammar review continued. Short themes based on reading. Practice in conversation. Class and collateral reading from these texts: Bazin, les Oberle; Daudet, Tartarin de Tarascon.

COURSE V—Twelve weeks. Five term-hours.

ADVANCED FRENCH—A rapid reading course. Weekly exercises, oral and written summaries based on reading. Study of idioms. Practice in conversation. Class and collateral reading from these texts: France, le Crime de Sylvestre Bonnard; Dumas, la Question d'argent; Hugo, les Miserables; Loti, Pecheur d'Islande.

COURSE VI—Twelve weeks. Five term-hours.

A careful study of representative modern texts. Practice in speaking. Weekly written reports based on reading. Class and collateral reading from these texts: Balzac, Eugenie Grandet; Musset, Trois Comedies; Michelet, Histoire de France; Rostand, Cyrano de Bergerac.

COURSE VII—Twelve weeks. Three term-hours.

MOLIERE—A study of Moliere's comedies. Reading and discussion of these texts: le Malade Imaginaire, l'Avare, les Femmes savantes, Tartuffe, le Misanthrope. Given First quarter.

COURSE VIII—Twelve weeks. Three term-hours.

VICTOR HUGO—A study of his poetry and dramatic works. Discussion of the literary movement of the nineteenth century. Given Second quarter.

COURSE IX—Twelve weeks. Three term-hours.

THE HISTORY OF THE NOVEL IN FRANCE—The reading and discussion of representative novels of different periods. Given Third quarter.
COURSE X—Twelve weeks. Three term-hours.
THE CLASSIC DRAMA—The character and form of the drama Reading and discussion of representative tragedies of Corneille and Racine. Given Fourth quarter.

COURSE XI—Twelve weeks. Three term-hours.
SURVEY OF FRENCH LITERATURE—The Drama. Given Third quarter.

COURSE XII—Twelve weeks. Three term-hours.

SPANISH

Students entering upon the study of Spanish are urged to arrange for two years' consecutive work in the subject. Classes are organized at the beginning of each school year, and at the beginning of any quarter if there is sufficient demand.

FIRST YEAR

Special attention is given to pronunciation and the fundamental principles of the Grammar. Drills and translations, dictation, elementary syntax and orthography, memorizing of short poems and proverbs.

SECOND YEAR

Spanish is used entirely as a medium of instruction, so that the ear and tongue, as well as the eye, will be trained. Drill stories, read or told in class. A few stories and poems are read as an introduction to Spanish literature.

The following courses are offered:

COURSE I—Twelve weeks. Five term-hours.
THE BERLITZ METHOD—Grammar notes given by the professor. The instruction will include a brief study of all parts of speech, laying emphasis on the verbs "haber, tener, ser and estar" and their uses.

COURSE II—Twelve weeks. Five term-hours.
THE BERLITZ METHOD continued and Spanish Grammar "De Vitiz". Compositions.

COURSE III—Twelve weeks. Five term-hours.
THE BERLITZ METHOD continued. The Spanish Grammar "De Vitiz" continued. Compositions and Dictation.
COURSE IV—Twelve weeks. Five term-hours.
   THE BERLITZ METHOD continued. The Spanish Grammar "De Vitiz" continued. Compositions and Dictation.

COURSE V—Twelve weeks. Five term-hours.

COURSE VI—Twelve weeks. Five term-hours.
   EL CAPITAN VENENO—ALARCON, is read. Spanish Grammar De Vitiz completed. Practice in reading and writing commercial and familiar letters in Spanish. No text is required. Letters are arranged by the professor.

COURSE VII—Twelve weeks. Five term-hours.
   COMPOSITION continued. Reading of some novels of Juan Valera Blasco Ibanez, Palacio Valdes, Isaacs.
   Texts to be selected.

COURSE VIII—Twelve weeks. Three term-hours.
   EL SOMBRERO DE TRES PICOS—ALARCON, is read. Letter writing continued. Compositions are written fortnightly.

COURSE IX—Twelve weeks. Three term-hours.
   CONVERSATION. Reading of some novels and poems of different authors.
   Texts to be selected.
   These courses must be taken in their order. Each course is required for the course immediately following it.
   A Department Library in connection with the class room, also Spanish newspapers and magazines are at the disposition of the student.

COURSE X—Twelve weeks. Three term-hours.
   SPANISH LITERATURE TO THE NINETEENTH CENTURY—Outline of the history of Spanish literature. The "Siglo de Oro," etc., with library readings.

ITALIAN

Classes in Italian are organized at the beginning of the year only.
   The courses are especially adapted to music students. The rudiments of the grammar are given, and special stress is placed upon pronunciation and sight reading.
COURSE I—Twelve weeks. Five hours.
Rota’s Italian Grammar (Hossfeld's Method)—Reading, dictation, easy exercises. Auxiliary and regular verbs.

COURSE II—Twelve weeks. Five hours.

COURSE III—Twelve weeks. Five hours.

COURSE IV—Twelve weeks. Five hours.

GERMAN

Only college German will be offered. The students have access to the German division of the University Library.

COURSE I—Twelve weeks. Five term-hours.
Elementary work with conversation and composition. Grammar drill from Roessler’s Essentials of German Grammar.

COURSE II—Twelve weeks. Five term-hours.
Continuation of Course I. Short stories and an intensive drill in conversation and composition.

COURSE III—Twelve weeks. Five term-hours.
Prose stories such as Immensee, and lyric poems, some of which are to be memorized. Composition and syntax.

COURSE IV—Twelve weeks. Five term-hours.
Wilhelm Tell and the life and works of Schiller. Composition.

COURSE V—Twelve weeks. Five term-hours.
Scientific German suitable for students in the Department of Chemistry. This work will enable them to read intelligently German magazines and articles on scientific subjects.

GREEK

COURSE I—Twelve weeks. Five term-hours.
COURSE II—Twelve weeks. Five term-hours.
-Open to students who have had Course I. Given Second quarter.

COURSE III—Twelve weeks. Five term-hours.
Homer, Iliad. Given Third quarter.

HISTORY

COURSE I—Twelve weeks. Three term-hours.
ENGLISH HISTORY—A study of the origin and growth of the English people; the development of their institutional life; their economic life; the Tudor despotism and the Reformation; to 1603. Carefully prepared essays. First and Second quarters.

COURSE II—Twelve weeks. Three term-hours.
ENGLISH HISTORY—Emphasis is placed on the Parliamentary struggles under the first two Stuarts; the Cromwellian era; the Revolution of 1688; the Industrial Revolution of the 18th century, and the social, economic and political reforms of the 19th century. England’s part in the war of 1914. Carefully prepared essays. Third and Fourth quarters.

COURSE III—Twelve weeks. Three term-hours.
ENGLISH CONSTITUTIONAL HISTORY—An intensive study of England’s Constitutional life as exemplified by her great Charters, Parliamentary growth and party government. Reports on special topics. Third quarter.

COURSE IV—Twelve weeks. Three term-hours.
THE RENAISSANCE IN ITALY—Italy in the Middle Ages. Political and social organization. Beginnings of the Renaissance; causes, economic, historical, social and political. Results in literature, science, industry, politics, etc. Its spread to other countries. Spring term.

COURSE V—Twenty-four weeks. Four term-hours.

COURSE VI—Twelve weeks. Three term-hours.
THE FRENCH REVOLUTION—A study of the causes, including the study of the despotism of Louis XIV and his immediate suc-
cessors. Special emphasis on the economic, political and social evolution of the Napoleonic era. An interpretation of the historic effects on French and other European institutions. Carefully prepared papers. Third quarter.

COURSE VII—Twelve weeks. Three term-hours.

MODERN EUROPEAN HISTORY, ADVANCED COURSE—A general survey of the development of Institutionalism of Modern European Nations since 1815, and the issues of the later revolutions. Development of democratic tendencies; the great inter-European wars and unification of nations. Great enterprises and jealousies during the latter part of the nineteenth and first part of the twentieth centuries, and a survey of the causes of the war of 1914. Essays. Second quarter.

COURSE VIII—Twelve weeks. Three term-hours.

AMERICAN POLITICS—A survey of the origin and character of the political institutions of the United States. The political parties and their tenets. The issues in relation to the application of party tenets in domestic and foreign affairs. Politics in Slavery, the Rebellion, Reconstruction, the Monroe Doctrine; the new conception of the relation between the States and the Nation, and of our relation to World Politics. Extensive topical study. Fourth quarter.

COURSE IX—Twelve weeks. Three term-hours.

AMERICAN CONSTITUTIONAL HISTORY—This course is given by the Department of Political Science. For description see announcement of that department. Winter term.

COURSE X—Twelve weeks. Three term-hours.

SLAVERY AND RECONSTRUCTION IN THE UNITED STATES—A study of the origin and character and growth of Slavery. Its social and political influences. The issues between the Southern and Northern States as to the relation between the Nation and the States. Secession and the Civil War. The issues and results of the Period of Reconstruction, to 1876. Carefully prepared papers. First quarter.

COURSE XI—Twelve weeks. Three term-hours.

INDUSTRIAL HISTORY OF THE UNITED STATES—A survey of the industrial life of the Colonial period; the pioneers of the earlier United States. The rise of manufacturing and immigration; the
conquering of the West; the industrial corporations; internal and foreign commerce and modern machinery in our industrial life. Collateral reports. Alternates with English History. Omitted 1919-1920.

COURSE XII—Twenty-four weeks. Four term-hours.

Diplomatic History of the United States—A brief survey of the elements and the subjects of diplomacy, and a study of some of the leading subjects of our international dealing as a nation. Reports and lectures. Alternates with the Period of the Reformation. Omitted 1919-1920.

COURSE XIII—Twelve weeks. Three term-hours.

The French Nation—A study of the origin and rise of the French Monarchy; its struggle with England and other European nations during the Middle Ages; its religious wars and the rise and overthrow of the despotic regime. The struggle for democracy and institutional expansion during the nineteenth century. Collateral reports. Third quarter.

COURSE XIV—Twelve weeks. Three term-hours.

The South American Colonies—A general survey of the origin and development of the leading countries of the southern hemisphere in relation to their political, economic and social life, and to their relation to the United States. Lectures and reports. Third or Fourth quarters.

COURSE XV—Twelve weeks. Three term-hours.

The Great War—A brief survey of the causes, course and outcome of the Great War with emphasis upon the responsibility for the war, the geographical, political and economic changes resulting from it. Lectures and collateral reports. Fourth quarter.

POLITICAL SCIENCE

An attempt is made not only to define government as to origins, organization, and workings, but also to present the problem from the point of view of the citizen as to his rights, duties, privileges, powers, and immunities. Political science emphasizes, not the past but the present, not the ideal but the real as related to the ideal. The University seeks to meet a practical need in a practical way.
COURSE I. OUR FEDERAL GOVERNMENT—Twelve weeks. Three term-hours.

A study of the federal government as to the source, scope and limits of its authority, the division of power, and the actual workings of the different divisions. Relation to state governments and tendencies toward centralization.

Fall term.

COURSE II. STATE GOVERNMENTS—Twelve weeks. Three term-hours.

Nature and limits on authority. Relation to federal government. Relation to local governmental units. Recent tendencies toward reorganization.

Winter term.

COURSE III. LOCAL GOVERNMENTS—Twelve weeks. Three term-hours.

A consideration of the various forms of local government—township, county, town and city—together with a consideration of the actual work done by these various divisions. Consideration is given to the relation between the state and the local governments. Some of the proposals of reform are considered. Students from a dozen or more of the states make this an especially interesting class, by reason of comparisons, which under such conditions can readily be made.

Spring term.

COURSE IV. GOVERNMENT OF ENGLAND—Twelve weeks. Two term-hours.

Attention will be given to the historical development of the English constitution and government, with emphasis upon recent reforms. Most emphasis, however, is placed on the consideration of the constitution and government as they actually function today.

Fall term.

May be taken with Course I.

COURSE V. GOVERNMENTS OF CONTINENTAL EUROPE—Twelve weeks. Two term-hours.

A consideration of the governments of France, Italy and Spain, and of recent developments in the countries whose governments were most profoundly affected by the great war.

Winter and Spring terms.
COURSE VI. LOCAL GOVERNMENTS OF EUROPE—Twelve weeks. 
Three term-hours.

A study will be made of the local governments of typical European countries, and a comparison with our own local governments will be made. Previous training in political science is requisite.

Summer term, 1920.

COURSE VII. AMERICAN CONSTITUTIONAL HISTORY—Twelve weeks. Three term hours.


COURSE VIII. CONSTITUTIONAL LAW.

For a description of course see announcement of courses in Law.

COURSE IX. MUNICIPAL CORPORATIONS.

See announcements of Law School.

COURSE X. INTERNATIONAL LAW.

Omitted 1919-1920.

COURSE XI. AMERICAN POLITICAL HISTORY.

Given by History Department. See announcements of that department for description of course.

COURSE XII. ENGLISH CONSTITUTIONAL HISTORY—Twelve weeks. 
Three term-hours.

See History Department.

COURSE XIII. THE GOVERNMENT OF AMERICAN CITIES—Twelve weeks. Three term-hours.

Relation to state. Special charters, classified charters, home rule charters, etc. Methods of administration. Innovations in organization.

Omitted 1919-1920.
COURSE XIV. GOVERNMENTAL ADMINISTRATION—Twelve weeks. Three term-hours.

A general survey. A comparison of the different systems in use in Europe and America. Designed to present the chief problems of administration and the essential elements of these problems.

Omitted 1919-1920.

SOCIOLOGY AND ETHICS

The University offers three courses in Sociology and two in Ethics.

COURSE I. SOCIOLOGY—Twelve weeks. Three term-hours.

This course is the study of the evolution of social institutions. The family is chosen as typical in this study.

COURSE II. SOCIOLOGY—Twelve weeks. Three term-hours.

This course is the study of modern social problems as to their origin, development and needs.

COURSE III. SOCIOLOGY—Twelve weeks. Three term-hours.

This course is a study of current social problems as to status and needs.

COURSE IV. ETHICS—Twelve weeks. Three term-hours.

This course is the study of (1) the Evolution of Morality; (2) the Theory of Morality.

COURSE V. ETHICS—Twelve weeks. Three term-hours.

This course is the study of (1) Personal Morality; (2) Social Morality.

POLITICAL ECONOMY

COURSE I—Twelve weeks. Three term-hours.

POLITICAL ECONOMY—This subject is regarded as the science of Wealth, or of Values, with three departments, Production, Distribution and Consumption. The Factors of Production, the Market, or Exchange, Rent, Wages, Interest, are considered; Socialism, Co-operation and Tariffs are discussed. Third quarter.

COURSE II—Twelve weeks. Three term-hours.

Continuation of Course I.
SCHOOL OF EDUCATION

The work in the School of Education leads to the degree of Bachelor of Arts in Education, A. B. To be a regularly enrolled student in this department, the candidate must be a graduate from a commissioned high school or must have equivalent attainment.

Bachelor of Arts Degree—To secure the Bachelor of Arts in Education Degree the student must successfully pursue one hundred and eighty (180) hours, forty-five (45) of which must be from the School of Education, and one hundred and thirty-five (135) of which must be Academic in order to receive the Bachelor of Arts in Education. The time required is one hundred and forty-four (144) weeks.

The required work for this degree is distributed as follows: Professional work, forty-five (45) hours; English, fifteen (15) hours; Foreign Languages, twenty-two (22) hours; Science, twenty-five (25) hours; related minor, twenty (20) hours; electives, fifty-three (53) hours.

The related minors are made up of sociology, ethics, and science.

The electives are to be chosen from other regular college departments.

The “hours” are term hours and one hour is one recitation per week for twelve weeks.

GENERAL COURSES IN EDUCATION

COURSES I, II, III, IV and V—Sixty weeks. Sixteen term-hours.

Courses I, II and III are three-hour courses; IV is a two-hour course and V is a five-hour course.

PSYCHOLOGY—Five courses in Psychology are offered. The subject is studied from the introspective, comparative, objective and experimental points of view. Course V is educational psychology.

Courses I and II are given every quarter; the others as demanded.

COURSE VI—Twelve weeks. Three term-hours.

PRINCIPLES OF EDUCATION—One course is offered. This is a study of known principles upon which education as a process is based. Given every quarter.
COURSE VII—Twelve weeks. Two term-hours.  
CLASS ROOM MANAGEMENT—One course is offered. Given every quarter.


SPECIAL METHODS—Five courses are offered. Current approved methods in school subjects are carefully studied.

Course VIII is the study of method in reading. Three hours. First and fourth quarters.

Course IX is the study of method in number. Two hours. First and Fourth quarters.

Course X is the study of method in grammar and language. Three hours. Second and Fourth quarters.

Course XI is the study of method in history. Three hours. Third quarter.

Course XII is the study of method in geography. Two hours. Third quarter.

Course XIII is the method of nature study. Two hours. Third quarter.

COURSES XIV and XV—Twenty-four weeks. Six term-hours.

HISTORY OF EDUCATION—Two courses are offered. The race's ideals and practice of education as manifested by its best representatives during the evolution of civilization are studied. Each course is a three-hour course. Second and fourth quarter.

COURSES XVI and XVII—Twenty-four weeks. Five term-hours.

PHILOSOPHY OF EDUCATION—Two courses are offered. The known facts of the different aspects of education are studied and interpreted and unified. Course XVI is a three-hour course. Course XVII is a two-hour course. Third and fourth quarters.

COURSES XVII and XIX—Twenty-four weeks. Five term-hours.

CHILD STUDY—Two courses are offered. The development of child life is studied. Genetic psychology is emphasized. Course XVIII is a three-hour course. Given first and third quarters. Course XIX is a two-hour course. Given second and fourth quarters.

COURSES XX and XXI—Twenty-four weeks. Ten term-hours.

OBSERVATION AND PRACTICE—Two courses are offered. This work consists of the observation of teaching and criticisms of it;
also, practice teaching. Both courses are five-hour courses. Second and third quarters.

COURSE XXII—Twenty weeks. Three term-hours.
SCHOOL ADMINISTRATION—One course is offered. This is a study of the organization, management and supervision of school systems. Fourth quarter.

COURSE XXIII—Twelve weeks. Three term-hours.
AMERICAN HIGH SCHOOL PROBLEMS—One course is offered. This consists of the study of the purpose, evolution, condition and needs of the American high school.

COURSE XXIV—Twelve weeks. Three term-hours.
RURAL EDUCATION—One course is offered. The status, needs and administration of rural schools are carefully studied.

COURSE XXV—Twelve weeks. Three term-hours.
EDUCATIONAL MEASUREMENTS—One course is offered. This is the study of the measure of results in teaching to the end of accurate valuation of school work. Fourth quarter.

COURSE XXVI—Twelve weeks. Two term-hours.
PUBLIC SCHOOL SYSTEMS—One course is offered. This is the study of school organization as manifested in contemporary school systems. Fourth quarter.

COURSE XXVII—Twelve weeks. Three term-hours.

COURSE XXVIII—Twelve weeks. Two term-hours.
METHOD IN HIGH SCHOOL LATIN.
LATIN PROSE COMPOSITION—This course offers a drill in the writing of comparatively easy Latin and is especially recommended to students who need a review of forms and syntax before undertaking to teach Latin or to enter college courses in the following year.
M., W. F., Fourth quarter.

COURSE XXIX—Twelve weeks. Three term-hours.
METHOD IN HIGH SCHOOL LATIN.
TEACHING OF HIGH SCHOOL LATIN—This course treats of the methods of handling H. S. Latin, the text books, aims of the study, supplementary and illustrative material, etc.
Fourth quarter.
The two above courses are offered by Professor Carver and are Courses III and XVII in the Department of Latin. Full credit is given for them in the Department of Education as professional courses.

**COURSE XXX—Twelve weeks. Three term-hours.**

**METHOD IN HIGH SCHOOL ENGLISH**—This is a study of the principles of presenting literature and teaching composition. Lectures, readings, reports and practice constitute the work. This work is the same as English XXI. Credit is given for this course in the Department of Education as professional work. Given Fourth quarter.

**COURSE XXXI—Twelve weeks. Three term-hours.**

**METHOD IN HIGH SCHOOL PHYSICS**—This course includes a discussion of the varied purposes of high school physics with the emphasis on methods of presentation of the subject-matter. The construction and use of demonstration apparatus will be studied.

The course is the same as Course XIV in the Department of Physics. Full credit is given for it in the Department of Education as a professional course. Given the Fourth quarter.

**COURSE XXXII—Twelve weeks. Five term-hours.**

**METHOD IN CHEMISTRY**—A thorough knowledge of the fundamental principles of General and Analytical Chemistry is necessary in order to elect this course.

This course treats of the best methods of presenting the foundation principles of General Chemistry, especially to High School classes. The best methods of laboratory work will also have attention, especially the location of the Laboratory in relation to other rooms, the management of laboratory furniture, the planning and buying of laboratory equipment, etc. The Chemistry Library is also considered from the standpoint of the best books to buy, how and where to get them and how to keep in touch with the current books and literature on the subject.

Given Fourth quarter.

**COURSE XXXIII—Twelve weeks. Five term-hours. Five hours recitation.**

**METHOD IN GENERAL SCIENCE**—Pre-requisite: A thorough knowledge of the fundamental principles of Botany, Zoology, and Chemistry.

This course treats of the best methods of presentation of the principles of General Science as it is now being offered in the
lower grades of the regular High School or of the Junior High School. Courses in General Science are usually planned to give the student a broad general view of Science in order that he may be guided in making a selection of the many elective courses now offered in both High School and College. This is the most difficult of all Science courses because of the great range of subject matter to be presented at the most critical period of the student's life, i.e., the time when closely supervised grade work has been left behind and they are facing the responsibility of their own work and action. At this period, before they have attained mastery of themselves, the laboratory appears to be a playhouse, unless the work is so presented that they become intensely interested in the experiments to be performed. It is to this end that the presentation methods and the subject matter of this course has been planned. The use of a scientific library will be considered from the standpoint of what books to buy, and how to keep in touch with the current literature. Laboratory location plans and equipment will also be considered.

Given Fourth quarter.

THE CERTIFICATION OF TEACHERS

In compliance with an Act of the General Assembly of Indiana, 1919 (H. 373), providing for a system of normal school instruction throughout the state, the following courses are offered:

TWO YEARS' COURSE

I. EDUCATIONAL:

Educational Psychology—Five hours.
Principles of Education—Three hours.
Class Room Management—Two hours.
Special Methods—Ten hours.
Observation and Practice—Ten hours.
Public School Systems—Two hours.
Rural Education—Three hours.

II. ACADEMIC, PREPARED:

English Grammar—Five hours.
Composition and Rhetoric—Five hours.
Juvenile Literature—Five hours.
History—Ten hours.
Sociology—Nine hours.
Biology—Ten hours.
Arithmetic—Five hours.
Algebra—Five hours.
Latin or French—Fifteen hours.
Physiology—Three hours.

III. Academic, Unprepared:
Music—Five hours.
Penmanship—Five hours.
Physical Culture—Five hours.
Vocational—Ten hours.

Four Years’ Course

I. Educational:
Psychology—Eight hours.
Principles of Education—Three hours.
Class Room Management—Two hours.
Psychology of School Subjects—Three hours.
Educational Measurements—Three hours.
Special Methods—Six hours.
School Administration—Three hours.
History of Education—Five hours.
Observation and Practice—Ten hours.
High School Problems—Three hours.

II. Academic:
Science—Thirty hours.
Mathematics—Fifteen hours.
English—Fifteen hours.
History—Fifteen hours.
Foreign Language—Twenty-five hours.
Sociology—Nine hours.
Ethics—Six hours.
Electives—Thirty hours.

In the Two Year’s Course a minimum of eighteen (18) hours in Education must be elected from the Educational courses offered, the sequence in which the courses are listed being required. In the Four Years’ Course a minimum of thirty-six (36) hours in Education must be elected from the course offered in Education, the sequence of subjects being maintained in which they are listed.

Classes “A”, “B”, and “C” Work for Teachers
Valparaiso University is accredited by the State Board of Education for preparing teachers for Classes “A”, “B”, and “C”.

Classes “A”, “B”, and “C” Work for Teachers
Valparaiso University is accredited by the State Board of Education for preparing teachers for Classes “A”, “B”, and “C”.
The teachers of Education most carefully and conscientiously help students in this work.

REVIEW COURSES FOR TEACHERS

**GRAMMAR**—*Twelve weeks. Five term-hours.*

The Inductive Method is carefully taught in the making of Definitions, and in analyzing the elements of the Sentence. The relation between the Idea and the Word, the Thought and the Sentence is fully explained; and the most difficult sentences in prose and poetry are carefully analyzed. The many grammatical uses of the Substantive in the Sentence, the comparison of the Pronoun and the Noun and of the Finite Verb with the Infinite Verb and the properties of the Parts of Speech are studied in connection with Sentence Analysis.

Given Summer quarter only, for college credit.

**DESCRIPTIVE GEOGRAPHY**—*Twelve weeks. Five hours.*

A brief review is given of the general subject of Geography. The reasons for the distribution of man and for his various activities are studied in detail. Special attention is given to the political divisions from the standpoint of location, physical features, climate, flora and fauna. Commercial or Economic Geography is emphasized and many questions of vital interest are carefully discussed.

Given Summer quarter only, for college credit.

**UNITED STATES HISTORY**—*Twelve weeks. Five term-hours.*

A general survey of the larger problems of the Nation's development. Emphasis is placed on the larger institutional phases of the Colonial period; the Revolution and Formation of the Constitution and Government; Institutional Expansion; the Slave Issues; the War with Mexico and the Rebellion; Reconstruction and Expansion of Domestic and International activities.

Given Summer quarter only, for college credit.

**PHYSIOLOGY**—*Twelve weeks. Five term-hours. Two hours laboratory.*

This course is designed especially for Pharmacists, Teachers, those taking Domestic Science and others wishing to review the subject. The chemical composition of the body, the tissues, the circulatory, respiratory, digestive and nervous systems are studied with all the detail that the time will allow.

Given Second and Fourth quarters only, for college credit. A laboratory fee of 50 cents is charged.
ARITHMETIC—Twelve weeks. Five term-hours.

Particular attention is given to the fundamental principles involved in the study of Fractions, Denominate Numbers, Percentage and all of its applications. Analysis and short practical forms for the solution of the more difficult problems are given. Revenues, Insurance, Partnership, Allegation, Involution and Evolution and Mensuration are given particular emphasis.

Given Summer quarter only, for college credit.

DEPARTMENT OF MANUAL TRAINING

The work in Manual Arts is organized with three purposes in view, viz: 1st, The training of Manual Arts teachers. 2d, To supplement the course in Engineering. 3d, To educate tradesmen and take the place of the apprentice system. Students from any of the departments of the University may take any of the Manual Arts courses for which they are prepared.

DEGREE—A degree of Bachelor of Manual Training is given to those in the teachers' course who have successfully pursued the required courses to the equivalent of 180 term hours. The required work is:

- Shop work, 80 hours.
- Mechanical Drawing, 10 hours.
- Free-Hand Drawing, 5 hours.
- Solid Geometry, 5 hours.
- Physics, 6 hours.
- Freshman English, 9 hours.
- Descriptive Geometry, 10 hours.
- Professional work, 20 hours.
- Electives, 35 hours.

DESCRIPTION OF COURSES

The regular work of the Department of Manual Arts comprises:

I. ELEMENTARY MANUAL TRAINING—Five term-hours.

This course involves work in paper, raffia, clay, pottery and bookbinding. It is applicable especially to the first four grades of public school work, and is recommended to those who take Manual Training, either with the thought of teaching or supervising it.
II. **Bench Work**—*Twenty-five term-hours. Courses a, b, c, d, e.*

This work begins with simple drills and extends through the more intricate hand processes. Various pieces of furniture are made. These courses are a prerequisite to all other courses in woodworking. Students must arrange to take this work in two hour periods.

III. **Cabinet Making and Machine Work**—*Fifteen term-hours. Courses a, b, c.*

These courses consist of the construction of bookcases, desks, china closets, etc. The school does a general contracting business in cabinet work and the student who is competent may elect either to work on his individual project or in the contract work of the school. This work is under the direction of a cabinet maker and contractor of many years' experience, and is conducted so as to give the student an idea of actual working conditions in a shop. The student is made familiar with the construction, use and care of the various machines.

IV. **Turning**—*Fifteen term-hours. Courses a, b, c.*

This course consists of standard exercises, after which many useful and interesting articles are turned. Instruction in steel lathe work is also given.

V. **Carpentry**—*Thirty term-hours. Courses a, b, c.*

These courses are being given much more attention than formerly. The student is taught carpentry as a trade and on the completion of the course is fitted to hold any position depending on a knowledge of the subject. The work is under the direction of an expert carpenter and contractor who has had many years of experience in teaching. During favorable weather the work is outside, building houses in the part of the city adjacent to the school, and when the weather is unfavorable for this the student is taken to the shop, where doors and windows are made and general millwork is done. Students taking the teacher's course, if thought advisable, may substitute other shop courses for the outside work in carpentry. Students desiring to take more than the three required terms will be paid according to their ability.
VI. DESIGNING—Three term-hours.

This course deals with the proper proportions, standard dimensions, etc., of furniture and all shop problems. For the benefit of those preparing to teach, a number of problems are designed suitable for all grades of school work. Various library assignments are made.

VII. FORGE—Five term-hours.

Drawing, upsetting, welding, toolmaking, etc.

VIII. PATTERN MAKING AND FOUNDRY—Ten term-hours. Courses a, b.

IX. FREE-HAND DRAWING—Five term-hours.

X. MECHANICAL DRAWING—Fourteen term-hours. Courses a, b, c, d.

These courses consist of lettering, drawing from models, copying from plates, projections, isometric drawings, details and assembled drawings of machines, shading, tinting, stippling, gearing, tracing and blue printing.

XI. DESCRIPTIVE GEOMETRY—Ten term-hours.

Course (a) Theoretical Problems.
Course (b) Shadows, perspective and practical structural problems involving Descriptive Geometry.

A fee of $4.00 per quarter hour for materials used is charged for Courses III (c). For other shop courses $3.50 per quarter hour is charged. Students electing to work on the contract work of the school are not required to pay the shop fee in the courses where such election is possible.

During the Fourth quarter special work will be given in Forge, Machine Work, and Concrete.

All courses are given every quarter except I, VI, and VII. These are only given during the summer quarter unless there is a special demand for them.

DEPARTMENT OF PRIMARY EDUCATION

This department is organized for those who desire to make a specialty of Primary Teaching in the public schools.
To enter the department, a student must be a graduate of a commissioned high school, or must have completed an equivalent course. It is particularly desirable that the student be able to write a good hand, to draw well, and it is always best to have an elementary knowledge of music.

Ninety term-hours of work in addition to six term-hours of gymnasium are required for the completion of this course of study. Thirty hours must be done in courses offered in the School of Education; twenty-one hours must be done in strictly Primary work and forty-nine hours may be elected after consultation with the Dean of the School of Education.

The Primary Lectures deal with the nature of Primary Reading, Language, Spelling, Numbers, History, Geography, Music and Calisthenics. A study of the different plans and systems for Primary Teaching is given in detail.

A diploma will be granted to those who have satisfactorily completed the work in this department.

**SUGGESTED COURSE OF STUDY**

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<thead>
<tr>
<th>FIRST YEAR</th>
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<tr>
<td><strong>FIRST QUARTER</strong></td>
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<td>Psychology I</td>
<td>Kindergarten Theory</td>
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<td>Methodology I</td>
<td>Botany or Zoology</td>
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<td>English</td>
<td>Primary Methods I</td>
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<td>Primary Lectures</td>
<td>Pedagogy</td>
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<td>English</td>
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<td>Child Study I</td>
<td>Domestic Science</td>
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<td>History of Education</td>
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<td>Psychology III</td>
<td>Observation and Practice</td>
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<td>Primary Lectures</td>
<td>Primary Methods II</td>
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<td>Elective</td>
<td>Folk Games</td>
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SCHOOL OF HOME ECONOMICS

The course in Domestic Economy is planned with reference to the needs of two classes of students: (1) For those who are preparing to teach cooking and sewing, and which leads to a Certificate; (2) For those who wish to enrich their academic course by the study of household arts and sciences, and which leads to the Bachelor's degree.

To obtain the certificate or the degree from this department the candidate must have a high school education or equivalent attainment, and then successfully pursue the work here outlined.

Two years (72 weeks) of College work are required for the Certificate of Associate in Home Economics, and four years (144 weeks) of College work are required for the degree of Bachelor of Science in Home Economics.

The additional requirements for the degree are an extra year in domestic science or art, in either of which the student may specialize if she so desires, and also a year of college electives in the liberal arts.

FIRST YEAR

<table>
<thead>
<tr>
<th>COURSE</th>
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<td>Inorganic Chemistry</td>
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<td>Sewing</td>
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SECOND QUARTER

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SECOND YEAR

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<td>Organic Chemistry I</td>
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Cooking ........................................................... 3 5
Sewing ............................................................ 4 5
Teaching Domestic Science ............................... 9 5

SECOND QUARTER
Invalid Cookery and Dietetics .............................. 4 5
General Sanitation ................................................. 5 3
Designing ............................................................. 5 5
Household Chemistry ........................................... 7 5

THIRD QUARTER
Institutional Cookery ............................................. 6 5
Household Sanitation ........................................... 3 3
Laundry and Crocheting ........................................ 6 3
Textiles ............................................................. 7 3
Elective .............................................................. 3

THIRD YEAR

FIRST QUARTER
Dressmaking ...................................................... 8 5
Institutional Cookery ............................................ 7 5
Special Problems ................................................ 8 5
Elective ............................................................. 3

SECOND QUARTER
Textiles ............................................................. 9 3
Family Cookery .................................................. 8 5
Political Economy ............................................... 10 3
Psychology ......................................................... 11 3

THIRD QUARTER
Applied Design .................................................. 10 5
Demonstrations and Contest Work ....................... 5 5
Bacteriology ....................................................... 4 5
Home Nursing ..................................................... 5 2

FOURTH YEAR

FIRST QUARTER
Analytical Chemistry ......................................... 5 5
Special Problems ................................................ 8 5
Electives ........................................................... 6

SECOND QUARTER
The Household .................................................. 7 5
Electives ........................................................... 11
COURSE I—Twelve weeks. Five term-hours. Eight hours laboratory and one hour recitation or lecture.

This course includes a study of the nature and uses of foods, and changes effected by heat, cold, and fermentation; uses and application of preservatives; canning; jelly-making; carbohydrates; sauces, etc; starchy vegetables; freshening of green vegetables; cooking of strong flavored vegetables; cooking of mild vegetables. Every quarter.

A laboratory fee of $5.00 is charged.

COURSE II—Twelve weeks. Five term-hours. Eight hours laboratory and one hour recitation or lecture.

This course includes the study of sugars, chemical tests, solubility, etc; sugar cookery; preparation of batters and doughs. Baking powder and soda—composition and use in food combinations. Methods of lightening doughs and batters. Yeast and Bread. Every quarter.

A laboratory fee of $5.00 is charged.

COURSE III—Twelve weeks. Five term-hours. Eight hours laboratory and one hour recitation or lecture.

This course includes the study of "fats". Temperatures, composition, value, sources, combination in cookery, uses of vegetable oils, and cooking fats.

Protein—Eggs, milk, meat, cheese.
Serving of meals.

A laboratory fee of $5.00 is charged.

COURSE IV—Twelve weeks. Five term-hours. Eight hours laboratory recitation or lecture.

This course includes the study of applied dietetics. Invalid and institutional dietetics.

A study of the composition and nutritive value of foods.
Diet and dietaries. Second quarter.

A laboratory fee of $5.00 is charged.
COURSE V—Twelve weeks. Five term-hours. Eight hours laboratory and one hour recitation or lecture.

This course is a continuation of Course IV, and includes Demonstration, Contest work, Marketing.

Given as demanded.

A laboratory fee of $5.00 is charged.

COURSE VI—Twelve weeks. Five term-hours. Eight hours laboratory and one hour lecture.

This course of institutional Cookery comprises the study of cooking in large amounts. Planning meals; menus; serving; dietaries; balanced rations; cost of meals.

First and third quarters.

No laboratory fee is charged.

COURSE VII—Twelve weeks. Five term-hours. Eight hours laboratory and one hour lecture.

This course is a continuation of Course VI.

Third quarter.

No laboratory fee is charged.

COURSE VIII—Twelve weeks. Five term-hours. Eight hours laboratory and one hour lecture.

This course comprises the preparation and serving of meals for a family of six. Buying. Study of the different forms of service.

Given as demanded.

A laboratory fee of $5.00 is charged.

SEWING

COURSE I—Twelve weeks. Five term-hours; eight hours laboratory, and one hour lecture.

This course includes the study of the various stitches, seams, etc., and their application in making of undergarments, and a kimonadrafting. Every quarter.

COURSE II.—Twelve weeks. Five term-hours, eight hours laboratory, and one hour lecture.

This course includes the drafting and making of a shirt-waist; matching of plaids, and something in silk. Every quarter.
COURSE III—**Six weeks. Three term-hours; eight hours laboratory, and one hour lecture.**

This course includes making of bows, flowers, etc. Frame making and hat making, appropriate to the season. First and third quarters.

COURSE IV—**Twelve weeks. Five term-hours; eight hours laboratory, and one hour lecture.**

This course includes the altering of commercial patterns; making of house dresses, lingerie dresses, waists. Third and fourth quarters.

COURSE V—**Twelve weeks. Five term-hours; eight hours laboratory, and one hour lecture.**

This course includes simple designs in flat colors, such as borders, rugs, etc.; color harmony; lettering; proportions of the human figure; designs for waists, dresses, hats, etc., decorating and stenciling. Every quarter.

COURSE VI—**Six weeks. Three term-hours; eight hours laboratory, and one hour lecture.**

This course includes practical work in laundry, removal of stains. Lectures. Crocheting of simple patterns. Embroidery for underwear, dresses, tablecovers, sofa pillows, etc. Tatting, drawn-work, knitting. Third and fourth quarters. Continuation of Course III.

COURSE VII—**Six weeks. Three term-hours; five hours lecture and recitation.**

This course includes the study of the historical development of the textile industry, climatic conditions, and the manufacture of fabrics; tests. Third and fourth quarters. Excursions to various manufacturing plants, etc.

COURSE VIII—**Twelve weeks. Five term-hours; ten hours laboratory.**

This course includes the study of drafting systems. Designing, drafting and making of silk or wool dresses. Given as demanded.

COURSE IX—**Six weeks. Three term-hours; ten hours laboratory.**

Detection of adulterants in fabrics, experiments in dyeing, weaving, basketry. Third and fourth quarters. Continuation of Course VII.
GENERAL SCIENCE COURSES

COURSE I—Twelve weeks. Four term-hours. Three hours lecture and two hours laboratory.

PHYSIOLOGY—This course includes a study of Physiology and Personal Hygiene, physical training, diet, conservation of nervous energy.

Second and Fourth quarters.

A laboratory fee of 50 cents is charged.

COURSE II—Twelve weeks. Three term-hours. Three hours lecture and recitation.

HYGIENE AND SANITATION—This course includes a study of the occurrence, distribution, classification, and chemistry of Bacteria and their relation to man. Library work.

First and Third quarters.

COURSE III—Twelve weeks. Three hours lecture and recitation.

HOUSEHOLD SANITATION—This course includes a study of the dwelling; its construction and furnishing in relation to health problems. Relation of germ life to water, ice, milk supplies, and to other foods, both uncooked and preserved by various methods.

Reference work. Excursions to dairies, etc.

Given as demanded.

COURSE IV—Twelve weeks. Four term-hours. Two hours lecture and six hours laboratory.

BACTERIOLOGY—This course includes studies in morphology, physiology, and reproduction of bacteria, yeasts and molds. Making of culture media, of permanent mounts; exercises in elementary analysis of air, milk and water from different sources.

Fourth quarter.

A laboratory fee of $3.50 is charged.

COURSE V—Twelve weeks. Two term-hours. Two hours lecture and recitation.

CARE OF SICK—This course includes a study of the care of the sick, bathing, bed making, and first aid. Given as demanded.

COURSE VI—Twelve weeks. Five term-hours. Five hours lecture and recitation.

THE HOUSE—A study of the furnishing and management of the house from the artistic, practical, and economic standpoints. Methods of keeping household accounts. The cost of living and the apportionment of the income. Given as demanded.
COURSE VII—Twelve weeks. Five term-hours. Five hours lecture and recitation.

Evolution of the House and of the Family—A special study of woman’s changing economic position and its effect upon the family.

COURSE VIII—Twelve weeks. Five term-hours. Ten hours laboratory or research work.

Special Problems in Domestic Economy—The work in this course may be along any line connected with the subject according to the preference of the student, and will be in charge of the instructor under whom the work chosen would naturally fall. Given as demanded.

COURSE IX—Twelve weeks. Five term-hours. Five hours lecture.

Teaching Domestic Science—Discussion of different types of equipment, of contents of courses in domestic science for various school grades, and of lesson plans. Supplementary reading required. Third and Fourth quarters.

COURSE X—Twelve weeks. Three term-hours. Three hours lecture and recitation.

Political Economy—This subject is regarded as the science of Wealth, or of Values, with the three departments, Production, Distribution and Consumption. The Factors of Production, the Market, or Exchange, Rent, Wages, Interest, are considered; Socialism, Co-operation and Tariffs are discussed. Third quarter.

COURSE XI—Twelve weeks. Three term-hours. Three hours lecture and recitation.

Psychology I.

Every quarter.

CHEMISTRY

COURSES I and II—Twenty-four weeks. Ten term-hours. Six hours recitation and eight hours laboratory.

Inorganic Chemistry III and IV.

COURSE III—Twelve weeks. Five term-hours. Ten hours laboratory.

Analytical Chemistry I—Lectures and Quiz.
COURSE IV—Twelve weeks. Five term-hours. Three hours recitation and four hours laboratory.

ELEMENTARY HOUSEHOLD CHEMISTRY—A study of the composition of foods. The detection of adulterants and preservatives. The relation of cooking to the chemical composition of foods. A study of soaps and other materials in common household use.

Third quarter.

A laboratory fee of $3.50 is charged.

COURSE V—Twelve weeks. Five term-hours. Ten hours laboratory.

ANALYTICAL CHEMISTRY II—Lectures and Quiz.

ENGLISH

COURSE I—Twelve weeks. Three term-hours. Three hours.

FRESHMAN ENGLISH—This course includes a review of Punctuation, Diction, Construction of Sentences, and Figures of Speech. Essays, reports and a study of literary types form a part of the work.

COURSE II—Twelve weeks. Three term-hours. Three hours.

HISTORY OF AMERICAN LITERATURE—ENGLISH VI.

COURSE III—Twelve weeks. Three term-hours. Three hours.

SHAKESPEARE—ENGLISH VIII.
SCHOOL OF MUSIC

The School of Music was organized forty-two years ago. It was the purpose of the founders to establish a school in which students might have all the advantages of the best musical conservatories at an expense within the reach of all. That the hopes of the founders have been realized is shown by the unparalleled growth of this department of the University.

Equipment—The Conservatory occupies a beautiful building devoted exclusively to music. There are fifty-one practice rooms in the building, each containing a piano. This permits each student to have a private practice room certain hours each day. In addition to these, there are ten large studios and special rooms for Harmony. The large and well equipped Recital Hall is well adapted for recital and ensemble work.

Faculty—Many of the teachers are professional soloists of high rank, and all are specialists in their particular work. All have been pupils of the noted masters.

Courses of Study—Five courses of study are given. The first four of these are offered in both instrumental and vocal music. They are: Preparatory, Teacher's Certificate, Graduate, and Post-Graduate (Gold Medal). The fifth course is Public School Music. The time required for the completion of any of these courses of study depends upon the previous preparation, the ability, the talent and the character of the work done by the individual pupil.

Degrees Conferred—A certificate is given upon the completion of the Teacher's Course; a diploma, upon the completion of the Graduate Course; and a Gold Medal, upon the completion of the Post-Graduate Course. A diploma is given in Public School Music.

Progressive Series of Piano Lessons—In addition to its regular courses in Pianoforte, the Conservatory offers two courses in the Progressive Series of Piano Lessons. They are, the High School Course, which covers the elementary and intermediate grades; and a College, or University Course, which includes the advanced and final grades. These courses are elective and may be taken in place of the regular courses if desired. Those who are not working for a degree in music may have high school or col-
lege credit in the Academic Department of the University for work done in the Progressive Series.

Public School Music—This course is especially attractive to those who desire to teach music in the public schools. It consists of private lessons in Voice and Piano, Harmony, Sight Reading, History of Music, Notation, Public School Music, and Chorus work. During the Fourth quarter a class is given for studying the best methods of presenting the subject to children.

Opera—A feature of the Conservatory is the Department of Opera, which is open to the advanced students of voice. One complete opera is produced each year. The entire cast and chorus are taken from the Conservatory students and given under the direction of the Music and Public Speaking Faculty.

Chorus Work—Excellent chorus work is offered in which all students in the School of Music are requested to take part. In addition there is special training in choir work for those who are specialized in voice only. The Choir furnishes the music for Chapel exercises.

University Band and Orchestra—A University Band and a University Orchestra are maintained during the entire year. They are composed of students from all departments of the University. Their rehearsals occur once a week, thus giving to their members a splendid drill in instrumental music. They give frequent recitals and one public concert each quarter.

Practice and Instruments—All instrumental and voice lessons and all practice rooms are private. The piano used is the Kimball piano, the same as found in the best Conservatories of Music. Instruction is given on almost every musical instrument: Piano, Violin, Cello, Guitar, Mandolin, Cornet, Clarinet, and Trombone.

Demand for Graduates—The result of the superior advantages offered and the thorough work done is that the graduates of the School of Music are sought as Soloists, Directors of Music, Organists, and as teachers in normal schools, colleges and universities.

Special Advantages—All students taking the regular course in this department have access, without additional expense, to all classes in any of the literary departments of the University. This of itself is an advantage not found in any other Conservatory of Music.
Lectures and Recitals—Lectures and recitals by the Faculty or prominent musicians from abroad are given every quarter. A musicale is given every other week by members of the various classes, at which every student of the department is expected to be present.

General Information—Sheet music and music books are for sale to the pupils at wholesale prices. No pupil is permitted to omit lessons or practice hours without sufficient excuse. No deduction is made for temporary or permanent absence from lessons or practice except in cases of illness or when one is unavoidably called away.

For sight reading, classes in ensemble for piano may be organized at any time.

REQUIREMENTS FOR THE COMPLETION OF THE VARIOUS COURSES

DEPARTMENT OF PIANO

PREPARATORY COURSE

Piano, 2 lessons per week, 1 to 3 years.
Harmony, 2 lessons per week, 48 weeks.
Chorus Practice.
One elective study each quarter of twelve weeks.
Practice, 3 to 4 hours daily.

TEACHER'S CERTIFICATE COURSE

One Year in, Addition to Preparatory Course

Piano, 2 lessons per week.
Harmony, 2 lessons per week, 48 weeks.
Counterpoint, 2 lessons per week, 48 weeks.
Composition, 1 lesson per week, 24 weeks.
Chorus Practice.
One elective study each quarter of twelve weeks.
History of Music, 2 lessons per week, 24 weeks.
Appreciation of Music, 2 lessons per week, 24 weeks.
Practice, 3 to 4 hours daily.
Appearance on program and attendance at all recitals.
GRADUATE COURSE

One Year in Addition to Teacher's Certificate Course

Piano, 2 lessons per week.
Harmony, 2 lessons per week, 48 weeks.
Counterpoint, 2 lessons per week, 24 weeks.
Composition, 1 lesson per week, 24 weeks.
History of Music, 2 lessons per week, 24 weeks.
Appreciation of Music, 2 lessons per week, 24 weeks.
Chorus Practice.
One elective study each quarter of twelve weeks.
Practice, 3 to 4 hours daily.
Appearance on program and attendance at all recitals.

GOLD MEDAL COURSE

One Year in Addition to Graduate Course

Piano, 2 lessons per week.
Chorus Practice.
Composition.
One elective study each quarter of twelve weeks.
Practice 3 to 4 hours daily.
Appearance on program and attendance at all recitals.

DEPARTMENT OF PUBLIC SCHOOL MUSIC

FIRST YEAR

Voice, 2 lessons per week, 36 weeks.
Piano, 1 lesson per week, 36 weeks.
Harmony, 2 lessons per week, 24 weeks.
History of Music, 2 lessons per week, 24 weeks.
Appreciation of Music, 2 lessons per week, 24 weeks.
Public School Music Class, 2 lessons per week, 36 weeks.
Chapel Choir and Chorus, 36 weeks.
Child Study, or an elective study each quarter.
Practice with instrument, 2 to 3 hours daily.

SECOND YEAR

Voice, 2 lessons per week, 36 weeks.
Piano, 1 lesson per week, 36 weeks.
Harmony, 2 lessons per week, 36 weeks.
Public School Music Class, 2 lessons per week, 36 weeks.
Appreciation of Music, 2 lessons per week, 24 weeks.
Chapel Choir and Chorus, 36 weeks.
Psychology, or an elective study each quarter.
Special course in Public School Music during fourth quarter.
Practice with instrument, 2 to 3 hours daily.

DEPARTMENT OF VOICE

PREPARATORY COURSE

Voice, 2 lessons per week, 1 to 2 years.
Harmony, 2 lessons per week, 48 weeks.
Choir and Chorus Practice, 48 weeks.
Practice with Instrument, 1 to 3 hours daily.
One elective study each quarter of twelve weeks.
Appearance on program and attendance at all recitals.

TEACHER'S CERTIFICATE COURSE

One Year in Addition to Preparatory Course

Voice, 2 lessons per week.
Spanish, Italian or French. First year's work.
Harmony, 2 lessons per week, 48 weeks.
Counterpoint, 2 lessons per week, 24 weeks.
Composition, 1 lesson per week, 24 weeks.
Choir and Chorus, 48 weeks.
History of Music, 2 lessons per week, 24 weeks.
Appreciation of Music, 2 lessons per week, 24 weeks.
Practice with instrument, 1 to 3 hours daily.
Appearance on program and attendance at all recitals.

GRADUATE COURSE

One Year in Addition to Teacher's Certificate Course

Voice, 2 lessons per week.
Spanish, Italian or French. Second year's work.
Harmony, 2 lessons per week, 48 weeks.
Counterpoint, 2 lessons per week, 24 weeks.
Composition, 1 lesson per week, 48 weeks.
History of Music, 2 lessons per week, 24 weeks.
Appreciation of Music, 2 lessons per week, 24 weeks.
Practice with instrument, 1 to 3 hours daily.
Choir and Chorus Practice, 48 weeks.
Appearance on program and attendance at all recitals.
GOLD MEDAL COURSE

One Year in Addition to Graduate Course

Voice, 2 lessons per week.

Choir and Chorus, the entire year.
Italian.
Composition.
One elective study each quarter of twelve weeks.
Practice with instrument, 1 to 3 hours daily.
Appearance on program and attendance at all recitals.

DEPARTMENT OF VIOLIN, VIOLA AND CELLO

PREPARATORY COURSE

Violin, Viola, or Cello, 2 lessons per week, 1 to 3 years.
Harmony, 2 lessons per week, 48 weeks.
Orchestra and Chorus practice, 48 weeks.
One elective study each quarter of twelve weeks.
Practice, 3 to 4 hours daily.
Appearance on program and attendance at all recitals.

TEACHER’S CERTIFICATE COURSE

One Year in Addition to Preparatory Course

Violin, Viola, or Cello, 2 lessons per week.
Harmony, 2 lessons per week, 48 weeks.
Counterpoint, 2 lessons per week, 24 weeks.
Composition, 1 lesson per week, 24 weeks.
Appreciation of Music, 2 lessons per week, 48 weeks.
Orchestra and Chorus, 48 weeks.
One elective study each quarter of twelve weeks.
History of Music, 2 lessons per week, 24 weeks.
Practice, 3 to 4 hours daily.
Appearance on program and attendance at all recitals.

GRADUATE COURSE

One Year in Addition to Teacher’s Certificate Course

Violin, Viola, or Cello, 2 lessons per week.
Harmony, 2 lessons per week, 48 weeks.
Counterpoint, 2 lessons per week, 24 weeks.
Composition, 1 lesson per week, 24 weeks.
Appreciation of Music, 2 lessons per week, 24 weeks.
History of Music, 2 lessons per week, 24 weeks.
Orchestra and Chorus practice the entire year.
One elective study each quarter of twelve weeks.
Practise, 3 to 4 hours daily.
Appearance on program and attendance at all recitals.

GOLD MEDAL COURSE

One Year in Addition to Graduate Course

Violin, Viola, or Cello, 2 lessons per week.
Orchestra work the entire year.
Composition.
One elective study each quarter of twelve weeks.
Practise, 3 to 4 hours daily.
Appearance on program and attendance at all recitals.

DEPARTMENT OF GUITAR, MANDOLIN AND BANJO

The requirements in this department in the various courses of study are the same as in the Department of Piano, excepting the use of the different instruments.

It must be remembered that no course of study can be completed without the required number of lessons for that particular year; that is, a course in Voice, Piano, Violin, Guitar, etc., cannot be completed without taking two lessons per week during the entire year.

Expenses—A quarter's work in music consists of 22 piano or 22 vocal lessons, or 11 piano and 11 vocal lessons, 22 harmony lessons, and 3 practice hours every day. The expense of this is $36.00. If the student desires to take 22 piano and 22 vocal lessons then the expense is $58.00 per quarter. Without additional expense the student is permitted to all the work in the literary department of the University, and is expected to take at least one subject in this department every quarter. Those who prefer to take additional work in music may do so at the rate of $1 per lesson and $2.50 for each practice hour per quarter.

For the completion of the full course in Music, the following additional subjects are required: History of Music, $3 per quarter; Composition, $6 per quarter; Counterpoint, $6 per quarter; Appreciation of Music, $3 per quarter; Progressive Series, $6 per quarter.
For those taking the Public School Music Course of study, the expense, if paid in advance, for the Junior year is $155.00. For the Senior year the expense, if paid in advance, is $160.00.

The expense for those taking the full course in Music, if paid in advance for the year of forty-eight weeks, is $165. This includes 88 piano or vocal lessons, 88 harmony lessons, 3 practice hours daily, history of music, harmonic analysis, composition, counterpoint, musical appreciation. The expense for those taking the full course in both piano and voice, if paid in advance for the year, is $254.00.

For further information address,

SCHOOL OF MUSIC, VALPARAISO UNIVERSITY,

Valparaiso, Indiana.
SCHOOL OF FINE ARTS

The University offers a full course of instruction in Academic Drawing and Painting, which is divided into four sections, as follows:

I. ELEMENTARY—Chiefly early charcoal practice from antique fragments in outline and general light and shade, together with practice from blocks and familiar objects.

II. INTERMEDIATE—Same as Elementary only more advanced, more important outlines. Still life in monochrome and color.

III. ANTIQUE—Heads and figures from cast in full light and shade. Still life in color.

IV. LIFE—Portrait and figure. Composition and landscape. Any medium. From time to time the best drawings are retained and are put upon the wall at the end of the month and recorded as Honorable Mention.

DIPLOMA COURSE

A diploma is conferred upon students who have held the rank of "Life Students" for two years and who are graduates of a commissioned high school or who have taken an equivalent course. Special students may take any work they may select and for which they are fitted.

All regular Art students are required to take one study each quarter from the academic department of the University. Graduates must complete work in the following subjects:

ANTIQUE—Shaded head. Full figure in outline.

LIFE—Shaded head in charcoal.
    Shaded figure in charcoal.
    Head in oil, water color, or pastel.
    Figure in oil, water color, or pastel.

STILL LIFE—Two studies, oil, water color, or pastel.

NATURE—Landscape, oil, water color, or pastel.

COMPOSITION—Oil, water color, or pastel.

PERSPECTIVE—Drawing and examination.
SKETCH CLASS—The students themselves maintain a sketch class, meeting every day, in which they pose their own models and use any medium desired.

DESIGN AND COMPOSITION—Instruction is given in the fundamental principles of construction, decorative and pictorial art. Students work out original designs in space and line composition, showing proper distribution of light and shade and harmonious schemes of color.

HISTORY OF ART—Ninety-six weeks. Three term-hours.

LITERATURE—Fifty-eight weeks. Twelve term-hours.

BOTANY—Twenty-four weeks. Ten term-hours.

PHYSIOLOGY AND ARTISTIC ANATOMY—Forty-eight weeks. Twelve term-hours.

ELECTIVE STUDIES—Seventy-two weeks. Eighteen term-hours.

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THIRD QUARTER (12 weeks)
1. Charcoal from Life
2. Color Work
3. Sketch from Life
4. Design and Composition
5. History of Art VII
6. Physiology III

FOURTH QUARTER (12 weeks)
1. Charcoal from Life
2. Color Work from Nature
3. Sketch from Life
4. Design and Composition
5. History of Art VIII
6. Artistic Anatomy II

THIRD YEAR

FIRST QUARTER (12 weeks)
1. Charcoal or Color from Life
2. Color Work from Nature
3. Sketch in Color from Life
4. Original Design and Composition
5. Botany I
6. Elective Study

SECOND QUARTER (12 weeks)
1. Water Color or Oil from Life
2. Water Color or Oil from Still Life
3. Sketch from Life in Color
4. Original Design and Composition
5. Botany II
6. Elective Study

THIRD QUARTER (12 weeks)
1. Water Color or Oil from Life
2. Water Color or Oil from Still Life
3. Sketch from Life in Color
4. Original Design and Composition
5. Elective Study

FOURTH QUARTER (12 weeks)
1. Water Color or Oil from Life
2. Water Color or Oil from Still Life
3. Sketch from Life in Color
4. Original Design and Composition
5. Elective Study

PUBLIC SCHOOL DRAWING COURSE

The object of the Public School Drawing Course is to qualify graduates to act as teachers of drawing or supervisors of art education in the public schools.

This course extends through a period of ninety-six weeks. The candidate, in order to obtain a diploma, must be a graduate from a commissioned High School or must have equivalent attainment prior to entering this course of study.
### First Year

#### First Quarter (12 weeks)
1. Psychology
2. Charcoal
3. Freehand Drawing I
4. Mechanical Drawing I
5. Theory and Practice in first and second grade work
6. Sketch from Life
7. Design and Composition
8. History of Art I

#### Second Quarter (12 weeks)
1. Psychology
2. Charcoal
3. Freehand Drawing II
4. Mechanical Drawing II
5. Theory and Practice in third grade work
6. Sketch from Life
7. Design and Composition
8. History of Art II

#### Third Quarter (12 weeks)
1. Pedagogy
2. Charcoal
3. Water Color
4. Theory and Practice in fourth grade work
5. Sketch from Life
6. Design and Composition
7. History of Art III

#### Fourth Quarter (12 weeks)
1. History of Education
2. Charcoal and Sketches from Out Door
3. Water Color from Still Life and Nature
4. Elementary Manual Training I
5. Theory and Practice in fifth grade work
6. Sketch from Life
7. Design and Composition
8. History of Art IV

### Second Year

#### First Quarter (12 weeks)
1. Mythology
2. Charcoal from Life
3. Water Color
4. Theory and Practice in sixth grade work
5. Design and Composition
6. History of Art V
7. Sketch from Life

#### Second Quarter (12 weeks)
1. Literature
2. Charcoal from Life
3. Water Color
4. Theory and Practice in seventh grade work
5. Sketch from Life
6. History of Art VI
7. Design and Composition
THIRD QUARTER (12 weeks)
1. Botany
2. Charcoal from Life
3. Color Work from Still Life
4. Theory and Practice in eighth grade work
5. Design and Composition
6. Sketch from Life
7. History of Art VII

FOURTH QUARTER (12 weeks)
1. Bookbinding and Clay Modeling
2. Color from Life and Nature
3. Theory and Practice in High School Drawing
4. Design and Composition
5. Sketch from Life
6. History of Art VIII

CHINA PAINTING

The object of the China Painting Course is to qualify graduates to act as teachers of China Painting in colleges, universities, or private schools.

This instruction in Ceramic Art covers processes and materials, freehand drawing, color, and the practical application of design to ceramics.

Students entering this class will receive a thorough course in application of suitable designs to the well known ceramic shapes.

The study of design includes the study of organic ornament, geometric and conventionalized, and the artistic use of colors.

FIRST YEAR

FIRST QUARTER (12 weeks)
Charcoal
Freehand Drawing I
China Painting
Sketching from Life
History of Art I

SECOND QUARTER (12 weeks)
Charcoal
Mechanical Drawing
China Painting
Sketching from Life
History of Art II

THIRD QUARTER (12 weeks)
Charcoal
Water Color
China Painting
Sketching from Life
History of Art III

FOURTH QUARTER (12 weeks)
Water Color and Conventionalization
Abstract Design
China Painting
Sketching from Life
History of Art IV
Botany
SECOND YEAR

FIRST QUARTER (12 weeks)
Water Color and Conventional-ization
Abstract Design
China Painting
Sketching from Life
History of Design and Research
History of Art V

SECOND QUARTER (12 weeks)
Water Color and Conventional-ization
Abstract Design
China Painting
Sketching from Life
History of Design and Research
History of Art VI

THIRD QUARTER (12 weeks)
Water Color and Conventional-ization
Abstract Design
China Painting
Sketching from Life
History of Design and Research
History of Art VII

FOURTH QUARTER (12 weeks)
Water Color and Conventional-ization
Abstract Design
China Painting
Sketching from Life
History of Design and Research
History of Art VIII

Expense—The tuition in the regular department of Fine Art is $24.00 per quarter of twelve weeks, or $90.00 per year of forty-eight weeks if paid in advance. For the course in China Painting the tuition is $30.00 per quarter of twelve weeks, or $110.00 per year of forty-eight weeks if paid in advance.

Students not registered in the department of Fine Art may avail themselves of the advantages of China Painting at the rate of $12.00 per quarter for two hours each day.
SCHOOL OF PUBLIC SPEAKING

The aim of this School is four-fold:

(1) To develop in the student a good serviceable, speaking voice and acquaint him with the elements of vocal expression and the fundamental principles of common reading.

(2) To give a practical experience in all the forms of public speaking.

(3) To acquaint the student with the principles and practice of interpretative and dramatic reading, impersonation, acting, and the various forms of professional work in the lyceum and on the stage.

(4) To give scientific and critical training to teachers.

The pre-requisite for work in this School leading to a graduate or post-graduate degree is the usual University qualifications. Students unable to fulfill these requirements, however, may enter certain classes and be conditioned until by future work the conditions are removed. Special students or those not working for a degree may enter any class for which they show themselves qualified.

The Degrees

The School of Public Speaking offers work leading to three degrees, The Bachelor of Oratory, The Master of Oratory, and the Bachelor of Arts. The first two degrees require half the work to be done in the Public Speaking. The Bachelor of Arts is given in the School of Arts and Sciences and forty-two term hours may be elected as a major provided the minor (twenty-one term hours) be elected in the English department. Both the Bachelor of Arts and the Master of Oratory degrees require four years' work of three terms each. The Bachelor of Oratory degree requires nine terms.

For the accommodation of students who enter solely for the purpose of preparing for lyceum work or the stage and are not working for a degree, a special One Year Lyceum Course in Dramatic Art is provided. No entrance requirements are made except that the student be somewhat endowed with ability to
speak and act, but only those who prove themselves especially gifted will be encouraged to continue after the first term's work. The subjects required are only those which tend directly toward the art of entertaining on the platform or the stage.

A Lyceum Arts Course of two years work is offered for students who want to do professional work in both the School of Public Speaking and the School of Music. A combined course is arranged so that the student may major in Public Speaking and minor in Voice, Piano or Violin, or he may major in any one of the music departments and minor in Public Speaking, or he may do practically all of his work in music except two or three required courses in Public Speaking. The candidate for this two year Lyceum Arts certificate must meet an entrance committee who will advise on the particular major and minor that should be elected.

Both of these lyceum courses require four instead of three terms' work to the year.

At the completion of this course, the student who has done "B" work or better will be given the opportunity to have a hearing before reliable managers of Lyceum, Chautauqua or Theatrical companies that are looking for available talent.

All students working for the degree in the department are required to take in the Freshman year two quarters of private lessons (23) lessons at an extra cost of $1.00 per lesson. The second term of these lessons are to be taken in the Voice department of the School of Music. These lessons may be taken any quarter which is most convenient for the student, but when once begun they should be taken regularly throughout the quarter. To take part in one quarter and part in another is unsatisfactory to both student and teacher.

All students expecting to graduate in the department are required to take General Elocution and Physical Culture. No advance credit in these courses will be given.

Under no circumstances shall a certificate be granted for less than one year's resident work at the University. Students who have met the requirements in all except Public Speaking may, by following a specified plan, take the work for the graduate degree in forty-eight weeks and for the post-graduate degree in seventy-two weeks.
A term hour credit represents one hour of recitation per week for a term of twelve weeks and is equivalent to two-thirds of a semester hour.

In the case of Private Lesson courses, one term hour credit is granted for a half-hour lesson per week for twelve weeks.

A total of one hundred eighty term hours is required for graduation in the Bachelor of Arts or Master of Oratory courses which are four year courses of three terms each. One hundred thirty-five term hours are required in the three year, or nine term course for the Bachelor of Oratory degree. One hundred twenty term hours of four terms each. Sixty term hours are required for the One Year Lyceum Course in Dramatic Art which covers four terms' work.

A major refers to the department in which the student elects the greater proportion of his work.

A minor is the department in which half as much work as the major is elected.

A second minor is equal in term hours to the first minor and may or may not be in the same department.

The Arabic numeral following the course number indicates the credit in term hours granted in the subject.

No student is expected to elect more than fifteen term hours during each term. The consent of the Registrar is necessary before extra hours may be added.

Many of the courses here described are offered every quarter, but only that particular quarter in which the subject naturally belongs according to logical sequence is mentioned. All courses for which there is sufficient demand will be offered in the summer quarter.

The bracketed letters, (a) (b) (c), following the Roman numeral course number, indicates the number of terms in one continuous course. No letter following indicates that the course is complete in the one term.
REQUIREMENTS FOR THE BACHELOR OF ORATORY DEGREE

FRESHMAN YEAR

PUBLIC SPEAKING (33 term hours)
Courses I, II, III, V, VII, VIII, IX, XI, XIII, XV and XX(a)

ENGLISH (9 term hours)
Course I.

PSYCHOLOGY OR LOGIC (3 term hours)
Course I (a).
Total term hours for the year, 45

JUNIOR YEAR

PUBLIC SPEAKING (21 term hours)
Courses IV, X, XII, XVII, XIX, XX (b) and XXI.

HISTORY (6 term hours)
Choice of courses

ENGLISH (12 term hours)
Choice of courses above Course I.

ELECTIVE (6 term hours)
Courses in School of Arts and Sciences and School of Education.
Total term hours for the year, 45

SENIOR YEAR

PUBLIC SPEAKING (21 term hours)
Courses XIV, XVI, XVIII, XX (c), XXIII and XXVII.

ENGLISH (9 term hours)
Choice of courses

PHILOSOPHY (6 term hours)
Sociology, Economics or Ethics

ELECTIVE (9 term hours)
Courses in School of Arts and Sciences and School of Education
Total term hours for the year, 45
TOTAL for the B. O. Degree 135
REQUIREMENTS FOR THE MASTER OF ORATORY DEGREE

Post-Graduate Year

PUBLIC SPEAKING (23 term hours)
Courses XX(d), XXII, XXIV, XXV, XXVI, XXXI and XXXIII.

ENGLISH (9 term hours)
Choice of courses

MUSIC (2 term hours)
Private lessons in Voice (23)

FRENCH (9 or 10 term hours)
Two five-hour courses or three three-hour courses

ELECTIVE (1 or 2 term hours)
Courses in School of Arts and Sciences
Total term hours for the year, 45
TOTAL for the M. O. degree, 180

REQUIREMENTS FOR THE BACHELOR OF ARTS DEGREE

Freshman and Sophomore Years

See General Catalog for School of Arts and Sciences (90 term hours)

Junior and Senior Years

A MAJOR IN PUBLIC SPEAKING (42 term hours)
Courses beyond General Elocution

A MINOR IN ENGLISH (21 term hours)
Courses beyond Freshman English

ELECTIVE (27 term hours)
Courses in School of Arts and Sciences or School of Education.
Total term hours for Junior and Senior Years, 90
TOTAL for the Bachelor of Arts Degree, 180
REQUIREMENTS FOR THE TWO YEAR LYCEUM ARTS COURSE

(See also the Bulletin for the School of Music)

FOR THE MAJOR IN PUBLIC SPEAKING.

First Year (48 weeks).

PUBLIC SPEAKING (35 term hours).
  Courses I to VI, and VIII, X, XI, XII and XX (a) (b).

ENGLISH (9 term hours).
  *Course I or three terms of High School English.

**VOICE (2 term hours).
  One lesson a week for two terms in addition to Public speaking II (b).

A MINOR (14 term hours).
  One lesson a week in Voice, Violin or Piano (4 term hours).
  Orchestra and Chorus Practice (or Choir) (2 term hours).
  Harmony, two hours per week (8 term hours).
  Practice, one to three hours daily (no term credit).
  Total term hours for the year of 48 weeks, 60.

Second Year.

PUBLIC SPEAKING (28 term hours).
  Courses VII, IX, XIV, XVI, XVIII, XX (c), XXIII, XXVII and XXIX (a) (b).

THE MINOR (14 term hours).
  Continuation of same courses as in first year.

**A SECOND MINOR (4 term hours).
  Voice, Violin or Piano.

A FOREIGN LANGUAGE (9 or 10 hours).
  *French, Spanish or Italian.

ENGLISH (5 term hours).
  Choice of High School or College English.
  Total term hours for the year of 48 weeks, 60.
  TOTAL term hours for the Lyceum Arts Certificate, 120.

*NOTE—If the student has already finished High School he may take the college courses in English and the Languages.

**NOTE—The Minor must be in a different department of Music from the Major, but the second Minor may be in the same depart-
ment as the Major or the Minor, or it may be in an entirely different department from either the Major or Minor. If the Minor is in Voice, then the required two terms of Voice in the first year may be substituted by Piano or Violin.

FOR THE MAJOR IN MUSIC.

First Year (48 weeks).

VOICE OR PIANO OR VIOLIN (8 term hours).
   Two lessons a week for 48 weeks.
HARMONY (8 term hours).
   Two hours per week for 48 weeks.
CHOIR AND ORCHESTRA AND CHORUS PRACTICE (2 term hrs.).
   Throughout the year.
PUBLIC SPEAKING (8 term hours).
   Courses I, II and VI.
ENGLISH (12 or 15 term hours).
   *Course I or three terms of High School English.
A MINOR (4 or 13 term hours according to subject).
   Voice, Piano or Violin, one lesson a week, 48 weeks, (4 term hours).
   OR
   Public Speaking, courses IV, V, X and XI (13 term hours).
ELECTIVE.
   Courses to satisfy the remaining term hours for the year.
PRACTICE (not counted in term hours).
   One to three hours daily.
   Total term hours for the year of 48 weeks 60.

Second Year (48 weeks).

VOICE OR PIANO OR VIOLIN (8 term hours).
   Two lessons a week for 48 weeks.
HARMONY (8 term hours).
   Continuation of first year's work, two hours a week 48 weeks.
COUNTERPOINT (4 term hours).
   Two hours per week, 24 weeks.
COMPOSITION (2 term hours).
   One hour per week, 24 weeks.
HISTORY OF MUSIC (4 term hours).
Two hours per week, 24 weeks.

APPRECIATION OF MUSIC (4 term hours).
Two hours per week, 24 weeks.

CHOIR (OR ORCHESTRA) AND CHORUS PRACTICE (2 term hrs.).
Continuation of first year's work, throughout the year, 48 weeks.

A FOREIGN LANGUAGE (9 or 10 term hours).
*French, Spanish or Italian.

A MINOR (4 or 15 term hours, according to subject).
Voice, Violin or Piano, one lesson a week, 48 weeks (4 term hours).

OR
Public Speaking, Courses XII, XIV, XVI, XVIII and XX (a) (b) (15 term hours).

ELECTIVE.
Courses to satisfy the remaining term hours for the year.

PRACTICE (not counted in term hours).
One to three hours daily.
Total term hours for the year of 48 weeks, 60
TOTAL term hours for Lyceum Arts Certificate, 120

NOTE—A Major must not be changed throughout the two years. The Minor must not be the same subject as the Major.

REQUIREMENTS FOR THE ONE YEAR LYCEUM COURSE IN DRAMATIC ART

PUBLIC SPEAKING (42 term hours).
Courses I to VI, and VIII, X, XI, XII, XIV, XVI (a), XX (a) (b), XXVII and XXIX (a).

ENGLISH (9 or 10 term hours).
*Course I or two terms of High School English.

ELECTIVE.
Courses to satisfy the remaining term hours for the year.
Total term hours for the Dramatic Art Certificate, 60.

NOTE—If the student is a High School graduate, he may elect college subjects, otherwise the English and Electives must be chosen from the High School curriculum or from the Commercial, Fine Arts or Music Schools.
I. 3. GENERAL ELOCUTION—(Freshman). Twelve weeks. Three hours.

The fundamental principles for good reading and speaking. Instruction is given in English phonation and the theory and practice of the vocal elements of expression. A general survey of the different phases of work in the entire field of public speaking. Practice in the elementary forms of acting, personating, impersonative reading and pure reading; in various types of original public speech; in declamation; in extempore oratory; and in story telling.

This is a foundation course which enables the student to discover that particular phase of the speech arts for which he is best adapted.

Required of all Freshmen. Fall quarter.

II. 2. FRESHMAN PRIVATE LESSONS—Twenty-four weeks. One-half hour lesson a week.

(a) In the first term's work the student is given individual criticism in his bodily action and general development. Practice on representative selections and criticism. Tone drills. Individual attention to speech defects and mannerisms.

Extra tuition, $12. Required of Freshmen in the department. Any quarter.

(b) The second term's lessons are taken in the Voice department of the School of Music and are designed to give the student instruction and individual drill in the proper management of the breath, the placement of tone and the development of a good, full, resonant voice.

Extra tuition, $11. Required of Freshmen in the department. Any quarter.


(a) In the first term's work, one and one-half hours per week are given to the fundamental bodily exercises that give poise and grace of movement, and
one-half hour a week is given to class work in voice building.

**Fall quarter.**

(b) The second term's work gives a broader conception to physical exercise and introduces the beginnings of pantomime together with more advanced practice in voice production.

**Winter quarter.**

(c) The third term's work develops into artistic pantomime, interpretative dancing and the higher forms of suggestive bodily expression, while the voice work is applied to daily practice in readings requiring the various emotional changes and shades of color in tone.

*Required of all Freshmen in the department.*

**Spring quarter.**

**ORIGINAL SPEECH MAKING**

**V. 3. PUBLIC ADDRESS—(Freshman). Twelve weeks. Three hours.**

Addresses for different occasions are delivered for class criticism. Speech building and outlines. Extemporaneous speaking. Platform etiquette. Formal and informal speech. A study of the five ends of speech and the principles of attention.

**Fall quarter.**

**VII. 2. HYMN AND BIBLE READING—(Freshman). Twelve weeks. Two hours.**

This course is especially designed for preachers and church workers, but is open to all who desire training in the more difficult forms of prose and poetry interpretations. Instruction is given in sermonizing. Short inspirational addresses. Lesson talks. Bible story-telling.

**Fall quarter.**

**IX. 3. ADVANCED PUBLIC ADDRESS—(Freshman). Twelve weeks. Three hours.**

During the first two weeks drill is given in vocabulary building. The remainder of the term is de-
voted to advanced forms of speech-making, including speeches to induce action and belief. Elementary brief-drawing. Impromptu speeches.

Winter quarter.

XI. 2. SALESMA NSHIP—(Freshman). Twelve weeks. Two hours.

This course is the practical application of public speech to the various forms of Salesmanship, including actual sales talks under various hypothetical situations. Speeches for charity appeals. Promotion speeches. Book salesmanship.

Winter quarter.

XIII. 3. PARLIAMENTARY LAW PRACTICE — (Freshman). Twelve weeks. Three hours.

Class is conducted as a regular assembly in which bills are presented and discussed in floor debates and in accordance with strict parliamentary rule. Each student acts as a member of the assembly and has various opportunities to govern the house in the capacity of chairman.

XV. 2. VOCATIONAL ADDRESS—(Freshman). Twelve weeks. Two hours.


Spring quarter.

XVII. 3. ARGUMENTATION—(Junior). Twelve weeks. Three hours.

Argument building. Lectures and criticism by the instructor. Written briefs and arguments. Conferences. Oral presentation of complete arguments. This course is the same as English XXII and may be taken as an English major or minor.

Fall quarter.


Practice weekly in formal debates. Team work in briefs. A study of Refutation. Fallacies. This
course is the same as English XXIII and may be taken as an English major or minor.

Winter quarter.


A more detailed study of team work in debate. Legal debate. Political debate. More intensive study of debate problems than is given in course XIX. This course is the same as English XXIV and may be taken as an English major or minor.

Spring quarter.

XXIII. 9. NORMAL COURSE—(Senior). Thirty-six weeks. Three hours.

(a) A scientific study of the fundamental principles of oral expression, including a systematic criteria for all forms of speech. A study of methods in teaching elocution and reading.

Fall quarter.

(b) The second term’s work takes up a critical study of several different methods in teaching elocution and reading. A further study of methods in teaching acting, personating and public reading. Methods of teaching original speech and argumentation.

Winter quarter.

(c) The third term is wholly given over to practice teaching in the various phases of oral expression.

Spring quarter.

XXV. 2. SEMINAR—(Post-graduate). Twelve weeks. Two hours.

A course in research which may take up the study of special literature for adaptation to public recitals or may consist of the collecting of suitable material for the writing of an original oration. Conferences and criticism.

XVII. 1. SENIOR RECITAL.

The presentation of a miscellaneous program during the final term of the senior year. Four hours a week constant practice on the program to be pre-
sented is required of each senior for twelve weeks prior to the recital. Open to the public. Spring quarter.

XXIX. 1-6. Special Private Lessons—(Number of credits according to number of terms and kind of work.)

Courses in special lines of work such as platform delivery for preachers, lecturers, oratorical contestants; everyday sales talks for practical business professions; acting for vaudeville entertainers; motion picture posing; stage dancing; character personations in costume for the lyceum or the stage; and special program work for public readers, are offered through the Special Lessons. Certain of the other regular courses in the department may be substituted through these lessons.

*Extra tuition $12 for each course of twelve half-hour lessons. Any quarter.*

XXXI. 2. Staging of Play—(Post-graduate).

Every candidate for the Master of Oratory degree is required to stage a short play near the end of the post-graduate year. The play must be not less than forty minutes in length and must be rehearsed at least twice a week for six weeks in a two hour rehearsal.

XXXIII. 1. Graduate Recital—(Post-graduate).

The presentation of an evening's reading of a play. This is to be given in the final term of the post-graduate year and is open to the public. At least four hours a week practice upon the reading for twelve weeks prior to the recital is required.

Dramatic Art

IV. 2. Junior Private Lessons—Twenty-four weeks. One half-hour lesson a week.

(a) These lessons are to be taken in the Junior year as a supplementary course to the first term of Dramatic Reading. Individual criticism and suggestions are given for the selections subsequently to be delivered in the Dramatic Reading.
Extra tuition, $12. Any quarter.
(b) The second term of Junior Lessons is supplementary to the Advanced Dramatic Reading.
Extra tuition, $12. Any quarter.

VI. 3. ANALYSIS OF THE PRINTED PAGE—(Freshman).
Twelve weeks. Three hours.
A study in literary analysis. Interpretation of difficult passages in literature. Effort is made to acquire a quick and comprehensive understanding of difficult sentence structure as it first presents itself to the eye. Group sequence. Values. Denotation. Connotation.
Winter quarter.

VIII. 3. INTERPRETATION—(Freshman). Twelve weeks. Three hours.
A study of English and American literature, both poetry and prose, from the standpoint of vocal interpretation.
Spring quarter.

(a) The presentation of memorized selections for criticism by the instructor and the class. A study of Acting, Personating, Impersonative Reading and Pure Reading in their artistic relation to each other. Six or eight selections of specified length and character are presented during the term.
Fall quarter.
(b) A continuation of X (a).
Winter quarter.

XII. 3. ADVANCED DRAMATIC READING—(Junior). Twelve weeks. Three hours.
The presentation of weekly memorized selections of specified length and character throughout the term. These selections are chosen and arranged for a definitely planned program which, together with the selections memorized in Course X, are to be intensively studied during the last term of the Senior
year for the Recital. An additional term, XII (b), may be taken in the One Year Lyceum Course in place of XVI (a) if the student chooses.

Spring quarter.

XIV. 2. Story Telling—(Senior). Twelve weeks. Two hours.

This course is especially helpful for students preparing for public school teaching or for social settlement work. In these particular fields there is a great demand for professional story-tellers. Especially do Kindergarten, Primary and Grade teachers find this work helpful. The student is given daily practice in the various forms of story-telling in their relation to various types of audiences. Fables, fairy tales, folk-lore, original stories and impromptu stories for the little folks.

Fall quarter.

XVI. 6. Play Reading — (Senior). Twenty-four weeks.

(a) The study and delivery of a complete cutting from an approved novel or a modern play during the term. The material is not presented wholly from memory, but is delivered with the assistance of book and desk. More accurate attention is given to suggestion and to the imaginative phase of the work.

Winter quarter.

(b) A continuation of XVI (a). A second play or cutting from a novel is presented.

Spring quarter.

XVIII. 2. Senior Private Lessons—Twenty-four weeks. One-half hour a week.

(a) These lessons are to be taken in the Senior year as a supplementary course to the first term of Play Reading. Criticisms and suggestions are given for the presentation of the play or novel to be subsequently delivered in the Play Reading class.

Extra tuition, $12. Any quarter.

(b) Supplementary to the second term Play Reading.

Extra tuition, $12. Any quarter.
XX. 4. ACTING AND MAKE-UP—Forty weeks. Two one-hour lessons a week.

(a) FIRST TERM—(Freshman). Ten weeks.

This course is given through private classes admitting but six students to each class. Students are cast for a little playlet and are drilled in the fundamentals of stage technique, the principles of make-up, costuming, etc., and are taught to coordinate complete bodily action with dialog.

Extra tuition, $10. Any quarter.

(b) SECOND TERM—(Junior). Ten weeks.

Through private classes of six the student is taught the more difficult phases of the art of acting in an advanced type of play.

Extra tuition, $10. Any quarter.

(c) THIRD TERM—(Senior). Ten weeks.

Shakespearean scenes are studied from the standpoint of stage technique. Six people in each private class.

Extra tuition, $10. Any quarter.

(d) FOURTH TERM—(Post-graduate). Ten weeks.

The Browning play is rehearsed in private classes of six. The highly idealistic form of acting is here introduced.

Extra tuition, $10. Any quarter.

XXII. 9. DRAMA COURSE—(Post-graduate). Thirty-six weeks. Three hours.

(a) The technical study of the staging of plays. A study of the appreciation of the drama. The first term a modern comedy is studied.

Fall quarter.

(b) The second term a classic comedy is studied. Continuation of the study of the appreciation of the drama.

Winter quarter.

(c) The third term a classic drama is studied.

Spring quarter.
XXIV. 6. **Advanced Play Reading**—*(Post-graduate)*. Twenty-four weeks. Three hours.

(a) The study and presentation of a Shakesperean play as a Reading. Technical study of suggestive action. Book and desk are used.

*Fall quarter.*

(b) Continuation of XXIV (a). The Browning or Tennyson play as a public reading. Book and desk are used.

*Winter quarter.*

XXVI. 2. **Graduate Private Lessons**—Twenty-four weeks. One half-hour a week.

(a) These lessons are to be taken as a supplementary course to the first term of Advanced Play Reading.

*Extra tuition, $12. Any quarter.*

(b) The second term lessons are a supplementary course to the second term of Advanced Play Reading.

*Extra tuition, $12. Any quarter.*

XXVIII. 1-6. **Class Private**—*(Number of credits according to number of terms and kind of work.)* Ten weeks. Two hours.

Private courses admitting six students for the study of some particular phase of public speaking not directly treated in the regular courses. These courses are frequently elected by students wishing to substitute for a course not offered at that particular time.

*Extra tuition, $10 for each ten weeks' course.*

*Any quarter.*

**PREPARATORY AND HIGH SCHOOL COURSES**

A. **Orthoepy**—*(Preparatory or High School).* Twelve weeks. Five hours.

This class is designed for students who are in need of daily drill in articulation, pronunciation and the mechanical processes of speech production.

*Every quarter.*
B. SIGHT READING—(*Preparatory or High School*). *Twelve weeks.*
*Five hours.*
Designed for students who have satisfactorily completed course A.
*Every quarter.*

C. HIGH SCHOOL ELOCUTION—(*High School*). *Twelve weeks.* *Five hours.*
This is a course in the fundamentals of good reading and speaking designed for students in the High School who wish to improve their voice and develop poise and ease of expression in recitation and declamation. Part of the time is devoted to Physical Culture and part to practice in reading and speaking.
*Every quarter.*
THE SCHOOL OF COMMERCE

The work in the School of Commerce is designed to meet the need of those who desire to fit themselves for the commercial world. The demand for commercially trained men and women is greater today than the supply. The business world needs them faster than they can be prepared, and is willing to pay the price to obtain them. The course in this department includes all of the leading commercial subjects.

The work has been planned with especial reference to the needs of three classes of students:—

1. Students who desire to teach commercial subjects, and who wish to make special preparation in the subjects they desire to teach.

Any student completing the courses in Practical Bookkeeping, Shorthand, and Typewriting, should be qualified to successfully pass the state teachers' examination in these subjects.

2. Students who wish to prepare for some specific office, secretarial or managerial work, and who wish to become proficient as quickly as possible.

The student who has mastered the principles set forth in the course of study need not hesitate to accept a position in any office. He can act with the assurance that the work he does will meet with the approval of his employers.

3. Students who wish to take advanced professional training, and who wish to take their major and minor in commerce.

Students completing the advanced courses should find no difficulty in taking the state C. P. A. examinations.

DIPLOMAS AND DEGREES

A Diploma will be awarded those who satisfactorily complete the prescribed work in shorthand and typewriting.

A Diploma will be awarded those who satisfactorily complete the prescribed course in practical bookkeeping and kindred subjects.

A certificate will be awarded those who successfully complete a two-year prescribed course in practical bookkeeping and higher accountancy, and kindred subjects.
The Degree Bachelor of Science in Commerce will be awarded those who successfully complete the prescribed four-year course in the School of Commerce. Candidates for this degree must be graduates of a regular commissioned high school or must possess equivalent training.

THE DEGREE CERTIFIED PUBLIC ACCOUNTANT

By acts of the General Assemblies of the various states, provision is made for the examination of candidates for the Degree of Certified Public Accountant, which is conferred by the state. Students completing the advanced course should have no difficulty in passing these examinations, providing other conditions have been met. A special course will be offered students who desire to pass this examination.

DESCRIPTION OF COURSES

PRACTICAL BOOKKEEPING AND BUSINESS PRACTICE

The foundation of a thorough business training is bookkeeping. A well-rounded education, either business or literary, is far from complete without a knowledge of bookkeeping. The cultural value, the mental and moral discipline derived from this study is unsurpassed by any other study.

The work in the first four courses is arranged with laboratory period, in order that all the work of the student may be under the supervision of an expert instructor. Each course constitutes a term of work of twelve weeks each, two hours per day.

PRACTICAL BOOKKEEPING AND BUSINESS PRACTICE

COURSE I—FUNDAMENTAL PRINCIPLES.

The chief object of this course is to train students in general bookkeeping practice in order to prepare them for further work in bookkeeping and accounting. It is a course that should be taken by every student in the University. Distinction between debits and credits; balance sheet and profit and loss statement; summarization of transactions and books required for this purpose; interpretation of ledger accounts; principles of journalizing and posting, with considerable practice in same; preparation of trial balance, balance sheet, and simple financial statements; final closing of books. Lectures, laboratory, actual business practice. Prerequisite of all other courses in bookkeeping and higher accountancy.
COURSE II—Partnership Bookkeeping.

The object of this course is to illustrate the application of the principles of accounting in a business conducted as a co-partnership, and to give further practice in the classification of accounts. It presents accounts with partners, fixed assets and reserves; trading accounts; operating expenses; adjusting entries; special sales book, purchase book, and cash book; depreciation; accruals and deferred items; consignments; analysis and comparative results; comparative charts; dissolution of partnership; changing from partnership to corporation. Lectures, laboratory, actual business practice. Prerequisite, Course I.

COURSE III—Corporation Bookkeeping.

A continuation of Course II, introducing accounts with selling expense; branch store accounts; accounts in connection with manufacturing business; special ruling in all books of original entry; voucher method of bookkeeping, together with many other scientific methods of recording transactions; dissolution of corporations. Lectures, laboratory, actual business practice. Prerequisite, Courses I and II.

COURSE IV—Elementary Cost Accounting (Same as Accounting I).

Students who cannot complete the Accounting work, but who want a working knowledge of the Bookkeeping and Cost Accounting, and who have been strong in Courses I, II and III, may with the permission of the Dean, take Elementary Cost Accounting at this time.

COURSE V—Bank Bookkeeping.

The purpose of this course is to aid students who desire to do bank bookkeeping, by giving them a general knowledge of the principles of bank bookkeeping. Students are required to prepare a set of books involving the work of the discount clerk; collection clerk; receiving and paying tellers; note tellers; correspondence clerk; individual and general bookkeepers. An introductory study of utility of banks; distinction between national, state, and private banks, together with powers and restrictions of same; duties of bank officers and clerks; trust companies; clearing houses; letters of credit; certificate of protest; note of protest. Twelve weeks, five hours. Prerequisite, Bookkeeping I. This course will be offered but one term each year.
ADVANCED ACCOUNTANCY

The results of the war; the inauguration of income and excess profits taxes; the demand on the part of the Government for more accurate and more efficient systems of accounting; the reorganization and amalgamation of the large business interests of the country, have produced a great demand for expert accountants, men who understand the true science of accounting. Accountancy is rapidly becoming one of the leading professions. Students completing the courses should be able to take up responsible positions as treasurers, auditors, etc.

ACCOUNTING I—PRINCIPLES.

This course is an introduction to the study of Accounting, designed to meet the demands for better trained men and women in the business world, and for more efficient commercial teachers. It is a prerequisite to all other courses in Accountancy. It consists of a correlated study of bookkeeping practice, and the principles underlying the preparation of balance sheets, and profit and loss statements; with a careful study of the structure and importance of the accounts which make up these statements. Both class and individual instruction, supplemented by lectures. C. P. A. questions, and special reports by students. Prerequisite, Bookkeeping I or the equivalent.

ACCOUNTING II—INTERMEDIATE.

This course is a continuation of Accounting I. Students will be required to apply the principles obtained in Course I to an analytical study of business facts. The solution of practical problems from C. P. A. examinations will constitute a part of the work of this course. Organization of corporation; analysis of corporation accounts; interpretation of balance sheet; statement of affairs; deficiency account; statement of realization and liquidation; methods of preparing special statements, and practice in same; holding companies and consolidated balance sheets. Lectures, etc. Prerequisite, Accounting I.

ACCOUNTING III—AUDITING, ADVANCED THEORY AND PRACTICE.

This course is designed especially for those who desire to enter the accountancy profession, and who desire to prepare for C. P. A. examinations.

Duties, responsibilities, and limitations of an auditor; object of an audit; checking accounts; examination and comparison of
same; detection of errors; detection of frauds; analysis of profit and loss statements and balance sheets; investigation, criticism, and interpretation of various accounts which constitute balance sheet; comparative statements; certificate of auditor. Special C. P. A. problems, lectures, special reports. Prerequisite, Courses I and II.

ACCOUNTING IV—ELEMENTARY COST ACCOUNTING.

The object of this course is to present the correct principles of cost accounting, and the best practice in applying them. Emphasis will be placed on the bookkeeping of cost accounting. This course should be of especial interest to teachers who are preparing to teach cost accounting, and to students who desire a working knowledge of costing but do not have time to take a more thorough course in cost accounting. This course is prerequisite to Factory Cost Accounting. Re-produced papers of a large business concern are used. Course includes laboratory period. Prerequisite, Accounting I or Bookkeeping I, II and III.

ACCOUNTING V—FACTORY COST ACCOUNTING.

A thorough course in factory cost accounting will be offered during the year 1920-1921. For details in regard to this course, consult the Dean.

BUSINESS ORGANIZATION AND MANAGEMENT.

Fundamental principles of business organization and management, with reference to ownership and operation; forms of organizations, individual proprietorship, partnerships, corporations; nature, advantages, and disadvantages of each; formation, promotion, and financing of enterprise; charters; by-laws; rights and obligations of bondholders, stockholders, and creditors; officers and directors, their duties; business combinations and trusts; comparative efficiency of various types of business organization.

COMMERCIAL LAW

COURSE I.

(a) GENERAL ELEMENTARY LAW—Brief history of Roman Civil Law, English Common Law, The Law Merchant, etc., together with a discussion of the Federal and State Constitutions, Statutory Law and Court decisions are carefully presented.

(b) THE LAW OF CONTRACTS—Essential elements, competent parties, consideration, consent, subject matter, the operation of contract, remedies, defenses, etc., are fully discussed.
(c) The Law of Agency—Powers, duties, and liabilities of principal, agent, master, servant, partners, directors, as applied to these contracting parties under Agency form a very important part in this course.

(d) Sales of Personal Property—Property defined; executory sales, executed sales; parties, necessary conditions, Statute of Frauds as applied to sales; mutual assent of parties, subject matter, price, passing of title, Stoppage in Transitu, warranty, written and implied, etc., carefully considered.

(e) Bailments of Personal Property—Distinguished from sales; kinds of bailment, degrees of diligence and negligence, use of property, return of property, rights of parties under all phases of this subject, including Inn Keepers, Common Carriers, etc., are other important topics for consideration.

(f) Negotiable Paper—This is one of the most important subjects for the study of the Commercial Student. Nearly every business transaction calls for a knowledge of the law governing bills of exchange, promissory notes, checks, bills of lading, etc. All characteristics, necessary conditions involving parties, consideration, negotiability, indorsements, demand and notice, payment, etc., are thoroughly learned by the student.

(g) Partnerships and Corporations—Carefully compared; how formed; powers, rights, duties, and disabilities of partners, stockholders, directors and officers are a few of the many topics that interest all business men.

(h) Written Work—Drafting of simple contracts, deeds of sale, leases, mortgages, bills of exchange, promissory notes, checks, receipts, freight bills, bills of lading, covering the topics considered receive the most careful attention.

COURSE II.

Five recitations each week for twelve weeks. Upon completion of course I., or its equivalent, the student is offered course II. A college credit is issued to the student completing this course.

(a) Origin and Scope of Business Law—Primary sources of business law; Federal and State Statutes, Secondary sources of business law; Roman Civil Law, English Common Law, Treaties, Chancery Courts, and rules of equity, the law merchant.

(b) Contracts—Elements, formation, subject matter, operation, discharge, legality, interpretation.
(c) **AGENCY AND SERVICE**—Principal and agent, relation of agency, competency of parties, obligations of principal and agent; master and servant, duties and liabilities of each.

(d) **BAILMENTS OF GOODS**—For sole benefit of one party, for mutual benefit of both parties; special forms of bailments, the Inn Keeper’s rights and liabilities of parties; Common Carriers, their rights, duties and liabilities.

(e) **SALES OF PERSONAL PROPERTY**—The contract, subject matter, price, conditions and warranties, transfer of title, performance, remedies of seller and buyer, liens, Stoppage in Transitus, Statute of Frauds.

(f) **SALES OF REAL ESTATE**—Titles, conveyancing, covenants of warranty, execution of deeds, mortgages, leases, wills of real property, contracts of tenure of real property.

(g) **PARTNERSHIP**—Relations of partners to third parties, relations of partners to one another, property rights of partners, dissolution and liquidation.

(h) **BUSINESS CORPORATIONS**—Formation, powers, organization, directors and officers, by-laws, records, reports, dissolution of corporations.

(i) **INSURANCE**—Fire, marine, life, accident and health; guaranty and suretyship, fidelity.

(j) **NEGOTIABLE INSTRUMENTS**—Promissory notes, checks, bills of lading, negotiation, rights and liabilities of parties, presentment for payment, notice of dishonor, discharge, protest, payment.

(k) **BANKS AND BANKING**—Organization of banks under national and state laws, duties and liabilities in respect to depositors and payees of checks.

(l) **PREPARATION OF LEGAL DOCUMENTS**—After the discussion of the foregoing topics, the execution of legal documents is taught so the student may become familiar with the practical phase of the subject as well as the theoretical. All transactions requiring a thorough knowledge of modern business law—involving the theory and practice—must be clearly understood upon the completion of Course II.
COMMERCIAL ARITHMETIC

Daily recitations for a term of twelve weeks. High School credit given upon completion of the course. The student must know well the fundamentals, including fractions—common and decimal—before entering upon this course. Opportunity is given in other departments for this preparation.

(a) A Short Review of Fundamentals—Principles, drills for accuracy, rapidity; commercial forms, fractions.

(b) Compound Numbers—Measurements, construction work, including materials for same; land survey, metric system and application.

(c) Application of Percentage and Other Subjects—Profit and loss, interest, discounts, accounts, exchange, commission and brokerage, stocks and bonds, equation of payments, business forms for accountants, partnership, bankruptcy, insurance, banking.

(d) Mensuration—Evolution, involution, geometrical figures involving surface and solidity measurements.

Careful attention is given to the arithmetic required by the expert accountant in the auditing of the books and records of private and public corporations, and the management of business concerns.

DEPARTMENT OF SHORTHAND AND TYPEWRITING

No other study more quickly, more surely, and more lastingly, brings a young person up from a non-paying position, to an enjoyable, profitable position, than does the study of shorthand and typewriting. Our courses are especially fitted to prepare the student for high salaried secretarial duties, court reporters, etc.

SHORTHAND

COURSE I—This course will comprise the usual instruction in the Manual of Gregg Shorthand supplemented by drill work from Progressive Exercises and daily reading from shorthand plates in the Gregg Speed Studies. After covering the theory of Gregg Shorthand, thorough reviews of the Manual will receive special attention until the student can execute outlines with great facility involving any principle in the study. Special work will be provided in the form of shorthand penmanship by one who has attain-
ed the highest mark of merit in artistry of shorthand writing. This course requires twelve weeks. Class recites two hours daily. Books used: Manual, Gregg Speed Studies, and supplementary work from Progressive Exercises.

COURSE II—Daily assignments out of the Speed Studies will be made as an exercise in reading of shorthand plates which will later be taken as dictation matter at progressive rates. A large amount of writing and reading shorthand will be done in this class. Every shorthand plate in the Gregg Writer Magazine will be read and later used for dictation. Transcript work will continue practically throughout the whole term. Exchange of notes will frequently be made by students to familiarize themselves with other students’ outlines, thus training the student to read another stenographer’s notes when working in an office if called upon to do so. The last eight weeks of the course will be supplemented by daily assignments from the Gregg Speed Practice. Class recites two hours daily. Books used: Gregg Speed Studies, Gregg Speed Practice, The Gregg Writer Magazine, and supplementary dictation from Gardner’s Constructive Dictation.

COURSE III—Advanced dictation in the Gregg Speed Practice and Gardner’s Constructive Dictation is given in this course at rates varying from 100 to 175 words a minute, and a complete mastery of the Correlation of Shorthand and Typewriting will be made. Dictation from editorials, magazine articles, legal forms, court testimonials, and business literature will be the main feature of the course. Every conventional style of letter-writing is mastered. Advanced phrasing and the shortening of outlines in law phraseology will receive a great deal of attention. Every student will receive practical office experience and will be required to learn the use of the Mimeograph, Adding Machines, different Duplicating processes and the use of Filing Cabinets. Class recites two hours daily. A graduating test is given at the end of this course which consists of 400 words at the rate of 100 words per minute. Books used: Gregg Speed Practice, Gardner’s Constructive Dictation, Reigner’s Dictation in Business Literature and, supplementary work from newspapers, magazines, legal forms, court testimonials and books on literature by various authors.

COURSE IV—This course is elective and is intended for those who wish to attain a high rate of speed in shorthand writing and later, enter the profession of court reporting. The dictation material will practically consist of new matter appropriate for the at-
tainment of the highest degree of speed ranging from 150 to 200 words per minute. Various phases of the psychology of court reporting will be under discussion throughout this course. Class recites one hour daily. Selective material for dictation.

The following courses in typewriting are offered:

COURSE I—The essential points of the typewriter are shown to the student before entering upon the first lesson. After this the proper position of the fingers upon the keyboard are observed and then, in logical method of presentation, the entire keyboard is mastered so that a student can write at an accurate but slow rate of speed without looking on the keys. Those not possessing a knowledge of touch typewriting may here master the subject under the most favorable conditions, while those who are familiar with it may carry their mastery of the art to a higher degree of perfection. Since speed will come of its own accord, accuracy is the chief aim of this course. Two hours a day will be given to practice in typewriting. The Rational Typewriting text is used.

COURSE II—This course will commence with letter-writing in which every kind of arrangement is studied. Model letters are given for repetition matter and later, material will be given in dictation and the student will arrange it according to the models learned. A preliminary drill of about ten minutes at the beginning of each period will be given to finger exercises and practice on letter combinations on the keyboard. Speed tests will be given once every week. Speed copies for supplementary work will be furnished to each student. In this course, all shorthand transcript work will be considered a part of the work in typewriting. Those who do not take shorthand may continue in the text-book. Three hours a day will be given to practice.

COURSE III—Continuous practice on speed exercises will be the main features of this course. Preliminary drills of ten minutes on finger exercises and keyboard drills must precede each practice period. Dictation will be given twice every week from business literature to all students of this course. Students in this course will be required to write legal forms, tabulate, copy from rough draft, cut stencils, make carbon copies, bill, mimeograph and transcribe from their shorthand notes such matter as may be given for transcription. A thorough study of the machine will be made in its mechanical construction so that a student may become quite proficient in repairing a typewriter when out of order. Two hours a day will be given to practice.
COURSE IV—This course is selective and is intended for those who wish to attain a higher rate of speed in typewriting. Copies for speed exercises will be furnished to the student.

The following certificates of proficiency will be awarded:
(1) Primary Certificate for writing 25 words net per minute.
(2) Card Case and Certificate for writing 40 words net per minute.
(3) Gold Medal and Certificate for writing 55 words net per minute.

A DIPLOMA will be given those who satisfactorily complete the prescribed course in shorthand and typewriting.
SCHOOL OF ENGINEERING

The School of Engineering is composed of the Civil, Architectural, Electrical, Mechanical and Chemical Engineering courses. The first and the last ones are fully developed, the others being carried at present through the first year only. It is probable that the remaining years of all or part of the other courses will be offered in 1920.

The object of the Civil Engineering Course is to provide such training in the theory and such practice in the field, shops, laboratory and drawing room, as to fit the students to undertake the exacting duties of the modern civil engineer.

Among the subjects are Chemistry and Bacteriology, which are very important in sanitary engineering and water supply and are investigated to a considerable length. The courses in Railway Engineering, Bridge Design, Reinforced Concrete, Masonry Construction, Testing Materials, and Highway Engineering are practically complete to date, but are enlarged each year to keep in touch with latest engineering practice.

ADMISSION.—Admission to the regular Engineering Course is open to all High School graduates or those who have equivalent preparation. Examination for High School standing will be given at Valparaiso several times each year by the State High School Inspector.

All Engineering students are required to be registered with the Dean of Engineering in addition to and immediately after their registration at the main office.

ENGINEERING SOCIETY.—The Civil Engineering Department has a society for the purpose of stimulating interest in Engineering and promoting the social interests of the members of the Department. The American Association of Engineers has recently organized a Chapter at Valparaiso University. Weekly meetings are held. One-half of the meetings are given up to student addresses and papers, and one-half to addresses from outside speakers. Discussions by the students will follow each paper or address.
ENGINEERING I—DRAWING.

ENGINEERING I a—Twelve weeks. Six hours Drafting.
Elementary work in drawing, practice in drawing from models, copying from plates.

ENGINEERING I b—Twelve weeks. Five hours Class.
Projections and isometric drawing.

ENGINEERING I c—Twelve weeks. Six hours Drafting.
Continuation of I a.

ENGINEERING I d—Twelve weeks. Four hours Drawing. Three hours Class.
Theoretical problems in descriptive geometry.

ENGINEERING I e—Twelve weeks. Two hours Class. Six hours Drafting.
Shadows, perspective and practical problems involving use of Descriptive Geometry.

ENGINEERING I f—Twelve weeks. Six hours Drawing.
Practice in the drawing of gears and machines. Tracing and blue printing.

ENGINEERING II—SURVEYING.

ENGINEERING II a—Twelve weeks. Five hours Class. Ten hours Field Work.

PLANE SURVEYING—Recitations, lecture, field and office work in the theory and practice of plane surveying. The highest standards of form and style of field notes and office calculations are required.

An instrument fee of $1.00 is charged.


The fees required in surveying and laboratory are not for breakage. The student is required to pay for all apparatus carelessly broken.

ENGINEERING II b—Twelve weeks. Ten hours Field and Drafting.

TOPOGRAPHICAL SURVEYING—A study of the theory and practice of stadia, plane tables and other instruments employed in
topographical surveys. A topographical survey is made of a tract of land, including city lots; open field, rough country, and a hydrographical survey is made of a portion of one of the lakes in the vicinity.

An instrument fee of $1.00 is charged.

Texts: Breed & Hosmer, Vols. I and II.

ENGINEERING II — Six hours Field and Drafting and four hours Class.

HIGHER SURVEYING—Theory and methods of special surveying and geodesy, complete observations for time, longitude, latitude and meridian; hydrographic surveying and stream gauging.

Texts: Breed & Hosmer, Vol. II.

An instrument fee of $1.00 is charged.

ENGINEERING III—RAILWAY ENGINEERING.

ENGINEERING III a—Twelve weeks. Five hours Class. Five hours Field.

RAILWAY CURVES—This course takes up the theoretical study of simple, compound and reverse railway curves, with sufficient field practice to prepare the student for the more advanced work in Railway Location.

Text: Field Manual for Railway Engineers—Nagle.

ENGINEERING III b—Twelve weeks. Twelve hours Field.

RAILWAY LOCATION AND CONSTRUCTION—A complete survey of a railway some miles in length, in which the student makes reconnaissance, preliminary topographical and final surveys. The road is completely cross-sectioned. Reconnaissance, preliminary and final maps and estimates are made. Advanced field problems in simple, compound and transition curves.

An instrument fee of $1.00 is charged.


ENGINEERING III c—Twelve weeks. Two hours Lecture. Three hours Drawing.

RAILWAY MAINTENANCE AND ECONOMICS—The maintenance of railway track and structures; lectures, recitations, inspection trips, design, comparison of rail sections, tie plates, locks, section of road bed, freight yards; lectures on timber, treating ballast,
etc. Economics of railway location, revisions and improvements; analysis of operating expenses as affected by grades, curves; economic estimates.

Text: Elements of Railway Engineering—Raymond.

ENGINEERING IV—ALGEBRAIC AND GRAPHIC STATICS.

ENGINEERING IV a—Twelve weeks. Five hours Class. Ten hours Drawing.

GRAPHIC STATICS—Analysis of stresses in roof trusses under action of static and wind loads, and in bridge trusses under action of static and moving wheel loads.

Text: Modern Framed Structures, Part I, Johnson & Bryan & Turneaure.

ENGINEERING IV b—Twelve weeks. Five hours Class. Ten hours Drawing.

Continuation of Engineering IV a.

ENGINEERING V—TECHNICAL MECHANICS.

ENGINEERING V a—Twelve weeks. Three hours Class.

TECHNICAL MECHANICS—A study of the laws of equilibrium and motion; algebraic determination of stresses, center of gravity, moment of inertia, work, energy and friction.


ENGINEERING V b—Twelve weeks. Five hours class.

TECHNICAL MECHANICS—Continuation of Engineering V a.


ENGINEERING V c—Twelve weeks. Five hours class.

STRENGTH OF MATERIALS—Mechanics of materials including stresses and deformations in tension and compression, shearing, torsion, and flexure; also strength of long columns and continuous girders, reinforced concrete and the elements of the theory of elasticity.


ENGINEERING VI—TESTING MATERIALS

ENGINEERING VI a—Twelve weeks, two hours lectures, eight hours laboratory.

GENERAL TESTING—An experimental study of the effects of tension, compression, torsion and flexure, upon steel, wood, stone,
concrete, plain and reinforced, brick and other building material. The student learns to judge the character and properties of building materials and to verify theoretical laws.

A laboratory fee of $2.00 is charged.


ENGINEERING VI b—Twelve weeks. Five hours class.

CEMENT AND CONCRETE TESTING—Advanced work in testing materials used in masonry construction, with particular attention to cement and concrete.

A laboratory fee of $2.00 is charged.


ENGINEERING VII—HYDRAULICS.

ENGINEERING VII—Twelve weeks. Five hours class.

HYDRAULICS—Lectures and recitations covering the laws of motion of fluids; flow of water through orifices, open channels and weirs, and the fundamental principles underlying hydraulic development.

Text: Hydraulics—Slocum.

ENGINEERING VIII—REINFORCED CONCRETE.

ENGINEERING VIII a—Twelve weeks. Five hours.

ELEMENTARY REINFORCED CONCRETE—A thorough study of reinforced concrete beam and column theory, including character of materials, slab, beam, girder and T beam design. The value of some of the patents are also discussed.

Text: Reinforced Concrete—Hool I.

ENGINEERING VIII b—Twelve weeks. Three hours.

DESIGN OF REINFORCED CONCRETE STRUCTURES—The actual design of several reinforced concrete structures is undertaken.

Text: Reinforced Concrete—Hool II.

ENGINEERING IX—MUNICIPAL ENGINEERING

ENGINEERING IX a—Twelve weeks. Three hours class, four hours field and laboratory.

ROADS AND PAVEMENTS—Recitations and lectures on purpose, quality, location, construction and maintenance of roads and pavements; friction and resistance to rolling; tractive power of gradi-
ents; design, estimates, field location and cost of different types of roads at various grades.

Text: Hand Book for Highway Engineers. Harger and Bonney.

ENGINEERING IX b—Twelve weeks. Three hours class, four hours drafting.

WATER SUPPLY—A study of the various sources of water supply and methods of purification; design and construction of the various methods of supplying water, methods of connection and distribution; pumping machinery, tanks and reservoirs.

Text: Public Water Supplies—Turneaure & Russel.

ENGINEERING IX c—Twelve weeks. Three hours class, six hours field and drafting.

SEWERAGE—Systems of carriage for storm water and sewerage, separate and combined; sewerage disposal systems; laws of flow; field work in running profiles, profiles from contours, determining grades, computing quantities, design of plans; specifications; contract and method of assessment.


ENGINEERING IX d—Twelve weeks. Two hours class, six hours laboratory.

BACTERIOLOGY—This course covers the microscopical examination of drinking water; qualitative and quantitative bacteriological analysis of water and sewage; practice in detecting sewage bacteria in suspected waters; the interpretation of chemical analysis bearing on bacteriological analysis, personal and public hygiene, contagion, pasteurization and sterilization.

A laboratory fee of $3.50 is charged.


ENGINEERING X—POWER ENGINEERING

ENGINEERING X a—Twelve weeks. Two hours class.

ENGINES AND BOILERS—A study of steam and Gas Engines as to structural detail; valves, simple and compound; link motion and reversing gears; diagrams and the theory of steam engine indicator. A similar study is made of typical boilers and the modern steam turbines.

ENGINEERING X b—*Twelve weeks. Two hours class.*
GAS ENGINES—A brief study of gas, gasoline and oil engines with special attention given to the practical side. Contractor’s small power plants and automobile engines are examined in detail.
Text: Not fixed.

ENGINEERING XI—MASONRY CONSTRUCTION

ENGINEERING XIa—*Twelve weeks. Three hours class.*
MASONRY CONSTRUCTION—A brief course in masonry construction.
Text: Masonry Construction—Baker.

ENGINEERING XII—HEATING AND VENTILATING

ENGINEERING XII—*Twelve weeks. Three hours class.*
A study underlying the design of the various private and district heating plants. Each student submits designs covering systems used in residences, school or office buildings and central heating systems. Must be preceded or accompanied by Physics III.

ENGINEERING XIII—COST ENGINEERING

ENGINEERING XIII—*Twelve weeks. Five hours.*
Study of principles underlying cost and management on large and small contracts. Reading and estimating quantities from blueprints, collection and tabulation of cost data. Study of labor conditions in various parts of the world. Comparison of cost between hand labor, animal labor and machine labor. The human side of engineering.
Text: Engineering Office Methods—Davis.

ENGINEERING XIV—BRIDGE AND STRUCTURAL DESIGN

ENGINEERING XIV a—*Twelve weeks. Ten hours class and drafting room.*
DESIGN OF PLATE GIRDER AND PIN CONNECTED BRIDGES—Complete detail and shop drawings made for one bridge.

ENGINEERING XIV b—*Twelve weeks. Ten hours class and drafting room.*
DESIGN OF RIVETED RAILROAD AND HIGHWAY BRIDGE—Design of a roof truss.
ENGINEERING XIV - Twelve weeks. Four hours drafting.
Design and part details of steel office and mill building.
Text: Ketchum’s Handbook for Structural Engineers.

ENGINEERING XV - SEMINAR

ENGINEERING XV - Twelve weeks. Three hours class.
Assigned reading and reports on past and current engineering subjects. Tri-weekly meetings and discussions of leading articles of the week.

ENGINEERING XVI - THESIS

The completion of a satisfactory thesis or its equivalent is required of all candidates for the degree of Civil Engineer. The subject must be submitted prior to the opening of the quarter in which it is prepared. The subject and treatment must be approved by the Dean of Engineering.

NOTE: The University reserves the right to retain a part of any student’s work (in Engineering) for use in class instruction. Only a small part of any student’s work will be retained. Every student is required to have a copy of text during the class when such is necessary to proper conduct of recitation.

ENGINEERING XVII - INSPECTION TRIPS

ENGINEERING XVII.
Each student is required to participate in at least one inspection trip in the second year covering one or two days and three in the third year covering three or more days.
The second year trip takes place during the first quarter and applies to Railway Engineering.
The third year trip covers concrete structures, bridge and municipal plants.
The total expenses need not exceed $6.00 per trip. A small fee is charged to pay general expenses of the trip and arrangements.

CIVIL ENGINEERING COURSE.
FIRST YEAR

FIRST TERM. Twelve weeks.

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Hours per Week</th>
<th>Class.</th>
<th>Field or Lab.</th>
<th>Credit.</th>
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<td>Mathematics II a, College Algebra</td>
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<tr>
<td>Engineering I a, Drawing</td>
<td>6</td>
<td>3</td>
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<td>Manual Training II a</td>
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<td>Subjects</td>
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<td>College English I</td>
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<td>College Chemistry I</td>
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**SECOND TERM**

| Math. III a, Plane Trigonometry             | 5      |               | 5      |
| Engr. I b, Drawing (Projections)            | 5      |               | 5      |
| Manual Training IV a                        |       | 6             | 3      |
| College English II                          | 3      |               | 3      |
| College Chemistry II                        | 3      | 4             | 5      |

**THIRD TERM**

| Math. III b, Spherical Trigonometry         | 2      |               | 2      |
| Math. IV a, Analytical Geometry             | 3      |               | 3      |
| Engineering I c, Drawing                    |       | 6             | 3      |
| Engineering I d, Descriptive Geom           | 5      |               | 5      |
| Public Speaking                             | 3      |               | 3      |
| Chemistry (Analytical)                      |       | 10            | 5      |

**FOURTH TERM**

| Math. IV b, Analytical Geometry             | 5      |               | 5      |
| Engineering I e, Descriptive Geom           |       | 4             | 2      |
| Bacteriology                                | 2      | 6             | 5      |
| Astronomy                                   | 5      |               | 5      |
| Industrial Chemistry                        | 3      |               | 3      |

**SECOND YEAR**

**FIRST TERM**

| Math. V a, Differential Calculus            | 5      |               | 5      |
| Engineering I f, Drawing                   |       | 6             | 3      |
| Commercial Law                             | 5      |               | 5      |
| Geology (Dynamic)                           | 5      |               | 5      |
| Physics VI, Fluids and Heat                 | 3      | 6             | 5      |

**SECOND TERM**

| Mathematics V b, Differential Calculus      | 3      |               | 3      |
| Mathematics V c, Integral Calculus          | 2      |               | 2      |
| Physics IV, Electricity                     | 3      | 6             | 5      |
| Geology (Economic)                          |       | 6             | 3      |
| Engr. IV a, Algebraic & Graphic Statics     | 5      |               | 5      |

**THIRD TERM**

| Math. V d, Integral Calculus                | 3      |               | 3      |
| Engr. IV b, Algebraic & Gr. Statics II      | 5      |               | 5      |
| Engr. II a, Plane Surveying                 | 5      | 10            | 10     |
| Physics VIII, Sound and Light               | 3      | 6             | 5      |
### Subjects.

**Hours per Week.**

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<tr>
<th>Class.</th>
<th>Field or Lab.</th>
<th>Credit.</th>
<th>Subjects.</th>
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<td>Engr. II c, Higher Surveying........... 3</td>
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<td>Engr. II b, Topography................. ..</td>
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<td>Engr. III a, Railway Curves............ 5</td>
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<td>Engr. III b, R. R. Location and Const...</td>
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<td><strong>FIRST TERM</strong></td>
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<td>Math. VI a, Differential Equations (Optional) 2</td>
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<td>Engr. V a, Technical Mechanics........... 3</td>
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<td>Engr. III c, Ry. Maintenance and Economics 5</td>
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<td>Engr. IX a, Roads and Pavements......... 3</td>
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<td>Engr. VIII, Hydraulics.................. 5</td>
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<td>Engr. VI b, Testing Materials (Cement) 1</td>
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<td>Engr. V b, Technical Mechanics........... 5</td>
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<td>Engr. V c, Strength of Materials........ 5</td>
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<td>Engr. IX b, Water Supply................ 5</td>
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<td>Engr. XII, Heating and Ventilating..... 3</td>
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<td>Engr. X a, Engines and Boilers.......... 2</td>
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<td>Engr. XIV a, Bridge Design I............. 2</td>
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<td>Engr. XIV b, Bridge Design II........... 2</td>
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<td>Engr. IX c, Sewerage.................... 3</td>
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<td>Engr. VIII a, Reinforced Concrete I..... 5</td>
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<td>Engr. XI, Masonry Construction.......... 3</td>
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<td>Engr. X b, Gas Power.................... 2</td>
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<td>Engr. XIV c, Structural Design........... 4</td>
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<td>Engr. XIII, Cost and Management Engr. 5</td>
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<td>Engr. XVI, Thesis....................... 10</td>
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</table>

A limited number of electives as approved by the Dean of Engineering may be substituted.

Upon completion of 248 term credit hours from above list the degree of Civil Engineer is conferred.
THE LAW SCHOOL

The Law School was instituted in 1879. It stands for sound learning, complete utilization of time, and minimum expense. It is strictly a professional school, and aims to train for the practice of law men and women who possess sufficient maturity, earnestness, and ability to engage in serious professional study.

Equipment—The School occupies a comfortable building, with well appointed recitation and library rooms, and offices for the instructors. A good working law library, which is being added to yearly, is maintained in the building, and its use is free to law students from 9 A. M. to 9 P. M. The general library of the University also is open to students of the Law School without additional charge.

The School Year—The School year 1919-1920 will open on Tuesday, September 23, 1919; and will close on Thursday, May 20, 1920. Class work will begin promptly on the opening day.

The Law School is in session throughout the Fall, Winter and Spring quarters but not, at present, during the Summer quarter. Each quarter is twelve weeks in length. School is held on Saturday mornings during the Fall quarter and on the first Saturday of each of the other quarters. An intermission of two school days occurs between quarters. There are no other vacations, and the only holidays are Thanksgiving day and Christmas day. A year at this school is therefore a year of uninterrupted study—a day’s instruction for nearly every working day spent in residence. Although the number of days and hours of class-room instruction is greater than in most other law schools, students are released for summer employment shortly after the middle of May.

Admission of Regular Students—The following persons are admitted to the first year without examination as candidates for the degree of Bachelor of Laws:

1. Graduates of standard colleges, upon production of their diplomas or certificates of graduation.

2. Applicants not less than eighteen years of age, upon production of certificates showing the successful completion in a commissioned four-year high school or preparatory school of at least fifteen units (the usual college entrance requirement, equivalent to four years of high school work).
A unit represents one year's study of a subject in a high school. The fifteen units may be made up from the following subjects, including not more than five units of foreign languages. The Roman numerals indicate the year of study in a subject.

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<td>Greek, Elementary</td>
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<td>French, Elementary, I, II</td>
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<td>Advanced, III, IV</td>
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<td>Spanish, Elementary, I, II</td>
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<td>Mediaeval and Modern European</td>
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<td>English</td>
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<tr>
<td>Commercial Law</td>
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</table>
Entrance Examinations—College entrance examinations in High School subjects are held on Thursday, Friday and Saturday immediately preceding the opening of the Fall quarter. Arrangements for taking these examinations should be made by correspondence before the applicant presents himself in person.

Admission of Special Students—Persons who cannot qualify as candidates for the degree but who are not less than twenty-one years of age and who produce evidence of such training and experience as should enable them to pursue with advantage the study of law may be admitted as special students by the consent of the faculty. Not to exceed ten special students are admitted to any class. A person who wishes to enter under this rule should make written application to the Dean, stating his age, education, experience, and occupation, and giving the names of three or more persons acquainted with his character, ability, and attainments. Such applicant should not present himself for registration without receiving assurance from the Dean that his application has been favorably considered. Special students may take the same work as regular students, and are entitled to certificates showing all subjects taken and the time spent in residence, but are not eligible for a degree.

Admission to Advanced Standing—Students who have attended another law school of high grade after becoming qualified to enter this school are admitted without examination to such standing as their certified credentials may entitle them. Reasonable substitution of subjects, in equivalent amounts, is permitted.

Examinations for advanced standing, for students who have done substantially the work but who for proper reasons lack formal credits therein, are given on Thursday, Friday, and Saturday immediately preceding the Fall quarter. Application for permission to take these examinations should be made in advance. Students who pass these examinations are given conditional standing until they have demonstrated their ability to do satisfactory work.

Registration—Students are expected to register in person on or before the first day of the Fall quarter, and will not be received if more than two weeks late, unless they have done sufficient work in law to enable them to proceed with the class.
Routine of Entrance—Payment of fees, and arrangements for board and room, should first be made at the University office in the Old College Building. Credentials and receipts for tuition should then be presented at the office of the Dean in the Law Building. If credentials are not approved, the money paid will promptly be refunded. In case of doubt as to the sufficiency of credentials, correspondence is invited before the applicant presents himself for admission. Newcomers are advised not to contract for rooms before consulting the University office.

COURSE OF STUDY

The course of study extends through three school years of thirty-six weeks each. It is carefully graded and includes the subjects most necessary in the practice of law and most commonly required by bar examiners. During the school year 1919-20 a few subjects will be given to the second and third year classes in combination.

FIRST YEAR

ELEMENTS OF LAW. Part of Fall quarter (M.-S.). Forty-five hours. Robinson's Elementary Law (1st ed.); Bowman's Lectures and Bowman's Questions and Exercises on Elementary Law; Woodruff's Introduction to the Study of Law; Pound's Introduction to Study of Law.

PRINCIPLES OF LIABILITY. Fall quarter (M.), Winter quarter (M., Tu.), Spring quarter (M.). Fifty hours. Beale's Cases on Legal Liability.

CONTRACTS. Fall quarter (M.-F.) and Winter quarter (W., Th., F.). Ninety-six hours. Huffcut and Woodruff's Cases on Contract (2d ed.); Anson's Law of Contract (Huffcut's 2nd ed.); Bowman's Lectures and Problems in Contract.

TORTS. Part of Fall quarter (Tu.-S.) and Winter quarter (W., Th., F.). Eighty hours. Ames and Smith's Cases or Torts (Pound's ed.).

PROPERTY. (Personal Property; General Introduction to Real Property; Rights in Another's Lands). Winter quarter (M., T.), and Spring quarter (T.-F.). Seventy-two hours. Warren's Cases on Property; Reeves' Real Property.
CRIMINAL LAW AND PROCEDURE. Part of Fall quarter and Winter quarter (W., Th., F.), Spring quarter (Th.-F.). Eighty hours. Beale’s Cases on Criminal Law (3d ed.); Beale’s Criminal Pleading and Practice.

CIVIL PROCEDURE AT COMMON LAW. Part of Fall quarter and Winter quarter (M., Tu.), Spring quarter (M., Tu., W.). Eighty hours. Sunderland’s Cases on Common Law Pleading; Stephen’s Pleading (Tyler’s ed.); Bowman’s Lectures and Problems in Contract.

BAILMENTS, CARRIERS, AND PUBLIC UTILITIES. Spring quarter (M.-F.). Sixty hours. Goddard’s Cases on Bailments and Carriers; Goddard’s Outlines of Bailments and Carriers; selected cases.

SECOND YEAR

EQUITY JURISPRUDENCE AND PROCEDURE. Fall and Winter quarters (M.-Th.). Ninety-six hours. Boke’s Cases on Equity; Rush’s Equity Pleading and Practice (2d ed.).


PERSONS. Part of Fall quarter (M.-F.). Thirty-five hours. Peck’s Persons and Domestic Relations.

PROPERTY (Titles: Acquisition of Real Property inter vivos and on death of former owner). Fall, Winter, and Spring quarters (M.-F.). One hundred eighty hours. Aigler’s Cases on Titles to Real Property; Costigan’s Cases on Wills, Descent, and Administration; Warvelle’s Abstracts of Title (3d ed.). Reeves’ Real Property and practical exercises.

AGENCY (Principal and Agent; Master and Servant). Part of Fall quarter and part of Winter quarter (M.-F.). Seventy hours. Huffcut’s Cases on Agency (2d ed.); Huffcut’s Agency (2d ed.); Peck’s Persons and Domestic Relations.

TRUSTS. (Taken with the third-year class in 1919-20.)


MOOT COURT. Spring quarter. Twenty-four hours.
PARTNERSHIP. Fall quarter (M.-Th.). *Forty-eight hours.* Gilmore's *Cases on Partnership.*

LEGAL BIBLIOGRAPHY. [Taken with the second-year class in 1919-20.]

CONSTITUTIONAL LAW. Fall quarter and part of Winter quarter (M.-F.). *Seventy-five hours.* Wambaugh's *Cases on Constitutional Law.*

EVIDENCE. Fall quarter and part of Winter quarter (M.-F.). *Seventy hours.* Wigmore's *Cases on Evidence* (2d ed.).

BILLS OF EXCHANGE AND PROMISSORY NOTES. Winter quarter (M.-Th.). *Forty-eight hours.* Bigelow's *Cases on Bills and Notes* (2d ed.); McMaster's *Commercial Paper.*

CODE PLEADING. [Omitted in 1919-20. To be given in 1920-21.]

DAMAGES. Part of Winter quarter (M.-F.). *Forty-five hours.* Beale's *Cases on Damages* (2d ed.).

CORPORATIONS. Part of Winter quarter and part of Spring quarter (M.-F.). *Sixty hours.* Warren's *Cases on Corporations* (2d ed.).

TRUSTS. Part of Winter quarter and Spring quarter (M.-F.). *Seventy-five hours.* Scott's *Cases on Trusts.*

PROPERTY (Future Interests; Illegal Conditions and Restraints). Spring quarter (M.-F.). *Sixty hours.* Kale's *Cases on Future Interests; Reeves' Real Property.*

TRIAL PRACTICE. Part of Spring quarter (M.-F.). *Fifty hours.* Sunderland's *Cases on Trial Practice.*

MOOT COURT. [Taken with the second-year class in 1919-20.]

Books—In addition to the books named in the program of study, a law dictionary is essential. Standard text-books on the various subjects and a set of Blackstone's Commentaries will be found useful. The statutes of the State where the student expects to practice can be used to advantage by second and third year students.
Object of Course—It is the design of the Law School to give such instruction in the principles of American law as will constitute the best preparation for the practice of the profession in any part of the country. The School aims to give due weight to both theory and practice, and to develop in its students both knowledge and power. It endeavors to teach legal principles in such a way that students will not only acquire an acquaintance with the actual rules of law, but will also gain a systematic training in legal modes of thinking and the solution of legal problems.

Method of Instruction—Beginning students are carefully grounded at the outset in the fundamental conceptions of the common law and are given some acquaintance with its history and evolution. Thereafter the instruction consists in the discussion of legal principles as disclosed in reported cases, supplemented by a considerable amount of practice work. This method is the result of much study of the needs and capabilities of students, and is designed to give a practical knowledge of legal principles and to develop the power of legal reasoning.

The practice work consists of exercises in finding authorities, drafting legal papers, passing upon abstracts of title, and practice in the two courts of the Law School—the Moot Court and the Circuit Court.

Procedure and Practice—To familiarize students with the practical side of the law, instruction in procedure and practice is given almost continuously throughout the course. Attention is therefore invited to the Procedure series, the Practice series, and the Practice courts. These have been placed so as to correlate with the substantive subjects and to proceed step by step with them.

The Procedure series embrace: (1) Criminal Procedure, presented in its natural connection with Criminal Law; (2) Civil Procedure at Common Law, a study of (a) the common law forms of action, designed to give students an apprehension of these as he encounters them in his substantive case books, and (b) common law pleading, the principles of which are the basis of all existing systems of procedure in the United States; (3) Equity Pleading, a study of the pleading and practice in courts of equity, with especial reference to the procedure in states which retain the separate practice, the equity rules in the Federal courts, and the elements which reappear in the codes; (4) Code Pleading, an examination of the main statutory provisions of the reformed
procedure and the doctrines developed by the courts, together with an account of its rise and progress in England and America and its influence in states which have not adopted it in its entirety; (5) Evidence, a study of the principles which govern the admission and rejection of evidence and the examination of witnesses.

The Practice series comprise: (1) Introduction to the Study of Law (a part of the course in Elements of Law), an elementary and practical explanation to beginning students of the methods of legal study and the sources and forms of law; (2) Legal Bibliography, a more advanced and critical study of the use of law books, together with practical exercises in looking up the law and preparing briefs; (3) Trial Practice, a discussion of problems of practice and tactics, and the principles which govern their solution; (4) Legal Ethics, a consideration of matters of professional conduct.

Two Practice Courts, accompanying the class work in procedure and practice, are conducted, presided over by members of the faculty. These are known as the Moot Court and the Circuit Court. Participation in these courts is required.

In the Moot Court issues of law supposedly reached by demurrer, stated in instructions, or presented by motion for a new trial are argued, one student appearing for each side. The judge of this court is an experienced practitioner. The questions involved are narrow and sufficiently close to be open to argument. Each student is expected to base his argument upon a practically exhaustive search of the authorities, thus making application of the methods which he has studied in finding and using authorities. The design of the court is to provide experience in the investigation and argumentation of questions which arise in actual practice. In order that each student may receive the greatest possible benefit, the class is divided into sections and each section meets twice a week for about twelve weeks. The work is graded so as to prepare the student for the second practice court and to familiarize him with the working methods of courts.

The Circuit Court is organized with a full staff of officers and is equipped with records and legal blanks such as are used in the regular courts. The presiding judge has had many years experience as a trial judge and as a justice of the Supreme Court of Indiana. Criminal prosecutions and civil actions are instituted, process is issued, returns are made, and default days, mo-
tion hours, continuances, and the time requirements for filing papers are observed. A record of proceedings is kept, and causes are brought to issue and tried with a view to the record on appeal. The court meets five hours a week for two court terms of four weeks each. During the first term attention is given to the framing of pleadings, the service of writs, and the joining of issues. During the second term causes at issue are brought on for hearing, juries are empaneled, witnesses are examined and cross-examined, and causes are conducted through the various stages to judgment. The work to most intents is that of an actual court. After each sitting such suggestion and criticism of the work done are given as seem helpful.

Instruction in other departments—The instruction given in the other departments of the University is open to law students without additional charge except for laboratory courses and private lessons in oratory, music, etc. Those who wish to avail themselves of these opportunities may do so upon obtaining the written consent of the Dean. A student may not ordinarily take more than one subject in addition to law.

Public Speaking—The School of Public Speaking offers many subjects which are advantageous to law students. Two of these are designed particularly for members of the Law School. The first is Public Address, which deals with the practical forms of speechmaking, extempore and impromptu oratory, the building of short addresses and the like. The second is Finished Debate, in which a text book is used and weekly practice in debate is given. Law students are not confined to these, however, but may take any work for which they may be prepared.

Liberal Arts—The College of Liberal Arts offers the usual subjects of a standard college, many of which are allied to law and may be studied or reviewed to advantage in connection with law. Literature and English are particularly recommended.

Commercial subjects—In the Commercial Department and the Department of Phonography and Typewriting, law students may take courses in Bookkeeping, Business Practice, Shorthand, and Typewriting, a knowledge of which is often useful in the practice of law. Students may often improve their penmanship to advantage.

Examinations and Standings—Regular examinations in writing are held upon the completion of the various law subjects.
Examinations, recitations, and attendance are taken into consideration in estimating grades. Standing is indicated by the letters A, B, C, D, and E, representing Excellent, Good, Fair, Condition, and Failure, respectively.

Conditions not exceeding one fifth of the work of a year, if balanced by an equal number of hours of A or B work in other subjects of the year, do not impair regular standing. All conditions not so balanced, and all conditions in excess of one-fifth of the work of a year but not in excess of one-third of the work, may be removed by passing deficiency examinations before entering the next higher year. If not so removed, the work must be repeated in class and the regular examinations passed. Deficiency examinations for the removal of conditions are held on Thursday, Friday, and Saturday next preceding the opening of the Fall quarter.

A failure can be made good only by repeating the subject in class and passing the regular examination. A student who has received conditions or failure in more than one third of the work of a year is classified again in the same year and repeats the subjects in which he is deficient, taking only such work in the advanced class as the faculty may deem advisable.

Graduation—The degree of Bachelor of Laws is conferred upon regular students who have satisfactorily completed the course of study. Higher degrees in law are not given.

Students admitted to advanced standing must complete at least one year's work in this school in order to receive the degree.

A regular student who is not entitled to graduate with his class may receive his degree upon making up his deficiencies within two years thereafter.

Combined Courses in Arts and Law—Students who have completed three years (nine quarters) of work in the College of Liberal Arts, or equivalent work in any other standard college, may count the first year of the law course toward both the degree in arts and the degree in law. Such students will be granted the degree of Bachelor of Arts upon the completion of one year in law, and the degree of Bachelor of Laws upon the completion of the law course. By electing the combined courses students may obtain the two degrees in six school years; and by taking nine consecutive
quarters of college work, may further reduce this time to five and one-fourth calendar years.

Admission to the Bar—Graduates of the Law School who are residents of Indiana and not less than twenty-one years of age may be admitted upon motion and without examination to the Circuit Court of the county, the Supreme Court of the State, and the District Court of the United States for the district of Indiana. Members of the faculty cannot move the admission of students who do not graduate.

Pre-legal Instruction—The various departments of the University offer special advantages to students who desire to strengthen their preparation before undertaking the study of law.

High school graduates who cannot give the time necessary for a college degree may enter the College of Liberal Arts and take courses in History, Political Economy, Sociology, English, Latin, Modern Languages, Science, Mathematics, Parliamentary Law, and many other subjects which are valuable to the law student and the lawyer. Although not required for entrance to the Law School, a year or more of college work before beginning law is strongly advised.

Persons who are not high school graduates may make up their deficiencies in high school subjects in the University High School, and in common branches in the Preparatory Department. Members of these schools are more mature than pupils in ordinary high schools and common schools. Students may enter at the beginning of any quarter, take such subjects as they may need, and proceed as rapidly as their capabilities permit.

Most states require a high school course or its equivalent as a preliminary to the study of law. The University High School provides effective means of complying with these requirements. By writing to the Dean of the Law School, any applicant may obtain information as to the requirements of the State where he expects to practice.

More detailed information concerning the University High School and the Preparatory Department is given elsewhere in this catalog.

Expenses—The tuition fee is seventy-five dollars a year, payable in advance and not refunded when a student leaves before the end of the school year. An athletic fee of one dollar is payable at the beginning of each quarter.
No matriculation fee is charged. For each deficiency and college entrance examination there is a charge of three dollars; for each subject repeated, when taken in addition to regular work, five dollars. The diploma fee is seven and one-half dollars. Official certificates of admission to the State and Federal courts cost five dollars. All fees are payable at the University office.

The cost of the books used in class, new, is about forty-five dollars a year. A good law dictionary costs four dollars; the best, nineteen and one-half dollars. Used books may be obtained for less, and books may be sold when the subjects are completed, greatly reducing the expense. By sharing books with a classmate, even this expense may be cut in half. There is great advantage, however, in having one's own books and in retaining them for reference in later subjects and after graduation.

Information as to general expenses may be found under the head EXPENSES in this catalog.

Self Help—There are many opportunities for employment in the University, in business establishments, and in private homes, whereby students may defray a part of their expenses. Both the General Office of the University and the University Y. M. C. A. gladly aid students in finding positions. But since the ordinary expense is unusually low, law students should, if possible, give all their time to their studies. A student's time, ordinarily, is worth more to himself than to anyone else.

Regulations—The Law School comes within the same general regulations concerning discipline and other matters as the other departments.

For further information, inquiries may be addressed to

THE LAW SCHOOL, VALPARAISO UNIVERSITY

Valparaiso, Indiana
THE SCHOOL OF CHEMISTRY AND PHARMACY

The School of Pharmacy graduated its first class in 1893. The School prepares for the duties of the pharmacist, and, at the same time, provides an excellent preparation for the study of medicine and dentistry, or for many other scientific and professional vocations. It also prepares the student for analytical work in both chemical and pharmaceutical lines of research. Every branch of pharmacy is taught.

Equipment—The School of Pharmacy is located in one of the newest and best equipped buildings of the University. This building is a three-story structure, 60 x 120 feet. The walls are constructed of Bedford stone and pressed brick with lining throughout of builders’ terra-cotta. This building is provided with all modern conveniences; is well lighted and ventilated. The total floor space is 21,600 square feet. In all, there are eight separate laboratories in which the different kinds of laboratory work in pharmacy are done. Each laboratory is supplied with special modern apparatus. These laboratories have a capacity for twelve hundred students daily. The facilities and equipment of the School of Pharmacy are entirely adequate.

Courses of Instruction—Four courses are offered in Pharmacy and two in Chemistry. The elective course leads to a special preparation for State Board Examination. Three other courses lead to the Degrees of Graduate in Pharmacy or Ph. G., Pharmaceutical Chemist or Ph. C., and the Bachelor of Science in Pharmacy or the B. S. in Phar. To these have been added two courses, leading to the Degrees of Bachelor of Science in Chemistry and Bachelor of Science in Chemical Engineering.

Elective Course—Anyone may enter the School of Pharmacy at any time and select such work as he is fitted for. This affords opportunity for review for those who have been out of touch with the school work for some time. Because of the fact that the selection of subjects is made with regard to the needs of the individual, it makes a course preparatory to board examinations. Non-registered pharmacists may avail themselves of this special course for reviewing those particular subjects in which they feel themselves least qualified. No college credit is allowed unless candidate meets entrance requirements.
THE GRADUATE IN PHARMACY COURSE comprises two years of nine months each. Each year is divided into three quarters of twelve weeks each, with an interim of three months between Junior and Senior years.

This is the most popular course in the School of Pharmacy because it is designed to prepare the student for the duties of the retail pharmacist.

This course is not planned especially for the purpose of fitting students for examination, but those who complete it should be able to pass any state board, and be qualified to fill responsible positions.

The curriculum is so arranged that the subjects pursued will prepare the student for all the studies to be taken up in the succeeding quarters, thus preserving logical sequence in the order in which the different subjects in the course in Pharmacy are presented. It is also arranged in conformity to the outline given in the Pharmaceutical Syllabus. However, in every instance there is offered and required a greater number of hours than indicated in the outline given by the National Committee. To a very limited extent, students may elect certain branches in other departments of the University in place of taking additional work in Pharmacy, without extra charge, with the exception of private lessons in music, etc.

THE PHARMACEUTICAL CHEMIST COURSE comprises two years of forty-eight weeks each, or ninety-six weeks. Since the demand for pharmacists of broad professional attainments is increasing with each passing year, this course has been arranged to furnish a more thorough training than could possibly be given in the Ph. G. course of seventy-two weeks. Graduates of this course are exceptionally well prepared for all kinds of pharmaceutical and general chemical work. They are especially qualified for the different phases of analytical chemistry which will enable them to fill positions in pharmaceutical laboratories, food laboratories, and in various manufacturing establishments. On the other hand they have obtained either, one of the best foundations possible for a study of medicine, or the educational qualifications necessary to make them sought for as teachers of chemistry.

THE BACHELOR OF SCIENCE IN PHARMACY COURSE—This course comprises three years of four quarters each of one hundred forty-four weeks. It is designed to add scholastic training to the work presented in pharmacy proper and is arranged to include the Ph. C. course, having the same entrance requirements, namely, four years’ high school or equivalent attainment.
Graduates from this course are exceptionally well trained to fill the position of pharmacist, chemist or teacher, the last year of the course being particularly adapted to the needs of the teacher of science. It will be observed that the regular Ph. C. course gives ample training in chemistry and botany. To this is added either zoology or geology. In case physics is desired it may be made the elective. To this there is also added a full year’s work (four quarters) in psychology and education, a second year’s work in modern language, and three-quarters in higher English.

In addition to being a training course for teachers of science it constitutes a very practical foundation for the profession of dentistry or medicine.

Bachelor of Science in Chemistry Course—This course comprises three years of four quarters each, or one hundred and forty-four weeks. It is designed to more fully equip a student for the various chemical pursuits and at the same time add scholastic training through the various electives allowed, so that a place in the social and political world may be creditably maintained.

Bachelor of Science in Chemical Engineering Course—This course covers a period of three years of four quarters each or one hundred and forty-four weeks, and is designed to prepare one for the highest positions in any of the various branches of chemical industry. The course covers a sufficient range of work to make it an excellent foundation for Master’s or Doctor’s degree later. Considerable stress is placed upon Mathematics, Modern Language and Mechanical Drawing. Entrance requirement—four years’ High School or its equivalent.

The Faculty—The Faculty consists of men of scientific attainment as well as having a wide range of experience in practical pharmacy. A number of members of the Faculty are either interested in a retail pharmacy establishment or have been at some former time. This assures those who attend this school of pharmacy that the practical side of their profession will not be overlooked.

The University is usually able to obtain situations for all graduates who do not find positions without its assistance.

Advantages—The School of Pharmacy, being located in a small city, is free from the influences which detract from a close attention to study upon the part of the student. Thus more can be accomplished in the same time than is accomplished where the stu-
dent's time is divided between school work and outside employ­ments and diversions.

It is not considered desirable for students to find employment in stores for any part of their time while pursuing this course.

The practical side of pharmacy is in no way underrated by the School of Pharmacy, but it is to the student's best interest to give his undivided time to his studies while taking the course. Certainly not more than one-half as much can be learned in a school of pharmacy where the time is divided between school work and store practice.

It must be understood that here instruction is given five days in the week throughout the entire school year.

The living expenses in a small city are much lower than in a large city. This makes it possible to take the complete course at much less expense than would be incurred when taken in institutions differently situated. Students may enter at the beginning of any quarter, but it is earnestly recommended that in so far as possible entrance be made at the beginning of the school year in September.

Requirements for Admission—The educational requirements for admission to the Graduate in Pharmacy Course is a certificate of having completed at least two years of a recognized high school course, or the equivalent determined by examination.

For the Pharmaceutical Chemist Course and the Bachelor of Science in Pharmacy Course a certificate of graduation from a recognized high school offering a four years' course is required or the equivalent as shown by properly certified credentials.

For the Elective Course only those may enter as candidates for a degree who have had a Ph. G. course in this or some other recognized school of pharmacy.

For purposes of review work not leading to a degree, anyone may enter.

For the Degrees of Bachelor of Science in Chemistry and Bachelor of Science in Chemical Engineering a certificate of graduation from a recognized High School offering a four years' course or its equivalent in properly certified credentials is required.

All applicants for admission to any of the courses must be of good moral character, and at least seventeen years of age.

Credentials must be presented at the time of entrance.

Requirements for Graduation—Candidates for graduation must have met the admission requirements, and must have completed all the subjects designated in the course of study with a mark of
at least 80%, and with a record of attendance not falling below 80%. Examinations are given at the end of each twelve weeks upon the subjects covered during that quarter. There are also final examinations in Chemistry, Materia Medica, and Pharmacy which are obligatory, 80% being the minimum passing mark.

Credits will be accepted from other institutions whose admission requirements, and character of work comply with the standards of this University. Anyone who receives a degree in any of the courses in pharmacy must have attended the full senior year in this University.

The degree of Graduate in Pharmacy will be given to those who complete the seventy-two weeks’ course.

The degree of Pharmaceutical Chemist will be given to those completing the ninety-six weeks’ course, and the degree of Bachelor of Science in Pharmacy to those completing the one hundred forty-four weeks’ course.

The degrees of Bachelor of Science in Chemistry and Bachelor of Science in Chemical Engineering will be conferred upon those who have completed the prescribed courses, each covering a period of one hundred and forty-four weeks.

Fees and Expenses—The University fees are payable each quarter in advance. Those who pay for the entire year are given a liberal reduction. The expenses in detail are as follows:

General tuition, each quarter, twelve weeks.......................... $ 20.00
Tuition for two years, Ph. G Course, six quarters paid in advance ........................................ 110.00
Athletic fee, per term.................................................. 1.00

LABORATORY FEES

PHARMACY GRADUATE—Ph. G.

<table>
<thead>
<tr>
<th>Subject</th>
<th>Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing Pharmacy</td>
<td>$ 7.00</td>
</tr>
<tr>
<td>Chemistry (a)</td>
<td>3.00</td>
</tr>
<tr>
<td>Chemistry (b)</td>
<td>3.00</td>
</tr>
<tr>
<td>Botany, Pharmacy (a)</td>
<td>1.50</td>
</tr>
<tr>
<td>Botany, Pharmacy (b)</td>
<td>1.50</td>
</tr>
<tr>
<td>Physics (a)</td>
<td>2.50</td>
</tr>
<tr>
<td>Physics (b)</td>
<td>2.50</td>
</tr>
<tr>
<td>Pharmaceutical Chemistry</td>
<td>7.00</td>
</tr>
<tr>
<td>Hist. Pharmacognosy</td>
<td>1.00</td>
</tr>
<tr>
<td>Qualitative Analysis (a)</td>
<td>4.00</td>
</tr>
<tr>
<td>Organic Chemistry (a)</td>
<td>3.00</td>
</tr>
</tbody>
</table>
Quantitative Analysis ................................................. 7.00
Alkaloid Analysis ...................................................... 3.50
Dispensing ................................................................. 7.00
Organic Chemistry (b) .............................................. 4.00
Physiology ................................................................. 1.00

ADDITIONAL COURSES FOR Ph. C.

Tuition, two years, Ph. C. Course, eight quarters paid in
advance ........................................................................ $145.00
Bacteriology ............................................................... 3.50
Water Analysis ............................................................ 2.50
Microscopy ................................................................. 2.00
Advanced Quantitative Analysis ................................. 6.00
Industrial Chemistry (b) ............................................ 4.00
Food and Drug Analysis ............................................ 12.00
Organic Chemistry (c) .............................................. 7.50

ADDITIONAL COURSE FOR B. S.

Qualitative Analysis (b) .............................................. $ 4.00
Alloys ........................................................................ 3.00
Gas and Fuels ........................................................... 3.50
Assay of Ores ............................................................ 4.00
Industrial Chemistry (a) ............................................ 7.00
Mineralogy ................................................................. 1.00

In case a student takes advantage of the liberal reduction men­
tioned above and later decides to withdraw from the University,
all fees are returned excepting for the preceding and current
quarters. It is to be understood that the regular quarter rates
are charged from the time in school including that quarter in which
he withdraws. Thus no one is obliged to continue work in this
Institution if he is dissatisfied.

Students who enter upon any course in Pharmacy have the
privilege of taking other studies in the University without ad­
tional cost. There are always many students each year who
avail themselves of this opportunity to improve in some special
branch.

For further information, address

SCHOOL OF PHARMACY, VALPARAISO UNIVERSITY,
Valparaiso, Indiana.
SCHOOL OF DENTISTRY

A very important factor in the successful Teaching of Dentistry is to be able to supply an abundance of clinical material. This can be done in a large city.

The Dental Department of the University is the Chicago College of Dental Surgery, one of the oldest and best established Dental Schools in Chicago. The high standard of excellence for which this College is known throughout the world will be maintained, and it will continue to add to its curriculum and equipment as the Science and Art of Dental Surgery advances.

Buildings and Equipment—The School of Dentistry occupies its own building at the corner of Harrison and Wood Streets in Chicago. The building is a five story and basement structure of Bedford stone, pressed brick and terra cotta. Its location is ideal. It stands in the center of the great medical and hospital district of Chicago. Students are thus, from the very beginning of their course, brought into close contact with both Dentistry and Medicine, and the atmosphere of student life permeates the entire locality.

There are in this building two amphitheatres for general teaching purposes and a clinical amphitheatre for teaching oral surgery. There are also numerous laboratories for teaching the science and art of dentistry and its related subjects.

A library is maintained by the School as a separate and distinct feature of the Institution. It is free to all of the students. It contains the leading medical and dental journals besides valuable texts and reference books upon the various subjects of Dentistry, and is in charge of an experienced librarian.

The regular opening of each college session is the first Tuesday of each calendar year.

Students must enter this School at this time, or not later than ten days thereafter. The complete course consists at present of four years of thirty-six weeks each. The curriculum is arranged as follows:
FIRST YEAR
Anatomy
Chemistry
Histology
Physiology
Dental Anatomy and Operative
Technic
Prosthetic Technic
Applied Physics
English

SECOND YEAR
Anatomy
Chemistry, Organic and Physiologic
Physiology and Hygiene
Histology, Dental
Bacteriology
Prosthetic Dentistry
Operative Dentistry
Metallurgy

THIRD YEAR
Pathology
Therapeutics and Materia Medica
Lectures and Practical Operative Dentistry
Lectures and Practical Prosthetic Dentistry
Bacteriology
Orthodontia
Oral Prophylaxis
Crown and Bridge Work
Radiography
Physical Diagnosis and Anesthesia

FOURTH YEAR
Dental Pathology
Therapeutics and Materia Medica
Lectures and Practical Operative Dentistry
Lectures and Practical Prosthetic Dentistry
Oral Surgery
Orthodontia
Oral Hygiene and Prophylaxis
Surgical Clinic
Dental History and Economics
Dental Ethics and Jurisprudence
Physical Diagnosis and Anesthesia

Faculty—Among the faculty of the School of Dentistry are many men of national and international reputation as practitioners and dental educators. Some have achieved fame as authors of text books of the important branches of dentistry, while others have achieved the distinction of having excelled in some particular branch of dental surgery or dental art.

The graduates of this School are found in almost every city throughout the world. The Institution has always taken pride in the fact that its alumni has in it so many prominent members that are now holding responsible positions in the profession.

Requirements for Admission—The School of Dentistry is one of the colleges which is recognized by the National Association of Dental College Faculties and adheres faithfully to the code of rules of this association concerning requirements for admission into Dental colleges.
At present the minimum requirement is that the applicant has completed the regular four years' course in a commissioned high school or has done equivalent work. Those who do not have a diploma or documentary evidence of having completed a high school course may take an examination upon the subjects embraced in a high school curriculum.

Those who may be in doubt about their preliminary qualifications should write, stating the extent of the preparatory work completed. The University will then be able to inform you if further preparation is necessary.

Requirements for Graduation—The candidate for graduation must be twenty-one years of age and must possess a good moral character.

Students are required to attend before graduation four full courses of lectures, the last of which must be in this institution. Every candidate must present for inspection practical operations performed by himself in each department and give full evidence of his skill and ability in treating patients who may be submitted to him.

He must also stand an examination satisfactory to the Faculty in all the branches taught. The report of the attendance and practice of students in the infirmary will be considered and will have a material bearing upon the final standing and credits.

Fees and Expenses—The School fees have, by agreement with most of the recognized Colleges of Dentistry, been fixed at the uniform price of $175.00 for the general tuition, including all laboratory fees.

The registration fee for each year has been fixed at $5.00. Thus the fees in the School of Dentistry are no higher than in any other Dental College.

The fees need not necessarily all be paid in advance. Living expenses in Chicago may be reduced considerably by taking advantage of boarding in clubs.

Those who desire to economize can find positions which they may fill without taking time from college work and thus earn sufficient to pay for board and room. Those desiring some assistance to defray a part or all of their living expenses should confer with the college clerk upon arriving at the Institution.

For further information address,

SCHOOL OF DENTISTRY, VALPARAISO UNIVERSITY,
Valparaiso, Indiana.
# THE PRE-MEDICAL WORK

The School of Medicine was established in 1901. Since that time and until the year 1917-1918, the University maintained a medical department in Chicago, the Chicago College of Medicine and Surgery. The first two years of the Medical course might always be taken in Valparaiso and the last two years in Chicago, or all four years in Chicago, just as the student might elect.

During the year 1917-1918 the freshman and sophomore years in Medicine were taught in Valparaiso as in former years, but the University had no direct connection with any medical school. During the school year 1919-1920, and until further notice, the University will not give any Medical work, but it will continue to give all of its Pre-Medical courses.

The University now offers a regular two year Pre-Medical course. Each year consists of three quarters of nine months, and is equivalent to thirty semester hours. "By a semester hour is meant the work of the class, meeting once a week for eighteen weeks."

The requirements for entrance are the completion of a four years' high school course or an equivalent attainment.

All of the courses in science consist of lectures and quizzes and of appropriate laboratory work. They are the courses given in the College of Arts and Sciences and are courses in which the student is taught how to do the things which will prepare him for his medical studies.

Below is given the two year Pre-Medical College course, as outlined by the Council of the American Medical Association:

<table>
<thead>
<tr>
<th>Required Courses:</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adv. Zoology, Embryology or Comp. Anatomy</td>
<td>3—6</td>
</tr>
<tr>
<td>Chemistry</td>
<td>12</td>
</tr>
<tr>
<td>Physics</td>
<td>3</td>
</tr>
<tr>
<td>Biology</td>
<td>8</td>
</tr>
<tr>
<td>English Composition and Literature</td>
<td>6</td>
</tr>
<tr>
<td>French or German</td>
<td>6—12</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Courses Strongly Urged:</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adv. Algebra, Solid Geom. and Trig.</td>
<td>3—6</td>
</tr>
<tr>
<td>Additional Courses in Chemistry</td>
<td>3—6</td>
</tr>
<tr>
<td>Additional Mod. Language, French or German</td>
<td>6—12</td>
</tr>
<tr>
<td>Psychology</td>
<td>3—6</td>
</tr>
</tbody>
</table>
Suggested Elective Courses:
- English (Additional), Economics, History, Sociology, Political Science, Logic, Mathematics, Latin, Greek, Drawing.

This two-year course, according to quarters as given by the University, is as follows:

**FIRST YEAR**

<table>
<thead>
<tr>
<th>FIRST QUARTER</th>
<th>SECOND QUARTER</th>
<th>THIRD QUARTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>French</td>
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**SECOND YEAR**

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<th>THIRD QUARTER</th>
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<td>Psychology</td>
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<td>Political Economy</td>
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</table>

*Trigonometry is highly advisable before taking Physics.

If a student presents acceptable college credits for any of these subjects, he may choose other college work as electives. All changes must be passed upon by the Faculty Committee.