

*Please return to
Calvin College*

CALVIN COLLEGE

BULLETIN



GRAND RAPIDS, MICHIGAN

1950-51

Calvin College

An Institution of the Christian Reformed Church

BULLETIN
1950 - 1951



GRAND RAPIDS, MICHIGAN

HOW TO ADDRESS CORRESPONDENCE

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

Regarding admission and graduation requirements, address the Dean.

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

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

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

Regarding teaching positions after graduation, address the Placement Bureau.

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

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

TABLE OF CONTENTS

How to Address Correspondence.....	3
Table of Contents	4
Calendar of the College	6
Board of Trustees	7
Executive Committee	8
The Faculty	9
Aim	14
Admission	15
Freshman Standing	15
Admission of War Veterans.....	17
Advanced Standing	17
Unclassified Students	18
Student Expenses	19
Tuition	19
Other Fees	20
Living Expenses	21
Housing	21
Student Aid	23
Scholarships	23
Prizes and Awards	24
Loans	26
Placement Bureau	26
Administration	27
Religious Culture	27
The Hekman Memorial Library.....	27
Physical Education	27
Attendance	27
Grades and Honor Points.....	28
Examinations and Written Work.....	29
Dropping and Changing of Courses.....	29
Class Visitors	29
Dismission	29
Requirements for Graduation	30
General College	30
Pre-Seminary	32
Education	34
Pre-Medical and Pre-Dental	36
Four-year Pre-Medical	37
Pre-Law	38
Four-Year Pre-Law	39
Pre-Engineering	40
Pre-Business Administration	42
Major in Business Administration.....	42
Pre-Forestry	43
Major in Music	43
Minor in Music	44
Nursing Course	45

Bachelor of Science in Nursing on the Combined Curriculum Plan	45
Bachelor of Science in Medical Technology on the Combined Curriculum Plan	46
Description of Courses	48
Art	48
Bible	48
Biology	49
Chemistry	51
Dutch	53
Economics	54
Education	55
Engineering	57
English	58
French	60
Geography	61
German	61
Greek	62
History	63
Latin	65
Mathematics	66
Music	67
Philosophy	72
Physical Education	73
Physics	74
Political Science	75
Psychology	75
Sociology	76
Speech	77

CALENDAR

1950-1951

1950

Beginning of first semester and enrollment	September 6
Opening exercises.....	September 12
Re-examinations	September 11
Thanksgiving recess	November 23-26
Christmas vacation begins.....	December 20, 12:00 Noon

1951

Christmas vacation ends.....	January 4, 7:50 A. M.
Final examinations	January 15
First semester closes.....	January 23
Registration for the second semester.....	January 24-27
Meeting of Board of Trustees.....	In February
Spring vacation begins.....	March 24, 12:00 Noon
Spring vacation ends.....	April 3, 7:50 A. M.
Re-examinations	April 6-7
Final examinations	May 21-30
Commencement	June 1

Summer Session

Enrolment	June 18, 9:00 A. M.
Classes begin	June 19
Independence Day recess.....	July 4
Summer session closes	July 27

General Session 1951-1952

Beginning of first semester and enrollment	September 5
Opening exercises.....	September 11
Re-examinations	September 10

BOARD OF TRUSTEES

OFFICERS

THE REV. GERRIT HOEKSEMA.....	President
THE REV. EDWARD J. TANIS.....	Vice-President
THE REV. RICHARD J. FRENS.....	Secretary
DR. JACOB T. HOOGSTRA.....	Assistant Secretary

MEMBERS

The Rev. Peter A. Hoekstra.....	San Diego, California
(Classis California)	
The Rev. James Putt, S.T.D.....	Fulton, Illinois
(Classis Chicago, North)	
The Rev. Gerrit Hoeksema.....	Chicago, Illinois
(Classis Chicago, South)	
The Rev. Richard J. Frens, A.M., Th.M.....	Grand Rapids, Michigan
(Classis Grand Rapids, East)	
The Rev. Martin Monsma.....	Grand Rapids, Michigan
(Classis Grand Rapids, South)	
The Rev. John G. Van Dyke, Th.D.....	Grand Rapids, Michigan
(Classis Grand Rapids, West)	
Rev. Hessel Bouma.....	Passaic, New Jersey
(Classis Hackensack)	
The Rev. Jacob T. Hoogstra, Ph.D.....	Holland, Michigan
(Classis Holland)	
The Rev. Nicholas J. Monsma.....	Paterson, New Jersey
(Classis Hudson)	
The Rev. Edward B. Pekelder.....	Kalamazoo, Michigan
(Classis Kalamazoo)	
Rev. William F. Vander Hoven.....	Edgerton, Minnesota
(Classis Minnesota)	
The Rev. Edward J. Tanis, A.M., B.D.....	Grand Haven, Michigan
(Classis Muskegon)	
The Rev. Ralph Bronkema, Th.D.....	Orange City, Iowa
(Classis Orange City)	
The Rev. Henry Zwaanstra.....	Grundy Center, Iowa
(Classis Ostfriesland)	
The Rev. Watson Groen, B.D.....	Seattle, Washington
(Classis Pacific)	
The Rev. John Geels.....	Sully, Iowa
(Classis Pella)	
The Rev. John G. Vande Lune.....	Hills, Minnesota
(Classis Sioux Center)	
Rev. Gysbert J. Rozenboom.....	Sheboygan, Wisconsin
(Classis Wisconsin)	
The Rev. Jacob H. Bruinooge, Th.D.....	Zeeland, Michigan
(Classis Zeeland)	
Mr. Herman Elenbaas.....	Lynden, Washington
Mr. John Hamersma, Jr.....	Paterson, New Jersey
Mr. John Hekman.....	Grand Rapids, Michigan
Mr. Henry Holtvluwer.....	Grand Rapids, Michigan

Mr. Jerry De Nooyer.....Kalamazoo, Michigan
 Mr. Benjamin Staal.....Holland, Michigan
 Mr. Theunis Ribbens.....Sheboygan, Wisconsin
 Dr. John A. Van Bruggen.....Grand Rapids, Michigan
 Mr. John Vander Ark.....Hull, Iowa

EXECUTIVE COMMITTEE

1950 - 1951

Rev. Gerrit Hoeksema, Chairman
 Rev. Edward J. Tanis, Vice-President
 Rev. Richard J. Frens, Secretary
 Dr. J. H. Bruinooge
 Mr. John Hekman
 Mr. Henry Holtvluwer

Dr. Jacob T. Hoogstra
 Rev. Nicholas J. Monsma
 Rev. E. B. Pekelder
 Mr. Theunis Ribbens
 Dr. John A. Van Bruggen

Mr. Henry J. Voss, Assistant Treasurer.....1117 Neland Ave., S.E.
 Rev. Arnold Brink, Educational Secretary.....557 Glenwood Ave., S.E.

ADMINISTRATION

Henry Schultze, A.B., B.D.....President
 Henry J. Ryskamp, Ph.D.....Dean of the College
 Harry G. Dekker, M.S.....Registrar
 Catherine Van Opynen, A.M.....Dean of Women
 Lambert J. Flokstra, Ph.D.....Director of Teacher Placement

LIBRARY

Josephine Baker, A.M., A.M.L.S.....Librarian
 Willemina Twilight, Mrs. Johanna Graves.....Assistants in the Library

OFFICES AND BOOKSTORE

Caroline Veen.....Secretary to the President
 Lena Bossenbroek.....Office Secretary
 Connie Kossen, Adeline Veen, Marilyn Zwier.....Office Stenographers
 Gertrude De Boer.....Clerk, Treasurer's Office
 Mrs. Wilma Westra.....Bookstore Manager
 Lester Ippel.....Bookkeeper
 Hester Klomp.....Assistant in the Bookstore

HEALTH

William H. Vander Ploeg, M.D.....1209 Kalamazoo Ave., S.E. 5-3962

MAINTENANCE AND HOUSING

Henry Keegstra.....Custodian
 Mr. and Mrs. M. Schreur.....Dietitians, Calvin Dormitory
 Mrs. Anna Dolfin.....Housemother, Calvin Dormitory
 Mrs. Marguerite Meyer.....Housemother, Calvin Hall, 820 Bates St., S.E.
 Mrs. Cora Hazebrook.....Housemother, Grace Hall, 1342 Franklin St., S.E.
 Mrs. Gertrude Baker.....Housemother, College Hall,
 1338 Franklin St., S.E.

THE FACULTY

HENRY SCHULTZE, A. B., B. D., *President*
 1240 Benjamin Avenue, S.E. Telephone 5-5660

ALBERTUS J. ROOKS, A. M., *Dean Emeritus*
Professor of the Latin Language and Literature, Emeritus
 737 Benjamin Avenue, S.E. Telephone 5-1221

JACOB G. VAN DEN BOSCH, A. M.
Professor of the English Language and Literature, Emeritus
 857 Bates Street, S.E. Telephone 5-6054

ALBERT E. BROENE, A. B.
Professor of Modern Languages, Emeritus
 1355 Sherman Street, S.E. Telephone GL 4-6363

JOHANNES BROENE, A. M.
Professor of Education and Psychology, Emeritus

JOHN P. VAN HAITSMAN, PH. D.
Professor of Biology
 1027 Benjamin Avenue, S.E. Telephone 3-5306

JAMES NIEUWDORP, B. S.
Professor of Mathematics, Emeritus
 1046 Fuller Avenue, S.E. Telephone 5-3765

HENRY J. G. VAN ANDEL, A. M.
Professor of Holland Language and Literature
 1231 Giddings Avenue, S.E. Telephone 5-5096

PETER HOEKSTRA, PH. D., *Secretary*
Professor of History and Political Science
 1015 Worden Street, S.E. Telephone 5-5057

RALPH STOB, PH. D.
Professor of Classical Languages
 1301 Calvin Avenue, S.E. Telephone 3-0775

HENRY J. RYSKAMP, PH. D., *Dean*
Professor of Economics and Sociology
 1201 Sherman Street, S.E. Telephone 9-3857

WILLIAM HARRY JELLEMA, PH.D.
Professor of Philosophy
 1001 Alexander Street, S.E. Telephone GL2-5449

HARRY G. DEKKER, M. S., *Registrar*
Professor of Chemistry
 1309 Alexander Street, S.E. Telephone 3-1437

H. HENRY MEETER, TH. D.
Professor of Bible
 1045 Fuller Avenue, S.E. Telephone 5-7692

HENRY VAN ZYL, PH. D.
Professor of Educational Methods
 1143 Fuller Ave., S.E. Telephone 5-6600

SEYMOUR SWETS, A. M.
Professor of Music
 1526 Boston, S.E. Telephone 5-1229

LAMBERT J. FLOKSTRA, PH. D.
Professor of Education
 1126 Alto Avenue, S.E. Telephone 3-5979

EDWIN Y. MONSMA, PH. D.
Professor of Biology
 719 Fuller Avenue, S.E. Telephone 5-9861

HARRY J. WASSINK, A. B., B. S.
Professor of Physics and Engineering
 835 Eastern Avenue, S.E. Telephone GL2-9502

WILLIAM THOMAS RADIUS, PH. D.
Professor of Classical Languages
 1341 Colorado Avenue, S.E. Telephone 5-1407

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

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

HENRY STOB, TH. M., PH. D.
Professor of Philosophy
 1334 Sherman Street, S.E. Telephone GL2-1433

RICHARD DROST, PH. D.
Professor of History
 1220 Sherman Street, S.E. Telephone 5-0951

CORNELIUS JAARMA, PH.D.
Professor of Education
 2229 College Avenue, S.E. Telephone GL2-3649

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

THEDFORD DIRKSE, PH. D.
Professor of Chemistry
 51 Fitzhugh Avenue, S.E. Telephone 8-9409

HENRY A. BRUINSMA, PH. D.
Professor of Music
 1307 Philadelphia Avenue, S.E. Telephone 5-2438

CECIL DEBOER, PH. D.
Professor of Philosophy
 820 Henry Avenue, S.E. Telephone GL2-6280

JOHN THOMAS DALING, PH. D.
Associate Professor of Philosophy and Psychology
 West Leonard Road, RFD 5 Telephone 6MA 120F4

GORDON BUTER, M. B. A.
Associate Professor of Economics and Sociology
 1020 Griswold Street, S.E. Telephone 3-2928

JOHN J. TIMMERMAN, PH. D.
Associate Professor of English
 1016 Neland Avenue, S.E. Telephone 5-0697

BERNARD FRIDSMA, A. M.
Associate Professor of German
 1017 Alto Avenue, S.E. Telephone GL2-2176

WILLIAM SPOELHOF, PH. D.
Associate Professor of History
 2460 Almont Avenue, S.E. Telephone 3-0636

EARL U. STRIKWERDA, PH. D.
Associate Professor of History
 1316 Griggs Street, S.E. Telephone 5-5971

HENRY R. VAN TIL, A. B., TH. M.
Associate Professor of Bible
 935 Hancock Street, S.E. Telephone GL2-0085

JOHN CHARLES BULT, A. B.
Associate Professor of Physical Education
 917 Henry Street, S.E. Telephone GL 2-1126

JOHN HAROLD BRATT, A. B., TH. M.
Associate Professor of Bible
 815 Alto Avenue, S.E. Telephone 5-2041

JAMES J. DE JONGE, M.S., M. MUS.
Associate Professor of Music
 1300 Calvin Avenue, S.E. Telephone 3-7809

MARTIN KARSTEN, A. M.
Associate Professor of Biology
 1401 Eastern Avenue, S.E. Telephone GL2-4273

JOHN TULS, A. M.
Associate Professor of Mathematics
 101 Fuller Avenue, S.E. Telephone GL4-4406

DONALD HERBERT BOUMA, A. M.
Associate Professor of Sociology
 1401 Johnston Avenue, S.E. Telephone 3-9992

CLARENCE BOERSMA, PH. D.
Associate Professor of German
 637 Wealthy Street, S.E. Telephone 8-5811

ENNO WOLTHUIS, PH. D.
Associate Professor of Chemistry
 1030 Sherman Street, S.E. Telephone GL2-0046

CORNELIUS A. PLANTINGA, PH. D.
Associate Professor of Psychology
 1060 Bates Street, S.E. Telephone 3-3125

JOHN WEIDENAAR, A. B. TH. B.
Associate Professor of Bible
 1209 Dunham Street, S.E. Telephone 5-1776

JOSEPHINE BAKER, A. M., A.M.L.S.
Librarian
 1025 Tamarack Avenue, N.W. Telephone 8-5744

CATHERINE VAN OPYNEN, A. M.
Dean of Women
 814 N. Otilia Street, S.E. Telephone 5-1689

GERTRUDE SLINGERLAND, A. M.
Assistant Professor of English
 330 Diamond Avenue, S.E. Telephone 8-6026

HENRY BENGELINK, A. M.
Assistant Professor of Biology
 1201 Sigsbee Street, S.E. Telephone GL 4-6602

LESTER DE KOSTER, A. M.
Assistant Professor of Speech
 Thornapple River Drive, R. R. #3 Telephone 99-6502

JOHN LESTER DE BEER, A. M.
Assistant Professor of Education
 1740 Giddings Avenue, S.E. Telephone GL 2-4680

JOHN VANDEN BERG, A. M.
Instructor in Economics and Business Administration
 1318 Adams Street, S.E. Telephone GL 2-6785

MELVIN E. BERGHUIS, A. M.
Instructor in Speech
 1284 Boston Street, S.E. Telephone GL 2-1525

ROBERT G. SETTERGREN, B. S.
Assistant in Drawing
 134 Ridgewood Avenue, S.E. Telephone GL 2-1053

HELEN VAN LAAR, A. B.
Assistant in Education
 1319 Sigsbee Street, S.E. Telephone GL 6-5083

JOHN WILLIAM KINGMA, A. B.
Assistant in Dutch
 2211 Boston Street, S.E. Telephone GL 2-0998

NELLIE MARIE BEUKEMA, M. S.
Assistant in Biology
 1341 Fisk Street, S.E. Telephone 3-5471

KATHRYN SCHNEIDER HEKMAN, A. B.
Assistant in English
 1314 Sigsbee Street, S.E. Telephone GL 4-3354

STEVE JOHN VANDER WEELE, A. M.
Assistant in English

GRACE BARDOLPH, A. M.
Assistant in English

SHIRLEY BALK, M. M.
Assistant in Music

MARGARET DEPUYT, A. B.
Assistant in Physical Education

Committees of the Faculty 1950 - 1951

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

BOARDING PLACES AND DORMITORY—Wassink, Muyskens, Drost, Slingerland, Van Til, Daling, Van Opynen, Bengelink.

BOOKSTORE—Monsma, Karsten, Drost, Wyngaarden.

DISCIPLINE—Hoekstra, H. Stob, Spoelhof, Van Opynen, Monsma, De Beer.

EDUCATIONAL POLICY—Ryskamp, Dekker, Jellema, Flokstra, Zylstra, R. Stob, Van Hattma, Hoekstra.

LIBRARY—Zylstra, Strikwerda, Dirkse, Jellema, Radius.

PLACEMENT BUREAU—Flokstra, Van Zyl, Jaarsma, De Boer.

PUBLICATIONS—Radius, Timmerman, Fridsma, De Koster.

RADIO—De Koster, Bratt, De Jonge, Boersma.

RECREATION—Monsma, Buter, Bruinsma, Slingerland, Wolthuis.

RELIGIOUS AND SOCIAL ACTIVITIES—Meeter, Van Andel, Swets, Strikwerda, Bratt, Jaarsma, Slingerland, Van Opynen.

SCHOLARSHIP AND GUIDANCE—Dekker, Ryskamp, Radius, R. Stob, Van Opynen, Meeter, Van Til.

Divisional and Departmental Organization

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

1. Division of Bible, Philosophy, Education and Psychology.
 - (a) Department of Bible
 - (b) Department of Philosophy
 - (c) Department of Education
 - (d) Department of Physical Culture
 - (e) Department of Psychology
2. Division of Languages, Literatures and Arts.
 - (a) Department of Classical Languages
 - (b) Department of English
 - (c) Department of Modern Languages
 - (d) Department of Art
 - (e) Department of Music
 - (f) Department of Speech
3. Division of Natural Science and Mathematics.
 - (a) Department of Biology
 - (b) Department of Chemistry
 - (c) Department of Mathematics
 - (d) Department of Physics and Engineering
4. Division of Social Science.
 - (a) Department of Economics and Sociology
 - (b) Department of History and Political Science

Aim

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

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

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

ADMISSION

ALL APPLICATIONS for admission should be made to the Dean at least a month before the date of opening. Since all applications must be made on the forms provided by the college, the applicant should send 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.

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

Freshman Standing

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

PLAN A.

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

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

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

I. ENGLISH

A major sequence of at least 3 units is required..... 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..... $\frac{1}{2}$ or 1 unit	Trigonometry $\frac{1}{2}$ unit
Solid geometry..... $\frac{1}{2}$ unit	Physics 1 unit

0, 2, 3

C. NATURAL SCIENCE GROUP

Physics1 unit	Zoölogy1 unit
Chemistry1 unit	Biology (botany, $\frac{1}{2}$ unit and zoölogy, $\frac{1}{2}$ unit)
Botany1 unit	1 unit 0, 2, 3

D. SOCIAL STUDIES GROUP

Ancient history, 1 unit
European history, 1, $1\frac{1}{2}$, or 2 units
American history, $\frac{1}{2}$ or 1 unit
American government, $\frac{1}{2}$ unit
Economics, $\frac{1}{2}$ unit

0, 2, 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 both of the Groups B and C as part of a sequence.

If biology is counted, neither botany nor zoölogy 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.

APPLICANTS FOR PRE-PROFESSIONAL COURSES:

Pre-seminary students should present, if possible, 2 units of high school German and 2 units of high school Latin for admission.

Pre-medical, pre-dental, pre-engineering, medical technology, and 3-year nursing students should present, if possible, $1\frac{1}{2}$ units of algebra, 1 unit of geometry, 1 unit of high school chemistry, and 1 unit of high school physics.

Pre-law students should present, if possible, 2 units of high school Latin for admission.

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

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

Admission of War Veterans

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

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

Advanced Standing

ADVANCED STANDING (in other words, college credit) is granted in the following cases:

1. When the applicant submits from an accredited college, junior college, or normal school, a certificate of honorable dismissal and a transcript of the studies pursued. However, no applicant is allowed more than sixteen hours of credit for each semester of work taken at another recognized institution.

2. When the applicant, at the time of entrance, passes satisfactory examinations in the subjects in which he desires advanced standing.

3. When the applicant submits from an accredited high school, in excess of sixteen units for admission, credits in subjects which

are also taught in college; provided that for at least one semester he successfully continues work in these subjects at Calvin College. The limit of such college credit allowance is six hours.

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

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

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

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

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

Unclassified Students

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

STUDENT EXPENSES

TUITION RATES

Tuition and fees for the semester must be paid during the first five days after registration.

REGULAR TUITION FEE

The regular tuition is \$150.00 a semester.

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

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

For students residing within these zones the tuition is \$100.00 a semester. For two students from one family residing in the region defined, the tuition for each is \$84.00 a semester.

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

For students residing within these zones the tuition is \$72.50 a semester. For two students from one family residing in the region defined, the tuition for each is \$58.50 a semester.

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

For students residing within these zones the tuition is \$45.00 a semester. This is the minimum tuition.

Canadian Students

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

In calculating the tuition, residence is determined as follows:

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

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

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

Residence of all others is considered local.

OTHER FEES

ORGANIZATION FEE

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

EXCESS HOURS

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

UNCLASSIFIED STUDENT FEES

Unclassified students pay at the rate of twelve dollars for each semester hour.

LABORATORY FEE

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

PRACTICE FEE

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

GRADUATION FEE

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

LATE REGISTRATION

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

SPECIAL EXAMINATION

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

SUMMER SESSION

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

INDIVIDUAL LESSONS

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

LOCKER FEES

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

REFUNDMENT

No refunds will be made to any student expelled, suspended, or requested to withdraw on account of conduct or poor scholarship.

If a student withdraws voluntarily and in good standing within two weeks after the first day of enrollment, tuition and all fees ex-

cept \$5.00 to cover registration, will be refunded; if before the end of eight weeks, one-half of the total fees (tuition and miscellaneous fees) will be returned; after eight weeks, no part will be refunded.

Living Expenses

LIVING EXPENSES, including board, room rent, fuel, light, laundry, and text books are from \$600.00 up per year.

HOUSING

Lodging and Board for Men

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

Lodging and Board for Women

THE college dormitory for women on Giddings Avenue provides living accommodations for about 78 students. Board and room fees total approximately \$235.00 per semester. Application for admission should be made with the Dean of Women, Calvin College. Since new applications are given preference according to time of filing, the applicant is advised to correspond with the Dean of Women as early as possible.

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

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

All rates are subject to change.

STUDENT AID

Scholarships

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

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

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

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

It is important that you should note the following points:

1. Applications should be in the hands of the secretaries of state committees as early as possible in October, and in any case not later than October 29th.
2. War Service Scholarships are not offered this year. Candidates must be unmarried, and must fulfill the age and academic requirements stated in the Memorandum.
3. Veterans are eligible to compete, provided they are single and provided they fulfill the age and academic requirements.
4. The stipend will have its pre-war value of 400 pounds, supplemented for the present by a special allowance of 100 pounds per year. Veterans who are suitably qualified for benefits under the G. I. Bill of Rights may, of course, receive those benefits as in the past.

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 1949-50 the award was made for special excellence in the department of Biology.

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

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.

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."

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

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

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

Mr. William B. Eerdmans, Sr., in the interest of encouraging originally expressive writing among Calvin students, has established

THE WILLIAM B. EERDMANS LITERARY AWARDS

Under the terms of the foundation three awards

1st: \$35.00 2nd: \$25.00 3rd: \$15.00

will be made for the three pieces judged best among the contributions to *each* issue of the Calvin College *Student Literary Review* published in any given year. Any type of original writing submitted to the *Review* is eligible for an award, whether it be poetry, fiction, or essay, creative or critical, seriously reflective or delightfully amusing.

Loans

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

Placement Bureau

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

ADMINISTRATION

Religious Culture

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

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

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

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

The Hekman Memorial Library

THE library contains more than 37,000 volumes. About 2,000 books are added yearly. All students and former students of Calvin College and Seminary are entitled to the full use of the library.

Physical Education

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

Attendance

THE school year of thirty-six weeks is divided into two semesters of eighteen weeks each. A summer session of six or eight weeks is offered each summer.

Two vacations are given during the year: a vacation of two weeks at the Christmas holidays, and a spring vacation of one week. Students are required to remain on duty until the last school exercise preceding a vacation is completed, and to be present at the hour of opening, after a vacation.

Grades and Honor Points

REPORT CARDS are sent out at the end of each semester.

In grading the work of students a literal system equivalent in honor points is used; as follows:

MARK	INTERPRETATION	EQUIVALENT HONOR POINTS
A	Exceptional.	3
B	Good or very good.	2
C	Graduation average.	1
D	Unsatisfactory; just passable	0
E	Condition, which may be removed by re-examination.	Minus 1
F	Failure. No re-examination.	Minus 2
Inc.	Work not completed.	
W	Work extending over two semesters.	

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

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

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

The mark Inc. signifies the absence of a certain amount of reading to be completed, or of papers to be handed in. This mark is given only in cases of prolonged illness and in emergencies, i.e., in circumstances which may reasonably prevent a student from completing his work on time, such as practice teaching, inability to obtain necessary books, etc. To remove a mark Inc. the student must secure credit for the course by satisfying the instructor *within one year*. Responsibility for securing such credit and for obtaining from the instructor concerned a signed removal slip without which

no change is made in the Registrar's entries, and for presenting such removal slip to the Registrar, *lies with the student*. Should a student fail to remove the mark Inc. within the allotted time, the mark automatically becomes F.

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

Examinations and Written Work

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

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

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

Any student found guilty of dishonesty in any examination or test or required written work of any character, will 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.

Dismission

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

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

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

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

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:

Bible 101 or 105, 102 or 106, 201, 202, 301	10 hours
English 103, 104	6 hours
History	6 hours
Philosophy (not including Psychology or Logic)	6 hours
Natural Science	10 hours
Foreign Language	(see following explanation)

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.

All students pursuing the course leading to a General A. B. degree, especially those who plan to go on to a graduate school, must, not later than the beginning of their junior year, apply to the head of the department of their selection for permission to major or to concentrate in that department. The department head, on accepting the application, will outline the student's program of major and supporting courses.

To insure proper distribution of the student's work, the subjects have been divided into three groups; as follows:

- Group I. Art, Dutch, English, French, German, Greek, Latin, Music, Speech.
- Group II. Biology, Chemistry, Mathematics, Physics, Psychology.
- Group III. Bible, Economics, Education, History, Philosophy, Political Science, Sociology.

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

- a. The student must choose one of these three groups as his major and another group as his minor.
- b. In his major group the student must choose two subjects, in one of which he completes a sequence of at least twenty-four hours (for music majors, 40-42 hours) and in the other of which he completes a sequence of at least twelve hours or fifteen hours if he desires a Teachers' Certificate). The total

number of hours required in the major group is, therefore, at least thirty-six, except for music.

- c. In his minor group the student must choose one subject in which he completes a sequence of twelve hours. Besides, he must take an additional six hours within his minor group. The total number of hours required in the minor group is, therefore, eighteen.
- d. At least one-half of the work taken in residence beyond the sophomore year must be in courses not open to freshmen.

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

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

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

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

Pre-Seminary

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

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

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

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

		<i>Hours</i>			<i>Hours</i>
Bible 201, 202, 301, 302.....	8	History 101, 102	6		
Biology 210, 306	4	Intro. to Inorganic Science....	6		
Dutch Language	20	Latin 201, 202, or 307, 308....	6		
Dutch History 326.....	3	Philosophy 300, 301, 302.....	9		
Economics 201, 202.....	6	Psychology 201	3		
Education 301	3	Phil. 200 (Logic).....	3		
English incl. 103, 104.....	12	Speech 103, 104, 205.....	6		
Greek 101, 102, 201, 202,		Sociology 203	3		
313, 314	20				

Schedule for the year 1950-51

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

Freshman Year

<i>FIRST SEMESTER</i>		<i>SECOND SEMESTER</i>			
		<i>Hours</i>			<i>Hours</i>
Dutch 101	4	Dutch 102	4		
English 103	3	English 104	3		
History 101	3	History 102	3		
Latin 201	3	Latin 202	3		
Speech 103	2	Speech 104	2		
	15		15		

Sophomore Year

Bible 201	2	Bible 202	2
Dutch 203	3	Biology 210	2
Greek 101	4	Dutch 202.....	3
Psychology 201	3	Greek 102	4
Sociology 203	3	Philosophy 200	3
	15		14

Junior Year

Dutch 305	3	Biology 306	2
Education 301	3	Dutch 306	3
English 207 (or other English elective)	3	Dutch Hist. 326.....	3
Greek 201	3	Greek 202	3
Speech 205	2	Philosophy 300	3
Elective	3	English continued	3
	17		17

Senior Year

Bible 301	2	Bible 302	2
Economics 201	3	Economics 202	3
Greek 313	3	Greek 314	3
Philosophy 301	3	Philosophy 302	3
Intro. to Inorganic Science.....	3	Elective	2
Elective	2	Intro. to Inorganic Science....	3
	16		16

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

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

Education

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

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

2. COURSE REQUIREMENTS FOR PROSPECTIVE HIGH SCHOOL TEACHERS: (Grades 7-12.)

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

Majors and minors may be chosen from the following subjects:

Chemistry	History	Philosophy
Economics-Sociology	History-	Physics
Economics	Polit. Science	Physical Education
English	Latin	Sociology
French	Mathematics	Science (Biology)
German	Music	
	Art	

B. Subject requirements:

- (1) Bible 101-2 or 105-6, 201-2, 301.....10 hours
- (2) English 103-4 6 hours
- (3) History 6 hours
- (4) Natural Science 4 hours
- (5) Foreign language..... 4 semesters of one foreign language

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

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

- (6) Education courses20 hours
 - (a) Psychology 201 and 202
 - (b) One course from Education 203, 306, or 309
 - (c) Education 314

- (d) One methods course from Education 307, 310, 324, 326, 328, 340, 330m.....2 or 3 hours
- (e) Speech 103 or 104
- (f) Education 342: Observation
- (g) Education 344: Directed Teaching

Prerequisites for Education 344, Directed Teaching:

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

3. COURSE REQUIREMENTS FOR PROSPECTIVE ELEMENTARY TEACHERS: (Kindergarten through Grade 8.)

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

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

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

C. Subject requirements:

- (1) Bible 101-2 or 105-6, 201-2, 301.....10 hours
- (2) English 103-4 6 hours
- (3) History 6 hours
- (4) Natural Science 4 hours
- (5) Foreign language..... 4 semesters of one foreign language

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

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

- (6) Education courses20 hours
 - (a) Psychology 201 and 202
 - (b) One course from Education 203, 306 or 309
 - (c) Education 301 or 315 or 317
 - (d) One methods course from 220, 307, 310, 324, 340, 3222 or 3 hours
 - (e) Students planning to teach in a Christian School must add Education 220, 222, 320, and 322
 - (f) Education 341: Observation
 - (g) Education 343: Directed Teaching
 - (h) In addition to these subjects prospective elementary teachers are urged to include in their courses:
 - 1) Art 227 or 228 (no credit) and Art 301.....3 hours
 - 2) Geography 105 or 106.....3 hours

- 3) Education 318, 225, and 324.....8 hours
- 4) Speech 103 or 104 or Educ. 225.....2 hours

Prerequisites for Education 343, Directed Teaching:

- (a) Grade of work equivalent to C+
- (b) Principles of Education (315 or 317)
- (c) Educational Psychology (202)
- (d) Methods course:
 - 1) For teacher of grades K - 3.....Educ. 322
 - 2) For teacher of grades 4 - 8.....Educ. 220

4. THE STATE BOARD OF EDUCATION IN MICHIGAN grants Provisional Certificates to graduates who have met all the requirements of this course. These certificates are valid for five years and may be converted into Permanent Certificates, provided:

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

Pre-Medical and Pre-Dental

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

1. AMOUNT OF WORK. The student must complete 94 hours of work.
2. GRADE OF WORK. The student must obtain a total of 94 honor points; in other words, must obtain an average grade of C; except that to obtain faculty recommendation for admission to a class A medical school he must in the three years of residence obtain a total of 188 honor points, representing an average of B.
3. PRESCRIBED WORK. The following courses are prescribed:

Freshman Year

FIRST SEMESTER	SECOND SEMESTER
Bible 101 or 105..... 2 hours	Biology 110 3 hours
Biology 109 3 hours	Chemistry 104 4 hours
Chemistry 103 4 hours	English 104 3 hours
English 103 3 hours	Mathematics 104 3 hours
History 101 or 205..... 3 hours	History 102 or 206..... 3 hours
15 hours	16 hours

Sophomore Year

Bible 201 2 hours	Bible 202 2 hours
Biology 201 4 hours	Biology 208 3 hours
Chemistry 201 4 hours	Chem. 202 or elective..... 4 hours
French or German..... 4 hours	French or German..... 3 hours
Physics 201 4 hours	Physics 202 4 hours
18 hours	16 hours

Junior Year

Bible 301 2 hours	Biology 306 2 hours
Biology 207 3 hours	Biology 312 3 hours
Biology 311 2 hours	Chemistry 302 4 hours
Chemistry 301 4 hours	English or elective..... 3 hours
English or elective..... 3 hours	Psychology 312 or elective 3 hours
Psychology 201 3 hours	
17 hours	15 hours

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

Trigonometry presupposes one and one-half units of Algebra.

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

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

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

4. DISTRIBUTION OF ELECTIVES. The number of hours of electives will vary according to the nature of the student's high school preparation in French or German. For their electives students should choose such subjects as are required for admission to the medical school which they expect eventually to attend.

5. DIPLOMA. On satisfactory completion of this course the student will receive a three-year diploma.

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

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

Four-Year Pre-Medical

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 two honor points per semester hour of credit is required.

3. PRESCRIBED WORK.

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

4. DISTRIBUTION OF ELECTIVES. The number of electives will vary according to the nature of the student's high school preparation in French and German. Not less than 12 hours of his elected courses over and above the courses prescribed under 3 (above), but including Philosophy, must be in Groups I and III. The student is urged to elect Biology 106 and Chemistry 202 and 308m.

Pre-Law

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

1. AMOUNT OF WORK. The student must complete 94 hours of work.

2. GRADE OF WORK. The student must obtain a total of 94 honor points; in other words, an average of C; except that he must obtain 188 honor points, representing an average of B, to warrant faculty recommendation for admission to a class A law school.

3. PRESCRIBED WORK. Of the 94 hours required, certain hours are prescribed; as follows:

Freshman Year

FIRST SEMESTER		SECOND SEMESTER	
Bible 101 or 105.....	2 hours	Bible 102 or 106.....	2 hours
English 103.....	3 hours	English 104.....	3 hours
Latin.....	3 hours	Elective.....	3 hours
Mathematics or Science.....	3 hours	Logic.....	3 hours
Psychology.....	3 hours	Mathematics or Science.....	3 hours
Speech.....	2 hours	Speech.....	2 hours
	16 hours		16 hours

Sophomore Year

Bible 201.....	2 hours	Bible 202.....	2 hours
English.....	3 hours	English.....	3 hours
History 203.....	3 hours	History 204.....	3 hours
Latin, French or German.....	3 hours	Latin, French or German.....	3 hours
Political Science.....	3 hours	Political Science.....	3 hours
Sociology 203.....	3 hours	Sociology 204.....	3 hours
	17 hours		17 hours

Junior Year

Bible 301.....	2 hours	English.....	3 hours
English.....	3 hours	History 302.....	3 hours
History 301.....	3 hours	Political Science.....	3 hours
Political Science.....	3 hours	History 312.....	3 hours
Elective.....	3 hours	Elective.....	2 or 3 hours
	14 hours		14 or 15 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 two honor points per semester hour of credit.

Four-Year Pre-Law

Students desiring a four-year Pre-Law Course, or seeking to enter schools which demand four years of Pre-Law work (such as the University of Michigan—after September, 1950) are advised to make their senior selections upon the advice of their Pre-Law Course advisers and of the Dean.

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 law schools an average grade equivalent to two honor points per semester hour of credit 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.
- b. The student must meet the prescribed course requirement of the Three-Year pre-Law 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 foreign language. He is urged to elect subjects in such departments as the following: Economics, Speech, History, Mathematics, Political Science, Philosophy, and Sociology. Specific elections should be made only after consultation with the Pre-Law Course advisers or with the Dean.

Pre-Engineering

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

1. AMOUNT OF WORK. The student must complete 94 hours of work.

2. GRADE OF WORK. The student must obtain a total of 94 honor points; in other words, must obtain an average grade of C.

3. PRESCRIBED WORK. Of the 94 hours required, the following are prescribed:

Three-Year General Pre-Engineering Course

Freshman Year

FIRST SEMESTER		SECOND SEMESTER	
Bible 101 or 105.....	2 hours	Drawing 102*	3 hours
Chemistry 103	4 hours	Chemistry 104	4 hours
Drawing 101*	3 hours	English 104	3 hours
English 103	3 hours	Mathematics 104	3 hours
Mathematics 103	3 hours	Speech 103 or 104.....	2 hours
	15 hours		15 hours

Sophomore Year

Drawing 201*	2 hours	Bible 102 or 106.....	2 hours
Economics 201	3 hours	Economics 202	3 hours
Mathematics 201	3 hours	Mathematics 202	3 hours
Physics 201E	5 hours	Physics 202E	5 hours
Physics 203	1 hour	Physics 204	1 hour
Surveying 207*.....	2 or 3 hours	Elective	2 hours
	16 or 17 hours		16 hours

* See Engineering Subjects.

Junior Year

Bible 301	2 hours	Dynamics 302*	3 hours
Mathematics 301	5 hours	Mathematics 302	5 hours
Economics 301	3 hours	Physics 304	3 hours
Statics 301*	3 hours	Economics 302	3 hours
Electives	3 hours	Elective	3 hours
	16 hours		17 hours

Three-Year Chemical Pre-Engineering Course

Freshman Year

Bible 101 or 105.....	2 hours	Chemistry 104	4 hours
Chemistry 103	4 hours	English 104	3 hours
English 103	3 hours	Drawing 102*	3 hours
Drawing 101*	3 hours	Mathematics 104	3 hours
Mathematics 103	3 hours	Speech	2 hours
	15 hours		15 hours

Sophomore Year

Chemistry 201	4 hours	Bible 102 or 106.....	2 hours
Mathematics 201	3 hours	Chemistry 202	4 hours
Drawing 201*	2 hours	Mathematics 202	3 hours
Physics 201E	5 hours	Physics 202E	5 hours
Physics 203	1 hour	Physics 204	1 hour
	15 hours		15 hours

Junior Year

Bible 301	2 hours	Chemistry 302	4 hours
Chemistry 301	5 hours	Economics 202	3 hours
Economics 201	3 hours	Mathematics 302	5 hours
Mathematics 301	5 hours	Modern Physics 304	3 hours
Statics 301	3 hours	*Dynamics 302 or	
	18 hours	Electives	2 or 3 hours
			17 or 18 hours

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

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

Electives must be chosen in consultation with the Dean.

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

5. DEGREE. On satisfactorily completing either course with a record of not less than 125 honor points received in the required 94 hours, the student is eligible for the degree of bachelor of science

* See Engineering Subjects.

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

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

<i>Freshman Year</i>	
FIRST SEMESTER	SECOND SEMESTER
Bible 101 or 105.....2 hours	Bible 102 or 106.....2 hours
Economics 1033 hours	Economics 1043 hours
English 1033 hours	English 1043 hours
Lab. Science 3 or 4 hours	Lab. Science3 or 4 hours
History or Mathematics3 hours	History or Mathematics3 hours
14 or 15 hours	14 or 15 hours

<i>Sophomore Year</i>	
Bible 2012 hours	Bible 2022 hours
Economics 2013 hours	Economics 2023 hours
English 201 or 207.....3 hours	English 202 or 208.....3 hours
Mathematics 2053 hours	Mathematics 2063 hours
Psychology 2013 hours	Philosophy 2023 hours
Speech 1032 hours	Speech 1042 hours
16 hours	16 hours

<i>Junior Year</i>	
Economics 3013 hours	Bible 3012 hours
Economics 3033 hours	Economics 3023 hours
Economics 3054 hours	Economics 3064 hours
Economics 3093 hours	Pol. Science 3043 hours
Pol. Science 3033 hours	Elective3 hours
16 hours	15 hours

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

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

Major in Business Administration

Candidates for a bachelor's degree from the General College Course may select their subjects with a view to obtaining a major in Business Administration. They should complete the subjects prescribed for the General College Course (see p. 30). To complete the major group requirements they should elect 24 hours in

Economics and 12 hours in another department listed in Group III (see p. 31). They may elect to complete their minor group requirement by selecting subjects either in Group I or in Group II. The 24 hours in Economics must include Economics 201 and 202 and Economics 305 and 306.

Students desiring to receive a master's degree in Business Administration at the University of Michigan, after receiving a bachelor's degree from Calvin College, can do so by successfully completing a maximum of one year and one summer at the School of Business Administration of the University of Michigan.

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.

<i>Freshman Year</i>	
FIRST SEMESTER	SECOND SEMESTER
Biology 109 3 hours	Bible 1022 hours
Chemistry 101 or 103.....4 hours	Biology 110 3 hours
Engineering 1013 hours	Chemistry 102 or 104.....4 hours
English 1033 hours	English 1043 hours
Mathematics 1033 hours	Mathematics 1043 hours
16 hours	15 hours
<i>Sophomore Year</i>	
Bible 2012 hours	Bible 2022 hours
Biology 2014 hours	Biology 206 3 hours
Economics 2013 hours	Biology 306 2 hours
Physics 2014 hours	Economics 2023 hours
Engineering 2072 hours	Mathematics 3084 hours
Speech 1032 hours	Physics 2024 hours
17 hours	18 hours

MAJOR IN MUSIC

CANDIDATES for the A.B. degree in the General College Course or in the Education Course may select music as a major field. They should complete the general course requirements prescribed for the General College Course (see p. 31) or the Education Course (see p. 34). Their minor fields must be chosen with care in order to allow the maximum amount of hours for work in the major field. The candidate for a major in music must complete from 40 to 42 hours of course work in music.

The music major program allows for three different fields of concentration: music history and literature, music theory, and applied music. By the end of the first year of study the candidate

should make a choice of one of the three programs. Freshmen music majors must elect Music Theory 103-104 since this course is a pre-requisite for all succeeding major courses.

Course Requirements

A. For concentration in music history and literature:

Basic Theory	12 hours
History of Music.....	6 hours
Advanced Courses in Music History or Literature	12 hours
Applied Music	8 hours
Electives in Theory or History Courses to complete 40 to 42 hours.	

B. For concentration in music theory:

Basic Theory	12 hours
Advanced Courses in Theory, Form, Orchestration, etc.	12 hours
History of Music.....	6 hours
Applied Music	8 hours
Electives in History or Theory Courses to complete 40 to 42 hours.	

C. For concentration in applied music:

NOTE: It must be remembered that this course, within the liberal arts framework, is non-professional, and serves only as partial preparation for the Bachelor or Music degree in the same field. The student who plans to attend a graduate school of music working towards the M.M. degree in applied music should plan to take extra applied music course work without credit at Calvin College or to take extra summer work in order to make up the professional school entrance requirements in applied music.

Basic Theory	12 hours
History of Music.....	6 hours
Applied Music	16 hours
Electives in Theory or History to complete 40 to 42 hours.	

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

All music majors are required to participate in at least one applied music ensemble each semester. Although the student will be allowed to follow his inclination as much as possible, it may be necessary at times for the faculty to direct the student to a particular ensemble.

MINOR IN MUSIC

A student wishing to choose music as a minor subject must include in the minor sequence:

Music Theory	103-104
and	
Music Literature	211-212 or
Music History	305-306

Nursing Course

The Nursing Course at Blodgett Memorial Hospital in Grand Rapids, Michigan, is so arranged that the first two semesters of the total three-year program are taken at the college. The courses listed below are given during this period.

FIRST SEMESTER	SECOND SEMESTER
Bible 101	Biology 106
Biology 105	English 104
English 103	Psychology 201
Chemistry 101N	Nutrition
Nursing Arts including	Pharmacology
Hygiene (Hospital)	Nursing Arts
Microbiology	(Hospital)
	Prof. Adjust. I
	(Hospital)
	Physical Education
	17 hours

Upon completion of these two semesters and an additional twenty-seven months of clinical experience at Blodgett Memorial Hospital, the student is granted a diploma in nursing. She is then eligible to write the examinations given by the Michigan Board of Registration of Nurses, and upon passing these examinations receives a certificate to practice as a registered nurse.

Students wishing to take this course must make application at Blodgett Memorial Hospital with the Director of the School of Nursing, preferably before August 1.

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

Chemistry 101N	Biology 110
English Composition	Speech
European History	Sociology
Psychology 201	Electives

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

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

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

Bachelor of Science in Nursing, on the combined Curriculum Plan

The student must

1. Meet regular admission requirements to the college, including among highschool credits Algebra, Geometry, and Chemistry or Physics;

2. Successfully complete 94 semester hours of pre-professional subjects considered fundamental in any liberal arts program;

3. Complete an additional 27 to 30 months of training at an accredited hospital school of nursing.

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 hours
English Composition and Rhetoric.....	6 hours
English or American Literature.....	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
Ancient Language	8 hours
Chemistry (Inorganic)	8 hours
Organic and Biochemistry.....	8 hours
Human Anatomy and Physiology.....	5 hours
Animal Biology	3 hours
Microbiology	4 hours
Introduction to Embryology.....	3 hours
Biological Problems	2 hours
Pharmacology	1 hour
Nutrition	3 hours

84 hours

To complete the 94 hours, the student may elect courses in Literature, History, Education, Chemistry, Political Science, Biology such as Histology or Parasitology, or Elementary Physics.

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

The student must

1. Meet regular admission requirements to the college, including among highschool credits Algebra, Geometry, and Chemistry or Physics;

2. Successfully complete 94 semester hours of pre-professional subjects considered fundamental in any liberal arts program;

3. Complete an additional 12 months of training at an accredited school of Medical Technology.

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

The required college courses in the program are the following:

Bible (including 301).....	6 hours	—	2
English Composition and Rhetoric.....	6 hours	OK	
English or American Literature.....	6 hours	OK	
History	6 hours	OK	
Psychology	6 hours	OK	

(Continued on next page)

Sociology (Introduction or Problems).....	3 hours	—	
Philosophy (Introduction to).....	3 hours	—	
*Ancient Language	8 hours	OK	
Chemistry (Inorganic) 103 and 104.....	8 hours	OK	
Human Anatomy and Physiology.....	5 hours	3 SP	2
Organic and Biochemistry.....	8 hours	OK	
Animal Biology	3 hours	OK	
Microbiology	4 hours	2P	
Microscopic Technique	1 hour	—	
Biological Problems	2 hours	—	
Plant Biology	3 hours	OK	
Histology	4 hours	—	2
Parasitology	4 hours	2P	
Physics (Introductory)	6 hours	OK	22
Elective	2 hours	OK	6
	94 hours		18
			11

SUGGESTED PROGRAM

Freshman Year

FIRST SEMESTER		SECOND SEMESTER	
Biology 105	3 hours	Biology 106	2 hours
Biology 109	3 hours	Biology 110	3 hours
English 103	3 hours	English 104	3 hours
Latin or Greek 101.....	4 hours	Latin or Greek 102.....	4 hours
Physics 101	3 hours	Physics 102	3 hours
	16 hours		15 hours

Sophomore Year

Bible 201	2 hours	Bible 202	2 hours
Biology 107	4 hours	Biology 304	1 hour
Chemistry 103	4 hours	Elective	2 hours
History 101	3 hours	Chemistry 104	4 hours
Psychology 201	3 hours	History 102	3 hours
	16 hours	Sociology 204	3 hours
			15 hours

Junior Year

Bible 301	2 hours	Biology 306	2 hours
Biology 307	4 hours	Biology 308	4 hours
Chemistry 303	4 hours	Chemistry 304	4 hours
English 201	3 hours	English 202	3 hours
Philosophy 203	3 hours	Psychology 312	3 hours
	16 hours		16 hours

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

DESCRIPTION OF COURSES

Art

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

201. ART FOR ELEMENTARY TEACHERS *Three hours*
A course in art education in the elementary school. The areas of drawing, values, color, design, lettering and poster work are studied. The student is taught to develop skill in the manipulation of different art media, and given some knowledge of teaching methods relevant to art.
202. HANDCRAFT *Three hours*
The course aims to give the student ideas in the field of craft problems related to the elementary grades. It requires work in clay modeling, weaving, and block printing.
228. PENMANSHIP *Two hours*
Manuscript and cursive writing. Theory and practice. No credit. For prospective teachers in elementary grades.
331. FLEMISH PAINTING *Three hours*
A course in the Flemish and Dutch primitives and Italianizers, 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.
332. 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 intertestamentary period are sketched with particular reference to the coming Messiah; 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 Christian religion as contained in the Bible and as reflected in the confessional standards of the Reformed Churches.
202. REFORMED DOCTRINE *Two hours*
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.

Biology

For majors in this department, the following courses are required: 105-106, 111, 201, 207, 306, and either 112 or 311 and 312 (24 hours required).

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

General Biology: 105-106, 111, 201, 207, and 306. (Any 15 hours.)

Botany and Bacteriology: 107, 111, 112, and 207. (Total 15 hours.)

Human Biology: 103, 105-106, 308, and either 212 or 213. (Total 15 hours.)

Zoology: 201, 206, 208, 307, 308, and 311-312. (Any 15 hours.)

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

102. HUMAN PHYSIOLOGY *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 course 105. At the same time it is planned to supplement course 103.
103. PERSONAL HYGIENE *Three hours*
The proper care of our bodies and approved practices for the prevention of disease are studied. Courses 102 and 103 together form a unit which is adapted to the needs of students who expect to teach health subjects in the elementary grades. Offered both semesters.
105. HUMAN ANATOMY AND PHYSIOLOGY *Three hours*
An introduction to the study of human biology, including elements of embryology, genetics, anatomy, histology, and physiology. Two hours of lectures and one laboratory period a week. Laboratory fee, \$3.00.

106. HUMAN ANATOMY AND PHYSIOLOGY *Two hours*
Continuation of course 105.
107. PRINCIPLES OF MICROBIOLOGY *Four 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. Three hours of lectures and quizzes. One laboratory period a week. Laboratory fee, \$3.00.
109. 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, \$3.00.
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.
111. GENERAL BOTANY *Four hours*
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*
This course with course 111 constitutes a full year's course in botany. A comparative study of plant forms and life histories of representative plants. The course offers a general systematic view of the plant kingdom. Three hours of lectures and quizzes, one laboratory period a week. Laboratory fee, \$3.00.
201. INVERTEBRATE ZOÖLOGY *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, reports, and recitations; and three hours of laboratory work per week. Laboratory fee, \$3.00.
206. NATURAL HISTORY *Three hours*
A systematic study of the appearance and habits of animals which are more commonly met near our homes, in zoölogical 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. GENETICS *Three hours*
A study of the ways and means by which the inherited characteristics of plants, animals, and man are transmitted from parents to offspring. The course consists of lectures and problems concerning applications of the laws of heredity.
208. INTRODUCTION TO EMBRYOLOGY *Four hours*
A study of the development of vertebrate animals. Three 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 several divisions of biology, such as plant and animal anatomy, physiology, and classification. The interrelations between plants and animals are emphasized. Two hours of lectures or recitations and one hour of demonstrations per week.

212. NUTRITION *Three hours*
The study of fundamental principles of human nutrition at all ages, applied to the individual, family, and community nutrition problems. Two lectures and one laboratory period a week. To be preceded or accompanied by 102 or 106. Laboratory fee, \$3.00.
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 teleology are considered. Lectures, assigned readings, recitations, and reports. Prerequisites: 109 and 110 or equivalent courses.
307. PARASITOLOGY *Four hours*
An introduction to the study of the parasites of man and of common animals. Classification, and life-cycles of the parasites, and reactions of the hosts will be considered. Three lectures and one laboratory period a week. Laboratory fee, \$3.00.
308. HISTOLOGY *Four hours*
A study of mammalian tissues. The relation between microscopic structure and function will be considered. Three lectures and one laboratory period a week. Laboratory fee, \$3.00.
311. VERTEBRATE ZOÖLOGY *Two hours*
An introduction to the study of vertebrates with emphasis on their comparative anatomy. Evolution problems are considered. One lecture and one laboratory period a week. Laboratory fee, \$3.00.
312. VERTEBRATE ZOÖLOGY *Three hours*
A continuation of 311. Two lectures and one laboratory period a week. Laboratory fee, \$3.00. Prerequisite: 311.
- 330m. TEACHING BIOLOGY *Two hours*
Points of view, contents, and methods of teaching secondary biology, and human physiology and hygiene. Prerequisite: twenty hours of Biology.

Chemistry

A student who wishes to major in chemistry should complete the following courses: 103-4, 201-2, 301-2, 307-8 and 310. In related fields, he should complete Mathematics through Calculus, and Physics 201 and 202.

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, \$5.00. No prerequisites. Not offered in 1950-51.
102. GENERAL CHEMISTRY *Four hours*
Continuation of 101. Hours, texts and fees the same. Not offered in 1950-51.

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, \$5.00. No prerequisites, although a knowledge of high school chemistry is desirable.
104. GENERAL INORGANIC CHEMISTRY *Four hours*
Continuation of 103. Hours, texts and fees the same.
- 101N. CHEMISTRY FOR NURSES *Four hours*
A one semester course designed for students in the regular pre-nursing course. A survey of inorganic, organic, and biological chemistry as applied to the field of medicine. Three class-room hours and one two-hour laboratory period per week.
Laboratory fee, \$3.00. 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, \$3.00. Breakage fee, \$7.00. Prerequisites: 103 and 104, and Mathematics 101.
202. QUANTITATIVE ANALYSIS *Four hours*
Two hours in the class-room and from eight to ten hours of laboratory work per week. Laboratory fee, \$3.00. Breakage fee, \$7.00. 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, \$3.00. Breakage fee, \$7.00. Prerequisite: General Inorganic Chemistry.
302. ORGANIC CHEMISTRY *Four hours*
Continuation of 301. Hours and fees the same. This course deals primarily with aromatic compounds. Prerequisites: General Inorganic Chemistry and 301.
303. ORGANO-BIOCHEMISTRY *Four hours*
A brief study of important classes of organic compounds with special emphasis on biochemistry, chemistry of carbohydrates, proteins, fats, enzymes and other subjects. For pre-nursing, pre-medical technology students, and for teachers who have a minor in chemistry. Three hours of classroom work and two laboratory periods of three hours each per week. Laboratory fee, \$3.00. Breakage fee, \$7.00. Prerequisites: Chemistry 103 and 104.
304. ORGANO-BIOCHEMISTRY *Four hours*
Continuation of 303. Hours and fees the same.
305. INTRODUCTION TO THE FIELD OF INORGANIC SCIENCE *Three hours*
This course attempts to evaluate critically the basic assumptions, simple laws and results of modern scientific investigations in the fields of chemistry, physics, and geology. Emphasis is placed on the interrelation of these fields rather than a study of each unit by itself. Open to pre-seminary students and to Juniors and Seniors pursuing an A.B. in Education course who have neither a major nor minor in Science. This course will not be counted as science credit in the 10 hours science requirement of the General College course.

306. INTRODUCTION TO THE FIELD OF INORGANIC SCIENCE *Three hours*
Continuation of 305.
307. PHYSICAL CHEMISTRY *Four hours*
A study of the kinetic theory of gases, solids and liquids. Three lecture hours and one laboratory period per week. Laboratory fee, \$3.00. Breakage fee, \$7.00. 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.
- 308m. PHYSICAL CHEMISTRY FOR PRE-MEDICAL STUDENTS *Three hours*
A study of the states of matter, properties of solutions, chemical kinetics and the colloidal state. Open only to pre-medical students.
309. BIOCHEMISTRY *Four hours*
A discussion of the fundamentals of biochemistry, chemistry of carbohydrates, proteins and fats, enzymes, colloids, digestive processes, metabolism and other subject matter essential to an understanding of biochemistry. Three hours of classroom work and two laboratory periods of three hours each per week. Laboratory fee, \$3.00. Breakage fee, \$7.00. Prerequisites: 301 and 302.
310. QUALITATIVE ORGANIC ANALYSIS *Four hours*
One and one-half hours of lecture and three laboratory periods per week. This course is based on Shriner and Fuson's text. Prerequisite: Chemistry 302. Laboratory fee, \$3.00. Breakage fee, \$7.00.
- 330m. TEACHERS' COURSE *One hour*
Methods of teaching chemistry in secondary schools. Prerequisite: two years of chemistry.

Dutch

A. DUTCH LANGUAGE

101. ELEMENTARY GRAMMAR *Four hours*
Conjugations and declensions. 8
102. ADVANCED GRAMMAR *Four hours*
Review. Full declensions. Syntax. Required outside reading.
201. INTERMEDIATE DUTCH *Three hours*
Reading of modern prose. Review of the more important parts of grammar. Outside reading of four hundred pages. 2
202. ADVANCED DUTCH *Three hours*
Reading of nineteenth century prose and poetry. Grammar review continued. Outside reading of four hundred pages. ~~2~~
305. MODERN LITERATURE *Three hours*
The outstanding prose writers and poets after 1880 are read and the movements of naturalism, symbolism, neo-romanticism and neo-vitalism are discussed. Required outside reading and essays. 6
306. RENAISSANCE AND ROMANTICISM *Three hours*
The leading authors of the Renaissance and the Romantic Movement. Required outside reading and essays. 20

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

B. MEDIEVAL AND DUTCH HISTORY

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

- 3 325. THE RENAISSANCE IN FLANDERS AND ITALY (1850-1550) *Three hours*
3 326. DUTCH HISTORY (1500-1815) *Three hours*

C. DUTCH ART

- 3 331. FLEMISH PAINTING *Three hours*
The Flemish and Dutch Primitives and Italianizers between 1400 and 1600 Rubens and Van Dyck and their schools. The course is analytical as well as historical.
3 332. DUTCH PAINTING *Three hours*
The Dutch Renaissance (1600-1700) and the modern Dutch painters.

Economics

- 3 103. ECONOMIC HISTORY (United States) *Three hours*
A review of the economic development of this country from the time of colonization to the present day. Special emphasis is placed on the development of the transportation system, the history of the tariff question, the development of unionism, the history of the banks, and the development of government regulation in our economic system. Offered the first semester.
12 104. ECONOMIC GEOGRAPHY *Three hours*
A study of the physical factors of the environment and man's relationship to them. The subject is approached from the point of view of the various occupations in which man is engaged, and how these occupations are carried on in the world. Offered the second semester.
32 Ho 201. PRINCIPLES OF ECONOMICS *Three hours*
A review of the fundamental principles underlying modern economic life. Not open to Freshmen except by special permission. Students electing 201 are expected to take 202.
202. PRINCIPLES OF ECONOMICS *Three hours*
A continuation of the principles of economics and an application of the same to current industrial problems and institutions.
205. BUSINESS MATHEMATICS *Three hours*
For description of this course, see under Mathematics 205.
206. STATISTICS *Three hours*
For description of this course, see under Mathematics 206.
301. MONEY AND BANKING *Three hours*
A study of the nature and functions of money, with a view to the understanding of the complex rôle of currency systems in our national and international life. A detailed study of the functions of banking, the Federal Reserve, private financial institutions, foreign trade, and so forth. Prerequisite: 201 and 202 or their equivalents.
302. FINANCIAL PRINCIPLES *Three hours*
A continuation of 301. The financial promotion of corporations and of trusts. The trust problem.

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

305. ESSENTIALS OF ACCOUNTING *Four hours*
An introductory course in accounting. Intended to give students the necessary accounting background for entrance into schools of business administration or for business uses when graduating from Calvin. Emphasis is placed on the principles of accounting and the accounting procedure in corporations. A laboratory period is held each week for application of the material. Prerequisite: 201 and 202 or their equivalents.

306. ESSENTIALS OF ACCOUNTING *Four hours*
Continuation of 305.

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

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

Education

Students who plan to meet teacher certificate requirements will find detailed information on pages 34 to 36.

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.
305. HISTORY OF EDUCATION *Three hours*
A survey of the growth of educational theory and practice during the ancient and medieval periods. Not offered in 1950-51.
306. HISTORY OF EDUCATION *Three hours*
A continuation of 305 covering the modern period. Not offered in 1950-51.
309. 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

301. PRINCIPLES OF EDUCATION *Three hours*
A study of the aim 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 Morrison's *The Practice of Teaching in the Secondary Schools*. The teaching technique in each of the types of subjects in the curriculum is analyzed.

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. ELEMENTARY SCHOOL MUSIC. Music 331 may be substituted. *Three hours*

225. CHILDREN'S LITERATURE (STORY TELLING) *Two or three hours*

This course is offered in order to develop a knowledge of and an interest in good literature on the elementary level. The development of skill in story telling on the part of the teacher is also emphasized.

307. SCHOOL ADMINISTRATION *Three hours*

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

310. EDUCATIONAL MEASUREMENTS *Three hours*

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

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

320. TEACHING BIBLE IN ELEMENTARY SCHOOLS *Three hours*
Both semesters.

322. TEACHING READING IN ELEMENTARY SCHOOLS *Three hours*
Both semesters.

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 330*m*. Two hours devoted to content; one to method.

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

332. REMEDIAL READING *Three hours*

340. CURRICULUM *Two hours*

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

341. DIRECTED OBSERVATION OF TEACHING AND LESSON PLANNING *Two or three hours*

About eighteen hours are spent in the schools of Grand Rapids with specific instructions for directed observation. For students planning to teach in the elementary schools. To be taken simultaneously with Educ. 343.

342. DIRECTED OBSERVATION AND LESSON PLANNING *Two or three hours*

This course is like Education 341 and is for students looking for positions in the junior and senior high schools. To be taken simultaneously with Educ. 344.

343. DIRECTED TEACHING *Five hours*

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

344. DIRECTED TEACHING *Five hours*

To be taken simultaneously with Educ. 342. For students planning to teach in junior or senior high school. Offered both semesters. See prerequisites listed earlier in this catalogue under Education.

330*m*. 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

101. MECHANICAL DRAWING *Three hours*

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

102. DESCRIPTIVE GEOMETRY *Three hours*

Exercises, instruction, and drill through the medium of 8C 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 the 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 or three hours*

Elementary theory and practice; use of instruments, reading verniers and angles; running straight lines; traverse survey; computing areas; leveling; profile; grade stakes; note keeping. Lectures, text assignments, one recitation, and one four-hour field period. Prerequisite: Mathematics 104.

301. STATICS *Three hours*
 Study of fundamental principles of mechanics and their application to the simpler problems of engineering. Forces, components, moments, cables, friction, centroids, moments of inertia. Recitations, lectures, problems. Must be preceded or accompanied by Mathematics 301 and Physics 201 or 201E.

302. DYNAMICS *Three hours*
 Motion of a particle, dynamics of moving bodies, Newton's laws, simple harmonic motion, elementary vibration problems, balancing, pendulums, impulse and momentum, work and energy. Recitations, lectures, problems. Must be preceded or accompanied by Mathematics 302 and Physics 202 or 202E.

English

All Freshmen are required to take Freshman English (103-104). Upperclassmen whose programs of concentration require more than six hours of English, or who choose courses in English as electives, may, if they are sophomores, elect any 200-course, or, if they are Juniors or Seniors, any 300-course. In making their selection of courses, such students should normally favor periods and areas neglected in their past and anticipated programs of concentration.

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

Freshman English.....	103-104	6 hours
Elizabethan Period	207	3 hours
American Literature	201	
<i>or</i>		
Seventeenth Century	208	3 hours
Eighteenth Century	210	3 hours
American Literature	202	
<i>or</i>		
Romantic Period	301	3 hours
Victorian Poetry	302	
<i>or</i>		
Victorian Prose	310	3 hours
Contemporary Poetry	304	
<i>or</i>		
The Novel	312	3 hours

Such a suggested program need not be strictly followed, however; it is susceptible to adjustment in accordance with the student's special interests and his studies in related fields.

English 306 (Advanced Composition) and English 330m (Methods of Teaching English) should not be elected as contributing to a disciplinary program historically pursued, but as professional courses to be taken over and above the main concentration.

Students planning to pursue *graduate* studies in English should develop a college major (in the subject) of at least thirty hours. Such students should also achieve a reading knowledge of Latin, French, and German.

103. FRESHMAN ENGLISH *Three hours*
 Grammar, rhetoric, and composition. Required of all freshmen, and prerequisite to all other courses in English. Textbooks, and periodic themes.

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, and reports.

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

207. LITERATURE OF THE ELIZABETHAN PERIOD *Three hours*
 A survey of the poetic literature of the English renaissance, and an intensive study of the poems and plays of Shakespeare. Textbook, collateral reading, and reports.

208. LITERATURE OF THE SEVENTEENTH CENTURY *Three hours*
 A survey of the poetry and prose of the century, and an intensive study of the works of John Milton. Textbook, collateral reading, and reports.

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

301. LITERATURE OF THE ROMANTIC PERIOD *Three hours*
 Intensive critical analysis of the work of Wordsworth, Coleridge, Byron, Keats, and Shelley, and a survey of other English poets writing in the years 1798-1830. Textbooks and critical papers.

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

303. CONTEMPORARY ENGLISH FICTION *Three hours*
 A study of English and American fiction, in its continental relations, from 1890 to the present time. Collateral reading and reports. Summer, 1950.

304. CONTEMPORARY ENGLISH POETRY *Three hours*
 A study of the lyric and dramatic poetry of England, in its continental relations, from 1890 to the present time. Textbook, collateral reading, and reports.

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

310. NINETEENTH CENTURY ENGLISH PROSE *Three hours*
An intensive study of such representative English prose of the nineteenth century, exclusive of fiction, as the works of Carlyle, Ruskin, Arnold, Huxley, Mill, Newman, Pater, Stevenson, and others. Textbook and reports.
312. THE ENGLISH NOVEL *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.
313. CHAUCER *Three hours*
A study of the General Prologue, representative Canterbury Tales, and Troilus and Criseyde. Emphasis will fall upon Chaucer's literary genius and the reflection in his work of the major cultural phenomena of his time. Collateral reading.
315. THE PRINCIPLES OF LITERARY CRITICISM *Three hours*
A course in critical theory, historically and normatively pursued. Analysis of the principal contributions to Western literary criticism. Emphasis on Plato, Aristotle, Longinus, Horace, Sidney, Dryden, Pope, Lessing, Wordsworth, Coleridge, Shelley, Poe, Arnold, and Eliot. Method: *explication de texte*. Textbook and critical papers.
- 330m. METHODS OF TEACHING ENGLISH *Three hours*
Attention is given the terms and standards of literary criticism, the merits and inadequacies of representative high school English textbooks, and acceptable methods of teaching composition and the various literary forms. The student must give evidence of having achieved on his own a mastery of the essentials of grammar.

French

101. ELEMENTARY FRENCH *Four hours*
Grammar, pronunciation, composition, dictation, oral drill, and conversation are intended to impart a certain amount of ear-training and ability to understand simple spoken French.
102. CONTINUATION OF 101 *Four hours*
Text in both courses: Micks & Longi, *Fundamental French*. This is followed by the reading of easy prose.
201. INTERMEDIATE FRENCH *Three hours*
Reading of about two hundred pages of easy nineteenth century text. Special stress on idiom. Composition based on the text read. Prerequisite: 101 and 102.
202. CONTINUATION OF 201 *Three hours*
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.
301. THE ROMANTIC MOVEMENT *Three hours*
A history of French literature of the first half of the nineteenth century. Collateral reading and reports. Prerequisite: 101 to 202.
302. NINETEENTH CENTURY—SECOND HALF *Three hours*
A history of French literature since the middle of the nineteenth century. Collateral reading and reports. Prerequisite: 101 to 202. Anthology in both courses: Schinz, *Nineteenth Century French Readings*, Vols. I and II.

303. THE CLASSIC PERIOD *Three hours*
A study of French literature and culture in the 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 *Three hours*
A continuation of 303, dealing with the later seventeenth century literature, with special attention to Moliere and Racine. A drama of Racine is read in class. A few dramas are assigned for outside reading. Anthology in both courses: Schinz and King's *Seventeenth Century Readings*. Prerequisite: 202 and 303.
- 330m. METHODS OF TEACHING MODERN FRENCH LANGUAGE *One hour*
Intended for prospective teachers of French in secondary schools. Prerequisite: six of the courses offered in this department.

Geography

104. ECONOMIC GEOGRAPHY *Three hours*
For description see Economics and Sociology.
105. GEOGRAPHY OF NORTH AMERICA *Three hours*
A survey of the elements of the natural environment of the major regions of the United States and Canada in their relationship to the cultural landscape. Intended for those specializing in education or in the social sciences.
106. GEOGRAPHY OF SOUTH AMERICA *Three hours*
A study of the geographic structure of South America in relation to human adjustment and culture. Intended for those specializing in education or in the social sciences.
107. 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.
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 Pacific area.

German

101. ELEMENTARY GERMAN *Four hours*
Grammar and composition. Text: Vos, *Essentials of German*
102. CONTINUATION OF 101 *Four hours*
Study of grammar continued. Reading of at least one hundred pages of modern prose and poetry.
201. INTERMEDIATE GERMAN *Three hours*
Reading of nineteenth century prose. Review of the more 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 idiom and otherwise, effort is made throughout the year to create *Sprachgefühl*. Outside reading with reports required to the extent of at least eight hundred pages for the year. Prerequisite: 201.

301. **THE ROMANTIC PERIOD** *Three hours*
A survey of German literature of the first half of the nineteenth century. Collateral reading and reports. Prerequisite: 202. Not offered in 1950-51.
302. **REALISM** *Three hours*
History of German literature since the middle of the nineteenth century. Collateral reading and reports. Prerequisite: 202. Not offered in 1950-51.
303. **EARLY NINETEENTH CENTURY DRAMA** *Three hours*
A comprehensive study of the lives and works of leading German dramatists of the early nineteenth century. Assigned readings. Papers on related subjects. Prerequisite: 202.
304. **LATER NINETEENTH CENTURY DRAMA** *Three hours*
A study of Hauptmann and Sudermann and their times. Assigned readings and reports. Prerequisites: 202 and 303.
305. **THE CLASSIC PERIOD** *Three hours*
A general survey of German literature in the eighteenth century as far as Lessing and with special attention to him. A drama of Lessing is read in class. Collateral reading and reports. Prerequisite: 202. Not offered in 1950-51.
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 305. Not offered in 1950-51.
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.
- 330m. **METHODS OF TEACHING MODERN FOREIGN LANGUAGES** *One hour*
Intended for prospective teachers in German in secondary schools. Prerequisite: six of the courses offered in this department.

Greek

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

101. **BEGINNERS' GREEK** *Four hours*
Text: Crosby and Schaeffer, *An Introduction to Greek*.
102. **BEGINNERS' GREEK** *Four hours*
Continuation of 101. Completion of the text and the reading of the first book of Xenophon *Anabasis*, or its equivalent.
201. **XENOPHON** *Three hours*
Selections from the *Anabasis*. Prerequisite: 101 and 102.
202. **SELECTIONS FROM PLATO** *Three hours*
Prerequisite: 201.
311. **GREEK HISTORY** *Three hours*
The political, social and cultural history of the Greek city-states up to the death of Alexander. Some attention is also given to the history of the Near and the Middle East.
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; 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: 313.
316. **GREEK THOUGHT AND THE NEW TESTAMENT** *Three hours*
No knowledge of Greek is required. Lectures, discussions, assigned readings. Open to Juniors and Seniors.
317. **PLATO'S REPUBLIC** *Two hours*
No knowledge of Greek is required. The course aims at an understanding and evaluation of Plato's views as presented especially in the Republic. Open to Sophomores, Juniors, and Seniors.

History

Those majoring in History must have had courses 101 and 102 or their equivalent in high school. In addition, 24 hours must be completed, with six (6) hours of credit in each of four (4) chosen fields. The fields of choice are: Ancient History, Medieval History, English History, Modern Europe, United States and Latin America, Eastern Europe. One of these four fields must be in American History.

Students are urged to consult with the head of the department early in their college career regarding their major program of History.

101. **GROWTH OF WESTERN CIVILIZATION** *Three hours*
This course aims to give the student a comprehensive view of the history of civilization from earliest times to 1200 A. D. Required of all students taking the General College Course and of all Pre-Seminary students.
102. **GROWTH OF WESTERN CIVILIZATION** *Three hours*
A continuation of Course 101. Particular attention is given to the great movements which have been significant in the development of western civilization to the present day.
201. **EASTERN EUROPE SINCE 1815** *Three hours*
Russia from 1815 to the near present. Lectures, readings, and reports. Prerequisites: 101 and 102. For Sophomores and Juniors.
202. **EASTERN EUROPE SINCE 1815** *Three hours*
The Balkan States, Austria, Hungary, and Czecho-Slovakia. Lectures, readings, and reports. Prerequisites: same as 201.
203. **ENGLISH HISTORY TO 1600** *Three hours*
An outline of the political and constitutional history of England. Prerequisites: 101 and 102. For Sophomores and Juniors.
204. **ENGLISH HISTORY TO 1600** *Three hours*
Continuation of 203, which is prerequisite.
205. **EUROPE SINCE 1815** *Three hours*
The general history of Europe since 1815, with emphasis on such topics as the revolutionary movement in France, the unification of Germany, the rise of socialism. Discussion and assigned reading. Presupposes a high school course in general history.
206. **EUROPE SINCE 1815** *Three hours*
A continuation of 205, which is prerequisite. Courses 205 and 206 are for Freshmen; open to Sophomores by special arrangement.
207. **AMERICAN HISTORY FOR TEACHERS** *Three hours*
This course is designed to meet the requirement in American History for prospective teachers. Open only to those students taking the two-year Teacher Training Course.

301. AMERICAN HISTORY *Three hours*
Lectures and readings. Prerequisite: a high school course in American history.
302. AMERICAN HISTORY *Three hours*
Continuation of 301, which is prerequisite. Courses 301 and 302 are open to Juniors and Seniors.
303. AMERICAN FOREIGN RELATIONS *Three hours*
The diplomatic relations of the United States since 1789 with the principal countries of Europe and with China and Japan. Prerequisite: high school course in American history.
304. AMERICAN FOREIGN RELATIONS *Three hours*
Diplomatic relations with South American countries. Origin and development of the Monroe Doctrine. Courses 303 and 304 open to Juniors and Seniors.
Under certain conditions Courses 303 and 304 in American Foreign Relations may be credited toward a major in Political Science.
305. LATIN AMERICAN HISTORY *Three hours*
An account of the history, government, and social and economic development of the Central and South American Republics.
307. MEDIEVAL HISTORY *Three hours*
The political, cultural and social developments in Europe from the last century of the Roman Empire to the dawn of the Renaissance and the beginnings of the modern era. Given in 1950-1951.
308. MEDIEVAL HISTORY *Three hours*
Continuation of 307. Prerequisite: 307. Given in 1950-1951.
309. EARLY MODERN EUROPE *Three hours*
Sixteenth Century Europe (1500-1648). Emphasizing the background and development of the Reformation, the wars of religion in France, the rise of the Netherlands, and the Holy Roman Empire and Thirty Years' War. Given in 1951-1952.
310. EARLY MODERN AND MODERN EUROPE *Three hours*
Seventeenth Century and Eighteenth Century Europe (1648-1815). The Age of Louis XIV, the French Revolution and the Napoleonic periods. Given in 1951-1952.
311. GREEK HISTORY *Three hours*
The political, social and cultural history of the Greek city-states up to the death of Alexander. Some attention is also given to the history of the Near and the Middle East.
312. ROMAN HISTORY *Three hours*
The history of Rome from the foundation of the city to A. D. 476. The emphasis falls on the development of the constitution and its effect upon, and how in turn it was affected by the expansion of Rome over the Mediterranean. Economic, social and literary history studied in its relation to the political.
325. THE RENAISSANCE IN FLANDERS AND ITALY (1350-1550) *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.

326. DUTCH HISTORY (1500-1815) *Three hours*
A short review of the history of the Netherlands up to 1500. The Precursors of the Reformation and the Reformation in the Netherlands. The Eighty 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 plutocracy and rationalism in the eighteenth century. The spirit of the French Revolution as manifested in Holland. The rebirth of Calvinism as a political and cultural power after 1815.

Latin

Students who have had two units of Latin in high school should meet their Pre-Seminary or General College ancient language requirement by taking 201 and 202. Students, whether Pre-Seminary or General College, who have completed 101 and 102 should follow these courses with either 301 and 302, or 307 and 308. Those who wish to follow a Latin major should consult with Professor Radius before registering.

101. ELEMENTARY LATIN *Four hours*
Text: Thompson, Tracy, Dugit: *Essential Latin*.
102. ELEMENTARY LATIN *Four hours*
Continuation of 101. Same text as above.
201. INTERMEDIATE LATIN *Three hours*
For students who have had two units of Latin in high school. A thorough review of the grammar will accompany the reading of selections from various Latin authors.
202. INTERMEDIATE LATIN *Three hours*
Continuation of 201.
301. CICERO'S PHILOSOPHICAL ESSAYS *Three hours*
Reading of one or more of the following: *De Amicitia, De Senectute, Tusculanae Disputationes*.
302. READINGS IN LATIN PROSE AND POETRY *Three hours*
Selections drawn from the following Roman writers: Catullus, Cicero, Horace, Livy, Lucretius, Martial, Ovid, Pliny the Younger, Propertius, Tibullus and Vergil.
307. READINGS IN THE CHURCH FATHERS *Three hours*
Selections drawn from the writings of Tertullian, Minucius, Felix, Cyprian, Lactantius, Ambrose, St. Jerome and St. Augustine.
308. READINGS IN THE CHURCH FATHERS *Three hours*
Continuation of 307.
312. ROMAN HISTORY *Three hours*
The history of Rome from the foundation of the city to A. D. 476. The emphasis falls on the development of the constitution and its effect upon, and how in turn it was affected by the expansion of Rome over the Mediterranean. Economic, social and literary history studied in its relation to the political.
321. ROMAN CULTURE *Three hours*
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. Not offered 1950-1951.

322. LATIN LITERATURE IN ENGLISH *Three hours*

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 literatures of subsequent ages. Not offered in 1950-1951.

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 328.

330m. TEACHERS' COURSE *Two hours*

This course is required of all students who expect to teach Latin, and who seek to obtain a State Teachers' Certificate. In this course study will be made of the problems and methods of teaching secondary Latin.

Mathematics

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

101. ADVANCED ALGEBRA *Three hours*

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

102. SOLID GEOMETRY *Three hours*

Prerequisite: 101 and plane geometry.

103. COLLEGE ALGEBRA *Three hours*

Prerequisite: 101.

104. PLANE TRIGONOMETRY *Three hours*

Prerequisite: 101 and 103. Students taking the Pre-Medical course may be admitted if they have had Course 101.

201. PLANE ANALYTICAL GEOMETRY *Three hours*

Prerequisite: 103 and 104.

202. CONTINUATION OF 201 *Three hours*

Plane analytical geometry completed. Introduction to solid analytical geometry.

203. SPHERICAL TRIGONOMETRY *Two hours*

Prerequisite: 102 and 104.

205. BUSINESS MATHEMATICS *Three hours*

Required for all students of Business Administration. Prerequisite: Math. 101.

206. STATISTICS *Three or four hours*

Emphasis on statistical methods. Prerequisite: 101; 103 and 104 are highly desirable.

For Business Administration Students 205, or its equivalent, is a prerequisite.

301. DIFFERENTIAL CALCULUS *Five hours*

Prerequisite: 201 and 202.

302. INTEGRAL CALCULUS *Five hours*

Integral calculus and introduction to differential equations. Prerequisite: 301.

304. DIFFERENTIAL EQUATIONS *Two or three hours*

Prerequisite: 301 and 302.

305. THEORY OF EQUATIONS *Two or three hours*

Prerequisite: 301 and 302.

309. ASTRONOMY — DESCRIPTIVE *Two hours*

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

330m. TEACHERS' COURSE *One hour*

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

Music

APPLIED MUSIC REQUIREMENTS

REQUIREMENTS FOR CONCENTRATES IN APPLIED MUSIC

I. Concentrates in Piano

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

Haydn, Sonata No. 11, G major No. 20 (Shirmer);
Mozart, Sonata C major No. 3 or F major, No. 13 (Schirmer);
Schubert, impromptu Op. 142, No. 2, etc.

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

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

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

Bach, Chromatic Fantasia and Fugue, toccatas, organ transcriptions by Busoni, Tausig, Liszt, D'Albert;
Beethoven, later Sonatas such as Op. 53, 57 and a Concerto;
Brahms, Rhapsody B minor, Sonata F minor;
Chopin, Ballades, Polonaises, Scherzi, and a Concerto;
Liszt, Rhapsodies, Paganini Etudes, a Concerto;
Schumann, Carneval, Concerto;
Compositions by standard American and foreign modern composers such as MacDowell, Grieg, Rubinstein, Moszkowski, Debussy, Ravel, Rachmaninoff, and others.

II. Concentrates in Voice.

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

III. Concentrates in Organ.

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

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

- Bach (Schirmer Edition) Vol. I, No. 12, Prelude.
Volume II, No. 17, Fugue in G minor.
- Selections from the *Liturgical Year Chorales*.
- Mendelssohn, Sonatas No. II, IV, V.
- Guilmant, Sonata No. IV.
- Compositions for the modern organ by standard American and foreign composers.

At the end of the fourth year, the student should demonstrate the ability to transpose, improvise, modulate and sight read. He should have a large repertoire of organ literature of all schools, classic and modern, of the degree of difficulty comparable to the following:

- Bach, Vol. IV (Schirmer), No. 4, Fantasia and Fugue, G minor;
Vol. IV, No. 7, Prelude and Fugue, B minor;
Vol. II, No. 12, Prelude and Fugue, D major;
Book V, Sonatas;
- Franck, Chorales, Piece Heroique;
- Widor, Symphony, No. V;
- Guilmant, Sonata D minor, No. 1;
- Vierne, Symphony No. 1.
- Compositions for modern organ of same grade of difficulty by standard American and foreign composers.

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

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

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

THEORY

108. THEORY AND HARMONY *Three hours*
- The elements of music: tonality, notation, rhythm. A coordinated study of harmony through the ear, eye, and keyboard. Writing and harmonization of hymn tunes and chorales, sight-singing, dictation using primary and dominant seventh chords.
- Music 103A is specifically designed for general college students who wish to gain a thorough foundation in the elements of music. There will be less emphasis upon the technique of dictation, etc.,

and greater emphasis upon a broad survey of the problems of musical structure.

NOTE: Music 103 B is especially designed for music majors, and they will be expected to attend one hour of laboratory work in ear-training, dictation, and keyboard harmony each week. (See laboratory schedule.)

104. THEORY AND HARMONY *Three hours*
Continuation of 103.
203. THEORY AND HARMONY, ADVANCED *Three hours*
Continuation of 103-104. Use of all diatonic triads and seventh chords, altered chords, color chords. Problems of composition involving smaller forms. Continuation of sight-singing and dictation. One hour laboratory period per week required.
204. THEORY AND HARMONY, ADVANCED *Three hours*
Continuation of 203.
303. COUNTERPOINT, CANON AND FUGUE *Three hours*
The principles of contrapuntal composition, including a study of species counterpoint and a detailed analysis of Palestrinian counterpoint. Not offered in 1950-1951.
304. COUNTERPOINT, CANON AND FUGUE *Three hours*
Continuation of 303. Not offered in 1950-1951.
315. ARRANGING AND CONDUCTING *Three hours*
The problems involved in writing for orchestra, band, and choir. A survey of the technical limitations of each instrument and of the human voice. Arrangements written by class members will be performed by student organizations whenever practical. One class period per week will be devoted to conducting, using class ensemble and recordings. Prerequisite: Music 103-104.
- NOTE: Students wishing to study conducting only may register for Music 315A after receiving permission of the instructor. One hour per week, one hour credit.
316. ARRANGING AND CONDUCTING *Three hours*
Continuation of 315.

HISTORY AND LITERATURE

211. INTRODUCTION TO MUSIC LITERATURE (MUSIC APPRECIATION) *Three hours*
- General course designed to develop intelligent discrimination in the listener. Structural principles and aesthetic 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. MUSIC LITERATURE *Three hours*
Continuation of 211.
219. CHURCH MUSIC *Two hours*
- The history and practice of worship music from the Hebrews and early Christians to the present. The development of Church chant, the Lutheran chorale and the Genevan Dutch psalm-tunes.
- Hymnody in Germany, England and America. The principles of sound worship music and a study of the literature for organ, choir and congregation. Opportunity to conduct hymns and anthems before the class.
220. CHURCH MUSIC *Two hours*
Continuation of 219.

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

306. HISTORY OF MUSIC *Three hours*
Continuation of 305.

307. FORM *Two hours*
A study of the development of musical forms, beginning with the plain-song, masses, motets, madrigals, and continuing through early orchestral and instrumental compositions. The relationship of musical form to problems of tonality, rhythm, unity and variety.

308. FORM *Two hours*
Continuation of 307.

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

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

MUSIC EDUCATION

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

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

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

333. INSTRUMENTAL METHODS I—Strings *Three hours*
Problems in the organization of a school instrumental program, beginning with the establishment of elementary school rhythm bands; principles of class instruction in violin, clarinet, and trumpet; evaluation of methods of class instruction; orchestra and band organization; repertoire.

334. INSTRUMENTAL METHODS II—Woodwinds *Three hours*
Same description as 333.

APPLIED MUSIC (Individual Lessons)

A maximum of 8 semester hours of credit in Applied Music will be allowed towards the Bachelor's Degree, except for Music Majors concentrating in Applied Music, in which case the maximum is 16 semester hours.

117-118. FIRST YEAR VOICE *One hour*
Classification of the voice, vocalizations for tone production. Simple Italian and old English classics to assist in tone production through articulation and diction. Easy oratorio arias. Fee, \$30 per semester.

217-218. SECOND YEAR VOICE *One hour*
Continuation of technical studies for development of the necessary qualities of the individual voice. Additional Italian and English classics. German or French songs introduced. Additional recitatives and arias from oratorios. Fee, \$30 per semester.

317-318. THIRD YEAR VOICE *One hour*
Study of songs with foreign text continued. Additional material from oratorios and selected material from the operatic repertoire. Technical studies likewise continued. Fee, \$30 per semester.

327-328. FOURTH YEAR VOICE *One hour*
Preparation of program for graduation recital, selected from repertoire acquired in previous grades; public recital; appearance with orchestra upon recommendation of the music faculty. Fee, \$30 per semester.

109-110. FIRST YEAR ORGAN *One hour*
Individual lessons in organ. Prerequisite: three years of piano. Fee \$30 per semester plus \$10 per semester for the use of the organ.

209-210. SECOND YEAR ORGAN *One hour*
Individual lessons in organ. Fee \$30 per semester plus \$10 per semester for the use of the organ.

309-310. THIRD YEAR ORGAN *One hour*
Individual lessons in organ. Fee \$30 per semester plus \$10 per semester for the use of the organ.

PIANO

141-2, 241-2, 341-2, 351-2 (4 years). Per semester one hour. Individual lessons in piano. Fee \$30 per semester.

VIOLIN

161-2, 261-2, 361-2, 371-2 (4 years). Per semester one hour. Individual lessons in violin. Fee \$30 per semester.

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

APPLIED MUSIC (Groups)

101-102. ORATORIO CHORUS *No Credit*
The study of representative works of the great masters of choral writing with a view to public performance. Händel's *Messiah* is rendered annually at Christmas time. Another oratorio is presented in the spring.
Open to all who meet the requirements of voice and musicianship.

207-8. 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.

213-214. BAND

One hour

Representative works in the field of symphonic band literature are studied and prepared for concert performance. The repertoire is changed annually so that over a period of four years the standard works for symphonic band will have been performed. Open to all Calvin College students after consultation with the director. A limited number of instruments are available to students on loan from the Band library.

215-216. ORCHESTRA

One hour

Representative works in the field of chamber orchestra and symphony orchestra are studied and prepared for concert performance. The repertoire is changed annually so that over a period of four years the standard works will have been studied. Open to all Calvin College students after consultation with the director. A limited number of instruments are available to students on loan from the Orchestra library.

Philosophy

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

ELEMENTARY COURSES

200. LOGIC *Three hours*
A course in traditional and elementary symbolic logic. Offered each semester.
201. PERSPECTIVES *Three hours*
An introduction to philosophy and its problems which emphasize the basic differences in philosophical orientation and perspective between naturalism, classic pagan idealism, modernity, and Christianity. Together with 202, intended primarily for students wishing to satisfy the six-hour Philosophy requirement for the A.B. Offered first semester only.
202. PERSPECTIVES *Three hours*
Continuation of 201, but may be taken independently by qualified students. Offered second semester only.
203. INTRODUCTION *Three hours*
A one-semester introduction to philosophy; study of the aims and methods of critical reflection and a discussion of representative philosophical problems. Offered each semester.

INTERMEDIATE COURSES

Intermediate courses normally presuppose three hours of Philosophy, but are open to all qualified juniors and seniors.

300. HISTORY OF PHILOSOPHY: ANCIENT *Three hours*
Historical and critical study of the philosophical question raised by the Greek and classic pagan mind, and of the implicit movement in the proffered solutions. Offered each semester.
301. HISTORY OF PHILOSOPHY: MEDIEVAL *Three hours*
Historical and critical study of the Christian philosophical synthesis from the beginnings of Christianity to the Renaissance. Special emphasis is given to Augustine and Thomas Aquinas. Offered each semester.
302. HISTORY OF PHILOSOPHY: MODERN *Three hours*
Historical and critical study of the philosophical perspective of modernity. Renaissance through Kant. Offered each semester.

303. PHILOSOPHY OF SCIENCE

Three hours

A study of the first principles underlying Greek, modern classical, and contemporary physical science. Illustrations and analogies will be confined to the history of relativity and thermodynamics.

305. ETHICS

Three hours

The study is systematic rather than historical. In the discussion of moral problems and their solution, emphasis is on the contrast between the "moral commonwealths" of ethical naturalism in its various forms, of classic pagan and modern idealism, and of Christianity. Offered first semester only.

ADVANCED COURSES

Advanced courses normally presuppose six hours of Philosophy, but are open to all qualified seniors.

350. ARISTOTLE *Three hours*
Some text of Aristotle is selected for study. Offered second semester.
351. KANT *Three hours*
Study of the *Critique of Pure Reason*. First semester.
352. THE PHILOSOPHY OF THOMAS AQUINAS *Three hours*
A course in Thomistic thought based upon a critical analysis of the Summae. Prerequisite: 301. Open only to Seniors. Not offered in 1950-1951.
362. CONTEMPORARY PHILOSOPHY *Three hours*
History of the major philosophical movements in the last 100 years. Second semester.
364. METAPHYSICS *Three hours*
Some of the major problems of metaphysics, with special emphasis on recent Dutch philosophy. Second semester.

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: Biology instead of Organic Science 105 and 210.

103. PERSONAL HYGIENE (Biol. 103) *Three hours*
The proper care of our bodies and approved practices for the prevention of disease are studied.
104. HISTORY AND PRINCIPLES 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.
203. ORGANIZATION AND ADMINISTRATION OF PHYSICAL EDUCATION *Two hours*
A study of the representative programs of Physical Education and evaluation of these programs. Not offered in 1950-51.
204. COMMUNITY RECREATION *Two hours*
A study of the development, administration, and use of leisure time within the community and of the community agencies organized to meet present-day recreational needs. Not offered in 1950-51.
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. Not offered in 1950-51.

206. COACHING OF SPRING SPORTS *Two hours*
 A study of the fundamentals of Track, Tennis, and Golf. Methods of teaching and coaching of these sports are also discussed.

SPECIAL PHYSICAL EDUCATION COURSES FOR GIRLS

221. SPRING SPORTS FOR GIRLS *Three hours*
 A study of the background, fundamentals, and coaching methods of Tennis, Golf, Badminton, Archery, and Softball.
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.

Physics

101. ELEMENTARY PHYSICS *Three hours*
 Mechanic, sound, and heat. Adapted to pre-nursing, medical technology students and normal students preparing to teach general science. Accompanied with demonstrations and several laboratory exercises.
- X 102. ELEMENTARY PHYSICS *Three hours*
 Magnetism, electricity, and light. Adapted to pre-nursing, medical technology students and normal students preparing to teach general science. Accompanied with demonstrations and several laboratory exercises.
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.
- X 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, \$3.00.
- A 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, \$3.00.
203. 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.
- X 204. PHYSICS PROBLEM COURSE *One hour*
 A continuation of 203. 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-ray, 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 prerequisite. Offered odd years.

Political Science

History 303 and History 304 (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 *Three hours*
 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 *Three hours*
 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 *Three hours*
 Continuation of 303, which is prerequisite.
 NOTE: *Foreign Relations*. See History 303 and 304.

Psychology

201. INTRODUCTORY PSYCHOLOGY *Three hours*
 A general course in psychology for beginners. This course is given during both semesters.
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.
209. MENTAL HYGIENE *Two hours*
 A study of personal attitudes toward reality and the solution of maladjustment by means of integration.

210. SOCIAL PSYCHOLOGY *Three hours*
A study of individual human behavior in reaction to social environment, of the consequences of such social interaction for human personality, and of the behavior and consciousness of groups.
301. HISTORY OF PSYCHOLOGY *Three hours*
An historical introduction to the problems and theories of modern psychology with special reference to the origin of divergences in the interpretation of human nature. Readings and discussions.
302. THEORIES OF LEARNING *Three hours*
A presentation of the important conclusions of modern investigations of learning and forgetting and an evaluation of the various contributions to their explanation. The place of learning theory in general psychology is stressed.
304. CONTEMPORARY SCHOOLS OF PSYCHOLOGY *Three hours*
A critical examination of the principal theories, systems and schools of modern psychology and their philosophical implications. Readings, discussions and individual investigations will constitute the course.
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 psychoses. 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.
206. RURAL SOCIOLOGY *Three hours*
A study of contemporary farm and village social organization and of problems arising in the rural framework. The suburban, or "fringe", development is considered as well as urban-rural relationships. 203 is a prerequisite except for those who are working towards a two-year State Limited Certificate.
303. LABOR PROBLEMS *Three hours*
This course is described under Economics.

304. THE FAMILY *Three hours*
This course will be adapted to suit the needs of the students. It aims, however, at an intensive study of the history of the family as a social and educational institution, and at a thorough discussion of the divorce problem and other problems connected with modern family life. Prerequisites: 203 and 204, or their equivalents.
305. THE FIELDS 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 SOCIOLOGY *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.
320. PROSEMINAR IN SOCIOLOGICAL RESEARCH *Two hours*
How to set up a problem for research, techniques of collecting data, sources of data, uses of tables and charts, and the preparation of research reports. Prerequisite: At least 12 hours of Sociology. Open to seniors only and by permission. Taught both semesters.
- 330m. METHODS OF TEACHING SOCIAL PROBLEMS *One or two hours*
A study of the methods of teaching sociology, social problems and similar courses on the secondary level. Prerequisite: Five of the courses offered in this department. Offered first or second semesters to meet the convenience of the students interested.

STATISTICS

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

Speech

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

PRACTICE-THEORY COURSES

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

104. FUNDAMENTALS OF SPEECH — II *Two hours*
Continuation of 103, with emphasis on longer speeches, rhetoric, and special applications such as discussion, debate, parliamentary practice, etc. Prerequisite: Course 103.
204. ANCIENT ORATORS AND THEORIES OF SPEECH *Two hours*
Analytical study of ancient orators and rhetorical theory, pre-Demosthenes through Quintillian. Not open to Freshmen.
205. ADVANCED SPEECH COMPOSITION *Two hours*
Study of the psychological and rhetorical techniques involved in speech composition. Speeches and oration. Intended particularly for juniors in the pre-Seminary course.
207. INTRODUCTION TO SPEECH BASED ON THE GREAT BOOKS *One hour*
Prerequisite to Course 208. A study of Adler's *How to Read a Book* intended to prepare the student for careful and critical reading of the Great Books chosen as basic for work in 208. Open to Freshmen by permission.
208. SPEECH BASED ON THE GREAT BOOKS *Two hours*
Each student will choose one of the books from the Adler list and use it as a basis for his speeches during the semester. Emphasis on speech. Prerequisite: Course 207.
301. ADVANCED SPEECH *Two hours*
A practice course, designed for pre-Seminary students. Open to others only by permission.
303. INTERPRETATIVE READING *Two hours*
The principles and techniques of interpretation and expression. Oral interpretation of representative selections. Practice in individual and choral reading.
304. ADVANCED INTERPRETATION *Two hours*
Continuation of 303. Application of its principles to a broader range of material, including drama, recitals, and radio reading. Especially designed for prospective teachers of interpretation and dramatics.
309. SPEECH FOR THE CLASSROOM TEACHER *Three hours*
Designed to: (1) improve the prospective teacher's vocal habits; (2) train in the detection, appreciation, and handling of speech defects encountered in the classroom; (3) aid the prospective coach of forensic programs. Open only to juniors and seniors in Education, and others by permission.
311. ORAL DISCUSSION AND DEBATE *Two hours*
Theory and practice of discussion and debate in their various forms.

FORENSICS

209. INTERCOLLEGIATE PEACE ORATORY (Formerly 305) *One hour*
211. INTERCOLLEGIATE ORATORY (Formerly 307) *One hour*
310. INTERCOLLEGIATE INTERPRETATIVE READING *One hour*
312. INTERCOLLEGIATE DEBATING *One hour*

SUMMARY OF ATTENDANCE 1949-1950

Seniors	309
Juniors	274
Sophomores	345
Freshmen	414
Unclassified	23
Summer School	350
	<hr/>
	1715