Calvin College
An Institution of the Christian Reformed Church

YEARBOOK
1946 - 1947

Announcements for 1947-1948

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, whether or not in Calvin Dormitory, 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

1947

General Session

Beginning of first semester and enrollment of freshmen .......................... September 3
Enrollment of upper classmen and opening exercises ......................... September 5
Re-examinations .................................................................................. September 5-6
Thanksgiving recess ............................................................................... November 27-30
Christmas vacation begins ................................................................. December 19, 6:00 P.M.

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Christmas vacation ends ................................................................. January 6, 7:00 A.M.
Final examinations ............................................................................. January 6-14
First semester closes ......................................................................... January 14
Registration for the second semester ................................................ January 15-19
Spring vacation begins ........................................................................ March 19, 8:00 P.M.
Spring vacation ends ........................................................................... March 30, 7:00 A.M.
Re-examinations .................................................................................. April 2-3
Meeting of Board of Trustees ........................................................ May 20
Final examinations .............................................................................. May 20-28
Commencement ....................................................................................... June 1

Summer Session

Enrollment ......................................................................................... June 17, 9:00 A.M.
Classes begin ...................................................................................... June 18
Independence Day recess ..................................................................... July 4
Summer session closes ...................................................................... July 30

General Session

Beginning of the first semester and enrollment of freshmen ............... September 8
Enrollment of upper classmen and opening exercises ....................... September 10
Re-examinations ............................................................................... September 10-11

BOARD OF TRUSTEES

OFFICERS

The Rev. Gerrit Hoekema ................................................................. President
The Rev. Ralph Bronkema, Th.D ......................................................... Vice-President
The Rev. John Gritter ........................................................................ Secretary

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The Rev. Sebastian Struyk ................................................................. Los Angeles, California (Class of 1915)
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(Classis Pella)
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(Classis Sion Center)
The Rev. Robert A. Peck .................................Sheboygan, Wisconsin
(Classis Wisconsin)
The Rev. Jacob H. Bruinsege, Th.D. .................Zeeland, Michigan
(Classis Zeeland)

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Rev. Edward J. Taus, Vice-President
Rev. John Griller, Secretary
Dr. J. H. Bruinsege
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Rev. Richard Veldman

COMMITTEE ON FINANCE
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Mr. Benjamin W. Hertel
Rev. Richard J. Frans, Secretary
Mr. Tony Noordewier
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Rev. Donald Drost .................................Mr. Fred L. Winter
Mr. John Heiman .................................

Mr. Tony Noordewier, Treasurer ............................855 Kilamastu Ave., S.E.
Mr. Henry J. Voog, Assistant Treasurer ..........................1117 Neldan Ave., S.E.
Mr. Samuel Van Til, Field Representative ..........................1300 Maude Ave., N.E.

ADMINISTRATION
Henry Schultze, A.B., B.D. ................................President
Henry J. Bykamp, Ph.D. ..................................................Dean of the College
Harry G. Dobker, M.S. ..................................................Registrar
Catherine Van Oyenon, A.M. ......................................Dean of Women
Lambert J. Fokstra, Ph.D. ........................................Director of Teacher Placement

LIBRARY
Josephine Baker, A.M.L.S. ........................................Librarian
Mrs. Esther Brema, A.B. ........................................Assistant in the Library

OFFICE AND BOOKSTORE
Caroline Veen ........................................Secretary to the President
Lena Bouwensbook ........................................Office Secretary
Marilyn J. Zwieter ........................................Office Clerk
Gertrude DeBoer ........................................Clerk, Treasurer's Office
Ruth Immee ........................................Alumni Secretary and Bookstore Manager
Mrs. Wilma Westra ........................................Assistant in the Bookstore

MAINTENANCE AND HOUSING
Henry Keogstra ........................................Custodian
Mr. and Mrs. M. Schreur ........................................Dietist, Calvin Dormitory
Mrs. Anna Dolin ........................................Housemother, Calvin Dormitory
Miss Jeanne Biezena ........................................Housemother, Calvin Hall
Mrs. J. Krutchof ........................................Housemother, 1345 Franklin St., S.E.
Mrs. A. Prince ........................................Housemother, 1338 Franklin St., S.E.

THE FACULTY

HENRY SCHULTZE, A. B., B. D., President
1240 Benjamin Avenue, S.E.

ALBERT J. ROOKS, A. M., Dean Emeritus
Professor of the Latin Language and Literature, Emeritus
787 Benjamin Avenue, S.E.

JACOB G. VAN DER Dries, A. M.
Professor of the English Language and Literature
827 Rato Street, S.E.

JACOB E. BROEKE, A. B.
Professor of Modern Languages
1610 Alexander St., S.E.

JOSEPH DE KROON, A. M.
Professor of Education and Psychology, Emeritus
265 Collins Ave., S.E.

JOHN P. VANDERSTRAETE, Ph. D.
Professor of Organic Science
1027 Benjamin Avenue, S.E.

JAMES NIEUWKOOP, B. S.
Professor of Mathematics, Emeritus
1545 Fuller Avenue, S.E.

HENRY J. G. VAN ANDEL, A. M.
Professor of Holland Language and Literature
1561 Giddings Avenue, S.E.

PETER KOCKERSTRA, Ph. D., Secretary
Professor of History and Political Science
1515 Warden Street, S.E.

RALPH STOK, Ph. D.
Professor of Classical Languages
1501 Calvin Avenue, S.E.

HENRY J. RYSEMAM, Ph. D., Dean
Professor of Economics and Sociology
1501 Sherman Street, S.E.

WILLIAM HARRY JELLEMA, Ph.D.
Professor of Philosophy
1601 Alexander Street, S.E.

HARRY G. DEKKER, M., S., Registrar
Professor of Chemistry
1609 Alexander Street, S.E.

H. HENRY MEYER, Th. D.
Professor of Bible
1545 Fuller Avenue, S.E.

HARRY J. VANDERSTRAETE, Ph. D.
Professor of Educational Methods
1143 Fuller Ave., S.E.

SEYMOUR SWETS, A. M.
Professor of Music
1590 Underwood Avenue, S.E.

Phone 5-5601
Phone 5-1221
Phone 5-4054
Phone 5-2024
Phone 6-8808
Phone 3-3006
Phone 5-3765
Phone 5 5096
Phone 5-5007
Phone 5-9770
Phone 5-8877
Phone 5-7692
Phone 5-0009
Phone 5-1239
LAMBERT J. FLONSTRA, Ph.D.
Professor of Education
1126 Alto Avenue, S.E.
Telephone 3-5979

EDWIN Y. MONSLA, Ph. D.
Professor of Physical Science
719 Fuller Avenue, S.E.
Telephone 3-8824

HARRY J. WASSINK, A. B., B. S.
Professor of Physics and Engineering
2577 Philadelphia Avenue, S.E.
Holland Telephone 6-6849

WILLIAM THOMAS RADIUS, Ph. D.
Professor of Classical Languages
1941 Colorado Avenue, S.E.
Telephone 5-1407

JOHN DE VRIES, Ph. D.
Professor of Chemistry
831 Calvin Avenue, S.E.
Telephone 3-8438

ALBERT H. MUYKENS, A. M.
Professor of Mathematics
1557 Philadelphia Avenue, S.E.
Telephone 5-6752

HENRY ZOBOR, M. D.
Professor of Philosophy
1541 Sherman Street, S.E.
Telephone GL2-1433

RICHARD DRUET, Ph. D.
Professor of History
1290 Sherman Street, S.E.
Telephone 5-0991

CORNELIUS JAAKEMA, Ph.D.
Professor of Education
1452 Giddings Ave., S.E.
Telephone 3-7542

HENRY ZYLSTRA, Ph.D.
Associate Professor of English
922 Virginia Street, S.E.
Telephone 8-5823

JOHN THOMAS DALING, Ph. D.
Associate Professor of Philosophy and Psychology
3150 West Leonard Road
Telephone 7-4717

GORDON BUTLER, A. M.
Associate Professor of Economics, and Sociology
228 Lafayette Avenue, N.E.
Telephone 6-9847

JOHN J. TIMMERMAN, A. M.
Associate Professor of English
1016 Noined Avenue, S.E.
Telephone 5-0897

* HENRY A. BRUINSMA, A. M.
Associate Professor of Music
BERNARD FRIDEMA, A. M.
Associate Professor of German
2017 Alto Avenue, S.E.
Telephone GL2-2176

WILLIAM SPENROTH, Ph. D.
Associate Professor of History
2405 Almoh Avenue, S.E.
Telephone 3-0636


KARL U. STRIKKEVIDA, Ph.D.
Associate Professor of History
1358 Griggs Street, S.E.
Telephone 5-2671

HENRY R. VAN TIL, A. B., Th. M.
Associate Professor of Bible
2555 Hancock St., S.E.
Telephone 5-8480

JOHN CHARLES BULL, A. B.
Associate Professor of Physical Education
2500 Durand Avenue, S.E.
Telephone GL2-1326

JOHN HAROLD BRATI, A. B., Th. M.
Associate Professor of Bible
700 Prince St., S.E.
Telephone 5-4529

THEODORE KREKKE, Ph.D.
Associate Professor of Chemistry
JAMES J. DE JONGE, M.S., M. S.
Associate Professor of Music
1300 Calvin Avenue, S.E.
Telephone GL2-1326

GERTRUDE SNEIDER, A. M.
Instructor in English
330 Diamond Avenue, S.E.
Telephone 5-0059

MARTIN KARSTEN, A. M.
Instructor in Organic Science
1401 Eastern Ave., S.E.
Telephone 5-0768

JOHN TULS, A. M.
Instructor in Mathematics
101 Fuller Avenue, S.E.
Telephone GL4-4406

DONALD HERBERT BOUMA, A. M.
Instructor in Sociology
116 Brown Street, S.W.
Telephone 5-5992

* JOHN ROBERT HUTCHENS, A. B.
Instructor in Chemistry
JOSEPHINE BAKKE, A. M., A.M.L.S.
Librarian
1055 Tamarack Avenue, N.W.
Telephone 5-5744

CATHERINE VAN OOPKUM, A. M.
Dean of Women
410 Thomas St., S.E.
Telephone 5-5992

HENRY BENDELINK, A. M.
Instructor in Organic Science
LESTER DE ROOY, A. M.
Instructor in Speech
2017 Alto Avenue, S.E.
Telephone 7-36-2

ANNE DE BOER, A. M.
Assistant in Chemistry
272 London St., S.W.
Telephone 3-3518

RUTH VANDERKIEFT, A. M.
Assistant in English
816 Sigsbee St., S.E.  Telephone GL4-1215

JOHN VANDERBERG, A. M.
Assistant in Economics and Business Administration

ROBERT G. SETTERBERG, B. S.
Assistant in Drawing
650 Spaulding, S.E.

LEE C. VERDUN, B. S.
Assistant in Physics
1720 Silver Avenue, S.E.  Telephone GL2-5784

NELLIE VAN HERP TJAKKE, A. B.
Assistant in Music

KATHLEEN HAGG, A. B.
Assistant in Physical Education
1336 Dunham St., S.E.  Telephone 3-9699

SUZANNE LEISTMA, A. B.
Assistant in Latin
1490 Fulton St., East  Telephone 8-3140

ANITA PETERMAN, A. B.
Assistant in Speech

HELEN VAN LAAR, A. B.
Assistant in Education
1519 Sigsbee St., S.E.  Telephone 6-5083

HAROLD GERRE, A. B.
Assistant in Music

Committees of the Faculty

Athletics—De Vries, Bult, Tuls, Timmerman, Buter, Bouma.

Boarding Places and Dormitory—Wassink, Muyskens, Drost, Slingerland, Van Til, Daling, Van Opynen, Bengelink.

Bookstore—Monisma, Karsten, Drost, Wyngaarden.

Discipline—Hoekstra, R. Stob, Van Halstma, Jeliema, Spoelhof, Van Opynen.

Educational Policy—Radius, Monisma, Van Zyl, H. Stob, Zylstra, De Vries.

Library—Van Andel, Zylstra, Streekwra, Dirkse.

Placement Bureau—Floksstra, Van Zyl, Van Opynen, Jaarsma.

Publications—Timmerman, Radius, Fridema, De Koster.

Religious and Social Activities—Meeter, Van Andel, Swets, Streekwra, Bratt, Slingerland, De Jonge.

Scholarship and Guidance—Dekker, Ryskamp, Floksstra, R. Stob, Meeter, Van Til, Van Opynen.

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 for 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.

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 .......... 3

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 .......... 7

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 .......... 0, 2, 3

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 ...... ½ or 1 unit
Solid geometry ...... ½ unit
Trigonometry ...... ½ 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) ...... ½ unit
and zoology ...... ½ unit 0, 2, 3

D. SOCIAL STUDIES GROUP

Ancient history, 1 unit
European history, 1, 1½, or 2 units
American history, 1½ or 1 unit
American government, ½ unit
Economics, ½ unit 0, 3

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 ................ 5

Total .......... 15

Physics may not be counted in either 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 groups in selecting sequences and should, if possible, complete one language sequence in high school.

NOTE: Pre-summer students should present, if possible, 2 units of high school Latin and 3 units of high school Latin for admission. Pre-medical, pre-dental, and pre-engineering students should present, if possible, 1½ units of algebra, 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 Returning War Veterans

Men and women in the Armed Services 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 recommended by the State 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 some other 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.

To students coming from other colleges not more than sixteen hours of credit will be allowed for every full semester's work. 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.

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.
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. To this rule
there is one exception; as follows:

The graduation fee need not be paid till just before the time
of admission to final examinations.

ORGANIZATION Fee. All students pay an organization fee of
three and one-half dollars each semester for the benefit of all-school
activities.

REGULAR TUITION Fee. The regular tuition is $100.00 a semes-
ter. For students who are members of a Christian Reformed Church
and thus contribute indirectly to the support of Calvin College the
tuition is as follows:

For students residing west of the Ohio River and east of the
Mississippi the tuition is $75.00 a semester.

For two students from one family residing west of the Ohio
River and east of the Mississippi River the tuition fee for
each is $57.50 a semester.

For students residing east of the Ohio River the tuition fee
is $52.50 a semester; for two students from one family residing
in the region defined, the tuition fee for each is $41.00 a semes-
ter.

For students residing west of the Mississippi River but east
of Montana, Wyoming, Colorado, and New Mexico, the tuition
fee is $32.50 a semester; for two students from one family re-
siding in the region defined, the tuition fee for each is $41.00
a semester.

For students residing in Montana, Wyoming, Colorado, New
Mexico, or in points west of these states, residence is deter-
mined as follows:

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

Residence of a married man is considered that of his estab-
lished home during the semester preceding the date of regis-
tration.

Residence of all others is considered local.

EXCESS HOURS. Students taking in excess of seventeen semester
hours will be charged an extra fee of six dollars for each such
excess semester hour.

UNCLASSIFIED STUDENT FEES. Unclassified students pay at the
rate of $8 for each semester hour.

LABORATORY Fee. An extra fee is charged in some laboratory
courses to cover cost of materials, wear and tear of instru-
ments, and the like. Amount of such laboratory fee is indicated in the catalog
in the description of the specific courses.

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

GRADUATION Fee. The general graduation fee, including di-
ploma, is six dollars.

LATE REGISTRATION. A fee of one dollar will be charged for
late registration.

SUMMER Session. The tuition fee is $8 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. Lockers are rented to students at the rate 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, laun-
dry, and text books, are from $450.00 up per year.
HOUSING

Alexander Lodge for Men

Men students may obtain rooms at Alexander Lodge, 1010 Alexander Street. Ward accommodations are provided, but meals must be arranged for at the dining room in the campus dormitory. Board and room rates are subject to change. The approximate rates for the first semester, 1947-48 are:

- Room at Alexander Lodge: $3 to $5 per person
- Meals at the dormitory:
  - 3 meals per day: $120 to $140 per semester
  - 2 meals per day: $120 to $130 per semester

Men living in Alexander Lodge must furnish their own towels, sheets, and pillow cases.

College Residence Halls for Women

The college dormitory for women on Giddings Avenue provides living accommodations for about 80 students. Board and room fees total approximately $220.00 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 $10.00 per week. Application for admission to these homes 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. The student should report to the Committee on Housing as soon as he arrives in Grand Rapids.

The college cafeteria is located in the dormitory. In addition to the dormitory residents and the men students from Alexander Lodge, 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.

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

A RHEDES 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 1944-45 the award was made for special excellence in the department of Bible. For the year 1945-46 the award went to the department of Education.

THE BEETS CALVINISM PRIZE.—Dr. and Mrs. Henry Beets have presented the College with $300.00, 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.

BROODMAN ORATORICAL PRIZES.—Through the generosity of Dr. G. J. Broodman 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.

ANNA BRUMSMA PRIZE IN MUSIC.—The interest of $75.00, given by Mr. H. J. Brummsma 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.
The Thespian Prize—The Thespians, dramatics 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."

Loans

The Dutch Mother Fund, founded by one of Calvin’s grateful alumni, uses the proceeds of $2,500 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 each school day 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 the spiritual adviser has consultations with each student, the aim being to offer such help in the moral and spiritual life as the student may need.

The Hekman Memorial Library

The library contains more than 32,000 volumes. About 900 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 sixth, 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 fifth. 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**

Reports 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>F</td>
<td>Failure, No re-examination.</td>
<td>Minus 1</td>
</tr>
<tr>
<td>Inc.</td>
<td>Work not completed.</td>
<td>Minus 2</td>
</tr>
<tr>
<td>E</td>
<td>Condition, which may be removed by re-examination.</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>Unsatisfactory; just passable</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>Graduation average.</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>Good or very good.</td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>Exceptional.</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. Failure to do this results in an F for the course.

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., 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 Friday and Saturday 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 be graded 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**

Admission 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 certified students from the following courses: General College, pre-Seminary, Education, pre-Medical, pre-Law, pre-Engineering, pre-Business Administration, pre-Forestry, and pre-Nursing.

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.

By department is meant any one of the following: Art, Bible, Chemistry, Dutch, Economics and Sociology, Education, Engineering, English, French, German, Greek, History, Latin, Mathematics, Music, Organic Science, Philosophy, Physical Education, Physics, Political Science, Psychology, Public Speaking.

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, 102, 201, 202, 301</td>
<td>10</td>
</tr>
<tr>
<td>English 105, 104</td>
<td>6</td>
</tr>
<tr>
<td>History</td>
<td>6</td>
</tr>
<tr>
<td>Philosophy (not including Psychology or Logic)</td>
<td>6</td>
</tr>
<tr>
<td>Natural Science</td>
<td>10</td>
</tr>
<tr>
<td>Foreign Language (see following explanation)</td>
<td></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 departments of study have been divided into three groups; as follows:

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

Group II. Chemistry, Mathematics, Physics, Organic Science, 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 departments in one of which he completes a sequence of at least twenty-one 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). Besides, he must take an additional three hours in either of these two departments. The total number of hours required in the major group is, therefore, thirty-six.

c. In his minor group the student must choose one department 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.

e. 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 requirements for these certificates are given on p. 32, 3 b. Students planning to work for a certificate should consult the Dean.

Pre-Seminary

(See note regarding Pre-Seminary entrance requirements under Plan A, page 14, 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 obtain one and one-third times as many honor points as hours of credit.

3. Prescribed Work. The following 115 hours of work are prescribed:

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bible 201, 202, 301, 302</td>
<td>8</td>
</tr>
<tr>
<td>Chemistry 306</td>
<td>2</td>
</tr>
<tr>
<td>Dutch Language</td>
<td>2</td>
</tr>
<tr>
<td>Dutch History 306</td>
<td>2</td>
</tr>
<tr>
<td>Economics 201, 202</td>
<td>6</td>
</tr>
<tr>
<td>Education 301</td>
<td>3</td>
</tr>
<tr>
<td>English incl. 108, 109</td>
<td>12</td>
</tr>
<tr>
<td>Greek 101, 103, 201, 202</td>
<td>20</td>
</tr>
<tr>
<td>History 101, 102</td>
<td>8</td>
</tr>
<tr>
<td>Latin 201, 202, or 207, 208</td>
<td>6</td>
</tr>
<tr>
<td>Math. 309, (Astronomy)</td>
<td>2</td>
</tr>
<tr>
<td>Org. Science 210, 206</td>
<td>4</td>
</tr>
<tr>
<td>Philosophy 204, 304, 305</td>
<td>2</td>
</tr>
<tr>
<td>Psychology 201</td>
<td>2</td>
</tr>
<tr>
<td>Speech 103, 104, 501</td>
<td>6</td>
</tr>
<tr>
<td>Sociology 203</td>
<td>3</td>
</tr>
<tr>
<td>Dutch 102</td>
<td>3</td>
</tr>
<tr>
<td>English 104</td>
<td>3</td>
</tr>
<tr>
<td>History 102</td>
<td>4</td>
</tr>
<tr>
<td>Latin 202, 302</td>
<td>3</td>
</tr>
<tr>
<td>Public Speaking 103</td>
<td>2</td>
</tr>
<tr>
<td>Public Speaking 104</td>
<td>2</td>
</tr>
</tbody>
</table>

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>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dutch 101</td>
<td>3</td>
</tr>
<tr>
<td>English 108</td>
<td>3</td>
</tr>
<tr>
<td>History 101</td>
<td>4</td>
</tr>
<tr>
<td>Latin 201</td>
<td>3</td>
</tr>
<tr>
<td>Public Speaking 103</td>
<td>2</td>
</tr>
<tr>
<td>English (or other)</td>
<td>3</td>
</tr>
<tr>
<td>English elective</td>
<td>3</td>
</tr>
<tr>
<td>Bible 201</td>
<td>2</td>
</tr>
<tr>
<td>Dutch 206</td>
<td>2</td>
</tr>
<tr>
<td>Greek 101</td>
<td>4</td>
</tr>
<tr>
<td>Psychology 201</td>
<td>3</td>
</tr>
<tr>
<td>Sociology 206</td>
<td>3</td>
</tr>
<tr>
<td>English 301, (or other)</td>
<td>3</td>
</tr>
<tr>
<td>English elective</td>
<td>3</td>
</tr>
</tbody>
</table>

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>Dutch 206</td>
<td>2</td>
</tr>
<tr>
<td>Greek 101</td>
<td>4</td>
</tr>
<tr>
<td>Psychology 201</td>
<td>3</td>
</tr>
<tr>
<td>Sociology 206</td>
<td>3</td>
</tr>
<tr>
<td>English 201, (or other)</td>
<td>3</td>
</tr>
<tr>
<td>English elective</td>
<td>3</td>
</tr>
<tr>
<td>Bible 202</td>
<td>2</td>
</tr>
<tr>
<td>Dutch 206</td>
<td>2</td>
</tr>
<tr>
<td>Greek 102</td>
<td>4</td>
</tr>
<tr>
<td>English 202</td>
<td>3</td>
</tr>
<tr>
<td>Greek 102</td>
<td>4</td>
</tr>
<tr>
<td>Psychology 201</td>
<td>3</td>
</tr>
<tr>
<td>Sociology 206</td>
<td>3</td>
</tr>
<tr>
<td>English 301, (or other)</td>
<td>3</td>
</tr>
<tr>
<td>English elective</td>
<td>3</td>
</tr>
</tbody>
</table>

Junior Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dutch 305</td>
<td>3</td>
</tr>
<tr>
<td>Education 301</td>
<td>2</td>
</tr>
<tr>
<td>English 207, (or other)</td>
<td>2</td>
</tr>
<tr>
<td>English elective</td>
<td>3</td>
</tr>
<tr>
<td>Greek 201</td>
<td>3</td>
</tr>
<tr>
<td>Public Speaking 301</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
</tr>
<tr>
<td>Bible 301</td>
<td>3</td>
</tr>
<tr>
<td>Dutch Hist. 326</td>
<td>3</td>
</tr>
<tr>
<td>English 302</td>
<td>3</td>
</tr>
<tr>
<td>Greek 314</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics 309</td>
<td>3</td>
</tr>
<tr>
<td>Philosophy 301</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

Senior Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bible 301</td>
<td>2</td>
</tr>
<tr>
<td>Economics 201</td>
<td>3</td>
</tr>
<tr>
<td>Greek 315</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics 309</td>
<td>3</td>
</tr>
<tr>
<td>Philosophy 301</td>
<td>3</td>
</tr>
<tr>
<td>Physics 305</td>
<td>3</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.
4. DEGREE. Upon satisfactory completion of this course, the student will receive the degree of bachelor of arts, pre-seminary course.

Education

1. AMOUNT OF WORK. A total of 125 hours of work must be completed.

2. GRADE OF WORK. At least 125 honor points are required.

3. PRESCRIBED WORK. To earn the degree of bachelor of arts in education for recommendation for a Michigan State Teacher's Certificate the student must complete:

a. Calvin College requirements:

   1. A major field of 24 hours and two minors of at least 16 hours for either high school or elementary school positions, or four minors for elementary school positions only.
   2. Bible 101, 102, 201, 202, 301: 10 hours
   3. English 105, 106: 6 hours
   4. History: 4 hours
   5. Natural Science: 4 hours
   6. 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.

   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.

b. The Michigan State Department of Education requirements:

   1. Psychology 201-302; Education 200 or 300 or 309; 301, or 314, or 315, or 317; a method course, and 348: 20 hours

4. FOR PROSPECTIVE HIGH SCHOOL TEACHERS (Grades seven through twelve):

   a. Majors and minors may be chosen from the following subjects:

<table>
<thead>
<tr>
<th>Chemistry</th>
<th>German</th>
<th>History</th>
<th>Physical</th>
<th>History</th>
<th>Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economics</td>
<td>Sociology</td>
<td>Latin</td>
<td>Philosophy</td>
<td>Science</td>
<td></td>
</tr>
<tr>
<td>Sociology</td>
<td>Mathematics</td>
<td>English</td>
<td>Physics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>French</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

   b. Prospective teachers in secondary schools must also take Speech 103 or 104, Education 342, and at least one method course from the following:

   Education 220, 307, 310, 324, 326, 328, 329, 330m: 2 or 3 hours

5. FOR PROSPECTIVE ELEMENTARY SCHOOL TEACHERS (Kindergarten through grade eight):

a. Prospective elementary teachers may select majors and minors from the list under 4a, but 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.

   c. Prospective teachers in the elementary grades who are preparing to teach in the Christian schools are required to take the following methods courses: Education 220, 222, 320, 322.

   In addition to these subjects prospective elementary teachers are urged to include in their courses:

   1. Art 207 or 229 (no credit) and Art 301: 2 hours
   2. Geography 105 or 106: 2 hours
   3. Education 321, 325, and 324: 2 hours
   4. Speech 103 or 105 or 104: 2 hours

6. The State Board of Education in Michigan upon graduation at Calvin gives the students Provisional Certificates valid for five years, to be converted into Permanent Certificates provided:

   a. The applicants have taught three years successfully.
   b. They have earned an additional semester hours of credit.

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

CAUTION: No person can 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 1 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:

   2. To the holder of a State Limited Renewal Certificate: 33
(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. Net less than 3 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 study credit.

(b) In order to assure that the credits earned toward renewal will apply on the State Provisional Certificate curriculum at the institution where the candidate intends to qualify eventually for that certificate, the candidate should arrange in advance to have each one to have his course selections approved by that institution. Also all credits wherever earned should be submitted to that institution for evaluation and be 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 15 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 college 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
   - Chemistry 105 .................. 4 hours
   - English 103 .................... 3 hours
   - Organic Science 109 ........... 3 hours
   - History 205 .................... 3 hours
   - 15 hours

   **Second Semester**
   - Chemistry 104 .................. 4 hours
   - English 104 .................... 3 hours
   - Mathematics 104 ................. 3 hours
   - Organic Science 110 ............ 3 hours
   - History 206 .................... 3 hours
   - 16 hours

   **Sophomore Year**
   - Bible 201 ........................ 2 hours
   - Chemistry 201 ................. 4 hours
   - French or German .............. 4 hours
   - Organic Science 201 .......... 4 hours
   - Physics 201 ................... 4 hours
   - 18 hours

   **Junior Year**

   Bible 301 ......................... 2 hours
   Chemistry 301 .................... 4 hours
   English or elective ............. 3 hours
   Organic Science 301 ......... 3 hours
   Psychology 301 ................. 2 hours
   Psychology 301 ................. 2 hours
   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.

   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 Organic Science 203 and 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*

<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>English 101</td>
<td>2 hours</td>
</tr>
<tr>
<td>Latin</td>
<td>3 hours</td>
</tr>
<tr>
<td>Mathematics or Science</td>
<td>3 hours</td>
</tr>
<tr>
<td>Logic</td>
<td>2 hours</td>
</tr>
<tr>
<td>Psychology</td>
<td>3 hours</td>
</tr>
<tr>
<td>Public Speaking</td>
<td>2 hours</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sophomore Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bible 201</td>
</tr>
<tr>
<td>English 204</td>
</tr>
<tr>
<td>History 202</td>
</tr>
<tr>
<td>Latin, French or German</td>
</tr>
<tr>
<td>Political Science</td>
</tr>
<tr>
<td>Sociology 203</td>
</tr>
</tbody>
</table>

   Junior Year

   | Bible 301 | 2 hours |
   | English  | 3 hours |
   | History 302 | 3 hours |
   | Political Science | 3 hours |
   | Latin 306 (Hon. Clin.) | 2 or 3 hours |
   | Elective | 3 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 credit.

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:

36
### 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 102*</td>
</tr>
<tr>
<td>Chemistry 201</td>
<td>Chemistry 104</td>
</tr>
<tr>
<td>Drawing 101*</td>
<td>English 104</td>
</tr>
<tr>
<td>English 103</td>
<td>Mathematics 101</td>
</tr>
<tr>
<td>Mathematics 101</td>
<td>Pub. Speaking 101 or 104</td>
</tr>
<tr>
<td>15 hours</td>
<td>15 hours</td>
</tr>
</tbody>
</table>

**Sophomore Year**

| Drawing 201* | 2 hours |
| Economics 201 | Economics 202 | 3 hours |
| Mathematics 201 | Mathematics 202 | 3 hours |
| Physics 201 | Physics 202 | 3 hours |
| Physics 205 | Physics 204 | 1 hour |
| Surveying 207* | Elective | 2 hours |
| 16 hours | 16 hours |

**Junior Year**

| Bible 201 | 2 hours |
| Mathematics 201 | Statistics 202* | 3 hours |
| Elective | Modern Physics 204 | 3 hours |
| 16 hours | 16 hours |

### Three-Year Chemical Pre-Engineering Course

**Freshman Year**

| Bible 101 or 105 | 2 hours |
| Chemistry 105 | Chemistry 104 | 4 hours |
| English 103 | English 104 | 4 hours |
| Drawing 101* | Mathematics 104 | 3 hours |
| Mathematics 101 | Public Speaking | 3 hours |
| 15 hours | 15 hours |

**Sophomore Year**

| Chemistry 201 | 4 hours |
| Mathematics 201 | Bible 102 | 2 hours |
| Drawing 201* | Mathematics 202 | 3 hours |
| Physics 201B | Physics 202 | 5 hours |
| Physics 203 | Physics 204 | 1 hour |
| 15 hours | 16 hours |

**Junior Year**

| Bible 201 | 2 hours |
| Chemistry 201 | Chemistry 202 | 4 hours |
| Mathematics 201 | Mathematics 202 | 3 hours |
| Mathematics 201 | Modern Physics 204 | 3 hours |
| Elective | Statistics 202* | 3 hours |
| 17 hours | 18 hours |

* See Engineering Subjects.

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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 successfully 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.

### Pre-Business Administration Course

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

**Freshman Year**

| Bible 101 | 2 hours |
| Economics 101 | Economics 103 | 3 hours |
| English 103 | English 104 | 3 hours |
| Lab. Science | Lab. Science | 3 or 4 hours |
| One of the following: Foreign Language, History, Mathematics | Foreign Language, History, Mathematics | 3 hours |

**Sophomore Year**

| Bible 201 | 2 hours |
| Economics 201 | Economics 202 | 3 hours |
| Economics 205 | Economics 206 | 4 hours |
| Economics 201 or 202 | Economics 202 or 206 | 3 hours |
| Psychology | Philosophy 202 | 3 hours |
| **Public Speaking 103** | **Public Speaking 104** | 2 hours |

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* Economics 202 and 206 (Accounting) may be elected by Sophomores who plan to remain at Calvin only two years.
** Required either in the Freshman or Sophomore year.
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. 26). 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. 27). 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>Chemistry 101 or 110</td>
<td>Bible 101, 102</td>
</tr>
<tr>
<td>Engineering 101</td>
<td>Bible 102 or 104</td>
</tr>
<tr>
<td>English 101</td>
<td>Chemistry 102 or 104</td>
</tr>
<tr>
<td>Mathematics 101</td>
<td>English 104</td>
</tr>
<tr>
<td>Organic Science 101</td>
<td>Mathematics 104</td>
</tr>
<tr>
<td>* Required courses.</td>
<td></td>
</tr>
<tr>
<td><strong>Sophomore Year</strong></td>
<td><strong>SECOND SEMESTER</strong></td>
</tr>
<tr>
<td><strong>FIRST SEMESTER</strong></td>
<td><strong>SECOND SEMESTER</strong></td>
</tr>
<tr>
<td>Bible 201</td>
<td>Bible 202</td>
</tr>
<tr>
<td>Economics 201</td>
<td>Economics 202</td>
</tr>
<tr>
<td>Organic Science 201</td>
<td>Mathematics 208</td>
</tr>
<tr>
<td>Physics 201</td>
<td>Organic Science 206</td>
</tr>
<tr>
<td>Engineering 207</td>
<td>Physics 202</td>
</tr>
<tr>
<td>* Since Engineering 207 (Surveying) is taught every even year, students starting in September of the even years should take this course during their freshman year. Other students take Organic Science 205 during the freshman year.</td>
<td></td>
</tr>
</tbody>
</table>

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 Blodgett Memorial School of Nursing.

<table>
<thead>
<tr>
<th>FIRST SEMESTER</th>
<th>SECOND SEMESTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bible 101</td>
<td>English 104</td>
</tr>
<tr>
<td>English 105</td>
<td>Psychology 201</td>
</tr>
<tr>
<td>Chemistry 101N</td>
<td>Organic Science 106</td>
</tr>
<tr>
<td>Hygiene</td>
<td>Nutrition</td>
</tr>
<tr>
<td>(Hop)</td>
<td>Pharmacology</td>
</tr>
<tr>
<td>Medical</td>
<td>Nursing Arts</td>
</tr>
<tr>
<td>Microbiology</td>
<td>Organic Science 105</td>
</tr>
<tr>
<td>Organic Science 105</td>
<td>Prof. Adjustment</td>
</tr>
<tr>
<td>Physical Education</td>
<td>12 hours</td>
</tr>
</tbody>
</table>

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 the following subjects are suggested:

<table>
<thead>
<tr>
<th>Chemistry 101N</th>
<th>English Composition</th>
</tr>
</thead>
<tbody>
<tr>
<td>English 101N</td>
<td>History 211</td>
</tr>
<tr>
<td>Mathematics 101</td>
<td>Psychology 201</td>
</tr>
<tr>
<td>Physical Education</td>
<td>12 hours</td>
</tr>
</tbody>
</table>

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

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

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 on the Combined Curriculum Plan

The student must
1. meet regular admission requirements to the college;
2. successfully complete 94 semester hours of pre-professional subjects considered fundamental in any liberal arts program;
3. complete an additional 28 to 30 months of training at an accredited hospital.
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:

- **Bible** .............................................. 6-8 hours
- **English Comp. and Rhetoric** .............. 6 hours
- **English or American Lit.** ..................... 3-6 hours
- **History** ............................................. 6 hours
- **Psychology** .......................................... 6 hours
- **Sociology, Intro.** .................................. 3 hours
- **Sociology, Problems or The Family** ....... 3 hours
- **Philosophy (not incl. Psych, or Logic)** ... 3 hours
- **Foreign Language** .................................. 6-8 hours
- **Chemistry (Inorganic)** ......................... 8 hours
- **Organic Chemistry** ................................... 8 hours
- **Human Anat. and Physiology** .................. 8 hours
- **Animal Biology** ....................................... 8 hours
- **Microbiology** ......................................... 3 hours
- **Intro. to Embryology** ............................... 3 hours
- **Biological Problems** ............................... 2 hours

74-81 hours

To complete the 94 hours, the student may elect courses in Literature, History, Education, Organic Science, Chemistry, Political Science, or others.

**DESCRIPTION OF COURSES**

**Art**

Courses 321 and 322 may be credited in the Dutch department. They are of great benefit to teachers and students of history and literature.

229. **PENNSHIP**

Two hours

Manuscript and curiris writing. Theory and practice. No credit. For prospective teachers in elementary grades.

301. **INDUSTRIAL ART**

Three hours

Art education in the elementary school will be treated in the manner of Mathias' *The Teaching of Art.*

302. **HANDICRAFT**

Three hours

The course is arranged to work out craft problems related to elementary grades. Prerequisite 301.

333. **CREATIVE EXPRESSION IN THE ARTS**

Three hours

This course is planned particularly for the classroom teacher. It will consist of illustrated lectures, discussions on both art and education and experiences in working with art materials.

394. **ART APPRECIATION**

Three hours

This course will consist of lectures, reading, and a study of art objects, paintings, pottery, textiles, etc. There will be a limited amount of hand work centering on individual problems.

331. **FLEMISH PAINTING**

Three hours

A course in the Flemish and Dutch primitives and Danzianers, 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.

382. **DUTCH PAINTING**

Three hours

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.

**Bible**

101. **INTRODUCTION TO THE BOOKS OF THE BIBLE**

Two hours

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 specific introduction, inquiring into the contents, historical setting, literary form, and especially the permanent ethical and religious values of a few of the individual books.

102. **INTRODUCTION TO THE BOOKS OF THE BIBLE**

Two hours

Continuation of 101.

105. **OLD TESTAMENT HISTORY**

Two hours

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.
106. NEW TESTAMENT HISTORY
Two hours
A companion course to 105. Events of the intertestamental period are sketched with particular reference to the historical and religious background. 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.

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

202. REFORMED DOCTRINE
Continuation of 201.

301. STUDIES IN CALVINISM
Two hours
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.

302. HEBREW CULTURE
Two hours
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.

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

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

Chemistry

101. GENERAL CHEMISTRY
Four hours
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, $6.00. No prerequisites.

102. GENERAL CHEMISTRY
Continuation of 101. Hours, texts and fees the same.

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. Breakage fee, $6.00. No prerequisites, although a knowledge of high school chemistry is desirable.

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

105E. 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
Continuation of 105E. 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 biochemical chemistry as applied to the field of medicine. Three class-room hours and one two-hour laboratory period per week. Laboratory fee, $8.00. Breakage fee, $5.00. No prerequisites. Note: Students preparing for a B.S. in nursing are advised to take 103E and 104E.

201. QUALITATIVE ANALYSIS
Four hours
Two hours of class-room work, one quiz period, and two laboratory periods of three hours each per week. Laboratory fee, $5.00. Breakage fee, $6.00. Prerequisites: 103 and 104.

202. QUANTITATIVE ANALYSIS
Four hours
Two hours in class-room and from eight to ten hours of laboratory work per week. Laboratory fee, $6.00. 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, $21.00. Breakage fee, $6.00. Prerequisite: General Inorganic Chemistry.

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

306. SURVEY COURSE
Two hours
This course will deal with the history of the development of chemistry, its relation to other sciences, its theories and its methods, as well as its efforts to explain the constitution of matter. Two lecture periods per week. Not open to freshmen or chemistry majors.

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, $3.00. Breakage fee, $5.00. Prerequisites: Chemistry 201, Physics 201, Mathematics 301. 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 electrochemistry, chemical thermodynamics and nuclear structure.

310. QUALITATIVE ORGANIC ANALYSIS
Four hours
One and one-half hours of lecture and three laboratory periods per week. This course is based on Shriver and Fassal's text. Prerequisite: Chemistry 302. Laboratory fee, $6.00. Breakage fee, $5.00.

312. THERMODYNAMICS
Two hours
This course emphasizes both the older and more recent theories and laws of inorganic and organic chemistry for the purpose of bringing them into a more unified whole. Prerequisites: Chemistry 301 and preferably Physics 201 and 202.

339w. TEACHERS' COURSE
One hour
Methods of teaching chemistry in secondary schools. Prerequisite: two years of chemistry.
Dutch

A. DUTCH LANGUAGE

101. ELEMENTARY GRAMMAR
Three hours
Constructions and declensions.

102. ADVANCED GRAMMAR
Three hours

201. READING AND COMPOSITION
Two hours
This course combines easy to moderately difficult reading with
grammar review and composition. Required outside reading.

202. CONVERSATIONAL DUTCH
Two hours
An effort is made in this course to get students acquainted with
the conversational vocabulary as it is found in the Dutch Language
Course. Outside reading.

305. MODERN LITERATURE
Two hours
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.

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

NOTE: These Courses and Dutch history 226 are required of those
who take the pre-Seminary course.

B. MEDIEVAL AND DUTCH HISTORY

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

334. THE HIGH MIDDLE AGES (1000-1350) Three hours
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 Romantic Litera-
ture. Dante.

335. THE RENAISSANCE IN FLANDERS AND ITALY 1580-1650 Three hours
The age of unrest. The Christian and the Flemish Renaissance;
the Italian Renaissance, and its distribution over Western Europe
through the Brethren of the Common Life. The Renaissance spirit.

336. DUTCH HISTORY (1500-1815) Three hours
A short review of the history of the Netherlands up to 1600.
The Provinces of the Reformations and the Reformation in the
Netherlands. The Eight Years' War. The Dutch Golden Age
and its influence on Europe. Dutch commerce and colonization.
Wars between the Netherlands and other countries for religious
and commercial purposes. The triumph of patricians and reli-
ance in the eighteenth century. The spirit of French Revolu-
tion as manifested in Holland. The rebirth of Calvinism as a
political and cultural power after 1615.

C. DUTCH ART

351. FLEMISH PAINTING
Three hours
The Flemish and Dutch Primitives and the artists between
1400 and 1600! Rubens and Van Dyck and their schools. The
course is analytical as well as historical.
309. BUSINESS LAW: CONTRACTS

Three hours

Deals with the main principles of contract: offer, acceptance, consideration, capacity of the parties, legality of object, the formal requirements of agreements under the statute of frauds, the operation of contracts in business and their interpretation by the courts. Open to Seniors and to Juniors only by special permission.

312. ADVANCED ACCOUNTING

Three hours

This course will be offered during the second semester of 1947-1948.
A course in Statistics is offered in the Mathematics department.

Education

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

B. HISTORY

203. HISTORY OF AMERICAN EDUCATION

Three hours

In this course the educational development in our country will be viewed in the light of the religious, social, economic and political changes.

205. HISTORY OF EDUCATION

Three hours

A survey of the growth of educational theory and practice during the ancient and medieval periods.

206. HISTORY OF EDUCATION

Three hours

A continuation of 205 covering the modern period.

209. EDUCATIONAL SOCIOLOGY

Three hours

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

C. PRINCIPLES

201. PRINCIPLES OF EDUCATION

Three hours

A study of the aims of education and of the various underlying problems.

314. PRINCIPLES OF TEACHING IN THE SECONDARY SCHOOLS

Three hours

The principles of teaching will be discussed in the light of Harrison's The Practice of Teaching in the Secondary Schools. The teaching techniques in each of the types of subjects in the curriculum is analyzed.

315. PRINCIPLES OF TEACHING IN THE ELEMENTARY SCHOOLS

Three hours

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 capital 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. NATURE STUDY

Three hours

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

220. 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

Three hours

207. SCHOOL ADMINISTRATION

Three hours

This course aims to discuss the organization and management of state and local school systems.

310. EDUCATIONAL MEASUREMENTS

Three hours

A survey course of present-day practices of measuring the results of teaching. Mental testing is included.

320. TEACHING BIBLE IN ELEMENTARY SCHOOLS

Three hours

Both semesters.

321. TEACHING GEOGRAPHY IN ELEMENTARY SCHOOLS: METHODS AND CONTENT

Three hours

322. TEACHING READING IN ELEMENTARY SCHOOLS

Three hours

Both semesters.

323. CHILDREN'S LITERATURE AND THE TEACHING OF ENGLISH IN THE ELEMENTARY SCHOOL

Three hours

325. RESEARCH READING

Three hours

324. TEACHING HISTORY

Two hours

A brief survey of the history of our country will be fused with a 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 320m. Two hours devoted to content; one to method.

328. TEACHING LATIN

Three hours

Same as Latin 227 and 320m combined.

340. CURRICULUM

Two or three hours

Emphasis on the courses of studies in the middle grades. 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 student planning to teach in the elementary schools. To be taken the first semester of their senior year.

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 the second semester of their junior year.

343. PRACTICE TEACHING

Five hours

Course 341 or 342 is a prerequisite. Offered both semesters. At least one method course must precede Practice Teaching.

330m. THE TEACHING OF LATIN OR ENGLISH, ETC.

Teachers' 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 Subjects

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

102. DESCRIPTIVE GEOMETRY Three hours
Exercises, instruction, and drill through the medium of 50 printed plates of problems. Three two-hour drafting-room periods, three hours home work a week. Prerequisite: 101.

201. MECHANISM AND SKETCHING Two hours
Sketching of models in orthographic, isometric, and oblique projection; practice in making of working drawings from sketches; free-hand lettering. Two two-hour drafting-room periods, two hours home work a week. Prerequisite: 102.

207. SURVEYING Two hours
Elementary theory and practice; use of instruments in surveying; calculating areas; solving; profile; grade stakes; note keeping. Lectures, text assignments, one recitation, and one four-hour field period. Prerequisite: 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, vibrations, levers, problems. Must be preceded or accompanied by Mathematics 302 and Physics 303 or 303E.

English

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 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, ad reports.

202. AMERICAN LITERATURE Three hours
Continuation of English 201. Intensive study of Whitman and Twain. Survey of realist 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 Elizabethan 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.

219. 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 1798-1830.

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; an 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

304. CONTEMPORARY ENGLISH POETRY Three hours
A study of the lyric and dramatic poetry of England, in its continental relations, from 1860 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.

319. 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, Hazlitt, Mill, Newman, Pater, Stevenson, and others. Textbook and reports.

312. THE ENGLISH NOVEL Three hours
A survey of the English novel from the beginning through 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.

289M. METHODS OF TEACHING ENGLISH One, two, or three hours
A review of the essentials of grammar and rhetoric, and a study of the methods of teaching English in the secondary schools. Prerequisite: at least seven of the courses offered in the English department. First semester.
101. ELEMENTARY FRENCH  
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  
Text in both courses: Micks & Longi, Fundamental French. This is followed by the reading of easy prose.

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

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

201. THE ROMANTIC MOVEMENT  

202. NINETEENTH CENTURY—SECOND HALF  
A history of French literature since the middle of the nineteenth century. Collateral reading and reports. Prerequisite: 201 to 202. Anthology in both courses: Schin, Nineteenth Century French Reading, Vols. I and II.

301. THE CLASSIC PERIOD  
A study of French literature and culture in the seventeenth century as a background for the more detailed study of the classic authors. One drama is read in class, others are assigned for outside reading. Prerequisite: 202.

304. THE CLASSIC PERIOD  
A continuation of 303, dealing with the later seventeenth century literature, with special attention to Racine and Boileau. A drama of Racine is read in class. A few dramas are assigned for outside reading. Anthology in both courses: Schin, and King’s Seventeenth Century Reading. Prerequisites: 202 and 303. Either 301-2 or 304-5 will be offered during 1947-1948.

300m. METHODS OF TEACHING MODERN FRENCH LANGUAGES  
One hour. Intended for prospective teachers of French in secondary schools. Prerequisite: six of the courses offered in this department.

GEography

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

105. GEOGRAPHY OF NORTH AMERICA  
A survey of the natural environment of the major regions of the United States and Canada in their relation to cultural landscape. Intended for those specializing in education or in the social sciences.

106. GEOGRAPHY OF SOUTH AMERICA  
A study of the geographic structure of South America in relation to human adjustment and culture. Intended for those specializing 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 population. Not given in 1947-1948.

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 student’s only course in teaching methods. This course not only includes a course in methods, but also one hour of content dealing with the Caribbean area.

GErman

101. ELEMENTARY 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 important parts of grammar. Composition and dictation. Prerequisite: 101 and 102.

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

301. THE ROMANTIC PERIOD  

302. REALISM  

303. EARLY NINETEENTH CENTURY DRAMA  

304. LATER NINETEENTH CENTURY DRAMA  
Three hours. A study of Hauptmann and Sudermann and their times. Assigned readings and reports. Prerequisites: 202 and 205.

305. THE CLASSIC PERIOD  

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 1947-1948.
320. **Scientific German**  
One hour  
Students wishing to take this course should confer with the professor in charge at the opening of the school year.

330w. **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, 311, 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. Xenophon**  
Three hours  
Selections from the *Anabasis*. Prerequisite: 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, 202 or 204; others, 102.

**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: 213.

**315. Greek Culture**  
Three hours  
No knowledge of Greek is required. The main features of Greek culture (i.e., the Greek outlook) are studied. Lectures, discussions, assigned readings. Not open to freshmen.

**316. Greek Thought and the New Testament**  
Three hours  
No knowledge of Greek is required. Lectures, discussions, assigned readings. Open to Juniors and Seniors. Offered both semesters.

**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**

**101. General Survey of History**  
Three hours  
This course aims to give the student a comprehensive view of the history of civilization from earliest times to 1280 A. D. Required of all students taking the General College Course and of all Pre-Seminary students.
Latin

Students who have had two units of Latin in high school should meet their Pre-Student or General College ancient language requirement by taking 201 and 202. Students, whether Pre-Student or General College, who have completed 101 and 102 should follow these courses with either 301 and 302, or 397 and 398. Those who wish to follow a Latin major should consult with the instructor in charge before registering.

101. ELEME N TARY LATIN

Text: Thompson, Tracy, Duets Essential Latin.

102. ELEME N TARY 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. Text: Hettich and Maltz, Latin Fundamentals.

202. INTERMEDIATE LATIN

Continuation of 201.

301. OCHER'S PHILOSOPHICAL ESSAYS

Review of grammar based on Oxford Latin Reader. Reading of one or more of the following: De Amicis, De Senecate, Tuscanus Dicata Chosen. Not offered in 1947-1948.

302. READINGS IN LATIN PROSE AND POETRY


307. READINGS IN THE CHURCH FATHERS


308. READINGS IN THE CHURCH FATHERS

Continuation of 307. Same text as above.

319. LATIN LITERATURE IN ENGLISH

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

320. 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.

327. LATIN GRAMMAR AND WRITING

Two hours

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 330m may be offered as a three-hour methods course in the department of Education. Same as Education 355.

330m. TEACHERS' COURSE

One hour

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 Latin.

This course will be offered either the first or second semester to meet the convenience of the students interested.

Mathematics

101. ADVANCED ALGEBRA

Three hours

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 Premedical course may be admitted if they have had Course 101.

105. PLANE ANALYTICAL GEOMETRY

Prerequisite: 105 and 104.

Plane analytical geometry completed and introduction to solid analytical geometry.

106. SPHERICAL TRIGONOMETRY

Two hours

107. DIFFERENTIAL CALCULUS

Prerequisite: 106 and 104.

108. INTEGRAL CALCULUS

Prerequisite: 201 and 202.

109. DIFFERENTIAL EQUATIONS

Prerequisite: 101 and 102.

110. THEORY OF EQUATIONS

Prerequisite: 101 and 102.

111. STATISTICS

Three or four hours

Emphasis on statistical methods. Prerequisite: 101 and 104; 105 is highly desirable.

112. ASTROLOGY—DESCRIPTIVE

Two hours

A study of the solar system, the sidereal universe, and the theory of evolution.

330m. TEACHERS' COURSE

Discussion of methods of teaching mathematics in secondary schools. Twenty hours of observation work are required.

Music

101-102. CHORUS (Calvin Oratorio Society)

The study of representative works of the great masters of choral writing, with a view to public performance. 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.
201. Music Theory
Three hours
The elements of music. Drill in notation, time, and rhythmic values, scales, and signatures.

208. Harmony
Three hours
A threefold approach to the elements of harmony through the ear, eye, and hand or keyboard. Written work and class exercises. The writing and analysis of hymn tunes and a study of their chords. Primary triads, dominant seventh.

204. Harmony (Continuation of 208)
Three hours
Secondary triads, dominant seventh, dominant ninth, and their inversions.

207-208. A Cappella Choir
One hour
Representative works in the field of choral literature are studied and a limited number of selections prepared for concert performance. Open only to those who meet the demands of voice and musicianship.

211. Music Appreciation
Three hours
General course designed to develop intelligent discrimination in the listener. Structural principles and aesthetic content 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 alike for the technical musician and those who wish to become merely intelligent listeners.

212. Continuation of 211
Three hours

222. Introduction to School Music
Three hours
Designed for the classroom teacher in schools where music instruction is required. The course includes a study of the elements of music and sight-singing, as well as a study of school music methods and materials. Not for music majors. Offered both semesters.

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 test-book work. Not offered during 1946-47.

306. History of Music
Continuation of 305.
Three hours

311. School Music Methods I
Three hours
A study of materials and methods for the elementary grades. Prerequisite: Music Theory 201 or its equivalent. No credit for a student who has credit for Music 222.

312. School Music Methods II
Three hours
A study of materials and methods for the junior and senior high schools. Prerequisite: Music Theory 201 or its equivalent.

Applied Music

217-218. First Year Voice
Individual lessons in voice. Fee $20 per semester.

217-218. Second Year Voice
Individual lessons in voice. Fee $30 per semester.

317-318. Third Year Voice
One hour
Individual lessons in voice. Fee $30 per semester.

309. Organ
One or two hours
Foundations and hymns; twelve church pieces of medium grade. Each of these courses comprises fifteen lessons and gives one hour credit. Prerequisite: three years of piano.

310. Organ
Twelve choral preludes of Bach, Karg Elert, Dupre and Brahms; six preludes and fugues of Bach and Mendelssohn; twelve concert pieces of medium grade; four sonatas of Mendelssohn; four major works of modern French composers; twelve units of modern Dutch composers; twelve Bach transcriptions; four major works of Bach, Liszt, Karg, Elert, Yon, and Sowerby. Prerequisite: 306.

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

Organic Science

102. Human Physiology
Two hours
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 and 106. At the same time it is planned to supplement course 105.

103. Personal Hygiene
Three hours
The proper care of our bodies and approved practices for the prevention of disease are studied. Course 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.

106. Human Anatomy and Physiology
Three hours
An introduction to the study of human embryology, anatomy, histology, and physiology. This course, together with 106, is planned to meet the needs of students in physical education, for medical, pre-dental, and pre-nursing curricula. It is recommended to prospective teachers who study in junior high schools, and also to all students who expect to major in Organics Science. Two hours of lectures and recitations and one laboratory period a week. Laboratory fee, $3.00.

196. Human Anatomy and Physiology
Two hours
Continuation of course 106.

197. Principles of Microbiology
Three hours
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.

198. Plant Biology
Three hours
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, $4.00.
110. ANIMAL BIOLOGY
Three hours
An introductory study of a few animal types selected to illustrate fundamental principles of anatomy, physiology, ecology, parasitology, and classification. Two lectures or recitations and one laboratory period a week. Laboratory fee, $3.00. Offered both semesters.

111. GENERAL BOTANY
Four hours
Formerly 202. Anatomy and physiology of seed plants. Open to freshmen. Three recitations and one laboratory period a week. Laboratory fee, $3.00.

112. GENERAL BOTANY
Four hours
Formerly 203. 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 recitations, one laboratory period a week. Laboratory fee, $3.00.

201. INVERTEBRATE ZOOLOGY
Four hours
Anatomy, physiology, behavior, and classification of animals representative of the invertebrate groups. Insects and disease-causing forms are emphasized. Three hours of lectures, recitations, and recitations; and one laboratory period a week. Laboratory fee, $3.00.

206. NATURAL HISTORY
Three hours
A systematic study of the appearance and habits of animals which are more commonly seen 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.

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

208. INTRODUCTION TO EMBRYOLOGY
Three hours
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
Two hours
A brief survey of the more significant phenomena and principles of the 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 demonstration per week.

304. MICROSCOPIC TECHNIQUE
One hour
The technique of slide making, killing, fixing, dehydrating, embedding, sectioning, staining, and mounting of tissues. Three hours of laboratory work per week. Laboratory fee, $3.00.

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

311. VERTEBRATE ZOOLOGY
Two hours
Comparative anatomy and natural history of vertebrates. Evolutionary problems are emphasized. One lecture and three hours of laboratory work a week. Laboratory fee, $3.00. Prerequisite: 110. Courses 105-106 are desirable antecedents.

312. VERTEBRATE ZOOLOGY
Three hours
A continuation of 311. Two lectures and one laboratory period a week. Laboratory fee, $3.00. Prerequisite: 311.

330. TEACHING BIOLOGY
One hour
Points of view, content, and methods of teaching secondary biology, and human physiology and hygiene. Prerequisite: twenty hours of Organic Science.

PHILOSOPHY

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

203. INTRODUCTION TO PHILOSOPHY
Three hours

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 professed solutions. For students taking only six hours of philosophy, 203 is prerequisite.

301. HISTORY OF PHILOSOPHY: MODERN
Three hours
A study of the Christian philosophical synthesis. Special attention is given to St. Augustine and St. Thomas Aquinas. Prerequisite: 204.

302. HISTORY OF PHILOSOPHY: MODERN
Three hours
A study of the development of philosophical thought from the Renaissance to Hegel. Prerequisite: two semesters of philosophy.

303. HISTORY OF PHILOSOPHY: RECENT
Three hours
An examination of the leading thought movements of the last hundred years. Prerequisite: 302.

304. METAPHYSICS
Three hours
An attempt, through a consideration of ontological and cosmological problems, to lay bare the outlines of a philosophical system. Prerequisite: 303.

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.

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, 210.

103. PERSONAL HYGIENE
Three hours
The proper care of our bodies and approved practices for the prevention of disease are studied. Offered in 1947-1948.
194. **Principles and Methods of Physical Education** Two hours
Traces the history of Physical Education from its early origin to present-day trends. Considers the relation of Physical Education to life and ideas. Acquaints the student with the profession of Physical Education. Offered in 1947-1948.

205. **Organization and Administration of Physical Education** Two hours
A study of the representative programs of Physical Education and evaluation of these programs.

204. **Community Recreation** Two hours
A study of the development, administration, and use of leisure time within the community and of the community agencies organizing to meet present-day recreational needs.

205. **Coaching of Basketball** Two hours
A consideration of the fundamentals that make up the game of basketball; team conditioning, styles of play, and team strategy.

206. **Coaching of Spring Sports** Two hours
A study of the fundamentals of Track, Tennis, and Golf. Methods of coaching and coaching of these sports are also discussed.

**SPECIAL PHYSICAL EDUCATION COURSES FOR GIRLS**

221. **Spring Sports for Girls** Three hours

223. **Teaching of Physical Education in Elementary Schools** Three hours
Theoretical and practical methods in the teaching of play activities to children of the elementary grades. Offered both semesters of 1947-1948.

**Physics**

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.

201E. **General Physics** Five hours
Mechanics, sound, and heat. (Required of all engineering students.) At least half the semester is devoted to elementary mechanics; the remainder of the time to sound and heat. Many experimental illustrations. Four recitations and one two-to-three-hour laboratory period a week. Prerequisite: plane trigonometry and a preparatory course in physics. Laboratory fee, $5.00.

202E. **General Physics** Five hours
Electricity and light. (Required of all engineering students.) A continuation of 201E. It takes up the fundamental phenomena and laws of electricity and light with ample class illustrations. Four recitations, and one two-to-three-hour laboratory period a week. Laboratory fee, $5.00.

208. **Physics Problem Course** One hour
Should be preceded by or accompany 201 or 201E. This course consists of the solution and discussion of problems in mechanics, sound, and heat. One recitation a week.

304. **Modern Physics** Three hours
A study of physics beginning with the discovery of radioactivity, electricity, the nature of radiant energy, X-rays, atomic spectra. Discussion of subjects such as the atomic nature of matter and molecular structure and radioactivity. Prerequisite: Physics 202 or 202E.

305. **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 prerequisites. Offered odd years.

**Political Science**

History 203 and History 204 (Foreign Relations) may be taken to satisfy requirements for a major in either History or Political Science, but they 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** Continuation of 101, which is prerequisite.

201. **Principles of Political Science** Three hours
(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 to the individual. Lectures and collateral reading. Not open to freshmen.

202. **Principles of Political Science** Continuation of 201, which is prerequisite.

303. **American National Government** Three hours
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.

304. **American National Government** Continuation of 303, which is prerequisite. Foreign Relations. See History 203 and 204.

**Psychology**

201. **Introductory Psychology** Three hours
A general course in psychology for beginners. This course is repeated in the second semester.

202. **Educational Psychology** Three hours
Course 201, or its equivalent, is a prerequisite.
204. CHILD PSYCHOLOGY  Three hours
A study of the physical and mental development of the child.
Course 201, or its equivalent, is a prerequisite.

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

312. THE PSYCHOLOGY OF ABNORMAL PEOPLE  Three hours
A study of disorders of sensation, perception, association, and so forth. Some study is made of hypnosis, hysteria, and other subjects usually considered under the heading of abnormal psychology, and especially, too, the phenomena and problems of the paranoids. Psychology 201, or its equivalent, is a prerequisite.
This course is open only to seniors and to pre-medical and pre-law students of the junior year who are in their last year of residence.

Sociology

203. PRINCIPLES OF SOCIOLOGY  Three hours
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.

204. SOCIAL PROBLEMS  Three hours
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. These include population problems, poverty, crime and delinquency, divorce, race and minority cleavages, and problems of farm and village. It is desirable, but not necessary, to precede this course with 203.

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

304. THE FAMILY  Three hours
This course will be adapted to 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 a thorough discussion of the divorce problem and other problems connected with modern family life. Prerequisites: 203 and 204, or their equivalents.

305. THE FIELD OF SOCIAL WORK  Three hours
A survey of the various types of social work, including individual case work, group work, and community organization. Agencies set up to work with deviate 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.

306. CRIMINOLOGY AND DELINQUENCY  Three hours
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.

309. EDUCATIONAL PSYCHOLOGY  Three hours
This course is offered in the department of Education.

315. SOCIAL CASE WORK  One hour
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.

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

101. SPEECH FOR THE CLASSROOM TEACHER  Two hours
Throughout the course the major emphasis will fall on elementary school needs.

103. SPEECH-MAKING  Two hours
The writing and delivery of short original speeches and orations to develop a direct, forceful, conversational style.

104. SPEECH-MAKING  Two hours
Continuation of 103, together with special types of speeches, including after-dinner speeches, discussion, and parliamentary procedure. Prerequisite: Course 103.

201. INTERPRETATIVE READING  Two hours
The principles of interpretation and expression. Oral interpretation of representative selections. Prerequisite: Course 103. Not open to freshmen.

204. GREAT ORATORS  Two hours
Analytical and evaluative study of the aims, methods, and achievements of selected orators from antiquity to the present. Prerequisites: Course 103 and Course 104.

301. ADVANCED LITERARY COMPOSITION  Two hours
A study of the psychological technique involved in effective speech composition. Speeches and orations. Intended particularly for seniors of the pre-seminary course.

303. INTERCOLLEGIATE EXTENSIVE SPEAKING  One hour

305. INTERCOLLEGIATE PEACE ORATORY  One hour

307. INTERCOLLEGIATE ORATORY (M.I.S.L.)  One hour

310. INTERCOLLEGIATE INTERPRETATIVE READING  One hour

311. ORAL DISCUSSION AND DEBATE  Two hours
Theory and practice of discussion, argumentation, and debate.

312. INTERCOLLEGIATE DEBATING  One hour
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