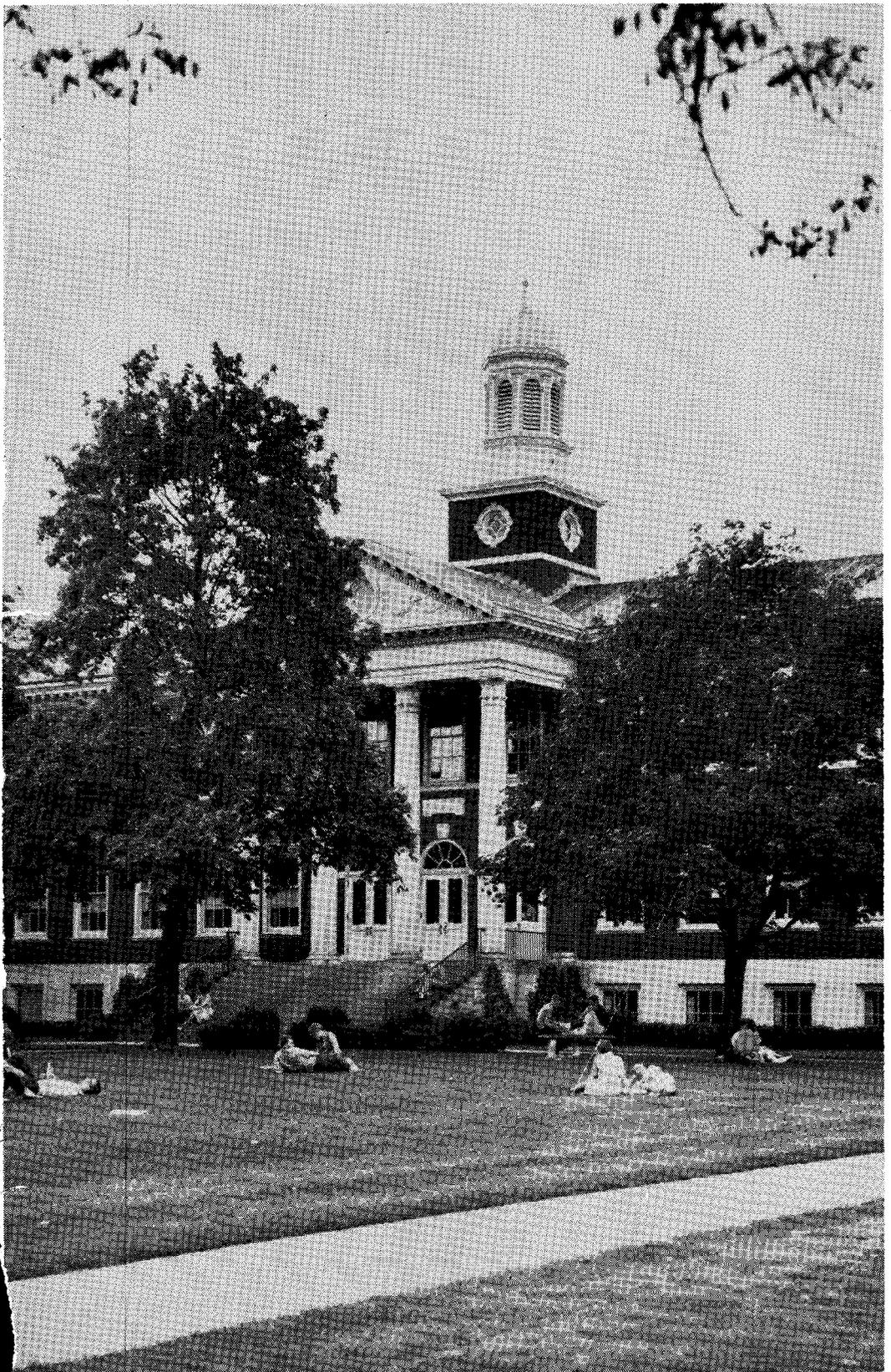


The Pond — Knollcrest Campus



Administration Building — Franklin Campus

Calvin College

An Institution of the Christian Reformed Church

BULLETIN

Catalog Issue 1963-1964

GRAND RAPIDS 6, MICHIGAN

The College welcomes visitors to both the Franklin Street and Knollcrest campuses throughout the year. The administrative offices are open from 8:00 a.m. to 5:00 p.m. Monday through Friday and from 9:00 a.m. to 12 noon on Saturday. During the academic year classes are in session Saturday morning.

It is advisable that appointments for interviews with administrative officers be made in advance.

The College telephone number is Grand Rapids CH 3-0193, Area Code 616. The College mailing address is 1331 Franklin Street, S.E., Grand Rapids 6, Michigan. The Knollcrest campus is located at the East Belt Line and Burton Street, 1801 East Belt Line, 3215 Burton Street, S.E.

CORRESPONDENCE

All correspondence should be sent to Calvin College, Grand Rapids 6, Michigan. Specific inquiries and requests should be directed as follows:

Registrar and Director of Admissions

- Applications for admission
- Catalogs
- Information concerning admission and graduation
- Information for foreign students
- Transcripts of record

The Dean of Men

- Housing for men students
- Financial aids (loans, campus employment)
- Off-campus employment
- Graduate placement

The Dean of Women

- Housing for women students
- Domestic employment for women students

Chairman of the Scholarship Committee

- Applications for scholarships

College Chaplain

- Religious life of the college
- Chapel arrangements

Development Secretary

- Gifts and bequests

Teacher Placement Bureau

- Teaching positions after graduation

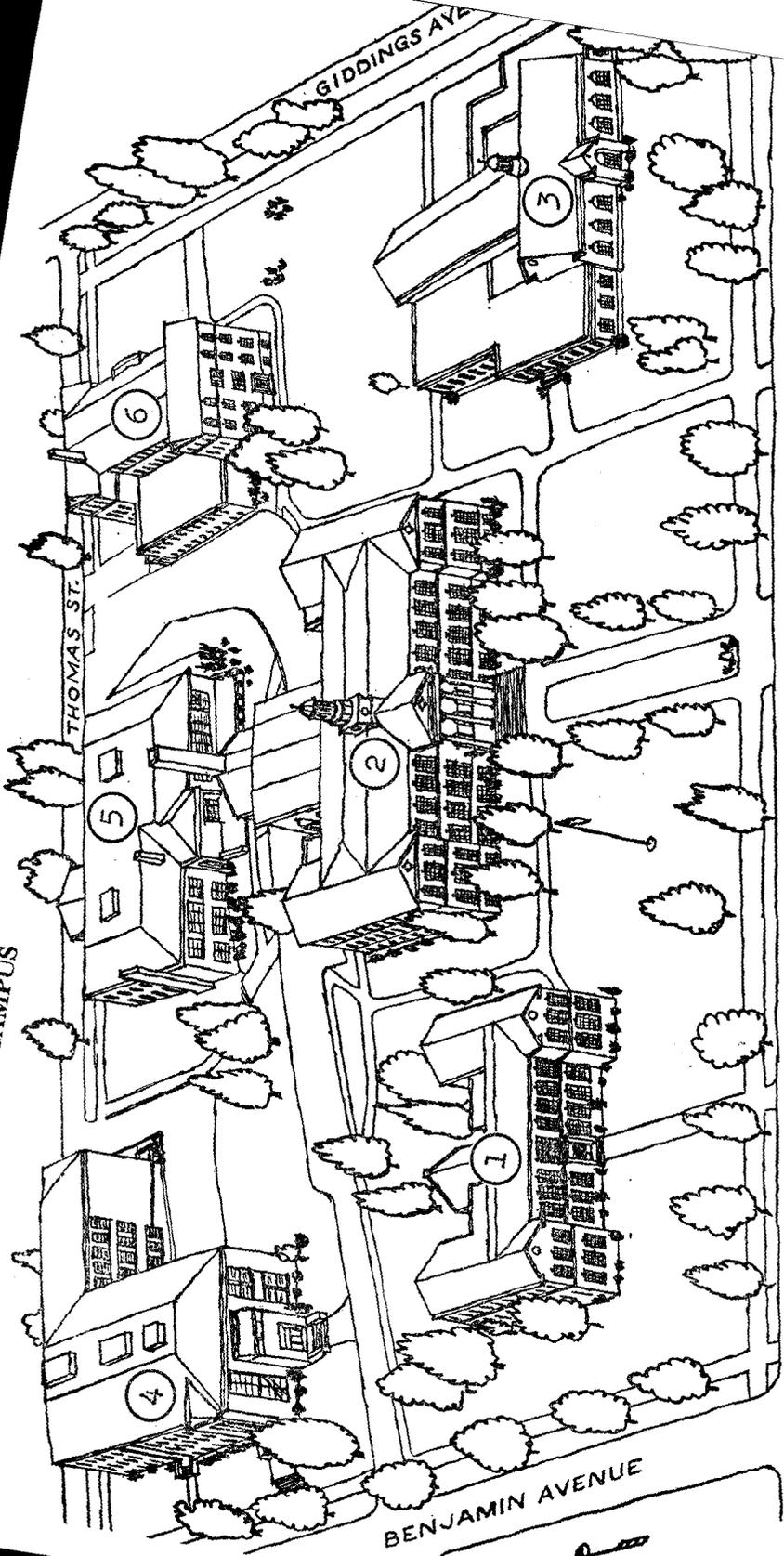
The Secretary of the Alumni Association

- Alumni matters

Business Office

- Payment of bills; business matters

THE CALVIN FRANKLIN STREET CAMPUS



- 3. Library
- 4. Science Building
- 5. Comm...
- 1. Hekman Classroom Building
- 2. Administration Building

THE CALVIN KNOLLCREST CAMPUS

- 1. Seminary
- 2. Manor House—
Calvin
Hospitality
Center

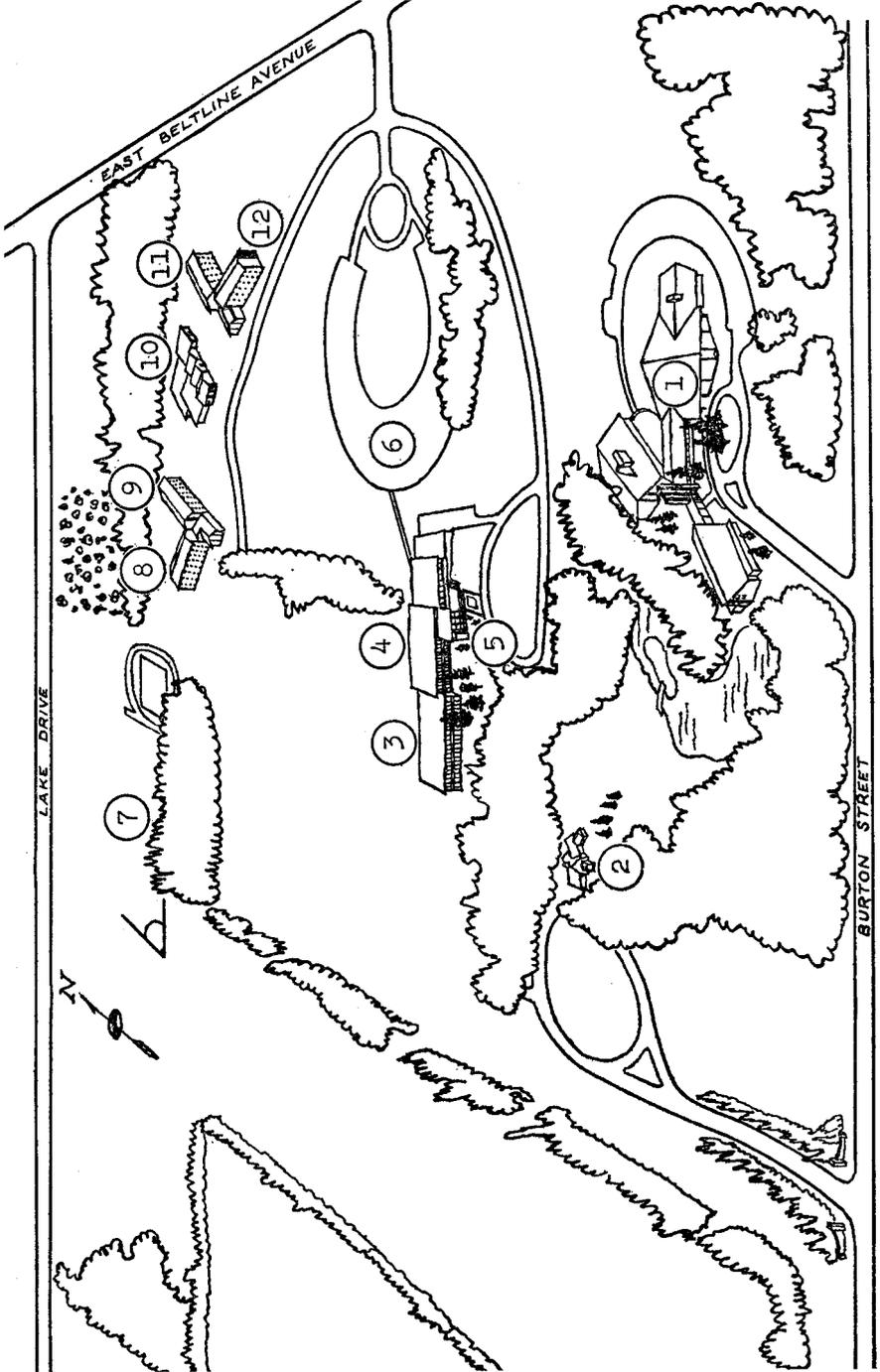
Library-Classroom Building:

- 3. Hiemenga Hall
- 4. Library
- 5. Heritage Hall
* * *

- 6. Parking Area
- 7. Athletic Area

Residence Area:

- 8. Noordewier Hall
- 9. Vander Werp
Hall
- 10. Knollcrest
Dining Hall
- 11. Veenstra Hall
- 12. Beets Hall



● CALENDAR FOR 1963 ●																											
JANUARY				APRIL				JULY				OCTOBER															
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● CALENDAR FOR 1964 ●																												
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● CALENDAR FOR 1965 ●																													
JANUARY				APRIL				JULY				OCTOBER																	
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28	29	30	31											26	27	28	29	30			26	27	28	29	30	31			

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- P. Cooper, D.D.S.....2429 N. 5th St., Sheboygan, Wis.
- D. De Vries, M.D.....2500 Cascade Rd., S.E., Grand Rapids, Mich.
- G. Tinholt.....316 Lake Shore Ave., Holland, Mich.
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Peter Vande Guchte, M.B.A.....Assistant Registrar

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Sydney Youngsma.....Development Secretary
Lester Ippel.....Assistant Business Manager

HEALTH SERVICE

Staff available at the Health Center:

Harvey Bratt, M.D.
833 Lake Drive, S.E.
GL 1-0766

Tuesday and Thursday

Laurence H. Feenstra, M.D.
833 Lake Drive, S.E.
GL 9-0213

Monday, Wednesday, Friday

Leonard Vander Linde, Ph.D.
1328 Madison Avenue, S.E.
CH 1-2677

By appointment

Miss Ann Minnema, R.N.

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Academic Office

Mary Bloemendaal.....Receptionist and Switchboard Operator
David J. Lanenga.....Electronic Data Processing
Caroline Prins.....Secretary to the Registrar
Paula Reitsma.....Records Clerk
Karen Rhoda.....Admissions Clerk
Alice Stonehouse.....Academic Office Clerk
Adeline Veen.....Secretary to the Dean of the College

Carol Veen.....Secretary to the President
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Josephine Waalkes.....Secretary to the College Chaplain

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 John Kaashoek.....Housing Officer
 Margaret Swaagman.....Parking Clerk

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Bookstore

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 Janna Poel.....Manager

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Jo Haan.....Secretary to the Business Manager and the Development Secretary
 Christine Ham.....Payroll Clerk
 George Kamp.....Statistician
 Elmer Kroeze.....Manager of the Supply Office
 Janet Kuperus.....Clerk, Knollcrest Bookstore-Business Office
 Joe Orlebeke.....Development Representative
 Dorothy Stuursma.....Building Fund Bookkeeper
 Edward Timmer.....Bookkeeper
 Cora Van Huesen.....Revenue and Student Accounts Clerk
 Florence Wiebenga.....Building Fund Clerk

Alumni Office

Wilma Westra.....Executive Secretary

Library

Dawn Bos.....Assistant
 Louise Clark.....Circulation Assistant
 Marjorie Jansen.....Assistant
 Edith Kamper.....Assistant
 Marguerite Kamper.....Secretary to the Director

HOUSING

Cora Vogel.....Resident Director, Beets-Veenstra Halls

MAINTENANCE

Peter De Loof.....Chief Engineer

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 154 Holmdene Avenue, N.E. Telephone GL 8-9409

*On leave of absence during 1963-'64.

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- JOHN VAN BRUGGEN, PH.D.
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*On leave of absence during second semester, 1963-'64.

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 101 Fuller Avenue, S.E. Telephone GL 4-4406
- JAMES J. DE JONGE, M.S., M.MUS.
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 1300 Calvin Avenue, S.E. Telephone CH 3-7809
- JOHN WEIDENAAR, TH.M.
Associate Professor of Bible
 2949 Oakwood Drive, S.E. Telephone 949-1867
- JOHN HAMERSMA, S.M.D.
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 101 Worcester Drive, N.E. Telephone 454-2950
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- HERMAN BROENE, PH.D.
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- THEODORE MINNEMA, Th.D.
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1342 Sherman Street, S.E.
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2800 Thornapple River Drive, S.E. Telephone 949-1542
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938 Maxwell Avenue, S.E. Telephone 452-9562
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Assistant Professor of Economics and Business Administration
1452 Cornell Drive, S.E. Telephone CH 5-1223
- HAROLD GEERDES, A.M.
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1244 Bates Street, S.E. Telephone CH 3-0621
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Assistant Professor of Engineering
1429 Louise Avenue, S.E. Telephone CH 3-2841
- **DONALD E. PRUIS, M.B.A. (C.P.A.)
Assistant Professor of Economics and Business Administration

*On leave of absence during first semester, 1963-'64.

**On leave of absence during 1963-'64.

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Assistant Professor of Education
 1909 Kalamazoo Avenue, S.E. Telephone CH 5-4304
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College Chaplain
 922 Orchard Avenue, S.E. Telephone 241-1929
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- LARRY R. NYHOFF, M.S.
Instructor in Mathematics
- THOMAS J. OZINGA, M.A.
Instructor in Speech
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- MILDRED ZYLSTRA, A.B., A.M.L.S.
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- JAMES ZOETEWY, A.M.
Assistant in History
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- MARCHIENE VROON RIENSTRA, A.B.
Student Assistant in English and Speech
662 Watkins Street, S.E.
- HELEN J. STEENWYK, A.B.
Student Assistant in English
613 Fuller Avenue, S.E. Telephone 243-7293

Committees of the Faculty

1. ATHLETICS — Tuls, *Chairman and Faculty Representative on the M.I.A.A. Board*; J. De Vries, Karsten, Klooster, Vander Lugt, Van Vugt (Steen and Tuuk, advisory members).
2. COMPREHENSIVE EXAMINATIONS — J. Vanden Berg, *Chairman*; Boersma, Brouwer, De Beer, Griffioen, P. Oppewall, H. Rienstra, Ten Broek, Wolterstorff.
3. COORDINATING COMMITTEE ON TEACHER EDUCATION — J. Vanden Berg, *Chairman*; Jaarsma, Kuiper, Prins, Slingerland, Snapper, ZWIER.
4. COUNSELING AND GUIDANCE — Berghuis, *Chairman*; W. Bratt, Faber, Holkeboer, Kass, P. Oppewall, Rottman, Nyhoff.
5. CURRICULUM STUDY COMMITTEE — (Chairman to be elected); Fridsma, Harper, Miller, Van Harn, Wolterstorff, and Dean and President or their representatives.
6. DISCIPLINE — H. Rienstra, *Chairman*; Bengelink, Brouwer, Gebben, Harris, Janssen, Kreuzer, Spykman, Ten Broek.
7. EDUCATIONAL POLICY — Ryskamp, *Chairman*; Daling, De Beer, Sinke, Strikwerda, Tiemersma, Wolthuis.
8. FACULTY SOCIAL AND SPECIAL ACADEMIC ACTIVITIES — Berghuis, *Chairman*; Ed. Boevé, Geerdes, Ozinga, Radius, Slingerland, Vander Ark, Westmaas.
9. LIBRARY — Van Der Weele, *Chairman*; Hamersma, C. Plantinga, Orlebeke, Wevers.
10. PRE-SEMINARY RECOMMENDATIONS — Bos, *Chairman*; Minnema, D. Oppewal, Primus, Ryskamp, Spykman.
11. SCHOLARSHIP — Ryskamp, *Chairman*; De Koster, Harper, Ippel, D. Jellema, Ten Harmsel, Westra.
12. STUDENT PUBLICATIONS — J. Bratt, *Chairman*; De Bie (*Prism*), Miller (*Chimes*), Wiersma (*Loci*).
13. STUDENT RELIGIOUS AND SOCIAL ACTIVITIES — Lucasse, *Chairman*; W. De Boer, De Jonge, Hendricks, Pekelder, Smedes, Steen, Van Opynen.

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 Art, Physical Education, and Psychology — DR. BRATT, *Chairman*.
 - a. Department of Bible — DR. BRATT, *Chairman*.
 - b. Department of Philosophy — DR. PRINS, *Chairman*.
 - c. Department of Education and Art — DR. JAARSMAN, *Chairman*.
 - d. Department of Physical Education — DR. STEEN, *Chairman*.
 - e. Department of Psychology — DR. DALING, *Chairman*.

2. Division of Language, Literature, and Arts — DR. RADIUS, *Chairman*.
 - a. Department of Classical Languages — DR. RADIUS, *Chairman*.
 - b. Department of English — DR. VAN DER WEELE, *Acting Chairman*.
 - c. Department of Modern Languages — DR. FRIDSMA, *Chairman*.
 - d. Department of Music — PROF. SWETS, *Chairman*.
 - e. Department of Speech — ASST. PROF. BERGHUIS, *Acting Chairman*.

3. Division of Natural Science and Mathematics — DR. DIRKSE, *Chairman*.
 - a. Department of Biology — DR. TEN BROEK, *Acting Chairman*.
 - b. Department of Chemistry — DR. DIRKSE, *Chairman*.
 - c. Department of Engineering — PROF. WASSINK, *Chairman*.
 - d. Department of Mathematics — ASSOC. PROF. TULS, *Acting Chairman*.
 - e. Department of Physics — DR. FABER, *Acting Chairman*.

4. Division of Social Science — DR. IPPEL, *Chairman*.
 - a. Department of Economics and Sociology — DR. VANDEN BERG, *Chairman*.
 - b. Department of History and Political Science — DR. IPPEL, *Chairman*.

The College

History

The year 1876 is commonly accepted as the birth date of Calvin Seminary and Calvin College. It was in that year that the Synod of the Christian Reformed Church discontinued the tutorial system of instructing young men who felt called to the ministry of the gospel and appointed a full-time "Docent" or instructor. This Synod also adopted a six-year curriculum, the first four of which constituted the Literary Department and the last two the Theological Department. Humble indeed was the beginning, but an institution had been established, the Theological School of the Christian Reformed Church.

The lone instructor taught all subjects, both literary and theological, for several years before two additional members were added to the teaching staff. In 1894, Synod, in compliance with requests from its constituents, made two momentous decisions, momentous in those early years; first, it granted permission to admit to the Literary Department other than pre-theological students; secondly, it enlarged the Faculty to five members, assigning the new appointees exclusively to the Literary Department. This Literary Department thus rapidly developed into an institution of the type of the preparatory schools or academies that had sprung up throughout the New England states in the early decades of the 19th century.

Although the doors had now been opened for the admission of other than theological students, for reasons obvious today, none sought admission to the preparatory school. The curriculum of the Literary Department was heavily weighted with courses in languages, such as Dutch, German, Latin, Greek, and even Hebrew. Such a program did not appeal to the non-theological student. Consequently in 1900, the literary or preparatory course was liberalized and broadened, and students interested in teaching or preparing themselves for pre-professional courses in the universities soon began to fill the classrooms and lecture halls.

Although the early requirement for admission to the Theological Department was four years of preparatory training, it was realized that the future ministers of the church should have a broader intellectual and cultural background, and so a fifth and, by 1906, a sixth year had been added. In 1906, the Literary Department, now consisting of four years of preparatory and two years of college work, became known officially as the John Calvin Junior College. Four years later, in 1910, a seventh year was added and, by 1920, the Junior College had become a full-grown, four-year liberal arts college and had assumed the name, Calvin College. Its first president was appointed in 1919, and the Bachelor of Arts degree was first awarded in June, 1921. The college curriculum was broadened to meet the needs of the increasing number of young men and women who sought permission to enroll as students. The Faculty has gradually increased. In the year 1962-'63 the Faculty consisted of 118 full-time and 25 part-time members.

What had been the preparatory department was discontinued in 1921 when the last Freshman class was admitted. Those registered previous to this date were permitted to complete the four-year program, and thus, by 1925, only students of college level remained on campus.

The school which had started with seven students in 1894 grew slowly during the first three decades, but by 1915 had a student total of 300, including 239 in the Preparatory Department and 61 in the College. The following figures indicate the growth.

<i>Year</i>	<i>Preparatory School</i>	<i>Junior College</i>	<i>Four-Year College</i>
1910	161	33	—
1915	239	61	—
1920	131	—	122
1930	—	—	358
1940	—	—	499
1950	—	—	1270
1955	—	—	1541
1957	—	—	1751
1958	—	—	1791
1959	—	—	1908
1960	—	—	2015
1961	—	—	2232
1962	—	—	2412
1963	—	—	2537

Between 1920 and 1940 the student body had increased fourfold. Then came the tidal wave of enrollments, so that today over 2,400 young men and women are taking advantage of the educational programs which Calvin offers.

In 1961 construction began on the first college building located on the Knollcrest Campus. The freshman class which entered Calvin College in September 1962 was the first to use the new Library-Classroom Building and to occupy the new Knollcrest residence halls.

Aim and Purpose

Calvin College is a church-related college existing under the auspices of the Christian Reformed Church, a Protestant denomination which has adopted as its standards the Belgic Confession, the Heidelberg Catechism, and the Canons of Dordt. The members of the faculty endorse and affirm the following statement which they acknowledge without reservations as a statement of their task and goal as Christian teachers:

“According to the constitution all instruction given must be in harmony with Reformed faith. 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.”

Members of the Faculty acknowledge and in all their teaching are guided by certain basic Christian principles, among which are the following:

- a. "That all instruction at Calvin College must be under the absolute Lordship of the Christ."
- b. "That the Bible, the infallible Word of God, is our rule and guide in faith and life, doctrine, and conduct."
- c. "That all thinking is determined by presuppositions and that all teaching at Calvin must be determined by the presuppositions of the Christian Faith as set forth in our Reformed standards."

The College admits to its student body young men and women who are affiliated with orthodox Protestant Christian churches. It seeks to develop in its students a sense of genuine personal piety, of personal integrity, and of social responsibility. It strives to emphasize that service to God and fellow man is possible and necessary in all professions and activities. It aims to maintain high standards of scholarship and ethical conduct, both in the faculty and student body, in the spirit of the ideals of its founders.

Control and Government

Calvin College is controlled by the Synod of the Christian Reformed Church through a Board of Trustees, consisting of both ministers and laymen, elected by the Synod. This Board meets in February and May of each year. An Executive Committee which meets monthly functions for the Board throughout the school year.

Accreditation

Calvin College is fully accredited by the North Central Association of Colleges and Secondary Schools. It is also accredited by the American Chemical Society and by the National Council for Accreditation of Teacher Education. It maintains membership in the American Council on Education, the Association of American Colleges, American Association of Colleges for Teacher Education, College Entrance Examination Board, National Education Association, and the American Mathematical Society. Calvin College graduates are admitted to the leading graduate and professional schools.

The Summer Program

The program of studies offered during the summer is planned to meet the needs of:

1. Teachers who wish to continue study toward the bachelor's degree.
2. Teachers who desire credits to meet certification requirements.

3. High school graduates who desire to begin college in the summer.
4. Discharged veterans and others who wish to speed up their program.

Credit earned during this session has the same value as credit earned during the year and is transferable to other institutions. The credits are expressed in semester hours.

The Calvin Alumni Association

The Calvin Alumni Association is composed of all students who have studied one year or more at Calvin College, Calvin Seminary, the Normal Department, or the Preparatory School, and all faculty members of these institutions. The purpose of this Association is to provide an avenue whereby the alumni can indicate their attitude of continued loyalty to Calvin College and Seminary, and to demonstrate this loyalty concretely by performing appropriate services in response to the needs of the school.

The Association is governed by an Alumni Council, elected by the members, which meets once a year, and its business is conducted by the Executive Board of the Alumni Council which meets bi-monthly. The Alumni Association maintains an office on the college campus where records are maintained and the business of the Association is conducted.

ADMISSION

College Entrance Examination Board Scholastic Aptitude Test

All applicants for admission to the freshman class are required to take the Scholastic Aptitude Test of the College Entrance Examination Board. The fee for this test is \$5 payable to the College Entrance Examination Board. Applications are available in the office of any high school principal. As the name indicates, the Scholastic Aptitude Test is a test of the candidate's aptitude for college studies. It calls for no special preparation other than that which college-bound students receive in the regular classwork of their secondary school. During the academic year 1963-'64, the Scholastic Aptitude Test of the College Entrance Examination Board will be given on the following dates:

Saturday, December 7, 1963 Saturday, May 2, 1964
Saturday, January 11, 1964 Wednesday, July 8, 1964
Saturday, March 7, 1964

By requiring this test the College obtains helpful and uniform counseling data on all entering students before they arrive on the campus at the beginning of the academic year to plan their program of freshman studies.

Applicants make all arrangements for taking the Scholastic Aptitude Test directly with the College Entrance Examination Board authorities. Applicants who live in the Middle West, the South, or the East in the United States and Canada, should address their inquiries to the College Entrance Examination Board, Box 592, Princeton, New Jersey. Applicants living in New Mexico, Colorado, Wyoming, and Montana, and other states to the West, and applicants living in the Province of Manitoba, Canada, and other provinces to the West, should address their inquiries to the College Entrance Examination Board, Box 27896, Los Angeles 27, California. Applicants residing in foreign countries, other than Canada, should address their inquiries to Box 592, Princeton, New Jersey. Requests to take this test shall, in general, be received by the College Board four weeks in advance of the date on which the test is scheduled to be given.

Since the test scores form part of the data to be submitted at the time of application, it is necessary that the applicant take the test early. The applicant should arrange, if at all possible, to take the test in December or January.

Applicants for scholarships must take the test in December or January in order to meet the Scholarship Committee, deadline of March 15.

Application for Admission or Readmission

Applicants seeking admission for the first semester must submit all of their application credentials, including their scores on the Scholastic Aptitude Test, to the Office of Admissions by June 15. Those seeking admission for the second semester must submit all of their application credentials, including their scores on the Scholastic Aptitude Test, by

November 15. No application postmarked after these dates will be processed unless accompanied by a \$10 late application fee. Since the applications must be made on the forms provided by the College, the applicant should send for these early. The necessary forms consist of:

- Application for Admission
- Applicant's Personal Record
- Secondary-School Record
- Pastor's Recommendation
- Student Health Record

One who intends to study for the ministry must present a recommendation from his consistory, endorsing him for the ministry, in addition to the pastor's recommendation. This form will be mailed to the consistory by the College after the applicant has been accepted for admission.

When all of the application forms and the scores on the Scholastic Aptitude Test have been received by the Office of Admissions, the Director of Admissions will notify the prospective student regarding his status of admission. At the time that an applicant is granted admission, he will also be assigned his permanent student number. Applicants who are admitted for the fall semester will receive a communication during the month of August informing them when to report for Orientation and Registration.

Prospective students should not apply for admission to Calvin College until they have reached their senior year in high school. Subjects which are in progress during the student's senior year must be included on the transcript of the high school record.

Applicants wishing to take the Nursing Program must make application with the Director of the School of Nursing at Blodgett Memorial Hospital. This application should be submitted during the early part of the senior year in high school. No application will be acted upon until all forms are at Blodgett. Admission to the Nursing Program is determined by the Admissions Committee of the Blodgett Memorial Hospital School of Nursing.

A student who withdraws from College and later wishes to re-enroll should make formal application on a readmission form provided by the College. Students seeking readmission for the first semester must submit their applications by July 1. Students seeking readmission for the second semester must submit their applications by December 1.

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 transcript from an accredited school.

2. Amount of work. This transcript must testify to the satisfactory completion of 15 units of work. By a unit of work is meant the equivalent of five recitations a week for 36 weeks in one branch of study.

3. Prescribed work. The 15 units required for admission must include four sequences, two major sequences and any 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

Prospective college students are urged to submit two units of a foreign language for college admission.

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:

Advanced Algebra 1/2 or 1 unit Trigonometry 1/2 unit
 Solid Geometry 1/2 unit Physics 1 unit 0, 2, 3

Prospective college students are urged to submit two units of mathematics for college admission.

C. NATURAL SCIENCE GROUP

Biology 1 unit Physics 1 unit
 Botany 1 unit Zoology 1 unit
 Chemistry 1 unit
 0, 2, 3

D. SOCIAL STUDIES GROUP

Ancient history, 1 unit
 European history, 1, 1 1/2, or 2 units
 American history, 1/2 or 1 unit
 American government, 1/2 unit
 Economics, 1/2 unit
 Minimum requirements from above groups 10

The remaining units required to make up the necessary 15 units required are elective from among the subjects listed above and such others as are usually counted toward graduation by the accredited school. The Registrar, 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

Suggested High School Programs

STUDENTS who expect to pursue in Calvin College any one of the courses listed below are advised to submit for admission the following subjects, if possible:

1—For General A.B., A.B. in Education, Pre-Law, Pre-Nursing, and Pre-Medical Technology courses:

English	3 units
Math.	2 units (Algebra and Geometry)
Latin	2 units
Science	2 units (Biology and Chemistry or Physics)
History	2 units

Plus one additional unit in any of the last four subject areas to make a second major sequence of 3 units. To the total of the 12 units suggested above, four additional elective units may be added of any subjects ordinarily accepted for graduation from high school. (This total assumes that the student is required to complete 16 units for graduation.)

2—For Pre-Seminary course:

English	3 units
German	2 units
Latin	2 units
Math.	2 units (Algebra and Geometry)
Science	2 units (Biology and Chemistry)
History	2 units

Total suggested above: 13 units; additional elective units: 3 units = 16 units.

3—For Pre-Medical and Pre-Engineering courses:

English	3 units
Latin	2 units (or another Foreign Language)
History	2 units
Science	3 units (Biology, Chemistry, Physics)
Math.	3½ units (Algebra 2 units, Geometry 1 unit; Trig. ½ unit)

Total suggested above: 13½ units; additional elective units: 2½ units = 16 units.

4—For Pre-Business Administration course:

English	3 units
History	2 units
Latin	2 units (or another Foreign Language)
Math.	3 units (Algebra 1½ units, Geometry 1 unit, Trig. ½ unit)
Science	2 units (Biology, Chemistry)

Total suggested: 12 units; additional elective units: 4 units = 16 units.

Also recommended in each of the above courses: Typing.

Physics may not be counted in both of the Groups B and C as part of a sequence.

English History may be included under European History. World History may be included when accompanied by a second full year of history.

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 foreign language sequence in high school.

PLAN B. ADMISSION BY EXAMINATION. Applicants who are unable to furnish a transcript, 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. This applies especially to applicants who have successfully completed the General Educational Development tests.

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. The deficiency must be removed before the end of the first year of residence. However, applicants are strongly urged to make up any deficiency during the summer preceding their enrollment as Freshmen. Attention is called to the course offerings of the Calvin College summer session.

Admission of War Veterans

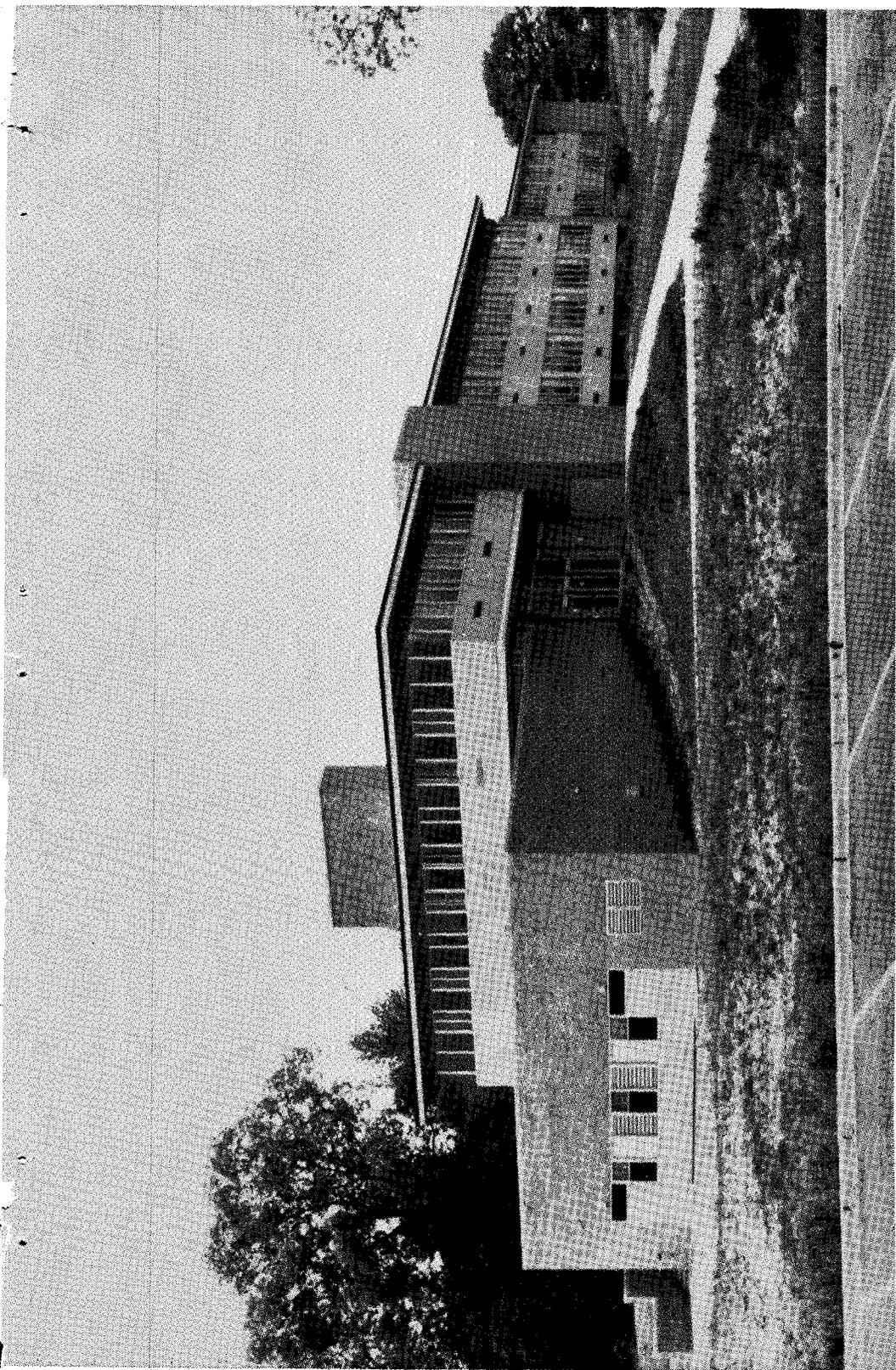
Calvin College has been approved by the Veterans Administration as an institution of higher education for the training of discharged servicemen. A veteran who wishes to attend college should obtain Form 7-1990, Application for Program of Education and Training, from the nearest regional office of the Veterans Administration or from the College Registrar's office. Advice for completing this form will gladly be given by Calvin's Veterans' Counselor. Upon submitting this form to the Veterans Administration the veteran will receive a Certificate of Education and Training. This must be presented to the Registrar or his secretary at the time of registration.

For admission to college, veterans will be expected to submit all of the application blanks required of civilian students. Veterans will receive credit, as recommended by the American Council on Education, for liberal arts courses taken through the USAFI and for correspondence courses taken from accredited universities.

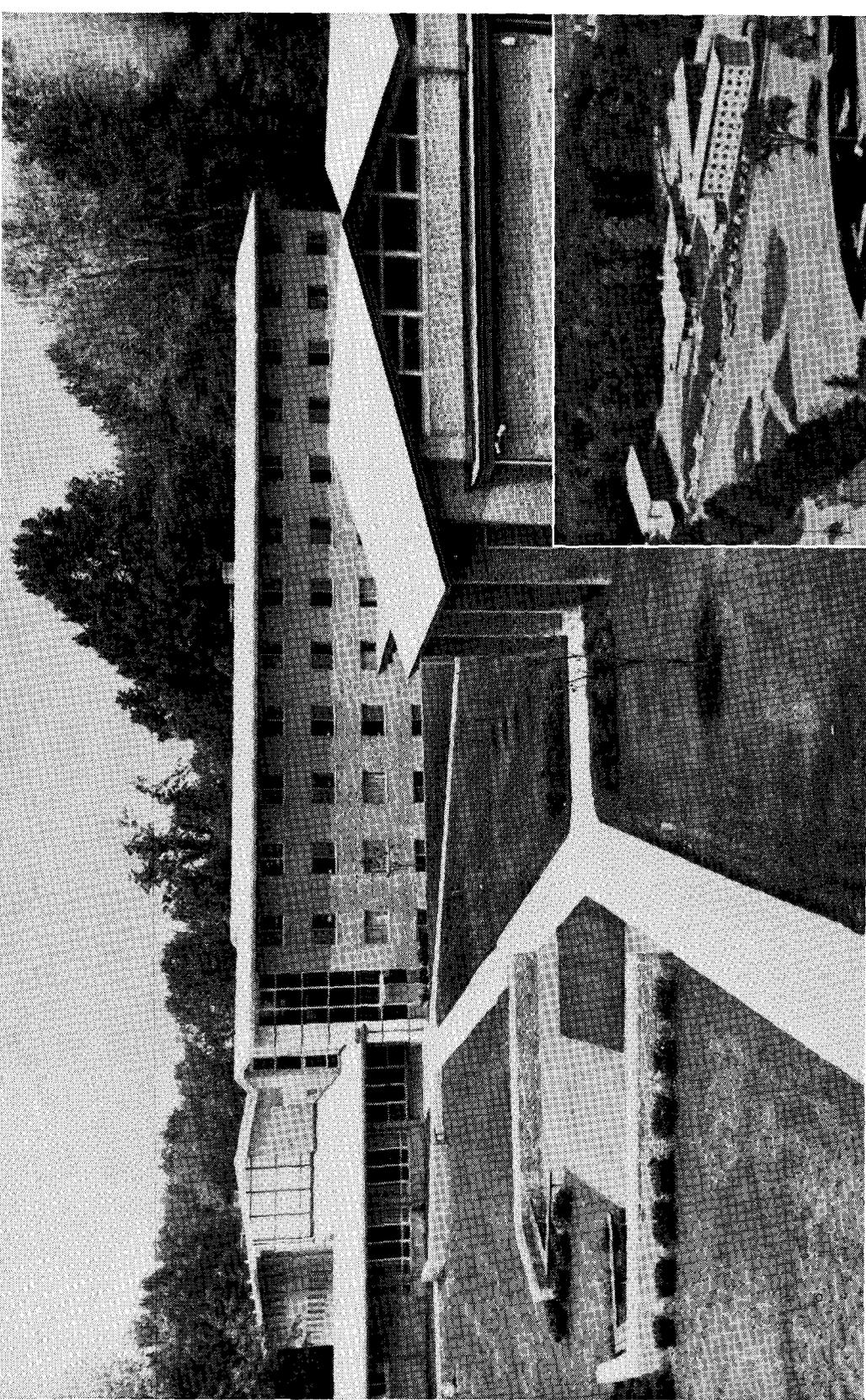
Admission of Foreign Students

Calvin College was approved by the commissioner, Immigration and Naturalization Service, Washington, D.C., December 3, 1947, File Number 56182-720, as an institution of higher education for the training of immigrant students who are in the United States on student visas.

Foreign students should begin making application for admission to college early in their last year of high school. To prevent loss of time they should proceed as follows:



Library-Classroom Building — Knollcrest Campus



Men's Residence Halls (Dining Hall, left) — Knollcrest Campus

Aerial View of Men's and Women's Residence Halls and Dining Hall

1. Write to the Registrar of Calvin College, declaring their intention of seeking admission and requesting the necessary application blanks.
2. Immediately make arrangements to take the Scholastic Aptitude Test of the College Entrance Examination Board and return all blanks, properly filled in, to the College as soon as possible. This includes official transcripts of all high school or college preparatory records and such credits as were earned on the college or university level. Upon receipt of acceptance for admission from the Registrar of the College, they should immediately make application with the American Consul in the area of their residence for passport and visa. As soon as the applicant is accepted for admission, the College will send him an I-20 Form.

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 college of education, a transcript of the courses completed, provided that these courses were of an academic nature, the grades received were "C" or better, and that the student is entitled to honorable dismissal. However, no applicant is allowed more than 16 hours of credit for each semester of work taken at another recognized institution. No more than 70 semester hours of advanced credit will be allowed for work taken at an accredited junior college.

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

3. When the applicant submits from an accredited high school, in excess of 16 units for admission, credits in academic subjects which are also taught in college; provided that for at least one semester he has successfully continued 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; the limit of such college credit allowance is six hours.

Admission to advanced standing does not excuse the student from meeting the specified requirements for graduation from Calvin College.

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 must have their official transcripts submitted to the Office of Admissions.

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

Exchange of Credits Between College and Seminary

1. A college student may, under the conditions stipulated below, be permitted to take courses for credit in the Seminary. Under no circumstances, however, may the credit earned be applied toward fulfillment of degree requirements in the College if it is also used to meet degree requirements in the Seminary. In other words, the credit may not be counted toward degrees in both College and Seminary.

2. College students may be permitted to enroll in such seminary courses as the Registrar of the Seminary permits them to take and as the Registrar of the College approves. Ordinarily, such courses may not be substituted for courses prescribed in the College to meet degree requirements, either the subject requirements prescribed in the catalog or the major and minor requirements prescribed by the several departments. The subjects must be such as would ordinarily be accepted for credit by the head of the department to whose field the subject would be regarded as belonging.

3. A student enrolled in the College may not take any work in the Seminary for seminary credit without informing the college authorities. No more than six seminary hours may be taken in any given semester.

4. A student enrolled in the Seminary may be given permission to take courses in the College for seminary credit, that is, for credit to be transferred to the Seminary, provided he has received the permission of the Registrar of the Seminary, the Registrar of the College, and the professor whose course is involved.

Special Students

Applicants who meet all of the requirements for admission but who do not desire to become candidates for an academic degree, may be enrolled for such studies as their preparation qualifies them to pursue with profit.

STUDENT EXPENSES

Tuition Rates

The semester tuition rate, which includes a \$6 organization fee, a \$5 student center fee, a \$2.50 health service fee, and laboratory fees, is \$390.

For students who are members of a Christian Reformed Church at the time of registration, and who thus contribute indirectly to the support of Calvin College, the tuition rate is determined on the basis of the postal zone (as calculated from Grand Rapids) or the Canadian province in which the student resides. An unmarried student's residence will generally be determined to be that of his parents. The rate for the various categories:

<i>Local Zone</i> (within 10 miles of Calvin College Campus)	\$305
<i>Zones 1, 2, and 3</i> (extending up to 300 miles from Grand Rapids) ..	255
<i>Zones 4 and 5</i> (from 300 to 1,000 miles from Grand Rapids)	220
<i>Zones 6, 7, and 8</i> (more than 1,000 miles from Grand Rapids)	180
<i>Manitoba, Ontario, and Quebec Provinces of Canada</i>	220
<i>Alberta, British Columbia, and Saskatchewan Provinces</i>	180

(The College reserves the right to interpret these rates and categories and to determine the rate in cases about which there is question.)

SPECIAL PROVISIONS FOR STUDENTS WHO ARE MEMBERS OF A CHRISTIAN REFORMED CHURCH

1. If there are two or more students from a single family attending Calvin College, a reduction of \$25 from the regular tuition rate shall be allowed for each such student.

2. If the student's parents are not members of the Christian Reformed Church, the tuition is based on the zone in which the Christian Reformed Church of which the student is a member is located.

3. The residence of a married student is considered that of his former established home.

SPECIAL PROVISIONS FOR ALL STUDENTS

1. Students taking in excess of 18 semester hours will be charged \$14 for each such excess semester hour.

2. Students taking less than a normal load can elect to pay on the basis of a part-time rate. This rate is \$30 for each semester hour, except that in the case of those who are members of the Christian Reformed Church it is \$24 per semester hour. For those taking less than 12 semester hours of credit this charge does not cover the organization, student center, health service, or laboratory fees.

3. If a student discontinues before the end of the twelfth week of a semester, he shall be charged a pro-rata share for the portion of the semester completed. For the purpose of this computation, a partial week shall be treated as a full week. There will be no reduction in the semester rate for a student who discontinues after the end of the twelfth week.

SUMMER SESSION

The summer session tuition rates for 1964 have not yet been determined. For the 1963 summer session the rates were as follows: for students affiliated with the Christian Reformed Church and whose residence is in the state of Michigan the fee was \$17 per semester hour; for students affiliated with the Christian Reformed Church and whose residence is outside of the state of Michigan the fee was \$14 per semester hour.

Fees

Late Application Fee — A fee of \$10 will be charged for late application. (See page 29.)

Late Registration Fee — A fee of \$10 will be charged for late registration.

Auditing Fee — The fee for students who are not enrolled full time is one-half the regular hourly charge. (Also see page 58.)

Chemistry Laboratory Breakage Fee — The student is required to make a deposit at the time of registration, against which breakage of equipment will be charged.

Directed Teaching Fee — In addition to the regular tuition charge for credit hours received, a fee of \$10 per semester is assessed for Directed Teaching.

Individual Lessons Fee — In addition to the regular tuition charge for credit hours received the fee for individual instruction in voice, piano, organ, and orchestral or band instruments is \$45 per semester (15 lessons). The fee for use of the organ for practice is \$15 per semester.

Graduation Fee — The general graduation fee, including diploma, is \$10. The charge for a second diploma on the combined curriculum or similar program is \$5.

Transcript Fee —

a. Each student or alumnus shall receive one free transcript of his academic record.

b. Each additional transcript shall be issued at a charge of \$1.

c. When two or more subsequent transcripts (after the first free copy) are issued *at the same time*, there will be a charge of \$1 for the first copy and 25 cents for each additional copy.

d. When additional credits have been earned, a free supplement will be sent, upon request, to the same address as a previous transcript.

Special Examination Fee — A fee of \$3 is charged for each special examination which is administered at the request of the Dean of the Faculty.

Tuition and Fee Payment

It is recommended that tuition and fees be paid in full at the time of registration. A payment of at least \$75 must be made at registration

time. The balance of all tuition and fees should be paid by November 15 of the first semester and by April 1 of the second semester. Accounts not paid by these dates are subject to a \$2 Deferred Payment Fee.

Living Expenses

Living expenses, including board, room, laundry, and textbooks are from \$1,300 up per year.

HOUSING

Housing and Board for Men

Freshmen — All unmarried freshman men students are expected to live in Residence Halls or with their parents unless special arrangements have been made with the Dean of Men. Additional information is sent with the application blanks for admission to the College or on request from the Dean of Men's Office.

Sophomores — All sophomore students are expected to live in the Franklin Campus Dormitory or to be assigned to rooms off campus by the Dean of Men. Room and Board is about \$355 per semester. Application for Housing should be made with the Dean of Men.

Juniors and Seniors — Some out-of-town men students are accommodated in the campus dormitory. Others are housed in private homes in the vicinity of the College. The cost per semester in the dormitory, including meals at the Commons, is about \$355.

The office of the Dean of Men keeps on file a list of approved rooming places in the community. The cost of these rooms ranges from \$6 to \$7 per week per person. Out-of-town men students must stay in the dormitory or in a home on the approved list. If the place at which they desire to stay is not on the approved list, they must obtain approval from the Dean of Men before renting the room. Rooming places may be selected during the summer or immediately upon arrival in Grand Rapids for registration. Dormitory application blanks may be obtained by writing to the Dean of Men. Men living in private homes usually eat in the Commons where the cost of food is approximately \$235 per semester.

Housing and Board for Women

Freshmen — All unmarried freshman women students are expected to live in Residence Halls or with their parents unless special arrangements have been made with the Dean of Women. Additional information is sent with the application blanks for admission to the College or on request from the Dean of Women's Office.

Sophomores — All sophomore students are expected to live in the Guild Houses or be assigned to rooms off-campus by the Dean of Women. The cost for room and board is about \$355 per semester. Application for Guild Houses should be made with the Dean of Women. There are some opportunities for Sophomore women students to work for room and board.

Juniors and Seniors — For those women students who are unable to secure admission to a college residence hall, or who wish to live in a private home, the Office of the Dean of Women keeps on file a list of approved 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.

Apartments

A limited number of apartments is usually available for Juniors and Seniors who desire to do their own cooking. Permission to stay in an apartment must be obtained from the Dean of Men, for men; and from the Dean of Women, for women students. All apartments must be on the approved list. Freshmen and Sophomores under 21 years of age are not permitted to stay in apartments.

Payments of Room and Board

Freshmen and Sophomores — All payments for rooms, both College-owned and private, and for meals in the Dining Halls are to be made in advance, and each advance payment must cover at least one quarter of the semester charge. A schedule will be published for each semester listing the due dates of the quarterly payments. It is important that this schedule of payments be followed closely. Accounts not paid on time are subject to a \$2 Deferred Payment Fee.

Juniors and Seniors — Payment for room and board in private homes is an arrangement between landlord and student. Students are expected to meet these obligations promptly and when complaints are received because of non-payment they will be handled by the Dean of Men or Dean of Women.

All rates quoted for room and board are approximations and are subject to change.

SCHOLARSHIPS AND AWARDS

For Undergraduates*

Freshman Scholarship — Christian High School Graduates. Each year Calvin College offers a scholarship consisting of \$150 per semester for two semesters, to a member of the graduating class in each of the accredited Christian High Schools of the U.S. and Canada supported by our constituency.

In addition, the College offers several undesignated scholarships of equal value, under the same conditions as the designated scholarships.

The candidates for the scholarships will be nominated by the faculty of the Christian High School. The Faculty of Calvin College will select the winners. If, in the opinion of the Faculty of Calvin College, no suitable candidate is available, no award shall be made in that particular year.

The awards will be made in accordance with the following conditions:

1. The applicant must be recommended for the scholarship by the faculty of the high school on the basis of scholarship, Christian character, personality, and promise of growth. Only students of high academic rating who may be expected to maintain a good record in college should be nominated by the high school faculty.
2. The applicant should expect to complete a three- or four-year course at Calvin College.
3. The recipient must have fulfilled regular college admission requirements. An Application for Admission, Pastor's Recommendation, Health Record, Applicant's Personal Record, and an official high school transcript must be submitted before a student may be considered for admission.
4. The recipient should have been in residence at the high school from which he graduates for at least his junior and senior years.
5. All applicants are required to take the College Entrance Examination Board Scholastic Aptitude Test. This test should be taken early enough to permit the scores to reach the Calvin College Office before March 15 — preferably, therefore, in December or January.

Applications and recommendations must be in the hands of the Chairman of the Scholarship Committee not later than March 15.

Freshman Scholarship — Pre-Nursing Scholarship, Christian High School Graduates. Each year Calvin College offers a scholarship, consisting of \$150 per semester for two semesters, to a member of a graduating class in one of the accredited Christian High Schools in the United States or Canada supported by our constituency who is recommended thereto by the faculty of that school and who desires to enter the one-year

*Scholarship application blanks will be available after January 1. Application may be made for more than one scholarship. No applicant will, however, receive more than one award.

pre-nursing course, in accordance with all of the conditions stipulated above under Freshman Scholarship — Christian High School Graduates, except No. 2.

Freshman Scholarship — Public High School Graduates.

Calvin College offers a scholarship consisting of \$150 per semester for two semesters to a member of the graduating class in each of *five* accredited public schools of the United States and *two* in Canada, provided:

1. The applicant is a member of the Christian Reformed Church.
2. The applicant can give evidence that he or she was unable, because of lack of opportunity, to attend a Christian High School. Reasons for not attending a Christian High School should be explained.
3. The applicant is recommended for the scholarship by the faculty of the high school in accordance with the same conditions as are listed above under Freshman Scholarship—Christian High School Graduates.
4. Applications must be in the hands of the Chairman of the Scholarship Committee not later than March 15.
5. The applicant must take the College Entrance Examination Board Scholastic Aptitude Test in December or January to permit the College to receive the test scores no later than March 15.

Freshman Scholarship — Pre-Nursing Scholarship, Public High School Graduates. Each year Calvin College offers a scholarship, consisting of \$150 per semester for two semesters, to a member of the graduating class of an accredited public high school in the United States or Canada who desires to enter the one-year pre-nursing course, provided the applicant meets all of the conditions stipulated above under Freshman Scholarship — Public High School Graduates.

Freshman Scholarship — Certificate of Merit Award Winners.

Calvin College offers a scholarship of \$150 per semester for two semesters to each high school graduate who wins a National Merit Scholarship Corporation Certificate of Merit. The winner of such an award who seeks to qualify for the scholarship must notify the Chairman of the Scholarship Committee, no later than April 20 of the year in which he is applying for admission, that he has received the award.

Winners of Letters of Commendation are not eligible.

The scholarship is awarded only provided:

1. The applicant fulfills the regular college admission requirements.
2. The applicant expects to complete a three- or four-year course at Calvin.
3. The applicant is recommended for the scholarship by his high school principal, or by his pastor if he is not a graduate of a Christian High School.
4. The applicant presents a copy of the certificate to the Scholarship Committee.
5. The applicant is a member of the Christian Reformed Church.

General Motors Scholarship — Calvin College has been allocated one scholarship to be awarded each year under the General Motors College Scholarship Plan. This award is intended for a high school graduate who is seeking admission to Calvin College. The applicant is expected to have outstanding talents, and primary consideration in the award will be given to scholarship, Christian character, personality, and promise of growth. In selecting a candidate for this award the College will apply such standards relating to scholarship and all-around ability as it believes to be in keeping with the objective of the General Motors Plan.

High School graduates who fulfill all requirements for admission and who consider themselves eligible for this award should write for application blanks. Applications must be in the hands of the Chairman of the Scholarship Committee on or before March 15.

Associated Women Students Scholarship — Each year the Associated Women Students of Calvin College, of which every woman student is a member, offers a scholarship consisting of \$100 per semester for two semesters, to a sophomore woman student for her junior year. The selection of a candidate or candidates for the scholarship is made by the Executive Board of the Associated Women Students, subject to the approval of the Faculty Scholarship Committee. Recommendations shall be on the basis of scholarship, Christian character, personality, promise of growth, and need.

Application blanks may be obtained from the Office of the Dean of Women of Calvin College. Application must be made by March 1.

Upperclassman Scholarships — **Calvin College Freshmen, Sophomores, and Juniors** — Each year Calvin College offers a scholarship consisting of \$150 per semester for two semesters to each of three members of the freshman class, each of three members of the sophomore class, and each of four members of the junior class who have made application and have been recommended therefor by the Faculty of Calvin College, in accordance with the following conditions:

1. a. The Faculty of Calvin College will select and appoint the winners from among the applicants.
- b. If, in the opinion of the Faculty, no suitable candidate is available, no award will be made in that particular year; or, if only a limited number of suitable candidates is available, a limited number of awards will be made.
- c. The Faculty always reserves the right, for reasons of its own, to reject any candidate who may have made application and may have been recommended for a scholarship.
2. The recommendation shall be made on the basis of scholarship, Christian character, personality, and promise of growth. Only students of high scholarship rank who may be expected to maintain a good record in subsequent college years should be recommended.
3. The recipients should expect to complete a four-year course at Calvin College.

4. The recipients should have been in residence for the preceding year (in the case of Freshmen) or years at Calvin College.
5. Applications and recommendations must be in the hands of the Chairman of the Scholarship Committee not later than April 15.
6. The winners will be notified by July 1.

Trinity College Scholarship — Junior College Graduates.

Each year Calvin College offers a scholarship consisting of \$150 per semester for two semesters to a member of the sophomore class in Trinity College of Chicago, Illinois, who is recommended thereto by the faculty of his college, 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 will be made in that particular year.
(c) The Faculty of Calvin College 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. Only students of high scholarship rank who may be expected to maintain a good record in senior college should be nominated by the junior college faculty.
3. The recipient should expect to complete a four-year course at Calvin College.
4. The recipient should have been in residence at the junior college by which he was recommended, for both the freshman and sophomore years.
5. Recommendations must be in the hands of the Chairman of the Scholarship Committee not later than March 15.

The Johnson Foundation Scholarship — The Johnson Foundation, established by S. C. Johnson & Son, Inc., of Racine, Wisconsin, has presented to Calvin College the sum of \$1,000 to provide support for undergraduate students majoring in chemistry. The scholarship consists of a grant of \$500 a year for each of two years. Decisions relating to the award, such as selection of the winner, the class year of the student, and other eligibility rules shall be determined by the faculty members of the department of Chemistry.

Detroit Edison Company Scholarship — The Detroit Edison Company offers a scholarship of \$350 annually to be awarded to a high school graduate whose residence is in the area served by the Detroit Edison Company. The scholarship is awarded on the basis of scholastic record, character and personality, citizenship, extra-curricular activity, seriousness of purpose, and financial need.

Application blanks may be obtained from the Chairman of the Scholarship Committee of Calvin College.

Applications must be in the hands of the Chairman of the Scholarship Committee by March 15.

Consumers Power Company Scholarship — The Consumers Power Company offers a scholarship of \$300 annually to an entering Freshman. The scholarship is good for any course of study selected by the student, but the recipient must live in a Michigan area served by the Consumers Power Company. The winner is to be selected by officials of Calvin College, and applications must be in the hands of the Chairman of the Scholarship Committee by March 15.

The Alvin M. Bentley Foundation Scholarship — Calvin College has been allocated one tuition scholarship, to be awarded each year under the Alvin M. Bentley Foundation Scholarship Plan. The award is intended for an outstanding high school senior, who is a resident of the state of Michigan, and who is seeking admission to Calvin College. The same general criteria used in the selection of candidates for other scholarships will be used in the selection of a candidate for the Bentley Scholarship. The student is expected to have outstanding talents, and primary consideration will be given to scholarship, character, personality, and promise of growth. Applications and recommendations must be in the hands of the Chairman of the Scholarship Committee by March 15.

Dow-Employees Scholarship Fund — The Dow-Employees Scholarship Fund provides Calvin College with an annual scholarship grant to cover an amount approximately equal to the institutional cost of educating the student in the year immediately preceding the year in which the grant is given. The grant will cover the student's tuition as well as the additional cost to the school.

The stipend is to be given preferably to an outstanding science or engineering major in his junior year, or to a major in another department, if the College so elects, for use in his senior year. The recipient must have the ability, initiative, and personality to contribute to his field in coming years. The recipient is to be elected by the Scholarship Committee of the College, on the recommendation of the department concerned.

Spalink Memorial Missions Scholarship — An annual senior scholarship award of \$500 is presented by Mr. and Mrs. John Spalink, in memory of their son, John Spalink, Jr. Its purpose is to encourage superior students to enter missions. The scholarship is awarded to a junior student of either sex who shows a definite interest in a missionary vocation. The award is given primarily for achievement in scholarship, although other factors, such as financial need, will be taken into account. Generally, members of the Christian Reformed Church who aspire to a career with that church's missions will be shown a certain preference. The Scholarship Committee makes final determination of the award. The rules are as follows:

- A. Application must be made no later than April 1.

- B. Applications must include the following:
1. a statement of mission vocational aims;
 2. a plan of study.
- C. Recommendations from two members of the Faculty must accompany the application.
- D. Applicants must be prepared to give evidence of confirmed interest in missions, and the intention to work in missions after training.

Classis Muskegon Young Calvinist Alliance Scholarship — The Young Calvinist Alliance of Classis Muskegon of the Christian Reformed Church offers a scholarship or grant-in-aid of \$300, to a Christian or public high school graduate who is or was a member of the Alliance, for study at Calvin College. The award is given to a prospective Freshman or to a current undergraduate student. It is renewable for one year. Applications are received by the Executive Committee of the Young Calvinist Alliance and a nomination of two or three is presented to the Delegate Board, which in turn selects one for the award.

Regulations:

1. The recipient must be a member of the Christian Reformed Church and a member or former member of the Muskegon Young Calvinist Alliance.
2. If in the opinion of the Executive Committee of the Alliance no suitable candidate is available, no award will be made that year.
3. Selection is made on the basis of Christian character and life, loyalty to the church and societies, financial need, intellectual ability, and leadership.
4. A Freshman receiving this scholarship or grant-in-aid must have fulfilled regular college admission requirements.
5. Application for this scholarship must be made by March 1. The applicant should inform the pastor of his church of his interest. Application forms will be forwarded to the applicant.
6. This scholarship or grant-in-aid may be for either Freshmen or upperclassmen.
7. The recipient of this scholarship should expect to complete his course at Calvin College.

Steelcase Foundation Scholarship — The Steelcase Foundation of Grand Rapids, Michigan, offers two scholarships annually, of \$250 each, to applicants for admission to Calvin College who are children of Steelcase, Incorporated, employees. The scholarships are renewable for three years. Continuation of the scholarship shall require maintenance of at least a C+ average. The winners are to be selected by the Scholarship Committee of the College, and the applicants are to be judged on the basis of scholastic ability, character, and need. If scholarships are not filled by the children of Steelcase, Incorporated, employees,

for whatever reasons, the scholarships shall be open to other Michigan residents. Applications must be in the hands of the Chairman of the Scholarship Committee no later than March 15.

George M. Pullman Educational Foundation — The George M. Pullman Educational Foundation awards each year a number of scholarships to college students with financial need. Applicants should be residents of Cook County, Illinois. Non-residents of Cook County, Illinois, are eligible for consideration only if they are sons or daughters of employees of the Pullman-Standard Car Manufacturing Company or of the Pullman Company.

Applications are accepted from entering Freshmen and from current undergraduate students. The application deadline for entering Freshmen is March 1. The application deadline for current undergraduate students is April 15. Inquiries should be addressed to the Educational Director, George M. Pullman Educational Foundation, 168 North Michigan Avenue, Chicago 1, Illinois. High school seniors should also obtain information about application procedures from high school placement officials. The National Merit Scholarship Qualifying Test or the College Board Scholastic Aptitude Test is required of prospective freshman candidates. Arrangements to take either of these tests must normally be made well before March 1 of the senior year of high school.

Alumni College - Faculty Memorial Scholarships — The Calvin College Alumni Association each year provides the College, in memory of deceased college faculty members, with three annual scholarship grants of \$300 each, one to be given to a freshman for use in the sophomore year, one to a sophomore for use in the junior year, and one to a junior for use in the senior year.

The rules are as follows:

- A. The Faculty of Calvin College, through its Scholarship Committee, will select candidates for the awards, whose names will be submitted to the Alumni Association for final selection.
- B. If, in the opinion of the Faculty, no suitable candidate is available in a given year, the funds for that year will be added to the Alumni scholarship fund.
- C. Application must be made for the award, and recommendation secured from two members of the Faculty. Applications and recommendations must be in the hands of the Chairman of the Scholarship Committee no later than March 15.
- D. The recommendation must be on the basis of scholarship, Christian character, promise of growth, and personality.
- E. The applicant should have been in residence at Calvin College for at least the preceding year and should expect to complete his college work at Calvin College.

Summer School Scholarship — Eleven scholarships in the amount of \$200 each, one for each National Union of Christian Schools district,

will be available to Christian school teachers for undergraduate study at Calvin College during the summer of 1964. The National Union and Calvin College each contributes \$1,100 for this undergraduate program. The cash awards must be used for payment of tuition and other expenses involved in work for personal and professional enrichment, work toward the validation of a teaching certificate, or toward a degree at Calvin College.

To be eligible for a scholarship the teacher:

1. Must have completed three years of successful teaching in the Christian schools.
2. Must be able to produce satisfactory evidence of possessing:
 - a. Ability to pursue academic work successfully.
 - b. Qualities of personality, character, and conviction that are assets to a Christian teacher.
 - c. Loyalty to the Reformed faith.
 - d. Superior teaching ability.
3. Must agree to serve a National Union member school at least one year after using a scholarship.
4. Must submit a statement of 250 words or less on the reason(s) for applying for a scholarship.

For details and applications for these scholarships, write directly to the Director of Scholarships, National Union of Christian Schools, 865 28th Street, S.E., Grand Rapids 8, Michigan.

Application must be made by February 1.

Julius Bergsma Memorial Awards — The Bergsma Brothers Foundation gives duplicate awards to a young man and a young woman finalist in the Annual Young Calvinist Federation Oratorical Contests. The first-place winner in the men's contest and the first-place winner in the women's contest each receives a \$300 tuition award to Calvin College. Contestants must be members of a Young Calvinist Society which is affiliated with the Young Calvinist Federation, and must participate in the elimination contests specified in the regulations.

In case the first-place winner is not eligible to enter college, the award is kept in trust up to three years. Schooling of contestants must not exceed high school. If the winner does not plan to enter Calvin College or is prevented from doing so, the next ranking contestant becomes eligible for this award. Send for complete details to The Young Calvinist Federation, 2365 Nelson Avenue, S.E., Grand Rapids 7, Michigan.

MUSIC AWARDS

Anna Bruinsma Award in Music — The interest on \$750, given by the late 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. This award is open only to seniors.

Oratorio Society Tuition Scholarships in Music — Five college tuition awards of \$200 each are presented by the Calvin College Oratorio So-

ciety to prospective Freshmen. These scholarships are awarded to four instrumentalists and one vocalist who can meet college admission requirements and have records of superior achievement in high school music activities. Recipients must maintain a C average for four semesters and will be expected to participate in the scheduled rehearsals and performances of at least one of the following: Calvin College Band, Orchestra, or Choir.

Vander Heide Voice Award — One tuition award of \$200 is offered annually by Mr. and Mrs. Jan Vander Heide to a vocalist who can meet College admission requirements, and who has a record of superior achievement in high school music activities. The recipient will be expected to participate in the scheduled rehearsals and performances of at least one choral ensemble, and to maintain at least a C average for four semesters. Only Freshmen are eligible. Applicants will be judged on the basis of evidence of talent and financial need.

Application blanks for these awards may be secured from the Secretary of the Music Department after April 1, and must be returned on or before April 23, 1964. Auditions in person or by tape recording will be held May 2, 1964.

MISCELLANEOUS AWARDS

The Beets Calvinism Award — The late Dr. and Mrs. Henry Beets presented the College with \$500, 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. The prize will be awarded at the discretion of the professor holding the chair of Calvinism, in consultation with the President of Calvin College. If, during any given year, the professor named above considers the essays or papers submitted of insufficient merit to deserve the prize, the interest of such a year, or years, will be added to the principal.

Jewish Evangelization Award — Dr. and Mrs. William J. Yonker for the year 1963-'64 offer a prize of \$100 for the best essay and a prize of \$30 for the second-best essay on a subject bearing on the Evangelization of the Jews. The contest is open to all college students.

The Rinck Memorial Award — A fund of \$1,350 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 devoted to an award for outstanding work in mathematics. The prize is awarded annually to the senior student majoring in the Mathematics Department who has, in the opinion of the members of the Department, done superior work in undergraduate mathematics.

The William B. Eerdmans Literary Awards — 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 2nd: \$25 3rd: \$15

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.

SPEECH AWARDS

Baker Extemporaneous Speaking Awards — Through the generosity of the Baker Book House of Grand Rapids, Michigan, credit vouchers for the purchase of books are awarded annually to the first, second, and third place winners in both the men's and women's divisions of the Extemporaneous Speaking Contest. In each division the winners of first, second, and third places are awarded credit vouchers of \$25, \$10, and \$5 respectively. The first place winners of each division represent Calvin at the annual State Extemporaneous Speaking Contest.

Berghuis Forensic Awards — Students who represent the College in State Oratory, Extemporaneous Speaking, and Interpretative Reading Contests, and students who represent the College in the State Debate Tournament are eligible for the Berghuis Forensic Awards. These awards are made in the following manner: for the first year's participation, a silver pin; for the second, a silver pin exchanged for a gold pin; for the third, a ruby is added; for the fourth, two pearls are attached; for the fifth, a diamond is added. If any student represents the College in two activities in one year, he is credited with two awards. These awards are made possible through the generosity of Mr. and Mrs. J. P. Berghuis of Prinsburg, Minnesota.

Broodman Oratorical Awards — Through the generosity of the Dr. G. J. Broodman family of Grand Rapids, Michigan, a gold medal and a \$25 Savings Bond are awarded to the first place winner in a men's oratorical contest. Silver and bronze medals are given annually to the winners of the second and third places, respectively, in a men's oratorical contest. These awards are presented in memory of the late Dr. G. J. Broodman. The first-place winner represents Calvin in the State Oratorical Contest of the Michigan Intercollegiate Speech League held in March of each year.

Drama-Interpretative Reading Awards — An anonymous donor annually presents the Speech Department with \$100 to be used as awards in the areas of drama and interpretative reading. This enables the Speech Department each year to make the following awards:

1. A \$25 award to a Senior student who has done outstanding work in acting in Thespian productions.
2. A \$25 award to a Senior student who has made valuable contributions in the areas of the technical aspects of Thespian productions.

3. \$15 awards to each of the two students selected to represent Calvin College at the League Division of the Annual Interpretative Reading Festival of the Michigan Intercollegiate Speech League.
4. \$10 awards to each of the two students selected to represent our College at the Junior Division of the Annual Interpretative Reading Festival.

Monsma Debate Award — Each year Mr. and Mrs. John W. Monsma, Jr., offer an award of \$100 to an outstanding Calvin College debater. The award is given on the basis of the student's ability as a debater, his academic record, his character and personality, and his financial need. The Speech Department will select the nominee to receive the annual award.

Thespian Oratorical Awards — The Thespians, dramatics club of Calvin College, offers three awards in oratory for women, of \$15, \$10 and \$5.

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

Zondervan Peace Oratorical Awards — Through the generosity of the Zondervan Publishing Company of Grand Rapids, Michigan, credit vouchers for the purchase of books are awarded annually to the first, second, and third place winners in both the men's and the women's divisions of the Peace Oratorical Contest. In each division the winners of the first, second, and third places are awarded credit vouchers of \$25, \$10, and \$5, respectively. The first place winners of each division represent Calvin at the annual State of Michigan Peace Oratorical Contest.

Zondervan Peace Extempore Awards — The Zondervan Publishing Company annually awards credit vouchers for the purchase of books to the first, second, and third place winners in both the men's and women's divisions of the Peace Extempore Contest. In each division the winners of the first, second, and third places are awarded credit vouchers of \$25, \$10, and \$5, respectively. The first place winners of each division represent Calvin at the annual State of Michigan Peace Extempore Contest.

Awards for Continuing Graduate and Seminary Study (Available through and at Calvin College)

Dr. Harry Kok Memorial Scholarship — The late Dr. Harry Kok, in his Last Will and Testament, bequeathed to Calvin College certain assets to be used for a scholarship award, made annually to a pre-medical student. The award shall normally be made to a graduate of the four-year pre-medical course. The candidate need not necessarily be a graduate of the pre-medical course in the year in which the award is granted.

"Out of the income received from said property there shall be paid, each year for fifteen (15) consecutive years, [beginning September, 1952] a scholarship of \$400 to such male student who has taken his pre-medical work at Calvin College and Seminary and shall be selected by the Board of Trustees thereof, said payment to be made to him upon his matriculation at an accredited medical college which awards the degree of Doctor of Medicine."

Students who are interested must apply to the Chairman of the Scholarship Committee before March 15. Final award need not necessarily be limited to the student who has made formal application.

Board of Trustees Scholarship — Calvin Seminary, under the authority of the Board of Trustees of Calvin College and Seminary, offers a scholarship consisting of \$500 to a member of the graduating class of Calvin College. The award will be made to a student who plans to enter the ministry in the Christian Reformed Church in the fall of the year immediately following his graduation from Calvin Seminary.

Applications should be in the hands of the Chairman of the Scholarship Committee by March 15.

The Dewey and Hattie Battjes Foundation Scholarship—Mrs. Dewey Battjes and her children, through the Battjes Foundation, have offered to award a scholarship, in the year 1963-'64, to a student entering Calvin Seminary. To receive consideration, a student must have been in residence in Calvin College as a pre-Seminary student for not less than the last three years preceding graduation, though exception may be made for a Calvin College graduate who has spent his first two years in a Christian junior college supported by our own Christian Reformed constituency.

Pre-seminary Seniors should not apply directly for this award, since selection of the recipient shall be made by the Scholarship Committee of the College from the list of eligible Seniors. Approval of the committee's choice must be given, however, by the College Faculty, the Seminary Faculty, and the Board of Trustees or its Executive Committee.

University of Michigan State College Fellowship — 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 Executive Board of the Graduate School some member of the graduating class, or some one of its graduates of not more than four years' standing, as a suitable candidate for a State College Fellowship. In each case an alternate may be nominated. All nominations are sent by the College to the Dean of the Graduate School not later than February 15 preceding the academic year for which the recommendation is made; accompanying each should be an official record of the candidate's undergraduate work and three letters of recommendation. The stipend is \$1,600 for two semesters of full-time work.

Students wishing to make application for this fellowship should consult the Chairman of the Scholarship Committee of Calvin College not later than January 15.

University of Michigan Scholarships for Graduates of the Pre-Engineering Course — The University of Michigan offers a limited number of scholarships to worthy and needy students who have completed their pre-engineering course and who transfer to the University of Michigan to complete their work for an engineering degree. The amount of the scholarship is \$500, or more, a year. These scholarships are offered only to residents of Michigan. Pre-engineering students who are interested should see the Chairman of the Engineering Department or the Dean of the College before March 15.

University of Michigan School of Business Administration Tuition Scholarship — This scholarship is awarded annually to a graduate of Calvin College who has majored in Business Administration and who is recommended for the scholarship by the members of the Economics Department. Seniors who are interested should see the Chairman of the Economics Department before March 15.

Fulbright Scholarship — Awards under the Fulbright Act are a part of the educational exchange program of the Department of State. The objectives of this program are to promote better understanding of the United States abroad, and to increase mutual understanding between the people of the United States and the people of other countries.

Eligibility requirements:

1. United States citizenship.
2. A college degree or its equivalent at the time the award is to be taken up.
3. Knowledge of the language of the country sufficient to carry on the proposed study.
4. Good health.

Students who are interested should confer with the College Fulbright Adviser.

STUDENT SERVICES

Financial Aids

The following statements summarize the Financial Aid Program at Calvin College:

Loans

1. National Defense Education Act of 1958 funds are available to U.S. citizens and permanent residents.
2. Calvin Loan Funds are available primarily to non-citizens.
3. Emergency Loans for amounts up to \$50 are available from the Dean of Women or the Dean of Men.

Campus Employment

1. Residence Hall — housekeeping, desk clerk, switchboard
2. Dining Hall — bus boys, waitresses
3. General — Clerical, maintenance

Policies

1. Financial Aid is awarded only by action of the Financial Aid Committee.
2. Any full-time student in good standing (including entering Freshmen with regular or provisional admission) may apply for Financial Aid.
3. Loans are granted only in cases of proven financial need.
4. Campus Employment applicants are given priority on the basis of financial need.
5. The Financial Aid Committee reserves the right to suspend any or all aid commitments at any time for reasons which they deem sufficient.
6. Students who receive aid are expected to live economically, and to establish an acceptable record in all phases of college life.

Procedures

1. A student's financial needs over the entire academic year are used as the basis for awarding Financial Aid.
2. A student who wishes to apply for Financial Aid should file an application with the Student Personnel Office well in advance of the semester in which he/she expects to receive assistance.
3. Applications for Financial Aid will be reviewed and awards made beginning June 30 preceding the fall semester for which application is made. Applications received prior to that date will be held until then. Later applications will be acted upon as they are received.

4. An Application for Financial Aid will not be processed until after the student has been accepted by the Admissions Office.
5. Application blanks for Campus Employment and Loans are available from the Student Personnel Office.

Off-Campus Student Employment Service

A Student Employment Service is operated under the supervision of the Dean of Men's Office. Students desiring part-time employment may fill in application cards with this service at the time of registration or at the Employment Desk in the Student Personnel Office any time during the semester. This office has on file the names of business firms and individuals interested in employing students on a part-time basis.

Teacher Placement Bureau

The College maintains a Placement Bureau, administered by the Director of Student Teaching, to assist graduates in securing teaching positions. Personal data, recommendations from members of the Faculty, and other information relative to the teaching ability of the candidates are made available to school superintendents throughout the United States and Canada. All seniors and graduates of the College who have completed the requirements for teachers' certificates are entitled to use this service without charge. All communications should be addressed to the Teacher Placement Bureau at Calvin College.

Graduate Placement Bureau

Arrangements are made each spring semester by the Student Personnel Office for interviews with prospective employers. The schedule of these interviews is made available to all interested students.

Student Health Insurance

There is available to all students a Group Accident and Sickness Expense Protection Plan. The premium cost, only \$18 for 12 months, is extremely low considering the coverage that is provided under the plan. A family plan is also available. Although participation is voluntary, the College Administration strongly urges all students not covered by a medical plan to participate. Detailed information is available at the Business Office.

InterCampus Bulletin

The Inter-Campus Bulletin is published daily and posted in designated places on both campuses. Notices regarding class changes, programs, and information of general interest are included. It is each student's responsibility to read this bulletin each day.

Inter-Campus Transportation

The shuttle bus service is available, free of charge, between campuses and to local churches.

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 students. Ten hours of such religious instruction must be taken during the four college years in accordance with a set program.

Devotional exercises are held on Monday, Wednesday, and Friday. All students are required to attend devotional exercises at times assigned to them.

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

Students attending Calvin College and Seminary who are too far from home to attend services there are expected to transfer their membership to a local church of their own choice; or retain their membership with their home church, but place themselves under the temporary care of one of our Grand Rapids churches. The latter can be done by means of student certificates supplied by the student's own consistory. Either plan must be effected during the first eight weeks of school.

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. Conferences with the college chaplain can be arranged by any student during the course of the school year.

The Christian Reformed Church, which sponsors Calvin College, is eager to have its students live the full Christian life—a life dedicated to the glory of God and to the service of our Lord Jesus Christ. It is deeply grieved when they fall short of the high expectations held for them.

The Faculty of Calvin College has been instructed by the Synod (1940) "to deal in the spirit of love, yet also, in view of the strong tide of worldliness which is threatening our churches, very firmly with all cases of misdemeanor and offensive conduct in the matter of amusements, particularly theater-attendance, card-playing, and dancing, and to discipline and finally expell all students who refuse to heed the admonition of the school authorities in this matter."

The Libraries

The Hekman Memorial Library on the Franklin Campus, and the Knollcrest Library, hold, together, more than 130,000 volumes, to which about 8,000 are added yearly. More than 900 different periodicals are currently received. The Hekman Library houses the Cayvan Collection of 11,000 phonograph records. The Knollcrest Library houses the theological and Freshman library collections, as well as the Colonial Origins documents, Calvin microfilm, and rare book collections. Both

libraries are open daily from 8:00 a.m. to 11:00 p.m., Monday through Thursday; 8:00 a.m. to 9:30 p.m. on Friday; 8:00 a.m. to 5:00 p.m. on Saturday; holiday and vacation hours are from 8:00 a.m. to 5:00 p.m., Monday through Friday, at the Franklin campus; Monday, 1:00 to 5:00 p.m., and Thursday, 8:00 a.m. to 12:00 noon, at Knollcrest.

The Required Physical Education Program

Requirement

Physical education is a requirement for all freshman and sophomore students. All students must take required physical education for three semesters of their first two years' residence at Calvin College. All classes meet twice a week.

The requirement includes a semester in Foundations, a semester in Team Sports, and a semester in Individual and Dual Sports. (See p. 112 for Courses.)

Credit

All students must meet the physical education requirement to graduate. Failure to meet this requirement will result in the withholding of transcript and diploma.

A grade of "Cr." (Credit) or "N.C." (No Credit) will be given for each course. In order to receive credit for a course a student must earn a passing physical education average. This average is based on ability, progress, attitude, attendance, skill, and written tests.

Exemptions

Students over 27 years of age are excused.

Medical excuses will be accepted only from a physician of the Calvin Health Service. Upon consultation with him some students may be placed in restricted activities according to ability and need.

Varsity athletes at Calvin are required to take two semesters of required physical education during their first two residence years. (The third semester requirement is fulfilled by enrolling in Physical Education 120.) All athletes must complete the Foundations course in their freshman year.

Equipment, uniforms, lockers

Equipment for activities will be supplied by the College.

Students enrolled in the instructional courses are required to buy a standard uniform. Sweat suits are optional but the purchase of them is encouraged. These can be purchased through the physical education office.

Lockers are available for all students. A \$5 deposit is necessary in securing a locker and will be returned at the end of the school year if all articles are intact.

Health Center

The College provides limited health and medical service for all students. The fee for this service is incorporated in the tuition charge. The

Health Center is located on the ground floor of the Dormitory Building on the Franklin Street campus. Its facilities consist of examination room, dispensary, men's sick bay, and women's sick bay. The health service is staffed by a campus nurse on full-time duty, physicians with consultation hours each morning, and a clinical psychologist with consultation one day each week. The service is limited to out-patient treatment. All serious medical problems will be referred to the student's family physician (in the case of in-town students) or to a physician of the student's own choice.

College Year

The school year of 36 weeks is divided into two semesters of 18 weeks each. Summer sessions of six and eight weeks are 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

Grade reports are sent out at the end of each semester. Mid-semester grades reports are prepared for Freshmen only during their first semester of residence at Calvin College.

Each student receives one final grade in each course which he takes. This grade is a combination of the results of classwork, tests and final examination. Grades are indicated by letters. The honor point value assigned to grades is indicated in the following table:

A	Excellent	4
B	Good to very good	3
C	Graduation average	2
D	Unsatisfactory; just passable	1
F	Failure	0
X	Absent from examination	0
I	Incomplete work	0
W	Withdrawn	0
+	Add .3 honor points per registered hour (effective September, 1962)	+ .3
-	Subtract .3 honor points per registered hour (effective September, 1962)	- .3

To meet graduation requirements the student must satisfactorily complete 125 hours of credit with an average of two honor points for each registered hour. Honor points are computed on the basis of registered hours.

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

If a student is absent from a final examination the grade X may be given. This grade must be removed by taking the examination at the time scheduled for re-examination. If the examination is not taken within one year, the grade X automatically becomes F.

The number of honor points earned in a course is determined by multiplying the number of honor points received per registered hour by the number of registered hours in a given course. For example, a grade of B in a four-hour course gives 3×4 , or 12 honor points. A grade of B+ in a four-hour course gives 3.3×4 , or 13.2 honor points. A grade of B- in a four-hour course gives 2.7×4 , or 10.8 honor points.

Grade-point Average

A student's grade-point average may be obtained by dividing the total number of honor points earned by the total number of registered hours for which the student enrolled during any period. Cumulative and current semester totals and grade point averages are indicated on the grade report.

Dean's List

To gain a place on the Dean's List a student must:

1. Have registered for at least 12 hours of work during the semester.
2. Have a grade-point average of 3.50 or higher for the semester based upon letter grades and pluses and minuses.

"I" Incomplete

The grade I signifies the absence of a certain amount of reading to be completed, or of papers to be handed in. This grade 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 directed teaching, inability to obtain necessary books, etc. To remove a grade of I or X 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 grade of I or X within the allotted time, *the grade automatically becomes F*.

Seniors must have all incompletes removed by May 1 of the year in which they expect to graduate.

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 Registrar of the College and the instructor concerned.

"W" Withdrawn

A grade of W is given in a course when a student officially withdraws from that course or from the College at a time preceding the established date for withdrawing from courses without penalty. A student may not withdraw from a course without penalty after November 1 of the first semester and after March 15 of the second semester.

WP is given to indicate that a student has officially withdrawn from a course after the penalty date and that he was doing passing work in that course when he withdrew.

WF is given to indicate that a student has officially withdrawn from a course after the penalty date and that he was doing failing work in that course when he withdrew.

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.

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.

Latest Date of Registration

No student will be permitted to enroll after the first week of classes without the permission of the Registrar.

Schedule Changes

No schedule changes will be permitted after the second week in any semester.

Dropping of Courses

After the second week of classes no student may drop a subject without the approval of his faculty counselor and the Registrar. Such permission will be granted only in exceptional cases after November 1 of the first semester and after March 15 of the second semester.

Auditing a Course

To audit a course a student must meet the requirements for admission to Calvin College. There is no additional charge for full-time students. The fee for students who are not enrolled full time will be one-half of the regular hourly charge. Anyone desiring to audit a class should make application for this at the time of registration. No one will be permitted to audit a class unless he has the permission of both the Registrar and the instructor of the class. If a student has not previously registered he must pay a matriculation fee of \$5.

Auditors are required to attend class and conduct themselves in class just as if they were full-time students working for credit. They are not required to take tests or final examinations and do not receive credit.

Class Visitors

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

Dismissal

Admission to Calvin College is a privilege, not a right. This privilege may be withdrawn from any student whose presence is regarded by the college authorities as undesirable.

Withdrawal During a Semester

Students who desire to discontinue College during a semester must present a Withdrawal Request at the Registrar's Office signed by either the Dean of Men or the Dean of Women.

Use of Automobiles

Automobiles owned or operated by Calvin students must be properly registered with the College and carry an official college automobile permit. They may be parked only in approved parking places when in the vicinity of the campus.

All students may apply for college automobile permits. It is within the discretion of the college administration to disqualify any applicant by reason of demonstrated academic or financial deficiency. The fee for each permit is \$3 per year.

Students are held responsible for full knowledge of these approved parking places as well as all other student automobile regulations. The use of an automobile not properly registered, as well as all parking violations, will be dealt with by means of established financial penalties, and also, if necessary, by stringent action of the Discipline Committee.

Injuries Sustained While Attending Calvin College

All students are reminded that ordinarily the College is not liable for injuries sustained by students in their activities as students, even though such injuries occur upon the college premises; for example, in required laboratory work or physical education classes. The College does not undertake to be an insurer of its students. The liability of the College under the law must be based on fault. It is necessary, in order to establish liability of the College for such injuries, not only to prove negligence or carelessness on the part of the College, but also to show that the student was free from any negligence or carelessness which might have contributed to the injuries.

Because of this fact, any liability insurance policy which the College might have does not and cannot provide reimbursement for medical costs resulting from such injuries. Hence, each student or prospective student is urged to review his personal health and accident insurance status. If he is no longer covered by his father's family plan (normally coverage expires upon reaching the age of 19), and he does not have an individual policy, we suggest that he participate in the Student Group Plan available through the College.

Contact the Business Office for details.

REQUIREMENTS FOR GRADUATION

The College graduates students from the following courses: General College, Pre-Seminary, Education, Pre-Medical, Pre-Dental, Pre-Law, Pre-Engineering, Pre-Business Administration, Pre-Nursing, and Pre-Medical Technology.

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

All full-time students registered at Calvin College are required to take courses in Bible. This requirement must include Bible 301. Students in residence for a full year are required to complete three semester hours; those in residence for two years at least six semester hours; those in residence three or four years at least nine semester hours.

By a SEMESTER 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, Physical Science, Physics, Political Science, Psychology, Sociology, and Speech.

All prescribed freshman and sophomore courses must be completed in the first two years. This includes required physical education.

A student enrolling for more than 18 hours a semester must have the approval of his academic counselor or the Registrar.

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

Every candidate for a baccalaureate degree, a three-year pre-professional diploma, or a provisional teacher's certificate must file an application to graduate, in the Registrar's Office, not later than the beginning of the semester or summer session in which he expects to receive his degree or certificate.

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

BACHELOR OF ARTS - GENERAL COLLEGE COURSE

The requirements for the Bachelor of Arts - General College Course degree apply to all four-year students who complete the curricula outlined below:

General College
*Pre-Seminary
Pre-Medical
Pre-Dental

Pre-Law
Pre-Engineering
Pre-Business Administration
Music Major

*Students who plan to pursue the pre-seminary curriculum while completing the requirements for a General College Course must, if they wish a recommendation for admission to the Seminary, take all of the prescribed subjects listed on page 63.

General College

1. **AMOUNT OF WORK.** The student must complete 125 hours of work.
2. **GRADE OF WORK.** The student must secure a total of 250 honor points for the 125 hours of work. In other words, he must obtain an average grade of C. Honor points are computed on the basis of registered hours.
3. **PRESCRIBED WORK.** Of the 125 hours required, the following are prescribed:

Bible 103, 206, 301	9
English 103, 104	6
History (101, 102 for entering Freshmen)	6
Philosophy (not including Logic)	6
†Mathematics 109, Physical Science 110, Biological Science 111	12
Foreign Language	(see following explanation)
Physical Education	(See page 54)

FOREIGN LANGUAGE REQUIREMENTS

- a. Students will be required to complete the equivalent of two years (four semesters) of one foreign language and one year (two semesters) of a second foreign language. One of these must be an ancient language and the other a modern 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. However, a foreign language taken in high school is not credited toward a major or a minor nor toward the 125 hours required for graduation.
- c. The foreign language requirements must be completed by the end of the sophomore year.
- d. In exceptional cases, the Registrar of the College may approve a deviation from any or all the above rules.

4. DISTRIBUTION OF WORK. MAJORS AND MINORS

All students pursuing the course leading to a General College A.B. degree *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, Geography, Mathematics, Physics, Psychology.

†Mathematics 109 is not required of freshmen in 1963-'64. Entering freshmen should consult counselors concerning required science courses.

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

The student must distribute the total 125 hours (incl. those prescribed) among the three groups, complying with the following restrictions:

- a. At least 24 semester hours in one subject chosen from one of the above groups, I, II, or III. This constitutes a major. To make certain that he meets the major sequence requirements of his department, the student should check the requirements listed under Description of Courses.
- b. At least 12 semester hours (15 semester hours for a Teacher's Certificate) in one subject, other than the major subjects, but in the same group from which the major subject is chosen. This constitutes the required minor in the major group.
- c. At least 18 semester hours chosen from one of the other two groups, that is, other than the major group. At least 12 of these 18 semester hours must be in one subject (15 semester hours for a teacher's certificate). This constitutes a second minor.

The student who elects 15 semester hours in each of his two minors, and the required 24 semester hours for a major, is eligible for a provisional certificate provided he meets the requirements stated in paragraph 6.

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

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 hours.

5. DEGREES A.B. and B.S. 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 PROVISIONAL TEACHER'S CERTIFICATE. To be eligible for recommendation by Calvin College for a State Provisional Teacher's Certificate, a student must apply for admission to the Teacher-Education Program as explained on pages 72-79 and meet its requirements.

Directed Teaching must be taken at Calvin College to receive credit for graduation and to be recommended for a State Provisional Teacher's Certificate. This is in keeping with a general practice among colleges that student teaching be taken at the institution where the degree is earned and that is to recommend a student for a teaching certificate.

Pre-Seminary

The student who completes the prescribed Pre-Seminary curriculum will have met all the requirements for a General College degree. He will have a major sequence in Greek (including Greek and Roman History) and minors in English, Modern Foreign Language, and Philosophy.

1. AMOUNT OF WORK. The student must complete 125 hours of work. To receive the Faculty's recommendation for admission to Calvin Seminary the student must complete the 125 hours listed below.

2. **GRADE OF WORK.** The student must secure a total of 250 honor points for the 125 hours of work. In other words, he must obtain an average grade of C. Honor points are computed on the basis of registered hours. To receive, in addition, the Faculty's recommendation for admission to Calvin Seminary, the student must obtain one and two-thirds as many honor points as hours of credit, effective as of September, 1954, and two and two-thirds as many honor points as hours of credit, effective beginning September 1957.

3. **PRESCRIBED WORK.** The following courses are prescribed:

Bible 103, 206, 301	9	English 103, 104 and two of the following: 308, 309, 310, 329	12
Biology 111	4	German - See Dutch	
*Dutch or German - The elementary and intermediate courses in one of these languages	20	†Greek 101, 102, 201, 202, 313, 314	20
Economics, Political Science, or Sociology. Choice of a 6-hour sequence:		†History 101, 102, 311, 312	12
Economics 201, 202		‡Latin 105 (or 201), 208	6
Political Science 203, 204, or Sociology 203, 204		Mathematics 109	4
Three hours in one of the two fields not chosen for the 6-hour sequence. (In any case, the student must elect 3 hours of Sociology.)	9	Philosophy 200	3
Education - See Psychology		Philosophy 220, 301, 302	9
		Physical Science 110	4
		Political Science - See Economics	
		Psychology 201 and either Psychology 202 or Education 301	6
		Sociology - See Economics	
		Speech 103, 104, 205	7

*Each pre-seminary student shall be required to take three years of Dutch or German (in terms of college credit) with the option of eliminating the third year if, at the end of the second year, he can pass an examination demonstrating reading competence in the language.

†In exceptional cases, and only with the permission of the Dean, students may exercise the option of taking Greek 319-320 instead of History 311-312.

‡The student who has not had the equivalent of first year college Latin in high school will have to make this up in college but may not count the credit which he earns in freshman Latin toward the 125 semester hours required for the degree.

Freshman Year

FIRST SEMESTER		SECOND SEMESTER	
	Hours		Hours
Bible 103 (1st or 2nd Sem.)	3	†Mathematics 109	4
English 103	3	English 104	3
*Dutch or German 101	4	Dutch or German 102	4
History 101	3	History 102	3
Latin 105 (or 201)	3	Latin 208	3
	<hr/>		<hr/>
	16		17

Sophomore Year

FIRST SEMESTER		SECOND SEMESTER	
	Hours		Hours
Physical Science 110	4	Biological Science 111	4
English (as prescribed)	3	English (as prescribed)	3
Greek 101	4	Greek 102	4
Dutch or German 201	3	Dutch or German 202	3
Speech 103	2	Speech 104	2
	<hr/>		<hr/>
	16		16

†Mathematics 109 is not required of freshmen in 1963-'64. Entering freshmen should consult counselors concerning required science courses.

Junior Year

FIRST SEMESTER		SECOND SEMESTER	
	<i>Hours</i>		<i>Hours</i>
Bible 206 (st or 2nd Sem.)	3	Greek 202	3
Dutch or German	3	Dutch or German	3
Greek 201	3	Econ., Pol. Sci. or Soc. (as prescribed)	3
Econ., Pol. Sci. or Soc. (as prescribed)	3	Philosophy 220	3
Philosophy 200	3	Psychology 201	3
	15		15

Senior Year

FIRST SEMESTER		SECOND SEMESTER	
	<i>Hours</i>		<i>Hours</i>
Bible 301	3	Econ., Pol. Sci. or Soc. (as prescribed)	3
Greek 313	3	Greek 314	3
History 311	3	History 312	3
Philosophy 301	3	Philosophy 302	3
Speech 205	3	Psychology 202 or Educ. 301 ..	3
	15		15

*If the student is required to complete three years of Dutch, he must arrange to include this in his junior or senior year.

Three-Year Pre-Medical and Pre-Dental

(See note regarding Pre-Medical entrance requirements on page 31)

1. AMOUNT OF WORK. The student must complete 94 hours of work.
2. GRADE OF WORK. The student must secure a total of 188 honor points for the 94 hours of work. In other words, he must obtain an average grade of C. Honor points are computed on the basis of registered hours.

To obtain faculty recommendation for admission to a Class A medical school he must in the three years of residence obtain a total of 282 honor points, representing an average of B.

3. PRESCRIBED WORK. The following courses are prescribed:

Freshman Year

FIRST SEMESTER		SECOND SEMESTER	
	<i>Hours</i>		<i>Hours</i>
Bible 103 (st or 2nd Sem.)	3	Biology 110 or 109	4
Biology 109 or 110	4	Chemistry 104	4
Chemistry 103	4	English 104	3
English 103	3	Mathematics 104	3
History 101	3	History 102	3
	17		17

Sophomore Year

FIRST SEMESTER		SECOND SEMESTER	
	<i>Hours</i>		<i>Hours</i>
Biology 207	3	Biology 208	4
Chemistry 203	5	Chemistry 204	3
Foreign Language	4	Foreign Language	4
Physics 201	4	Physics 202	4
	16		15

Junior Year

FIRST SEMESTER		SECOND SEMESTER	
	<i>Hours</i>		<i>Hours</i>
Bible (1st or 2nd Sem.)	3	Biology 306	2
Bible 301	3	Biology 311	5
Psychology 201	3	Chemistry 302	4
Chemistry 301	4	Elective	3
Elective	2		14
	15		

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

One and one-half units of algebra in high school is a prerequisite for trigonometry.

For admission to the University of Michigan School of Medicine, the foreign language requirement may be met by one college year in any of the following languages: French, German, Spanish, Latin, or Greek. High school credits in languages will not be acceptable in lieu of this requirement or any part of it.

Students desiring to enter a medical school other than that of the University of Michigan should consult the catalog of the institution for foreign language requirements.

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

4. DISTRIBUTION OF ELECTIVES. For their electives students should choose such subjects as are required for admission to the medical or dental school which they expect to attend eventually.

5. DIPLOMA AND DEGREE. Upon satisfactory completion of this course, and one year of successful work in a recognized medical or dental school, the student will be eligible for the degree of Bachelor of Science on the Combined Curriculum Plan in Letters and Medicine, or on the Combined Curriculum Plan in Letters and Dentistry.

An average record of B is required for recommendation to a Class A medical school.

It is the responsibility of the student who desires to secure a baccalaureate degree on the Combined Curriculum Plan to notify the Registrar's Office by April 1 of the year in which he expects to receive the degree.

Four-Year Pre-Medical

1. **AMOUNT OF WORK.** The student must complete 125 hours of work.
2. **GRADE OF WORK.** The student must secure a total of 250 honor points for the 125 hours of work. In other words, he must obtain an average grade of C. Honor points are computed on the basis of registered hours.

However, for admission to Class A medical schools an average grade equivalent to three 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 College Course, instead of the Bachelor of Arts.
 - b. The student must meet the prescribed course requirements of the Three-Year Pre-Medical Course, and, if possible, in the order given.
4. **DISTRIBUTION OF ELECTIVES.** 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 307 and Chemistry 204.

Three-Year Pre-Law

(See note regarding Pre-Law entrance requirements on page 31.)

For those students who wish to secure a baccalaureate degree from Calvin College on the combined curriculum plan, the following requirements must be met:

1. **AMOUNT OF WORK.** The student must complete 94 hours of work.
2. **GRADE OF WORK.** The student must secure a total of 188 honor points for the 94 hours of work. In other words, he must obtain an average grade of C. Honor points are computed on the basis of registered hours. He must secure 282 honor points, representing an average of B, to warrant faculty recommendation to a Class A law school.

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

Bible	9 hours	Math.-Science sequence	12 hours
English 103-4	6 hours	Philosophy	6 hours
History 101-2	6 hours	Foreign Language	

(See requirements on page 31.)

In addition, the student, in consultation with the pre-law adviser, must select a major and two minors. (Suggested fields are political science, history, economics, and philosophy.) Since the student cannot complete the required hours for a recognized major or minor, it is expected that he accumulate as many hours as possible in his selected fields.

For their electives, students should choose such subjects as are required for admission to the law school which they expect eventually to attend.

A suggested program for a three-year pre-law student who has selected a history major would be:

Freshman Year

FIRST SEMESTER	Hours	SECOND SEMESTER	Hours
Bible 103 (1st or 2nd Sem.)	3	Mathematics 109	4
English 103	3	English 104	3
History 101	3	History 102	3
Foreign Language	4	Foreign Language	4
Speech	2	Speech	3
	15		17

Sophomore Year

FIRST SEMESTER	Hours	SECOND SEMESTER	Hours
Bible (1st or 2nd Sem.)	3	Foreign Language	3
Foreign Language	3	Biological Science	4
Physical Science	4	Political Science 204	3
Political Science 203	3	History 216	3
History 215	3	Elective	3
	16		16

Junior Year

FIRST SEMESTER	Hours	SECOND SEMESTER	Hours
Bible	3	History 314 or 316	3
History 313 or 315	3	Philosophy	3
Philosophy	3	Economics 202	3
Economics 201	3	Speech 202	1
Philosophy 200	3	Electives	5
	15		15

4. **DIPLOMA AND DEGREE.** On satisfactorily completing this course, and one year of successful work in a recognized law school, the student will be eligible for the degree of Bachelor of Arts on the Combined Curriculum Plan in Letters and Law.

It is the responsibility of the student who desires to secure a baccalaureate degree on the combined curriculum plan to notify the Registrar's Office by April 1 of the year in which he expects to receive the degree.

Three-Year Transfers

Students who plan to enter law school after three years at Calvin, but who do not intend to meet graduation requirements at Calvin, must complete 94 hours of the requirements for the General College Bachelor of Arts degree (see page 61). The selection of a program adequate for entrance into a law school should be made in consultation with the pre-law adviser.

Four-Year Pre-Law

Students who plan to enter a law school upon graduation from Calvin College are expected to complete the requirements for the General College Bachelor of Arts degree (see page 61). The selection of the majors and minors in their program should be made in consultation with the pre-law adviser.

Pre-Engineering

(See note regarding Pre-Engineering entrance requirements on page 31.)

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 secure a total of 188 honor points for the 94 hours of work. In other words, he must obtain an average grade of C. Honor points are computed on the basis of registered hours.

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

THREE-YEAR GENERAL PRE-ENGINEERING COURSE

Freshman Year

FIRST SEMESTER		SECOND SEMESTER	
	<i>Hours</i>		<i>Hours</i>
Bible 103 (1st or 2nd Sem.)	3	Chemistry 104	4
Chemistry 103	4	Engineering 102	3
Engineering 101	3	English 104	3
English 103	3	Mathematics 111	4
Mathematics 103	3	Electives	2
	16		16

Sophomore Year

FIRST SEMESTER		SECOND SEMESTER	
	<i>Hours</i>		<i>Hours</i>
Economics 201 or 307	3	Economics 202 or 203	3
Engineering 205	3	Speech 103	2
Mathematics 112	4	Mathematics 211	5
Physics 203	6	Physics 204	6
	16		16

Junior Year

FIRST SEMESTER		SECOND SEMESTER	
	<i>Hours</i>		<i>Hours</i>
Bible (1st or 2nd Sem.)	3	Engineering 304	4
Engineering 301	3	Engineering 306	3
Mathematics 212	5	English 202 or 204	3
Philosophy 201	3	Philosophy 202	3
Physics 303 or Elective	3		
	17		13

THREE-YEAR CHEMICAL PRE-ENGINEERING COURSE

Freshman Year

The same subjects as the three-year general Pre-Engineering course above, except that Chemistry 105 and 106 replaces Chemistry 103 and 104.

Sophomore Year

The subjects should be chosen in consultation with the student's adviser.

Junior Year

The subjects should be chosen in consultation with the student's adviser.

NOTE: Two units of algebra credit will be required by September 1964 in addition to the present requirement of $\frac{1}{2}$ unit of credit in trigonometry. Deficiency in these entrance requirements delays the program.

4. **DIPLOMA AND DEGREE.** Upon satisfactory completion of either course, and completion of the requirements for a bachelor of science degree in engineering in a recognized engineering school, the student will be eligible for the bachelor of science on the Combined Curriculum Plan in Science and Engineering.

It is the responsibility of the student who desires to secure a baccalaureate degree on the combined curriculum plan to notify the Registrar's Office by April 1 of the year in which he expects to receive the degree.

Abbreviated Pre-Engineering Course

For a student who is unable to take more than two years at Calvin College, a two-year program will be arranged to satisfy, as nearly as possible, the requirements of the Engineering School which he plans to attend. This program must be arranged with either the engineering course adviser or the Registrar of the College.

Major in Business Administration

Candidates for a Bachelor of Arts 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. 61). For students interested in Business Administration but who desire to earn a Bachelor of Business degree at one of the universities a two- or three-year course can be arranged. Since the emphasis in the professional schools today is upon a broad liberal arts training, however, the student should consider the advisability of remaining at Calvin College for four years and transferring to the university after he receives his A.B. degree. He can then enroll in the Master of Business Administration program at the university. This kind of preparation for a business career is highly recommended by Business Administration School officials. To complete the major group requirements he should elect 24 hours in economics and 12 hours in another department listed in Group III (see p. 62). The student may elect

to complete his minor group requirements by selecting subjects either in Group I or 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 of Arts 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.

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. The following requirements apply:

- a. The general course requirements as prescribed for either the General College Course (see p. 61) or the Education Course (see p. 72).
- b. Sufficient proficiency at the piano to pass the minimum keyboard test.
- c. Participation in at least one music ensemble (choir, band, or orchestra) each semester.
- d. The following courses in basic musicianship:

Music 103-104, 203-204 (Theory)	12 hours
Music 305-306 (History of Music)	6 hours
- e. The specific course requirements for one of the following five areas of concentration in music:
 1. MUSIC HISTORY AND LITERATURE

Advanced courses in the History and Literature of Music	12 hours
*Applied Music	8 hours
Electives in Music	2-4 hours
 2. MUSIC THEORY

Advanced courses in Music Theory	12 hours
*Applied Music	8 hours
Electives in Music	2-4 hours
 3. SOLO INSTRUMENT OR VOICE

†Applied Music (Private lessons in one instrument or voice) up to	16 hours
Electives in Music	6-8 hours
 4. INSTRUMENTAL MUSIC EDUCATION

Music 315-316 (Arranging)	6 hours
Music 313-314 (Conducting)	2 hours
Music 213-214 and/or 215-216 (Band and/or Orchestra) (Participation in at least one each semester)	8 hours
†Applied Music (Private lessons on the major instrument, of which at least four semesters are required)	4-8 hours
Music 333 (Teaching of Instrumental Music)	3 hours

Proficiency on secondary instruments, equivalent to two semesters each on string, wood-wind, and brass instruments and one semester on percussion instruments and also one semester in voice.

*More than eight hours of applied music may be taken but only eight will be credited toward degree requirements.

†More than 16 hours of applied music may be taken but only 16 will be credited toward degree requirements.

5. VOCAL MUSIC EDUCATION

Music 107-108 and/or 207-208 (Choir)	8 hours
(Participation in at least one each semester)	
Music 117-118, 217-218 (Voice)	4 hours
Music 331 and 332 (Methods of teaching)	6 hours
Music 313-314 (Conducting)	2 hours
Music 141-142 or equivalent (Piano)	2 hours
Electives in Music	3-5 hours

Candidates for the A.B. degree in the Education Course, or for the A.B. degree in the General College Course, with a Michigan State Teacher's Certificate, must elect either the concentrate in Instrumental Music Education or the concentrate in Vocal Music Education.

Candidates for the A.B. degree in the General College Course may elect any one of the five areas of concentration given above. If they choose Instrumental Music Education or Vocal Music Education, they will be expected to complete the requirements for the Michigan State Teacher's Certificate (see p. 72) in addition to the requirements given under "a" through "e" (see p. 70).

If the student intending to major in music is not a pianist or organist, it is recommended that piano study begin *before* entering Calvin. Non-credit piano lessons will be required of all prospective music majors who cannot successfully pass the minimum key board requirements test during the opening weeks of school.

Minor in Music

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

Music 103-104 (Theory)	6 hours
Music 211-212 (Music Literature)	
or	
Music 305-306 (Music History)	6 hours

Music minors interested in earning a Michigan State Teacher's Certificate must add to these requirements Music 331, or Music 332.

Church Music

Students who are interested in a career in church music should plan to do graduate work in this field. Undergraduate preparation should consist of the concentrate in Organ. In addition the student should elect Music 303-304 (Counterpoint), Music 219-220 (Church Music), Music 313-314 (Conducting), and Music 117-118 (Voice).

Concerts and Tours

There are several musical organizations at Calvin College, offering the student opportunity for singing or playing.

The Oratorio Society, 400 to 500 voices, has a long tradition of presenting Handel's *Messiah* at Christmas time, and another oratorio such as the *Elijah* or the *Creation* each spring.

The A Cappella Choir of 65 selected voices is well known throughout the United States and Canada through the annual tours taken during spring vacation. Usually the choir appears in 15 or more concerts.

The Radio Choir is nationally known for its singing on the "Back to God Hour" broadcasts each Sunday. This choir also engages in an annual tour.

The College Orchestra plays the orchestral accompaniment to the oratorios and plays at least one full concert during the school year.

The College Concert Band plays many concerts in and around Grand Rapids and goes on a tour to the east or west during the spring vacation.

The College Chamber Band is a select group of musicians chosen from the Concert Band to play literature particularly suitable to a smaller wind ensemble.

The College Varsity Band is organized as an activities band, performing at athletic events, student activities, Knollcrest functions, and at the annual spring band concert.

The Meistersingers, a student-directed chorus of selected male voices, serves an important purpose on our campus. Organized primarily to sing at campus functions such as Home Coming and the annual Moonlight Musicale at Knollcrest, the choir also sings several sacred concerts each season.

BACHELOR OF ARTS IN EDUCATION — TEACHER EDUCATION PROGRAM

To obtain a Bachelor of Arts degree in Education, and to secure a Michigan State Provisional Teacher's Certificate a student must be *a citizen of the United States or have filed a statement of intentions*, must be admitted to the Teacher-Education Program and complete its requirements for either the elementary or secondary level. Students interested in special fields in education should confer with the Director of Certification.

Admission to the Program. — To be admitted to the Teacher-Education Program a student may make formal application to the chairman of the Education Department as soon as he has sophomore standing. He should do this before the close of the sophomore year in order that he may plan his course selections in conference with his adviser. Delay of application until the junior or senior year may make it difficult to complete requirements in four years.

To qualify for admission to the Teacher-Education Program a student must give evidence of the following:

1. A minimum grade-point average of 2.0
2. The ability to communicate effectively and correctly
3. Physical and emotional health
(The College reserves the right to call for an examination.)

4. Personality qualities essential to becoming a competent teacher, such as,

Enthusiasm for teaching
Desire to learn and study
Self-discipline

5. Moral and spiritual fitness in keeping with the Christian faith.

Retention and Continuation in the Program — The status of a student in the Teacher-Education Program is under constant review and subject to change when standards for admission are not maintained.

At the time of registration at the beginning of the junior year a copy of the student's schedule, signed by his course adviser, is filed with the Education Department. Any change in course selections following registration must be approved by a student's counselor and submitted by the student to the chairman of the Education Department.

A student is required to declare his major field of concentration not later than at the time he becomes a junior. Prospective elementary teachers shall select their specific courses within their major and minor fields of concentration in consultation with the coordinator of elementary education. This counselor likewise approves of other course selections according to the needs of the student.

Prospective secondary school teachers shall select specific courses within their major and minor fields of concentration in consultation with the chairmen of the departments involved and with the approval of the coordinator of secondary education.

The Education Department, in cooperation with the student's faculty course adviser (in the junior and senior years this will normally be the chairman of the department in which the student is majoring), will keep a check on the student's program.

Standards for Admission to Directed Teaching

1. Acceptance in the Teacher-Education Program
2. Completion of 90 semester hours of college studies (Normally transfer students must be in residence the semester immediately prior to directed teaching.)
3. Completion of all professional course requirements. See III. B. below.
4. Competence in subject matter
 - Elementary: adequate preparation in all the fields taught in the elementary school.
 - Secondary: at least 24 semester hours (30 hours required for graduation) must be completed in the major field of concentration.

Directed Teaching must be taken at Calvin College to receive credit for graduation and to be recommended for a State Provisional Teacher's Certificate. This is in keeping with a general practice among colleges that student teaching be taken at the institution where the degree is earned and that is to recommend a student for a teaching certificate.

Curriculum and Major and Minor Sequences for Elementary Teachers

- I. **AMOUNT OF WORK.** The student must complete 125 hours of work.
- II. **GRADE OF WORK.** The student must secure a total of 250 honor points for the 125 hours of work. (Average Grade of C.)
- III. **PRESCRIBED WORK.** Of the 125 hours required, the following are prescribed:

A. <i>General Education (Degree Requirements):</i>	<i>Hours</i>
Bible 103, 206, 301	9
Biology	4
Physical Science	4
Mathematics	4
English 103-104	6
History 101-102	6
Psychology 201	3
Speech 109 or 303	3
Physical Education	3 semesters
Foreign Language	14

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

Four semesters of one foreign language in *high school* is the equivalent of two semesters of the language in college.

B. <i>Professional Courses:</i>	<i>Hours</i>
Psychology 202	3
Education 203-204	6
Education 315	3
Education 322	3
Education 343	8

C. <i>Additional Courses:</i>	<i>Hours</i>
Art 201 or 306	3
Geography	3
Music 221-222	4
Psychology 204	3
Sociology 203 or 204	3

At least 9 of these 16 hours, or their equivalent, will in all likelihood be completed in the major and minor fields which are outlined below.

IV. DISTRIBUTION OF WORK. Major and Minor Sequences,

A student is required to complete 30 semester hours in one of the following study areas and 18 semester hours in another. The following major and minor sequences are recommended for counseling purposes.

<i>English Studies: Major sequence — (30 hours)</i>	<i>Hours</i>
Required: English 103-104	6
English 201-202	6
Speech 303-309	6
Education 225	3
Recommended electives: English 203-204	6
English 309	3
Speech 202	1
Speech 215	2
	(21 hours)
	(9 hours)

Minor sequence — (18 hours)	
Required:	English 103-104 6
	Speech 109 or 303 3
	Speech 215 2 (11 hours)
Recommended electives:	English 203-204 6
	Other courses listed under Major sequence. (7 hours)
<i>Art and Music Studies: Major sequence — (30 hours) Hours</i>	
Required:	Art 306, 207-208 9
	Music 221-222 4 (13 hours)
Recommended electives:	Art 201 3
	Art 202 3
	Music 103-104 6
	Music 211-212 6
	Music 305-306 6
	Music 313 1
	Music 314 1
	Music 331 3 (17 hours)
Minor sequence — (18 hours)	
Required:	Art 201 or 306 3
	Music 221-222 4 (7 hours)
Recommended electives:	May be selected from courses listed under Major sequence. (11 hours)
<i>Social Studies: Major sequence — (30 hours) Hours</i>	
Required:	History 101-102 6
	History 301-302 (or 209-210) 6
	Sociology 203 or 204 3
	Geography 105 3
	Political Science 203 3 (21 hours)
Recommended electives:	History 205-206 6
	History 305-306 6
	Geography 106, 107 or 109 3
	Political Science 204 3
	Economics 103 or 203 3
	Philosophy 205 3
	Sociology 203 or 204 3
	Sociology 309 3
	Sociology 310 3 (9 hours)
Minor sequence — (18 hours)	
Required:	History 101-102 6
	Geography 105 3
	Sociology 203 or 204 3 (12 hours)
Recommended electives:	History 301-302 or 209-210 6
	Political Science 203 3
	Other courses listed under Major sequence (6 hours)
<i>Science Studies: Major sequence — (30 hours) Hours</i>	
Required:	Biology 4
	Physical Science 4
	Mathematics 109 4
	Psychology 201-204 6 (18 hours)
Recommended electives:	Biology 105-106 6
	Biology 107 4
	Psychology 209, 212, 311, 302 3 (12 hours)

Minor sequence — (18 hours)

Required: Biology	4
Physical Science	4
Mathematics	4
Psychology 201-204	6 (18 hours)
Recommended electives: Psychology 209 or 212	3
Biology 105 or 106	3

V. ILLUSTRATIVE PROGRAM FOR ELEMENTARY TEACHERS

Freshman Year

FIRST SEMESTER		SECOND SEMESTER	
	<i>Hours</i>		<i>Hours</i>
Bible 103 (1st or 2nd Sem.)	3	Phys. Science	4
Mathematics 109	4	English 104	3
English 103	3	History 102	3
History 101	3	Foreign language	3 or 4
Foreign language	3 or 4	Electives	2
	<hr/>		<hr/>
	16 or 17		15 or 16

Sophomore Year

FIRST SEMESTER		SECOND SEMESTER	
	<i>Hours</i>		<i>Hours</i>
Bible 206 (1st or 2nd Sem.)	3	Geography	3
Art 201 or 306	3	Psychology 201	3
Biology	4	Speech 303 or 109	3
Sociology 203 or 204	3	Foreign Language or Bible	3
Foreign language or		*Electives	3
*Electives	2		<hr/>
	<hr/>		15
	15		

*Electives may be major, minor, or free electives. They are to be chosen in consultation with the counselor. See pages 74-75 for recommended electives.

Junior Year

FIRST SEMESTER		SECOND SEMESTER	
	<i>Hours</i>		<i>Hours</i>
Bible 301	3	Education 204	3
Education 203	3	Music 222	2
Music 221	2	Psychology 202	3
Psychology 204	3	*Electives	8
*Electives	5		<hr/>
	<hr/>		16
	16		

Senior Year

(Semesters may be alternated)

	<i>Hours</i>		<i>Hours</i>
Education 315	3	*Electives	15
Education 322	3		
Education 343	8		
	<hr/>		
	14		

*Electives may be major, minor, or free electives. They are to be chosen in consultation with the counselor. See pages 74-75 for recommended electives.

The total number of semester hours for the four years must be at least 125.

For 1963-'64 freshmen and sophomores are required to follow the above program. Upperclassmen are advised to follow it as closely as possible, depending upon courses previously completed.

Students who enrolled as freshmen prior to September 1962, have the option of graduating under either the old or the new Teacher-Education Program. The new program is not retroactive and is not mandatory for such students. In any event, the student must meet all of the requirements of the program of his choice.

Curriculum and Major and Minor Sequences for Secondary Teachers

- I. AMOUNT OF WORK. The student must complete 125 hours of work.
- II. GRADE OF WORK. The student must secure a total of 250 honor points for the 125 hours of work. (Average Grade of C.)
- III. PRESCRIBED WORK. Of the 125 hours required, the following are prescribed:

A. <i>General Education (Degree Requirements):</i>	<i>Hours</i>
Bible 103, 206, 301	9
Biology	4
Physical Science	4
Mathematics	4
English 103-104	6
History 101-102	6
Psychology 201	3
Foreign Language	14
Physical Education	3 semesters

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

Four semesters of one foreign language in *high school* is the equivalent of two semesters of the language in college.

B. <i>Professional Courses</i>	<i>Hours</i>
Psychology 202	3
Education 203-204	6
Education 314	3
Education 344	8

IV. MAJOR AND MINOR SEQUENCES

A student is required to complete a major of 30 hours and a minor of 18 hours, these to be selected from the following subject matter areas:

Art	Geography	Music
Biology	German	Physics
Chemistry	History	Physical Education
Economics	Political Science	Sociology
English	Latin	Speech
French	Mathematics	

Prospective secondary school teachers, when selecting specific courses within their major and minor fields of concentration, should make their selections in consultation with the chairmen of the departments involved and with the approval of the Education Department counselor.

The Michigan State Department of Public Instruction does not consider either Bible or philosophy as a major or minor for a teacher's certificate.

Psychology may be selected as a minor, provided sociology is not selected as a major or minor. Psychology 202 may not be included in the psychology minor.

V. ILLUSTRATIVE PROGRAM FOR SECONDARY TEACHERS

Freshman Year

FIRST SEMESTER		SECOND SEMESTER	
	<i>Hours</i>		<i>Hours</i>
Bible 103 (1st or 2nd Sem.)	3	English 104	3
English 103	3	Foreign Language	3 or 4
Foreign Language	3 or 4	History 102	3
History 101	3	Phys. Science	4
†Mathematics 109 or elective	4	*Elective	2
	<hr/>		<hr/>
	16 or 17		15 or 16

Sophomore Year

FIRST SEMESTER		SECOND SEMESTER	
	<i>Hours</i>		<i>Hours</i>
Bible 206 (1st or 2nd Sem.)	2	Psychology 201	3
†Biology	4	Education 204	3
Education 203	3	Foreign Language	
Foreign Language		*or elective	3
*or elective	3	*Electives	7
*Electives	4		<hr/>
	<hr/>		16
	16		

Junior Year

FIRST SEMESTER		SECOND SEMESTER	
	<i>Hours</i>		<i>Hours</i>
Bible 301	3	Education 314	3
Psychology 202	3	*Electives	13
*Electives	10		<hr/>
	<hr/>		16
	16		

Senior Year

(Semesters may be alternated)		<i>Hours</i>	
	<i>Hours</i>		<i>Hours</i>
Education 344	8	*Electives	17
*Electives	6		<hr/>

*Electives must be major or minor area subjects to complete requirements, or free electives.
 †Mathematics 109 is not required of freshmen in 1963-'64. Entering freshmen should consult counselors concerning required science courses.

The total number of semester hours for the four years must be at least 125.

General College Course requirements in the freshman and sophomore years may have to be moved up if course sequences in a major area should require this, e.g. History 101-102 may have to be postponed if a student is to start physics in the freshman year.

For 1963-'64 freshmen and sophomores are required to follow the above program. Upperclassmen are advised to follow it as closely as possible, depending upon courses previously completed, and upon course sequence in their major and minor fields.

Students who enrolled as freshmen prior to September 1962 have the option of graduating under either the old or the new Teacher-Education Program. The new program is not retroactive and is not mandatory for such students. In any event, the student must meet all of the requirements of the program of his choice.

Pre-Librarianship

The educational requirement for professional library work is a Bachelor's degree from an accredited college and a Master's degree in library science.

Calvin College offers courses of study which are acceptable for admission to any library school and for any type of specialization. While no special major is required, the course of study should stress a broad cultural background in liberal arts and science. Proficiency in typing should also be acquired. A reading knowledge of a modern foreign language is required.

Pre-library students may be given the opportunity for part-time work experience in the library.

Pre-Library Work Counseling

Detailed information regarding types of library work, library school requirements, and work-study programs may be obtained from the Director of the Library.

Pre-Agriculture, Pre-Forestry, Pre-Home Economics, and Pre-Occupational Therapy

Students interested in specializing in the fields mentioned above should see the Registrar of the College. Curricula can be arranged to enable such students to remain at Calvin for one or two years.

Nursing Program

The Nursing Courses at Blodgett Memorial Hospital in Grand Rapids, Michigan, are 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	
	<i>Hours</i>		<i>Hours</i>
Bible 103 (1st or 2nd Sem.)	3	Biology 106	3
Biology 105	3	English 104	3
English 103	3	Psychology 201	3
Chemistry 101	4	Biology 212 (Nutrition)	3
Nursing Arts including		Chemistry 102 (Pharmacology)	1
Hygiene (Hospital)	(2)	Nursing Arts (Hospital)	(2)
Biology 107	4	Prof. Adjust. I (Hospital)	(1)
	17		13

Upon completion of these two semesters and an additional 27 months of clinical experience at Blodgett Memorial Hospital the student is granted a diploma in nursing by the Blodgett Memorial Hospital School of 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.

Applicants wishing to take the Nursing Program must make application with the Director of the School of Nursing at Blodgett Memorial Hospital. This application should be submitted during the early part of the senior year in high school. No application will be acted upon until all forms are at Blodgett. Admission to the Nursing Program is determined by the Admissions Committee of the Blodgett Memorial Hospital School of Nursing.

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

To qualify for this degree the student must:

1. Meet regular admission requirements to the College, including among high school credits algebra, geometry, and chemistry or physics.
2. Successfully complete 94 semester hours of pre-professional subjects considered fundamental in any liberal arts program. He must secure a total of 188 honor points for the 94 hours of work. In other words, he must obtain an average grade of C. Honor points are computed on the basis of registered hours.
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 Bible 103)	6
Biology, General	8
Biology, Microbiology	4
Biology, Additional*	4
Chemistry, General	8
Chemistry, Additional†	8
English, Freshman	6
English or American Literature	6
Foreign Language	8
History	6
Mathematics	3 or 4
Psychology	3
Sociology, Principles or Problems	3
Philosophy, Perspectives or Ethics	3
Electives	18 or 17
	94

*The remaining biology courses to complete the requirements may be selected from the following subjects: Human Anatomy and Physiology, Comparative Anatomy, Parasitology, Histology, Genetics, or other biology courses acceptable toward a biological science major.

†The other chemistry courses to complete the requirements may be selected from: Qualitative Chemistry, Quantitative Chemistry, Organic Chemistry, Organo-Biochemistry, Physical Chemistry, or other chemistry courses acceptable toward a chemistry major.

Suggested Program

Freshman Year

FIRST SEMESTER		SECOND SEMESTER	
	<i>Hours</i>		<i>Hours</i>
Biology 109	4	Biology 110	4
Chemistry 103	4	Chemistry 104	4
English 103	3	English 104	3
*Foreign Language	4	*Foreign Language	4
	15		15

*If a student has had foreign language in high school, the number of hours prescribed may be reduced by four for each year of a foreign language completed in high school. If this requirement has been met, the student may substitute eight hours of electives.

Sophomore Year

FIRST SEMESTER		SECOND SEMESTER	
	<i>Hours</i>		<i>Hours</i>
Bible 103 (1st or 2nd Sem.)	3	Mathematics	
Biology 107	4	(1st or 2nd Sem.)	3 or 4
Chemistry 303	4	Biology 106	3
History 101	3	Chemistry 304	4
Psychology 201	3	History 102	3
	17	Elective	3
			16 or 17

Junior Year

FIRST SEMESTER		SECOND SEMESTER	
	<i>Hours</i>		<i>Hours</i>
Bible	3	Sociology	3
English 201 or 203	3	English 202 or 204	3
Philosophy 201	3	Electives	9 or 10
Electives	5 or 6		
	14 or 15		15 or 16

Description of Courses

Art

ASSISTANT PROFESSORS VAN LAAR AND BOEVE

201. **Introduction to Art** **Three hours**
Information and practice in the basic elements and principles of art as applied to drawing, values, color, design, lettering, and poster work. The student learns to manipulate various art media. Prerequisite for Art 306.
202. **Printing** **Three hours**
The course aims to give the student experience in the media of wood block printing and silk screen process. Six class hours per week; offered first semester.
207. **Introduction to Design** **Three hours**
Pure design, design in pictorial representation, perspective drawing; various black and white media used in basic art elements, i.e. line, shape, texture, pattern. Work may include three-dimension problems. Six class hours per week.
208. **Introduction to Design** **Three hours**
Continuation of 207. Prerequisite: 207.
Work in color — hue, value, intensity; the utilization of these elements in organization of pure design and pictorial representation. Media to include water colors, tempera, and casein paint. Six class hours per week.
228. **Penmanship**
A statement of acceptable performance in the areas of manuscript, cursive, and on-the-blackboard writing is required of all prospective elementary teachers. Theory and practice. Offered during the second semester only.
231. **An Introduction to the History of the Fine Arts** **Three hours**
A survey of the history of architecture, painting, and sculpture in Ancient, Medieval and Renaissance times. The character of ancient art from Egypt through Rome will be followed by a study of medieval art from its beginning in the early days of the Christian era to its climax in the Gothic period of the thirteenth century. This course will be concluded with an introduction to the art of the Renaissance in Italy to 1600.
232. **An Introduction to the History of the Fine Arts** **Three hours**
Continuation of 231. The history of art from 1600 to the present.
301. **Advanced Painting** **Three hours**
Prerequisite: 207-208.
A study of the traditions in painting emphasizing techniques and methods of communicating ideas visually. Studio work will give opportunity to experiment in various techniques and subjects. Six class hours per week.
302. **Advanced Painting** **Three hours**
Continuation of 301.
An exhibition will be expected of each student at the conclusion of the year. Six class hours per week.
306. **Principles of Art Education** **Three hours**
Prerequisite: 201, or a studio art course.
A course emphasizing methods and techniques of organizing and motivating art instruction. It includes lectures and demonstrations.

Bible

PROFESSOR J. BRATT; ASSOCIATE PROFESSORS WEIDENAAR, BANDSTRA, SMEDES, SPYKMAN, VOS*, AND MINNEMA; ASSISTANT PROFESSORS W. DE BOER AND PRIMUS; VISITING LECTURER HOLWERDA

Students who contemplate a major in Bible should confer with a member of the departmental staff before the beginning of their junior year.

- | | | |
|------|---|--------------------|
| 103. | Biblical Theology | Three hours |
| | A study of the unfolding of the history of redemption as set forth within the historical framework of the Old Testament, Inter Testament, and New Testament eras. Biblical books and Apocryphal literature are analyzed and the major themes of Scripture are explicated. | |
| 203. | Principles of Missions | Two hours |
| | This course begins with a survey of the most pertinent Biblical material data pertaining to missions. From this data and the system of Reformed doctrine in general, the principles of missions are developed with appropriate reference to both message and method, bringing into view the work of missions both at home and abroad. Not open to Freshmen. Bible 206 is a prerequisite. | |
| 204. | History of Missions | Three hours |
| | The record of missionary history throughout the ancient, medieval and modern periods is examined with a view to ascertaining the principles that come to expression, the methods employed, the areas covered, the chief figures, and the measure of success or failure. In the modern period the major revivals in America receive some attention. Not open to Freshmen. Bible 206 is a prerequisite. | |
| 205. | Comparative World Religions | Three hours |
| | An analytical and critical study of the major non-Christian religions of our day, especially Primitivism, Hinduism, Buddhism, and Islam. Attention is given to cultural and religious relationships with Christianity and problems of missionary approach. Not open to Freshmen. Bible 206 is a prerequisite. | |
| 206. | Reformation Theology | Three hours |
| | A study of Christian doctrine as formulated in the Protestant Reformation and refined and elaborated by later Reformed theologians. Comparisons are drawn between the Reformed system and that of other branches of Christendom. Calvin's Institutes of the Christian Religion serves as a basic text. Not open to Freshmen. | |
| 301. | Studies in Calvinism | Three hours |
| | An historically oriented study of Calvinism and its basic concepts. Its origin and development is traced, its impact upon cultures in which it took root as well as the impact of those cultures upon it is assessed, and its contemporary relevance is evaluated. Open <i>only</i> to Juniors and Seniors. | |
| 302. | Biblical Archaeology | Three hours |
| | A study of the pertinent archaeological data which provide a background for or throw light upon the Biblical narrative. Open to Juniors and Seniors. | |
| 303. | General Church History | Three hours |
| | A survey of the history of the Christian Church from its beginnings to the present time. | |
| 304. | American Church History | Three hours |
| | A consideration of the religious history of our country from the emigration period to the present. Attention will be paid to the European background, the early church beginnings in their diversity, the colonial era, the westward movement, and the major social and political developments in their in- | |

*On leave of absence 1963-'64.

- fluence upon the American religious scene. Not open to pre-Seminary students.
306. **History of the Christian Reformed Church** **Three hours**
The historical antecedents and the development of the Christian Reformed Church in America. Not open to pre-Seminary students.
307. **Reformed Confessions** **Three hours**
A study of the creeds in their Biblical basis, historic origin, doctrinal deliverance and practical value as to faith and order.
308. **Contemporary Theology** **Three hours**
Selected writings of significant contemporary theologies are read and evaluated. Bible 206 and Philosophy 302 are recommended as prerequisites.
309. **Christian Evidences** **Three hours**
A study of the evidences of the truths of Christianity as found in the records of the Old Testament with its revelation, miracles and prophecies, in the gospel record of the supernatural and vicarious life and death and resurrection of Jesus Christ; and the confirmation of the truth of Christianity as a supernatural force in history.
310. **Romans** **Three hours**
A presentation of the teachings of the apostle Paul in his epistle to the Romans as they center about Revelation, Redemption, Predestination, and Christian Ethics. Lectures, collateral reading, and reports. Open to Juniors and Seniors who have taken 206.

Biology

ASSOCIATE PROFESSOR TEN BROEK; PROFESSOR MONSMA; ASSOCIATE PROFESSOR KARSTEN; ASSISTANT PROFESSORS BENGELINK, GEBBEN, AND VAN HARN; INSTRUCTOR KLOOSTER

A. Students expecting to do *graduate* work in Biology should take Biology 109-110 plus 24 hours of advanced course work. These 24 hours should produce a background in each of the following areas:

1. Animal morphology (Biology 201, 208, or 311)
2. Plant morphology (Biology 203 or 204)
3. Genetics (Biology 207)
4. Physiology (Biology 314*)
5. Ecology (Biology 313)
6. Systematics (Biology 301)

B. *Biology Minor*: The student minoring in biology should take Biology 109-110, plus other courses determined by major department in consultation with Biology department.

C. *Education Students Majoring or Minorng in Biology*: A student intending to teach biology in the secondary school should take the following:

Major—Biology 109-110, 201, 203 or 204, 313, 314, 207, 301.

Minor—Biology 109-110, 201, 203 or 204, and one of the following: 313, 314, 207, or 301.

105. **Human Anatomy and Physiology** **Three hours**
An introduction to the study of human biology, including elements of anatomy, histology, and physiology. Two hours of lectures and one laboratory session per week.
106. **Human Anatomy and Physiology** **Three hours**
Continuation of 105 which is prerequisite.

*Prerequisites are Chemistry 103-104 and Chemistry 301-302 or 303-304.

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 others. Three hours of lecture and one laboratory period a week.
109. **General Biology** **Four hours**
 An introduction to the protists, plant diversity, and plant structure and function. Three hours of lecture and one laboratory period per week, offered both semesters.
110. **General Biology** **Four hours**
 An introduction to animal diversity, structure, and function. Three hours of lecture and one laboratory period per week. Offered both semesters.
111. **Biological Science** **Four hours**
 An introduction to the principles and concepts of biology, and the history and philosophy of biological thought for the liberal arts student. Lectures and laboratory.
201. **Invertebrate Zoology** **Four hours**
 Anatomy, physiology, behavior and classification of animals representative of the invertebrate groups. Three hours of lecture and one laboratory session per week. Prerequisite: Biology 109-110.
203. **Plant Morphology** **Four hours**
 A consideration of structure, life cycles, and phylogeny of the algae, fungi, and bryophytes. Three hours of lecture and one laboratory session per week. Prerequisite: Biology 109-110.
204. **Plant Morphology** **Four hours**
 Continuation of 203 dealing with the vascular plants. Prerequisites: Biology 109-110, Biology 203 advised but not required.
206. **Natural History of the Vertebrates** **Four hours**
 A study of the classification, identification, habits, and habitats of the vertebrate animals. The course consists of lectures, museum studies, laboratory work, and field work. Three hours of lecture and one laboratory session per week. Prerequisite: Biology 109-110. Not offered 1963-'64.
207. **Genetics** **Three hours**
 A study of the ways and means by which the inherited characteristics of plants, animals, and men are transmitted from parents to offspring. The course consists of lectures and problems concerning applications of the laws of heredity. Prerequisite: Biology 109-110.
- 207L. **Genetics Laboratory** **One hour**
 An introduction to the experimental phase of genetics.
 Prerequisites: Biology 207 and consent of instructor.
208. **Introduction to Embryology** **Four hours**
 A study of the development of vertebrate animals. Three hours of lectures and recitations and one laboratory session per week. Prerequisite: Biology 109-110.
212. **Nutrition** **Three hours**
 The study of the fundamental principles of human nutrition at all ages, applied to individual, family, and community nutrition problems. This course cannot be applied toward a major or minor in biology. Two lectures and one laboratory period per week. To be preceded or accompanied by Biology 106.
301. **Plant Taxonomy** **Four hours**
 An introduction to the principles and concepts of plant systematics with laboratory and field work in the identification of plants. Two lectures and

two laboratory or field sessions per week. Prerequisites: Biology 109-110, Biology 203 or 204, or consent of instructor.

306. **Biological Problems** **Two hours**
 The history of biology and the evidences for evolution and organic teleology are considered. Lectures, assigned readings, recitation, and reports. Prerequisite: Biology 109-110 or equivalent courses.
307. **Parasitology** **Four hours**
 An introduction to the study of the parasites of man and of common animals. Classification, life-cycles of the parasites, and reactions of the hosts will be studied. Three lectures and one laboratory period per week. Prerequisite: Biology 109-110. Not offered 1963-'64.
308. **Histology** **Four hours**
 A study of mammalian tissues. The relationship of microscopic structure to function is emphasized. Three lectures and one laboratory period per week. Prerequisites: Biology 109-110, 105-106, or consent of instructor.
311. **Comparative Anatomy of Vertebrates** **Five hours**
 A comparative study of the anatomy of vertebrate animals. Three lectures and two laboratory sessions per week. Offered spring semester only. Prerequisites: Biology 109-110, Biology 208 recommended.
313. **General Ecology** **Four hours**
 An introduction to the principles and concepts of ecology. Three lectures and one laboratory or field session per week. Prerequisites: Biology 109-110, Biology 301, or consent of instructor.
314. **General Physiology** **Four hours**
 An introduction to the principles and concepts of the physiology of plants and animals. Three lectures and one laboratory session per week. Prerequisites: Biology 109-110, Chemistry 103-104; and Chemistry 301-302 or Chemistry 303-304. Physics 201-202 strongly recommended.
320. **Principles of Modern Biology** **Three hours**
 A course emphasizing the present day principles of the molecular, cellular, population-species, and ecosystem levels of biology, and treating the organism level to a somewhat lesser degree. Not offered 1963-'64.
321. **Principles of Modern Biology** **Three hours**
 Continuation of Biology 320, which is prerequisite. Not offered 1963-'64.
380. **Biology Journal Seminar** **One hour**
 This course consists of the presentation and discussion of papers from biological journals and is open to majors in biology at the Junior and Senior levels. Prerequisite: Fall semester, Biology 313 or concurrently. Spring semester, Biology 314 or concurrently.

Chemistry

PROFESSORS DIRKSE, DE VRIES, AND WOLTHUIS; ASSOCIATE PROFESSOR BROENE; ASSISTANT PROFESSOR VANDER LUGT

A student who plans to do graduate work in chemistry should complete the following courses: 105-6, 201-2, 301-2, 305, 307-8, and 320. In related fields, he should complete mathematics through calculus, and Physics 205, 206, 303, 304. Students planning to enter graduate school should have a reading knowledge of both German and French.

Students who expect to receive certification by the American Chemical Society Committee on the Professional Training of Chemists should complete the following courses: Chemistry 105-6, 201-2, 301-2, 305, 307-8, and 320.

Students who desire a chemistry major for teaching in secondary schools may select Physics 201-2 or Physics 205-6 as partial fulfillment of the Chemistry major sequence.

101. **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 classroom hours and one two-hour laboratory periods per week.
 No prerequisite.
 Note: Students preparing for a B.S. in nursing are advised to take 103 and 104.
102. **Pharmacology** **One hour**
 This course deals with the arithmetic involved in the preparation of solutions. Open only to Pre-Nursing students.
103. **General Chemistry** **Four hours**
 A discussion of the basic laws of inorganic chemistry, accompanied by an emphasis on the periodic table and atomic and molecular structure. Three hours in classroom and one two-hour laboratory period per week. No prerequisite, although a knowledge of high school chemistry or physics is desirable.
104. **General Chemistry** **Four hours**
 Continuation of 103 plus some descriptive material on non-metals. Hours and texts the same.
105. **General Chemistry** **Five hours**
 For students majoring in chemistry. A study of the fundamental principles of inorganic chemistry, with emphasis on the quantitative and structural aspects of elements and compounds and their interactions. Three classroom hours and one four-hour laboratory period per week. A knowledge of high school chemistry or physics is desirable, but not required.
106. **General Chemistry and Qualitative Analysis** **Five hours**
 Continuation of 105. The laboratory work is concerned with the separation and identification of the more common cations and anions.
201. **Quantitative Analysis** **Four hours**
 Two hours of classroom work and two three-hour laboratory periods each week. This course consists of a study of the theory and practice of acidimetry, alkalimetry, permanganometric and iodometric analyses, and gravimetric determinations. Prerequisite: 106.
202. **Quantitative Analysis** **Four hours**
 Continuation of 201. The laboratory work will deal with specialized and instrumental methods of analysis; the classroom work will stress inorganic chemistry.
203. **Analytical Chemistry** **Five hours**
 Three hours of classroom work and two three-hour laboratory periods each week. The classroom and laboratory work are integrated to cover both qualitative and quantitative analysis. This course is designed for students taking pre-professional courses such as pre-medical, pre-dental, etc. Prerequisites: Chemistry 104 and Mathematics 101. Not open to students who have had Chemistry 106.
204. **Physical Chemistry for Pre-Medical Students** **Three hours**
 A study of the states of matter, properties of solutions, chemical kinetics, and the colloidal state. Three lecture hours per week. Prerequisite: 203.
301. **Organic Chemistry** **Four hours**
 A study of the various homologous series of organic compounds. Emphasis is placed on aliphatic compounds in this course. Three hours in classroom and one three-hour laboratory period per week. Prerequisite: 103 and 104 or 105 and 106. Chemistry 201 is desirable.

302. **Organic Chemistry** **Four hours**
Continuation of 301, with emphasis on aromatic compounds and isolated topics. Hours the same. Prerequisite: 301.
303. **Organo-Biochemistry** **Four hours**
A study of organic compounds, with special emphasis on their biochemical significance. Includes a study of bio-chemistry — carbohydrates, liquids, proteins, digestion, metabolism, etc. For pre-nursing, pre-medical technology students, and for teachers with a minor in chemistry. Three hours of classroom work and three hours of laboratory per week. Prerequisite: 103 and 104.
304. **Organo-Biochemistry** **Four hours**
Continuation of 303. Hours the same.
305. **Qualitative Organic Analysis** **Four hours**
Two hours of lectures and two or three three-hour laboratory periods per week. This course is based on Shriner and Fuson's text. Prerequisite: 302.
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. Prerequisite: Chemistry 201, Physics 201, Mathematics 211 and 212.
308. **Physical Chemistry** **Four hours**
Continuation of 307. Hours the same. A study of electro-chemistry, chemical thermodynamics and kinetics.
320. **Chemical Research** **Three hours**
Library and laboratory research on an assigned problem. Only for approved Seniors majoring in chemistry.

Dutch

ASSOCIATE PROFESSOR LAGERWEY*

The Queen Juliana Chair of the Language and Culture of the Netherlands

A. DUTCH LANGUAGE

101. **Elementary Dutch** **Four hours**
An introductory course in the comprehension and use of spoken and written Dutch.
102. **Elementary Dutch** **Four hours**
Continuation of 101
201. **Intermediate Dutch** **Three hours**
Selected readings of modern Dutch prose and poetry. Review of grammar and syntax; collateral reading reports.
202. **Intermediate Dutch** **Three hours**
Continuation of 201.
305. **Dutch Classics** **Three hours**
Study and discussion of several Dutch literary texts representative of the classical and modern periods of Dutch literature. Required outside reading and essays.
306. **Dutch Classics** **Three hours**
Continuation of 305.

*On leave of absence second semester 1963-'64.

B. MEDIEVAL AND DUTCH HISTORY

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. Not offered in 1963-'64.
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.

Economics

PROFESSORS VANDEN BERG AND BROUWER; ASSISTANT PROFESSOR PRUIS*

- Students who plan to major in Economics should take Mathematics 205 and 206. These courses, however, do not apply toward a major in economics.
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. Not offered in 1963-'64.
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.
203. **Principles of Economics** **Three hours**
 A one-semester course in economic principles and their application to questions of public policy. Intended especially for pre-engineering students. Open to others who desire a course in economics, but who do not plan to take a minor or major in this field and for whom Economics 201 and 202 are not prescribed. This course may serve as a prerequisite to advanced courses for students not concentrating in economics. Not open to Freshmen.
301. **Money and Banking** **Three hours**
 A study of the nature and functions of money, with a view to the understanding of the role of currency systems in our national and international life. Prerequisite: 201 and 202 or their equivalents.
302. **Financial Principles** **Three hours**
 An introductory course in business finance including study of forms of business organization, types and sources of capital, and other areas of financial administration. Prerequisite: 305.
303. **Labor Economics** **Three hours**
 The problems of labor-management relations are considered from the standpoint of economic and social principles. The labor market, wages and

*On leave of absence 1963-'64.

hours, unemployment, and economic insecurity are analyzed in the light of developing labor legislation and trade unionism. Prerequisite: 201 and 202.

305. **Essentials of Accounting** **Four hours**
 First semester of a one-year introductory course in accounting. Intended to give students the necessary accounting background for entrance into schools of business administration or for business uses when graduated from college. 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.
307. **Essentials of Accounting** **Three hours**
 A one-semester course designed for those who desire a course in accounting, but who are unable to take a full year's work in the subject (namely, pre-engineering, pre-law, sociology and political science majors). Not open to economics and business administration majors or to Freshmen.
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.
311. **History of Economic Thought** **Three hours**
 A systematic study of the development of economic doctrine, emphasizing the development of economic thought from Smith through Keynes; it introduces the student to the way in which economic thinking and analysis emerge and develop against the background of changing historical conditions. Prerequisite: Principles of Economics, or permission of instructor.
312. **Cost Accounting** **Three hours**
 Principles and methods of accounting for manufacturing and operating costs, with emphasis on cost analysis for managerial control. Prerequisite: 306, or 305 and permission of instructor.
314. **International Economics** **Three hours**
 A general course in the field of international economic relations. The fundamentals of international trade theory are stressed, including the balance of payments, problems of international dis-equilibrium, trade barriers, and efforts to promote international economic stability and growth.

Education

PROFESSORS JAARSMA, FLOKSTRA, DE BEER, VAN BRUGGEN, BOS; ASSOCIATE PROFESSOR SNAPPER; ASSISTANT PROFESSORS VAN OPYNEN, VAN LAAR, D. OPPEWAL, VANDER ARK, DE BOER, KASS; INSTRUCTOR HENDRICKS

Students who plan to prepare for teaching will find detailed information on pages 72 to 79.

A. PSYCHOLOGY

201. **General Psychology** **Three hours**
 (For description see under department of Psychology)
202. **Educational Psychology** **Three hours**
 A psychological study of the forming of personality as it takes place in the classroom of the elementary and secondary schools. The course seeks to develop a sound foundation in principle and in fact for the understanding

of a child in the learning process. The observed facts of child life with reference to the classroom are interpreted according to the Scriptural doctrine of man and the Scriptural mandate in education. Psychology 201, or its equivalent, is a prerequisite. Offered both semesters.

B. HISTORY

203. **Historical and Philosophical Foundations of Education** **Three hours**
 On the assumption that the history of education in any period or social order should be viewed against the background of the more general and historical development of the period, this course aims to study the relationship between the growth of educational theory and practice in Western European civilization (through the Reformation) and its intellectual and cultural bases. Offered first semester.
204. **Historical and Philosophical Foundations of Education** **Three hours**
 Continuation of Education 203, with emphasis on the development of American education. Offered second semester.

C. PRINCIPLES

301. **Principles of Education** **Three hours**
 A study of the aim of education and the various underlying problems. Not offered in 1963-'64.
314. **Principles of Teaching in Secondary Schools** **Three hours**
 A general methods course to give the student a perspective of educational practices at the secondary level. This includes an analysis of objectives, teaching plans and techniques, pupil guidance and discipline, and testing and appraisal. Prerequisite: Psychology 202 and Education 203 and 204.
315. **Principles of Teaching in Elementary Schools** **Three hours**
 A study of the principles, methods, and techniques appropriate to the direction of the learning process. Prerequisite: Psychology 202; Education 203 and 204.
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 content of the curriculum for grades one, two, and three; and observation in actual classroom situations. Prerequisite: Psychology 202. Not offered 1963-'64.

D. PROFESSIONAL COURSES

220. **Teaching Arithmetic in Elementary Schools** **Three hours**
 Both content and methods in arithmetic throughout the grades will be considered. Prerequisite: Psychology 202.
222. **Elementary School Music (A Methods Course)** **Two hours**
 Prerequisite: Music 221.
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.
231. **Audio-Visual Aids in Education** **Three hours**
 The study of multi-sensory aids to learning, oriented in psychology. Includes study of graphic media, multi-dimensional models, field trips, magnetic recording, projected material and associated equipment, radio and television. Three class sessions include laboratory period.
307. **School Administration** **Three hours**
 A study of the structure, organization, administration and management of the elementary and secondary school. Development of professional leadership and supervisory practices.

310. **Educational Measurements** **Three hours**
 A survey course of present-day practices of measuring the results of teaching. Mental testing is included. Not offered 1963-'64.
318. **Teaching Geography in Elementary Schools: Methods and Content** **Three hours**
 Prerequisite: Psychology 202; Education 203 and 204.
322. **Teaching Reading in Elementary Schools** **Three hours**
 Section A — Primary Grades
 Section B — Intermediate Grades
 Both Semesters
 Prerequisite: Psychology 202 and Education 203 and 204.
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. Not offered 1963-'64.
343. **Directed Teaching, Including Observation and Participation** **Eight hours**
 For students planning to teach in the elementary schools. Offered both semesters. See prerequisite listed earlier in this catalog under Education.
344. **Directed Teaching, Including Observation and Participation** **Eight hours**
 For students planning to teach in junior or senior high schools. The course seeks to orient the student to classroom teaching by integrating observation, participation, and actual teaching. A study of theory of teaching parallels daily work in the junior or senior high school classroom in order to help the student make explicit to himself a distinctly Christian view of theory and practice in education. See prerequisites listed earlier in this catalog under Education.

Engineering

PROFESSOR WASSINK; ASSISTANT PROFESSOR BOSSCHER*

101. **Engineering Drawing** **Three hours**
 A study of basic topics in engineering drawing to provide facility in the transmission of ideas through graphical means. Areas covered include orthographic projection, freehand sketching, pictorial representation, auxiliary views, sections and conventions, basic dimensioning, and fasteners, culminating in the production of the working drawing.
102. **Descriptive Geometry and Graphical Solutions** **Three hours**
 A study of basic graphical techniques for solution of spacial relationships and other physical problems. Topics covered are descriptive geometry; concerned with solution of point, line plane, and surface problems in three dimensions; precision dimensioning, charts and graphs, graphical solutions, and graphical calculus.
205. **Principles of Engineering Materials** **Three hours**
 An introductory course in the science of engineering materials. Engineering properties are correlated with internal structures — atomic, crystal, micro, macro — and service environments — mechanical, electrical, thermal, chemical. There are tours through various plants. Students should keep Thursday afternoon open on their schedules for such tours. Prerequisite: Chemistry 104 or 106.
301. **Statics** **Three hours**
 Study of fundamental principles of mechanics and their application to the simpler problems of engineering. Forces, components, moments, cables,

*On leave of absence first semester 1963-'64.

friction, centroids, moments of inertia. Recitations, lectures, problems. Must be preceded or accompanied by Mathematics 211 and Physics 201 or 203.

304. **Strength and Elasticity of Materials** **Four hours**
 Application of principles of mechanics to solution of problems in stress and strain of engineering materials, including resistance to force, bending, torque, shear, eccentric load, deflection of beams, buckling of columns, and compounding of simple stresses. Recitations, lectures, and problems. Prerequisite: Engineering 301.
306. **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 212 and Physics 202 or 204.

English

PROFESSORS TIMMERMAN*, VAN DER WEELE, HARPER, TIEMERSMA, AND JANSSEN; ASSOCIATE PROFESSORS P. OPPEWAL, TEN HARMSEL, AND WIERSMA; ASSISTANT PROFESSORS SLINGERLAND, HOLKEBOER, AND KUIPER; VISITING LECTURER WALHOUT; MISS WALTERS, MRS. RIENSTRA, MISS STEENWYK

All Freshmen must take Freshman English (103 and 104).

Sophomores may choose between the comprehensive course in American Literature (English 201 and 202) and the comprehensive course in English Literature (English 203 and 204). Sophomores, however, who plan to take more than twelve hours of English in College should elect American Literature (English 201 and 202), and thereupon proceed directly to the 300-courses.

Sophomores who plan a major or minor concentration in English may take a 300-English course concurrently with English 201 and 202.

Upperclassmen who elect English as the subject of their major or minor concentration should try to pursue as many of the special period and author 300-courses as their programs of study allow. Such students should consult the department in the selection of these courses.

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

100. **English for Foreign Students** **No credit**

A non-credit course for students failing the examination. To be taken by all students who have had less than two years' formal education in an English- or American-speaking country. Students must give evidence of satisfactory mastery of this course before being admitted to 103. Not offered 1963-'64.

103. **Freshman English** **Three hours**
 Grammar, rhetoric, and composition. Textbooks and periodic themes.

104. **Freshman English** **Three hours**
 Continuation of 103.

103. **Honors Freshman English** **Three hours**
 An enriched Freshman English program including the essential formal disciplines of 103 and 104. Wide and intensive reading in the various literary types. Enrollment in the course is voluntary. Selection to be made from interested students upon distinguished achievement in the Departmental tests to be announced during registration.

*On leave of absence 1963-'64.

104. **Honors Freshman English** **Three hours**
Continuation of 103.
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 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.
203. **English Literature** **Three hours**
A comprehensive study of English literature from Chaucer through Pope. The course is conducted intensively in the major authors rather than inclusively of all of them. Textbook, library reading, assigned papers, classroom analysis and discussion of important works.
204. **English Literature** **Three hours**
Continuation of 203. The course proceeds from Johnson through Eliot.
205. **Advanced Composition** **Three hours**
A practical course in advanced expository writing. Intensive reading in the formal essay and biography, with much systematic writing in such types of composition as description, the formal and informal essay, the informative and feature article, the editorial, the book review, and the like. Open by permission only to qualified students (B average in Freshman English).
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 works 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 Fiction** **Three hours**
A study of English and American fiction, in its continental relations, from 1890 to the present time. Collateral reading and reports.
304. **Contemporary English Poetry** **Three hours**
A study of the lyric and dramatic poetry of England, in its continental relations, from 1890 to the present time. Textbook, collateral reading, and reports.
306. **Creative Writing** **Three hours**
A practical course in the writing of imaginative prose and poetry. Major emphasis to fall on the short story and lyric poem. Class sessions devoted to an analysis of the techniques employed by contemporary writers and to an analysis of student writing. A minimum of twelve assignments required. Prerequisite: publication in a periodical other than a school newspaper; published piece will be evaluated at time of registration.
307. **Literature of the Seventeenth Century** **Three hours**
A study of important poetry and prose in England from Donne to Dryden with particular emphasis upon the poetry of Donne, Herbert, Vaughan, Traherne, and Herrick, and upon the prose of Donne, Browne, and Taylor. Textbooks and a critical report.
308. **Milton** **Three hours**
An intensive study of the works of John Milton. Textbook, collateral reading, and reports.

309. **Shakespeare** **Three hours**
An intensive study of the sonnets and about fifteen plays of Shakespeare. Textbook and reports.
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. Not offered 1963-'64.
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.
316. **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.
319. **Non-Shakespearean Drama of the Renaissance** **Three hours**
This course will examine, in turn, the medieval background of English drama, the developments in drama during the Tudor Age, and the works of later Elizabethan and Jacobean dramatists.
329. **American Classics** **Three hours**
A critical study of American masterpieces as the literary embodiment of the evolving minds, ways, and values of the American cultural process. Emphasis upon selected writings of Edwards, Franklin, Emerson, Hawthorne, Melville, Whitman, Twain, H. James, Adams, Frost, Eliot, Hemingway, Faulkner.
Open only to non-English majors. May not be substituted for 203-204. May not be taken in addition to 201 and 202.
334. **The Development of the English Language** **Three hours**
An analysis of the sound, grammatical, and vocabulary changes that have occurred throughout the history of the English language based on an intensive study of the Oxford English Dictionary and selected passages from Chaucer, Shakespeare, and various English translations of the Bible. Not offered 1963-'64.
380. **Advanced English Studies** **One hour**
Intensive study of selected texts in English literature, with readings in articles appearing in professional journals, leading to the preparation and presentation of a detailed paper. Open, by permission of the current director, to seniors majoring in English, and recommended for all those who intend to do graduate work in English. Various members of the department.

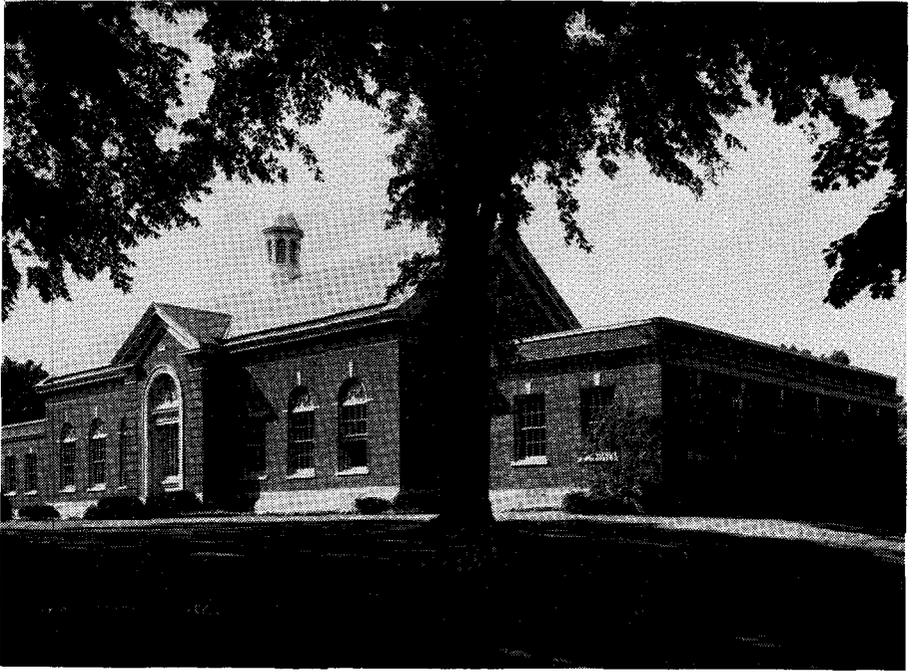
French

ASSISTANT PROFESSORS A. OTTEN AND HOLKEBOER; INSTRUCTOR ZEGERS

Students wishing to major in French ought to present twenty-four hours of work beyond the elementary level. Permission to major in French must be obtained from the head of the department.

The facilities and materials of the Language Laboratory are available to all students of French.

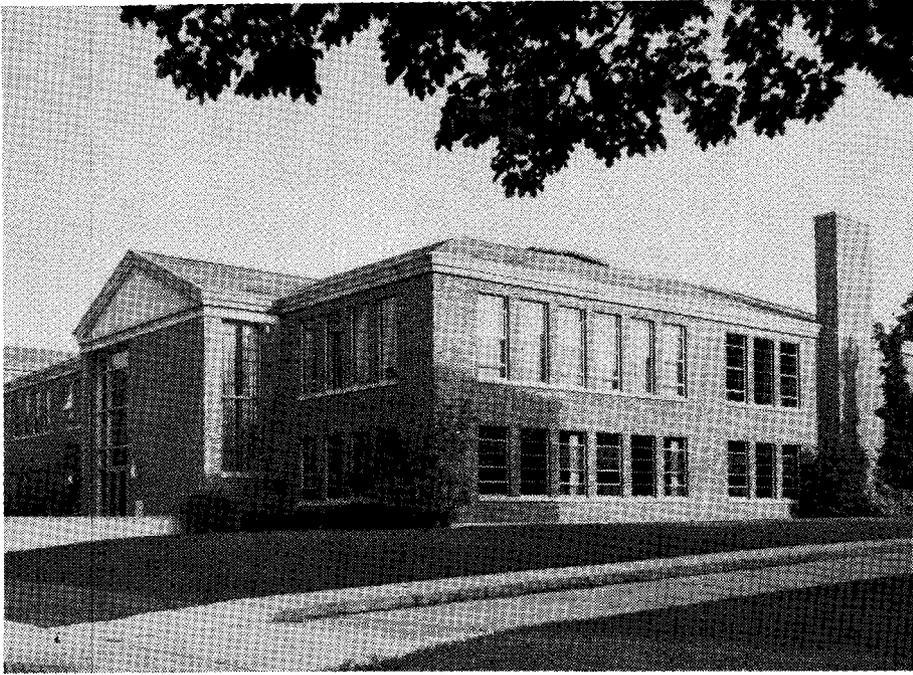
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|------|--|--------------------|
| 101. | Elementary French
An introductory course in the comprehension and use of spoken and written French. | Four hours |
| 102. | Elementary French
Continuation of 101. | Four hours |
| 201. | Intermediate French
Further training in spoken and written French, study of the structure of the language, and reading in significant French literature. | Three hours |
| 202. | Intermediate French
Continuation of 201. | Three hours |
| 207. | Readings in French Literature I.
An introduction to the major writers and movements in the history of French literature from the Middle Ages through the eighteenth century. Extensive reading, lectures, <i>explications de texte</i> . Prerequisite 202. | Three hours |
| 208. | Reading in French Literature II.
Continuation of French 207. Study of the nineteenth and twentieth centuries. | Three hours |
| 305. | Literature of the Seventeenth Century
A study of the growth and spirit of Classicism, with emphasis on representative authors. Not offered 1963-'64. | Three hours |
| 306. | Literature of the Seventeenth Century
Continuation of 305. Not offered 1963-'64. | Three hours |
| 307. | Literature of the Eighteenth Century
Lectures and discussion on the history of the literature and thought of the eighteenth century. Critical reading and analysis of the works of the principal writers of the period with special attention to Montesquieu, Voltaire, Rousseau, and Diderot. | Three hours |
| 308. | Literature of the Nineteenth Century
A study of major movements and writers in nineteenth century France to 1870. | Three hours |
| 309. | Contemporary French Literature
A detailed study of major writers and movements from 1870 to 1914. Extensive reading of significant fiction and drama, and intensive study of poetry beginning with Rimbaud, Verlaine, and Mallarmé. Not offered 1963-'64. | Three hours |
| 310. | Contemporary French Literature
A study of French literature and thought since the first World War, ending with a survey of the current literary scene. Lectures, critical analysis of texts, reports. Not offered 1963-'64. | Three hours |
| 321. | Advanced French
A course for the advanced student preparing for graduate study or for the teaching of French. A wide variety of exercises, compositions and drills is designed to develop in the student a high degree of competence in speaking, reading and writing idiomatic French. Three class meetings per week. (This course should be taken, if possible, in the senior year.) | Two hours |



Library — Franklin Campus



Reference Room — Franklin Campus Library



Commons Building — Franklin Campus



Foyer and Concession Stand in the Commons Building

322. **Advanced French** **Two hours**
Continuation of French 321

Geography

ASSISTANT PROFESSOR VAN OPYEN

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. Offered only first semester.
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. Not offered 1963-'64.
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. Not offered 1963-'64.
109. **Geography of the Caribbean Area** **Three hours**
A study of the geographic and historic background of this area. The course deals with the geographic aspects of certain problems related to industry, agriculture, and population. Not offered 1963-'64.
318. **Teaching Geography in Elementary Schools** **Three hours**
A study of geography as taught from grades one through eight. 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.

German

PROFESSORS FRIDSMA AND BOERSMA; INSTRUCTORS KREUZER AND W. BRATT

101. **Elementary German** **Four hours**
A beginners' course stressing both written and spoken German and aiming at familiarity with basic grammatical patterns.
102. **Elementary German** **Four hours**
Continuation of 101.
201. **Intermediate German** **Three hours**
Selected prose readings. Grammar review, composition, and collateral reading reports. Prerequisite: 101 and 102.
202. **Intermediate German** **Three hours**
More advanced readings in prose and/or poetry. Grammar review and composition continued. Collateral reading reports. Prerequisite: 201.
205. **Advanced Oral and Written Composition** **Two hours**
Prerequisite: 202.
207. **Readings in Major German Authors I** **Three hours**
Basic introduction to German literature. Selected readings in major German authors from 1750 on. Assigned readings and papers. Prerequisite: German 201-202.
208. **Readings in Major German Authors II** **Three hours**
Continuation of 207.

301. **Classicism** **Three hours**
The origins of the classical ideal during the seventeenth and early eighteenth centuries. Readings from Klopstock, Lessing, Goethe, and Schiller. Prerequisite for either semester: 202.
302. **Classicism** **Three hours**
Continuation of 301.
303. **Romanticism** **Three hours**
The literary theory and philosophical-religious basis of the German romantic movement as reflected in representative works of both earlier and later Romanticists. Prerequisite: 202. Not offered 1963-'64.
304. **Realism** **Three hours**
Reading in the literary prose of the latter half of the nineteenth century. A survey of the intellectual and cultural changes immediately preceding this era and an analysis of some literary works characteristic of the period. Prerequisite: 202. Not offered 1963-'64.
305. **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. Not offered 1963-'64.
306. **Later Nineteenth Century Drama** **Three hours**
A study of Hebbel and Hauptmann and their times. Assigned reading and reports. Prerequisite: 202 and preferably 305. Not offered 1963-'64.
307. **Studies in Modern German Literature I** **Three hours**
A comprehensive study of the major writers and movements from 1890 to the present. Among the figures considered are Mann, Rilke, Kafka, Hesse, and Brecht. Assigned readings and papers. Prerequisite: German 207-208 or permission of instructor. Not offered 1963-'64.
308. **Studies in Modern German Literature II** **Three hours**
Continuation of 307. Not offered 1963-'64.

Greek

PROFESSORS RADIUS AND R. OTTEN; ASSISTANT PROFESSOR WEVERS; INSTRUCTOR HARRIS

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. **Intermediate Greek** **Three hours**
Reading in Attic prose, particularly Plato's *Apology* and earlier *Dialogues*.
202. **Intermediate Greek** **Three hours**
An introduction to Greek poetic forms through readings in the Homeric epic and Attic drama.
311. **Greek History** **Three hours**
The political, social and cultural history of the Greek city-states up to the time of the Roman conquest. Some attention is also given to the history of the Near and Middle East. Open only to Juniors and Seniors who are Pre-Law, Pre-Seminary, History or Classics majors; others must secure permission.

313. **New Testament Greek** **Three hours**
 The Gospel according to St. Mark is read with some notice of the parallel passages in the other Gospels. 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. Prerequisite: 313.
319. **Plato's Republic** **Three hours**
 The Greek text is studied. This course aims at an understanding and evaluation of Plato's views as presented especially in the Republic. Prerequisite: two years of Greek.
320. **Plato's Republic** **Three hours**
 Continuation of 319, which is also a prerequisite.

History

PROFESSORS IPPEL, RADIUS, STRIKWERDA, DE BEER, MILLER, AND JELLEMA; ASSOCIATE PROFESSORS LAGERWEY* AND RIENSTRA; ASSISTANT PROFESSORS DE BIE, VAN KLEY, AND DE BOER; INSTRUCTOR BRINKS; MR. DAHM

History majors in either the general A.B. or the B.A. in Ed. programs are required to complete a minimum of 30 hours of history including History 101-102 and American History 215-216, plus at least two of the following year sequences: Greek and Roman History 311-312; Medieval History 307-308; Early Modern European History 309-310; Modern and Contemporary History 205-206; English History 203-204 or 313-314; and Russian and Eastern European History 211-212. Beginning with the class graduating in 1963, the Senior Seminar 391 will be required. Economics 201-202 and Political Science 203-204 are recommended and suggested minors are economics, political science, English, foreign language, or philosophy. If possible at least two years of a modern foreign language or its equivalent should be completed except for students with a strong interest in ancient history, in which case two years of Greek or Latin is recommended.

Majors working toward a secondary State Provisional Teacher's Certificate are advised to follow the general A.B. program while meeting the minimum certification requirements of 20 hours of professional education courses, including psychology. Such courses should be so arranged as to avoid splitting year units in subject matter fields. Any student expecting to teach a second field is advised to complete at least 18 hours in that subject in order to meet the conditions of the North Central Association.

A minor in history should include History 101-102 and American History 215-216. A minimum of 18 hours should be completed by any student expecting to teach history.

A student who wishes to be identified as a departmentally-approved major must file written application with a member of the department at the close of his sophomore year. No student with a general average in history below B- will be recommended for advanced training.

Courses 101 and 102 are required of every Freshman who expects to earn the Bachelor of Arts degree.

101. **Growth of Western Civilization** **Three hours**
 Surveys of Egyptian, Mesopotamian, Greek, and Roman History. The founding and spread of Christianity. The barbarian invasions, feudalism, the Church, the Empire, the Renaissance, and the Reformation. (Juniors and Seniors will be required to do additional work to receive full credit.)

*On leave of absence second semester 1963-64.

102. **Growth of Western Civilization** **Three hours**
Continuation of 101. Outlines the rise of the great powers, the several revolutions of modern history, the Napoleonic period, and the major political phenomena of the nineteenth and the twentieth centuries. (Juniors and Seniors will be required to do additional work to receive full credit.)
203. **English History** **Three hours**
The development of Britain from Roman times, through the Anglo-Saxon period, Norman England, the Middle Ages, with emphasis on the Tudor and Stuart eras. Not offered in 1963-'64.
204. **Great Britain Since 1714** **Three hours**
The development of Britain in the eighteenth, nineteenth and twentieth centuries with emphasis upon the growth of democracy and the establishment of the British Empire. Not offered in 1963-'64.
205. **Modern and Contemporary Europe Since 1815** **Three hours**
Western Europe from the Congress of Vienna to about the end of the century. Outlines political and economic history and examines nationalism, liberalism, socialism, Darwinism, and industrialism. Not open to Freshmen.
206. **Modern and Contemporary Europe Since 1815** **Three hours**
Continuation of 205. Western Europe from about 1900 to the present, with particular emphasis on Russia and the modern Near Eastern Question. The problems of the new economic and political balance of power, the conflict of ideologies, cultural relativism, the new age of conservatism. Not open to Freshmen.
209. **Canadian History** **Three hours**
A tracing of the political, economic, and cultural history of Canada and the Atlantic Provinces to the Quebec Conference of 1864. Lectures and student reports.
210. **Canadian History** **Three hours**
Continuation of 209. A survey of Canada's history from the Confederation to the present. Includes an analysis of cabinet or parliamentary government. Lectures and student reports.
211. **Russian and Eastern European History** **Three hours**
The study of Russian and East European history from the Byzantine and Slavic origins up to the Congress of Vienna. Assigned readings and reports.
212. **Russian and Eastern European History** **Three hours**
The study of Russian and East European history from the Congress of Vienna to the near present. The course will be concentrated upon the causes, nature, and consequences of the Russian Revolution. Assigned readings and reports.
215. **American History** **Three hours**
European backgrounds, colonial development, the Revolution, the onset of the national period, Jacksonianism, sectionalism, and the Civil War. (Formerly History 301)
216. **American History** **Three hours**
Continuation of 215. The aftermath of the Civil War, the economic phenomena and political history of the late nineteenth century, the Roosevelt and the Wilson eras, the New Deal and the Second World War. (Formerly History 302)
305. **Latin American History** **Three hours**
An account of the history, government, and the social and economic development of the Central and South American colonies of Spain, and Portugal. Not offered 1963-'64.

306. **Latin American History** **Three hours**
Continuation of 305. Presents the histories and governments of the several Central and South American countries during their national periods to the present. Not offered 1963-'64.
307. **Medieval History** **Three hours**
The study of European history from the establishment of Christianity as a civilizing force to the twelfth century rise of cities. Three or four interpretive papers are to be written. For Juniors and Seniors.
308. **Medieval History** **Three hours**
Continuation of the former from the Renaissance of the twelfth century to the Italian Renaissance. Intellectual and religious developments are emphasized. The same requirements as for 307.
309. **Modern Europe to 1648** **Three hours**
A history of Europe between 1500 and 1648, with primary emphasis on the various phases of the Reformation, the Counter-Reformation, and the wars of religion.
310. **Modern Europe: 1648 to 1815** **Three hours**
The age of Louis XIV, the Age of Reason, the Enlightenment. Includes the intellectual, religious, and cultural movements, as well as the colonial conflicts. Ends with the French Revolution.
311. **Greek History** **Three hours**
The political, social and cultural history of the Greek city-states up to the time of the Roman conquest. Some attention is given also to the history of the Near and Middle East. Open only to Juniors and Seniors who are Pre-Law, Pre-Seminary, history or classics majors; others must secure permission.
312. **Roman History** **Three hours**
The history of Rome from the foundation of the city to A.D. 565, the death of Justinian. 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 their relation to the political. The decline of paganism and the rise of Christianity are reviewed in their relation to each other. Prerequisite: 311.
313. **English Constitutional History** **Three hours**
A study of the origins and subsequent developments of English legal institutions, law, and constitutional usages from Anglo-Saxon times to the close of the Middle Ages.
314. **English Constitutional History** **Three hours**
Continuation of 313.
315. **American Constitutional History** **Three hours**
A study of the development of American political ideas, institutions and practices from colonial precedents to contemporary problems. Emphasizes the origin, character, and evolution of the American constitution and the court decisions which interpret it. Not offered 1963-'64.
316. **American Constitutional History** **Three hours**
A continuation of History 315. Not offered 1963-'64.
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.

327. **Social and Intellectual History of the United States** Three hours
 A study of influential ideas, systems of thought, religious values and individuals prominent in the development of American culture and society from pre-Revolutionary times to the present.
328. **Social and Intellectual History of the United States** Three hours
 A continuation of History 327.
391. **Seminar in History** Three hours
 A course taught by the staff in the history of history, the interpretation of history, historical bibliography, and the writing of history. Required of all majors as defined in the departmental requirements, during the senior year, and open to others by permission. Offered each semester.

Latin

PROFESSORS RADIUS AND R. OTTEN; ASSISTANT PROFESSORS VAN VUGT AND WEVERS; INSTRUCTOR HARRIS

Pre-Seminarians —

- Those who have had one year in high school take 101.
 Those who have had two years in high school take 105 (208 second semester).
 Those who have had three years in high school take 202 or 208.
 Those who have had 101-2 in college take 201 (208 second semester).

Others —

- Those who have had one year in high school take 101.
 Those who have had two years in high school take 105.
 Those who have had three years in high school take 202.
 Those who have had 101-2 in college take 201.
101. **Elementary Latin** Four hours
 For students who have had only one unit of high-school Latin or who have had no Latin. Emphasis is placed on the essentials of grammar and a basic vocabulary with constant comparison to English. *Sententiae* from the principal Latin authors will be read.
102. **Elementary Latin** Four hours
 A continuation of 101. Emphasis is placed on grammar and the early reading of longer selections of authentic Latin dealing with Roman history and culture. Prerequisite: 101 or its equivalent.
105. **Intermediate Latin** Three hours
 For students who enter with two units of high-school Latin. A thorough review of the essentials of grammar will accompany the reading of selected Latin prose.
106. **Intermediate Latin** Three hours
 A continuation of 105. An introductory reading of Vergil's *Aeneid* in English translation leading to a study of selected books and passages in Latin.
201. **Latin Readings** Three hours
 For students who have had one year of Latin in college. Open only by special permission to those who enter with two units of high-school Latin. Selected authors will be read with some attention to review of syntax.
202. **Vergil's Aeneid** Three hours
 For those who have had 201 or three units of high-school Latin. A study of the Latin epic. The whole of the *Aeneid* will be read in English translation. Selected books will be read in Latin with a study of the prosody of Vergil. Offered both semesters.

205. **Readings in Latin Literature I** **Three hours**
Intensive reading in the major writers of prose from the Late Republic to the Early Empire. Collateral reading in the literary history of the period. Prerequisite: 106 or 202.
206. **Readings in Latin Literature II** **Three hours**
Intensive reading in the major writers of poetry from the Late Republic to the Early Empire. Collateral readings in the literary history of the period. Prerequisite: 106 or 202.
208. **Readings in the Church Fathers** **Three hours**
Reading of selected portions of Lactanius' *Divinae Institutiones* and other patristic literature. Prerequisite: 105 or 201.
301. **Lucretius and Cicero** **Three hours**
Selections from Lucretius and Cicero, designed to portray some of the major issues posed by classical thought. Collateral reading and reports. Alternates with Latin 303. Prerequisite 205 and 206.
302. **Seneca and Augustine** **Three hours**
Readings from Seneca and Augustine, selected to complete the survey begun in 301 and to give the first significant Christian critique of classical thought as delineated in the *De Civitate Dei* of Augustine. Collateral reading and reports. Alternates with 304. Prerequisite 205 and 206.
303. **Latin Poetry** **Three hours**
A study of Latin poetry from Catullus through the Elegiac Poets, with some attention to early Christian and Medieval Poetry. Collateral reading and reports. Alternates with 301. Prerequisite 205 and 206. Not offered 1963-'64.
304. **Roman Historical Thought** **Three hours**
Representative selections from such historians as Sallust, Livy, Tacitus, and Suetonius. Collateral reading and reports. Alternates with 302. Prerequisite 205 and 206. Not offered 1963-'64.
312. **Roman History** **Three hours**
The history of Rome from the foundation of the city to A.D. 565, the death of Justinian. 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. The decline of paganism and the rise of Christianity are viewed in their relation to each other. Prerequisite: Greek 311 or History 311.
327. **Latin Grammar and Writing** **Three hours**
A thorough review of Latin grammar and syntax will be made, and attention will be given to Latin writing. There is also included an exposition of the pedagogy of presenting Latin grammar. For this reason the course should be postponed to the senior year of students who plan to teach Latin. Prerequisite: consult instructor. Offered both semesters.

Mathematics

ASSOCIATE PROFESSORS TULS, SINKE, AND ZWIER; INSTRUCTOR NYHOFF

Students who wish to major in mathematics should take Mathematics 101, 103, and 104 in high school. These courses will not be credited toward a college major in mathematics.

Qualified students (those whose preparation includes four semesters of algebra, two semesters of geometry, and one semester of trigonometry) who are planning to major in mathematics are directed to enroll in Mathematics 111, which is the first course in the major program.

Minimum requirements for a major in mathematics for students who entered the major program before September 1961 include: Mathematics 201, 202, 301, 302, 304, plus one additional course from those numbered 300 or above.

Minimum requirement for a major in mathematics for students who enter the major program after September 1961 include: Mathematics 111, 112, 211, 212, plus two additional courses from those numbered 300 or above. Students planning to pursue graduate studies in Mathematics should take Mathematics 311, 312, 308, 309, and 310. Such students are urged to acquire a reading knowledge of two foreign languages.

Prospective teachers of high school mathematics (who must present 30 hours of mathematics in the major program) must take, in addition to the analytic geometry and calculus sequence, Mathematics 309 and 320, plus two additional courses numbered 300 or above.

Prospective secondary teachers who minor in mathematics must take Mathematics 111, 112, 211, or their equivalent, together with Mathematics 309 and Mathematics 320 in their minor program.

Beginning in September 1962, all prospective elementary teachers will be required to take Mathematics 109 in their freshman year.

A student who desires to major in mathematics must receive departmental approval. He must file application for such approval with the chairman of the department not later than the beginning of the junior year.

- 101. Advanced Algebra** **Three hours**
 For those who have had only one year of high school algebra. Fundamental operations, special products, factoring, fractions, linear equations, ratio, proportion, variation, linear systems, quadratic equations, exponents, radicals, logarithms. Offered each semester.
- 103. College Algebra** **Three hours**
 This course is the equivalent of Algebra 4 in high school. Theory of quadratics, inequalities, complex numbers, systems of quadratics, theory of equations, binomial theorem, mathematical induction, progressions, determinants, partial fractions, infinite series. Offered each semester.
- 104. Plane Trigonometry** **Three hours**
 Prerequisite: 101 and Plane Geometry. Offered each semester.
- 109. Elements of Modern Mathematics** **Four hours**
 A course designed to acquaint the general college student with the basic concepts of mathematics, using logic and sets. Emphasis falls on understanding rather than on manipulative skill. Prerequisite: one year of high school algebra and one year of geometry, or permission of the instructor. *Not open to mathematic majors.*
- 111. Analytic Geometry and Calculus** **Four hours**
 The real number system, straight lines, circles, functions, limits, derivatives, differentiation of algebraic functions, applications. Prerequisite: Four semesters of algebra and one semester of trigonometry. Offered each semester.
- 112. Calculus and Analytic Geometry** **Four hours**
 Conic sections, definite integrals, transcendental functions, formal integration, applications. Prerequisite: 111. Offered each semester.
- 205. Mathematics for Business Analysis** **Three hours**
 Functions and graphs, equations and inequalities, introduction to vectors and matrices, progressions, derivatives and integrals of simple functions. Particular emphasis falls on business applications such as optimum solutions, linear programming, interest and annuities. Prerequisite: 101.
- 206. Elementary Statistics** **Three hours**
 Description of sample data, probability, theoretical frequency distributions, sampling, estimation, testing hypothesis, correlation, regression. Prerequisite: 101. For business administration students 205 is required.

211. **Calculus and Analytic Geometry** **Five hours**
Advanced formal integration, applications, properties of functions, parametric equations, polar coordinates, infinite series, solid analytic geometry, vectors. Prerequisite: 112. Offered each semester.
212. **Calculus and Differential Equations** **Five hours**
Partial differentiation, multiple integrals, differential equations of first order and first degree, orthogonal trajectories, linear differential equations, operators, variation of parameters, systems of equations, equations of higher degree, power series solutions. Prerequisite: 211.
308. **Mathematical Statistics** **Three hours**
Introduction to probability, frequency functions, binomial, Poisson, and normal distributions, central limit theorem, distribution of sample statistics, applications to hypothesis testing and estimation of parameters. Prerequisite: 211 or its equivalent.
309. **Introduction to Modern Algebra** **Three hours**
Fundamental concepts of sets, mappings, relations, and operations; the real number system, integral domains, fields, polynomial domains, the complex number field, groups, rings. Prerequisite: 211 or its equivalent.
310. **Introduction to Linear Algebra** **Three hours**
Elements of finite dimensional vector spaces, determinants, linear transformations, matrices, canonical forms. Prerequisite: 211 or its equivalent.
311. **Advanced Analysis** **Three hours**
Vector analysis, line integrals, Green's and Stoke's theorems, surface integrals, partial differential equations, vibrating strings, Fourier series, Laplace transformations, special functions. Prerequisite: 212.
312. **Advanced Analysis** **Three hours**
Topology of the plane, introduction to theory of complex variables, measure and integration. Prerequisite: 311.
320. **Foundations of Geometry** **Three hours**
A discussion of pre-euclidean geometry and Euclid's Elements, mathematical systems, Hilbert's postulates for Euclidean geometry, equivalent forms for Euclid's fifth postulate, non-euclidean geometries, and models for mathematical systems. Some attention will be paid to current developments in the teaching of geometry in the secondary school.

Music

PROFESSOR SWETS; ASSOCIATE PROFESSORS DE JONGE AND HAMERSMA; ASSISTANT PROFESSOR GEERDES; INSTRUCTOR DE WALL; MRS. KNOL, AND MRS. RUS

THEORY

103. **Theory and Harmony** **Three hours**
The elements of music: tonality, notation, rhythm. A coordinated study of harmony through the ear, eye, and keyboard. Writing and harmonization of hymn tunes and chorales, sight-singing, dictation using primary and dominant seventh chords. One hour laboratory period per week required.
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.
304. **Counterpoint, Canon and Fugue** **Three hours**
Continuation of 303.
313. **Conducting** **One hour**
A beginning course in basic, general conducting, working with hymns, folksongs, and choral literature. One hour of class and one hour of conducting lab per week is required. Prerequisite: 103-104.
314. **Conducting** **One hour**
A continuation of 313, with students studying in their area of special interest in either instrumental or choral conducting. One hour of class and one hour of conducting lab per week is required. Prerequisite: 313.
315. **Arranging** **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. Prerequisite: 103-104. Not offered 1963-'64.
316. **Arranging** **Three hours**
Continuation of 315. Not offered 1963-'64.

HISTORY AND LITERATURE

211. **Introduction to Music Literature** **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**
A historical survey of the worship music of the ancient Hebrews, the early Christian church, the Roman church and the churches of the Reformation. A study of the development of plainsong, the Lutheran chorale and the Genevan-Dutch psalm tunes. Not offered 1963-'64.
220. **Church Music** **Two hours**
A historical survey of the music of the church in post-Reformation England and America. A study of the organ and its literature and of the English hymn. Principles of appropriate worship music are discussed in the light of the history of the music of the church. Prerequisite: 219. Not offered 1963-'64.
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 textbook 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 early plainsong, 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.
326. **Chamber Music** **Three hours**
 A general course designed to provide the historical and musical background necessary for perceptive listening to music for small ensembles. The Cayvan Collection of recordings and scores will be used to give the student an insight into music written for trios, quartets, and quintets of string or wind instruments. The course is designed for the general college student who wishes to acquaint himself with this medium of musical expression. Offered second semester.

MUSIC EDUCATION

221. **Elements of Music** **Two hours**
 A course designed to give basic training in the melodic, rhythmic and harmonic elements of music for the prospective grade teacher. Special attention is given to coordinating the ear, eye, voice, and piano keyboard.
222. **Elementary School Music** **Two hours**
 A course designed to prepare the regular grade teacher for teaching music in the grades. Includes the study of child voice problems, rote-song teaching, conducting, music-reading, and an evaluation of basic music texts and supplementary music materials. Collateral reading. Prerequisite: Music 221 or its equivalent.
331. **Advanced Elementary School Music** **Three hours**
 A course designed to prepare the vocal music education major for teaching, organizing and administering all aspects of vocal music in the elementary grades. Must not be taken later than junior year. Prerequisite: Music 103-104, or equivalent.
332. **Secondary School Vocal Music** **Three hours**
 The study and evaluation of the aims, content, and procedures of a vocal music program for junior and senior high schools. Includes consideration of the changing voice, voice-testing and classification, general music class, and the principles underlying the organization and development of choral groups. Collateral reading. Must not be taken later than junior year. Prerequisite: Music 103-104 or equivalent.
333. **Organization and Administration of Instrumental Music** **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 orchestra and band instruments; evaluation of methods of class instruction; orchestra and band organization; repertoire. Must be taken no later than the junior year. Offered first semester.

APPLIED MUSIC

All applied music students should study with a member of the college staff. In case of an overload in the department, it may be necessary for the chairman of the

department to recommend that the student study with an approved teacher in the community. This recommendation will be made only in an emergency.

Applied music concentrates are required to give the equivalent of one half recital in the sophomore or junior year, and a full recital in the senior year.

All applied music students and all music majors are required to attend repertory class or studio class each Thursday at 1:00 p.m. Attendance is necessary in order to receive credit in applied music.

All applied music students must appear before a jury consisting of the members of the music faculty for examination at the end of each semester to determine placement and grade.

All entering applied music students will be given provisional placement for the semester by the instructor. Final placement will be determined by the jury at the end of the semester.

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

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 hours.

Individual Lessons

117-118, 217-218, 317-318, 327-328	Voice	One hour
Individual lessons in voice. Fee \$45 per semester.		
117c-118c, 217c-218c, 317c-318c, 327c-328c	Voice	Two hours
Individual lessons for the Music Major concentrating in voice. Fee: \$45 per semester.		
109-110, 209-210, 309-310, 319-320	Organ	One hour
Individual lessons in organ. Fee: \$45 per semester. Practice fee: \$15 per semester.		
109c-110c, 209c-210c, 309c-310c, 319-320c	Organ	Two hours
Individual lessons for the Music Major concentrating in organ. Fee: \$45 per semester. Practice fee: \$15 per semester.		
141-142, 241-242, 341-342, 351-352	Piano	One hour
Individual lessons in piano. Fee: \$45 per semester.		
141c-142c, 241c-242c, 341c-342c, 351c-352c	Piano	Two hours
Individual lessons for the Music Major concentrating in piano. Fee: \$45 per semester.		
161-162, 261-262, 361-362, 461-462	Strings	One hour
Individual lessons in violin, viola, violoncello or bass violin. Fee: \$45 per semester.		
161c-162c, 261c-262c, 361c-362c, 461c-462c	Strings	Two hours
Individual lessons for the Music Major concentrating in violin, viola, violoncello, or bass violin. Fee: \$45 per semester.		
171-172, 271-272, 371-372, 471-472	Woodwinds	One hour
Individual lessons in flute, oboe, clarinet, bassoon or saxophone. Fee: \$45 per semester.		
171c-172c, 271c-272c, 371c-372c, 471c-472c	Woodwinds	Two hours
Individual lessons for the Music Major concentrating in flute, oboe, clarinet, bassoon or saxophone. Fee: \$45 per semester.		
181-182, 281-282, 381-382, 481-482	Brasses	One hour
Individual lessons in cornet, horn, baritone, trombone or bass horn. Fee: \$45 per semester.		

- 181c-182c, 281c-282c, 381c-382c, 481c-482c **Brasses** **Two hours**
 Individual lessons for the Music Major concentrating in cornet, horn, baritone, trombone or bass horn. Fee: \$45 per semester.
191. **Percussion** **One hour**
 Individual lessons in snare drum, tympani and other percussion instruments. Fee: \$45 per semester.

Class Lessons

- 163-164. **Strings** **One hour**
 Class lessons in string instruments for the music major concentrating in Instrumental Music Education. Two class lessons per week.
- 173-174. **Woodwinds** **One hour**
 Class lessons in woodwinds for the music major concentrating in Instrumental Music Education. Two class lessons per week.
- 183-184. **Brasses** **One hour**
 Class lessons in brass instruments for the music major concentrating in Instrumental Music Education. Two class lessons per week.
193. **Percussion** **One hour**
 Class lessons in percussion instruments for the music major concentrating in Instrumental Music Education. Two class lessons per week.
- 119-120. **Voice** **One hour**
 Class lessons in voice for the music major concentrating in Instrumental Music Education.
- 199-200. **Repertory Class** **No credit**
 Students perform for their fellow students and for the music faculty to gain experience in public performance and to increase their knowledge of music literature. Attendance is required of all music majors and students of Applied Music. Others are invited.

ENSEMBLES

- 101-102. **Oratorio Chorus** **No credit**
 The study of representative works of the great masters of choral writing with a view to public performance. Handel's *Messiah* is rendered annually at Christmas time. Another oratorio is presented in the spring. Open to all who meet the requirements of voice and musicianship.
- 107-108. **Radio Choir** **One hour**
 Performs weekly as the Choir of the Back to God Hour over both the NBC and the Mutual Networks. Representative works in the field of church music suitable for radio performance are used. Open only to those who meet the demands of voice and musicianship. One hour credit for each semester.
- 113-114. **Varsity Band** **No credit**
 Membership in this band is open to all students who have had some experience on a wind or percussion instrument. It is designed for students whose schedules or qualifications do not permit their immediate membership in the concert band. The band plays for athletic events, Knollcrest campus activities, and other college functions. One rehearsal a week.
- 207-208. **A Cappella Choir** **One hour**
 Representative works in the field of choral literature are studied and a limited number of selections are prepared for concert performance. Open only to those who meet the demands of voice and musicianship. One hour credit for each semester.

213-214. Band **One hour**

Representative works in the field of band literature are studied and prepared for concert performance. Open to all students who meet the demands of musicianship. Two rehearsals a week. One hour credit for each semester.

215-216. Orchestra **One hour**

Representative works in the field of chamber and symphony orchestra literature are studied and prepared for concert performance. Open to all students who meet the demands of musicianship. One two-hour full orchestra rehearsal per week, plus a one-hour string sectional rehearsal. One hour credit each semester.

227-228. Chamber Band **No credit**

This band offers instrumental music majors and other qualified players a chance to perform works particularly suited to a wind ensemble of about 40 members. Open to a select group of players from the Concert Band. One rehearsal per week.

Philosophy

PROFESSORS PRINS AND RUNNER; ASSOCIATE PROFESSORS ORLEBEKE, WOLTERSTORFF, AND A. PLANTINGA

Every candidate for the A.B. degree, General College, is required to take six hours of philosophy, exclusive of Logic. To fulfill this six-hour requirement, the student may choose any one of the following combinations, (a) being the usual sequence.

- (a) Perspectives 201 and 202.
- (b) Ethics and any one of the following: Perspectives 201, Perspectives 202, History of Philosophy: Ancient.
- (c) History of Philosophy: Ancient followed by Perspectives 202.
- (d) Perspectives 201 followed by History of Philosophy: Modern.

This sequence (Philosophy 201-202) should be fulfilled by the end of the sophomore year. Juniors and seniors who elect to take Philosophy 201, 202, or 205 shall be assigned extra work.

Philosophy Majors:

Students who plan to major in philosophy should make application to the chairman of the department *not later than the beginning of the junior year*, and should thereafter arrange *each semester's* program in consultation with him.

Minimum total number of departmental hours required of a philosophy major is 27, distributed as follows:

Logic, History of Philosophy: Ancient, Medieval, Modern	12 hours
Kant	3 hours
Additional courses (advanced) in History of Philosophy, selection to be approved by departmental chairman	6 hours
Systematic disciplines, selection to be approved by departmental chairman	6 hours

Honors in Philosophy: All senior majors seeking honors should enroll in Philosophy 400 the second semester. The requirements for honors are:

- A. A senior thesis to be completed according to the following schedule:

- Subject - October 15
- Prospectus - November 15
- Finished thesis - March 15

- B. Successful completion of departmental comprehensives during the spring term. The departmental comprehensives will be given in the following fields:
1. History of Philosophy
 2. Systematic disciplines — not less than two

ELEMENTARY COURSES

(A student may elect any one of the elementary courses without having had previous courses in Philosophy.)

200. **Logic** **Three hours**
 A course in elementary deductive logic. Open to Freshmen. Offered each semester.
201. **Perspectives of Philosophy** **Three hours**
 An introduction to philosophy which emphasizes basic differences in philosophical orientation and perspectives by way of study of the Greek mind in comparison with the Christian, more particularly as articulated by Augustine. Offered first semester.
202. **Perspectives of Philosophy** **Three hours**
 Similar to 201, except that attention is centered on medieval and modern philosophy. Offered second semester.
205. **Elementary Ethics** **Three hours**
 Emphasis is on the contrast between the "moral commonwealths" of ethical naturalism, and its various forms, of classic pagan and modern idealism, and of Christianity. Offered first semester.
220. **History of Philosophy: Ancient** **Three hours**
 Historical and critical study of the philosophical questions raised in the Greek and Hellenistic periods, and of the implicit movement in the proffered solutions. Through Plotinus. Offered each semester.

INTERMEDIATE COURSES

(Intermediate courses normally presuppose three hours of Philosophy, but are open to all qualified *Juniors and Seniors*.)

301. **History of Philosophy: Medieval** **Three hours**
 Historical and critical study of the Christian philosophical perspective from the beginnings of Christianity to the Renaissance. Offered each semester.
302. **History of Philosophy: Modern** **Three hours**
 Historical and critical study of Western philosophy from the Renaissance to Kant. Offered each semester.
303. **Philosophy of Science** **Three hours**
 A study of philosophical problems arising out of the method and results of modern science. Offered first semester.
305. **Intermediate Ethics** **Three hours**
 A course in ethics which presupposes some acquaintance with the history of philosophy. (No credit is allowed for 305 if student has had 205.)
307. **Political Philosophy** **Three hours**
 A history of political thought from the Hebrews to contemporary times, with especial emphasis on the development of democratic ideals and their application. Not offered 1963-'64.

308. **Aesthetics** **Three hours**
 A study of the main features of the aesthetic judgment as exemplified in the fine arts, of the relation of art to the aesthetic, and of the relation of aesthetic value to other values, such as the moral. Offered first semester.
320. **Contemporary Philosophy** **Three hours**
 A study of the history of philosophy of the past 100 years, or some major movements of this period. Offered first semester.

ADVANCED COURSES

(Advanced courses normally presuppose six hours of Philosophy, but are open to all qualified *Seniors*.)

- A. 350-379. Advanced courses in history of philosophy. Intensive study of some philosopher or philosophical school of the ancient, the medieval, the modern, or the contemporary period.
351. **Plato** **Three hours**
 Study of the later Platonic dialogues. Offered first semester.
352. **Aristotle** **Three hours**
 Advanced study of Aristotle.
361. **The Philosophy of Thomas Aquinas** **Three hours**
 A course in Thomistic thought, including analysis of portions of the *Summa Theologica*.
365. **Kant** **Three hours**
 Study of the *Critique of Pure Reason*. Offered second semester.
- B. 380-399. Advanced courses in systematic disciplines of philosophy.
381. **Advanced Logic** **Three hours**
 Offered first semester.
395. **Metaphysics** **Three hours**
400. **Senior Honors Thesis** **Three hours**

Physical Education

PROFESSOR STEEN; INSTRUCTORS TUUK AND ZUIDEMA; MR. VROON, MRS. BYKER, AND MISS ZUIDEMA

REQUIRED PHYSICAL EDUCATION

Both men and women students are required to take three semesters of physical education in the four semesters of their freshman and sophomore years. In these three semesters one course must be selected in Foundations (140 series), one course in team and conditioning activities (160-170 or 260-270 series), and one course in individual and dual activities (180 or 280 series). The Foundations course must be taken in the freshman year.

Classes meet twice per week. Each course runs a full semester but is divided into two units of activity. Both units must be completed to receive credit for the course. Students may not repeat for credit any instructional unit.

The physical education requirement must be completed by the end of the sophomore year. Juniors and Seniors who have not fulfilled their requirements will be assigned extra work upon enrolling in a course.

Students should select the section of a course that fits their ability level. The 100 series sections are intended for beginners while the 200 series courses are intended for the more advanced in skill students. Students who were varsity letter winners in a sport in high school may not elect that sport in physical education.

Students who earn a letter in a sport at Calvin College should enroll in Physical Education 120 during the second semester of their sophomore year. This will fulfill their third semester requirement in physical education.

I. Foundations: 142 — Foundations and Track/Field; 143 — Foundations and Touch Football; 144 — Foundations and Field Hockey; 145 — Foundations and Softball.

II. Team and Conditioning: 160 or 260 — Soccer and Basketball; 161 or 261 — Soccer and Volleyball; 162 or 262 — Volleyball and Touch Football; 165 or 265 — Volleyball and Baseball-Softball; 166 or 266 — Basketball and Volleyball; 167 or 267 — Basketball and Physical Fitness; 168 or 268 — Volleyball and Physical Fitness; 169 or 269 — Volleyball and Field Hockey; 170 or 270 — Soccer and Gymnastics; 171 or 271 — Soccer and Physical Fitness.

III. Individual and Dual: 180 or 280 — Tennis and Badminton; 181 or 281 — Tennis and Archery; 182 or 282 — Archery and Badminton; 183 or 283 — Combatives and Golf; 184 or 284 Combatives and Tennis; 185 or 285 — Combatives and Archery; 186 or 286 — Golf and Badminton; 188 or 288 Body Mechanics and Tennis; 189 or 298 — Body Mechanics and Archery.

PROFESSIONAL COURSES

Students desiring the degree of A.B. in Education may obtain a minor in this department. They should select 12 hours from the courses listed here. Biology 105 and 106 are required for the minor program.

Minor students in physical education are expected to take all the courses offered in Required Physical Education program. They should consult with the head of the department for individual scheduling of these courses.

Students should meet requirements for the Red Cross First Aid Certificate. This course will be offered each semester.

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** **Three hours**
A study of the representative programs of physical education and evaluation of these programs.
204. **Community Recreation** **Two hours**
A study of the development, administration, and use of leisure time within the community and of the community agencies organized to meet present-day recreational needs. Not open to Freshmen.
205. **Coaching of Basketball** **Two hours**
A consideration of the fundamentals that make up the game of basketball; team conditioning, styles of play, and team strategy.
206. **Coaching of Spring Sports** **Three hours**
A study of the fundamentals of track, tennis, golf, and baseball. Methods of teaching and coaching of these sports are also discussed. Not open to Freshmen.
222. **Team Sports for Women** **Three hours**
A study of fundamentals, history, and teaching methods of basketball, softball, soccer, and volleyball.
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.

315. **Measurement and Evaluation in Physical Education** **Three hours**
 Required of all Physical Education Minor students. A study of the evaluation techniques available in physical education. Emphasis on tests of physical fitness, body mechanics, growth, motor ability, sport skills, and knowledge of health practices and sport activities. Consideration is given to the organization of evaluation programs and the use of such programs. The course gives opportunity for practical experience in administering tests. (prerequisite Physical Education 203.)
322. **Individual Sports for Women** **Three hours**
 A study of the background, fundamentals, and teaching methods of tennis, golf, badminton, archery and bowling.

Physical Science

PROFESSOR DE VRIES; ASSOCIATE PROFESSOR BROENE; ASSISTANT PROFESSOR VANDER LUGT

110. **Physical Science** **Four hours**
 This course attempts to evaluate primarily the basic assumptions used in the study of nature, the historical development of several theories and laws, and the results of modern scientific investigations in the fields of Physics and Chemistry. Emphasis is placed on the interrelation of these fields rather than on a study of each by itself. The student may elect to take Chemistry 103 or Physics 201 in place of this course. Prerequisite: Mathematics 109 or its equivalent.

Physics

PROFESSOR WASSINK; ASSOCIATE PROFESSOR R. FABER; ASSISTANT PROFESSOR GRIFFIOEN

A student who plans to do graduate work in Physics should complete Physics 205 and 206, as well as all of the 300-level Physics courses. In related fields, he should complete the Mathematics sequence 111, 112, 211, 212, 311, 312 before the end of the Junior year. Four semesters of algebra, two semesters of geometry and one semester of plane trigonometry should be completed in high school, if possible. A reading knowledge of two modern foreign languages is desirable for those planning to enter graduate school.

201. **General Physics for Biological Science Students** **Four hours**
 This course is designed for those who do not intend to do further work in Physics. Topics will include classical physics (mechanics, sound, heat, electricity and magnetism, and light) as well as descriptive material in modern physics (relativity, quantum theory, and particle physics). Three lectures and one laboratory period per week. Prerequisite: Plane trigonometry.
202. **General Physics for Biological Science Students** **Four hours**
 A continuation of 201 which is a prerequisite.
203. **General Physics for Engineers** **Six 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. Five recitations and one two- to three-hour laboratory period a week. Prerequisite: plane trigonometry.
204. **General Physics for Engineers** **Six hours**
 Electricity and light. (Required of all engineering students.) A continuation of 203. It takes up the fundamental phenomena and laws of electricity and light with ample class illustrations. Five recitations, and one two- to three-hour laboratory period a week.

205. **Introductory Physics** **Five hours**
 For students majoring in physics or chemistry or minoring in physics. An introduction to the major fields of physics: mechanics, heat, wave motion, electricity, and magnetism, atomic and nuclear physics. Calculus will be used. Prerequisite: Mathematics 112 or its equivalent.
206. **Introductory Physics** **Five hours**
 Continuation of 205, which is a prerequisite.
- NOTE: Prerequisites for the following courses are Physics 204 or 206, and Mathematics 212.**
301. **Mechanics** **Three hours**
 The fundamental principles of Newtonian Mechanics applied to a single particle, a system of particles, and to the motion of a rigid body; a discussion of central force motion with applications to Kepler's laws and Rutherford scattering laws; the principle of virtual displacements, d'Alembert's principle and Lagrange's equations; an introduction to the special theory of relativity.
302. **Mechanics** **Three hours**
 Continuation of 301 which is prerequisite.
303. **Modern Physics** **Three hours**
 The theories of special relativity and wave mechanics, with applications to atomic and molecular structure and spectroscopy, x-rays, statistical mechanics, solid state physics, and radioactivity.
304. **Modern Physics** **Three hours**
 Continuation of 303 which is a prerequisite.
305. **Thermodynamics** **Three hours**
 The principles of Thermodynamics with limited application to the kinetic theory of gases, chemical and electromagnetic systems.
306. **Optics** **Three hours**
 The phenomena of interference, diffraction and polarization. Two lectures and one laboratory period a week.
307. **Electricity and Magnetism** **Three hours**
 The elementary theory of electrostatics, magnetism, direct current and alternating current circuit theory, and electromagnetic waves. Not offered 1963-'64.
308. **Electricity and Magnetism** **Three hours**
 Continuation of 307 which is a prerequisite. Three lectures and one laboratory period a week. Not offered 1963-'64.
317. **Electrical Measurements** **Two hours**
 One four-hour lecture-laboratory period per week. This course provides experience in the techniques and theory of direct and alternating current measurements.
318. **Electronics** **Two hours**
 One four-hour lecture-laboratory period per week. This course provides an introduction to the basic electronic circuits commonly used in physics research. Prerequisite: Physics 317 or permission of the instructor.
319. **Modern Physics Laboratory** **Two hours**
 One four-hour lecture-laboratory period per week. An introduction to the basic laboratory techniques in atomic and nuclear physics and a study of some of the more important experiments on which modern physical theory is based. Prerequisite: Physics 318 and enrollment in Physics 303, or the permission of the instructor.

320. **Physics Research** **Three hours**
 Library and laboratory research on an assigned problem. Open only to approved Seniors majoring in physics.

Political Science

ASSISTANT PROFESSOR WESTRA; MR. ZOETEWY

A political science major requires a minimum of 24 hours. These must include particularly courses 203-204 (Introduction), and 305-306 (Political Thought).

Entry to any political science course which is numbered above 300 requires the completion of Political Science 203 and 204 or the permission of the instructor.

Majors in political science should present a minor in one of the following fields: Economics, History, Philosophy, or Sociology.

A minor in political science should include 203-204.

Students preparing to enter a school of law or contemplating careers in public administration should normally take Economics 307 (Essentials of Accounting) and Economics 309 (Business Law) in addition to a major in political science regardless of choice of minor. (See paragraph above.)

Students preparing for graduate work in foreign relations or who plan careers in foreign service should normally complete a political science major plus four years of a modern language plus one of the above-listed minors.

The meeting or satisfaction of any of the above-stated stipulations in no way releases students from the requirements (overall) of the General A.B. degree.

203. **Introduction to American Government** **Three hours**
 The first semester is intended as an introduction to political science: the nature of government, the state, law; constitutions, forms of government, ideologies. Designed to provide a background for more intensive study of American government.
204. **Introduction to American Government** **Three hours**
 Continuation of 203. A detailed study of American national government, analyzing its constitutional foundations, its structure and its functions; civil liberties, political parties, pressure groups.
205. **Government of Modern States** **Three hours**
 A study of the governments of the major powers of Europe: Great Britain, France, Germany and Russia. Sketches the historical background and the major factors (social, economic, ideological) which influence the process of government in each of these countries. Special attention is paid to post-war developments, to political movements, and to comparison of democratic and dictatorial regimes. Not offered 1963-'64.
206. **Government of Modern States** **Three hours**
 Continuation of 205. Includes brief treatment of the governments of some minor European states: Switzerland, the Netherlands. Not offered 1963-'64.
301. **State and Local Government** **Three hours**
 The development and philosophy of the American federal system; constitutional bases of state and local government; state and local administrative problems; formal and informal distribution of power in local communities.
302. **Parties, Public Opinion, and Pressure Groups** **Three hours**
 A study of the basic ideas of political parties and pressure groups; party organization, finance, electoral activity; pressure groups and public opinion; analysis of the competition for power among major organized interests such as business, labor and agriculture.
305. **History of Ancient and Medieval Political Thought** **Three hours**
 The development of political theory up to the Reformation. The leading theorists from Plato to Machiavelli; Church and State in the Middle Ages; medieval constitutionalism.

306. **History of Modern Political Thought** **Three hours**
 Representative political theorists from the Reformation to the present day.
307. **International Politics** **Three hours**
 An analysis of basic factors involved in world politics; the modern state system, nationalism, militarism, imperialism; the evolution of international relations; the foreign policies of major powers.
308. **International Politics** **Three hours**
 Continuation of 307. Special emphasis is placed on problems of American foreign policy; the process of foreign policy formulation in the United States; problems of international organization.
309. **Constitutional Law** **Three hours**
 The American Constitution as interpreted by the Supreme Court. Analyzes the leading cases in which the Court has laid down principles governing the relations between the national government and the states and between the three branches of the national government; limitations on Congress; limitations on the states.
310. **Constitutional Law** **Three hours**
 Continuation of 309. Special emphasis on constitutional issues in the field of civil liberties: freedom of religion, free speech, due process of law.

Psychology

PROFESSORS DALING AND C. PLANTINGA; ASSISTANT PROFESSORS BIJKERK AND WESTMAAS

The following courses are recommended for those intending to minor in psychology: 201, 204, 212, 209 or 311, plus a 300-level course. These courses should be taken in the order in which they are listed. (Educational Psychology 202 will be counted toward a psychology minor for those who are majoring in Education.)

The minimum total number of hours in psychology required of a psychology major is 24. Students who expect to be recommended for graduate work should take six additional hours of 300-level courses beyond the minimum of 24 hours; they also must take Mathematics 206 (Elementary Statistics). Students with a general average in psychology below B- will not be recommended for advanced training.

The following courses should normally be included in a psychology major (the first four in their sequential order): 201, 204, 212, 209 or 311, 301, 304, 308, 310 or 314 or 300. Majors who intend to teach psychology should also take Principles of Education (Education 301).

Majors are urged to take as many as possible of the following courses for ancillary aspects of psychology: Human Anatomy and Physiology, Logic, Perspectives in Philosophy, Elementary or Intermediate Ethics, Principles of Sociology or Social Problems, Social Anthropology, Shakespeare or American Classics, Principles of Speech Correction.

201. **General Psychology** **Three hours**
 An introductory course intended to give the beginner some orientation to the field of psychology in general in respect to viewpoints, methods, and assumptions; the major emphasis is on the motivational, emotional, and cognitional aspects of the normal adult human being. It is advisable that the student have had a course in human physiology. Not open to Freshmen, except by special permission. Offered both semesters.
202. **Educational Psychology** **Three hours**
 A psychological study of the forming of personality as it takes place in the classroom of the elementary and secondary schools. The course seeks to develop a sound foundation in principle and in fact for the understanding

of a child in the learning process. The observed facts of child life with reference to the classroom are interpreted according to the Scriptural doctrine of man and the Scriptural mandate in education. Psychology 201, or its equivalent, is a prerequisite. Offered both semesters.

- 204. Child Psychology** **Three hours**
 A study of the physical, motor, social, emotional, linguistic, intellectual and valuational development of the child. An attempt is made to trace these aspects of the human being's development from babyhood through adolescence. Course 201, or its equivalent, is a prerequisite. Offered both semesters.
- 207. Adolescent Psychology** **Three hours**
 A specialized course in developmental psychology directed specifically to the period from puberty to adulthood. Prerequisite: 201 and 204. Offered second semester.
- 209. Mental Hygiene** **Three hours**
 A study of personal attitudes toward reality and the solution of maladjustment by means of integration. Prerequisite: 201. Offered second semester.
- 212. 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. Offered both semesters.
- 216. Psychology of Exceptional (handicapped) Children** **Three hours**
 A study of psychological disorders in children, such as mental deficiency, partial defects of intelligence, personality disorders, neuroses. Attention will be given to diverse childhood intellectual, emotional, and motivational disturbances as caused by poor environmental conditions or by constitutional defects of mind or body. Prerequisites: Psychology 201 and 204. Offered second semester.
- 300. Advanced General Psychology** **Three hours**
 A more detailed and thorough examination than is possible in Psychology 201 of the major psychological functions of man. Emphasis will be placed on problems involved in perceiving, imagining and thinking. Prerequisite: 201. Offered first semester.
- 301. History of Psychology** **Three hours**
 A historical introduction to the problems and theories of modern psychology with special reference to the origin of divergences in the interpretation of human nature. Offered first semester.
- 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. Permission of instructor required. Offered second semester.
- 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. Offered second semester.
- 308. Experimental Psychology** **Three hours**
 A critical survey of experimental methods, problems, materials, results, and conclusions, with major emphasis on perception and learning but also some attention to broader problems of personality investigation. Two class-

room hours and one two-hour laboratory period per week. Prerequisites: open only to juniors and seniors intending to major in psychology or allied areas who have had a course in statistics plus at least nine hours of psychology. Offered first semester.

310. **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. Prerequisite: Psychology 201 and Sociology 203 or their equivalents. Offered first semester by department of sociology, second semester by department of psychology.
311. **Theories of Personality** **Three hours**
 An introduction to modern American and European theories concerning the psychological structure and dynamics of the human person. Prerequisite: six hours of psychology. Offered first semester.
312. **Psychodiagnostics** **Three hours**
 This course aims at giving the student a thorough introduction to the theoretical and practical issues, viewpoints, and techniques of psychological testing in the areas of both intelligence testing and projective techniques. Open only to psychology majors in their junior or senior year. May be offered second semester.
314. **Clinical Psychology** **Three hours**
 An introduction to the science, techniques, and art of employing psychological means to promote the welfare or mental health of a person. Prerequisites: nine hours of psychology including Psychology 212, it is also recommended that the student have had a course in statistics as well as the course in Theories of Personality. Offered second semester.

Sociology

ASSOCIATE PROFESSOR ROTTMAN; ASSISTANT PROFESSOR HOLSTEGE; VISITING INSTRUCTOR WILSON

A student who expects to do graduate work in sociology or social work should elect courses 203, 204, 310, 317, and 320. In addition, one who expects to do graduate work in Sociology should elect 318 and Mathematics 206. Mathematics 206, however, does not apply toward a major in sociology.

A student who majors in sociology but expects to do graduate work in social work should elect courses 203, 204, 305, 315, 317, 320. A student intending to do graduate work in social work need not necessarily elect sociology as his (her) major.

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, crime and delinquency, divorce, race and minority cleavages, and urban problems. It is desirable, but not necessary, to precede this course with 203.
206. **Urban Community** **Three hours**
 A descriptive and theoretical analysis of culturally variant urban communities. The emphasis is on function, process, value systems and styles of life, as well as on community structure. The suburban and "fringe" develop-

ment is considered as well as urban relationships. Prerequisite: 203 or 204, or equivalent.

210. **Introduction to Anthropology** **Three hours**
 The major areas of anthropology are critically evaluated in terms of a Biblical view of man and the world. These concern man in antiquity, the origin of the races, development of culture and cultural relativity. Relevant scriptural passages are considered.
304. **The Family** **Three hours**
 This course aims at an intensive culturally comparative and historical analysis of the family as a social and educational institution, and a discussion of divorce problems and other problems connected with family life. Prerequisite: 203 and 204, or equivalent.
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 deviant forms of behavior and situations are studied both theoretically and in operation. Prerequisite: 203 and 204, or equivalent.
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. Prerequisite: 203 or 204, or equivalent.
309. **Educational Sociology** **Three hours**
 The school as a social institution, School-Community relations, social control of education, and structure of school society. (Also listed as Education 309.) Not offered in 1963-'64.
310. **Social Psychology** **Three hours**
 Human behavior in relation to social environment, the shaping of personality through group membership, the impact of personality on the group, and collective behavior. (Credit applied either as psychology or sociology.) Prerequisite: Introductory courses in sociology and psychology.
315. **Introduction to Social Case Work** **Three hours**
 The analysis of social work principles, problems, and methods based upon theoretical and case material. Prerequisite: 203 and 204, or equivalent.
317. **Social Anthropology** **Three hours**
 A study of the origin and development of culture with a critical survey of prevailing theories of cultural origins such as social evolution and cultural relativism. The course will include a comparative analysis of social institutions and culture patterns, those of the United States and of widely different societies, past and present. Prerequisite: 203 or equivalent.
318. **Advanced Sociological Theory** **Three hours**
 The development of sociology, including its European backgrounds and early beginnings in the 20th century in America. Calvinistic appraisal of sociological pioneers, selected sociological concepts, and a general analysis of contemporary journal articles. Prerequisite: at least 12 hours of sociology.
320. **Pro-Seminar in Sociological Research** **Three hours**
 Involves the actual formulation of sociologically significant hypothesis, designing research to test them, collection and analysis of data, the use and misuse of statistics. Prerequisite: At least 12 hours of sociology.

Spanish

ASSISTANT PROFESSOR DAVID VILA

101. **Elementary Spanish** **Four hours**
 An introductory course in the use and comprehension of oral and written Spanish.

102. **Elementary Spanish** **Four hours**
Continuation of Spanish 101.
201. **Intermediate Spanish** **Three hours**
Review of essential grammatical structures and further training in spoken and written Spanish. Readings from significant Spanish authors.
202. **Intermediate Spanish** **Three hours**
Continuation of Spanish 201.
207. **Readings in Spanish and Latin American Literature I** **Three hours**
An introductory survey of Spanish literature from the Middle Ages to the present. The first semester deals with Spanish Literature up to the 18th century. Emphasis will be placed on representative authors within the main literary currents. Lectures, readings, and reports. Prerequisite: Spanish 202. To be offered only if schedule will allow.
208. **Readings in Spanish and Latin American Literature II** **Three hours**
Continuation of Spanish 207. This second semester deals with Spanish Literature of the *Generación del '98* up to the present. Some representative Latin-American authors will also be studied. To be offered only if schedule will allow.

Speech

ASSISTANT PROFESSOR BERGHUIS; PROFESSOR JANSSEN; ASSISTANT PROFESSORS DE KOSTER AND VANDE GUCHTE*; MRS. BOEVE, *Director of Drama*; INSTRUCTOR OZINGA; MR. BYKER AND MRS. RIENSTRA

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. Offered both semesters.
104. **Fundamentals of Speech — II** **Two hours**
Continuation of 103, with emphasis on longer speeches, motivation, and rhetoric. Panel discussions, symposiums, and different types of speeches will be presented. Prerequisite: 103 or its equivalent. Offered both semesters.
106. **Diction for the Foreign Student** **Non-credit**
Particularly designed to aid the foreign student taking the pre-Seminary course who has not completely mastered the English language. Intensive drill in phonetics. Open to others by permission. Offered first semester.
109. **Speech for the Classroom Teacher** **Three hours**
Designed to: (1) improve the prospective teacher's vocal habits; (2) train the student in the use of the International Phonetic Alphabet; (3) aid the prospective teacher in handling speech activities in the classroom. Offered both semesters.
202. **Parliamentary Procedure** **One hour**
A study of the basic principles of parliamentary procedure. Opportunity will be given for developing skill in the handling of the rules of parliamentary procedure. Especially recommended for Pre-Seminary, Pre-Law, and education students. Offered second semester.

*On leave of absence 1963-'65.

205. **Advanced Speech Composition** **Three hours**
 Study of the psychological and rhetorical techniques involved in speech composition. Speeches and oration. Intended particularly for Juniors in the Pre-Seminary course. Offered both semesters.
207. **Introduction to Speech Based on the Great Books** **One hour**
 Prerequisite to 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. Offered first semester.
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: 207. Offered second semester.
215. **Principles of Speech Correction** **Two hours**
 A one-semester course especially designed for the elementary and secondary school teachers. A detailed study will be made of the types, nature, and causes of speech defects, as well as of the principles and methods of speech correction. Not open to Freshmen, except by special permission. Offered both semesters.
219. **Principles of Dramatic Productions** **Three hours**
 A study of the theory and principles of drama as revealed in representative plays from the Greek through the modern period. With a view to training the prospective coach, attention will be given to the technical aspects of production. Students will be trained in acting and in directing by means of classroom presentations of dramatic scenes. Offered both semesters.
225. **Ancient and Medieval Orators and Theories of Speech** **Three hours**
 An historical and analytical study of ancient and medieval orators and rhetoricians, including Plato, Aristotle, Demosthenes, Cicero, Quintilian, Saint Augustine, and the patristic orators. Not open to freshmen. Offered first semester.
226. **Renaissance and Modern Orators and Theories of Speech** **Three hours**
 An historical and analytical study of Renaissance and modern orators and rhetoricians with special reference to the social and political movements in history. Representative speeches will be selected for analysis. Not open to freshmen. Offered second semester.
301. **Advanced Speech** **Two hours**
 A practice course, designed for Pre-Seminary students. Open to others only by permission. Offered second semester.
303. **Interpretative Reading** **Three hours**
 The principles and techniques of interpretation and expression. Oral interpretation of prose and poetry. Intensive study of representative selections. Offered both semesters.
304. **Advanced Interpretation** **Three hours**
 Continuation of 303. Application of its principles to drama. Study of development from Greek to modern drama. Collateral reading. Offered second semester.
311. **Oral Discussion and Debate** **Two hours**
 Theory and practice of discussion and debate in their various forms. The use of analysis, evidence, and argumentation is developed. Offered first semester.
330. **The Teaching of Speech** **One hour**
 Methods of teaching speech in the secondary schools. Attention will be given to the handling of extracurricular forensic activities. Prerequisite: a minor in speech. Offered second semester.

FORENSICS

209. Intercollegiate Peace Oratory	One hour per year
211. Intercollegiate Oratory	One hour per year
213. Intercollegiate Extemporaneous Speaking	One hour per year
220. Thespian Productions	One hour per year
<p>Membership in the Thespian group is limited and is determined annually by tryout. The members will be given training in the various practical aspects of the production of drama. Students may participate more than one year. The activity runs through the school year.</p>	
310. Intercollegiate Interpretative Reading	One hour per year
312. Intercollegiate Debating	
League Debaters	Two hours per year
Tournament Debaters	One hour per year

SUMMARY OF ENROLLMENT

Fall 1962 and Summer 1963

Seniors	480
Juniors	575
Sophomores	637
Freshmen	768
Post-Graduate	34
Special	43
Summer Session, 1963	507
Total	<u>3044</u>

Bequests

Friends wishing to make donations, conveyances, or bequests to Calvin College and Seminary may use the following legal form of bequest:

“I hereby give, devise, and bequeath unto Calvin College and Seminary, a corporation organized and existing under the laws of the State of Michigan, the sum of dollars, to be paid out of any real or personal estate owned by me at my decease.”

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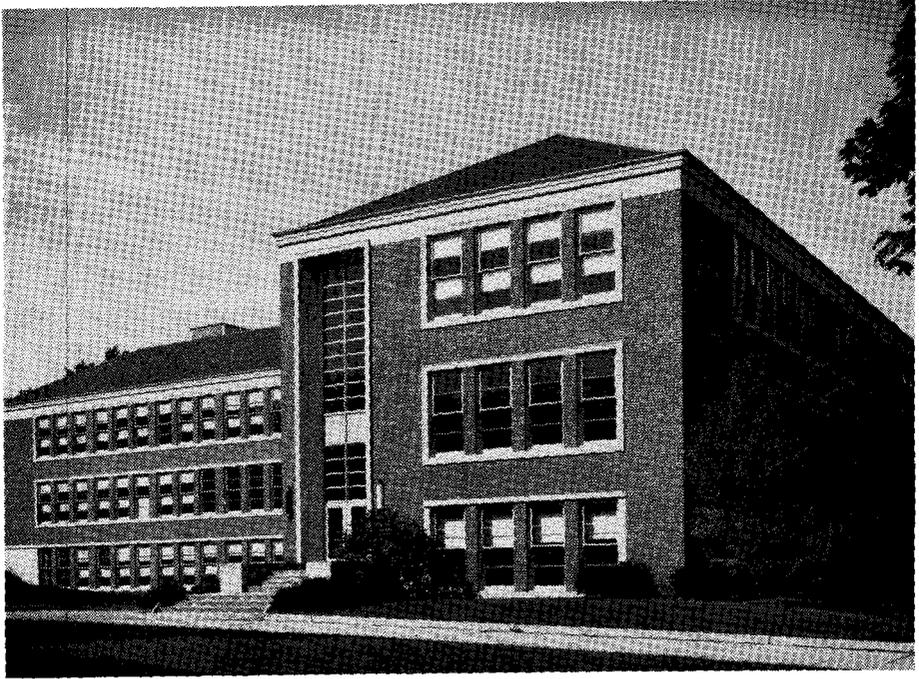
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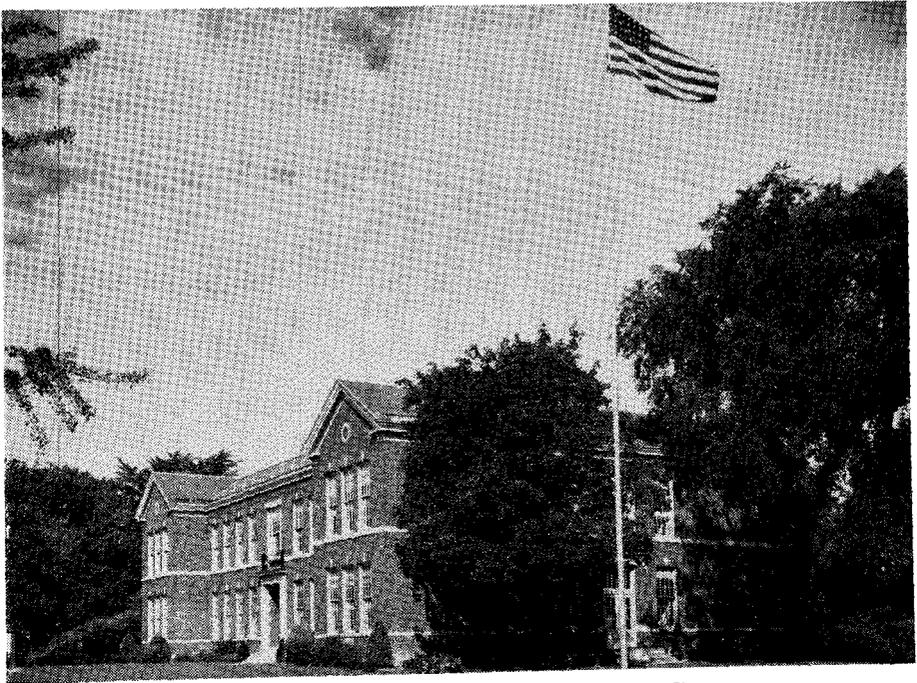
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Science Building — Franklin Campus



Hekman Classroom Building — Franklin Campus



Language Laboratory, Library-Classroom Building—Knollcrest Campus



Franklin-Knollcrest Line