Calvin College
An Institution of the Christian Reformed Church

YEARBOOK
1948 - 1949

Announcements for 1949-1950

GRAND RAPIDS, MICHIGAN
HOW TO ADDRESS CORRESPONDENCE

All correspondence should be sent to Calvin College, Grand Rapids, Michigan. In sending correspondence, the specific addresses given below should be used:

Regarding admission and graduation requirements, address the Dean.

Regarding records, transcripts, requests for literature, address the Registrar.

Regarding boarding or rooming places for girls, work for girl students, address the Dean of Women.

Regarding boarding or rooming places for men, address the Committee on Dormitory and Boarding Places.

Regarding teaching positions after graduation, address the Placement Bureau.

Regarding alumni matters, address the Secretary of the Alumni Association.

All checks should be made payable and correspondence concerning them sent to the Treasurer, Calvin College.
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CALENDAR

1949

General Session 1949 – 1950

Beginning of first semester and enrolment .................................................. September 7
Opening exercises ......................................................................................... September 14
Re-examinations ......................................................................................... September 12-13
Thanksgiving recess ...................................................................................... November 24-27
Christmas vacation begins ............................................................................ December 21, 12:00 Noon

1950

Christmas vacation ends ................................................................. January 5, 7:50 A. M.
Final examinations ................................................................................. January 16
First semester closes .............................................................................. January 24
Registration for the second semester ..................................................... January 25-28
Meeting of Board of Trustees ................................................................. In February
Spring vacation begins .............................................................................. March 25, 12:00 Noon
Spring vacation ends ................................................................................ April 4, 7:00 A. M.
Re-examinations ......................................................................................... April 7-8
Final examinations ..................................................................................... May 22-31
Commencement ......................................................................................... June 2

Summer Session

Enrolment ........................................................................................................ June 15, 9:00 A. M.
Classes begin ............................................................................................... June 19
Independence Day recess ........................................................................... July 4
Summer session closes ................................................................................ July 28

General Session 1950 – 1951

Beginning of first semester and enrolment .................................................. September 6
Opening exercises ......................................................................................... September 13
Re-examinations ......................................................................................... September 11, 12

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The REV. Richard J. Frens ................................................................. Secretary
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1949 - 1950

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Catherine Van Oppen, A.M., Dean of Women
Lambert J. Flescher, Ph.D., Director of Teacher Placement
Mrs. Carol Van Duren, Willemina Twight, Assistants in the Library

OFFICE AND BOOKSTORE
Caroline Veen, Secretary to the President
Leen Bosshoek, Office Secretary
Coralie Kooijman, Adeline Veen, Marilyn Zwier, Office Clerks
Gertie De Boer, Clerk, Treasurer's Office
Ruth Imanse, Alumni Secretary and Bookstore Manager
Mrs. Wilma Westra, Assistant in the Bookstore
Tillie Roeters, Secretary, Field Representative

HEALTH
William H. Vander Ploeg, M.D., 1209 Kalamazoo Ave., S.E., 5-3862

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Henry Kegelstra, Custodian
Mr. and Mrs. M. Schreurs, Dietitians, Calvin Dormitory
Mrs. Anna DeFol, Housemother, Calvin Dormitory
Miss Jessie Rhyna, Housemother, Calvin Hall
Mrs. Cora Hazenbrook, Housemother, 1342 Franklin St., S.E.
Mrs. A. Prince, Housemother, 1336 Franklin St., S.E.

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RICHARD DROST, Ph. D.
Professor of History
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Telephone 9684

Telephone 5-1407

Telephone 3-8438

Telephone 5-6752

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Telephone 5-0951

Telephone 9-6574

Telephone 5-8823

Telephone GL2-7136

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Telephone 5-2438

Telephone 6MA 3894

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Telephone 5-5971

Telephone 5-8489

Telephone GL2-1126

Telephone 5-2041

Telephone 3-7902

Telephone GL2-4273

Telephone 3-4406

Telephone 3-6995

Telephone GL2-7218

Telephone 3-6744

Telephone 3-8627

Telephone 3-8926

Telephone GL4-6002

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Telephone 99-6502

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Telephone GL 2-4889

Ruth Van De Kerp, A. M.
Instructor in English
512 Sigbee St., S.E.
Telephone GL 4-1215

John Van Den Berg, A. M.
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Assistant in Drawing
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Telephone GL 2-1093

Helen Van Laar, A. B.
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Telephone GL 6-5083

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Assistant in Dutch
Leonard P. Brink, A. B.
Assistant in Latin
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Assistant in Biology
Charlotte Fennema Otten, A. B.
Assistant in English
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Kathryn Schneider Herman, A. B.
Assistant in English
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Telephone GL 4-3384

Committees of the Faculty
1949-1950

Athletics—De Vries, Balt, Tuls, Timmerman, Buter, Bouma.
Boarding Places and Dormitory—Wassink, Muyerkens, Drost, Slingerland, Van Til, Daling, Van Opnyen, Bengelink.
Bookstore—Monsma, Karsten, Drost, Wyngaardens.
Discipline—Flokstra, H. Stob, Speelhof, Van Opnyen, Monsma, De Beer.

Library—Zylstra, Strikwerda, Dirksen, Jellisma, Radius.
Placement Bureau—Flokstra, Van Zyl, Jaarsma, De Boer.
Publications—Radius, Timmerman, Fridsma, De Koster.
Radio—De Koster, Brit, De Jonge, Boorsma.
Recreation—Monsma, Buter, Bruinsma, Slingerland, Vande Kieft.
Religious and Social Activities—Meeter, Van Andel, Swets, Strikwerda, Brit, Jaarsma, Slingerland, Van Opnyen.
Scholarship and Guidance—Dekker, Ryskamp, Radius, R. Stob, Van Opnyen, Meeter, Van Til.

Divisional and Departmental Organization

FOR the purpose of integrating the work of the various departments within a division and the work of the division with the broader educational objectives of the school as a whole, the various courses and departments are grouped under four large divisions as follows:

1. Division of Bible, Philosophy, Education and Psychology,
   (a) Department of Bible
   (b) Department of Philosophy
   (c) Department of Education
   (d) Department of Physical Culture
   (e) Department of Psychology

2. Division of Languages, Literatures and Arts,
   (a) Department of Classical Languages
   (b) Department of English
   (c) Department of Modern Languages
   (d) Department of Art
   (e) Department of Music
   (f) Department of Speech

3. Division of Natural Science and Mathematics,
   (a) Department of Biology
   (b) Department of Chemistry
   (c) Department of Mathematics
   (d) Department of Physics and Engineering

4. Division of Social Science,
   (a) Department of Economics and Sociology
   (b) Department of History and Political Science
Aim

Calvin College is an institution that exists under the auspices of the Christian Reformed Church in America. Its origin can be traced back to 1876 when the church organized a school for the training of ministers of the gospel, which at first devoted four years to literary and two years to theological study. This school gradually grew into a fully accredited liberal arts college and into a fully accredited theological seminary.

According to the constitution all instruction given must be in harmony with Reformed truth. The various branches of study, therefore, are considered from the standpoint of faith and in the light of Calvinism as a life and world view. The aim of the college is to give young people an education that is Christian, in the larger and deeper sense that all the class work, all the students' intellectual, emotional, and imaginative activities shall be permeated with the spirit and teaching of Christianity.

It is, furthermore, the aim of Calvin College to maintain standards of sound scholarship. In recognition of this aim the college is fully accredited by the North Central Association of Colleges and Secondary Schools and by the State Education Department of the State of New York, and is a member of the Association of American Colleges.

Admission

All applications for admission should be made to the Dean at least a month before the date of opening. Since all applications must be made on the forms provided by the college, the applicant should send these early. The forms referred to include:

(a) Personal application
(b) Transcript of high school record
(c) Recommendation of pastor
(d) Health record

One who intends to study for the ministry must present a recommendation from his consistory endorsing him for the ministry.

Those seeking admission at the beginning of the second semester should apply, if possible, a month before the semester opens.

Students whose residences are too far distant from Grand Rapids to permit them to attend church services at home are expected to transfer their membership to local churches of their own choice.

Freshman Standing

Students will be admitted to Freshman standing by plan A, B, or C.

Plan A.

1. The applicant for admission must submit a certificate from an accredited school.

2. Amount of work. This certificate must testify to the satisfactory completion of fifteen units of work. By a unit of work is meant the equivalent of five recitations a week for thirty-six weeks in one branch of study.

3. Prescribed work. The fifteen units required for admission must include four sequences, two major sequences and two minor sequences, selected from the five groups listed below. A major sequence consists of a minimum of three units, a minor sequence of a minimum of two units.

I. English

A major sequence of at least 3 units is required

II. One major sequence (3 units) and two minor sequences (2 units each) are to be chosen from Groups A, B, C, D. Two sequences may be chosen from Group A but only one from Groups B, C, D.
A. FOREIGN LANGUAGE GROUP
A sequence consists of work in a single language, not in the combination of two languages. The foreign languages acceptable are: Greek, Latin, French, German, Spanish, and Dutch.

B. MATHEMATICS-PHYSICS GROUP
A minor sequence in this group must include 1 unit of algebra and 1 unit of plane geometry. A major sequence is formed by adding to this minor sequence 1 or more units from the following:

- Adv. algebra...⅔ or 1 unit
- Trigonometry...⅔ unit
- Solid geometry...⅔ unit
- Physics...1 unit 0, 2, 3

C. NATURAL SCIENCE GROUP
Physics...1 unit
Chemistry...1 unit
Botany...1 unit
- Zoology...1 unit
- Biology (botany, ⅔ unit and zoology, ⅔ unit) 0, 2, 3

D. SOCIAL STUDIES GROUP
Ancient history, 1 unit
European history, 1, ⅔, or 2 units
American history, ⅔ or 1 unit
Economics, ⅔ unit

Minimum requirements from above groups: 10
The remaining units required to make up the necessary 15 units required are elective from among the subjects listed above and such others as are usually counted toward graduation by the accredited school. The Dean, however, has the right to reject such credits as the institution considers undesirable. One unit of foreign language may be offered under this group 6

Total: 16

Physics may not be counted in both of the Groups B and C as part of a sequence.
If biology is counted, neither botany nor zoology may be counted.
English history may be included under European history. World history may be included when accompanied by a second full year of history.
Half units in the social studies are acceptable as part of a sequence only if taken in the eleventh or twelfth grade.
Students who plan to meet the Bachelor of Arts degree requirements would be wise not to omit more than one of the above grades in selecting sequences and should, if possible, complete one language sequence in high school.

APPLICANTS FOR PRE-PROFESSIONAL COURSES:
Pre-medical students should present, if possible, 2 units of high school German and 2 units of high school Latin for admission.
Pre-medical, pre-dental, pre-engineering, medical technology, and 3-year nursing students should present, if possible, 1⅔ units of algebra, 1 unit of geometry, 1 unit of high school chemistry, and 1 unit of high school physics.
Pre-law students should present, if possible, 2 units of high school Latin for admission.

Plan B. Admission by Examination. Applicants who are unable to furnish approved certificates, and who are therefore unable to meet the first requirement of Plan A, may be admitted if by passing examinations satisfactorily they can meet the other requirements of Plan A. Further particulars regarding such examinations may be obtained from the Dean.

Plan C. Provisional Admission. An applicant for admission whether on Plan A or B, who meets all the requirements save that he fails by not more than one unit to satisfy the requirements either as to prescribed work or as to distribution of work, may be admitted provisionally. Such deficiency must, however, be removed during the first year of residence.

Admission of War Veterans
Men and women who have been in the Armed Services and who plan to enter college after their discharge should have a transcript of their high school record and previous college record mailed to Calvin College at their earliest convenience. Veterans who have spent time in the Army Specialized Training Program or the Navy College Training Program and who wish to return to Calvin should request the Registrar of the institution at which they received this training to forward a transcript of the credits earned to Calvin College. Advanced credit will be given for all such courses as can be applied toward degree requirements.

Calvin College has been approved by the Government as an institution of higher education for the training of discharged service men. Further information or counsel will be furnished gladly upon request.

Advanced Standing
Advanced Standing (in other words, college credit) is granted in the following cases:
1. When the applicant submits from an accredited college, junior college, or normal school, a certificate of honorable dismissal and a transcript of the studies pursued. However, no applicant is allowed more than sixteen hours of credit for each semester of work taken at another recognized institution.
2. When the applicant, at the time of entrance, passes satisfactory examinations in the subjects in which he desires advanced standing.
3. When the applicant submits from an accredited high school, in excess of sixteen units for admission, credits in subjects which
are also taught in college; provided that for at least one semester he successfully continues work in these subjects at Calvin College. The limit of such college credit allowance is six hours.

4. When the applicant submits credits from an accredited high school for work done after graduation, provided these credits are in courses taught in both high school and college. No more than six hours will be allowed for a full semester's work.

Admission to advanced standing does not excuse the student from meeting the specified requirements for graduation from Calvin College. For example, students entering as sophomores in the General College course must for graduation earn ninety-four honor points, those entering as juniors sixty-two and one-half honor points, those entering as seniors thirty-one honor points.

All advanced standing is subject to revision at the end of the first year of residence.

Students expecting advanced standing for work done at other institutions should bring full credentials, and should at the time of entrance consult the Dean.

Advanced credit up to nine semester hours will be allowed for courses taken by correspondence at accredited colleges or universities.

**Unclassified Students**

Applicants for admission who are not candidates for graduation may be enrolled for such studies as their preparation qualifies them to pursue with profit. Such applicants should consult the Dean regarding arrangements.

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**STUDENT EXPENSES**

**Tuition and Other Fees**

All tuition and other fees are charged by the semester, and must be paid to the College Treasurer during the first five days from the time of registration for the semester.

**Regular Tuition Fee**

The regular tuition is $125.00 a semester. For students who are members of a Christian Reformed Church and thus contribute indirectly to the support of Calvin College, the tuition shall be determined on the basis of the zone in which the student resides. The U.S. Official Postal Guide shall determine the zone of residence.

**Zones 1, 2, and 3** (extending up to 300 miles from Grand Rapids)

For students residing within these zones the tuition is $90.00 a semester. For two students from one family residing in the region defined the tuition for each is $75.00 a semester.

**Zones 4 and 5** (from 300 to 1,000 miles from Grand Rapids)

For students residing within these zones the tuition is $85.00 a semester. For two students from one family residing in the region defined the tuition for each is $82.50 a semester.

**Zones 6, 7, and 8** (over 1,000 miles from Grand Rapids)

For students residing within these zones the tuition is $40.00 a semester. This is the minimum tuition.

**Canadian Students**

For students residing in Canada, members of the Christian Reformed Church, the tuition shall be calculated on the same mileage basis as given above.

In calculating the tuition, residence is determined as follows:

Residence of minors is that of their parents or legal guardians.

Residence of students whose parents are foreign missionaries of the Christian Reformed Church shall be considered Zone 8.

Residence of a married man is considered that of his established home during the semester preceding the date of registration.

Residence of all others is considered local.
Organization Fee
All students pay an organization fee of three and one-half dollars each semester for the benefit of all-school activities.

Excess Hours
Students taking in excess of seventeen semester hours will be charged an extra fee of eight dollars for each such excess semester hour.

Unclassified Student Fees
Unclassified students pay at the rate of eight dollars for each semester hour.

Laboratory Fee
An extra fee is charged in some laboratory courses to cover cost of material, wear and tear of instruments, and the like. Amount of such laboratory fee is indicated in the catalog in the description of the specific course.

Practice Fee
A practice fee of eight dollars a semester is paid by students who register for practice teaching.

Graduation Fee
The general graduation fee, including diploma, is six dollars.

Late Registration
A fee of two dollars will be charged for late registration.

Special Examination
A fee of two dollars is charged for all special examinations.

Summer Session
The tuition fee is eight dollars per semester hour of credit.

Individual Lessons
Charges for individual instruction in voice, piano, organ and orchestral or band instruments are at the rate of thirty dollars per semester (fifteen lessons). The fee for use of the organ for practice is ten dollars per semester.

Locker Fees
All students are charged a locker fee of fifty cents per year.

Refundment
No refunds will be made to any student expelled, suspended, or requested to withdraw on account of conduct or poor scholarship. If a student withdraws voluntarily and in good standing within two weeks after the first day of enrollment, tuition and all fees except $5.00 to cover registration, will be refunded; if before the end of eight weeks, one-half of the total fees (tuition and miscellaneous fees) will be returned; after eight weeks, no part will be refunded.

Living Expenses
Living Expenses, including board, room rent, fuel, light, laundry, and text books are from $500.00 up per year.

Housing

Lodging and Board for Men

Men students are housed in private homes in the vicinity of Calvin College. The college keeps on file a list of rooms for men. However, it has been found desirable for students to discuss financial arrangements and other matters with their prospective landlords, the college students are advised to select their rooms during August or immediately after arrival in Grand Rapids. The average cost for room is about $5.00 per week per student for the facilities furnished. Food can be secured in some of these homes, in the neighboring eating places, or at the dormitory. Board rates for next year in the dormitory are set at $160 per semester subject to change with the variations of food costs. Application for rooms should be made to the Committee on Housing.

Lodging and Board for Women

The college dormitory for women on Giddings Avenue provides living accommodations for about 78 students. Board and room fees total approximately $230.00 per semester. Application for admission should be made with the Dean of Women, Calvin College. Since new applications are given preference according to time of filing, the applicant is advised to correspond with the Dean of Women as early as possible.

Three semi-cooperative homes in the southeast section of the city are maintained by the college and provide women students with congenial living accommodations. These homes are under the direct control of the faculty, and each is under the personal supervision of a housemother. Each student works out part of her room and board, net expenses amounting to about $190.00 per semester. Application for admission to these houses should be made with the Dean of Women.

Women living in college residence halls must furnish their own towels, sheets, pillow cases, and blankets.
Applicants accepted for admission to residence halls are expected to retain possession of their rooms for one semester, and may not move to other living quarters without permission.

Admission to residence halls is regarded by the college authorities not as a right, but as a privilege which may be withheld or withdrawn from any student whose presence there may not be considered desirable.

For those students who are unable to procure admission to a college residence hall, or who wish to live in a private home, the college keeps on file a list of rooming places, and will do all in its power to obtain for the student the kind of place desired. A city such as Grand Rapids offers excellent opportunity for self-support, especially for young women who desire to work for their room and board. Since it has been found most desirable for students to discuss financial arrangements and other matters with their prospective landladies, the college will not make advance assignments to private homes. Upon arrival in Grand Rapids the student should report to the Dean of Women.

The college cafeteria is located in the dormitory. In addition to the dormitory residents, a limited number of additional students may be served.

All rates are subject to change.

STUDENT AID

Scholarships

UNIVERSITY OF MICHIGAN STATE COLLEGE SCHOLARSHIP—The following is taken from the catalogue of the University of Michigan:

"By action of the Board of Regents, each of the faculties of the accredited colleges of the state of Michigan is authorized to nominate annually to the administrative officers of the Graduate School some member of the graduating class, or some one of their graduates of not more than four years' standing, as a suitable candidate for a State College Scholarship. In each case an alternate may also be nominated.

Students wishing to make application for this scholarship should consult the Registrar of Calvin College not later than February 1.

RHODES SCHOLARSHIP—Male students in the junior and senior years may apply for nomination to the Cecil Rhodes Scholarship.

A RHODES SCHOLARSHIP is tenable for three years at the University of Oxford. The stipend is at present fixed at 400 pounds a year. However, a Rhodes scholar should be prepared to supplement his stipend by at least 50 pounds a year from his own resources. More specific information may be obtained from the Calvin College Registrar.

FRESHMAN SCHOLARSHIP—Each year Calvin College offers a scholarship, consisting of free tuition for the Freshman year, to a member of the graduating class in each of the accredited Christian High Schools of America supported by our constituency, who is recommended thereto by the faculty of that school, in accordance with the following conditions:

1. (a) The Faculty of Calvin College will select and appoint the winner.

(b) If, in the opinion of the Faculty of Calvin College, no suitable candidate is available, no award shall be made in that particular year.

(c) The Faculty always reserves the right, for reasons of its own, to reject any candidate who may be recommended for this scholarship.

2. The recommendation shall be on the basis of scholarship, Christian character, personality, and promise of growth.

3. The recipient should expect to complete the course at Calvin.

4. The recipient must have fulfilled regular college admission requirements.
5. The recipient should have been in residence at the high school from which he graduates for at least his junior and senior years.

Alumni Tuition Scholarship.—The Alumni Association annually offers a tuition scholarship to that member of the Sophomore class who in his Freshman year has shown himself to be deserving. The conditions are as follows:

1. The recommendation shall be on the basis of scholarship, Christian character, personality, and promise of growth.
2. The recipient should expect to complete his college work at Calvin College.
3. If in the opinion of the faculty no suitable candidate is available, no award shall be made in that particular year.

Prizes and Awards

Alumni Prize.—The Alumni Association offers an annual prize of $15.00 based upon scholarship. For the year 1948-49 the award was made for special excellence in the department of Dutch.

The Beets Calvinism Prize.—The late Dr. and Mrs. Henry Beets presented the College with $500.00, the income of which is to constitute a prize for the best essay or term paper on Calvinism, in any of its bearings, written each year by Calvin College students, and to be awarded at the discretion of the professor holding the chair of Calvinism, in consultation with the President of Calvin College, provided that if during any given year the professor named above does not consider the essays or papers submitted of sufficient merit to deserve the prize, the interest of such a year, or years, be added to the principal.

Broedman Oratorical Prizes.—Through the generosity of Dr. G. J. Broedman of Grand Rapids, Michigan, gold, silver, and bronze medals are given annually to the winners of the first, second, and third prizes, respectively, in a men's oratorical contest. The first prize winner represents Calvin in the state oratorical contest of the Michigan Intercollegiate Speech League held in March of each year.

Thespian Prize.—The Thespians, dramatic club of Calvin College, offers three prizes in oratory for women, of $15.00, $10.00 and $5.00.

The first prize winner represents Calvin in the state oratorical contest of the Michigan Intercollegiate Speech League held in March of each year.

The Rinck Memorial Prize.—A fund of $500.00 has been subscribed by former students and friends of the late William Rinck, Professor of Mathematics at Calvin College, 1905 to 1920, the income of which is to be devoted to a prize in mathematics. The prize is awarded annually to the student who has done the best work in college algebra, analytical geometry, and calculus, provided the grade in each of these courses is at least "B."

Musicians' Guild Scholarship—Freshmen who register at Calvin College in September, 1949, will be eligible for a $50 scholarship offered by the Musicians' Guild. Instrumentalists, excluding pianists and organists, will be the only persons eligible for this scholarship. Try-outs will be conducted in September, 1949, after further announcements have been made. The winner will receive the $50 as a cash award. Persons interested may correspond with Professor Swets or see him at registration next September.

Anna Bruinisma Prize in Music—The interest of $750, given by Mr. H. J. Bruinisma of Grand Rapids in honor of his deceased wife, one of Calvin's alumnae, is to be used in the department of music, two-thirds of it serving as first, and the remaining third as second prize.

Oratorio Society Tuition Scholarship in Music—Four college tuition scholarships are presented by the Calvin College Oratorio Society. These scholarships are limited to instrumentalists who can meet College admission requirements, and have records of superior achievement in high school instrumental activities. Recipients will be expected to participate in the scheduled rehearsals and performances of the Calvin College Band, Orchestra, and Chamber Music Ensembles.

Vander Heide Voice Scholarship—One scholarship is offered annually by Mr. and Mrs. Jan Vander Heide. The stipend covers the applied music fee for private lessons in Voice. Applications will be judged on the basis of the student's evidence of talent and his financial need. Applicants must have met college admission requirements and be full time students in good standing.

Loans

The Dutch Mother Fund to the amount of $2,500 was contributed by one of Calvin's grateful alumni to help students who major in subjects essential to engineering, provided the applicants meet requirements in respect to character and scholarship and promise to repay the loan after graduation as soon as possible. Application for a loan from this fund must be made at the office.
Placement Bureau

The Placement Bureau was established some years ago for the purpose of assisting prospective teachers, graduates of Calvin College, in securing teaching positions. This bureau keeps on file a list both of vacancies in the teaching forces in our Christian Schools throughout the country, and of graduates who desire to teach. All correspondence for the Bureau should be addressed to: Placement Bureau, Calvin College. There is no charge for these services.

ADMINISTRATION

Religious Culture

In accord with its specific aim and with its belief that this aim cannot be attained unless the religious side of the student's life receives due attention, the College makes religious instruction, either doctrinal or historical, compulsory for all classes of students. Ten hours of such religious instruction must be taken during the four college years in accordance with a set program.

Furthermore, all students are required to attend the devotional exercises held in the auditorium on days assigned at 9:30 A.M.

It is understood, too, that on the Sabbath every student worships regularly at some church of his own selection.

As often as is deemed necessary during the course of the college year faculty counselors have consultations with each student, the aim being to offer, in addition to academic counseling, such help in the moral and spiritual life as the student may need.

The Hekman Memorial Library

The library contains more than 35,500 volumes. About 2,000 books are added yearly. All students and former students of Calvin College and Seminary are entitled to the full use of the library.

Physical Education

All Freshman and Sophomore men students are required to participate in a physical fitness program three times per week. Classes in required physical education for men are given during all periods, including the seventh, on Monday, Wednesday, and Friday. All Freshman and Sophomore girls are required to take physical education. Girl's classes are on Tuesday and Thursday from the first period through the seventh. No academic credit is given for this work. Exemptions from this requirement are permitted only upon written request of the school physician or upon the written consent of the Dean of the college.

Attendance

The school year of thirty-six weeks is divided into two semesters of eighteen weeks each. A summer session of six or eight weeks is offered each summer.
Two vacations are given during the year: a vacation of two weeks at the Christmas holidays, and a spring vacation of one week. Students are required to remain on duty until the last school exercise preceding a vacation is completed, and to be present at the hour of opening, after a vacation.

**Grades and Honor Points**

**Report Cards** are sent out at the end of each semester. In grading the work of students a literal system equivalent in honor points is used; as follows:

<table>
<thead>
<tr>
<th>MARK</th>
<th>INTERPRETATION</th>
<th>HONOR POINTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Exceptional</td>
<td>8</td>
</tr>
<tr>
<td>B</td>
<td>Good or very good</td>
<td>6</td>
</tr>
<tr>
<td>C</td>
<td>Graduation average</td>
<td>4</td>
</tr>
<tr>
<td>D</td>
<td>Unsatisfactory; just passable</td>
<td>2</td>
</tr>
<tr>
<td>E</td>
<td>Condition, which may be removed by re-examination.</td>
<td>Minus 1</td>
</tr>
<tr>
<td>F</td>
<td>Failure. No re-examination.</td>
<td>Minus 2</td>
</tr>
<tr>
<td>Inc.</td>
<td>Work not completed</td>
<td>0</td>
</tr>
<tr>
<td>W</td>
<td>Work extending over two semesters.</td>
<td></td>
</tr>
</tbody>
</table>

The mark E can be removed only by a re-examination passed with a grade of C or better. Such re-examination must be taken at the appointed time within the next semester. Responsibility for arranging for re-examination at the appointed time, for securing from the instructor concerned a signed removal slip without which no change is made in the Registrar’s entries, and for presenting such removal slip to the Registrar, lies with the student. Should the student fail to remove his condition, the mark E is automatically graded F.

For a course marked F a student can receive credit only by satisfactorily repeating the whole course.

If a student is absent from a final examination the mark “No exam.” will be given. This mark must be removed by taking the examination at the time scheduled for re-examinations.

The mark Inc. signifies the absence of a certain amount of reading to be completed, or of papers to be handed in. This mark is given only in cases of prolonged illness and in emergencies, i.e., in circumstances which may reasonably prevent a student from completing his work on time, such as practice teaching, inability to obtain necessary books, etc. To remove a mark Inc. the student must secure credit for the course by satisfying the instructor within one year. Responsibility for securing such credit and for obtaining from the instructor concerned a signed removal slip without which no change is made in the Registrar’s entries, and for presenting such removal slip to the Registrar, lies with the student. Should a student fail to remove the mark Inc. within the allotted time, the mark automatically becomes F.

When the record of a student suggests doubt as to his fitness to do more advanced work in a particular department, his case is determined jointly by the Dean and the instructors concerned.

**Examinations and Written Work**

Regular examinations, in writing, are held at the close of each semester. In addition, tests and written recitations are given frequently during the year, with or without previous notice, at the option of the instructor.

Supplementary examinations for admission and for the removal of conditions are held on the first Monday and Tuesday of the school year and on the first Friday and Saturday after the spring vacation.

Term papers and book reports (not including weekly or bi-weekly assignments) shall be in three weeks before the final examinations.

Any student found guilty of dishonesty in any examination or test or required written work of any character, will begraded F in the course, besides being subject to discipline.

**Dropping and Changing of Courses**

After a student has enrolled for a study, he may not drop it without written permission of the Dean. Such permission will be granted only in exceptional cases after November 1 the first semester, and after March 15 the second semester.

A student may not change his course of study without permission of the Dean.

**Class Visitors**

Under certain conditions, students may attend classes as visitors or auditors. Permission to do so must be obtained from the office.

**Dismissal**

Dismissal to Calvin College is a privilege not a right. This privilege may be withdrawn from any student whose presence is not regarded as desirable by the college authorities.
REQUIREMENTS FOR GRADUATION

THE COLLEGE graduates or certifies students from the following courses: General College, pre-Seminary, Education, pre-Medical, pre-Law, pre-Engineering, pre-Business Administration, pre-Agriculture, pre-Nursing, and pre-Medical Technology.

Every student (except those few who register as "Unclassified") must, in addition to the required physical education, fulfill the requirements of the course from which he elects to graduate. The requirements in each course are listed below.

By an hour of credit is meant in each case the equivalent of one recitation a week in one subject for one semester. The number of hours of credit given for a particular subject is indicated in the description of that subject to be found under Description of Courses.

The subjects are listed as follows: Art, Bible, Biology, Chemistry, Dutch, Economics, Education, Engineering, English, French, German, Greek, History, Latin, Mathematics, Music, Philosophy, Physical Education, Physics, Political Science, Psychology, Public Speaking, and Sociology.

No diploma will be granted for less than one year's resident work, which ordinarily must be the year immediately preceding graduation.

When no full course is completed, a statement is given of the studies which the student has successfully completed.

General College

1. AMOUNT OF WORK. The student must complete 125 hours of work.

2. GRADE OF WORK. The student must obtain a total of 125 honor points; in other words, must obtain an average grade of C.

3. PRESCRIBED WORK. Of the 125 hours required, the following are prescribed:

<table>
<thead>
<tr>
<th>Subject</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bible 101 or 105, 102 or 106, 201, 202, 301</td>
<td>10 hours</td>
</tr>
<tr>
<td>English 103, 104</td>
<td>8 hours</td>
</tr>
<tr>
<td>History</td>
<td>6 hours</td>
</tr>
<tr>
<td>Philosophy (not including Psychology or Logic)</td>
<td>6 hours</td>
</tr>
<tr>
<td>Natural Science</td>
<td>10 hours</td>
</tr>
<tr>
<td>Foreign Language</td>
<td>(see following explanation)</td>
</tr>
</tbody>
</table>

Foreign Language Requirements

a. A student who has had no foreign language in high school will be required to take two years (four semesters) of one foreign language and one year (two semesters) of a second foreign language in college. One of these must be an ancient foreign language and the other a modern foreign language.

b. Students who have earned credit for foreign language in high school may have this credit applied toward the fulfillment of the college language requirement. For the purpose of evaluating high school credit in a foreign language one year of foreign language in high school will be regarded as the equivalent of one semester in college.

c. The student is advised to make his choice of foreign languages, particularly his choice of a modern foreign language, in consultation with the Dean.

4. DISTRIBUTION OF WORK. MAJORS AND MINORS. To insure proper distribution of the student's work, the subjects have been divided into three groups; as follows:

Group I. Art, Dutch, English, French, German, Greek, Latin, Music, Public Speaking

Group II. Biology, Chemistry, Mathematics, Physics, Psychology

Group III. Bible, Economics and Sociology, Education, History, Philosophy, Political Science

The student must so distribute the total 125 hours (including, therefore, those prescribed) among the three groups that he complies with the following restrictions:

a. The student must choose one of these three groups as his major and another group as his minor.

b. In his major group the student must choose two subjects in one of which he completes a sequence of at least twenty-four hours and in the other of which he completes a sequence of at least twelve hours (or fifteen hours if he desires a Teachers' Certificate). The total number of hours required in the major group is, therefore, thirty-six.

c. In his minor group the student must choose one subject in which he completes a sequence of twelve hours. Besides, he must take an additional six hours within his minor group. The total number of hours required in the minor group is, therefore, eighteen.

d. Should a student choose Group II as his major or his minor group, and should he further choose Psychology as a sequence
in this group, nine hours of Psychology and three hours of Logic will be accepted as a twelve-hour sequence.

c. At least one-half of the work taken in residence beyond the sophomore year must be in courses not open to freshmen.

5. DEGREE. On satisfactory completion of this course, the student will receive the degree of bachelor of arts. If he has met all the requirements of this course and has completed 60 or more hours in Group II he may elect to receive the degree of bachelor of science instead of bachelor of arts.

6. STATE TEACHERS' PROVISIONAL CERTIFICATE. To be eligible for recommendation for a State Teachers' Provisional Certificate the student must on graduation meet the Michigan State Department of Education requirements for either the Elementary or the Secondary Provisional Certificate. The minimum subject requirements stipulated by the Michigan State Department of Education are: Psychology 201-202; Education 203, or 306, or 309; 301, or 314, or 315, or 317; a methods course and Education 343 or 344, a total of at least 20 semester hours of Education.

Prospective high school teachers must arrange their programs so as to complete a major of 24 hours and two minors of 15 hours each. (See 2A under Education, p. 34.)

Prospective elementary school teachers must arrange their programs so as to complete either a major and two minor sequences, or four minor sequences. (See 3A and B under Education, p. 35.)

Pre-Seminary

(See note regarding Pre-Seminary entrance requirements under Plan A, page 16 Note.)

1. AMOUNT OF WORK. The student must complete 125 hours of work.

2. GRADE OF WORK. The student must obtain a total of 125 honor points; in other words, he must receive an average grade of C. To receive, in addition, the faculty's recommendation for admission to Calvin Seminary, the student must receive one and one-half times as many honor points as hours of credit.

3. PRESCRIBED WORK. The following 118 hours of work are prescribed:

<table>
<thead>
<tr>
<th>Courses</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bible 201, 203, 301, 302</td>
<td>8</td>
</tr>
<tr>
<td>Biology 210, 206</td>
<td>4</td>
</tr>
<tr>
<td>Dutch Language</td>
<td>20</td>
</tr>
<tr>
<td>Dutch History 236</td>
<td>3</td>
</tr>
<tr>
<td>Economics 201, 202</td>
<td>6</td>
</tr>
<tr>
<td>Education 201</td>
<td>2</td>
</tr>
<tr>
<td>English incl. 101, 102</td>
<td>12</td>
</tr>
<tr>
<td>Greek 101, 103, 201, 203</td>
<td>12</td>
</tr>
<tr>
<td>History 101, 102</td>
<td>6</td>
</tr>
<tr>
<td>Intro. to Inorganic Science</td>
<td>6</td>
</tr>
<tr>
<td>Latin 201, 202, or 207</td>
<td>4</td>
</tr>
<tr>
<td>Philosophy 204, 301, 307</td>
<td>9</td>
</tr>
<tr>
<td>Psychology 201</td>
<td>3</td>
</tr>
<tr>
<td>Phil. 202 (Logic)</td>
<td>3</td>
</tr>
<tr>
<td>Spanish 101, 104, 206</td>
<td>3</td>
</tr>
<tr>
<td>Sociology 203</td>
<td>3</td>
</tr>
<tr>
<td>Sociology 203</td>
<td>3</td>
</tr>
</tbody>
</table>

Schedule for the year 1949-50

This schedule has been arranged for students who enter without any deficiencies and plan to take the full four year course.

**Freshman Year**

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
<th>Second Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dutch 101</td>
<td>4</td>
<td>Dutch 102</td>
<td>4</td>
</tr>
<tr>
<td>English 103</td>
<td>3</td>
<td>English 104</td>
<td>3</td>
</tr>
<tr>
<td>History 101</td>
<td>3</td>
<td>History 102</td>
<td>3</td>
</tr>
<tr>
<td>Latin 201 or 307</td>
<td>3</td>
<td>Latin 202 or 308</td>
<td>3</td>
</tr>
<tr>
<td>Public Speaking 103</td>
<td>2</td>
<td>Public Speaking 104</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>15</td>
<td></td>
<td>16</td>
</tr>
</tbody>
</table>

**Sophomore Year**

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
<th>Second Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Book 201</td>
<td>2</td>
<td>Bible 202</td>
<td>2</td>
</tr>
<tr>
<td>Dutch 205</td>
<td>3</td>
<td>Biology 201</td>
<td>3</td>
</tr>
<tr>
<td>Greek 104</td>
<td>3</td>
<td>Greek 102</td>
<td>3</td>
</tr>
<tr>
<td>Psychology 201</td>
<td>3</td>
<td>Psychology 202</td>
<td>3</td>
</tr>
<tr>
<td>Sociology 203</td>
<td>3</td>
<td>Philosophy 202</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>15</td>
<td></td>
<td>14</td>
</tr>
</tbody>
</table>

**Junior Year**

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
<th>Second Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dutch 205</td>
<td>3</td>
<td>Biology 206</td>
<td>3</td>
</tr>
<tr>
<td>Education 201</td>
<td>3</td>
<td>Dutch 205</td>
<td>3</td>
</tr>
<tr>
<td>English 207 (or other)</td>
<td>3</td>
<td>Greek 202</td>
<td>3</td>
</tr>
<tr>
<td>(English elective)</td>
<td></td>
<td>Greek 201</td>
<td>3</td>
</tr>
<tr>
<td>Public Speaking 206</td>
<td>2</td>
<td>Philosophy 204</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
<td>English continued</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>17</td>
<td></td>
<td>17</td>
</tr>
</tbody>
</table>

**Senior Year**

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
<th>Second Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bible 201</td>
<td>2</td>
<td>Bible 202</td>
<td>2</td>
</tr>
<tr>
<td>Economics 201</td>
<td>3</td>
<td>Economics 202</td>
<td>3</td>
</tr>
<tr>
<td>Greek 315</td>
<td>3</td>
<td>Greek 214</td>
<td>3</td>
</tr>
<tr>
<td>Philosophy 301</td>
<td>3</td>
<td>Philosophy 302</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
<td>Intro. to Inorganic Science</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>16</td>
<td></td>
<td>16</td>
</tr>
</tbody>
</table>

If Dutch 305 and 306 are taken in the Senior year, Economics 201 and 202 should be taken in the Junior year.

To meet the language requirements for this course the student is required to present two units of high school German and two units of high school Latin. If these languages were not taken in high school the student must make up the deficiency in college.
Education

Completion of the four year course in Education leads to the A.B. degree and a Michigan State Teacher's Certificate. Careful planning will insure the completion of both Calvin and Michigan requirements.

1. Amount and Grade of Work. One hundred and twenty-five hours of work must be completed with 125 honor points. This means the maintenance of a C average or better. An average of C- or better is required of all students entering the course in Directed Teaching. This C- applies to all work taken in the college after February 1, 1949.

2. Course Requirements for Prospective High School Teachers: (Grades 7-12.)

A. A major field of 24 hours and two minors of at least 15 hours for either high school or elementary school positions.

Majors and minors may be chosen from the following subjects:

Chemistry  History  Philosophy  Economics  History  Physical Education
Economics  Polish  Science  English  Latin  Sociology  French  Mathematics  Science  Biology
German  Music  Art

B. Subject requirements:

(1) Bible 101-2 or 105-6, 201-2, 301........................................ 10 hours
(2) English 108-4 .......................................................... 6 hours
(3) History ................................................................. 6 hours
(4) Natural Science .......................................................... 4 hours
(5) Foreign language ......................................................... 4 semesters of one foreign language

Students who have earned credit for foreign language in high school may have this credit applied toward the fulfillment of the college language requirement, if the same language is continued.

For the purpose of evaluating high school credit in a foreign language, one year of foreign language in high school will be regarded as the equivalent of one semester in college. The student is advised to make his choice of a foreign language in consultation with the Dean.

(6) Education courses .................................................. 20 hours

(a) Psychology 201 and 202
(b) One course from Education 203, 305, 306, or 309
(c) Education 301 or 314
(d) One methods course from Education 307, 310, 324, 326, 328, 340, 360.................. 2 or 5 hours
(e) Speech 108 or 104
(f) Education 347: Observation
(g) Education 344: Directed Teaching
(h) Prerequisites for Education 344, Directed Teaching:

(a) Grade of work equivalent to C-
(b) Principles of Education (301 or 314)
(c) Educational Psychology (202)
(d) Methods course in major field

3. Course Requirements for Prospective Elementary Teachers: (Kindergarten through Grade 8.)

A. Prospective elementary teachers may select majors and minors from the list under 2A, p. 34. Two of these must be in subjects or subject fields taught in the elementary grades.

B. Prospective elementary teachers are advised preferably to select four minors as follows:

(1) English studies: Credits earned in English literature, History, Speech, Reading, Story-Telling count towards this minor.
(2) Art studies: Music, Fine Arts, Industrial Arts, Drawing.
(3) Social studies: Economics, Geography, History, Political Science, Sociology, Ethics.
(4) Science studies: Biology, Psychology, Physics, Chemistry, Mental Hygiene.

C. Subject requirements:

(1) Bible 101-2 or 105-6, 201-2, 301........................................ 10 hours
(2) English 108-4 .......................................................... 6 hours
(3) History ................................................................. 6 hours
(4) Natural Science .......................................................... 4 hours
(5) Foreign language ......................................................... 4 semesters of one foreign language

Students who have earned credit for foreign language in high school may have this credit applied toward the fulfillment of the college language requirement, if the same language is continued.

For the purpose of evaluating high school credit in a foreign language, one year of foreign language in high school will be regarded as the equivalent of one semester in college. The student is advised to make his choice of a foreign language in consultation with the Dean.

(6) Education courses .................................................. 20 hours

(a) Psychology 201 and 302
(b) One course from Education 203, 305, 306 or 309
(c) Education 301 or 314
(d) One methods course from Education 307, 310, 324, 326, 328, 340, 360.................. 2 or 5 hours
(e) Speech 108 or 104
(f) Education 347: Observation
(g) Education 344: Directed Teaching
(h) In addition to these subjects prospective elementary teachers are urged to include in their courses:

1) Art 227 or 228 (no credit) and Art 301.................. 3 hours
2) Geography 205 or 206........................................ 3 hours
3) Education 221, 226, and 224.................................. 3 hours
4) Speech 108 or 104............................................... 2 hours

Prerequisites for Education 344, Directed Teaching:

(a) Grade of work equivalent to C-
(b) Principles of Education (301 or 314)
(c) Educational Psychology (202)
(d) Methods course:

1) For teacher of grades K – 3: Educ. 322
2) For teacher of grades 4 – 8: Educ. 329
4. **The State Board of Education in Michigan grants Provisional Certificates to graduates who have met all the requirements of this course. These certificates are valid for five years and may be converted into Permanent Certificates, provided:**

a. The applicants have taught three years successfully.

b. They have earned ten additional semester hours of credit.

**IMPORTANT DIRECTIONS TO HOLDERS OF LIMITED CERTIFICATES BASED ON THE MICHIGAN TEACHERS' CERTIFICATION CODE**

CAUTION: No person may be employed to teach in any school district unless he is legally qualified by holding a valid certificate. In order that the holder of any limited certificate may retain without interruption his status as a legally qualified teacher, he must make application for renewal to the State Board of Education between April 1 and September 30 of the year the certificate expires; if the candidate on the expiration of the certificate does not arrange for renewal as here stated, he will forfeit his status as a legally qualified teacher, and therefore will not be permitted to teach. He will, however, remain eligible to make application for renewal until June 30 of the year following expiration of his certificate after which date renewal privileges are canceled.

A. To the holder of a State Limited Certificate or of the State Limited Renewal Certificate.

1. To the holder of a State Limited Certificate may be issued (five times) a State Limited Renewal Certificate provided the candidate shall have met the following conditions:

   a. Subsequent to the date of issue of the last certificate held, the candidate must have acquired 10 semester hours of credit, of an average grade of "C" or better, earned in an institution or accepted by an institution approved by the State Board of Education.

   These credits must be applicable toward the requirements of the curriculum prescribed for the State Provisional Certificate eventually desired. Not less than 5 semester hours must be earned in residence; the remainder may be earned in extension study but of this not to exceed 3 semester hours may be correspondence credit.

   b. In order to assure that the credits earned toward renewal will apply on the State Provisional Certificate curriculum in the institution where the candidate intends to qualify eventually for that certificate, the candidate should arrange in advance in each case to have his course selections approved by that institution. Also all credits wherever earned should be submitted to that institution for evaluation and by it transmitted to the State Board of Education with recommendations.

B. The above statement was approved by the State Board of Education.

**Pre-Medical and Pre-Dental**

(See note regarding pre-Medical entrance requirements under Plan A, page 16 Note.)

1. **Amount of Work.** The student must complete 94 hours of work.

2. **Grade of Work.** The student must obtain a total of 94 honor points; in other words, must obtain an average grade of C; except that to obtain faculty recommendation for admission to a class A medical school he must in the three years of residence obtain a total of 156 honor points, representing an average of B-

3. **Prescribed Work.** The following courses are prescribed:

   **Freshman Year**

   **First Semester**
   - Bible 101 or 105: 2 hours
   - Biology 109: 3 hours
   - Chemistry 103: 4 hours
   - English 108: 3 hours
   - History 101 or 206: 3 hours

   **Second Semester**
   - Biology 110: 3 hours
   - Chemistry 104: 4 hours
   - English 109: 3 hours
   - Mathematics 104: 3 hours
   - History 102 or 206: 3 hours

   **Total:** 18 hours

   **Sophomore Year**

   **First Semester**
   - Biology 201: 4 hours
   - Biology 202: 2 hours
   - Chemistry 201: 4 hours
   - French or German: 4 hours
   - Physics 201: 4 hours

   **Second Semester**
   - Biology 208: 3 hours
   - Chemistry 202 or elective: 4 hours
   - French or German: 3 hours
   - Physics 202: 4 hours

   **Total:** 18 hours

   **Junior Year**

   **First Semester**
   - Biology 201: 2 hours
   - Biology 207: 2 hours
   - Biology 311: 2 hours
   - Chemistry 301: 4 hours
   - Psychology 201: 3 hours

   **Second Semester**
   - Biology 208: 2 hours
   - Biology 312: 3 hours
   - Chemistry 302: 3 hours
   - English or elective: 3 hours
   - Psychology 312 or elective: 3 hours

   **Total:** 17 hours

Pre-Medical students are strongly advised to take a full college course.

Trigonometry presupposes one and one-half units of Algebra.

If the student has had French or German in high school, the number of hours prescribed in the College may be reduced by four hours for each of the first two units of work. But one year of either French or German must be taken in college.

Since modern language requirements for admission into medical schools vary widely, medical students are advised to consult the office in respect to them.

Bible 301 can, at the option of the student, be accredited as philosophy on a transfer of credits.

4. **Distribution of Electives.** The number of hours of electives will vary according to the nature of the student's high school preparation in French or German. For their electives students should choose such subjects as are required for admission to the medical school which they expect eventually to attend.
5. **Diploma.** On satisfactory completion of this course the student will receive a three-year diploma.

6. **Degree.** On satisfactorily completing this course with a record of not less than 125 honor points received in the required ninety-four hours, the student is eligible for the degree of bachelor of science on the combined curriculum plan in letters and medicine. He will receive this degree after one year of successful work in a recognized medical school.

A two-year pre-dental course is provided for those who desire it, but universities give preference for admission to students who have completed the three-year pre-dental course.

### Four-Year Pre-Medical Course

1. **Amount of Work.** The student must complete 125 hours of work.

2. **Grade of Work.** The student must obtain a total of 125 honor points; in other words, must obtain an average grade of C.

However, for admission to some medical schools an average grade equivalent to one and one-half honor points is required.

3. **Prescribed Work.**
   a. The student must meet the prescribed course requirement as well as the major and minor group requirements for the General College A. B. course. If he has completed 60 or more hours in Group II he may elect to receive the degree of bachelor of science, general course, instead of the bachelor of arts.
   b. The student must meet the prescribed course requirement of the Three-Year pre-Medical Course, and, if possible, in the same order.

4. **Distribution of Electives.** The number of electives will vary according to the nature of the student's high school preparation in French and German. Not less than 12 hours of his elected courses over and above the courses prescribed under 3 (above), but including Philosophy, must be in Groups I and III. The student is urged to elect Biology 106 and Chemistry 202 and 307.

### Pre-Law

1. **Amount of Work.** The student must complete 94 hours of work.

2. **Grade of Work.** The student must obtain a total of 94 honor points; in other words, an average of C; except that he must obtain 156 honor points, representing an average of B-, to warrant faculty recommendation for admission to a class A law school.

3. **Prescribed Work.** Of the 94 hours required, certain hours are prescribed; as follows:

   **Freshman Year**
   - **First Semester**
     - Bible 101 or 106 2 hours
     - English 108 3 hours
     - Latin 3 hours
     - Mathematics or Science 3 hours
     - Psychology 3 hours
     - Public Speaking 2 hours
     - 16 hours
   - **Second Semester**
     - Bible 102 or 106 2 hours
     - English 104 2 hours
     - Elective 3 hours
     - Mathematics or Science 2 hours
     - Public Speaking 2 hours
     - 16 hours

   **Sophomore Year**
   - Bible 301 2 hours
   - English 3 hours
   - History 205 3 hours
   - Latin, French or German 3 hours
   - Political Science 2 hours
   - Sociology 208 3 hours
   - 17 hours

   **Junior Year**
   - Bible 301 2 hours
   - English 3 hours
   - History 301 3 hours
   - Latin 300 (Rom. Col.) 2 hours
   - 14 hours

   A student who has had French or German in high school may have his number of hours prescribed in college reduced by four hours for each of the first two units of high school work. But one year of French or German must be taken in college.

   Since modern language requirements for admission into law schools vary widely, students are advised to consult the office with respect to them.

4. **Distribution of Electives.** The number of hours of electives will vary according to the student's high school preparation in languages. For their electives students should choose such subjects as are required for admission in the law school which they expect eventually to attend.

5. **Diploma.** On satisfactory completion of this course the student will receive a three-year diploma.
6. **Degree.** On satisfactorily completing this course with a record of not less than 125 honor points received in the required 94 hours, the student is eligible for the degree of bachelor of arts on the combined curriculum plan in letters and law. He will receive this degree after one year of successful work in a recognized law school.

Some law schools require an average grade equivalent to one and one-half honor points per hour of work.

**Pre-Engineering Course**

Normally four semesters of work at a recognized school of engineering, in addition to the three-year course here outlined, are necessary to finish a regular engineering course.

1. **Amount of Work.** The student must complete 94 hours of work.

2. **Grade of Work.** The student must obtain a total of 94 honor points; in other words, must obtain an average grade of C.

3. **Prescribed Work.** Of the 94 hours required, the following are prescribed:

**Three-Year General Pre-Engineering Course**

**Freshman Year**

<table>
<thead>
<tr>
<th>FIRST SEMESTER</th>
<th>SECOND SEMESTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bible 101 or 105</td>
<td>Drawing 101*</td>
</tr>
<tr>
<td>Chemistry 102E</td>
<td>English 104</td>
</tr>
<tr>
<td>Drawing 101*</td>
<td>Mathematics 104</td>
</tr>
<tr>
<td>English 103</td>
<td>Pub. Speaking 108 or 104.2</td>
</tr>
<tr>
<td>Mathematics 103</td>
<td>15 hours</td>
</tr>
<tr>
<td>15 hours</td>
<td>15 hours</td>
</tr>
</tbody>
</table>

**Sophomore Year**

| Drawing 201* | Bible 102 or 106 |
| Economics 201 | Economics 202 |
| Mathematics 201 | Mathematics 202 |
| Physics 201E | Physics 205 |
| Physics 205 | Elective |
| Surveying 207* | 16 hours |
| 16 hours | 16 hours |

**Junior Year**

| Bible 301 | Statistics 302* |
| Mathematics 301 | Mathematics 302 |
| Economics 301 | Physics 304 |
| Electives | Elective |
| 16 hours | 16 hours |

In case the student has no credit in Advanced Algebra, Mathematics 101 must be taken, and in that event Mathematics 103 must be taken during the second semester.

In case the student has no credit in Solid Geometry, he should arrange to take Mathematics 102, if possible.

Electives must be chosen in consultation with the Dean.

4. **Diploma.** On satisfactory completion of either course the student will receive a three-year diploma.

5. **Degree.** On satisfactorily completing either course with a record of not less than 125 honor points received in the required 94 hours, the student is eligible for the degree of bachelor of science on the combined curriculum plan in science and engineering. He will receive this degree after completing satisfactorily the requirement for the bachelor of science in engineering in a recognized engineering school.

*See Engineering Subjects.*
### Pre-Business Administration Course

For students interested in Business Administration the following three-year course has been arranged:

**Freshman Year**

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Second Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bible 101 or 105</td>
<td>2 hours</td>
</tr>
<tr>
<td>Economics 105</td>
<td>3 hours</td>
</tr>
<tr>
<td>English 103</td>
<td>3 hours</td>
</tr>
<tr>
<td>Lab. Science</td>
<td>3 or 4 hours</td>
</tr>
<tr>
<td>History or Mathematics</td>
<td>3 hours</td>
</tr>
<tr>
<td><strong>14 or 15 hours</strong></td>
<td><strong>14 or 15 hours</strong></td>
</tr>
</tbody>
</table>

**Sophomore Year**

| Bible 201 | 2 hours | Bible 202 | 2 hours |
| Economics 201 | 3 hours | Economics 202 | 3 hours |
| English 201 or 207 | 3 hours | English 202 or 208 | 3 hours |
| Mathematics 206 | 3 hours | Mathematics 208 | 3 hours |
| Psychology 201 | 3 hours | Philosophy 202 | 3 hours |
| Speech 103 | 2 hours | Speech 104 | 2 hours |
| **16 hours** | **16 hours** |

**Junior Year**

| Economics 201 | 3 hours | Bible 201 | 2 hours |
| Economics 206 | 4 hours | Economics 202 | 3 hours |
| Economics 209 | 3 hours | Economics 208 | 3 hours |
| Pol. Science 303 | 3 hours | Pol. Science 204 | 3 hours |
| Elective | 3 hours | Pol. Science 304 | 3 hours |
| **16 hours** | **15 hours** |

This course is arranged to enable the student to meet the requirements for admission into the School of Business Administration of the University of Michigan. The student after successfully completing a maximum of one year and a summer at the University of Michigan will receive his B.B.A. degree from the University of Michigan.

Students desiring to enter Business Schools other than the University of Michigan should have a catalogue of the school available at the time of registration so that a course can be arranged.

### Major in Business Administration

Candidates for a bachelor's degree from the General College Course may select their subjects with a view to obtaining a major in Business Administration. They should complete the subjects prescribed for the General College Course (see p. 30). To complete the major group requirements they should elect 24 hours in Economics and 12 hours in another department listed in Group III (see p. 31). They may elect to complete their minor group requirement by selecting subjects either in Group I or in Group II. The 24 hours in Economics must include Economics 201 and 202 and Economics 305 and 306.

### Pre-Forestry

The following constitutes a recommended two-year Pre-Forestry Course. The student should complete 64 hours of work. He should choose such subjects as are required for admission to the particular school of forestry which he expects eventually to attend. The final arrangement of his course should have the approval of the Dean.

**Freshman Year**

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Second Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology 100</td>
<td>3 hours</td>
</tr>
<tr>
<td>Chemistry 101 or 103</td>
<td>4 hours</td>
</tr>
<tr>
<td>Engineering 101</td>
<td>3 hours</td>
</tr>
<tr>
<td>English 103</td>
<td>3 hours</td>
</tr>
<tr>
<td>Mathematics 103</td>
<td>3 hours</td>
</tr>
<tr>
<td>*Engineering 207</td>
<td>2 hours</td>
</tr>
</tbody>
</table>

**Sophomore Year**

| Bible 201 | 3 hours | Bible 202 | 3 hours |
| Biology 201 | 3 hours | Biology 206 | 3 hours |
| Economics 201 | 3 hours | Biology 306 | 2 hours |
| Physics 201 | 4 hours | Economics 202 | 3 hours |
| *Elective | 2 hours | Mathematics 306 | 3 hours |
| Public Speaking 103 | 2 hours | Physics 202 | 4 hours |
| **Pre-Clinical Nursing Course**

For students interested in Nursing, the following one-year course has been arranged to meet the requirements for admission to The Bolliget Memorial School of Nursing of Grand Rapids, Michigan.

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Second Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bible 101</td>
<td>2 hours</td>
</tr>
<tr>
<td>Biology 105</td>
<td>3 hours</td>
</tr>
<tr>
<td>English 102</td>
<td>3 hours</td>
</tr>
<tr>
<td>Chemistry 101N</td>
<td>3 hours</td>
</tr>
<tr>
<td>Hygiene</td>
<td>4 hours</td>
</tr>
<tr>
<td>Nursing Arts (Hosp.)</td>
<td>5 hours</td>
</tr>
<tr>
<td>Microbiology</td>
<td>3 hours</td>
</tr>
<tr>
<td><strong>17 hours</strong></td>
<td><strong>17 hours</strong></td>
</tr>
</tbody>
</table>

* Since Engineering 207 (Surveying) is taught every even year, students starting in September of the odd years should take this course during their freshman year. Other students take Biology 201 during the freshman year.
Students wishing to take this course must make application at Blodgett Hospital with the Director of Nurses before August 1.

Upon completion of this course and twenty-eight months at The Blodgett Memorial Hospital School of Nursing, the student will be eligible to write the examinations given by the Michigan State Board of Registration of Nurses, and upon passing the examinations will receive her certificate to practice as a registered nurse.

* * * * * *

For students who wish to enter Butterworth Hospital of Grand Rapids, Michigan, the following subjects are suggested:

Chemistry 101N ..................................... 4 hours
English Composition ................................ 6 hours
European History .................................. 3 hours
Psychology 201 .................................. 3 hours

Biology 110 ........................................... 3 hours
Public Speaking .................................. 4 hours
Sociology ............................................. 3 hours
Elecitives ........................................... 4 hours

In addition to the above, Bible (2 hours) and Physical Education are required.

For electives the student is advised to choose a subject of her own choice, preferably History, English, Literature or Science.

Upon completion of this course and three years in the School of Nursing at Butterworth Hospital, the student will be eligible for registration by the Michigan State Board of Registration for Nurses.

Bachelor of Science in Nursing, or in Medical Technology, on the Combined Curriculum Plan

The student must
1. meet regular admission requirements to the college, including among highschool credits Algebra, Geometry, and Chemistry or Physics;
2. successfully complete 94 semester hours of pre-professional subjects considered fundamental in any liberal arts program;
3. complete an additional 12 months of training at an accredited school of Medical Technology.

Courses of a technical nature, such as mechanical or free-hand drawing, practical or physical education are not acceptable as advanced credit toward the 94 hours of college work.

The required college courses in the program are the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bible (including 201)</td>
<td>6</td>
</tr>
<tr>
<td>English Composition and Rhetoric</td>
<td>6</td>
</tr>
<tr>
<td>English or American Literature</td>
<td>6</td>
</tr>
<tr>
<td>History</td>
<td>6</td>
</tr>
<tr>
<td>Psychology</td>
<td>6</td>
</tr>
<tr>
<td>Sociology (Introduction or Problems)</td>
<td>3</td>
</tr>
<tr>
<td>Philosophy (Introduction to)</td>
<td>3</td>
</tr>
<tr>
<td>*Ancient Language</td>
<td>8</td>
</tr>
<tr>
<td>Chemistry (Inorganic) 103E and 104E</td>
<td>8</td>
</tr>
<tr>
<td>Human Anatomy and Physiology</td>
<td>5</td>
</tr>
<tr>
<td>Organic and Biochemistry</td>
<td>8</td>
</tr>
<tr>
<td>Animal Biology</td>
<td>3</td>
</tr>
<tr>
<td>Microbiology</td>
<td>4</td>
</tr>
<tr>
<td>Microscopic Techniques</td>
<td>4</td>
</tr>
<tr>
<td>Biological Problems</td>
<td>2</td>
</tr>
<tr>
<td>Plant Biology</td>
<td>3</td>
</tr>
<tr>
<td>Histology (New course)</td>
<td>4</td>
</tr>
<tr>
<td>Parasitology (New course)</td>
<td>4</td>
</tr>
<tr>
<td>Physics (Introductory) (New Course)</td>
<td>6</td>
</tr>
<tr>
<td>Nutrition</td>
<td>3</td>
</tr>
</tbody>
</table>

96 hours

SUGGESTED PROGRAM

First Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology 105</td>
<td>3</td>
</tr>
<tr>
<td>Biology 109</td>
<td>3</td>
</tr>
<tr>
<td>English 104</td>
<td>3</td>
</tr>
<tr>
<td>Latin or Greek 101</td>
<td>4</td>
</tr>
<tr>
<td>Physics 101</td>
<td>3</td>
</tr>
</tbody>
</table>

16 hours

Second Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology 106</td>
<td>2</td>
</tr>
<tr>
<td>Biology 110</td>
<td>3</td>
</tr>
<tr>
<td>English 104</td>
<td>3</td>
</tr>
<tr>
<td>Latin or Greek 101</td>
<td>4</td>
</tr>
<tr>
<td>Physics 102</td>
<td>3</td>
</tr>
</tbody>
</table>

16 hours

Sophomore Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bible 201</td>
<td>2</td>
</tr>
<tr>
<td>Biology 202</td>
<td>2</td>
</tr>
<tr>
<td>Biology 204</td>
<td>3</td>
</tr>
<tr>
<td>Chemistry 104E</td>
<td>4</td>
</tr>
<tr>
<td>History 102</td>
<td>3</td>
</tr>
<tr>
<td>Sociology 204</td>
<td>3</td>
</tr>
</tbody>
</table>

17 hours

Junior Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bible 211</td>
<td>2</td>
</tr>
<tr>
<td>Biology 212</td>
<td>3</td>
</tr>
<tr>
<td>English 203</td>
<td>3</td>
</tr>
<tr>
<td>Philosophy 203</td>
<td>3</td>
</tr>
</tbody>
</table>

16 hours

*If a student has had Latin or Greek in high school, the number of hours prescribed in the college may be reduced by four for each of the first two units of work.
DESCRIPTION OF COURSES

Art
 Courses 331 and 332 may be credited in the Dutch department. They are of great benefit to teachers and students of history and literature.

228. PENMANSHIP
 Manuscript and cursive writing. Theory and practice. No credit. For prospective teachers in elementary grades. Three hours.

301. INDUSTRIAL ART
 A course in art education in the elementary school. The areas of drawing, values, color, design, lettering and printing are studied. The student is taught to develop skill in the manipulation of different art media, and given some knowledge of teaching methods relevant to art. Three hours.

362. HANDICRAFT
 The course aims to give the student ideas in the field of craft problems related to the elementary grades. It requires work in clay modeling, weaving, and block printing. Three hours.

331. FLEMISH PAINTING
 A course in the Flemish and Dutch primitives and Italians, followed by a discussion of the Flemish Renaissance painters with emphasis on Rubens and Van Dyck. The course is analytical as well as historical. Lectures, collateral reading, and reports. Not open to Freshmen. Three hours.

332. DUTCH PAINTING
 A course in Dutch painting from the Renaissance to modern times. The emphasis is placed on the seventeenth century. Lectures, collateral reading, and reports. Not open to Freshmen. Three hours.

Bible

101. INTRODUCTION TO THE BOOKS OF THE BIBLE
 A general introduction to the Bible as a whole, in which its origin, nature, canonicity, authority, organic unity, revelation and inspiration, and related subjects are investigated. A specified number of times is required to study the contents, historical setting, literary form, and especially the permanent ethical and religious values of a few of the individual books. Two hours.

102. INTRODUCTION TO THE BOOKS OF THE BIBLE
 Continuation of 101. Two hours.

105. OLD TESTAMENT HISTORY
 A survey, from the standpoint of special revelation, of the principal characters and the trend of events from the creation of the world to the return of the Jews from captivity. Special attention is given to the preparation for the coming Saviour. Some of the problems pertinent to Old Testament history are discussed and the significance of the various events is indicated. Lectures and collateral readings. Two hours.

107. NEW TESTAMENT HISTORY
 A companion course to 105. Events of the intertestamental period are sketched with particular reference to the coming Messias; the principal events and teachings of Christ as recorded in the gospels are treated; and the origin and early expansion of the Christian Church in apostolic times is surveyed. Lectures and collateral readings. Two hours.

201. REFORMED DOCTRINE
 An advanced course of study in the doctrine of the Christian religion as contained in the Bible and as reflected in the confessional standards of the Reformed Churches. Two hours.

202. REFORMED DOCTRINE
 Continuation of 201. Two hours.

301. STUDIES IN CALVINISM
 An inquiry into the origin and nature of Calvinism, its influence upon the development of religion and political life, as well as the proper application of its principles to these spheres. The course consists of lectures, assigned readings and essays. Open to Juniors and Seniors. To others only by special permission. Two hours.

302. REVIEW CULTURE
 A study of the geographical, social, civic, and religious customs of the Hebrews, and of the people among whom they lived when the Bible arose. Two hours.

304. HISTORY OF THE CHRISTIAN CHURCH
 A survey of the history of the Christian Church from its beginnings to the present time. Three hours.

304. HISTORY OF THE CHRISTIAN REFORMED CHURCH
 The historical antecedents and the development of the Christian Reformed Church in America. Three hours.

Biology

For majors in this department, the following courses are required: 106-108, 111, 201, 207, 306, and either 112 or 311 and 312 (24 hours required).

For students who elect Biology as a minor, one of the following sequences is advised:

General Biology: 106-108, 111, 201, 207, and 306. (Any 16 hours.)
Botany and Bacteriology: 107, 111, 112, and 207. (Total 10 hours.)
Human Biology: 105, 106-108, 310 and either 212 or 312. (Total 16 hours.)
Zoology: 201, 206, 208, 207, 310 and 311-312. (Any 15 hours.)

For students electing ten hours or less in this department, the following courses are recommended: 102, 103, 107, 109, 110, and 306.

102. HUMAN PHYSIOLOGY
 An introductory study of the organization, development, and physiological activities of the human body. The work of this course is so arranged that, if desired, it may be continued in courses 105. At the same time it is planned to supplement course 102.

103. PERSONAL HYGIENE
 The proper care of our bodies and approved practices for the prevention of disease are studied. Courses 102 and 103 together form a unit which is adapted to the needs of students who expect to teach health subjects in the elementary grades. Offered both semesters.

105. HUMAN ANATOMY AND PHYSIOLOGY
 An introduction to the study of human biology, including elements of embryology, genetics, anatomy, histology, and physiology. Two hours of lectures and one laboratory period a week. Laboratory fee, $5.00.
106. **HUMAN ANATOMY AND PHYSIOLOGY**  
**Continuation of course 105.**  
**Two hours**

107. **PRINCIPLES OF MICROBIOLOGY**  
The history of Microbiology and the cultural and morphological characteristics of bacteria, yeasts, and molds are considered. Special emphasis is placed on communicable diseases. This course is adapted to pre-nursing students, but is open to all others. Discussions, quizzes, and demonstrations.  
**Three hours**

109. **PLANT BIOLOGY**  
A general introduction to the study of plant biology and a brief survey of the plant kingdom. Two hours of lectures and recitations, and one laboratory period a week. **Laboratory fee, $3.00.**

110. **ANIMAL BIOLOGY**  
An introductory study of a few animal types selected to illustrate fundamental principles of anatomy, physiology, ecology, parasitology, and one laboratory period a week. **Laboratory fee, $5.00.**

111. **GENERAL BOTANY**  
Anatomy and physiology of seed plants. Open to freshmen. Three recitations and one laboratory period a week. **Laboratory fee, $3.00.**

112. **GENERAL BOTANY**  
This course with course 111 constitutes a full year's course in botany. A comparative study of plant forms and life histories of representative plants. The course offers a general systematic view of the plant kingdom. Three hours of lectures and quizzes, one laboratory period a week. **Laboratory fee, $5.00.**

201. **INVERTEBRATE ZOOLOGY**  
Anatomy, physiology, behavior, and classification of animals representative of the invertebrate groups. Insects and disease-causing forms are emphasized. Three hours of lectures, reports, and recitations; and three hours of laboratory work per week. **Laboratory fee, $3.00.**

206. **NATURAL HISTORY**  
A systematic study of the appearance and habits of animals which are more commonly met near our homes, in zoological parks, on pleasure trips, or in literature. Economically important fishes, birds, and fur-bearers will receive special consideration. This course consists of lectures, and library and museum studies. It is intended primarily for general college and education students. **Three hours.**

207. **GENETICS**  
A study of the ways and means by which the inherited characteristics of plants, animals, and man are transmitted from parents to offspring. The course consists of lectures and problems concerning applications of the laws of heredity. **Three hours.**

208. **INSTRUCTION TO EMBRYOLOGY**  
A study of the development of vertebrate animals. Two hours of lectures and recitations and three hours of laboratory work per week. **Laboratory fee, $3.00.**

210. **GENERAL BIOLOGY**  
A brief survey of the more significant phenomena and principles of several divisions of biology, such as plant and animal anatomy, physiology, and classification. The interrelations between plants and animals are emphasized. Two hours of lectures or recitations and one hour of demonstrations per week.

212. **NUTRITION**  
A study of normal and corrective diets in health and disease. Two lectures and one laboratory period a week. To be preceded or accompanied by 102 or 106. **Laboratory fee, $8.00.**

304. **MICROBIOLOGICAL TECHNIQUE**  
The technique of slide making, killing, fixing, dehydrating, embedding, staining, and mounting of tissues. Three hours of laboratory work per week. **Laboratory fee, $8.00.**

306. **BIOLOGICAL PROBLEMS**  
The history of biology and the evidences for evolution and organic teleology are considered. Lectures, assigned readings, recitations, and reports. Prerequisites: 109 and 110 or equivalent courses. **Two hours.**

307. **PARASITOLOGY**  
A study of the morphology, physiology, and life histories of the parasites of man and animals. Examples of various phyla: Protozoa, flat worms, round worms, and ectoparasites of the Arthropoda will be considered. Three hours of lectures and recitations; and three hours of laboratory work per week. **Laboratory fee, $3.00.**

308. **HISTOLOGY**  
A study of mammalian tissues. The relation between microscopic structure and function will be considered. Three lectures and one laboratory period a week. **Laboratory fee, $8.00.**

311. **VERTEBRATE ZOOLOGY**  
An introduction to the study of vertebrates with emphasis on their comparative anatomy. Evolution problems are considered. One lecture and one laboratory period a week. **Laboratory fee, $3.00.**

312. **VERTEBRATE ZOOLOGY**  
A continuation of 311. Two lectures and one laboratory period a week. **Laboratory fee, $8.00.** Prerequisite: 311. **Three hours.**

350. **TEACHING BIOLOGY**  
Points of view, content, and methods of teaching secondary biology, and human physiology and hygiene. Prerequisite: twenty hours of Biology. **Two hours.**

Chemistry  
A student who wishes to major in chemistry should complete the following courses: 103-4, 201-2, 301-2, 307-8 and 810. In related fields, he should complete Mathematics through Calculus, and Physics 201 and 302.

101. **GENERAL CHEMISTRY**  
A non-technical course designed for students who do not need chemistry for pre-professional study. This course is a terminal course and includes a survey of inorganic and organic chemistry. Credit earned in this course can be applied to the laboratory science requirement for graduation. Three hours in class-room and one three-hour laboratory period per week. **Laboratory fee, $3.00.** **Breakage fee, $5.00.** No prerequisites.

102. **GENERAL CHEMISTRY**  
Continuation of 101. Hours, texts and fees the same. **Four hours.**
103. GENERAL INORGANIC CHEMISTRY  Four hours
This course is designed for students who plan to take further
work in the department, e.g., chemistry majors, pre-medical,
and pre-dental students. Three hours in class-room and one three-
hour laboratory period per week. Laboratory fee, $3.00. Break-
age fee, $5.00. No prerequisites, although a knowledge of high
school chemistry is desirable.

104. GENERAL INORGANIC CHEMISTRY  Four hours
Continuation of 103. Hours, texts and fees the same.

103E. GENERAL INORGANIC CHEMISTRY  Four hours
This course is designed primarily for pre-engineering students
who need only one year of chemistry. This course differs
from 103 in that some material on Qualitative Analysis is also included.

104E. GENERAL INORGANIC CHEMISTRY  Four hours
Continuation of 103E. Hours, texts and fees the same.

101N. CHEMISTRY FOR NURSES  Four hours
A one semester course designed for students in the regular pre-
nursing course. A survey of inorganic, organic, and biological
chemistry as applied to the field of medicine. Three class-room
hours and one two-hour laboratory period per week.
Laboratory fee, $5.00. Breakage fee, $5.00. No prerequisites.
Note: Students preparing for a B.S. in nursing are advised to
take 100N and 104E.

201. QUALITATIVE ANALYSIS  Four hours
Two hours of class-room work, one quiz period, and two labora-
tory periods of three hours each per week. Laboratory fee, $5.00.
Breakage fee, $5.00. Prerequisites: 103 and 104, and Mathema-
tics 101.

202. QUANTITATIVE ANALYSIS  Four hours
Two hours in the class-room and from eight to ten hours of labora-
tory work per week. Laboratory fee, $5.00. Breakage fee,$5.00.
Prerequisite: 201.

301. ORGANIC CHEMISTRY  Four hours
Two or three hours of class-room work, one quiz period, and two
laboratory periods of three hours each per week. Laboratory fee,
$5.00. Breakage fee, $5.00. Prerequisite: General Inorganic
Chemistry.

302. ORGANIC CHEMISTRY  Four hours
Continuation of 301. Hours and fees the same. This course
deals primarily with aromatic compounds. Prerequisites: General
Inorganic Chemistry and 301.

303. ORGANIC-BIOCHEMISTRY  Four hours
A brief study of important classes of organic compounds with
special emphasis on biochemistry, chemistry of carbohydrates,
proteins, fats, enzymes, and other related subjects. For pre-clinic,
medical technology students, and for teachers who have a minor in
chemistry. Three hours of class-room work and two laboratory
periods of three hours each per week. Laboratory fee, $5.00. Break-
age fee, $5.00. Prerequisites: Chemistry 103 and 104.

304. ORGANIC-BIOCHEMISTRY  Four hours
Continuation of 303. Hours and fees the same.

306. INTRODUCTION TO THE FIELD OF INORGANIC SCIENCE  Three hours
This course attempts to evaluate critically the basic assumptions,
and to the laws and results of modern scientific investigation in the
fields of chemistry, physics, and geology. Emphasis is placed on
the interrelation of these fields rather than a study of each field
by itself. Open to pre-semester students and to Juniors and
Seniors pursuing an A.B. in Education course who have neither a
major nor minor in Science. This course will not be counted as
science credit in the 19 hours science requirement of the General
College course.

306. INTRODUCTION TO THE FIELD OF INORGANIC SCIENCE  Three hours
Continuation of 305.

307. PHYSICAL CHEMISTRY  Four hours
A study of the kinetic theory of gases, solids and liquids. Three
lecture hours and one laboratory period per week. Laboratory
fee, $5.00. Breakage fee, $5.00. Prerequisites: Chemistry 201,
Physics 201, Mathematics 201.
Note: Pre-medical students may take the lectures for three hours
credit.

308. PHYSICAL CHEMISTRY  Four hours
A continuation of 307. Hours and fees the same. A study of
elektrochemistry, chemical thermodynamics and nuclear structure.

308m. PHYSICAL CHEMISTRY FOR PRE-MEDICAL STUDENTS  Three hours
A study of the states of matter, properties of solutions, chemical
kinetics and the colloidal state. Open only to pre-medical students.

309. BIOCHEMISTRY  Four hours
A discussion of the fundamentals of biochemistry, chemistry of
carbohydrates, proteins and fats, enzymes, colloid, digestive pro-
cesses, metabolism and other subject matter essential to an under-
standing of biochemistry. Three hours of class-room work and two
laboratory periods of three hours each per week. Laboratory
fee, $3.00. Breakage fee, $5.00. Prerequisites: 301 and 302.

310. QUALITATIVE ORGANIC ANALYSIS  Four hours
One and one-half hours of lecture and three laboratory periods
per week. This course is based on Shriner and Pusan's text. Pre-
requisite: Chemistry 202. Laboratory fee, $5.00. Breakage fee,$5.00.

320m. TEACHER'S COURSE  One hour
Methods of teaching chemistry in secondary schools. Prerequi-
site: two years of chemistry.

Dutch

A. DUTCH LANGUAGE

191. ELEMENTARY GRAMMAR  Four hours
Conjugations and declensions.

192. ADVANCED GRAMMAR  Four hours

201. INTERMEDIATE DUTCH  Three hours
Reading of modern prose. Review of the more important parts
of grammar. Outside reading of four hundred pages.

202. ADVANCED DUTCH  Three hours
Reading of nineteenth century prose and poetry. Grammar re-
view continued. Outside reading of four hundred pages.
205. MODERN LITERATURE
   The outstanding prose writers and poets after 1850 are read and
   the movements of naturalism, symbolism, neo-romanticism and
   neo-vitalism are discussed. Required outside reading and essays.
   Three hours

206. RENAISSANCE AND ROMANTICISM
   The leading authors of the Renaissance and the Romantic Move-
   ment. Required outside reading and essays.
   Three hours

   Note: These courses and Dutch History 326 are required of those who
   take the pre-Summary course.

B. MEDIEVAL AND DUTCH HISTORY

   Note: For description of Dutch History courses, see under History
   Department.

323. THE EARLY MIDDLE AGES (400-1000)
   Three hours

324. THE HIGH MIDDLE AGES (1000-1500)
   Three hours

325. THE RENAISSANCE IN FLENDER AND ITALY (1300-1550)
   Three hours

326. DUTCH HISTORY (1500-1815)
   Three hours

   C. DUTCH ART

331. FLEMISH PAINTING
   The Flemish and Dutch Primitives and Humanists between
   1400 and 1600 Rubens and Van Dyck and their schools. The
   course is analytical as well as historical.
   Three hours

332. DUTCH PAINTING
   The Dutch Renaissance (1600-1700) and the modern Dutch
   painters.
   Three hours

Economics

103. ECONOMIC HISTORY (United States)
   A review of the economic development of this country from the
   time of colonization to the present day. Special emphasis is placed
   on the development of transportation system, the history of the
   tariff question, the development of unionism, the history of the
   banks, and the development of government regulation in our eco-
   nomic system. Offered first semester.
   Three hours

104. ECONOMIC GEOGRAPHY
   A study of the physical factors of the environment and man's
   relationship to them. Subject is approached from the point
   of view of the various occupations in which man is engaged, and
   how these occupations are carried on in the world. Offered
   second semester.
   Three hours

201. PRINCIPLES OF ECONOMICS
   A review of the fundamental principles underlying modern eco-
   nomic life. Not open to freshmen except by special permission.
   Students electing 201 are expected to take 202.
   Three hours

202. PRINCIPLES OF ECONOMICS
   A continuation of the principles of economics and an application
   of the same to current industrial problems and institutions.
   Three hours

205. BUSINESS MATHEMATICS
   For description of this course, see under Mathematics 205.
   Three hours

206. STATISTICS
   For description of this course, see under Mathematics 206.

201. MONEY AND BANKING
   A study of the nature and functions of money, with a view to
   the understanding of the complex role of currency systems in our
   national and international life. A detailed study of the functions
   of banking, the Federal Reserve, private financial institutions,
   foreign trade, and so forth. Prerequisite: 201 and 202 or their
   equivalents.
   Three hours

302. FINANCIAL PRINCIPLES
   A continuation of 301. The financial promotion of corporations
   and of trusts. The trust problem.
   Three hours

303. LABOR PROBLEMS AND TRADE UNIONISM
   The historical background of the modern labor movement, the
   controversies between capital and labor, and the various solutions
   offered. A careful study of the history, nature, and problems of
   trade unionism. Prerequisite: 201 and 202.
   Three hours

305. ESSENTIALS OF ACCOUNTING
   An introductory course in accounting. Intended to give stu-
   dents the necessary accounting background for entrance into
   schools of business administration or for business uses when grad-
   uating from Calvin. Emphasis is placed on the principles of
   accounting and the accounting procedure in corporations. A labo-
   ratory period is held each week for application of the material.
   Prerequisites: 201 and 202 or their equivalents.
   Four hours

306. ESSENTIALS OF ACCOUNTING
   Continuation of 305.
   Four hours

308. PRINCIPLES OF MARKETING
   A study of the marketing functions, the marketing of particular
   commodities, the functions and modes of operations of middlemen,
   associate activities affecting marketing, price policies, etc.
   Three hours

309. BUSINESS LAW: CONTRACTS
   Deals with the main principles of contract: offer, acceptance,
   consideration, capacity of parties, legality of object, the formal
   requirements of agreements under the statute of frauds, the opera-
   tion of contracts in business and their interpretation by the courts.
   Open to Seniors and to Juniors only by special permission.
   Three hours

312. COST ACCOUNTING
   A beginning course in the principles of cost accounting. A
   laboratory period is held each week for the application of the
   material.
   Three hours

Education

Students who plan to meet teacher certificate requirements will find
detailed information on pages 34 to 38.

A. PSYCHOLOGY
   (See description of courses under department of Psychology.)

B. HISTORY

320. HISTORY OF AMERICAN EDUCATION
   In this course the educational development in our country will
   be viewed in the light of the religious, social, economic, and
   political changes.
   Three hours

325. HISTORY OF EDUCATION
   A survey of the growth of educational theory and practice
   during the ancient and medieval periods.
   Three hours
306. HISTORY OF EDUCATION
A continuation of 305 covering the modern period.

309. EDUCATIONAL SOCIOLOGY
A study of the social structure and educational practices with emphasis on present-day problems. Credit also for Sociology. But not for both. Both semesters.

C. PRINCIPLES

311. PRINCIPLES OF EDUCATION
A study of the aim of education and of the various underlying problems.

314. PRINCIPLES OF TEACHING IN THE SECONDARY SCHOOLS
The principles of teaching will be discussed in the light of Morrison's The Practice of Teaching in the Secondary Schools. The teaching technique in each of the types of subjects in the curriculum is analyzed.

316. PRINCIPLES OF TEACHING IN THE ELEMENTARY SCHOOLS
Principles governing the directing of learning of children in the elementary school will be taken up.

317. PRINCIPLES OF KINDERGARTEN-PRIMARY GRADES TEACHING
Two or three hours
The course includes a brief history of past and present trends in kindergarten work; the status of the child in these grades; the content of the curriculum for grades one, two, and three; and observations in actual classroom situations.

D. PROFESSIONAL COURSES

101. MATERNITY
Three hours
General introduction to the various phenomena of nature and the methods of teaching natural study in the elementary grades. Credit for A.B. in Education only.

200. TEACHING ARITHMETIC IN ELEMENTARY SCHOOLS
Three hours
Both content and methods in arithmetic throughout the grades will be considered.

222. INTRODUCTION TO SCHOOL MUSIC: THEORY AND METHODS
Music 331 may be substituted.

307. SCHOOL ADMINISTRATION
Three hours
This course aims to discuss the organization and management of state and local school systems.

310. EDUCATIONAL MEASUREMENTS
Three hours
The principles of present-day practices of measuring the results of teaching. Mental testing is included.

320. TEACHING BIBLE IN ELEMENTARY SCHOOLS
Both semesters.

321. TEACHING GEOGRAPHY IN ELEMENTARY SCHOOLS: METHODS AND CONTENT
Three hours

322. TEACHING ENSIGN IN ELEMENTARY SCHOOLS
Three hours
Both semesters.

325. CHILDREN’S LITERATURE AND THE TEACHING OF ENGLISH IN THE ELEMENTARY SCHOOL
Three hours

332. READING, READING
Three hours

324. TEACHING HISTORY
Two hours
A brief survey of the history of our country will be used in the study of the techniques of teaching history in the elementary and junior high grades.

326. TEACHING ENGLISH IN SECONDARY SCHOOLS
One, two or three hours
Content as well as method receives attention. Same as English 330. Two hours devoted to content; one to method.

328. TEACHING LATIN
Three hours
Same as Latin 327 and 330 combined.

340. CURRICULUM
Two hours
A study of curriculum requirements for grades four through six, and of the fundamental teaching procedures applying to children of later childhood. Observation required.

341. DIRECTED OBSERVATION OF TEACHING AND LESSON PLANNING
Two or three hours
About eighteen hours are spent in the schools of Grand Rapids with specific instructions for directed observation. For students planning to teach in the elementary schools. To be taken simultaneously with Educ. 344.

342. DIRECTED OBSERVATION AND LESSON PLANNING
Two or three hours
This course is like Education 341 and is for students looking for positions in the junior and senior high schools. To be taken simultaneously with Educ. 344.

345. DIRECTED TEACHING
Five hours
To be taken simultaneously with Education 341. For students planning to teach in the elementary schools. Offered both semesters. See prerequisites listed earlier in this catalogue under Education.

344. DIRECTED TEACHING
Five hours
To be taken simultaneously with Educ. 341. For students planning to teach in junior or senior high schools. Offered both semesters. See prerequisites listed earlier in this catalogue under Education.

350. THE TEACHING OF LATIN OR ENGLISH, Etc.

Teach the courses offered in the various departments are all indicated by the number 330 followed by the letter m. For description see under the department wanted.

Engineering

101. MECHANICAL DRAWING
Three hours
The principles of orthographic projection; practice in the making of working drawings; practice in lettering; and tracing. Three two-and-one-half hour drafting-room periods, three hours homework a week.

102. DESCRIPTIVE GEOMETRY
Three hours
Exercises, instruction, and drill through the medium of 80 projected plates of problems. Three two-hour drafting-room periods, three hours homework a week. Prerequisite: 101.

201. MECHANISM AND SKETCHING
Two hours
Sketching of models in orthographic, isometric, and oblique projection; practice in the making of working drawings from sketches; free-hand lettering. Two two-hour drafting-room periods, two hours homework a week. Prerequisite: 102.
207. Surveying
Elementary theory and practice; use of instruments, readingorden, angles, and distance; traverse survey, computing areas, levels, profiles, grade stakes, note keeping. Lectures, text assignments, one recitation, and one four-hour field period. Prerequisites: Mathematics 104.

302. Statics
Three hours
Study of fundamental principles of mechanics and their application to the simpler problems of engineering. Forces, components, moments, cables, friction, centroids, moments of inertia. Recitations, lectures, problems. Must be preceded or accompanied by Mathematics 262 and Physics 202 or 202X.

English

All freshmen are required to take freshman English (103-104).

Upperclassmen whose programs of concentration require more than six hours of English, or who choose courses in English as electives, may, if they are sophomores, elect any 200-course, or, if they are juniors or seniors, any 300-course. In making their selection of courses, such students should normally favor periods and areas neglected in their past and anticipated programs of concentration.

Students who elect English as the subject of their major concentration should in their choice of courses aim at a disciplinary program historically pursued. A well-balanced program aiming at this objective would be the following:

- Freshman English 103-104 6 hours
- Elizabethan Period 207 5 hours
- American Literature 201
  - or 107 3 hours
- Seventeenth Century 208 3 hours
- Eighteenth Century 210 3 hours
- American Literature 202
  - or 205 3 hours
- Victorian Poetry 301 3 hours
- Victorian Prose 302 3 hours
- Contemporary Poetry 304 3 hours
- The Novel 312 3 hours

Such a suggested program need not be strictly followed, however; it is susceptible to adjustment in accordance with the student's special interests and his studies in related fields. English 206 (Advanced Composition) and English 303 (Methods of Teaching English) should not be elected as contributing to a disciplinary program historically pursued, but as professional courses to be taken over and above the main concentration.

103. Freshman English
Three hours
Grammar, rhetoric, and composition. Required of all freshmen, and prerequisite to all other courses in English. Textbooks, periodic themes, and a course paper.

104. Freshman English
Three hours
The theory, example, and practice of composition. A continuation of English 103, required of all freshmen, and a prerequisite to all other courses in English. Textbooks, periodic themes, and a course paper.

201. American Literature
Three hours
Analysis of important writings in the colonial and revolutionary periods. Emphasis upon culture and writings of the New England Group. Textbooks, collateral reading, and reports.

202. American Literature
Three hours
Continuation of English 201. Intensive study of Whitman and Twain. Survey of realistic movement, the new poetry, and important twentieth-century fiction and criticism. Textbook, collateral reading, and reports.

207. Literature of the Elizabethan Period
Three hours
A survey of the poetic literature of the English renaissance, and an intensive study of the poems and plays of Shakespeare. Textbook, collateral reading, and reports.

208. Literature of the Seventeenth Century
Three hours
A survey of the poetry and prose of the century, and an intensive study of the works of John Milton. Textbook, collateral reading, and reports.

210. Literature of the Eighteenth Century
Three hours
A study of English poetry and prose from Dryden through Burns. Emphasis upon the neo-classicists: Dryden, Pope, Addison, Swift, and Johnson, and a study of the beginnings of the romantic outlook in Gray, Thomson, and Cowper. Textbook, collateral reading, and reports.

301. Literature of the Romantic Period
Three hours
Intensive critical analysis of the work of Wordsworth, Coleridge, Byron, Keats, and Shelley, and a survey of other English poets writing in the years 1798-1840.

302. Poetry of the Victorian Period
Three hours
Intensive critical analysis of the work of Tennyson, Browning, and Arnold seen in relation to relevant cultural influences; a survey of the Pre-Raphaelite Movement, and consideration of the principal poems of Swinburne and Meredith. Textbook, and brief course paper.

303. Contemporary English Fiction
Three hours
A study of English and American fiction, in its continental relations, from 1850 to the present time. Textbook, collateral reading, and reports.

304. Contemporary English Poetry
Three hours
A study of the lyric and dramatic poetry of England, in its continental relations, from 1850 to the present time. Textbook, collateral reading, and reports.

306. Advanced Composition
Three hours
A practical course in the writing of such types of composition as the formal and informal essay, the informative and feature article, the editorial and book review, the short story, lyric poem, and the like. Some collateral reading and much student writing. Open, by permission only, to students who have ability or unusual interest in creative writing.

310. Nineteenth Century English Prose
Three hours
An intensive study of such representative English prose of the nineteenth century, exclusive of fiction, as the works of Carlyle, Ruskin, Arnold, Huxley, Mill, Newman, Pater, Stevenson, and others. Textbook and reports.
312. THE ENGLISH NOVEL
A survey of the English novel from the beginning through the
hardy. Emphasis upon the art and thought of the major novelists,
with special attention to the development of differing techniques
and schools of fiction. Textbook, collateral reading, and reports.
Offered 1949-50.

350m. METHODS OF TEACHING ENGLISH
One, two, or three hours
A review of the essentials of grammar and rhetoric, and a
study of methods of teaching English in the secondary schools.
Prerequisite: at least seven of the courses offered in the
English department. First semester.

French

101. ELEMENTARY FRENCH
Four hours
Grammar, pronunciation, composition, dictation, oral drill, and
conversation are intended to impart a certain amount of ear-
training and ability to understand simple spoken French.

102. CONTINUATION OF 101
Four hours
Text in both courses: Miela & Longi, *Fundamental French*.
This is followed by the reading of easy prose.

103. INTERMEDIATE FRENCH
Three hours
Reading of about two hundred pages of easy nineteenth century
text. Special stress on idiom. Composition based on the text read.
Prerequisite: 101 and 102.

104. CONTINUATION OF 103
Three hours
Reading of about three hundred pages of modern prose. Com-
position and thorough review of grammar throughout the year.
About seven hundred pages of outside reading is required for the
year.

301. THE ROMANTIC MOVEMENT
Three hours
A history of French literature of the first half of the nineteenth

302. NINETEENTH CENTURY—SECOND HALF
Three hours
A history of French literature since the middle of the nineteenth
Anthology in both courses: Schinz, *Nineteenth Century French*
Readings, Vols. I and II.

303. THE CLASSIC PERIOD
Three hours
A study of French literature and culture in the eighteenth century as a
background for the more detailed study of the classic authors.
One drama is read in class, others are assigned for out-
side reading. Prerequisite: 203.

304. THE CLASSIC PERIOD
Three hours
A continuation of 303, dealing with the later seventeenth cen-
tury literature, with special attention to Moliere and Racine. A
drama of Racine is read in class. A few dramas are assigned for
outside reading. Anthology in both courses: Schinz and King's
*Seventeenth Century Readings*. Prerequisite: 202 and 303.

320m. METHODS OF TEACHING MODERN FRENCH LANGUAGE
One hour
Intended for prospective teachers of French in secondary schools.
Prerequisite: six of the courses offered in this depart-
ment.

Geography

104. ECONOMIC GEOGRAPHY
Three hours
For description see Economics and Sociology.

105. GEOGRAPHY OF NORTH AMERICA
Three hours
A survey of the elements of the natural environment of the re-
jionary regions of the United States and Canada in their relationship to
the cultural landscape. Intended for those specializing in edu-
cation or in the social sciences.

106. GEOGRAPHY OF SOUTH AMERICA
Three hours
A study of the geographic structure of South America in relation
to human adjustment and culture. Intended for those special-
izing in education or in the social sciences.

108. GEOGRAPHY OF THE FAR EAST AND THE PACIFIC AREA
Three hours
A study of the geographic and historical background of India,
China, Japan, Soviet Asia, Australia, and minor areas of the Far
East and the Pacific. The course also deals with the geographic
aspects of certain problems dealing with industry, agriculture, and

321. TEACHING GEOGRAPHY IN ELEMENTARY SCHOOLS
Three hours
This course may be counted as credit in Geography toward an
A.B. degree in Education except in cases in which it is the stu-
dent's only course in teaching methods.
This course not only includes a course in methods, but also one
hour of content dealing with the Pacific area.

German

101. ELEMENTARY GERMAN
Four hours
Grammar and composition. Text: Vos, *Essentials of German*

102. CONTINUATION OF 101
Four hours
Study of grammar continued. Reading of at least one hundred
pages of modern prose and poetry.

201. INTERMEDIATE GERMAN
Three hours
Reading of nineteenth century prose. Review of the more im-
portant parts of grammar. Composition and dictation. Prerequi-
site: 101 and 102.

202. INTERMEDIATE GERMAN CONTINUED
Three hours
Intensive study of modern prose and poetry. By stress upon
idiom and otherwise, effort is made throughout the year to create
*Sprachfähigkeit*. Outside reading with reports required to the extent
of at least eight hundred pages for the year. Prerequisite: 201.

301. THE ROMANTIC PERIOD
Three hours
A survey of German literature of the first half of the nine-

302. REALISM
Three hours
A history of German literature since the middle of the nineteenth

303. EARLY NINETEENTH CENTURY DRAMA
Three hours
A comprehensive study of the lives and works of leading Ger-
man dramatists of the early nineteenth century. Assigned read-
ings. Papers on related subjects. Prerequisite: 202. Not offered
304. LATER NINETEENTH CENTURY DRAMA
A study of Hauptmann and Sudermann and their times. Assigned readings and reports. Prerequisites: 202 and 205. Not offered in 1940-1946.

305. THE CLASSIC PERIOD
Three hours
A general survey of German literature in the eighteenth century as far as Lessing and with special reading to him. A drama of Lessing is read in class. Collateral reading and reports. Prerequisite: 205. Not offered in 1940-1950.

306. THE CLASSIC DRAMA
Three hours
A study of the lives and works of Schiller and Goethe. One or two of their dramas are read. Reports on assigned topics. Prerequisite: 202 and 205. Not offered in 1949-1950.

307. SCIENTIFIC GERMAN
One hour
Students wishing to take this course should confer with the professor in charge at the opening of the school year.

330m. METHODS OF TEACHING MODERN FOREIGN LANGUAGES
One hour
Intended for prospective teachers in German in secondary schools. Prerequisite: six of the courses offered in this department.

Greek

Students who expect to graduate from the pre-Seminary Course must complete Courses 101, 102, 201, 202, 313, 314.

101. BEGINNERS' GREEK
Four hours
Text: Crosby and Schaeffer, An Introduction to Greek.

102. BEGINNERS' GREEK
Four hours
Continuation of 101. Completion of the text and the reading of the first book of Xenophon's Anabasis, or its equivalent.

201. SELECTIONS FROM ANABASIS
Three hours
Selections from the Anabasis. Prerequisites: 101 and 102.

202. SELECTIONS FROM PLATO
Three hours
Prerequisite: 201.

313. NEW TESTAMENT GREEK
Three hours
The Gospel according to Mark is read. A study is made of the special features of Hellenistic Greek. The significance of lexical and syntactical detail for the interpretation of the text is everywhere emphasized. Prerequisite: for pre-Seminary students, 205; others, 105.

314. NEW TESTAMENT GREEK
Three hours
A study is made of some of the Pauline Epistles. Lectures and discussion on St. Paul and his times. Prerequisite: 313.

316. GREEK THOUGHT AND THE NEW TESTAMENT
Three hours
No knowledge of Greek is required. Lectures, discussions, assigned readings. Open to Juniors and Seniors.

317. PLATO'S REPUBLIC
Two hours
No knowledge of Greek is required. The course aims at an understanding and evaluation of Plato's views as presented especially in the Republic. Open to Sophomores, Juniors, and Seniors. Offered both semesters.

History

Those majoring in History must have had courses 101 and 102 (Growth of Western Civilization) or its equivalent in High School, and eighteen (18) additional hours selected from the following fields: Western European History, 205 and 206; English History, 203 and 204; American History, 305 and 306. Six of these eighteen hours may be taken, if preferred, in courses on Eastern Europe or Mediæval History.

101. GROWTH OF WESTERN CIVILIZATION
Three hours
This course aims to give the student a comprehensive view of the history of civilization from earliest times to 1200 A. D. Required of all students taking the General College Course and of all Pre-Seminary students.

102. GROWTH OF WESTERN CIVILIZATION
Three hours
A continuation of Course 101. Particular attention is given to the great movements which have been significant in the development of western civilization to the present day.

201. EASTERN EUROPE SINCE 1815
Three hours
Russia from 1815 to the present. Lectures, readings, and reports. Prerequisites: 101 and 102. For Sophomores and Juniors.

202. EASTERN EUROPE SINCE 1815
Three hours
The Balkan States, Austria, Hungary, and Czechoslovakia. Lectures, readings, and reports. Prerequisites: same as 201.

203. ENGLISH HISTORY TO 1609
Three hours
An outline of the political and constitutional history of England. Prerequisites: 101 and 102. For Sophomores and Juniors.

204. ENGLISH HISTORY TO 1609
Three hours
Continuation of 203, which is prerequisite.

205. EUROPE SINCE 1615
Three hours
The general history of Europe since 1615, with emphasis on such topics as the revolutionary movement in France, the unification of Germany, the rise of socialism, discussion and assigned reading. Prerequisites: a high school course in general history.

206. EUROPE SINCE 1815
Three hours
A continuation of 205, which is prerequisite. Courses 205 and 206 are for Freshmen; open to Sophomores by special arrangement.

208. AMERICAN HISTORY
Three hours
This course is designed to meet the requirement in American History for prospective teachers. Open only to those students taking the two-year Teacher Training Course.

301. AMERICAN HISTORY
Three hours
Lectures and readings. Prerequisite: a high school course in American history.

302. AMERICAN HISTORY
Three hours
Continuation of 301, which is prerequisite. Courses 301 and 302 are open to Juniors and Seniors.

303. AMERICAN FOREIGN RELATIONS
Three hours
The diplomatic relations of the United States since 1789 with the principal countries of Europe and with China and Japan. Prerequisite: a high school course in American history.
304. **American Foreign Relations**

Diplomatic relations with South American countries. Origin and development of the Monroe Doctrine. Courses 303 and 304 open to juniors and seniors.

Under certain conditions Courses 303 and 304 in American Foreign Relations may be credited toward a major in Political Science.

305. **Latin American History**

An account of the history, government, and social and economic development of the Central and South American republics.

**Medieval and Dutch History**

323. **The Early Middle Ages (400-1000)**

The rise of Christianity and the Carolingian Empire and the rise of Mohammedanism are discussed after a short review of Greek and Roman civilization. Special attention is paid to the Netherlands during the Roman and Frankish periods.

324. **The High Middle Ages (1000-1300)**

The Central Middle Ages: Feudalism; France, Germany, and Italy in the feudal period; crusades; rise of cities especially in Italy and the Netherlands; rise of guilds and democracy; rise of universities, new monasticism; Gothic art; and Romanic literature; Dante.

325. **The Renaissance in Flanders and Italy (1350-1550)**

The age of unrest. The Christian and the Flemish Renaissance; the Italian Renaissance, and its distribution over Western Europe through the merchants of the Common Life. The Renaissance spirit.

326. **Dutch History (1500-1815)**


**Latin**

Students who have had two units of Latin in high school should meet their Pre-Seminary or General College ancient language requirement by taking 301 and 302. Students, whether Pre-Seminary or General College, who have completed 101 and 102 should follow these courses with either 301 and 302, or 307 and 308. Those who wish to follow a Latin major should consult with the instructor in charge before registering.

101. **Elementary Latin**

Text: Thompson, Tracy, Duigt: *Essential Latin.*

102. **Elementary Latin**

Continuation of 101. Same text as above.

201. **Intermediate Latin**

For students who have had two units of Latin in high school. A thorough review of the grammar will accompany the reading of selections from various Latin authors.

202. **Intermediate Latin**

Continuation of 201.

301. **Cicero's Philosophical Essays**

Reading of one or more of the following: *De Amicitia, De Senectute, Tusculane Disputations.*

302. **Readings in Latin Prose and Poetry**

Selections drawn from the following Roman writers: Catullus, Cicero, Horace, Livy, Lucretius, Martial, Ovid, Pliny the Younger, Propertius, Tibullus and Vergil.

306. **Readings in the Church Fathers**

Selections drawn from the writings of Tertullian, Migneus, Felix, Cyprian, Lactancius, Ambrose, St. Jerome and St. Augustine.

308. **Readings in the Church Fathers**

Continuation of 307.

321. **Roman Culture**

Requires no knowledge of the Latin language. The emphasis falls on the development of the constitution, the growth of private law, and the status of education, religion, and philosophy in the Roman world.

322. **Latin Literature in English**

No knowledge of Latin is required. The masterpieces of Latin literature are presented through the medium of English translation. Some attention is given to the influence which Latin writers have had upon the literatures of subsequent ages.

327. **Latin Grammar and Writing**

In this course a thorough review of Latin grammar and syntax will be made, and attention will be given to Latin writing. This course and 300 may be offered as a three-hour-methods course in the department of Education. Same as Education 328.

330m. **Teachings' Course**

This course is required of all students who expect to teach Latin, and who seek to obtain a State Teachers' Certificate. In this course study will be made of the problems and methods of teaching secondary Latin. This course will be offered either the first or second semester to meet the convenience of the students interested.

**Mathematics**

Students who wish to major in Mathematics should take Math. 101 and Math. 102 in high school. Ten hours of Calculus is the basic requirement for a major in Mathematics.

101. **Advanced Algebra**

For those who have had only one year of algebra in high school.

102. **Solid Geometry**

Prerequisite: 101 and plane geometry.

103. **College Algebra**

Prerequisite: 101.

104. **Plane Trigonometry**

Prerequisite: 101 and 102. Students taking the Pre-Medical course may be admitted if they have had Course 101.
201. PLANE ANALYTICAL GEOMETRY
Three hours
Prerequisite: 103 and 104.

202. CONTINUATION OF 201
Three hours
Plane analytical geometry completed. Introduction to solid analytical geometry.

203. SPHERICAL TRIGONOMETRY
Two hours
Prerequisite: 102 and 104.

204. BUSINESS MATHEMATICS
Three hours
Required for all students of Business Administration. Prerequisite: Math. 101.

206. STATISTICS
Three or four hours
Emphasis on statistical methods. Prerequisite: 101 or 104; 103 is highly desirable.
For Business Administration Students 205, or its equivalent, is a prerequisite.

301. DIFFERENTIAL CALCULUS
Five hours
Prerequisite: 201 and 202.

302. INTEGRAL CALCULUS
Five hours
Integral calculus and introduction to differential equations. Prerequisite: 301.

304. DIFFERENTIAL EQUATIONS
Three hours
Prerequisite: 301 and 302.

305. THEORY OF EQUATIONS
Two or three hours
Prerequisite: 301 and 302.

309. ASTRONOMY — DESCRIPTIVE
Two hours
A study of the solar system, the sidereal universe, and the theory of evolution.

330m. TEACHERS' COURSE
One hour
Discussion of methods of teaching mathematics in secondary schools. Twenty hours of observation work are required.

Music

APPLIED MUSIC REQUIREMENTS

A. GENERAL
All music majors must pass a sight reading examination in piano during the four-year course of study. The Department of Music strongly advises each student to pass this examination as early in his course as possible. Opportunity for taking this examination will be provided during registration period in September and at the end of the second semester of the school year.

The examination will consist of sight reading a hymn or chorale and a simple piano accompaniment. The candidates must also be able to play the major and minor scales correctly in moderate tempo and should be grounded in correct touch and technique.

B. REQUIREMENTS FOR CONCENTRATES IN APPLIED MUSIC

1. Concentrates in Piano
Before a student may be accepted as a concentrate in applied music (piano), he must take the general piano sight reading and technical examination listed above. In his repertoire he should have included some of the standard studies, such as Czerny, Op. 299, Book I; Heller, Op. 46 or 47; Bach, Two-part Invention, and compositions which correspond in difficulty to:

Haydn, Sonata No. 11, G major No. 20 (Shirmer);
Mozart, Sonata C major No. 8 or F major, No. 16 (Schirmer);
Schubert, Impromptu Op. 149, No. 2, etc.

By the end of the second year of study in college, the student should have sufficient technical to play scales and arpeggios in rapid tempo; scales in parallel and contrary motion, in thirds and sixths and in various rhythms. His repertoire should include works of at least the following grades of difficulty:

Bach, Three-part Inventions and French Suites;
Beethoven, Sonatas or movements from Sonatas such as Op. 2, No. 1; Op. 14, Nos. 1 and 2, etc.;
Mozart, Sonatas No. 1, F major, or 16, A major (Schirmer Ed.);
Mendelssohn, Songs Without Words;
Liszt, "Liebesleid," or transcriptions such as "On Wings of Song;"
Schumann, Impromptu in B flat;
Chopin, Polonaise C sharp minor, Valse E minor, Nocturne Op. 9, No. 2;
Schumann, Nocturne F major, Noelette F major;
Some compositions by standard modern composers of corresponding difficulty.

By the end of the fourth year of study, the student must have a repertoire covering the principal classic, romantic and modern compositions which should include such works as:

Bach, Chromatic Fantasy and Fugue, toccatas, organ transcriptions by Bascin, Tausig, Liszt, P.Albert;
Beethoven, later Sonatas such as Op. 53, 57 and a Concerto;
Brahms, Rhapsody B minor, Sonata F minor;
Chopin, Ballades, Polonaises, Scherzi, and a Concerto;
Liszt, Rhapsodies, Paganini Studies, a Concerto;
Schumann, Carnaval, Concerto;
Compositions by standard American and foreign modern composers such as MacDowell, Grieg, Rubinstein, Minkowski, Debusay, Ravel, Rachmaninoff, and others.

II. Concentrates in Voice

Before a student may be accepted as a concentrate in voice, he must be able to sing on pitch with correct phrasing and musical intonation of standard songs in good English. He should also demonstrate his ability to read a simple song at sight and a knowledge of the rudiments of music. Some knowledge of piano is urgently recommended, and voice students are urged to satisfy the piano sight reading requirement as soon as possible.

III. Concentrates in Organ

Before a student may be accepted as a concentrate in organ, he should have completed sufficient piano study to perform some Bach Inventions, Mozart Sonatas, easier Beethoven Sonatas, compositions by Mendelssohn, Grieg, etc.

At the end of the second year of study, the student's organ repertoire should include the following compositions or works of comparable difficulty:

Bach (Schirmer Edition) Vol. I, No. 12, Prelude;
Volume II, No. 17, Fugue in G minor;
Selections from the Liturgical Year Chorales;
Mendelssohn, Sonatas No. II, IV, V;
Gaillaint, Sonata No. IV;
Compositions for the modern organ by standard American and foreign composers.
At the end of the fourth year, the student should demonstrate the ability to transpose, improvise, modulate and sight read. He should have a large repertoire of organ literature of all schools, eclectic and modern, of the degree of difficulty comparable to the following:

- Bach, Vol. IV (Schirmer), No. 4, Fantasia and Fugue, G minor;
- Vol. IV, No. 7, Prelude and Fugue, B minor;
- Vol. II, No. 12, Prelude and Fugue, D major;
- Bach, V, Sonatas.
- Franck, Chorales, Piece Heroique;
- Widor, Symphonies, No. V;
- Guilmant, Sonata D minor, No. 1;
- Vierne, Symphony No. 1.

Compositions for modern organ of same grade of difficulty by standard American and foreign composers.

In addition to the above suggested repertoire, the student should learn an understanding of the place of the organ in the service of the Calvinist churches and should be able to demonstrate ability in sight reading, solo and choral accompaniments.

IV. Students desiring of studying other instruments under the Applied Music Concentrate program should consult the Music Department requirements for such work.

The above applied music requirements conform to the standards set up by the National Association of Schools of Music in 1947.

THEORY

103. THEORY AND HARMONY
   Three hours
   The elements of music: tonality, notation, rhythm. A coordinated study of harmony through the ear, eye, and keyboard. Writing and harmonization of hymn tunes, sight-singing, dictation using primary chords and dominant seventh chords. Laboratory period to be arranged.

104. THEORY AND HARMONY
   Continuation of 103.
   Three hours

208. THEORY AND HARMONY, ADVANCED
   Three hours
   Continuation of 208-204. Use of all diatonic triads and seventh chords, altered chords, color chords. Problems of composition involving smaller forms. Continuation of sight-singing and dictation.

204. THEORY AND HARMONY, ADVANCED
   Continuation of 203.
   Three hours

303. COUNTERPOINT, CANON AND FIGURE
   Three hours
   Counterpoint, showing the principles of counterpoint composition, including a study of species counterpoint and a detailed analysis of Palestrinian counterpoint. Not offered in 1949-1950.

304. COUNTERPOINT, CANON AND FIGURE
   Three hours

315. ARRANGING AND CONDUCTING
   Three hours
   The problems involved in writing for orchestra, band, and choir. A survey of the technical limitations of each instrument and of the human voice. Arrangements written by class members will be performed by student organizations whenever practical. One class period will be devoted to conducting, using phonograph records and class ensemble.

316. ARRANGING AND CONDUCTING
   Continuation of 315.
   Three hours

HISTORY AND LITERATURE

211. INTRODUCTION TO MUSIC LITERATURE (MUSIC APPRECIATION)
   Three hours
   General course designed to develop intelligent discrimination in the listener. Structural principles and aesthetic concepts of music with reference to the various forms and styles will be considered. The course is planned to give a general idea of the entire realm of music and is intended as a basis for the technical musician and those who wish to become merely intelligent listeners.

212. MUSIC LITERATURE
   Continuation of 211.
   Three hours

219. CHURCH MUSIC
   Two hours
   The history and practice of worship music from the Hebrews and early Christians to the present. The development of Church chant, the Lutheran chorale and the Germanic Dutch psalm-suites. Hymnody in Germany, England, and America. The principles of sound worship music and a study of the literature for organ, choir, and congregation. Opportunity to conduct hymns and anthems before the class.

220. CHURCH MUSIC
   Continuation of 219.
   Two hours

305. HISTORY OF MUSIC
   Three hours
   The development of the art of music from the earliest times to the present. Oratorio and church music, the opera, songs, and instrumental music. Biographies of composers. Representative compositions of each main period presented in class. Lectures, collateral reading, term papers, and text-book work.

306. HISTORY OF MUSIC
   Continuation of 305.
   Three hours

307. FORM
   Three hours

308. FORM
   Three hours

311. SYMPHONIC LITERATURE
   Three hours
   A study of the development of the Symphony from the early sonatas, suites, and overtures, through to the modern symphony.

312. SYMPHONIC LITERATURE
   Continuation of 311. This second semester will be devoted primarily to the symphonic poem.

MUSIC EDUCATION

222. ELEMENTARY SCHOOL MUSIC
   Three hours
   Methods of teaching vocal music in the elementary grades, including the teaching of tone songs, tone-production, rhythm bands, music-reading, and a study and evaluation of music literature.

331. SCHOOL MUSIC METHODS I
   Three hours
   A study and evaluation of vocal materials and methods for the elementary grades. A more intensive course than Music 222 for the music major who intends to teach grade school music. Prerequisite: Music Theory 103 or its equivalent. No credit for a student who has credit for Music 222.
332. **School Music Methods II**

A study and evaluation of vocal methods and materials for the junior and senior high schools, embracing a study of the adolescent child, the changing voice, the music curriculum, the organization and maintenance of vocal ensembles, including the high school choir. Primarily for music majors who plan to teach junior or senior high school music. Prerequisite: Music Theory 103 or its equivalent.

**333. Instrumental Methods I — Strings**

Problems in the organization of a school instrumental program, beginning with the establishment of elementary school rhythm bands; principles of class instruction in violin, clarinet, and trumpet; evaluation of methods of class instruction; orchestra and band organization; repertoire.

**334. Instrumental Methods II — Woodwinds**

Same description as 333.

**APPLIED MUSIC (Individual Lessons)**

117-118. **First Year Voice**

Classification of the voice, vocalizations for tone production. Simple Italian and old English classics to assist in tone production through articulation and dictum. Easy oratorio arias. Fee, $60 per semester.

217-218. **Second Year Voice**

Continuation of technical studies for development of the necessary qualities of the individual voice. Additional Italian and English classics. German or French songs introduced. Additional recitatives and arias from oratorios. Fee, $80 per semester.

317-318. **Third Year Voice**

Study of songs with foreign text continued. Additional material from oratorios and selected material from the operatic repertoire. Technical studies likewise continued. Fee, $90 per semester.

227-228. **Fourth Year Voice**

Preparation of program for graduation recital, selected from repertoire acquired in previous grades; public recital; appears with orchestra upon recommendation of the music faculty. Fee, $90 per semester.

109-110. **First Year Organ**

Individual lessons in organ. Prerequisite: three years of piano. Fee $80 per semester plus $10 per semester for the use of the organ.

209-210. **Second Year Organ**

Individual lessons in organ. Fee $80 per semester plus $10 per semester for the use of the organ.

309-310. **Third Year Organ**

Individual lessons in organ. Fee $80 per semester plus $10 per semester for the use of the organ.

**Piano**


**Violin**


**Note:** Arrangements will be made for additional private lessons in piano or other instruments for interested students.

**APPLIED MUSIC (Groups)**

101-102. **Oratorio Chorus**

No Credit

The study of representative works of the great masters of choral writing with a view to public performances. Handel's Messiah is rendered annually at Christmas time. Another oratorio is presented in the spring.

Open to all who meet the requirements of voice and musicianship.

**207. A Cappella Choir**

One hour

Representative works in the field of choral literature are studied and a limited number of selections prepared for concert performances. Open only to those who meet the demands of voice and musicianship.

**208. A Cappella Choir**

One hour

Continuation of 207.

**213-214. Band**

One hour per Semester

**215-216. Orchestra**

One hour per Semester

**Philosophy**

Students who plan to major in Philosophy should, before the beginning of their junior year, confer with a member of the departmental staff.

**202. Logic**

A course in traditional and elementary symbolic logic. This is a semester course which is offered both in the first semester and in the second. Not open to freshmen.

**203. Introduction to Philosophy**


**203a. Introduction to Philosophy**

Continuation of 203.

**204. History of Philosophy: Ancient**

Three hours

An examination of the philosophical question raised by the Greek mind and an attempt to trace the implicit movement in the preferred solutions. For students taking only six hours of philosophy, 203 is prerequisite.

**205. History of Philosophy: Medieval**

Three hours

A study of the Christian philosophical synthesis. Special attention is given to St. Augustine and St. Thomas Aquinas. Prerequisite: 204.

**206. History of Philosophy: Modern**

Three hours

A study of the development of philosophical thought from the Renaissance to Hegel. Prerequisite: two semesters of philosophy.

**207. History of Philosophy: Recent**

Three hours

An examination of the leading thought movements of the last 100 years. Prerequisite: 206.

**208. Metaphysics**

Three hours

An attempt, through a consideration of ontological and cosmological problems, to lay bare the outlines of a philosophical system. Prerequisite: 302.
305. ETHICS
Three hours
A course in moral philosophy conducted by way of a critical evaluation of rival ethical theories. Open to Juniors and Seniors. Prerequisite: two semesters of philosophy.

306. THE PHILOSOPHY OF THOMAS AQUINAS
Three hours
A course in Thomistic thought based upon a critical analysis of the Summas. Prerequisite: 301. Open only to Seniors.

Physical Education
Students desiring the degree of A.B. in Education may obtain a minor in this department. They should select twelve hours from the courses listed here; the remaining three hours they should select from the following: Organic Science 106, and 210.

103. PERSONAL HYGIENE
Three hours
The proper care of our bodies and approved practices for the prevention of disease are studied. At least half of the semester is devoted to laboratory work. The remainder of the semester is spent in the study of personal hygiene and the prevention of disease. Prerequisite: completion of the first year of college courses in Physical Education.

104. PRINCIPLES AND METHODS OF PHYSICAL EDUCATION
Two hours
Traces the history of Physical Education from its early origins to present-day trends. Considers the relation of Physical Education to life and ideas. acquaints the student with the profession of Physical Education.

123. ORGANIZATION AND ADMINISTRATION OF PHYSICAL EDUCATION
Two hours
A study of the representative programs of Physical Education and evaluation of these programs. Offered in 1940-1946.

204. COMMUNITY RECREATION
Two hours
A study of the development, administration, and use of leisure time within the community and of the community agencies organized to meet the leisure time needs of the community. Offered in 1940-1960.

205. COACHING OF BASKETBALL
Two hours

206. COACHING OF SPRING SPORTS
Two hours
A study of the fundamentals of track, tennis, and golf. Methods of teaching and coaching of these sports are also discussed.

SPECIAL PHYSICAL EDUCATION COURSES FOR GIRLS

211. SPRING SPORTS FOR GIRLS
Three hours

223. TEACHING OF PHYSICAL EDUCATION IN ELEMENTARY SCHOOLS
Three hours
Theoretical and practical methods in the teaching of physical activities to children of the elementary grades. Not offered in 1940-1960.

Physics

101. ELEMENTARY PHYSICS
Three hours
Mechanics, sound, and heat. Adapted to pre-nursing, medical technology students and normal students preparing to teach general science. Accompanied with exercises and demonstrations. No laboratory.

102. ELEMENTARY PHYSICS
Three hours
Magnetism, electricity, and light. Adapted to pre-nursing, medical technology students and normal students preparing to teach general science. Accompanied with exercises and demonstrations. No laboratory.

201. GENERAL PHYSICS
Four hours
Mechanics, sound, and heat. Prerequisite: plane trigonometry. Three recitations and one two-to-three-hour laboratory period a week. Laboratory fee, $3.00.

202. GENERAL PHYSICS
Four hours
Electricity and light. Continuation of 201. Three recitations and one two-to-three-hour laboratory period a week. Laboratory fee, $3.00.

203. GENERAL PHYSICS
Five hours
Mechanics, sound, and heat. (Required of all engineering students.) At least half of the semester is devoted to laboratory work; the remainder of the time is spent in the study of mechanics. Many experimental illustrations. Four recitations and one three-to-four-hour laboratory period a week. Prerequisite: plane trigonometry and a preparatory course in physics. Laboratory fee, $3.00.

204. GENERAL PHYSICS
Five hours
Electricity and light. (Required of all engineering students.) A continuation of 203. It takes up the fundamentals of electricity and light with ample class illustrations. Four recitations and one two-to-three-hour laboratory period a week. Laboratory fee, $3.00.

205. PHYSICS PROBLEM COURSE
One hour
Should be preceded by or accompany 201 or 203. This course consists of the solution and discussion of problems in mechanics, sound, and heat. One recitation a week.

206. PHYSICS PROBLEM COURSE
One hour
A continuation of 205. One recitation a week.

207. MODERN PHYSICS
Three hours
A study of physics beginning with the discovery of radioactivity, electricity, the nature of radiant energy, x-ray, atomic spectra. Discussion of subjects such as the atomic nature of matter and the molecular structure of radioactivity. Prerequisite: Physics 202 or 203.

208. SURVEY COURSE
Two hours
A non-mathematical presentation of the fields of physics accompanied with demonstrations. Those concentrating in science do not receive credit for this course. No prerequisite. Offered odd years.

Political Science

History 201 and History 204 (Foreign Relations) may be taken to satisfy requirements for a major in either History or Political Science, but these courses may not be used to satisfy requirements in both departments.

101. GOVERNMENT OF MODERN STATES
Three hours
The organization and operation of modern governments. Emphasis is placed on British and Continental European governments with a special regard for recent political developments in these countries. Lectures and collateral reading.

102. GOVERNMENT OF MODERN STATES
Three hours
Continuation of 101, which is prerequisite.
201. PRINCIPLES OF POLITICAL SCIENCE
(Formerly Political Science 301 — Introduction to Political Science)
An analysis of problems dealt with in Political Science, including the origin, nature, and essential functions of the state; the nature of sovereignty and law; and relations of government and the individual. Lectures and collateral reading. Not open to freshmen.

202. PRINCIPLES OF POLITICAL SCIENCE
Continuation of 201, which is prerequisite.

203. AMERICAN NATIONAL GOVERNMENT
Basic principles and their practical application to the operation of the Federal constitution. The interpretation of the constitution by the various branches and departments of government, and the extension of government into the socio-economic field. Three hours

204. AMERICAN NATIONAL GOVERNMENT
Continuation of 203, which is prerequisite.

Note: Foreign Relations. See History 303 and 304.

Psychology

201. INTRODUCTORY PSYCHOLOGY
A general course in psychology for beginners. This course is given during both semesters. Three hours

202. EDUCATIONAL PSYCHOLOGY
Course 201, or its equivalent, is a prerequisite. Three hours

203. CHILD PSYCHOLOGY
A study of the physical and mental development of the child. Course 201, or its equivalent, is a prerequisite. Three hours

204. MENTAL HYGIENE
A study of personal attitudes toward reality and the solution of maladjustment by means of integration. Two hours

205. THE PSYCHOLOGY OF ABNORMAL PEOPLE
A study of disorders of sensation, perception, association, and so forth. Some study is made of hypnotism, hysteria, and other subjects usually considered under the heading of abnormal psychology, and especially, too, the phenomena and problems of the psychoses. Psychology 201, or its equivalent, is a prerequisite. Three hours

Sociology

201. PRINCIPLES OF SOCIOLOGY
A study of the structure, functions and changes of social groups, stressing the important role that group relationships play both for the individual and for society. Fundamental concepts are discussed and an introductory view of the general field of sociology is presented. Not open to freshmen, except by special permission. Three hours

202. SOCIAL PROBLEMS
An investigation of the primary and secondary causes of social maladjustments in general and a survey of a number of major social problems confronting American society. Three hours

203. RURAL SOCIOLOGY
A study of contemporary farm and village social organization and of problems arising in the rural framework. The suburban, or "fringe," development is considered as well as urban-rural relationships. 203 is a prerequisite except for those who are working towards a two-year State Limited Certificate. Three hours

204. LABOR PROBLEMS
This course is described under Economics. Three hours

205. THE FAMILY
This course will be adapted to suit the needs of the students. It aims, however, at an intensive study of the history of the family as a social and educational institution, and at thorough discussion of the divorce problem and other problems connected with modern family life. Prerequisites: 203 and 204, or their equivalents. Three hours

206. THE PROBLEMS OF SOCIAL WORK
A survey of the various types of social work, including individual case work, group work, and community organization. Agencies set up to work with deviant forms of behavior and situations are studied both theoretically and in operation. Should be valuable for teachers as well as those contemplating doing social work. Three hours

207. CRIMINOLOGY AND DELINQUENCY
A study of the primary and secondary causes for, manifestations of, and ameliorative and preventive programs for criminal and delinquent behavior. Emphasis is placed on the implications for various community institutions, including school and church. Three hours

208. EDUCATIONAL SOCIOLOGY
This course is offered in the department of Education. Three hours

209. SOCIAL CASE WORK
Sociology students interested in social work have the opportunity of doing volunteer case work for agencies affiliated with the Grand Rapids Community Chest. Where satisfactory arrangements have been made, the college allows one hour of credit per semester for such work. One hour

210. PRESEMINAR IN SOCIOLOGICAL RESEARCH
How to set up a problem for research, techniques of collecting data, sources of data, uses of tables and charts, and the preparation of research reports. Prerequisites: At least 12 hours of Sociology. Open to seniors only and by permission. Taught both semesters. Two hours

211. METHODS OF TEACHING SOCIAL PROBLEMS
One or two hours

Statistics

A course in statistics is offered in the Mathematics department. Students majoring in Sociology should consult the Dean when making their arrangements for a major in this field.
Speech

A student wishing to major in Speech should consult one of the members of the staff.

PRACTICE-THEORY COURSES

101. SPEECH FOR THE ELEMENTARY TEACHER
      Methods and materials relative to story telling in the early grades.
      Two hours

103. FUNDAMENTALS OF SPEECH — I
      Basic principles of public speaking on the college level, with the aim of developing proper mental, vocal, and physical habits.
      Two hours

104. FUNDAMENTALS OF SPEECH — II
      Continuation of 103, with emphasis on longer speeches, rhetoric, and special applications such as discussion, debate, parliamentary practice, etc.
      Prerequisite: Course 103.
      Two hours

204. ANCIENT ORATORS AND THEORIES OF SPEECH
      Analytical study of ancient orators and rhetorical theory, pre-Demosthenes through Quintillian. Not open to Freshmen.
      Two hours

205. ADVANCED SPEECH COMPOSITION
      Study of the psychological and rhetorical techniques involved in speech composition. Speeches and oration. Intended particularly for juniors in the pre-Seminary course.
      Two hours

207. INTRODUCTION TO SPEECH BASED ON THE GREAT BOOKS
      Prerequisite to Course 208. A study of Adler's How to Read a Book intended to prepare the student for careful and critical reading of the Great Books chosen as basic for work in 208. Open to Freshmen by permission.
      One hour

208. SPEECH BASED ON THE GREAT BOOKS
      Each student will choose one of the books from the Adler list and use it as a basis for his speeches during the semester. Emphasis on speech.
      Prerequisite: Course 207.
      Two hours

301. ADVANCED SPEECH
      A practice course, designed for pre-Seminary students. Open to others only by permission.
      Two hours

308. INTERPRETATIVE READING (Formerly 201)
      The principles of interpretation and expression. Oral interpretation of representative selections.
      Prerequisite: Course 308.
      Two hours

309. SPEECH FOR THE CLASSROOM TEACHER
      Designed to: (1) improve the prospective teacher's vocal habits; (2) train in the detection, appreciation, and handling of speech defects encountered in the classroom; (3) aid the prospective coach of forensic programs. Open only to juniors and seniors in Education, and others by permission.
      Three hours

311. ORAL DISCUSSION AND DEBATE
      Theory and practice of discussion and debate in their various forms.
      Two hours

FORENSICS

209. INTERCOLLEGIATE PEACE ORATORY (Formerly 305)
      One hour

211. INTERCOLLEGIATE ORATORY (Formerly 307)
      One hour

310. INTERCOLLEGIATE INTERPRETATIVE READING
      One hour

312. INTERCOLLEGIATE DEBATING
      One hour

SUMMARY OF ATTENDANCE

Seniors ........................................ 206
Juniors ........................................ 379
Sophomores .................................... 382
Freshmen ...................................... 482
Unclassified .................................. 28
Summer School ................................. 946

Total ........................................... 1751