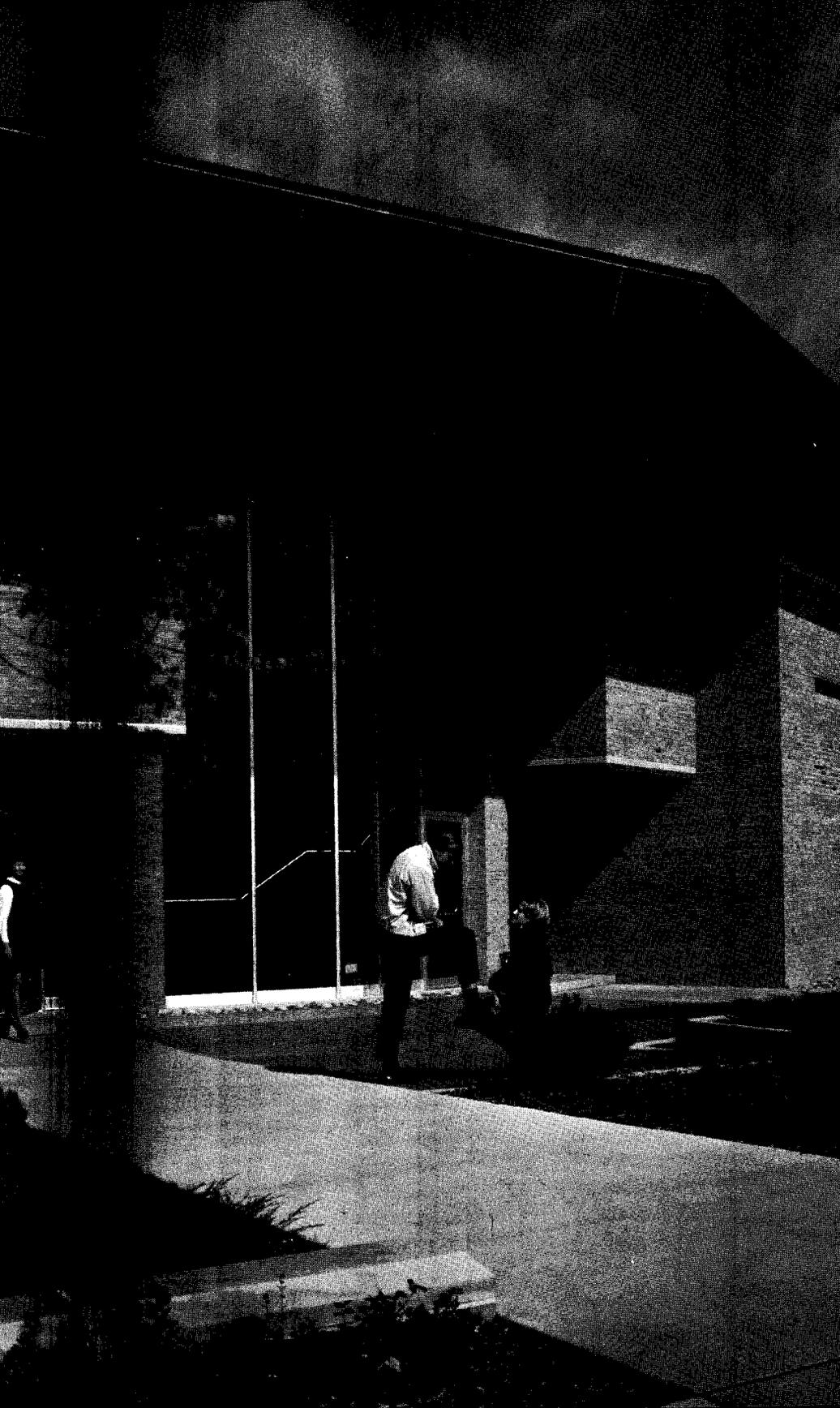




CALVIN COLLEGE

The college of the Christian Reformed Church

This is a catalog of programs conducted on both campuses of the college in Grand Rapids, Michigan. A supplementary catalog for the 1968-69 interim courses will be issued in the Fall of 1968.



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The college year, 1968-69

The Fall Semester

SEPTEMBER	3	Tuesday	Faculty-Board conference
	4	Wednesday	Residence halls open
	4-7	Wednesday-Saturday	Freshman orientation
	5-6	Saturday, Thursday, Friday	Sophomore, junior, and senior registration
	7	Saturday	Freshman registration
	9	Monday	Classes begin 8:00 a.m.
			Convocation, 10:45 a.m.
			Knollcrest campus classes resume, 1:30 p.m.
			Franklin campus classes resume, 2:00 p.m.
	20	Friday	Final date for course and section changes
NOVEMBER	15	Friday	Final date for dropping courses
	27	Wednesday	Thanksgiving recess begins, 5:00 p.m.
DECEMBER	2	Monday	Classes resume, 8:00 a.m.
	14	Saturday	Final examinations begin, 8:00 a.m.
	19	Thursday	Semester ends; vacation begins 5:00 p.m.

The Interim

JANUARY	8	Wednesday	Interim term begins, 8:00 a.m.
	30	Thursday	Interim term ends, 5:00 p.m.

The Spring Semester

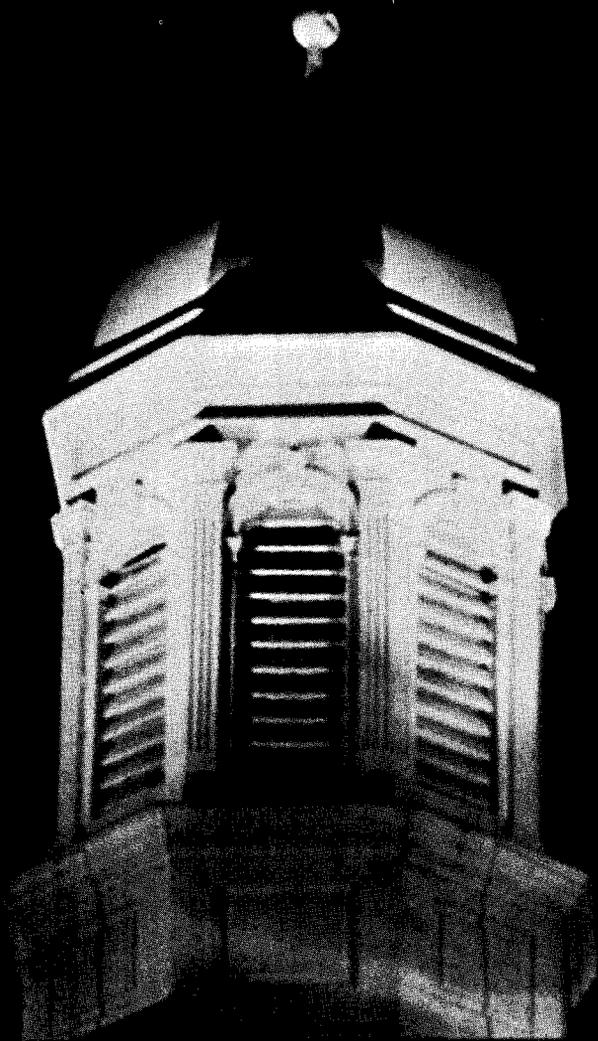
FEBRUARY	3-4	Monday, Tuesday	Registration for second semester
	5	Wednesday	Second semester begins, 8:00 a.m.
	18	Tuesday	Final date for course and section changes
MARCH	21	Friday	Spring vacation begins, 5:00 p.m.
	31	Monday	Spring vacation ends, 8:00 a.m.
APRIL	15	Tuesday	Final date for dropping courses
MAY	8	Thursday	Honors convocation
	19	Monday	Final examinations begin, 10:00 a.m.
	24	Saturday	Commencement

The Summer Session

JUNE	16	Monday	Registration
AUGUST	1	Friday	Final examinations; session ends

The Fall Semester

SEPTEMBER	2	Tuesday	Faculty-Board conference
	3-6	Wednesday-Saturday	Freshman orientation
	4-6	Thursday-Saturday	Registration
	8	Monday	Convocation; classes begin



THE COLLEGE *and* ITS OBJECTIVES

History

CALVIN COLLEGE is a college of the Christian Reformed Church. The Christian Reformed Church is a century-old church with a century-old heritage. It bases its whole faith and life on the sacred Scriptures, God's holy, inspired, infallible Word, and thus takes its stand with the churches which have their roots in the Protestant Reformation.

In America, the Christian Reformed Church traces its origin to a band of immigrants who sought freedom in the nineteenth century from the established church of the Netherlands. They settled in western Michigan, and, after an early period of religious unrest among the thousands of Dutch settlers who soon joined the earlier immigrants, organized the Christian Reformed Church in 1857.

The Christian Reformed Church subscribes to three statements of faith (in addition to the early Christian Apostolic Creed), which stem from the Reformation period: the Heidelberg Catechism, which is the most famous and widely translated of all Reformation creeds; the Confession of Faith, written by the Belgian theologian, Guido de Brés, in 1561; and the Canons of Dordt.

The Christian Reformed Church stresses the sovereignty of God in every part of life—in the family, the church, the state; in world affairs; in economic, social, and political life; in business; and in education and the arts.

The founding date of Calvin College and Seminary is 1876. In that year the Christian Reformed Church adopted a six-year curriculum for ministerial training. The first four of these years were spent in the Literary Department, and the last two in the Theological Department. In 1894 other than pre-theological students were admitted to an expanded curriculum, and thus the school became a type of preparatory school or academy. In 1900 the curriculum was further broadened and made more attractive

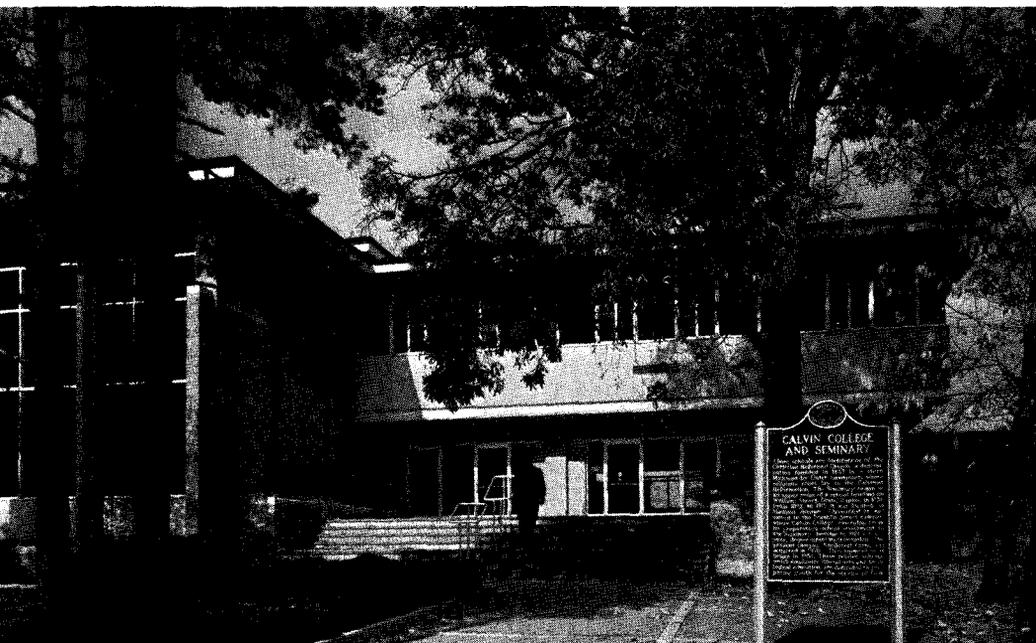
to students interested in teaching or in preparing for pre-professional courses in the universities. By 1906 the Literary Department, which provided the four years of preparatory and two years of college work, became known officially as the John Calvin Junior College. The two-year college in time became a four-year college, and the preparatory department was discontinued. In 1921 Calvin College awarded its first Bachelor of Arts degree.

The school which had started with seven students grew slowly during the early years, but by 1930 it had reached its pre-World War II size of 350-450 students. By 1950 the enrollment had climbed to 1,270 and last year reached 3,330.

In 1961 the college began the development of a new campus site. The college still occupies the Franklin Street campus for use by some of the upper division classes, but the center of academic activity is gradually shifting to the new Knollcrest campus. Most student housing is there. The Library-Classroom Building, the Fine Arts Center, the Physical Education Building, and the Student Commons are at the heart of the new campus. A new Science Building and two new dormitories will be occupied in September, 1968.

Aim and purpose

Calvin College aims to give young people an education that is Christian, in that it is governed by the Christian faith as reflected in the Reformed standards, through the discipline of the liberal arts and sciences. These arts and sciences cultivate, in the student, value-judgments related to a thorough knowledge of facts about man's relationship to God, to himself, to his fellow-



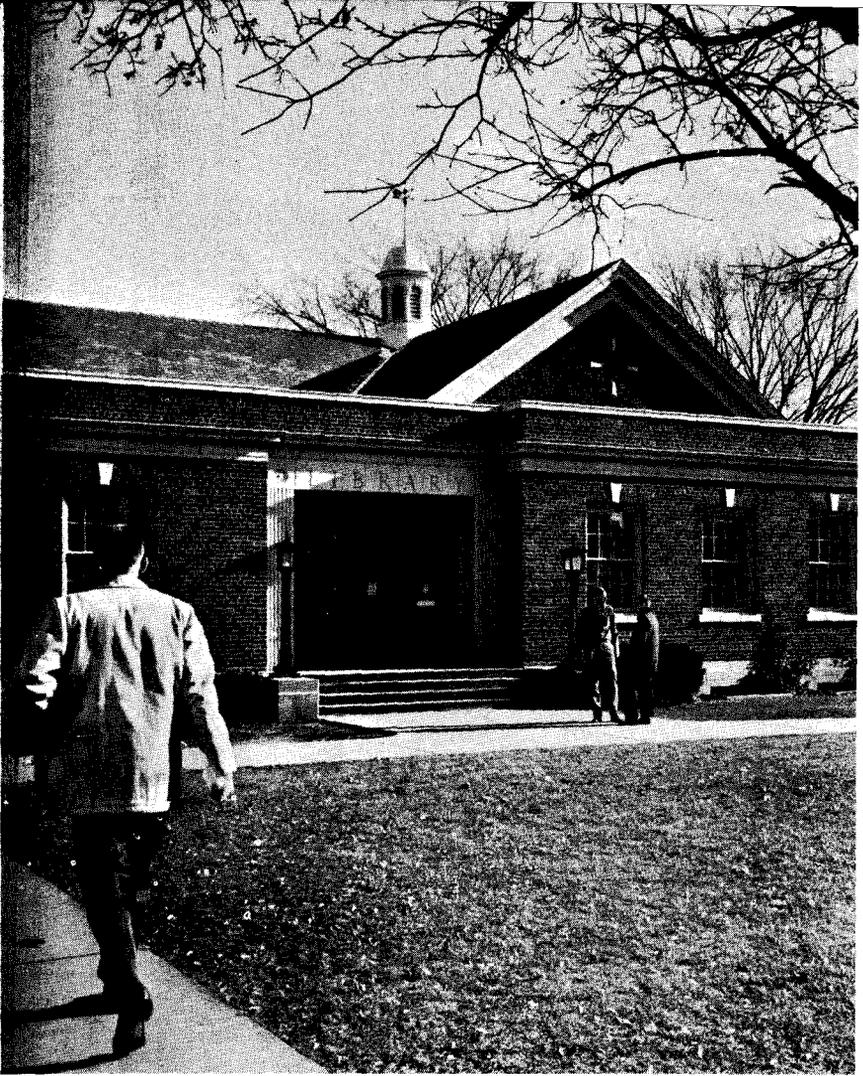


man, and to the world. The Christian faith is the dynamic motivating an investigation of all fields of human knowledge revealed by God in His Word and in His world. The student is led to offer his whole creative, imaginative, intellectual, and social enterprise eagerly and earnestly in the service of God and of his fellowman, thereby acknowledging the lordship of Christ over all things. Thus, the college seeks to promote in the student sound scholarship, earnest effort, and a sense of obligation to use his talents fully, in response to a calling.

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, personal integrity, and social responsibility. It strives to emphasize that service to God and fellowman 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.

Government

The corporate name of the college is CALVIN COLLEGE AND SEMINARY. It is governed by a single board of trustees, which represents the ecclesiastical divisions of the church, arranged on geographical lines. Internally, the administration, the staff, the student body, and the physical facilities of the college and seminary are completely separate and independent. The membership of the board is constituted of ministers elected by the various classes and approved by synod, and laymen elected by synod. The board of trustees meets in February and May of each year. An executive committee, which meets on the second Thursday of each month, functions for the board throughout the academic 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 is on the American Association of University Women list of institutions qualified for membership in the association. 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.

Alumni Association

The Calvin Alumni Association is composed of all students who have studied one year or more, or have completed at least twenty-four hours of course credits at Calvin College or at Calvin Seminary, 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 Calvin Alumni Association is governed by a council composed of the executive board and representatives of the alumni chapters. The council meets during the first week in June. The executive board meets five times a year to review the work of the full-time coordinator of alumni relations, make suggestions for the alumni program, and make final decisions on activities suggested by the coordinator.

The Alumni Association maintains an office in the administration building on the Franklin campus where all records are maintained and the business of the association is conducted.

Psychological Institute

The Calvin Psychological Institute was established in 1964 to provide facilities for the expansion of instructional activities, particularly for the departments of psychology and education, and for research by faculty members and advanced students. The institute provides psychological, educational, and occupational guidance services to the Calvin College student body, to Christian schools, and to individual clients. The institute is housed in the Professor Johannes Broene Center.

The staff of the institute is composed of members of the Psychology and Education departments and certified educational and psychological specialists. The services of consultants from the professions of medicine, psychology, and education are utilized.

The institute does not aim at long-term treatment for severely emotionally disturbed or retarded individuals. Rather, the main task of the various guidance services is conceived to be guidance in milder emotional and social problems, learning problems, and vocational problems.



STUDENT LIFE *and* REGULATIONS

THE AIM OF CALVIN COLLEGE is to prepare students to live productive lives of faith to the glory of God in contemporary society. Not merely lives that have a place for religion, or lives which formally relate religious commitment to the academic disciplines, but lives which in every part, in every manifestation, in their very essence, are Christian. Accordingly, the college attempts through its rules, its organizations, and the counsel of its personnel, to show the student how a life of commitment is lived in his room, on the athletic field, in his academic work, and in his daily religious practices. This matter of being totally Christian cannot be deferred until graduation. Confrontation with the secular world, cooperation with Christians in common cause, and the development of personal expressions of faith must be part of current college life. This being in the world while not of it, this testing of the spirits, whether they be of God or not, this searching, seeking, learning, trying—this is the business of Christian education at Calvin.

Worship and Christian service

All students are expected to find a place of worship, to participate with regularity, and to affiliate formally in some way during the first two months of their residence at the college. Students may either transfer their membership to local churches or have their home consistories provide them with student certificates which will be sent to local churches. Sunday worship services and the celebration of the sacraments are also held at the Knollcrest campus under the auspices of four local consistories. Student certificates will be held by the committee in charge, and pastoral counsel provided. Students are encouraged to seek out the pastors of the churches they attend and to identify themselves with the church life.

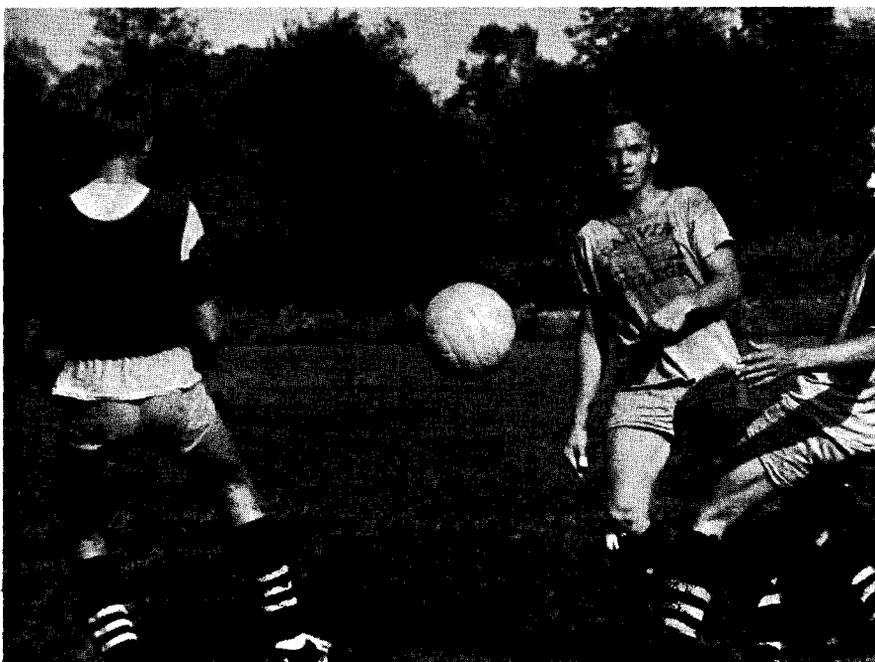
Chapel services are held on Tuesday, Wednesday, Thursday, and Friday on both campuses, and students are required to attend either on Tuesday and Thursday or on Wednesday and Friday. In addition there are many opportunities for voluntary religious activities—Bible study groups, student prayer groups, Christian service activities, the mission study club, as well as projects and college-level groups directly related to local churches. The voluntary aspect of campus religious life is supervised by the Student Religious Council and by the chaplain, who is available for counsel at any time.

Athletics

The program of required physical education is organized to promote physical fitness, to introduce students to a variety of sports programs, and to create sufficient skill and interest so that they will continue to participate voluntarily. Accordingly, facilities for both indoor and outdoor recreational facilities are conveniently and freely available. The intramural program is extensive throughout the entire year, with competition organized around sports clubs which may be based on residence units, or class groups. Calvin participates in most inter-collegiate sports except football and is a member of the Michigan Intercollegiate Athletic Association (MIAA) composed of Albion, Alma, Adrian, Hope, and Olivet colleges.

The fine arts

Many sorts of fine arts activities thrive at Calvin both as part of the academic life and as the result of spontaneous student interest. Bands, orchestras, choral groups, and ensembles are part of the program of the



Department of Music for the participation of all qualified students. The dramatic productions of the Thespians as well as inter-collegiate debating and other forensic activities are sponsored by the Department of Speech. Students from all departments participate. The long Calvin tradition of creative writing for publication and for private reading is encouraged by the members of the Department of English. The *Loci* and the *Chimes* provide opportunities for student publication. The enlarged Department of Art is creating excitement in the various graphic and plastic arts. Student creative work in all fields is presented at an annual Fine Arts Festival in the spring.

For students less interested in participation than in appreciation the student council provides a program of speakers, of fine films, and of other entertainment. Other public performances sponsored by various academic departments, by the alumni association, and by community groups are also presented on campus frequently. The four thousand-seat physical education building, the thousand-seat auditorium in the Fine Arts Center, and the hundred-seat Swets Choral Room have become centers for these activities.

Housing

As a matter of policy the college requires all students to live in college residence halls, private housing inspected and approved by the college, or at home. Accordingly, all freshmen and sophomore students must live in college-owned housing and board at college dining halls or live with their parents. There is some range of housing fees, depending on the numbers of students in a room and on the location. Housing information is available from the Student Personnel Office.

All other students must live in college-approved, off-campus housing. The list of approved rooming places is available at the Housing Office. Rents are typically \$6 to \$7 a week per person and are paid through the college. Seniors and other students at least 21 years of age may be permitted to live in college-approved apartments. Sophomore, junior, and senior women may work for their room and board. Approved homes are listed at the Housing Office.

Student government and other student organizations

Elected from class nominations, the twenty-five member student council has an important role in the life of the college. Not only does it serve as the official voice of the student body, but it governs most students activities. It controls the student activities budget and concerns itself with student publications, WCAL, homecoming, the film arts council, and similar groups.



Some of its members also serve on joint faculty-student committees, particularly the Student Social Activities Committee, the Student Religious Activities Committee, and the Communications Board.

All residence halls have their own governing councils and judiciary committees. These units work in cooperation with the staff members to enhance community life in the halls.

Numerous clubs and societies exist on campus, many of which are related to particular academic departments, such as education, psychology, and sociology. There are also many volunteer service groups which attract student participation, such as KIDS (Kindling Intellectual Desire in School), an organization of Calvin students that supplies teacher's assistants, "big brothers" for the local courts, and tutors for high school students from depressed areas.

All organized clubs or similar groups must have formal approval and sponsorship.

Orientation for new students

All new students are required to participate in a program of orientation held just prior to each registration. At that time they will meet a number of faculty members as well as administrators, including the college president,

the vice presidents, and deans. Information about college activities and facilities, and the distribution of registration materials are a part of the orientation program. Upperclassmen serve as orientation leaders for small groups of new students. The schedule and information are mailed to new students during the month before registration.

Maintenance of college standards

Admission to Calvin College is a privilege that may be withdrawn from any student who does not meet the academic standards of the college. In addition, the college not only expects a student to conduct himself both on and off campus in accord with his profession of religious commitment as he has indicated it in the application forms, but it may refuse admission to, may discipline, or may expel any student who in its judgment displays conduct or attitudes unworthy of the ideals and standards of the college.

Faculty advising

At his first registration a student will be assigned a faculty counselor, generally from the department or area of his greatest interest. A student may remain assigned to this faculty counselor for his entire college career but, if his interest changes or if for any reason he wishes another adviser, different assignments will be made. The student's faculty counselor not only will advise him on his academic program but will be concerned with the student's personal and religious development and will recommend any personality or vocational testing that seems appropriate. When necessary, he will refer the student to other services of the college, including the Psychological Institute. Program changes, including the dropping of courses, must be approved by the faculty counselor.

The college chaplain, the dean of students, the dean of women, and, in fact, any faculty member or administrator, will welcome conversation with any student and will seek opportunities to be of assistance.

Health services

The college provides limited medical services for all students. This is maintained by a fee incorporated in the tuition charge. The health center, located on the ground floor of the Franklin Dormitory, is maintained by a full-time nurse and by several consulting physicians who attend office hours each morning. 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 local students, or to a physician of the student's choice.

A Group Accident and Sickness Expense Protection Plan is available to all students on a low-cost, voluntary basis and all students not covered by similar plans are strongly urged to participate. Married student family plans are also available. Detailed information is available in the Business Office.

The college is not liable for injuries sustained by students in their activity as students, even though such injuries occur on college premises, in laboratory work, or in physical education classes. The college does not undertake to be the insurer of its students and its liability under law must be based on fault. It is necessary, in order to establish the 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. Accordingly, students are advised to be certain that they are covered by personal health and accident insurance.

Use of automobiles

Automobiles owned or operated by Calvin students must be properly registered in the Parking Office and must carry an official college automobile permit. Permits may be refused for academic or financial deficiency. Automobiles may be parked only in approved student parking areas and the drivers will be fined if they are parked elsewhere. Because parking areas are limited on both campuses, parking regulations are enforced stringently.

Graduate placement and fellowships

The college maintains a series of services for graduating students to assist them in securing fellowships to graduate school, teaching positions, and career placement.

The Teacher Placement Bureau, administered through the Department of Education, assists graduates in securing teaching positions. All seniors and graduates of the college who have completed the requirements for teacher certification are eligible for this service without charge but must file all the appropriate data with the bureau to secure the service. Such material is made available to any interested school.

The Student Personnel Office maintains a directory of prospective employers seeking college graduates and makes known through the *Intra-Campus Bulletin* the times when such organizations will interview students.

Various graduate school and graduate fellowship programs are supervised by the coordinator of graduate fellowships. The broadest of these is

the **Michigan** Scholars in College Teaching program which attempts to identify early and encourage students of promise who are interested in college teaching. This program is administered cooperatively by five Michigan liberal arts colleges and the University of Michigan. A similar program, but restricted to the humanities, is conducted jointly with thirty-six colleges and the University of Chicago. Students who show outstanding promise are eligible for graduate fellowships. A number of competitive national fellowships are available to Calvin seniors and information on these is also available through the coordinator. These include the Woodrow Wilson fellowships, the Danforth Foundation fellowships, the Rhodes scholarships, the Marshall fellowships, the National Science Foundation fellowships, the various Fulbright grants, and many others. The conditions for these grants vary from year to year as do the deadlines. For most of them, however, application must be made early in the fall and students are advised to take the Graduate Record Examination at the earliest possible date.





ADMISSION *and* ACADEMIC REGULATIONS

Admission

In selecting students for admission, Calvin College naturally looks for evidence of Christian commitment and for the capacity and desire to learn. Although the prospect of academic success is of primary consideration, the applicant's aspirations, the recommendations of his pastor and school, and the particular ability of Calvin to be of service to him will be considered.

All application forms received by the Office of Admissions later than May 1 must be accompanied by a \$10 late registration fee; no application will be considered after June 15. (The late registration fee must accompany second semester applications received after November 15 and none will be accepted after January 1.)

The following documents must support each application:

1. **SCHOLASTIC RECORD** The applicant's previous education must be reflected in a transcript from an accredited secondary school which shows the satisfactory completion of fifteen units of work and the school's appraisal of the candidate. (A unit is the equivalent of five class hours a week for thirty-six weeks in one branch of study.) These fifteen units must include the minimum of three units of English, two units of a single foreign language (Dutch, French, German, Latin, or Spanish), a three-unit major sequence and a two-unit minor sequence chosen from the mathematics-physics area, the natural sciences (excluding general science), and the social studies area. Two minor sequences will be accepted from these areas if a student presents a three-unit major sequence in a foreign language. The remaining units may be selected from those which count toward graduation in an accredited high school, but the Office of Admissions has the ultimate right of rejection. Candidates intending to follow the pre-seminary program are advised to

complete a minimum of two units of Latin. Those intending to major in engineering, mathematics, or physics should complete four units of mathematics, if possible.

2. REPORT OF THE COLLEGE ENTRANCE EXAMINATION BOARD TESTS The Scholastic Aptitude Test of the College Entrance Examination Board is required of all freshman candidates. The test is given, normally, six times a year throughout the world—November 2, 1968; December 7, 1968; January 11, 1969; March 1, 1969; May 3, 1969; and July 12, 1969. Application forms are generally available from high school principals, but may be secured by students living east of the Rocky Mountains from the College Entrance Examination Board, Box 592, Princeton, New Jersey 08540. Application should be made at least four weeks prior to the date of the test. Those who live in the Rocky Mountain states or farther West, including students in Western Canada and in foreign countries of the Pacific areas, should apply a month in advance to the College Entrance Examination Board, Box 1025, Berkeley, California 94701.

Applicants for scholarships should take the test in November or December in order that the results may be available for the Scholarship Committee early in January. All candidates for September admission are strongly urged to take the test at the earliest convenient date.

3. APPLICATION FOR ADMISSION

4. PERSONAL RECORD

5. PASTOR'S RECOMMENDATION

6. HEALTH RECORD All candidates must present evidence of a complete physical examination. Chronic physical or psychological problems should be clearly indicated to enable the College Health Service to function intelligently on the basis of full information. However, the college cannot be responsible for the continuing treatment of injuries or disabilities incurred by a student prior to matriculation.

An additional form, a recommendation from his consistory, is required for any student intending to study for the ministry. This form will be mailed to the consistory by the co-ordinator of admissions after the applicant has been accepted for admission.

A student will be notified concerning admission as soon as all six application documents have been received by the college and, if he is admitted, he will be given an admission card with his permanent student number, which must be presented at registration. Scholastic Aptitude Test results are usually reported three to four weeks after the tests are taken. Prospective students from outside the Grand Rapids area must make arrangements for room and board through the Office of Housing.

MODEL HIGH SCHOOL PROGRAM

High school students should recognize that the quality of their high school education will determine the ease with which they will do college work and their ability to follow certain courses of study. The following is recommended as a model high school program:

English	4 units	
Mathematics	3 units	An additional unit is desirable for prospective mathematics, physics, or pre-engineering majors.
Foreign language	2 units	Preferably three; ideally the last unit in grade 12; prospective ministers should complete two or more units of Latin.
Science	2 units	Biology, chemistry, or physics; one with a laboratory.
History	2 units	
Typing		
Electives	3 units	
	16 units	Additional units are desirable for students with special interests.

Admission under special circumstances

The college is eager to serve any prospective student, including those with irregular academic histories who show promise of benefiting from a college education. Applicants who are at least twenty-one years of age but have not completed high school or its equivalent may be admitted on probation provided they have successfully completed the General Educational Development Test and submit satisfactory scores on the Scholastic Aptitude Test.

Applicants who have not met the requirements as to prescribed high school work or as to the distribution of that work may be admitted provisionally. The deficiency, however, must be removed before the end of the first year of residence. Applicants are strongly urged to make up any deficiency during the summer preceding their enrollment as freshmen. In many cases these deficiencies may be removed by attending the summer session at Calvin College.

Some applicants with weak high school records may be admitted on academic probation because of other evidence of academic promise. Such students will receive special counsel and are advised to restrict sharply their involvement in employment, in social life, and in campus activities. Applicants who meet all of the requirements for admission but who do not desire to become candidates for an academic degree may be enrolled as special students for such studies as their preparation qualifies them to pursue with profit.

Admission of foreign students

Calvin College is approved by the U.S. Immigration and Naturalization Service as an institution of higher education for the training of non-citizens

who are in the United States on student visas. Such prospective students should apply for admission early in the fall of their last year in high school, following the general procedures given above. The Scholastic Aptitude Test is given in foreign countries but is not required of students presenting a Senior Matriculation Certificate or who transfer from another college or university having earned at least one semester of credit.

When such an applicant is accepted for admission he will be sent a formal letter of admission by the co-ordinator of admission and a copy of the required I-20 form. The prospective student should make application immediately with the American Consul in his area for a student visa.

Applicants from non-English speaking countries must demonstrate an adequate command of the English language. This can be done by passing either the English Test administered by the English Language Institute of the University of Michigan, Ann Arbor, or the Test of English as a Foreign Language administered periodically throughout the world by the Educational Testing Service of Princeton, New Jersey.

Admission to the nursing program

Candidates for the joint nursing program of Calvin College and the School of Nursing at the Blodgett Memorial Hospital must apply for admission to the college as outlined above and must also apply to the Director of the School of Nursing, Blodgett Memorial Hospital, 1840 Wealthy St., Grand Rapids, Michigan 49506. Completed forms for both applications should be submitted during the early part of the candidate's senior year in high school. The candidate must be accepted by both the college and by the admissions committee of the School of Nursing.

Readmission

Former students of the college and applicants who previously had been given papers entitling them to admission but who did not register must make formal application for readmission. Applications for the fall semester after July 1 and for the spring semester after December 1 must be accompanied by a late application fee.

Advanced standing

Students transferring from other colleges or universities must follow the same procedures of applying for admission as freshmen, but they are not required to sit for the Scholastic Aptitude Test. They will receive credit for work done in accredited institutions provided the courses were of an

academic nature, the grades were median C or higher, and the student received an honorable dismissal. However, not more than sixteen credit hours for each semester in attendance will be accepted. No more than seventy semester hours of advanced credit will be allowed for work at an accredited junior college. Furthermore, no matter how much work at other institutions may be accepted, in order to graduate from Calvin a student must complete a full academic year in residence.

A maximum of three course credits or nine semester hours will be allowed for courses taken by correspondence from accredited colleges and universities. Courses taken in residence at other accredited institutions are accepted, provided they have been approved by the registrar in advance. In no case, however, will work in a junior college be accepted after a student has accumulated more than twenty units of credit at Calvin.

Veterans will receive credit, as recommended by the American Council on Education, for liberal arts courses taken through the USAFI and for a maximum of nine semester hours taken by correspondence courses from accredited universities in the program.

Entering freshman students, at the time of admission, may be given limited advanced college credit for certain courses. The candidate must formally apply for advanced credit and may justify his request in any of four ways: he may submit satisfactory scores on any one of the Subject Examinations of the College-Level Examination Program administered by the College Entrance Examination Board; he may submit a grade of 3 or higher on the Advanced Placement Examination of the College Entrance Examination Board; he may submit up to two course units (or six credit hours of credit) from an accredited high school for college-level work completed after graduation; or he may pass special departmental examinations at Calvin College.

In some cases students may be given advanced standing in some particular field of study, with perhaps an excuse from a given course, without being given college credit for work previously done. Such advanced standing does not excuse a student from any of the general graduation requirements of the college.

Enrollment in seminary classes

College students may, as part of a program worked out with their departmental advisors, carry up to two courses in the seminary in any one semester. Approval by the registrar of the seminary and the registrar of the college is required, and under no circumstances may credit for a single course be counted toward degree programs in both the college and seminary. Seminary students may enroll for not more than two courses in the college provided the dean of the seminary and the college registrar approve.

Student load and classification

The typical student load is four courses a semester. The normal load, however, may range from three to four and a half courses with courses in applied music, drama, and speech and in required physical education not included in the maximum. A year's participation in applied arts courses carries a half course credit, but not more than two courses credits thus acquired may be applied toward graduation, except for music majors in certain applied music concentrations.

In exceptional cases a student may apply to carry more than four and a half courses; such an application requires the recommendation of his academic adviser and the approval of the dean of the college.

Students with a minimum of seven courses completed will be classified as sophomores; those with sixteen, as juniors; and those with twenty-five, as seniors.

For the purposes of conversion, a course under the new curriculum is considered to be equivalent to 3.5 credit hours.

Grading systems

Grades during the regular semesters are designated by the letters A, excellent; B, good; C, average; D, just passable; and F, failure. Provisional grades of I, incomplete, and X, absent from examination, are temporarily averaged as F and become F permanently, for students in residence, if not removed within a calendar year. The initiative for the removal of I and X grades rests with the student. Courses with grades of D or F may be repeated once with both grades included in the student's record.

For purposes of averaging grades, the following numerical values or grade points are assigned to each of the above grades: A, four points per course; B, three; C, two; and D, one. A plus is computed at three-tenths of a point above these figures and a minus at three-tenths below. Grades for courses completed at other colleges and universities are recorded on the student's record but are not used when computing the student's average at Calvin.

Ordinarily grades for the interim are H, honors; S, satisfactory; and U, unsatisfactory, do not carry honor point values, and are not averaged in the student's total record. The provisional grades of I and X become U automatically in a calendar year if they are not removed. A few courses normally offered during either semester, when taught during the interim, will be graded in the traditional letter system and will be included in the student's average.

A grade of W (withdrawn) will be recorded if a student officially leaves a course with the approval of his faculty counsellor, his instructor, and the registrar before November 15 of the first semester or April 15 of the second. After these dates grades of WP (withdrawn passing) or WF (withdrawn failing) will be recorded. A grade of W will be given in all courses if a student officially discontinues during the semester. Such action requires the approval of the dean of students or the dean of women, who will notify the student's parents, and of the registrar.

Any student found guilty of dishonesty in any examination or test or in written work of any character will be given F for the course and will be subject to disciplinary action.

Honors, probation, eligibility

Full-time students with an average grade of A- (3.50) or higher for any semester will be placed on the Dean's List. Students with cumulative averages below C (2.0) are placed on probation. Part-time students and those on academic or disciplinary probation may not participate in any organized extra-curricular activity. For details of these regulations, see the *Student Handbook*.

Application for degrees and certificates

For a baccalaureate degree a student must complete thirty-six and a half courses, including four interims, with a minimum cumulative average of C (2.0) in all courses graded with letter grades, must pass thirty-five and a half courses, and must complete an approved program of concentration with a minimum average of C (2.0). To receive a degree a student must also have completed at least one year's residence at Calvin, ordinarily the year preceding graduation.

Candidates for degrees must file application to graduate in the Office of the Registrar not later than the beginning of the semester or summer session in which they expect to receive their degrees. Students who meet the conditions for teacher certification in Michigan as explained on pages 44-47 should apply for this certificate at the end of the semester during which they complete the requirements, and must apply within one calendar year after their completion, at the Department of Education.



EXPENSES *and* FINANCIAL AID

Tuition and related fees

Tuition and related fees are \$1,080 for the year and \$540 for a semester. This includes a total of \$20 a semester in fees for student organizations including *Prism*, the student center, the health service, class dues, and laboratory fees. Although the tuition for the interim is covered by the tuition of the regular semesters, there will be no reduction in the semester tuition if a student does not enroll for the interim. If a student registers for the interim alone, he will be charged at the one-course rate.

Calvin has always considered it a privilege and an obligation to provide financial assistance to outstanding young men and women whose personal and financial resources are inadequate to meet the basic cost of education. The most significant financial support has come from the Christian Reformed Church. On the basis of distance from the college, it has provided the funds for significant institutional grants-in-aid. Students whose parents are members of the Christian Reformed Church and who thus contribute regularly to the support of Calvin College, will be able to apply for an institutional grant-in-aid at the time of registration. The amount of this grant-in-aid is determined in part by the distance between the student's home and his campus at Calvin College, as measured in a direct line. The home of an unmarried student is considered to be that of his parents; that of a married student, to be that of his residence before enrolling at Calvin. If a student's parents are not members of the Christian Reformed Church, the grant-in-aid will be based on the location of the Christian Reformed Church of which the student is a member. The maximum grant-in-aid is:

	per year	per semester
Within ten miles of the student's campus	\$160	\$ 80
From ten to three hundred miles	260	130
From three hundred to a thousand miles	330	165
More than a thousand miles	410	205
Manitoba, Ontario, and Quebec provinces of Canada	330	165
Alberta, British Columbia, and Saskatchewan provinces	410	205

In addition, a special reduction of \$25 per student is granted when two or more full-time students enroll from one family.

The tuition rate for part-time students is \$150 for each course, with a \$20 institutional grant-in-aid for those who are members of the Christian Reformed Church. Part-time tuition for students carrying fewer than three courses does not cover any of the related fees for health service, student organizations including the *Prism*, the student center, etc. The auditing fee for part-time students is one half of the regular tuition charge; there is no fee for auditing by full-time students.

Expenses for room and board

The basic charge for room in the new residence halls at Knollcrest and board in Knollcrest dining halls is \$850 for the year; students assigned to older college housing or guild houses in the Franklin campus area will be charged \$815. For regulations concerning student housing see page 13.

For students not required to live in college housing, the charge for a seven-day meal ticket is \$540 a year and for a five-day meal ticket is \$455.

Summary of fees

SEMESTER FEES		MISCELLANEOUS FEES	
Tuition, full-time	\$540.00	Late application fee	\$10.00
Tuition, part-time, per course	150.00	Late registration fee	10.00
Auditing, per course	75.00	Late payment fee	2.00
Room and board, maximum	425.00	Special examination fee	3.00
Board, seven days	270.00	Physical education deposit	5.00
Board, five days	227.50	Graduation fee	10.00
Directed teaching fee	10.00	Second diploma fee, combined curriculum programs	5.00
Individual music instruction	45.00	Vehicle registration fee	5.00
Organ rental	15.00	Transcripts, after first copy	1.00
		Copies with one paid	.25
		Residence hall social fee	16.00

In addition to these direct charges, the student should allow about \$80 per year for the purchase of textbooks and classroom supplies. An annual budget for personal items such as clothing, transportation, entertainment, toilet articles, and miscellaneous supplies varies widely among students.

Payment of financial obligations

Tuition and fees should be paid in full at the time of registration; however, in no case should the initial payment be less than \$150. The balance must be paid by November 15 of the first semester and by April 1 of the second. Accounts not paid by these dates are subject to a \$2 late payment fee.

A minimum of one fourth of the total charges for room and board, when these are to be paid to the college, must be paid at the beginning of the semester and the remainder in quarterly payments, at dates published subsequently. Accounts not paid on this schedule will be subject to a \$2 late payment fee.

Student financial aid

In addition to scholarships, which are granted on the basis of outstanding records and promise, Calvin College has a broad program of financial assistance for its students. This includes, in addition to the institutional grant-in-aid program described on page 27, a variety of other grant-in-aid and loan programs, several of which are supported or underwritten by the state and federal governments or by private organizations, and a placement service for part-time employment. The office also serves as a clearing house for non-college programs. The college urges each applicant to explore local or state sources of financial assistance as well. Generally, a student's financial needs can be met by a combination of the various programs. Students who may be eligible for scholarships should consult the section on page 30.

A prospective student should not deny himself a Calvin College education because of cost. However, arrangements should be made prior to registration. At that time he should have in hand a substantial portion of his semester's expenses either from savings, scholarships, loans, or grants-in-aid, if intending to carry a full academic load, should not plan to carry more than twelve to fifteen hours of employment.

Any student with financial need who feels he is eligible for any student aid program may request additional information from the Office of Student Financial Aid or request an application form. The office is located in the Administration Building on the Franklin campus. As a matter of policy, to be fair to all students, applications for financial assistance must be supported by a Parents' Confidential Statement which is reviewed for the college by the College Scholarship Service of the College Entrance Examination Board to determine the degree of need. Letters of recommendation are also required. Students who apply should be in good standing or, if freshmen, should be admitted to regular status. Except for emergency aid programs, applications should be made in the spring of the year or as soon as a student has been admitted to the college.

The office also operates the Student Employment Service, which serves as a clearing house for part-time and seasonal employment. Students wishing such work should apply at the office at any time.

Educational Opportunity Grants. This federal government-sponsored program is intended to make possible college education for exceptionally needy students with average or better-than-average academic promise. Up to one half of a U.S. citizen's financial need — grants range from \$200 to \$800 a year — may be supplied; the other half must come from loans or employment.

College Work-Study Program. Students who need employment to help pay for college expenses are potentially eligible for employment by Calvin College or in approved off-campus agencies under this federally-supported program for U.S. citizens. The student's eligibility depends on his need, with preference being given to applicants from low-income families.

National Defense Student Loan Program. A maximum loan of \$1,000 is possible for U.S. citizens. Preference is given to needy students and to those entering the teaching profession. These loans bear no interest charge until nine months after graduation. At that time, a ten-year repayment schedule commences with a 3 per cent interest charge. If the borrower

becomes a full-time teacher, up to 50 per cent of the loan may be forgiven at the rate of 10 per cent per year of teaching.

Loans for Canadian Students. The various provincial governments of Canada have generous loan programs which may be used by students from those provinces of Canada.

Cuban Loans. This program, with the same features as the National Defense Student Loan Program, is available to Cuban nationals who are refugees in the United States.

Guaranteed Loan Programs. Loans from private banks generally up to \$1,000 are guaranteed and subsidized by the federal government through various state and private agencies such as the Student Aid Fund, Inc. Financial need is not stressed.

Emergency Loans. Amounts up to \$50 are available from the Kiwanis Club funds.

Royce Ulferts Memorial Loan Fund. This \$100 emergency loan fund has been established in memory of Royce Ulferts.

Scholarships

A number of scholarships are available for undergraduates of all classes, and each applicant should determine his own eligibility. Approximately a hundred freshman scholarships are granted annually. All scholarships are awarded as recognition for academic excellence and are renewable on a competitive basis. Cash stipends given to scholarship winners vary in amount, depending on the student's need, and such stipends can be supplemented by loans and work opportunities provided by the college. All students holding scholarships awarded by the college are expected to meet part of their own expenses.

Calvin College participates in the College Scholarship Service of the College Entrance Examination Board. All scholarship winners who apply for scholarship amounts beyond the minimum stipend must submit a Parents' Confidential Statement for processing by the College Scholarship Service.

Freshman scholarship candidates may request application forms for each of the various scholarships when they request admission forms. Such candidates must not only complete application forms but must also complete the scholarship forms and arrange for two letters of recommendation in



their support. Because all freshman applications and supporting documents must be in the hands of the Scholarship Committee by January 1, the Scholastic Aptitude Test must be taken not later than the scheduled December date. Applications for all other scholarships must be completed by March 15, with the exception of those designated.

FRESHMAN SCHOLARSHIPS AND AWARDS

Freshman Honor Scholarships. Each year the college awards up to five Honor Scholarships to students of superior academic achievement. The minimum stipend is \$100; it can be supplemented by an additional stipend up to 80 per cent of the student's need and by work opportunities and loans. A student will automatically be considered for this scholarship if he has applied for the Calvin College Freshman Scholarship.

Freshman Scholarships. These are awarded to entering freshmen who have done excellent work in high school. The minimum stipend is \$50, but this can be supplemented by an additional stipend up to 25 per cent of a student's need and by work opportunities and loans.

Typically, at least one scholarship is offered to a graduate from each Christian high school.

Freshman Merit Award Scholarships. Calvin College offers Freshman Scholarships to each high school graduate who has received a National Merit Scholarship Corporation Certificate of Merit, provided he or she has satisfied the other conditions for receiving a College Scholarship described above, and provided he has not already been granted another freshman scholarship. The winner of such a certificate who seeks to qualify for the scholarship must notify the chairman of the Scholarship Committee not later than April 1 of the year in which he is applying for admission and must

present a copy of the certificate to the Scholarship Committee. Winners of Letters of Commendation are not eligible.

Freshman Pre-Nursing Scholarships. Each year Calvin College offers two scholarships for students who plan to enter the one-year pre-nursing course. One award is made to a graduate of a Christian high school, and one to a graduate of a public high school who is a member of the Christian Reformed Church. The stipends and the other conditions are like those for the Calvin College Scholarships described above, except that applicants are not expected to complete a three- or four-year program.

The Alvin M. Bentley Foundation Scholarship. Calvin College has been allocated one \$500 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. Consideration will be given to scholarship, character, personality, promise of growth, and financial need.

Consumers Power Company Scholarship. Each year the Consumers Power Company offers a scholarship of \$300 to an entering freshman. The scholarship is good for any course of study selected by the student; the recipient must live in a Michigan area served by the Consumers Power Company.

Detroit Edison Company Scholarship. The Detroit Edison Company offers annually a scholarship of \$400 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. The scholarship is renewable if the student maintains at least a B average.

Calvin College National Merit Scholarship. Calvin College annually sponsors one four-year scholarship for a National Merit Finalist. The selection procedure and the amount of the scholarship is determined by the National Merit Scholarship Corporation. Prospective students who indicate Calvin College as their first-choice institution will be considered for this award.

General Motors Scholarship. Calvin College has been allocated one scholarship to be awarded under the General Motors College Scholarship Plan. This four-year award is intended for a high school graduate seeking admission to Calvin College. The applicant must be a citizen of the United States and is expected to have outstanding talents. Primary consideration in making the award will be given to scholarship, character, personality, and promise of growth. The amount of the award will be based upon the applicant's financial need. 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.

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 the children of employees of Steelcase, Incorporated. 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.

Friends of Calvin Tuition Scholarship. Each year, two renewable, full-cost tuition scholarships are made available by the *Friends of Calvin* for worthy, needy, Christian Negro students who reside in Grand Rapids and environs. The scholarships are provided for the twofold purpose of giving such students a Christian collegiate education and giving the com-

munity competent Christian leadership. Renewal of the scholarships is dependent upon satisfactory performance. The winners are to be selected by the Scholarship Committee of the college, the applicants being judged on the basis of scholastic ability, character, and need. All applications and recommendations must be in the hands of the chairman of the Scholarship Committee by May 1.

Kent Medical Foundation Grants. Each year the Kent Medical Foundation makes

available two tuition grants to qualified students at Calvin College. These grants are designated for students who are residents of Kent County or vicinities bordering thereon and who have not received a professional degree. To qualify for a grant, a student must be matriculated in a health career recognized as scientific in nature. Upperclassmen, as well as freshmen, are eligible to apply for this grant; the deadline for application is March 15.

FRESHMAN GRANTS NOT ADMINISTERED BY THE COLLEGE

State of Michigan Competitive Scholarships. Each year the Michigan Higher Education Assistance Authority awards a number of state scholarships to beginning freshmen. These scholarships are to be used for tuition and fees and are not to exceed \$800. Scholarship winners must demonstrate college potential and financial need. To be eligible for consideration for a state scholarship, each applicant must: (1) qualify as a result of his performance on the State Competitive Examination, (2) be a continuous resident of Michigan for 18 months prior to the date of the examination, (3) have successfully completed the program of instruction at a Michigan high school or be currently enrolled as a student at such a school and engaged in a program which will be completed by the end of August, and (4) be a person of good moral character. Additional information and application forms can be secured from the principal's office of any Michigan high school.

Freshman Alumni Grants. Since 1966 the Calvin Alumni Association has given a large number of freshman grants of \$100 each to qualified high school seniors who are in need of special financial assistance. Candidates for these awards are nominated by local alumni chapters or by high school principals and counselors.

The Atlantic Monthly Scholarship. The Atlantic Monthly offers a \$500 scholarship each year to the winner of its Creative Writing Contest for high school students. Calvin College participates in this program by offering a supplementary grant based upon the needs of the winner, if he enrolls at Calvin College. The

selection is made by The Atlantic Monthly Company. Complete details concerning this contest can be secured by writing to the Atlantic High School and Private School Contest, Eight Arlington Street, Boston, Massachusetts 02116.

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.

Henry Beets Mission Society Scholarship. The Henry Beets Mission Society of the La Grave Avenue Christian Reformed Church provides an annual grant to promote the ministry of the Church to the American Indian. Initial funds for this grant were given by the Herrick Foundation of Detroit, Michigan. Those eligible are American Indians who intend, preferably, to minister as pastors or teachers to members of their own race. The amount of the grant is determined by the needs of the student. The student shall consult with the registrar when planning his program. Candidates should apply in writing to the Henry Beets Mission Society, La Grave Avenue Christian Reformed Church, 107 La Grave Avenue, Grand Rapids, Michigan 49503.

Julius Bergsma Memorial Awards. The Bergsma Brothers Foundation gives three duplicate awards to young men and young women finalists in the Annual Young Calvinist Federation Speech Contest: Two first-place winners — \$350 tuition and/or college-related expenses,

two second-place winners — \$100 cash awards, two third-place winners — \$50 cash awards.

Contestants must be members of a Young Calvinist Federation youth group. Schooling of contestants must not exceed the twelfth grade. The first-place award will be held in trust for up to three years to permit the contestant to meet college entrance requirements. If a first-place winner does not plan to enter college or is prevented from doing so, the next-ranking contestant becomes eligible for the award. Complete details on rules and awards may be obtained from The Young Calvinist Federation, 2365 Nelson Avenue, S.E., Grand Rapids, Michigan 49507.

George M. Pullman Educational Foundation Scholarships. 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 January 15, and for current undergraduate students April 15. High school seniors should obtain information about application procedures from high school placement officials. Other candidates should address their inquiries to the Educational Director,

George M. Pullman Education Foundation, 1451 East 55th Street, Chicago, Illinois 60615. 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 before December of the senior year of high school.

SOPHOMORE, JUNIOR, AND SENIOR SCHOLARSHIPS AND AWARDS

Upperclassman Scholarships. Each year Calvin College offers a number of scholarships to members of the freshman, sophomore, and junior classes who have achieved superior records in their previous college work. The minimum stipend is \$100, but this can be supplemented by an additional stipend up to 25 per cent of a student's need and by work opportunities and loans. Holders of Freshman Honor Scholarships and Calvin College Scholarships, as well as other qualified students, are encouraged to apply for Upperclassman Scholarships.

Alumni-Faculty Memorial Scholarships. The Calvin Alumni Association each year provides the college, in memory of deceased college faculty members, with annual scholarship grants. The number of scholarships given each year is dependent upon the funds available and the number of qualified students making application.

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.

Dr. Harry Kok Memorial Scholarship. An annual scholarship of \$400 is presented each year, in memory of Dr. Harry Kok, to a junior pre-medical stu-

dent for use in his senior year at Calvin College. The award is given primarily for achievement in scholarship, although other factors, such as financial, need, will be taken into account. This scholarship is not limited to students who make formal application.

Henry Beets Mission Society Scholarship. For information on this grant to American Indians see the previous section.

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 institution's cost of educating a student during 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 selected by the scholarship committee of the college on the recommendation of the department concerned.

Dutch Immigrant Society Scholarship. The Dutch Immigrant Society offers annually four scholarships of \$250 each to Calvin College upperclassmen. The applicant must be an immigrant or a child of immigrant parents. This award is granted on the basis of scholarship, Christian character and personality, and financial need. The selection of candidates is made by the Scholarship Committee.

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 academic achievement, 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.

Kent Medical Foundation Grants. Each year the Kent Medical Foundation makes available two tuition grants to qualified students at Calvin College. These grants are designated for students who are residents of Kent County or vicinities bordering thereon and who have not received a professional degree. To qualify for a grant a student must be matriculated in a health career recognized as scientific in nature.

Summer School Scholarship. Twelve 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 1969. The National Union and Calvin College each contributes

\$1,200 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 receiving 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 and for grants-in-aid write directly to the Director of Scholarships, National Union of Christian Schools, 865 - 28th Street, S.E., Grand Rapids, Michigan 49508.

Application must be made by February 1.

Student awards

Anna Bruinsma Award in Music. The interest on \$750, given by the late 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 Applied Music Awards. A number of awards of \$200 each are presented by the Calvin College Oratorio Society to prospective freshmen. These awards are given to instrumentalists and vocalists who can meet college admission requirements, who have records of superior achievement in high school music

activities, and give evidence of outstanding talent and musicianship in audition. Recipients must maintain a C average for the duration of the award and are expected to participate in the scheduled rehearsals and performances of at least one of the following: concert band, varsity band, orchestra, radio choir, a cappella choir. For application procedure, see award below.

Vander Heide Voice Award. An award of \$200 is offered annually by Mr. and Mrs. Jan Vander Heide to a vocalist who can meet Calvin College admission requirements, and who has a record of superior achievement in high school mu-

sic 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 the duration of the award. Only freshmen are eligible. Applicants will be judged on the basis of evidence of talent and financial need.

Application blanks for the Oratorio Society and Vander Heide awards may be secured from the Music Department after March 1, and must be returned on or before April 18, 1969. Auditions in person or by tape recording will be held May 3, 1969.

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 College at the annual State Extemporaneous Speaking Contest.

Berghuis Forensic Awards. Students who represent the college in State Oratory, Extemporaneous Speaking, and Inter-

pretative 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 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 College in the State Oratorical Contest of the Michigan Intercollegiate Speech League.

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 College in the State Oratorical Contest of the Michigan Intercollegiate Speech League.

The Beets Calvinism Award. The late Dr. and Mrs. Henry Beets established a fund which now amounts to \$1,500, the income of which is to constitute a prize for the best essay or term paper on Calvinism, in any of its expressions, written each year by a Calvin College student. The prize will be awarded at the discretion of the Department of Religion and Theology, in consultation with the president of Calvin College. If, during any given year, the Department of Religion and Theology 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.

The William B. Eerdmans Literary Awards. The late Mr. William B. Eerdmans, Sr., established the William B. Eerdmans Literary Awards in the interest of encouraging original, creative writing among Calvin College students.

Under the terms of the foundation three awards—first, \$35; second, \$25; third, \$15 are made for the three pieces judged best among the contributions to each issue of the Calvin College *Loci* published in any given year. Any type of original writing submitted to the *Loci* is eligible for an award, whether it be poetry, fiction, or essay, creative or critical, seriously reflective, or delightfully amusing.

The Rinck Memorial Award. A fund of \$2,500 has been subscribed by former students and friends as a memorial to William Rinck, Professor of Mathematics at Calvin College (1905 to 1920). The income of this fund 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.

Jewish Evangelization Award. Dr. and Mrs. William J. Yonker, for the year 1968-69, offer a prize of \$50 for the best essay and a prize of \$25 for the second-best essay on a subject bearing on the evangelization of the Jews. The contest is open to all college students.

The Edward D. VanderBrug Memorial Award. In memory of Mr. Edward D. VanderBrug, the VanderBrug family has provided two awards to be made annually to students who have done excellent work in their course in education. The awards, consisting of fifty dollars' worth of books, are given, without application, to those two students who, in the judgment of the Department of Education, have shown particular application to their training as teachers and who show strong intention to teach in the Christian schools.

Post-graduate fellowships

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 Calvin Seminary and, eventually, the ministry in the Christian Reformed Church.

Applications should be in the hands of the chairman of the Scholarship Committee by March 1.

Competitive National Graduate Fellowships. Many competitive national fellowships are available to Calvin seniors with outstanding records. These include the Woodrow Wilson fellowship, the Danforth Foundation fellowships, the Rhodes scholarships, the Marshall fellowships, the National Science Foundation fellowships, the various Fulbright grants, and many others. The conditions for these grants vary from year to year, as do the deadlines. For most of them, however, application must be made early in the fall and students are advised to take the Graduate Record Examinations at the earliest possible date. Students interested in any of these grants are advised to consult their departmental chairmen and the coordinator of graduate fellowships.

University of Michigan State College Fellowships. These competitive, prestige fellowships to the Graduate School of the University of Michigan, totalling \$2,400 plus tuition for an academic year's work, are open to students nominated through the scholarship committee. Up to twenty-four grants are made by the university to students nominated by various Michigan colleges and universities. For information, consult the coordinator of graduate fellowships.

University of Chicago Cooperative Four-Year Fellowships in the Humanities. A number of fellowships carrying a stipend of \$2,000 plus tuition, are available to students in the University of Chicago Cooperative Humanities program who wish to do graduate study at the University of Chicago in one of the humanities. This program, conducted with the collaboration of thirty-four midwestern liberal arts colleges and initially financed by the Ford Foundation, has as its primary purpose the training of colleges and university professors. In most fields a doctoral degree can be completed in the period of the grant. For information, consult the coordinator of graduate fellowships.

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 consult the chairman of the Engineering Department or the chairman of the Scholarship Committee before March 1.

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 February 15.



THE ACADEMIC PROGRAMS

THE PRIMARY FOCUS of a Christian liberal arts education at Calvin College is on teachers and students together engaging in the various scholarly disciplines, directed and enlightened in their inquiries by the Word of God. We believe that in a complete liberal arts education the student should be introduced to the disciplines on two different levels. In the first place, he should acquire a general or extensive education by following a rationally determined pattern of required and optional courses in the various major disciplines, the fundamental unifying element in this pattern being the Christian perspective within which all courses are presented. From this extensive study it is hoped that the student will acquire a knowledge of the more significant results or products of the various disciplines; an understanding of the methodologies of the disciplines, which will enable him to judge the products of the disciplines; and an acquaintance with alternative approaches to the same subject matter.

Secondly, we believe that in addition to such a general or extensive education, each student should also be required to concentrate in some particular discipline and thus to supplement his extensive study of the disciplines with an intensive study of some one discipline. This intensive study will have fundamentally the same aims as those for the extensive study. In his field of concentration, however, the student can achieve the same aims more fully, more intensively, in more detail.

The academic programs established on the basis of the philosophy of education set forth above are given in detail in the next section.

Requirements for graduation

In September, 1967, a revised college calendar and revised graduation requirements were introduced. The calendar was changed from the tra-

ditional two-semester plan to the 4-1-4 plan, consisting of two semesters, each approximately four months in length, plus a one-month interim term. Typically, during each of the two semesters a student takes four courses, each of equal academic value, and during the interim he takes one. It is anticipated that as part of the 4-1-4 program an honors program will be established for the superior student and a special program of assistance for students admitted on probation.

Students entering Calvin College in September, 1967, or later will be required to meet the graduation requirements of the 4-1-4 program. Students enrolled at Calvin College prior to September, 1967, have the option of graduating under the requirements either of the 4-1-4 program or of the program under which they first enrolled. However, a student must meet all of the requirements of the program under which he elects to graduate. Students enrolled in Calvin College prior to September, 1967, and wishing to graduate under the requirements of an earlier program should refer to the appendix, page 107, and consult with their adviser or the registrar.

Bachelor of Arts and Bachelor of Science degrees

All four-year degree programs require the completion of thirty-six and one-half course units, including four interim courses and seventeen and one-half core courses, with a minimum cumulative grade-point average of C (2.0). Students will also be required to complete with a minimum average of C (2.0) an approved program of concentration in one of the departments. Upon satisfactory completion of these requirements the student will receive the Bachelor of Arts degree. If a student has completed seventeen courses taught by the departments in the Science Division (biology, chemistry, engineering, mathematics, and physics), he may elect to receive the Bachelor of Science instead of the Bachelor of Arts degree.

THE REQUIRED CORE CURRICULUM

A student must complete seventeen and a half courses in the various disciplines as the core of his general or extensive education. In most cases a number of different courses in a department will meet the core requirement and, in some cases, different courses are recommended for students who intend to major in particular fields.

A student usually should complete the core requirements in mathematics, history, and written rhetoric by the end of his freshman year, and should complete the requirements in physical science, biological science, physical education, spoken rhetoric, and foreign language by the end of the sophomore year. At least one of the requirements in religion and theology must be completed by the end of the sophomore year. However, because of the demands of various programs of concentration, the particular courses

chosen to meet the core requirements and his schedule for completing them should be worked out early with his academic adviser.

THE DISCIPLINES	REQUIRED COURSES
<i>Mathematics.</i> Mathematics 109, 111, or 206.	1
<i>Physical Science.</i> Physics 110, 112, 222, 225, Chemistry 104, or any chemistry course above 104.	1
<i>Biological Science.</i> Biology 111 or 151.	1
<i>Studies in Persons and Society.</i> Psychology 151 or Sociology 151.	1
<i>Studies in Social Institutions.</i> Economics 151, Political Science 151, or 300.	1
<i>Studies in the Fine Arts.</i> From art, literature, music, or speech. At least one, but not more than two, must be in American, English, or English and American literature.	3
LITERATURE. Any English literature course except 225 and 321; Dutch 203, 204, 305, 306; French 207, 208, 311, 312, 313, 371; German 207, 208, or any 300-level course; Greek 202, 204, 301, 302; Latin 202, 205, 206, 301, 302, 303, 304; Spanish 207, 208, 303, 304, 305, 306, 307, 309, 310, 311, 312.	
MUSIC. The requirements may be met by 104, 211, 212, 219, 301, 302, or 326. 103 carries credit toward the core only when taken with one of the courses listed above.	
ART 151, 231, or 232.	
SPEECH 203, 219, 304, 317, 318, 325, or 326.	
<i>History.</i> History 101.	1
<i>Religion and Theology.</i> Religion and Theology 103 and 206 or 301.	2
<i>Philosophy.</i> 151-152 or 153 followed by 203, 205, 207, 208, 209 or Education 203.	2

THE COMPETENCES

<i>Written Rhetoric.</i> English 100.	1
<i>Spoken Rhetoric.</i> Speech 100 or, for elementary education students, 214.	1/2
<i>Physical Education.</i> Four semesters of participation.	1

FOREIGN LANGUAGES

One foreign language through the second year level is required, and at least one course must be completed at college. A student who does not present at least two years of a foreign language from high school will receive no credit at Calvin College for the first year of his first foreign language; those with three or more units need only one college course.

TOTAL 17 1/2

PROGRAMS OF CONCENTRATION

In addition to the required core curriculum every student must fulfill the requirements of some departmental or inter-departmental program of concentration, and must apply for admission into such a program not later than the beginning of his junior year. To be eligible for acceptance in a given program, a student must have secured a minimum grade of C (2.0) in the course or courses designated by the department offering the program,

he must maintain this average in the courses in his program, and he must present at least this minimum average in his program of concentration at the time of his graduation. A student not maintaining a minimum grade of C (2.0) in his program of concentration may be permitted to remain in a program for a single semester of probation. No student shall be permitted to graduate unless all of the courses presented for a program of concentration have been approved by the department offering the program. The programs of concentration are described in the section of the catalog presenting departmental programs and course offerings beginning on page 53.

INTERIM COURSES

A student normally must complete four interim courses for graduation. The grade for an interim course, except when decided otherwise by the faculty, shall be satisfactory, unsatisfactory, or honors. Interim courses are taught at three levels: Level I, open to freshmen and sophomores; Level II, open to sophomores and juniors; and Level III, open to juniors and seniors. A student is not permitted to take more than two interim courses in any single department, nor is he permitted to take more than two interim courses at any single level. Departments shall determine, subject to the approval of the committee on the interim program, whether or not any given interim course may count toward fulfilling concentration or core requirements.

Teacher education programs

POST-SEPTEMBER, 1967, REQUIREMENTS

Students who enrolled at Calvin College for the first time in September, 1967, or later, and who wish to qualify for a Michigan State Provisional Teacher's Certificate, should complete all of the requirements for either the Bachelor of Arts or the Bachelor of Science degrees as these are set forth on pages 41-44, and should meet the requirements of the teacher-education program for either the elementary or secondary level as described in the section below. Secondary education students should consult with Mr. Marion Snapper, chairman of the Department of Education, and elementary education students with Miss Gertrude Vander Ark, coordinator of elementary education.

PRE-SEPTEMBER, 1967, REQUIREMENTS

Students who were enrolled at Calvin College prior to September, 1967, and who wish to pursue the teacher-education program may, and are advised to, meet the requirements that were in effect when they first entered the program. (See page 107 for details of the pre-1967 requirements.) Upon completion of the graduation requirements of the college and the certifica-

tion requirements of the State of Michigan, (including directed teaching at Calvin College) the student will receive a Bachelor of Arts in Education degree, a Bachelor of Arts, or Bachelor of Science degree, depending on the graduation requirements he elects to fulfill.

Prospective secondary school teachers who plan to teach in Canada in most cases should take the general college course at Calvin College and reserve their teacher preparation courses for a fifth year to be taken in Canada. Prospective elementary school teachers, however, may obtain a Michigan State Provisional Teacher's Certificate, which entitles them to receive an official Letter of Standing permitting them to teach in Canadian schools. For information regarding a specific province, students should consult Mr. Bert Boss, director of student certification.

Formal application for admission to the teacher education program should be made at the Department of Education as soon as a student has been admitted to sophomore standing. At the time of admission, he must be maintaining a cumulative grade point average of C (2.0). Students applying later may require more than four years to complete their programs. A student must also be maintaining a cumulative average of C (2.0) when applying for assignment in directed teaching. For details of the teacher education program, students should secure the pamphlet, *The Teacher Education Program*, from the department.

Elementary education. To meet the departmental requirements in elementary education a student must complete the general graduation requirements; a group concentration of ten and one-half courses or a departmental concentration of nine courses; a minimum of six professional education courses; and a planned program consisting of six courses in other substantive fields deemed appropriate to elementary education. All programs should be worked out with Miss Gertrude Vander Ark, coordinator of elementary education.

A nine-course major program of concentration may be selected from among the following subjects: art, biology, English, foreign language (French, German, Latin, Spanish), history, music, mathematics, physical education, political science, religion and theology (history and literature of religion), and speech.

If a student selects a group program of concentration, he must fulfill one of the programs listed below. A group concentration shall consist of at least ten and a half courses, of which a minimum of five courses shall be in one subject listed above, three in another subject, and the remaining courses to a total of ten and a half in related subjects from the same group.

LANGUAGE AND LITERATURE STUDIES. Required are English 100, 225, and Speech 214; additional courses to a total of five in English language and literature, a foreign literature and language, or speech; and a total of three courses in one of the other two subject fields.

SOCIAL STUDIES. Required are Economics 151, History 101 and either 211 or 215; Political Science 151 or 300, and Sociology 151; additional courses to a total of five in economics, history, political science, psychology, or sociology; and a total of three courses in any one of the other subjects. The additional courses in the group may include geography.

MATHEMATICS-SCIENCE STUDIES. Required are Biology 111 or 151, Mathematics 109 or 111, and Physics 112; additional courses to a total of five in either mathematics or a combination of biology, chemistry, or physics; and a total of three courses from the other areas. The additional courses completing the ten and a half required for the group major may include, in addition to those from the two basic areas, geography and Psychology 204 or 308.

ART, MUSIC, AND DRAMA STUDIES. Required are Art 151, Music 222 or 331, and Speech 214; additional courses to a total of five in art, drama (typically speech courses numbered 203, 214, 219, 220, 304, 317, and 318), or music; and three from either of the other fields.

The prescribed professional education courses normally will include 202 (educational psychology), 203 (philosophy of education), and 343 (directed teaching for elementary teachers). Additional courses will be prescribed by the coordinator of elementary education, depending on the program followed by the student.

To meet the technical minor requirements for Michigan certification a student must also present six courses from fields appropriate to elementary education. Typically, these are met automatically by students meeting the core requirements for graduation. Courses recommended for this dual function include: Art 151, Biology 111, English 100 or any literature course in English or a foreign language, Geography 101 or 113, History 101, 211, or 215; Mathematics 109 or 111, Music 222 or 331, Physics 112, Psychology 204, Political Science 151 or 300, and Speech 214.

Secondary education. To meet the departmental requirements in secondary education a student must complete the general graduation requirements of the degree program under which he elects to graduate, a departmental concentration of nine courses or a group concentration of ten and a half courses, a minimum of six professional courses, and a minor of six courses or the equivalent.

The program of concentration shall be selected from the following subject areas: art, biology, chemistry, economics, English, French, geography, German, history, Latin, mathematics, music, physics, physical education, political science, religion and theology (history and literature of religion), Spanish, and speech. The minor shall be selected from these subject areas or from psychology, sociology, and the fine arts. Each program must be approved by an adviser in the student's department of primary concentration. For specific problems concerning professional education, a student should consult Mr. Marion Snapper, chairman of the Department of Education.

The prescribed professional education courses normally will include 202 (educational psychology), 203 (philosophy of education), and 344 (directed

teaching for secondary teachers). Additional courses will be prescribed depending on the program followed by the student.

Professional and pre-professional programs

Programs at Calvin College prepare students for admission to the various professional schools and, in some cases, through cooperation with other institutions, for completion of professional programs while at Calvin. In most cases students may qualify for a degree from the college as well as from a professional program, if they meet the appropriate requirements.

ARCHITECTURE

The first two years of an architecture program may be completed at Calvin College. Students interested in such a program should consult Mr. Edgar Boevé of the Art Department or Mr. James Bosscher of the Engineering Department. The program incorporates a significant portion of the basic core curriculum as well as of the pre-professional requirements of the profession. A typical program would be:

<i>First year</i>	COURSES
Art 231	1
Engineering 101	1½
Mathematics 111, 112	2
Christian Perspective 100 (interim)	1
Economics 151	1
Philosophy 153	1
Speech	½
Physical education	½
 <i>Second year</i>	 COURSES
Art, studio drawing or design	2
Chemistry, if none in high school; biology; or psychology	1
Physics 221, 222	2
Economics, history, political science, or sociology	2
Literature	1
Religion and Theology 103, 206, 301	1
Physical education	½

BUSINESS ADMINISTRATION

Students interested in programs in business administration should consult the chairman of the Department of Economics, Mr. Tony Brouwer.

ENGINEERING

Students planning to enter the pre-engineering program should consult with Mr. James Bosscher, acting chairman of the Department of Engineering, when arranging their programs. Students wishing to graduate from

Calvin College on the combined curriculum plan must complete twenty-seven courses, included the courses designated below, with a cumulative grade point average of C (2.0). Upon satisfactory completion of this program, plus approximately three semesters of successful work in a recognized school of engineering, the student will be eligible for the degree of bachelor of science on the combined curriculum plan in science and engineering.

Students entering Calvin College in September, 1967, or later are required to complete the following requirements: Chemistry 103; Engineering 101, 205, an interim, and three courses from 202, 303, 305, 309, 310; Mathematics 111, 112, 211, 212; Physics 126, 225, 226; two technical electives numbered 200 or higher from biology, chemistry, engineering, mathematics, and physics; Christian Perspective 100; Economics 151; English 100; Philosophy 153 plus a 200-series course; Religion and Theology 103, 206, or 301; Speech 100; one literature course plus an additional course in literature or economics; and two free electives. Engineering 312 and Physics 381 are recommended. A typical program is:

<i>First year</i>	COURSES
Chemistry 103	1
Engineering 101	1½
Mathematics 111, 112	2
Physics 126	1
Technical elective	1
Christian Perspective 100 (interim)	1
English 100	1
Speech 100	½
Physical education	½
 <i>Second year</i>	
Engineering 205 and 303, 305, 309, or 310	2
Mathematics 211, 212	2
Physics 225, 226	2
Digital computer lectures	0
Economics 151	1
Philosophy 153	1
Interim, free elective	1
Physical education	½
 <i>Third year</i>	
Engineering 303, 305, 309, or 310	2
Technical elective	1
Interim, engineering	1
Literature	1
Philosophy, 200 series course	1
Religion and Theology 103, 206, or 301	1
Free elective	1

LAW

Students who plan to enter a law school upon graduation from Calvin College are expected to complete the requirements for a Bachelor of Arts

degree as these are listed on pages 41-44. The selection of the program of concentration should be made in consultation with Mr. Johan Westra, the pre-law adviser.

LIBRARY SCIENCE

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 program of concentration 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.

MEDICINE AND DENTISTRY

All students planning to enter any one of the pre-medical or pre-dental courses should consult Mr. Henry Bengelink, faculty director of the pre-medical and pre-dental programs. Students should also note the pre-medical entrance requirements on page 19.

Students who began their work in September, 1967, or later should take a program of concentration which includes Chemistry 103-104, 201, 204, and 301-302; Biology 151, 152, 251, 252, and 321; and Physics 221-222 or their equivalent. Mathematics 111 and 112 are strongly recommended.

All students who began their program prior to 1967-68 should include in their program of concentration Chemistry 103-104, 201, 204, and 301-302; and Physics 221 and 222 or their equivalent. In addition to the chemistry and physics courses, these students should include in their program Biology 109-110, 207, 208 and 311 or 321.

Most medical and dental schools strongly advise students to take a four-year college course. Those students, however, who wish to secure a baccalaureate degree from Calvin College on the combined curriculum plan should complete twenty-seven courses with a minimum grade point average of C (2.0), including one of the programs prescribed above, and as much of the required core curriculum as possible. For their electives, students should choose such subjects as are required for admission to the particular medical or dental school which they expect to attend. Upon satisfactory completion of this course, and one year of successful work in a recognized medical or dental school, the student will be eligible on the combined curriculum plan for the degree of Bachelor of Science in Letters and Medicine, or Bachelor of Science in Letters and Dentistry.

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.

MEDICAL TECHNOLOGY

To qualify for the Bachelor of Science in Medical Technology on the combined curriculum plan a student must complete twenty-seven courses plus twelve months of successful work in an accredited school of medical technology. Students wishing to enter the medical-technology program should consult Mr. Herman Broene. The following courses are prescribed: Biology 151, 152, 251, 252, and 336; Chemistry 103, 104, and three electives from among 201, 204, 253, 254, 301, 302, and approved interim courses; English 100 plus a course in English or American literature; two courses in foreign language (the number of courses in foreign language may be reduced by one for each year of foreign language taken in high school); one course in each of the following subjects: history; mathematics; music or art; political science or economics; philosophy, psychology, or sociology; two courses in religion and theology; one elective; and three interim courses, one of which should be a course designed for the pre-medical technology student offered by the Biology Department; and four semesters of physical education.

A typical student program is as follows:

<i>First year</i>	COURSES
Biology 151, 152	2
Chemistry 103, 104	2
Foreign language (See paragraph above)	2
English 100	1
History 101	1
Interim	1
Physical education	½
 <i>Second year</i>	
Biology 251, 252	2
Chemistry 201, 204, 253, 254, 301, or 302	2
Other required courses	4
Interim	1
Physical education	½
 <i>Third year</i>	
Biology 336	1
Chemistry	1
Other required courses	4
Free elective	1
Interim, biology	1

THE MINISTRY

Calvin College, the college of the Christian Reformed Church, maintains a close relationship with Calvin Theological Seminary, the seminary

of the **Christian Reformed Church**. Calvin Theological Seminary is a fully accredited member of the American Association of Theological Schools and is maintained primarily to provide theological education for those aspiring to the **ministry** of the Christian Reformed Church. The seminary stands as a **representative** of the historic Reformed faith, its theological standpoint being formulated in the Belgic Confession, the Heidelberg Catechism, and the **Canons of Dordt**.

A student seeking to qualify for admission to Calvin Theological Seminary should meet all of the regular requirements for a Bachelor of Arts or a Bachelor of Science degree as well as the specific course requirements of the seminary. To qualify for admission as a degree candidate, he should **earn** a grade-point average of 2.67 or higher. A student may present a **concentration** in either a single department or in a group of related departments, as provided in the college curriculum. In either program a minimum of **seven** courses must be presented in a single department.

Calvin Seminary requires the following courses for admission:

	COURSES
Economics, political science, and/or sociology	2
English	3
Greek	4
History	3
Latin (May be met by two years in high school)	2
Modern language (See paragraph below)	
Science	2
Philosophy	3
Psychology and/or education	2
Religion and theology	2
Speech	1½

Reading competence in Dutch, French, or German is required. This competence may be demonstrated either by taking three years of course work or by sustaining the seminary's admission reading test.

In fulfilling the course requirements listed above, the student is advised to **include** the study of New Testament Greek, a sequence in the history of philosophy, and a course in the history of classical civilization. In view of its **importance** to Reformed theological scholarship, the study of Dutch is **recommended** as the first choice in fulfilling the modern language requirement; and in view of its general usefulness for the study of theology, the **study** of German is recommended as the second choice.

In selecting the courses for his pre-seminary program, the student should **consult** with the chairman of the department of his primary concentration or Mr. Bert Bos, chairman of the Pre-Seminary Advisory Committee.

NURSING

The nursing courses at Blodgett Memorial Hospital in Grand Rapids, Michigan, are so arranged that the first nine months of the thirty-months

program are taken concurrently at the college and at Blodgett Hospital. During the first semester students will take Biology 105 and 107, English 100, and Psychology 151 at the college and Basic Nursing I at Blodgett Hospital. During the second semester students will take Biology 106, Sociology 151, and Speech 100 at the college and Chemistry 101, Basic Nursing II, and Nutrition in Health and Disease at the hospital.

Upon completion of the work at Calvin College and Blodgett 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.

Persons wishing to take the nursing program must make application with both the director of the School of Nursing at Blodgett Memorial Hospital and with the admissions officer of Calvin College. Applications for admission to both institutions should be submitted during the early part of the senior year in high school. No application will be processed until all required forms are available to the director of the Blodgett Hospital School of Nursing. Admission to the nursing program is determined by the admissions committee of the School of Nursing.

OTHER PROFESSIONAL PROGRAMS

Students interested in preparing for any profession should see the registrar of the college. Curricula can be arranged to enable such students to remain at Calvin for one or two years.

DESCRIPTION OF COURSES

The symbols F (Fall), I (Interim), and S (Spring) indicate when each course is offered. The term *core* designates those courses in each department which meet the general graduation or core requirements of the discipline. The few courses which carry more or less than a single course credit are indicated; all others carry a single course credit. Interim courses numbered 1-19 are open to freshmen and sophomores; those numbered 20-29 are open to sophomores and juniors; and those numbered 30 or higher are open to juniors and seniors.

The asterik (*) before the name of a faculty member indicates he will be on leave of absence for one or both semesters of the 1968-69 academic year. Such information is subject to change.

A separate catalog describing the 1968-69 interim courses will be issued after the beginning of the academic year.

Inter-departmental courses

100 CHRISTIAN PERSPECTIVE ON LEARNING. An introduction to the relationship between faith and learning and the ways various academic disciplines are seen from religious perspectives. The course focuses on the Christian perspective, par-

ticularly as interpreted from a Reformed position. The course creates a general framework for subsequent intensive and systematic studies in each discipline. Taught by a committee representing the various disciplines. *Staff.*

Art

Associate Professor Boevé (acting chairman)
Assistant Professor Jensen
Instructors Bonzelaar, C. Huisman, Overvoorde

THE ART PROGRAM at Calvin has been conceived within the framework of the liberal arts tradition with a program for those who wish to teach art in the elementary and secondary schools. Students intending to major in the field must secure a minimum grade of C (2.0) in 207. The minimum

major program is 207, 208, 209, 210, 231, 232, 301, 302, and 340. During the spring semester of their senior year all art majors will be required to present an art exhibition on campus.

151 INTRODUCTION TO ART. F and S, core. Lecture and participation in the basic elements and principles of art. Emphasis placed upon the student's involvement and response to materials and ideas. *Staff.*

207 DESIGN I. F. Discovery of design through the use of the basic art elements: line, color, shape, texture, space, value. *Mr. Jensen, Mrs. Bonzelaar.*

208 DESIGN II. S. Continuation of 207. Expressive use of design with special emphasis on color. Prerequisite: 207. *Mr. Jensen, Mr. Huisman.*

209 DRAWING. F and S. Various media are used to explore the possibilities and problems in drawing from a creative, personal point of view. Famous artists of the past and present will be studied to acquaint the student with a variety of approaches to the medium. Prerequisites: 207, 208. *Mr. Huisman, Mr. Overvoorde.*

210 THREE-DIMENSIONAL DESIGN. S. Construction, carving, and modeling in various materials will be pursued in relation to problems in space, movement, balance, rhythm, and integration of the total form. Prerequisites: 207, 208, 209. *Mr. Huisman.*

220 PRINTMAKING. F. The course aims to give the student experience in the basic printmaking media: relief, intaglio, planography, serigraphy. Prerequisites: 207, 208, 209. *Mr. Jensen.*

231 AN INTRODUCTION TO THE HISTORY OF THE FINE ARTS. F, core. A survey of the history of architecture, painting, and sculpture in Ancient, Medieval, and Renaissance times. A study of the character of ancient art from Egypt through Rome is 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 1500. A major research paper will be required. *Mr. Boevé.*

232 AN INTRODUCTION TO THE HISTORY OF THE FINE ARTS. S, core. Continuation of 231. The study of painting and architecture from 1500 to the present. Art gallery reports will be required. *Mr. Boevé.*

301 PAINTING I. F and S. A study of the tradition in painting, emphasizing techniques, and methods of communicating ideas visually. Studio work will give opportunity to experiment in various techniques and subjects. Prerequisites: 207, 208, 209. *Mr. Overvoorde.*

302 PAINTING II. F and S. Continuation of 301. Prerequisites: 207, 208, 209, 301. *Mr. Overvoorde.*

306 PRINCIPLES OF ART EDUCATION. S. A course emphasizing methods and techniques of organizing and motivating art instruction. It includes lectures, demonstrations, and art teaching experiences in the school situation. Research paper required. Prerequisites: 151 or 207. *Mrs. Bonzelaar.*

340 CONTEMPORARY PAINTING AND ARCHITECTURE. S. A study of painting from Impressionism to the present with



emphasis on Expressionism, Abstractionism, Non-objectivism, and Abstract Expressionism. Architecture is studied in relation to programming, technology, materials, and site, beginning with Sullivan, Eiffel, and Gaudy, and continuing into the twentieth century with Wright, Le Corbusier, Mies vander Rohe, and Saarinen. Outside reading and papers will be required. Prerequisites: 231, 232. *Mr. Bosvé.*

1967-68 INTERIMS

10 THE CHRISTIAN AND CREATIVE ART. *Mr. Jensen.*

11 WATERCOLOR PAINTING. A study of watercolor techniques of today. The student will be exploring the many approaches to this medium of painting, such as transparent and opaque washes, the

use of pencil, crayon, craypas, in combination with wet washes and dry brush areas. The use and misuse of watercolor, brushes, and papers. *Mr. Overvoorde.*

20 CERAMIC POTTERY MAKING. This course will involve the student in the historical background of ceramic pottery making, the ceramics of other cultures, the contemporary approaches and the sequence of operations of ceramic pottery making from the raw, wet clay to the final fired product. Students will be introduced to the nature of clay, the forming methods, decorating methods, glazing techniques, and ceramic terms. *Mr. Huisman.*

21 ART TEACHING EXPERIENCES IN THE SCHOOL SITUATION. *Mrs. Bonzelaar.*

Astronomy

STUDENTS INTERESTED in graduate work in astronomy should major in mathematics and physics and should confer with the chairman of the Physics Department.

Biology

Professors Gebben, Ten Broek (chairman)
*Associate Professors A. Bratt, Karsten, *Van Harn*
*Assistant Professors Bengelink, *Klooster*
Assistant Instructor M. De Boer
Lecturer T. Entingh
Professional Staff, Bosma

VARIOUS PROGRAMS of concentration in biology prepare a student for graduate study, for high school teaching, and for professional training in medicine and related fields. To be admitted to a concentration a student must have a minimum average of C (2.0) in 151 and 152 or in an equivalent program approved by the department.

The major program requires 151, 152, 251, 252; three additional courses selected from any three of the following biological subdisciplines: developmental biology (303), ecology (313), morphology (321, 326), physiology (331, 336), and systematics (341, 346); and the senior seminar. Required cognates include mathematics through the level of calculus and

analytical geometry (Math. 111-112) or a year of college physics, and the completion of a second year of college chemistry.

The secondary school teaching major is essentially the same except that a total of nine courses is required in biology and, instead of the required cognates, the program must include a minor in the area of the physical sciences.

NURSING PROGRAM COURSES

105 HUMAN ANATOMY AND PHYSIOLOGY FOR NURSES. F. An introduction to the study of human biology, including elements of anatomy, histology, and physiology. *Staff.*

106 HUMAN ANATOMY AND PHYSIOLOGY FOR NURSES. S. Continuation of 105. Prerequisite: 105. *Staff.*

107 MICROBIOLOGY FOR NURSES. F. An introduction to the principles and techniques of microbiology, with emphasis on the bacteria. *Miss De Boer.*

GENERAL COLLEGE COURSES

111 BIOLOGICAL SCIENCE. F and S, core. An introduction to the principles and concepts of biology and the history and philosophy of biological thought for the general college student. Prerequisites: Mathematics 109, Physics 110. *Staff.*

205 HUMAN ANATOMY AND PHYSIOLOGY. S. A study of the normal biological structure and function of man. Prerequisite: Biology 111. *Staff.*

206 NATURAL HISTORY. F. An introduction to the study of plants and animals in their natural environment with emphasis upon the conspicuous components of the local flora and fauna. The course will provide acquaintance with major concepts and methods used in field biology and will provide experience in identification of plants and animals. Prerequisite: Biology 111. *Mr. Bengelink.*

PROGRAM OF CONCENTRATION COURSES

Any of the following courses may be used to fulfill the general college core

requirement in biology. Biology 151, 152, 251, and 252, or their equivalents are prerequisite to all other courses.

151 CELL BIOLOGY. F. A study of cellular, subcellular, and molecular structure and function. Cell theory is developed as a basis for study in other areas of biology. *Staff.*

152 GENETICS AND EVOLUTION. S. A study of the development of contemporary concepts of the gene and of organic evolution. The gene theory and the theory of organic evolution are developed as bases for study in other areas of biology. Prerequisite: Biology 151. *Staff.*

251 ORGANISM BIOLOGY I — ANIMAL STRUCTURE AND FUNCTION. F. A study of animal morphology and physiology with emphasis on the vertebrate organism. Principles of homeostasis and complementarity of structure and function are emphasized. Prerequisites: Biology 151-152. *Staff.*

252 ORGANISM BIOLOGY II — PLANT STRUCTURE AND FUNCTION. S. An introduction to the anatomy and physiology of plants with emphasis on the seed plants. Prerequisites: Biology 151, 152, 251. *Staff.*

303 DEVELOPMENTAL BIOLOGY. F. An introduction to the study of biological development, including both embryonic and post-embryonic systems. Additional prerequisite: Chemistry 254 or its equivalent. *Mr. Ten Broek.*

313 GENERAL ECOLOGY. F. An introduction to the study of biological populations and communities, including discussions of biogeographic regions, the ecosystem concept, and interactions of organisms with the biotic and abiotic environment. *Mr. Gebben.*



321 **DEVELOPMENTAL AND COMPARATIVE ANATOMY.** S, one and a half courses. A study of the development and comparative anatomy of vertebrates. Four hours of lecture and two laboratory sessions per week. *Mr. Bengelink.*

326 **PLANT MORPHOLOGY — NON-VASCULAR PLANTS.** F. A consideration of structure, life cycles, and phylogeny of the algae, fungi, and bryophytes. *Mr. Karsten.*

331 **COMPARATIVE ANIMAL PHYSIOLOGY.** S. A comparative study of basic functional mechanisms of animals. Additional prerequisite: Chemistry 254 or equivalent. Not offered 1968-69.

336 **GENERAL MICROBIOLOGY.** S. A study of the structure and function of microorganisms with emphasis on the bacteria. Additional prerequisite: Chemistry 254 or equivalent. *Miss De Boer.*

341 **ENTOMOLOGY.** F. The biology of insects, with emphasis on systematics. *Mr. A. Bratt.*

346 **PLANT TAXONOMY.** S. An introduction to the principles and concepts of plant systematics. *Mr. Gebben.*

400-401 **SENIOR SEMINAR.** F. and S, half course per semester. The reading, discussion, and evaluation of journal literature in biology and the investigation of an assigned laboratory, field, or library research problem in biology. Prerequisite: senior status in biology program of concentration. *Staff.*

1967-68 INTERIMS

10 **GREAT EXPERIMENTS IN BIOLOGY.** A study of some of the classic experiments in biology, with an emphasis on the method of inquiry used. Laboratory work will involve performing some of the classic experiments. Will satisfy the general core requirement in biology. *Mr. Ten Broek.*

20 **MORPHOLOGY OF THE VASCULAR PLANTS.** A consideration of structure, life cycles and vascular cryptogams and seed plants. *Mr. Karsten.*

21 **HISTOLOGY.** A study of mammalian tissues. The relationship of microscopic structure to function. Lectures and laboratory work. Laboratory work will consist of preparation of histological sections and observation of tissue preparations. *Mr. Bengelink.*

22 **READING IN HUMAN ECOLOGY.** A detailed study of selected papers dealing with man's adaptation to natural and man-made environments. Readings include discussion of the adaptation of man to certain natural environmental factors, i.e., temperature, altitude, seasonal cycles, and diseases; and to some environmental factors developed by man, i.e., population size, radiation, polluted air, and space capsule environment. *Mr. Gebben.*

23 **CONSERVATION.** A study of problems resulting from man's impact on his environment. Emphasis and readings will be on problems of conservation whose solutions are derived from the application of biographical principles. *Mr. A. Bratt.*

30 **LABORATORY TECHNIQUES IN BIOLOGY.** A course designed to give those students who are interested in teaching high school and junior high biology the necessary preparation to teach a laboratory effectively. Emphasis will be on de-

velopment of techniques to be used in a teaching laboratory and the preparations of materials for laboratory experiments. *Miss De Boer.*

31 INDIVIDUAL TOPICS. Individuals in-

terested in doing independent work under the direction of a staff member should petition the Biology Department and the individual staff member. Only those students who have completed Biology 400 will be eligible. *Staff.*

Chemistry

Professors Broene, Dirkse, Wolhuis (chairman)

Assistant Professors Piers, L. Vander Lugt, Van Doorne

PREREQUISITE TO BEING admitted to a concentration in chemistry is a minimum average of C(2.0) in 103, 104 and 201.

For students who do not plan to pursue graduate study in chemistry, additional courses required are: 277-278 and either 253-254 or 301-302. Required cognates are Mathematics 111-112 and a year of college physics.

For students preparing for graduate study in chemistry, the certification requirements of the American Chemical Society for professional training in chemistry may be met by completing the courses: 103-104, 201, 277-278, 301-302, 305, 309, 310, at least one chemistry interim course; Mathematics 111-112, 211-212; Physics 126 and 225-226. A reading knowledge of German and, if possible, of French is required.

For students preparing for secondary school teaching, the program includes the courses: 103-104, 201, 204 or 277, 253-254 or 301-302, one of 305, 278, or an interim course in chemistry; and two courses in physics, e.g. 221-222, but not 110 or 112.

101 CHEMISTRY FOR NURSES. S. A one-semester survey of inorganic, organic, and biological chemistry as applied in the field of medicine. A course specifically for students in the regular pre-nursing curriculum. *Mr. Dirkse.*

103 GENERAL CHEMISTRY. F. A study of the basic principles of chemistry, with emphasis on the laws of chemical combination, theories of atomic structure and chemical bonding, the periodic law, kinetic theory, and chemical and physical equilibria. Laboratory. A high school chemistry course is strongly recommended. *Staff.*

104 GENERAL CHEMISTRY. S, core. A continuation of 103, with emphasis on acid-base theory, reaction rates, ionic equilibria, redox reactions, electrochemis-

try, and nuclear chemistry. The laboratory work involves the systematic separation and identification of cations and anions. Laboratory. Prerequisite: 103. *Staff.*

201 QUANTITATIVE ANALYSIS. F. A study of the theory and practice of titrimetric and gravimetric methods of analysis. Laboratory. Prerequisite: 104. *Mr. Dirkse.*

204 INTRODUCTORY THEORETICAL CHEMISTRY. S. A study of the states of matter, properties of solutions, chemical kinetics, and the colloidal state. This course treats some of the topics also covered in Chemistry 277-278, but is designed for students who have not had Mathematics 111-112. Prerequisite: 201. *Mr. Broene.*

253 **ORGANO-BIOCHEMISTRY.** F. A study of organic compounds, reactions, and reaction mechanisms, emphasizing their biochemical significance. Laboratory. Prerequisite: 104. *Mr. Wolthuis.*

254 **ORGANO-BIOCHEMISTRY.** S. A continuation of 253, concluding with a study of the chemistry of metabolism and the application of quantitative methods to the analysis of blood components. Laboratory. Prerequisite 253. *Mr. Wolthuis.*

277 **PHYSICAL CHEMISTRY.** F. A study of the kinetic theory as applied to gases, liquids, and solids; introduction to thermodynamics. Prerequisite: 104, Mathematics 112, and a high school physics course. *Mr. Broene.*

278 **PHYSICAL CHEMISTRY.** S. A continuation of 277, with a study of electrochemistry, chemical thermodynamics, and kinetics. Laboratory. Prerequisite: 277. *Mr. Dirkse.*

301 **ORGANIC CHEMISTRY.** F. A detailed study of organic compounds, their synthesis and reactions, presented within the framework of modern physico-chemical theory, together with an introduction to modern methods of analysis and identification. Laboratory. Prerequisite: 104, and preferably 201. *Mr. Piers.*

302 **ORGANIC CHEMISTRY.** S. A continuation of 301. Laboratory. Prerequisite: 301. *Mr. Piers.*

305 **ORGANIC ANALYSIS.** F. A study of qualitative and quantitative chemical and instrumental methods useful for the separation and identification of organic compounds. Selected reactions are considered in detail with respect to their mechanisms and the experimental basis for these mechanisms. Laboratory. Prerequisite: 302. *Mr. Wolthuis.*

309 **ADVANCED QUANTITATIVE ANALYSIS.** S. A study of optical, electrometric, chromatographic, and radiochemical methods of analysis, with emphasis on their theoretical bases. Laboratory. Prerequisites: 201, 277. *Mr. Dirkse.*

310 **ADVANCED INORGANIC CHEMISTRY.** S. A study of the chemical elements from

the standpoint of periodicity and the nature of chemical bonding. Crystal field theory and ligand field theory are discussed in connection with the chemistry of the transition elements. Laboratory. Prerequisite: 278. *Mr. Van Doorne.*

320 **SENIOR RESEARCH.** S. Library and laboratory research on an assigned problem. Open only to approved seniors majoring in chemistry. *Staff.*

1967-68 INTERIMS

10 **INTRODUCTION TO RESEARCH.** A detailed study of a chemical problem, under close supervision, involving literature and laboratory research, with emphasis on methods of investigation, recording and organization of data, and the assembly of the results in an acceptable report form. Open only to students who have at least a B average in 103. *Mr. Wolthuis.*

11 **INTRODUCTORY RADIOCHEMISTRY.** A study of both natural and induced radioactivity and nuclear reactions. Basic theory will be studied, but also practical applications of radioisotope technology to chemical systems. Classes will meet daily for lectures and discussions. Some time will be spent in demonstration of the nuclear equipment owned by the college. *Mr. Broene.*

12 **PERIODICITY AND INORGANIC REACTIONS.** A study of the variation of physical and chemical properties of the elements as a function of atomic number. Topics will include electronic structure of the atoms, oxidation states by group, chemical bonding, descriptive inorganic chemistry, and coordination compounds. *Mr. Dirkse.*

20 **THE AGE OF THE EARTH AND RELATED PROBLEMS.** A description of the various methods used to date the earth's crust, meteors, fossils, and artifacts, accompanied by an evaluation of their validity and the implications inherent in the data. A critical study of the assumptions inherent in the approach of the "flood geologists" to the questions concerning the age of the earth, fossil forms, and the like, will be included in

the discussions. Lectures, discussions, and assigned readings. *Mr. Vander Lugt.*

30 RESONANCE SPECTRA. An introductory study of the theory of resonance spectra including nuclear magnetic resonance, electron spin resonance, and Mossbauer effect. An intensive study will be made of the application of resonance spectra to chemical problems such as molecular structure and exchange processes. *Mr. Van Doorne.*

31 SELECTED TOPICS IN BIOCHEMISTRY. A study of the physical and chemical methods used to derive the structures of biochemical species, such as carbohydrates, proteins, and fats. Discussions of some of the recent advances in the chemistry of metabolism will be included.



Classical languages

*Professors R. Otten (chairman), Radius
Associate Professor Wevers
Assistant Professors Harris, Van Vugt*

THE DEPARTMENT OFFERS THREE programs of concentration: classics, Greek, and Latin. The classics program is followed by those preparing for graduate studies, the Greek by pre-seminarians, the Latin by those intending to teach the language at the secondary school level.

The classics program requires fourteen courses and one interim, including six elementary or intermediate courses chosen from: Latin 201-202, Greek 101-102, 201-202, 203-204; six intermediate or advanced courses selected from: Latin 205-206, 301-302, 303-304; Greek 201-202, 203-204, 301, 302; and two courses in ancient history (Greek 311 and Latin 312). Reading competence in French and German is strongly recommended.

The Greek program requires eight courses selected from: Greek 101-102, 201-202, 203-204, 205, 206, 301, 302, 311, and Latin 312. The recommended program for pre-seminarians is the following: Greek 101-102, 201-202 or 203-204, 205, 206, 311, and Latin 312.

The Latin program requires ten courses (nine, if the student presents two units from high school, and eight, if the student presents three or more units from high school) selected from Latin 101-102, 201-202, 205-206, 301-302, 303-304, 312, and two interims.

A Latin teaching minor requires five courses beyond the 100 level and a course in Latin prose composition.

Students who have completed one year of high school Latin should enroll in Latin 101; two years, in 201; three years, in either 202 or 205; more than three years, in 205 or 206. Those who have completed one year of college Latin should enroll in 201.

GREEK

101 **ELEMENTARY GREEK.** F. Text: Crosby and Schaeffer, *An Introduction to Greek.* Mr. Radius.

102 **ELEMENTARY GREEK.** S. Continuation of 101. Completion of the text and the reading of the first book of Xenophon's *Anabasis* or its equivalent. Mr. Radius.

201 **INTERMEDIATE GREEK A.** F. Readings of selections from Xenophon and the early dialogues of Plato. Special emphasis is put on gaining reading proficiency in Greek prose. Prerequisite: 102. Mr. R. Otten.

202 **INTERMEDIATE GREEK A.** S, core. Continued readings in Plato. Further readings in Homer's *Iliad*. Attention is given to the characteristics of Homer's world. Prerequisite: 201 or 203. Mr. R. Otten.

203 **INTERMEDIATE GREEK B.** F. Readings of selections from Herodotus. Special emphasis is put on gaining reading proficiency in Greek prose, with some attention to the characteristics of Herodotus as historian. Further readings from the Attic orators. Prerequisite: 102. Mr. Wevers.

204 **INTERMEDIATE GREEK B.** S, core. Continued readings in the Attic orators. Attention is given to certain matters of style. The orators are viewed in relation to, and as documentation for, the history of fourth-century Athens. The course concludes with selected readings from Thucydides. Here, too, special attention is given to his style as well as to his characteristics as historian. Prerequisite: 203 or 201. Mr. Wevers.

205 **NEW TESTAMENT GREEK: THE GOSPELS.** F. 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: 102. Mr. R. Otten, Mr. Radius.

206 **NEW TESTAMENT GREEK: THE EPISTLES.** S. A study is made of some of the Pauline Epistles. Prerequisite: 205. Mr. Radius, Mr. R. Otten.

301 **PLATO'S REPUBLIC.** F, core. The Greek text is studied. This course aims at an understanding and evaluation of Plato's views as presented especially in the *Republic*. Prerequisite: Four courses in Greek. Mr. Harris.

302 **GREEK DRAMA.** S, core. A reading of selected Greek tragedies with attention given to their poetic and dramatic qualities. Those matters of Greek culture, literary tradition, and history which help to understand the plays are noted. Assigned outside reading in other Greek plays. Prerequisite: 301. Mr. Harris.

311 **GREEK HISTORY.** F. 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. Mr. Harris, Mr. Radius.

LATIN

101 **ELEMENTARY LATIN.** F. 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. Mr. Van Vugt.

102 ELEMENTARY LATIN. S. 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. *Mr. Van Vugt.*

201 INTERMEDIATE LATIN. F. A thorough review of the essentials of grammar will accompany the reading of selected Latin prose. Prerequisite: two units of high school Latin or two courses of college Latin. *Staff.*

202 INTERMEDIATE LATIN: VERGIL AND THE ANCIENT EPIC. S, core. A study of the *Aeneid* and the ancient epic in translation. Selected books in the *Aeneid* will be read in Latin with a study of the prosody of Vergil. Prerequisite: three units of high school Latin or three courses of college Latin. *Staff.*

205 READINGS IN LATIN LITERATURE. F, core. Intensive reading in the major writers of prose from the Late Republic to the Early Empire. Collateral readings in the literary history of the period. Prerequisite: 202. *Mr. Van Vugt.*

206 READINGS IN LATIN LITERATURE. S, core. 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: 202. *Mr. Van Vugt.*

301 LATIN PHILOSOPHICAL LITERATURE: LUCRETIVS AND SENECA. F, core. Selections from Lucretius and Seneca, designed to portray some of the major ethical and political issues raised in Roman thought. Collateral reading and reports. Prerequisite: 205 or 206. Alternates with 303. *Mr. R. Otten.*

302 LATIN PHILOSOPHICAL LITERATURE: CICERO AND AUGUSTINE. S, core. Readings in Cicero and Augustine, selected to complete the survey begun in 301 and to present the first major Christian critique of classical thought. Collateral readings and reports. Prerequisite: 205 or 206. Alternates with 304. *Mr. R. Otten.*

303 LATIN LYRIC POETRY. F, core. A

study of Latin lyric poetry from Catullus through the elegiac poets, with some attention to early Christian and medieval poetry. Collateral reading and reports. Prerequisite: Latin 205 or 206. Alternates with Latin 301. *Mr. R. Otten.*

304 TACITUS AND PLINY. S, core. Readings in the historical works of Tacitus and the correspondence of Pliny as sources and commentary on the political issues and movements of the Early Empire. Collateral reading and reports. Prerequisite: Latin 205 or 206. Alternates with Latin 302. *Mr. Harris.*

312 ROMAN HISTORY. S. 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 viewed in their relation to each other. Prerequisite: Greek 311. *Mr. Harris, Mr. Radius.*

1967-68 GREEK INTERIMS

20 CLASSICAL LITERATURE IN TRANSLATION. A survey of some of the major representatives of Greek and Roman literature, giving particular attention to them as generating much of Western culture and thought, both in its political institutions and in its literature. The genius and defects of the Greek and Roman works will be viewed in their relationship to each other and to Christianity. *Staff.*

21 STUDIES IN THE GREEK POETRY OF THE BYZANTINE RITE. Explorations of the origins, development, and structures of the poetic forms of the Greek Byzantine Rite and their iconic parallels. Prerequisite: two courses in Greek. *Mr. R. Otten.*

30 DIRECTED READING. For juniors and seniors approved by the Department of Classical Languages for individual study. Readings in authors selected for the particular interests and needs of the

individual student under the direction of a department member. *Staff.*

1967-68 LATIN INTERIMS

10 LATE AND MEDIEVAL LATIN. Specimen readings in some of the more important authors and texts in post-classical Latin, designed to extend the perspectives of the Greek and Latin concentrators, and to provide for others the opportunity to read source materials in their fields of interest. The choice of readings will be determined by the availability of texts and the interests of the students. Prerequisite: Two semesters or equivalent in Latin. *Staff.*

20 CLASSICAL LITERATURE IN TRANSLATION. See Greek 20.

30 DIRECTED READING. See Greek 30.

31 LATIN PROSE COMPOSITION. A thorough review of Latin inflections and syntax is made, designed to facilitate the writing of Latin. There is also included an exposition of the pedagogy of presenting Latin grammar through an analysis of the inner logic of the language. The course should be taken as close as possible to the time when the student does his practice teaching. Prerequisite: four semesters or equivalent in Latin. *Staff.*

Dutch

*Professor *Lagerwey (adviser for Dutch), Queen Juliana Professor of Language and Culture of the Netherlands.*

Associate Professor W. Bratt (acting chairman, Department of Germanic Languages).

PREREQUISITE to concentration in Dutch is a minimum average of C (2.0) in 101, 102, 201, and 202 for students without a background in the language or in 203 and 204 for those with. In addition to this basic language foundation a student must complete three courses from the 300 level and two interims approved by the department.

101 ELEMENTARY DUTCH. F. An introductory course in the comprehension and use of spoken and written Dutch. *Staff.*

102 ELEMENTARY DUTCH. S. Continuation of 101. *Staff.*

201 INTERMEDIATE DUTCH. F. Selected readings of modern Dutch prose and poetry. Review of grammar and syntax. *Staff.*

202 INTERMEDIATE DUTCH. S. Continuation of 201. *Staff.*

203 ADVANCED DUTCH. F, core. A course intended to serve students who already have some knowledge of the Dutch language but who are deficient in their ability to speak, comprehend, and write the language.

204 ADVANCED DUTCH. S, core. A continuation of 203.

305 DUTCH CLASSICS. Core. Study and discussion of several Dutch literary texts representative of the classical and modern periods of Dutch literature.

306 DUTCH CLASSICS. Core. A continuation of 305.

307 READINGS IN DUTCH CHURCH HISTORY. F. A study, in the Dutch language, of source documents pertaining to the history of the Reformed churches in the Netherlands during the period 1450-1700.

308 READINGS IN DUTCH CHURCH HISTORY. S. A continuation of 307 for the period 1700-1945.

309 NETHERLANDIC CIVILIZATION. A study conducted in the Dutch language of several important aspects of Netherlandic civilization: language, literature, history, religion, art, architecture, social structure, and education.

Economics

Professor Brouwer (chairman)

Associate Professor Pruis

Instructor R. Bosscher

Assistant Instructors Koning, Lubbers

THE BASIC COURSE for the four programs of concentration in the department is 151, which all prospective majors must complete with a minimum grade of C (2.0). Students in the general program of concentration must take 207, 321, 322 and six other courses, not more than two from 212, 313, 316, and 318. The business concentration requires 207, 212, 313, 316, 318, 321, 322, and two other courses in the department. Both of these programs also require two courses in mathematics for the social sciences (Math. 205-206). A group concentration is possible with five courses in economics including two from 207, 321, 322, and three from any one of the following disciplines: history, political science, sociology, and psychology. A departmental core course must be included as part of the program. Interim courses may not be credited toward programs of concentration without departmental approval. A group concentration for secondary teaching includes 207, 321 or 322, and four additional courses in economics plus a minimum of three courses in one of the following disciplines: history, political science, psychology, or sociology.

151 PRINCIPLES OF ECONOMICS. F and S, core. A study of the principles of resource allocation, income distribution, prices, production, income levels, and economic growth. The course is designed to prepare the student for further work in economics, history, government, and sociology, and to help him to an understanding of basic domestic and international problems. *Staff.*

207 INTRODUCTION TO ACCOUNTING. F. An introduction to accounting, with emphasis on principles of asset valuation and income determination. Interpretation of financial reports published for investors and an introduction to the managerial uses of accounting. *Mr. Pruis.*

212 ACCOUNTING. S. Principles and methods of accounting for manufacturing and operating costs, with emphasis on cost analysis for managerial control and decision-making. Prerequisite: 207. *Mr. Pruis.*

313 BUSINESS ORGANIZATION AND MANAGEMENT. F. A study of the principles and problems of organization and management for optimal administration of the general management function in the firm, with emphasis on effective utilization of the human resources of the firm. Prerequisite: 151. *Staff.*

316 FINANCIAL PRINCIPLES. F. A study of the principles and problems involved in the optimal administration of the finance function in the firm, including financial aspects of the form of organization, and the allocation of capital to and within the firm. Prerequisites: 151 and 207. *Staff.*

318 MARKETING. S. A study of the principles and problems involved in the optimal administration of the marketing function in the firm, including production and promotional policy, price determination, and distribution channels. Prerequisite: 151. *Staff.*

321 **THE NATIONAL INCOME.** F. An intermediate course in macro-economic theory which studies the theory of aggregate demand, the degree of utilization of productive capacity, economic growth, and the general levels of prices. Prerequisite: 151. *Mr. R. Bosscher.*

322 **THE PRICE SYSTEM.** S. An intermediate course in micro-economic theory, emphasizing the role of the price system in organizing economic activity and an evaluation of its effectiveness. Prerequisite: 151. *Mr. R. Bosscher.*

331 **CREDIT AND MONETARY THEORY.** F. A study of the principles of money, banking, and credit with emphasis on monetary theory and policy and their role in domestic and international economics. Prerequisite: 151. *Mr. R. Bosscher.*

334 **INDUSTRIAL MARKETS AND PUBLIC CONTROL.** S. A study of the structure, control, and market behavior of American industry, and the public policy of preserving competition to control economic power. Prerequisite: 151. *Mr. Brouwer.*

335 **LABOR ECONOMICS.** F. A study of the labor market and its relation to the economy as a whole, with emphasis on wage theory, the economic impact of trade unions, unemployment, social security, and public policy. Prerequisite: 151. *Mr. Brouwer.*

338 **INTERNATIONAL ECONOMICS.** S. A study of international economic relations, stressing the fundamentals of trade theory, the balance of payments, problems of international disequilibrium, trade barriers, and efforts to promote international economic stability and growth. Prerequisite: 151. *Mr. R. Bosscher.*

339 **THEORY OF PUBLIC FINANCE.** S. A study of the economics of government expenditures, taxation, and debt, with emphasis on their relation to economic stability, economic growth, and incidence of taxes. Prerequisite: 151.

342 **HISTORY OF ECONOMIC THOUGHT.** S. An examination of the development

of economic ideas, mainly in the last two hundred years, in the context of the philosophical and historical conditions in which they emerged. Prerequisite: 151 or the permission of the instructor. *Mr. Brouwer.*

400 **ECONOMICS SEMINAR.** F. A concentrated study of one or more significant problems in economics, designed primarily for majors planning to pursue graduate studies. Emphasis on oral and written reports and on extensive reading in current economic journals. Prerequisites: senior rank and consent of the instructor. *Staff.*

1967-68 INTERIMS

10 **ECONOMIC HISTORY OF THE UNITED STATES.** An examination of the important factors in American economic development, using a topical approach. Emphasis will be placed on both a descriptive and an interpretive study of these dynamic economic factors and their interrelationships.

11 **ECONOMICS OF POVERTY AND INCOME SECURITY.** An examination of the extent and causes of low incomes in the American economy in the context of the market system and an analysis of the policies and programs designed to reduce poverty. *Mr. Brouwer.*



20 DEVELOPMENT OF FINANCIAL AND MONETARY INSTITUTIONS. A study of the growth, importance, and functional role of selected institutions.

31 PROBLEMS OF ECONOMIC DEVELOPMENT. Discussion of theoretical aspects

of development, with particular emphasis on obstacles to development in the less developed countries. Course includes description and analysis of development programs in selected countries and of international efforts to assist underdeveloped nations. *Mr. R. Bosscher.*

Education

Professors Beversluis, De Beer, P. De Boer, D. Oppewal, Snapper (chairman), Van Bruggen

Assistant Professors Hendricks, Hoeks, Vander Ark, J. Wiersma

Instructors Haan, D. Westra

Director of Teacher Certification and Field Services, Bos

Administration Coordinator, M. Strikwerda

THE VARIOUS TEACHER education programs are described on pages 44-47. Prospective elementary teachers should consult with Miss Gertrude Vander Ark, coordinator of elementary education, and prospective secondary teachers should consult with an adviser in the department in which they expect to concentrate. The coordinator of secondary education is Mr. Marion Snapper. The department does not offer a major program of concentration in professional education courses.

202 EDUCATIONAL PSYCHOLOGY. F and S. A psychological study of the learner, the learning process, and the kinds of learning. Prerequisite: Psychology 151 or its equivalent. *Mr. De Beer, Mr. Van Bruggen.*

203 PHILOSOPHY OF EDUCATION. F and S. An analysis of the relationship between educational theory and practice and their social and philosophical setting. Course materials are drawn from either ancient and medieval European or contemporary American education. Philosophy 209 may substitute for this course. *Staff.*

204 HISTORY OF AMERICAN EDUCATION. F and S. A study of the American school systems in their historical setting from colonial times to the present. Special attention is given to the ways in which social and intellectual movements affect educational theory and practice. *Staff.*

220 TEACHING ARITHMETIC IN ELEMENTARY SCHOOLS. Both content and

methods in arithmetic as taught in the grades will be considered. Prerequisite: Psychology 202. Not offered in 1968-69.

307 SCHOOL ADMINISTRATION. A study of the structure, organization, administration, and management of elementary and secondary schools. Development of professional leadership and supervisory practices. Not offered in 1968-69.

310 EDUCATIONAL MEASUREMENTS. F and S. A survey course in evaluation and measurements including concepts of testing, construction, and use of teacher-made tests, standardized tests, and marking systems. *Mr. Reynolds.*

314 PRINCIPLES OF TEACHING IN SECONDARY SCHOOLS. F and S. A study of the principles, methods, and techniques appropriate to the direction of the learning process at the secondary level. Includes a study of the problems peculiar to the discipline taught by the student who must be registered concurrently in 344. Prerequisites: 202, 203, and 204. *Mr. Snapper.*

315 **PRINCIPLES OF TEACHING IN ELEMENTARY SCHOOLS.** F and S. A study of the principles, methods, and techniques appropriate to the direction of the learning process. Student must be concurrently registered in 343, and have completed, 202, 203, and 204.

322 **TEACHING READING IN ELEMENTARY SCHOOLS.** F and S. A study of the physiological, psychological, and behavioral prerequisites for success in reading, a sequential analysis of reading skills, and a consideration of the broader area of language arts. Section A is for lower elementary grades and Section B for upper elementary. Students must be concurrently registered in 343 and have completed 202, 203, and 204. *Mrs. Haan.*

343 **DIRECTED TEACHING FOR ELEMENTARY TEACHERS.** F and S, two courses. *Staff.*

344 **DIRECTED TEACHING FOR SECONDARY TEACHERS.** F and S, two courses. *Staff.*

1967-68 INTERIMS

20 **LANGUAGE AND THE ELEMENTARY SCHOOL.** A treatment of dramatics, writing, storytelling and listening, interpretive reading, and reading for appre-

ciation as it pertains to the elementary classroom. This will be a workshop involving extensive reading, discussion, and active participation. *Mrs. Haan.*

21 **A HISTORY OF EDUCATION IN WESTERN CIVILIZATION.** A survey of educational institutions and ideals as these come to expression in Christian education before the rise of Protestantism, and in the post-Reformation period. *Mr. P. De Boer.*

22 **EDUCATION IN THE INNER CITY.** A first-hand study of the inner city, its institutions and social agencies. The student will finish the course as a student assistant in inner city schools. Includes reading and class work in the sociology of the inner city. *Mr. Snapper.*

30 **RESEARCH IN SELECTED TOPICS IN EDUCATION.** Research in topics of students' own choosing. Students will work in small groups and report to the entire class. *Mr. De Beer.*

31 **EDUCATIONAL PHILOSOPHY IN THE CHRISTIAN REFORMED CHURCH.** A study of the educational philosophy of selected members of the Christian Reformed Church and of some unresolved issues in Christian Reformed educational philosophy. *Mr. Beversluis.*

Engineering

Associate Professor J. Bosscher (acting chairman)
*Assistant Professor *Van Poolen*

CALVIN COLLEGE does not offer a degree program in engineering, but rather presents a basic pre-engineering program which, in conjunction with subsequent study in an accredited school of engineering, leads to a joint degree. For details see pages 47 and 48.

101 **ENGINEERING COMMUNICATION AND CONCEPT DESIGN.** F, one and a half courses. A study of (1) basic topics in engineering drawing to provide facility in the transmission of ideas through accepted 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; (2) selected techniques in graphical mathematics and data presentation including graphical algebra and calculus, the determination of empirical equations from experimental data, functional scales, and basic nomography; (3) basic graphical techniques for the

solution of the spatial relationships involved in the solution of point, line, plane, and surface problems in three dimensions; (4) and involvement in the engineering design process at the concept level through the medium of lectures and assigned design projects. *Mr. J. Bosscher.*

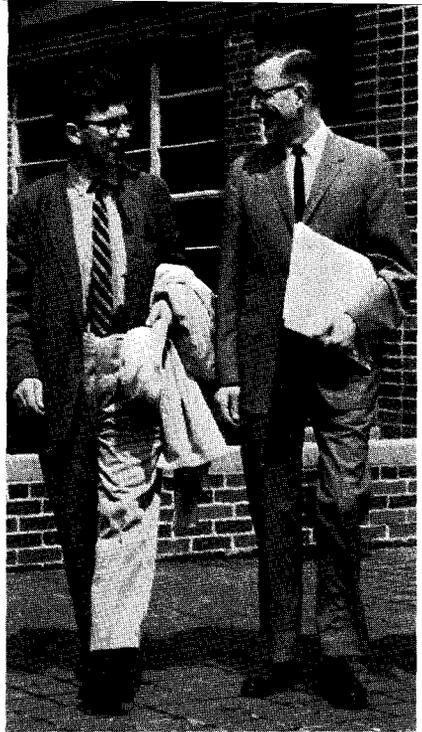
202 STATICS. S. Study of fundamental principles of mechanics and their application to the simpler problems of engineering. Vector algebra, forces, components, moments, couples, centroids, fluid statics, stress equilibrium, friction, moments of inertia, virtual work. Must be preceded or accompanied by Mathematics 112 and Physics 226 or 206. *Staff.*

205 PRINCIPLES OF MATERIALS SCIENCE. F. 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, magnetic, and radiation. Prerequisite: Chemistry 104. *Mr. J. Bosscher.*

303 DYNAMICS. F. 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. Must be preceded or accompanied by Mathematics 212 and Physics 226 or 206. *Staff.*

305 MECHANICS OF MATERIALS. S. 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, compounding of simple stresses, introduction to theories of failure and energy methods. Prerequisite. 202. *Mr. J. Bosscher.*

309 FLUID MECHANICS. S. An introduction to the dynamics and thermodynamics of real and ideal fluids; laminar, turbulent, compressible, and incompressible flows; the Euler, Bernoulli, and continuity equations; dimensional analysis and similitude applied to a series of subjects. Prerequisites: Mathematics 212 and Physics 226 or 206. *Staff.*



310 THERMODYNAMICS. S. An introduction to concepts of work and heat, properties of a pure substance, first law, second law, entropy, thermodynamic relations, mixtures, and an introduction to statistical thermodynamics. Prerequisites: Mathematics 212 and Physics 226 or 206. *Staff.*

312 PRINCIPLES OF ANALOG COMPUTATION. S, half course. An introduction to the theory and techniques of analog computation, including computer solutions for representative systems of linear and non-linear differential equations. Computer solutions contrasted with mathematical solutions where applicable. Prerequisite: Mathematics 212 or permission of the instructor. *Staff.*

1967-68 INTERIMS

10 DESCRIPTIVE GEOMETRY AND CONCEPT DESIGN. A study of basic graphical techniques for the solution of the spatial relationships in the solution of point, line, plane, and surface problems in three dimensions; and the involvement in the engineering design process at the concept level through the medium of lectures and assigned design projects. *Mr. J. Bosscher.*

English

Professors Harper (chairman), P. Oppewall, Ten Harmsel, Tiemersma, Timmerman, Van Der Weele, *S. Wiersma

Associate Professors K. Kuiper, Van't Hul

Assistant Professors Holkeboer, Hook, Kroese, Slingerland

Instructors Walters, Zylstra

Visiting Instructor Baron

Assistant Instructor Swets

STUDENTS may declare a major in English only after completing 100 and 200 with a minimum average of C (2.0). The program includes 303, 310, 311, 329 or 330, four other literature courses, and one interim. The recommended program for students preparing for a secondary education certificate includes, instead of the four electives, 305 or 306, 307, 308 or 309, 313 or 315.

100 WRITTEN RHETORIC. F and S, core. A study of written English rhetoric, with many formal exercises and papers. *Staff.*

200 INTRODUCTION TO LITERATURE. F and S, core. A study of the forms and genres of literature, with critical exercises and selected readings. *Staff.*

225 CHILDREN'S LITERATURE. F and S. A course designed to develop a knowledge of and an interest in good literature on the elementary level. The development of skill in storytelling on the part of the elementary teacher is emphasized. *Mrs. Zylstra.*

300 A SURVEY OF ENGLISH LITERATURE. F, core. A comprehensive study of English literature from Chaucer through Pope. The course is conducted intensively in the major authors rather than inclusively. *Staff.*

301 A SURVEY OF ENGLISH LITERATURE. S, core. A continuation of 300. The course proceeds from Johnson through Eliot. *Staff.*

302 MEDIEVAL ENGLISH LITERATURE. F, core. A study of Chaucer's *Canterbury Tales* and *Troilus and Criseyde* as reflecting Chaucer's literary genius and the major cultural phenomena of his time. Supplementary study in translation of *Beowulf*, *Gawain and the Green*

Knight, and portions of *Piers Plowman*. *Mr. Timmerman, Mr. Van't Hul.*

303 SHAKESPEARE. F and S, core. A study of selected works of William Shakespeare. *Staff.*

304 ENGLISH LITERATURE OF THE SIXTEENTH CENTURY. S, core. A study of the lyricists and sonneteers, the prose writers, and the dramatists (exclusive of Shakespeare). An intensive study of the poetry of Spenser and the drama of Marlowe. *Mr. Van't Hul.*

305 ENGLISH LITERATURE OF THE SEVENTEENTH CENTURY. F, core. 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. Not offered 1968-69.

306 MILTON AND DRYDEN. S, core. An intensive study of the poetry and prose of John Milton, and a briefer study of John Dryden to demonstrate the form in which the Miltonic influence enters the mainstream of English literature. Marvell will also be studied concurrently. *Staff.*

307 ENGLISH LITERATURE OF THE EIGHTEENTH CENTURY. F, core. A study of English poetry and prose in the

eighteenth century, with emphasis on the neo-classicists, Pope, Addison, Swift, and Johnson, and a study of the beginnings of the romantic outlook in Gray, Thomson, and Cowper. Textbook, collateral readings, and reports. *Mr. Van Der Weele.*

308 ENGLISH LITERATURE OF THE NINETEENTH CENTURY. F, core. A study of the Romantic writers of England in both poetry and prose, with intensive critical work on the early Browning; Wordsworth, Carlyle, and Coleridge. *Mr. Kroese, Mr. Tiemersma.*

309 ENGLISH LITERATURE OF THE NINETEENTH CENTURY. S, core. A continuation of 308. A study of the Victorian writers of England in both poetry and prose, with intensive critical work on Tennyson, Browning, and Arnold among the poets, and Arnold, Newman, Huxley, and Ruskin among the prose writers. *Mr. Harper, Mr. Tiemersma.*

310 AMERICAN LITERATURE. F, core. A study of important writings in the colonial and revolutionary periods, with emphasis upon the culture and writings of the New England group. *Staff.*

311 AMERICAN LITERATURE. S, core. A continuation of 310. Intensive study of Whitman and Twain. A survey of the realistic movement, the new poetry, and important twentieth century fiction and criticism. *Staff.*

312 AMERICAN LITERARY CLASSICS. S, core. A critical study of American masterpieces as the literary embodiment of the evolving minds, ways, and values of the American cultural process. Emphasis upon eight major authors. *Staff.*

313 CONTEMPORARY ENGLISH AND AMERICAN POETRY. S, core. A study of the lyric and dramatic poetry of England and America from 1890 to the present. *Mr. Van Der Weele.*

314 THE ENGLISH NOVEL. F and S, core. A survey of the English novel from its beginnings through Conrad, with emphasis upon the art and thought of the major novelists. Special attention is paid to the development of realistic, romantic, epic, and symbolic strains in modern fiction. The course includes the

reading of at least twelve novels. *Mr. Hook, Miss Ten Harmse.*

315 CONTEMPORARY ENGLISH AND AMERICAN FICTION. F and S, core. A study of English and American fiction, with their continental relations, from 1890 to the present. *Mr. Hook, Mr. P. Oppewall.*

320 WORLD LITERATURE. S, core. A course of selected readings and lectures in the literature of non-English speaking peoples, ancient and modern, with special emphasis on the period from Dante to Thomas Mann, and with particular attention to significant forms and themes. Not offered in 1968-69.

321 MODERN DRAMA (ENGLISH, IRISH, AMERICAN, AND CONTINENTAL). S. Continental, English, Irish and American drama from the late nineteenth century to the present. *Staff.*

329 LINGUISTICS. S, core. A course that requires previous mastery of a traditional grammar as background to assigned readings in scholarly non-structural, structural, and transformational grammars. The course gives attention to assumptions informing the nomenclature, methodology, and scope of the assigned grammars. The course incidentally considers the relationship of these grammars to the study of composition and literature. *Mr. Hook.*

330 HISTORY OF THE ENGLISH LANGUAGE. S, core. An analysis of the changes that have occurred throughout the history of the English language, based on an intensive study of selected portions of the *Oxford English Dictionary* and passages from Chaucer, Shakespeare, and various English translations of the Bible. *Mr. Van't Hul.*

331 LITERARY CRITICISM. S, core. A course in critical theory, historically and normatively pursued. Analysis of the principal contributions to Western literary criticism, as well as some practice of criticism on very recent literature. *Mr. Harper.*

332 ADVANCED COMPOSITION AND RHETORIC. S, core. A practical course in advanced expository writing. Intensive reading in the formal essay and in

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 vignette. Open to students who have a B (3.0), in 100 and permission of the instructor. *Mr. Van Der Weele.*

333 **THE WRITING OF PLAYS, POEMS, AND STORIES.** F, core. A course in the principles of composition of plays, poems, and stories. Works by contemporary authors are analyzed in the light of these principles. Students will practice writing in all three forms. Admittance to the class may be granted by the instructor on the recommendation of the student's instructor in 100. Prerequisite: a grade of B (3.0) in 100. Not offered 1968-69.

1967-68 INTERIMS

10 **C.S. LEWIS, LITERARY THEOLOGIAN.** A study of selected works of C.S. Lewis, exclusive of his children's literature, with emphasis on Lewis' view of the Christian life, his rationale for Christianity, and his insight into the psychology of fallen men in a fallen universe. *Mr. Minnema, Mr. Tiemersma.*

11 **THE SHORT STORY.** A careful study of great short stories, their analysis and interpretation, the development of the genre, and an acquaintance with

significant works of criticism on the short story. *Miss Ten Harmzel.*

20 **BEST SELLERS.** An appraisal of current best sellers — e.g., *Time* magazine listings and Book-of-the-Month Club selections. *Mr. Van Der Weele.*

21 **PROTEST LITERATURE.** A study of American novels which portray social, political, and economic protest. *Mr. Holstege and Miss Slingerland.*

30 **THE ROOTS OF FICTION.** An examination of selected "autobiographical" novels by Cather, Manfred, De Vries, and Hemingway in the light of their lives, in order to determine as far as possible the relation between life and fiction. *Mr. Timmerman.*

31 **AUTOBIOGRAPHY OF EX-EVANGELICALS.** A study of autobiographical writings of ex-evangelicals in nineteenth century England. *Mr. Harper.*

32 **TEACHING POETRY.** The course is designed to permit the students to investigate in depth the various approaches to the teaching of poetry, including the historical, the analytical, the didactic, the paraphrastic, and others. Some attention is given to relating critical theories about the nature of poetry to the pedagogical methods which are implicit in those theories. *Mr. K. Kuiper.*

French

Professor A. Otten (chairman, Department of Romance Languages)

*Instructor *L. Westra*

Assistant Ter Haar

Assistant Instructors A. den Hartog, Marsman

STUDENTS may declare for a program of concentration in French after having completed two units of college French with a minimum average grade of C (2.0). The program of concentration includes 201, 202, 207, 208, 311, 312, 313, 314, 321, and 322. Cognates in a second foreign language, art, English or American literature, and history are recommended. All courses above 102 meet core requirements; 207, 208, 311, 312, 313, 371, and 372 meet core requirements in the fine arts.

LANGUAGE

101 ELEMENTARY FRENCH. F. An introductory course in the comprehension and use of spoken and written French. *Staff.*

102 ELEMENTARY FRENCH. S. Continuation of 101. Prerequisite to a program of concentration are 101 and 102. *Staff.*

201 INTERMEDIATE FRENCH. F. Further training in spoken and written French, study of the structure of the language, and reading of important literary texts. Conducted almost exclusively in French. *Staff.*

202 INTERMEDIATE FRENCH. S. Continuation of French 201. *Staff.*

321 ADVANCED FRENCH. F even years. A course for the advanced student preparing for graduate study or for the teaching of French and for the student who wishes to improve his facility in the language to an exceptional degree. A wide variety of exercises, compositions, and drills is designed to develop in the student a high degree of competence in speaking, reading and, above all, writing idiomatic French. Conducted in French.

322 ADVANCED FRENCH. S even years. Continuation of 321, with training in the writing of the *dissertation* and the *analyse littéraire*.

LITERATURE

207 INTRODUCTION TO FRENCH LITERATURE. F. 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, *explications de texte*, reports, and papers. Conducted in French.

208 INTRODUCTION TO FRENCH LITERATURE. S. Continuation of 207. Study of the nineteenth and twentieth centuries. French 207 and 208 are designed to give the student an acquaintance with a large number of important works in French literature as well as the basic knowledge and historical framework necessary for further literary study.

311 FRENCH DRAMA. F odd years. A study of dramatic literature from the Middle Ages to the present day, with emphasis on classical and contemporary drama. Conducted in French. *Mr. A. Otten.*

312 THE FRENCH NOVEL. S odd years. A study of fiction from the Middle Ages to the present day, with special emphasis on the nineteenth and twentieth centuries. Conducted in French. *Mr. A. Otten.*

313 FRENCH POETRY. F even years. A study of the history and nature of French poetry by means of extensive reading and intensive examination of major poets, with special attention to the themes, forms, and techniques of poets of the modern period, beginning with Baudelaire. Conducted in French. *Mr. A. Otten.*

314 FRENCH PROSE. S even years. A study of major writers expressing French thought, spirit, and sensibility in non-fiction from Montaigne to Sartre. Special attention is paid to Calvin, Pascal, *les philosophes*, and the existentialists. Conducted in French.

371 LITERARY DOCTRINES AND PROBLEMS. F odd years. An advanced course devoted largely to literary theory, using as its point of departure a selection of such significant documents in the history of French literature as Du Bellay's *Défense et illustration de la langue française*, the various statements relating to the *Querelle des anciens et des modernes*, Hugo's *Préface de Cromwell*, the transcript of Flaubert's trial, and others. This course includes an examination of the situations and writings which elicited these documents. Normally this course should be taken after completion of the genre courses. Conducted in French.

CIVILIZATION

372 FRENCH CIVILIZATION. S odd years. A study of examples of non-literary, artistic expressions of the French mind in painting, architecture, and music, and of French religious, political, and social institutions. Designed to enhance the student's knowledge of French

culture and to enrich his literary studies, this course is a complement to, rather than a substitute for, literary studies. Conducted in French.

1967-68 INTERIMS

10 FRENCH FOR READING KNOWLEDGE. A beginning language course designed to develop reading proficiency only; introduction to the vocabulary of the various

disciplines. This course fulfills no foreign language requirements.

21 INTERIM ABROAD. Four and one-half weeks in France, with three-day excursion to the chateaux of the Loire valley. Advanced language; lectures by French authorities on language, literature, and culture. Visits to important monuments and museums, as well as attendance at the Opera and at the *Comédie Française*. *Mr. A. Otten.*

101 PRINCIPLES OF GEOGRAPHY. F and S. A study of the fundamental principles of geography both as an earth science and as it relates the environmental factors of man and his history. The cultural, political, social, and economic implications are studied. This course is organized to be of particular assistance to prospective teachers who will be required to teach geography on either the elementary or secondary level.

113 EARTH SCIENCE. F and S. This course is a study of the physical characteristics of the earth. It includes consideration of the place of earth in space; the structure of earth's atmosphere, crust, and interior; rocks and minerals; and processes giving rise to changes in earth's crustal and surface features. Prerequisite: Physics 110 or 112, or equivalent. *Mr. Menninga.*

Geography

Professors Boersma, Fridsma
Associate Professor W. Bratt (acting chairman, Department of Germanic Languages)
*Assistant Professors *Kreuzer, Hegewald*
Assistant Instructors G. den Hartog, Flikkema
Assistant Vierzen

STUDENTS should complete their first college year of German with a minimum average of C (2.0) before applying for admission to the major program. This concentration includes 201, 202, 205, 207, 208, three additional courses including 301 or 302, and one from 304, 306, 307, 308, and a senior level interim involving independent study.

101 ELEMENTARY GERMAN. F. A beginners' course stressing both written and spoken German and aiming at familiarity with basic grammatical patterns. *Staff.*

102 ELEMENTARY GERMAN. S. Continuation of 101. *Staff.*

201 INTERMEDIATE GERMAN. F, core. Selected prose readings, grammar re-

view, composition, and collateral reading reports. Prerequisites: 101 and 102, or two units of high school German. *Staff.*

202 INTERMEDIATE GERMAN. S, core. Continuation of 201. Prerequisite: 201 or three units of high school German. *Staff.*

203 INTERMEDIATE GERMAN. F, core.

German

A one-semester course intended specifically for students who have successfully completed three years (six units) of high school German. Selected prose readings, grammar review, composition, and collateral reading reports. *Staff*.

205 ADVANCED ORAL AND WRITTEN COMPOSITION. F. Exercises, compositions, and drills designed to develop in the student advanced competence in speaking and writing idiomatic German. Prerequisite: 202. *Mr. Boersma*.

207 READINGS IN MAJOR GERMAN AUTHORS. F, core. Basic introduction to German literature. Selected readings in major German authors from 1750 to 1850. Assigned readings and papers. Prerequisite: 202. *Mr. W. Bratt*.

208 READINGS IN MAJOR GERMAN AUTHORS. S, core. Continuation of 207. Readings in major German authors from 1850 to the present. Prerequisite: 202. *Mr. W. Bratt*.

301 CLASSICISM. F even years, core. The origins of the classical ideal during the seventeenth and early eighteenth centuries. Readings from Klopstock, Lessing, Goethe, and Schiller. Prerequisite: 202. *Mr. Boersma*.

302 CLASSICISM. Continuation of 301. Prerequisite: 202. *Mr. Boersma*.

303 ROMANTICISM. F even years, core. The literary theory and philosophical-religious basis of the German romantic movement as reflected in representative works of both earlier and later Romantics. Prerequisite: 202. *Mr. Hegewald*.

304 REALISM. S even years, core. Readings 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. *Mr. Hegewald*.

305 EARLY NINETEENTH CENTURY DRAMA. F odd years, core. 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. *Mr. W. Bratt*.

306 LATER NINETEENTH CENTURY DRAMA. S odd years, core. A study of Hebbel and Hauptmann and their times. Assigned reading and reports. Prerequisites: 202 and preferably 305. *Mr. W. Bratt*.

307 STUDIES IN MODERN GERMAN LITERATURE. S odd years, core. 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: 202. *Staff*.

308 STUDIES IN MODERN GERMAN LITERATURE. S odd years, core. Continuation of 307. Prerequisite: 202. *Staff*.

1967-68 INTERIMS

102 ELEMENTARY GERMAN. This course is identical to the second semester of first-year work in the language; available to those who have completed German 101. This interim course assumes that the student will be able to take a special course in the semester immediately following the interim, combining thereby both semesters of Intermediate German. *Staff*.

10 CULTURAL SURVEY OF GERMANY. A survey of such fields as architecture, music, literature, philosophy, and religion. Conducted in English. Does not count toward a concentration in German. *Mr. Hegewald*.

20 GERMAN LITERATURE IN TRANSLATION. For the student who does not know German but would like to acquaint himself with the major movements, themes, and figures in nineteenth and twentieth century German literature. Extensive reading of representative works since the age of Goethe.

21 MAJOR AUSTRIAN DRAMATISTS. Lectures and discussion of representative

works by Raimund, Grillparzer, Schnitzler, and Hofmannsthal. Concentration on Austrian conservatism, Volkstheater, Spanish baroque influences, relation to other European literature, *fin de siècle* "decadence," "Desillusionsbühne" tradition. Mr. den Hartog.

30 Goethe's *Faust*. Reading and interpretation of the complete text of Part I and selections from Part II. Some attention is paid to the history of the Faust legend and to the genesis and development of Goethe's drama. Mr. Boersma.

Greek

SEE THE DEPARTMENT OF CLASSICAL LANGUAGES for a description of courses and programs of concentration in Greek.

History

Professors Ippel (chairman, Department of History and Political Science), Jellema, Miller, Rienstra, Strikwerda
Associate Professors Bolt, *Brinks, Van Kley
Assistant Professors De Bie, De Vries, Marsden
Instructor Greydanus
Visiting Instructor Hekman

PROGRAMS for students majoring in history will be worked out for them by departmental advisors. Such programs will reflect the student's interests both within the field of history and in related departments, his anticipated vocational goal, and the demands of the historical discipline. A minimum grade of C (2.0) in 101 is required for admission to major programs. For most programs a proficiency in either French or German is advised. Students are asked to consult with departmental advisors early in their college careers concerning their choice of a foreign language and, if secondary teaching is their goal, concerning the various types of programs leading to certification.

The minimum requirements of the department are the completion of nine courses in the department, including History 101, one second or third level interim in history or a departmentally approved substitute, the departmental seminar (History 400), and a program emphasizing either American or European interests. The European concentration requires History 211 or at least two units from History 310 through 312 and at least three units from the basic European period sequence, History 301 through 305. The American concentration requires at least three units from History 310, 311, 312, and 355 and at least two units from History 301 through 305. Electives from within the department complete the programs.

AREA SURVEYS

101 WESTERN CIVILIZATION. F and S, core. A study of the main cultural currents of Western Civilization from Classical Egypt through the twentieth century. Staff.

201 ANCIENT NEAR EAST. F. A cultural history of the ancient Near East from pre-history to the rise of Islam. Based on evidences from archeology and cultural anthropology as well as on ancient texts in translation, Biblical ac-

counts, and contemporary historical records. Special consideration is given to: geographical setting, artistic and linguistic traditions, and cultural contacts with European civilizations. *Mr. B. De Vries.*

202 MODERN NEAR EAST. S. A study of the transformation of the Near East from the rise of Islam through the establishment of independent national states following World War II. Particular attention is given to the institutionalization of Islam, the classical Arab Caliphates, the Crusades, the Ottoman Turkish and Safavid Persian states, the Near East Question, the modernist movements in Islam, and the problems of the contemporary states. *Mr. B. De Vries.*

203 TRADITIONAL EAST ASIA. F. An introduction to the history of East Asian civilizations from the earliest times to the nineteenth century. Primary emphasis is placed on the civilizations of China and Japan. Study of the growth and development of traditional East Asian society is supplemented by topical discussions of religion, philosophy, art, music, and literature. *Mr. Van Kley.*

204 MODERN EAST ASIA. S. A study of the transformation of East Asian society resulting from the intrusion of the West, from the sixteenth century to the present. Primary emphasis is placed on the civilizations of China and Japan and on the contacts between East Asia and the West. Topics on East Asian religion, philosophy, art, literature, and music are included. *Mr. Van Kley.*

205 LATIN AMERICA. F. An introduction to Latin American history including: the Iberian background; the conquest of the Aztec, Inca, and Mayan civilizations; the cultural, economic, social, and political developments of the colonial era; the independence movements; social reform, church-state relations, Pan-Americanism, wars and foreign intrusions, and the political changes during the national period. *Mr. Hekman.*

NATIONAL HISTORIES

211 SURVEY OF AMERICAN HISTORY. F and S. Selected themes in American history from colonial times to the present.

This course is not intended for those who plan to take period courses in American history. *Staff.*

212 ENGLAND. F. A survey of English history including: the Anglo-Saxon background; the medieval intellectual, religious, and constitutional developments; the Tudor and Stuart religious and political revolutions; the emergence of Great Britain as a world power; the growth of social, economic, and political history in the modern period. *Mr. Ippel.*

215 CANADA. S. A tracing of the founding and character of New France and a more careful examination of the nineteenth and twentieth century Canada. *Mr. Strikwerda.*

218 RUSSIA. F and S. A study of Russian and East European history from Byzantine and Slavic origins through the Russian Revolution of 1917 and the development of the contemporary Soviet state. *Mr. Jellema.*

221 THE NETHERLANDS. S. An introduction to the history of the Netherlands; the medieval times; the Burgundian period; the Reformation; the Dutch "Golden Age"; the French Revolution; the revival of Calvinism during the later nineteenth century; the changing role of the Netherlands in the twentieth century. *Mr. Jellema.*

STUDIES OF HISTORICAL PERIODS

301 CLASSICAL HISTORY. S. A study of the history of Greece and Rome from the Minoan Age through the reign of the Emperor Theodosius. The emphasis is on the political and economic changes which were the background for the shifts in intellectual styles. Particular problems are studied in depth: the emergence of the city-state; the Periclean age of Athens; the age of Alexander; the crisis of the Roman Republic; and the Decline. The two units of Greek 311 and Latin 312 may be substituted for this one-unit course. Not offered 1968-69.

302 MEDIEVAL EUROPE. F and S. A study of European society from 400 through 1350. The broad sweep of political, economic, and intellectual change is

focused on the analysis of particular topics, such as the emergence of a Christian society, the rise of Feudalism, the tensions between Asceticism and Humanism, the Crusades, and the Regnum-Sacerdotium controversy. *Mr. Rienstra.*

303 **RENAISSANCE AND REFORMATION EUROPE.** S. A history of Europe from 1350 to 1600 with primary emphasis on the rise of dynastic states, the Italian Renaissance, the Renaissance in Northern Europe, and the various phases of the Reformation. *Mr. Rienstra.*

304 **EARLY MODERN EUROPE.** F and S. A history of Europe from 1600 to 1815, from the Thirty Years War through the French Revolution, with considerable emphasis on the Age of Reason and Enlightenment. *Mr. Van Kley.*

305 **MODERN EUROPE.** F and S. Western Europe from the Congress of Vienna to World War I. Attention is given to the changing political, economic, and cultural climate of the century and to the development of nationalism, liberalism, socialism, Darwinism, and industrialism. *Mr. Strikwerda.*

310 **COLONIAL UNITED STATES.** F and S. A study of the colonial origins of the United States from the first settlements to about 1790, with primary emphasis on the intellectual, social, and religious developments and on the European origins of American thought. Attention is given to political, imperial, military, and economic changes. This course is designed to serve as one of the American sequence and as an introduction to History 355, Intellectual and Social History of the United States. *Mr. Marsden.*



311 **NINETEENTH CENTURY UNITED STATES.** F and S. An examination of United States history from the drafting of the constitution to 1890. Particular attention is given to the Federalist Era, the origin of political parties, Jeffersonianism and Jacksonianism, social reform, sectionalism, slavery, the Civil War and reconstruction, economic expansion, and the Gilded Age. *Mr. Bolt.*

312 **TWENTIETH CENTURY UNITED STATES.** F and S. A study of politics, diplomacy, labor, industry, and scientific achievement since the 1890's with emphasis on such developments as the Progressive Movement, World War I, the retreat from international responsibility; the roaring twenties, the Great Depression, the New Deal, World War II, and domestic and foreign developments since World War II. *Mr. Bolt.*

320 **CONTEMPORARY WORLD.** F and S. Western Europe from World War I to the present; the breakdown of colonialism and the resulting emergence of non-European powers; World War II and its role of changing the balance of power; the Cold War and the era of little wars. Topical studies include: the changing character of world economics; the conflict of ideologies; cultural relativism; the new age of conservatism. *Mr. Miller.*

TOPICAL STUDIES

334 **UNITED STATES CONSTITUTIONAL HISTORY.** A study of the development of American legal and political traditions using the constitution as the focal point. Emphasis is on such themes as the inter-relationship among the three branches of government and the relationship between legal education and the decisions of the courts. Particular attention is given to the Supreme Court decisions as they have reflected or molded social, intellectual, economic, and political change. Not offered 1968-69.

351 **ENGLISH CONSTITUTIONAL HISTORY.** S. A study of the origins and subsequent developments of English law, legal institutions, and constitutional usages from 1066 to the present. Major

topics considered are: the nature of English constitutional monarchy, the growth of Parliament, the development of English Common Law, the Tudor and Stuart revolutions, the Whig oligarchy, and the significant reforms of modern Britain. *Mr. Ippel.*

355 INTELLECTUAL HISTORY OF THE UNITED STATES. F and S. An analysis of the changing intellectual patterns in American society from about 1790 to the present as exemplified in religious, philosophical, political, social, and scientific thought. Emphasis is placed on the interaction of thought and society and some attention is given to European influence on American thought. A general knowledge of American history is assumed. *Mr. Marsden.*

400 SEMINAR IN HISTORY. F and S. A course taught by the staff in historiography, the philosophy of history, historical bibliography, and the writing of history. The seminar is subdivided to reflect fields of student interest. *Staff.*

1967-68 INTERIMS

10 GREAT TRIALS IN HISTORY. A treatment of famous trials, having both moral and historical significance such as those of Socrates, Joan of Arc, Servetus, Eichmann, etc. *Messrs. Jellema and Prins.*

11 THE ANALYSIS OF REVOLUTIONS. A survey of all or some of the following: the sixteenth century Dutch revolt; seventeenth century English Puritan Revolution; the eighteenth century American Revolution; the French Revolution; the Industrial Revolution; and the twentieth century Russian Revolution. Problems to be discussed include validity of comparison, interpretation, "role of the mass," the Christian view of revolutions, and the impact or significance. *Mr. Ippel.*

12 DANTE: THE POET AND HIS AGE. A course in the reading of the *Divine Comedy* and a study of the social and intellectual context in which the poem was written. *Mr. Rienstra.*

13 THE NEGRO IN AMERICAN HISTORY. The course will concentrate on four

major topics: African origins, slavery, the history of the Negro in the United States from Emancipation to 1945, and the Negro today.

20 THE DEPRESSION AND THE NEW DEAL. A study of the alleged causes; the impact on emotions and living patterns; on partisanship; on government units; the leadership of the New Deal; reactions of business enterprise, organized labor, writers, the courts; success or failure. *Mr. Strikwerda.*

21 A STUDY OF FOUR AMERICAN PRESIDENTS. A study of the public careers of Thomas Jefferson, Andrew Jackson, Woodrow Wilson, and Harry Truman, with emphasis on the administrations of each. The development and evolution of the Democratic Party will be examined as much as possible while studying the lives and careers of these four Democratic presidents. *Mr. Bolt.*

22 THE NETHERLANDERS IN AMERICA. A study of the early settlements of the Dutch in the United States, primarily in the main areas of concentration, i.e., New York, New Jersey, Iowa, Wisconsin, and Michigan. *Mr. De Bie.*

23 THE REVOLUTIONARY JULY MONARCHY: FRANCE 1830-1848. A study based on the social, literary, and political writings of the July Monarchy reflecting the rapid changes brought about by the first phases of the French industrial revolution, by popular education, by urbanization, by religious changes, and by restated Liberalism. *Mr. Miller.*

24 NEAR EASTERN MYTHOLOGY. Analysis of the literary and religious elements in significant myths from Mesopotamia, Canaan, and Asia Minor. *Mr. B. De Vries.*

30 JACKSONIAN DEMOCRACY. A reading seminar in the nature of Jacksonian democracy based on readings in original sources, scholarly monographs, and journal articles. Emphasis is placed upon historical interpretation, the rise of the Democratic Party, the role of Andrew Jackson, the "Bank War," social reform, and party politics on the state and local level.

31 **THE FAILURE OF PROTESTANTISM IN MODERN AMERICA.** An attempt to define the factors which contributed to the decline and fall of Protestantism in America, focusing particularly on the era after 1865. *Mr. Marsden.*

32 **ASIAN INFLUENCES ON EUROPEAN CIVILIZATIONS.** A study of the information about Asia available to Europeans, primarily since 1500, and the significance of this information in European culture. *Mr. Van Kley.*

Latin

SEE THE DEPARTMENT OF CLASSICAL LANGUAGES for a description of courses and programs of concentration in Latin.

Mathematics

*Professors Sinke (chairman), Van Zwalenberg, *Zwier*
Associate Professors J. Kuipers, Tuls
*Assistant Professors Leestma, *L. Nyhoff*
Instructors De Bruin, V. Nyhoff
Assistant Instructors Lyzenga, Vander Brug

FRESHMEN DESIRING TO MAJOR in the department who have not had at least three and a half years of high school mathematics should enroll in 100. A minimum grade of C (2.0) in 211 is required of all students applying for a program of concentration in the department. The program includes 111, 112, 211, 212, 351, three additional courses numbered 300 or above, and one junior-senior level interim course. Students preparing to teach mathematics in secondary schools should complete the courses designated in the general program of concentration above, plus 321, 331, 343, and one junior-senior level interim course. Cognate courses in physics and/or philosophy are strongly recommended as is a reading knowledge of German and French.

100 **PRE-CALCULUS MATHEMATICS.** F and S. Review of elementary algebra; topics in college algebra, including inequalities, linear and quadratic functions, mathematical induction; introduction to the trigonometric functions and their properties. Prerequisite: One year of geometry and one year of algebra in high school. *Mr. De Bruin.*

109 **ELEMENTS OF MODERN MATHEMATICS.** F and S, core. Set algebra, cardinal numbers, the arithmetic of counting numbers, logic, axiomatic systems, construction of rational and real number systems, groups and fields, relations and functions, polynomials. Pre-

requisites: one year of geometry and one year of algebra in high school. *Staff.*

111 **CALCULUS AND ANALYTIC GEOMETRY.** F and S. Rates of change, limits, derivatives of algebraic functions, applications of the derivative, integration, applications of the integral. *Staff.*

112 **CALCULUS AND ANALYTIC GEOMETRY.** F and S. Transcendental and hyperbolic functions, formal integration, analytic geometry, polar coordinates, vectors, parametric equations. Prerequisite: 111. *Staff.*

205 **MATHEMATICS FOR SOCIAL SCIENCE.** F. Real number system, field

properties, functions and graphs, elementary linear programming, minimum and maximum problems, matrix algebra, systems of equations, sequences, applications to business mathematics, elementary probability theory. Prerequisite: Two years of high school mathematics. *Mr. Sinke.*

206 MATHEMATICS FOR SOCIAL SCIENCE. S, core. Description of sample data, binomial and normal distributions, distributions of sample statistics, statistical inference, regression analysis. Prerequisite: 205 or 111. *Mr. Sinke.*

211 CALCULUS AND LINEAR ALGEBRA. F and S. Infinite series; vector spaces, linear transformations, matrices, determinants, other topics from linear algebra; solid analytic geometry, vectors; functions of several variables. Prerequisite: 112. *Staff.*

212 CALCULUS AND DIFFERENTIAL EQUATIONS. S. Multivariate analysis, multiple integration, differential equations of first order, numerical methods, linear equations, differential equations of second and higher order; operators, power series solutions; Laplace transform. Prerequisite: 211. *Staff.*

311 ADVANCED ANALYSIS. F. Complex numbers, complex functions, integration and the Cauchy integral formula, power series, residues and poles, conformal mapping. Prerequisite: 212. *Mr. Van Zwalenberg.*

312 ADVANCED ANALYSIS. S. Laplace transform, Fourier series, Fourier integrals, orthogonal functions, Sturm-Liouville theory, Bessel functions, Legendre polynomials. Prerequisite: 311. *Mr. J. Kuipers.*

321 FOUNDATIONS OF GEOMETRY. F. Consideration of Euclidean geometry as an axiomatic system, introduction to non-Euclidean geometry, the Poincaré model. Prerequisite: 112. *Mr. V. Nyhoff.*

323 LINEAR AND PROJECTIVE GEOMETRY. F. Transformations in the Euclidean plane, review of algebra of vector spaces, affine spaces, projective space,

projectivities and their groups, cross ratio, theorems of Desargues and Pappus. Prerequisite: 352. *Mr. Sinke.*

331 HISTORY OF MATHEMATICS. S. A study of the historical development of certain basic mathematical concepts from early times to the present, with consideration of the problems that mathematicians have faced in each age. Prerequisite: 211. *Mr. V. Nyhoff.*

341 NUMERICAL ANALYSIS. S. Analysis of errors in numerical methods, real roots of equations, approximations using polynomials, calculus of finite differences, numerical methods for differentiation and integration, applications to differential equations, applications to matrix algebra, inversion of matrices, characteristic values. Prerequisite: 212. *Mr. Vander Brug.*

343 PROBABILITY AND STATISTICS. F. Probability, probability density functions; binomial, Poisson, and normal distributions; central limit theorem, limiting distributions, sample statistics, hypothesis tests, estimators. Prerequisite: 212. *Mr. De Bruin.*

351 ABSTRACT ALGEBRA. F. Set theory, relations and functions, equivalence relations; the integers, mathematical induction, and elementary number theory; groups, rings, fields, and polynomials. Prerequisite: 211. *Mr. Tuls.*

352 ABSTRACT ALGEBRA. S. Principal ideal rings, unique factorizations domains, advanced topics in groups and rings, linear algebra, finite dimensional vector spaces, linear transformations, matrices, canonical forms, diagonalization. Prerequisite: 351. *Mr. Tuls.*

361 GENERAL TOPOLOGY. S. Elementary set theory, topological spaces, separation properties and connectivity, continuous mappings, homeomorphisms, product and quotient spaces, invariants under continuous mappings, compactness, metric spaces and completeness. Prerequisite: 211. *Mr. Leestma.*

362. REAL ANALYSIS. S. The real number system, Lebesgue measure and integration, differentiation and integra-

tion of real functions, classical Banach spaces, abstract measure theory. Prerequisite: 311. *Mr. Van Zwalenberg.*

400 READINGS IN MATHEMATICS. F and S. Independent study of topics of interest to particular students, under supervision of a member of the department staff. Prerequisite: permission of the department. *Staff.*

1967-68 INTERIMS

10 ELEMENTARY NUMERICAL ANALYSIS. A consideration of some basic ideas in analysis including sequence, functions, graphs, the derivative, and the integral. Taught strictly from a numerical point of view using numerical methods, and utilizing our electronic calculating equipment. Ideal for students who have taken Mathematics 109 and who will take Physics 110. *Staff.*

11 GEOMETRY FOR ELEMENTARY TEACHERS. A consideration of basic ideas in modern geometry, such as measurement of lengths, angles, and areas; congruence and similarity relations, geometry of space; geometry as an axiomatic system. *Staff.*

12 MATHEMATICS 109X: ELEMENTS OF MODERN MATHEMATICS. Mathematics 109 re-designed for students who have had four years of high school mathematics, who have above-average ability, and who will not be majoring in mathematics or science. More intensive and more extensive than the regular Mathematics 109. Satisfies the core requirement in mathematics.

20 INFINITE SERIES. A study of infinite series, exploring in further detail such matters as general tests for convergence and divergence, representation of functions by series, summation processes for divergent series, and asymptotic series. Applications where appropriate. *Mr. Sinke.*

23 TOPICS IN NUMBER THEORY. A study of selected topics in number theory, including such topics as diophantine equations, distribution of primes, the Euler-function, quadratic residues, Gaussian integers. *Staff.*

24 DIFFERENTIAL EQUATIONS WITH APPLICATIONS. This course pays particular attention to applications of differential equations to such problems as vibration analysis, electronic circuits, growth and decay problems, and mechanics. The introductory material taught in Mathematics 212 is extended to include additional work with Laplace transform and power series methods. *Mr. Tuls.*

30 MEASURE THEORY AND INTEGRATION. A consideration of measure theory; specifically a study of integrals other than the integral studied in elementary calculus, such as the Stieltjes and Lebesgue integrals. *Staff.*

31 READINGS IN PHILOSOPHY OF MATHEMATICS. A study of readings selected to introduce the student to some of the main schools of thought in this field, such as intuitionism, formalism, logicism, and conventionalism. *Staff.*

Professor Hamersma (chairman)
Associate Professors De Jonge, Geerdes
Assistant Professors Slenk, Topp
*Instructors G. Huisman, *Worst*
Professional staff, Knol, Rus

TO BE ADMITTED AS A MAJOR in music a student must have completed 103, 104, 203, and 204 with a minimum average of C (2.0). The general music requirements for all majors include 103, 104, 121, 122, 123-124, 131, 132, 203, 204, 223-224, 303, 304, and participation each semester in some faculty-directed music ensemble. Students with a concentration in instru-

Music

mental music education are not required to take 131 and 132. In addition to these general departmental requirements a student concentrating in music must complete any one of the following programs of specialization. *Music history* requires 205, 206, 305, and 306. *Theory and composition* includes 205, 206, and any two courses from 315, 316, 407, and 408. The *applied music concentration* may be met by a total of four courses of individual instruction in a single medium. *Instrumental music education* requires five and a half courses — 313, 315, 316, 329, 330, and four semesters of instruction in a string or wind instrument. The five-course specialization in *vocal music education* may be met by 313; four semesters' study of a keyboard instrument or of voice, plus at least two semesters' study of the other; and three electives from the advanced courses.

A minor in secondary music education requires 103, 104, 203, 302, 313, 331, and two semesters of individual lessons in a single medium.

BASIC COURSES

103 THE VOCABULARY, LITERATURE, AND MATERIALS OF MUSIC. F. A coordinated study of the historical, theoretical, and practical aspects of music by means of lectures, score study, written exercises, listening drill in aural perception, singing, reading, and term paper. The course begins with an introduction to music, primitive music, exotic music, and the music of the ancient Greeks. Score studies, listening repertory, and historical background in the music of the Middle Ages. Students intending to major in music must take 121 concurrently. *Miss Huisman.*

104 THE LITERATURE AND MATERIALS OF MUSIC. S. A continuation of 103. An introduction to modal counterpoint. A study of the music of the fifteenth and sixteenth centuries. Students intending to major in music must take 122 concurrently. Prerequisite: 103. *Mr. Hamersma, Miss Huisman.*

121-122 KEYBOARD HARMONY, ELEMENTARY. F and S, quarter course. Class instruction in keyboard harmony. Private instruction in piano will be required concurrently for students failing to meet departmental piano requirements. To be taken simultaneously with Music 103-104. *Mrs. Knol.*

123-124 AURAL PERCEPTION, ELEMENTARY. F and S. Quarter course. A

course in the development of the ability to hear and grasp the rhythmic, melodic, and harmonic elements of music. To be taken simultaneously with Music 103-104 and Music 121-122.

131-132 KEYBOARD HARMONY, ADVANCED. F and S, quarter course. Continuation of 121-122. To be taken simultaneously with Music 203-204. Prerequisite: 121-122.

203 THE LITERATURE AND MATERIALS OF MUSIC. F. A continuation of 104. An introduction to tonal counterpoint. A study of the music of the Baroque era. Students intending to major in music, excepting concentrators in instrumental music education, must take 131 concurrently. Prerequisite: 104. *Mr. Hamersma.*

204 THE LITERATURE AND MATERIALS OF MUSIC. S. A continuation of 203. A study of the materials of traditional harmony. The study of the music of the Classic period. Students intending to major in music, excepting concentrators in instrumental music education, must take 132 concurrently. Prerequisite: 203. *Mr. Hamersma.*

223-224 AURAL PERCEPTION, ADVANCED. F and S. Quarter course. Continuation of 123-124. To be taken simultaneously with Music 203-204 and Music 131-132. Prerequisites: 123-124.

303 THE LITERATURE AND MATERIALS OF MUSIC. F. A continuation of 204.

Completion of the study of the materials of traditional harmony. A study of the music of the Romantic period. Prerequisite: 204. Not offered 1968-69.

304 THE LITERATURE AND MATERIALS OF MUSIC. S. A continuation of 303. A study of post-romantic and contemporary music. Comprehensive examination on the program of basic courses in the history and structure of music. Prerequisite: 303. Not offered 1968-69.

ADVANCED COURSES

205 VOCAL POLYPHONY OF THE RENAISSANCE. F even years. A study of the vocal works of sixteenth century composers, especially Josquin, Lassus, Palestrina, Victoria, Byrd, Hassler, and Gibbons. Exercises in modal counterpoint. Singing and drill in aural perception. Listening repertory of compositions. Prerequisite: 203. *Mr. Slenk.*

206 INSTRUMENTAL AND VOCAL POLYPHONY OF THE LATE BAROQUE. S even years. A study of contrapuntal practice of late Baroque composers, principally J. S. Bach. Exercises in tonal counterpoint. Singing and drill in aural perception. Listening repertory of compositions. Prerequisite: 204. *Mr. Slenk.*

220 CHURCH MUSIC. S odd years. A study of the worship music of the major Christian traditions in relation to their liturgies. Principles of appropriate worship music are discussed in the light of the history of church music. Prerequisite: 204.

305 MUSIC OF THE CLASSIC PERIOD. F odd years. A study of the principal forms of the Classic period from the keyboard music of Couperin, K.P.E. Bach, and Scarlatti through the major works of Haydn and Mozart to the late works of Beethoven. Analytic score studies of representative works. Listening repertory of compositions from the period. Several short papers. Not offered 1968-69.

306 MUSIC OF THE ROMANTIC PERIOD. S odd years. A study of the principal forms of the Romantic period from Schubert and Schumann through Wagner. Analytic score studies of representative

works. Listening repertory of compositions. Several short papers. Not offered 1968-69.

315 ARRANGING. F even years. 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 practicable. Prerequisite: 104.

316 ARRANGING. S even years. Continuation of 315, which is its prerequisite.

407 COMPOSITION. F even years. Writing in contemporary forms and according to contemporary practice. Prerequisite: 304 or permission of the instructor. Not offered 1968-69.

408 COMPOSITION. S even years. A continuation of 407. Prerequisites: 407 and permission of the instructor. Not offered 1968-69.

GENERAL COURSES

211 AN INTRODUCTION TO MUSIC. F, core. A 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 are considered. Study of the principal musical styles of Western civilization by means of representative works by outstanding composers. *Mr. De Jonge.*



212 AN INTRODUCTION TO MUSIC. S, core. Continuation of Music 211.

219 CHURCH MUSIC. F odd years, core. A historical survey of the worship music of the Hebrews, early Christian church, the Roman church, and the churches of the Reformation. Principles of appropriate worship music are discussed in the light of the history of church music. No prerequisite. Recommended for pre-seminary students. Not offered 1968-69.

301 HISTORY OF MUSIC. F, core. A study of the art of music from its origins through the Baroque. Score studies, listening repertory, and reading. *Mr. Slenk.*

302 HISTORY OF MUSIC. S, core. A study of the art of music from the Classic period to the present. Score studies, listening repertory, and reading. *Mr. Slenk.*

313 CONDUCTING. S, half course. A course in basic, general conducting leading to the conducting of either instrumental or choral literature in the second half of the course. Two hours of class and two hours of conducting laboratory per week. Prerequisite: 104. Should be taken by music education majors in the sophomore year. *Mr. Geerdes, Mr. Slenk.*

326 CHAMBER MUSIC. F odd years, core. 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. *Mr. Geerdes.*

MUSIC EDUCATION

222 ELEMENTARY SCHOOL MUSIC. F and S. This course is designed to prepare the classroom teacher for teaching music in the elementary grades. It includes the development of personal skills in singing, playing, listening, and teaching; the study of the fundamentals of music and musical styles; consideration of current materials, methods, and philosophy of teaching music. No prerequisite. Music 331 may be elected as a substitute. *Mr. Topp.*

331 ELEMENTARY SCHOOL MUSIC, Advanced. F. Open to music education majors, elementary education majors with previous musical experience, and music minors. Goals and scope are similar to Music 222, except that less time is spent developing skills in theory, singing, and playing so that more time may be devoted to development of skills in teaching and to a consideration of materials, philosophy, and methods. No prerequisite. Not open to students who have taken Music 222. *Mr. Topp.*

332 SECONDARY SCHOOL VOCAL MUSIC. F and S. A seminar devoted to the study of methods, materials, and underlying philosophy for the vocal and academic music curriculum in junior and senior high schools. Individual research. This course substitutes for Education 314 and is taken concurrently with student teaching (Education 344). Open to vocal music education majors. *Mr. Topp.*

333 SECONDARY SCHOOL INSTRUMENTAL MUSIC. F and S. A seminar devoted to the study of methods, materials, and underlying philosophy for the instrumental and academic music curriculum in junior and senior high schools. Individual research. This course substitutes for Education 314 and is taken concurrently with student teaching (Education 344). Open to instrumental music education majors. *Mr. Topp.*

APPLIED MUSIC

Students enrolling in any course in this section must also register for 199-200.

INDIVIDUAL LESSONS

109-110, 209-210, 309-310, 409-410 ORGAN. Quarter course. Individual lessons in organ. *Mr. Hamersma.*

109c-110c, 209c-210c, 309c-310c, 409c-410c ORGAN. Half course. Individual lessons for the music major concentrating in organ. *Mr. Hamersma.*

117-118, 217-218, 317-318, 417-418 VOICE. Quarter course. Individual lessons in voice. *Mr. De Jonge.*

117c-118c, 217c-218c, 317c-318c, 417c-418c VOICE. Half course. Individual

lessons for the music major concentrating in voice. *Mr. De Jonge.*

141-142, 241-242, 341-342, 441-442
PIANO. Quarter course. Individual lessons in piano. *Mrs. Rus, Mrs. Knol.*

141c-142c, 241c-242c, 341c-342c, 441c-442c
PIANO. Half course. Individual lessons for the music major concentrating in piano. *Mrs. Rus, Mrs. Knol.*

161-162, 261-262, 361-362, 461-462
STRINGS. Quarter course. Individual lessons in violin, viola, violoncello, or bass viol.

161c-162c, 261c-262c, 361c-362c, 461c-462c
STRINGS. Half course. Individual lessons for the music major concentrating in violin, viola, violoncello, or bass viol.

171-172, 271-272, 371-372, 471-472
WOODWINDS. Quarter course. Individual lessons in flute, oboe, clarinet, bassoon, or saxophone.

181-182, 281-282, 381-382, 481-482
BRASSES. Quarter course. Individual lessons in cornet, horn, baritone, trombone, or bass horn.

181c-182c, 281c-282c, 381c-382c, 481c-482c
BRASSES. Half course. Individual lessons for the music major concentrating in cornet, horn, baritone, trombone, or bass horn.

191
PERCUSSION. Quarter course. Individual lessons in snare drum, tympani, and other percussion instruments.

CLASS LESSONS

199-200
REPERTORY CLASS AND STUDIO CLASSES. F and S, no credit. Performance classes for students of applied music for the purpose of gaining experience in public performance and increasing knowledge of music literature. Attendance is required of all music majors and students registered in any applied music course. *Staff.*

329
STRINGS AND PERCUSSION. S odd years. Class lessons in string and percussion instruments for the music major concentrating in instrumental music education.

330
BRASSES AND WOODWINDS. F even years. Class lessons in brass and wood-

wind instruments for the music major concentrating in instrumental music education.

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. *Mr. Geerdes.*

107-108
RADIO CHOIR. Half course per year. Performs weekly as the choir of the Back to God Hour over the NBC, Mutual Networks, and independent stations here and abroad. 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. *Mr. De Jonge.*

113-114
VARSITY BAND. Half course per year. Membership in this band is open to all students who have 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, and other college functions. One rehearsal a week. Not offered 1968-69.

207-208
A CAPPELLA CHOIR. Half course per year. 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. *Mr. Slenk.*

213-214
CONCERT BAND. Half course per year. 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. *Mr. Geerdes.*

215-216
ORCHESTRA. Half course per year. 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. *Mr. Geerdes.*

227-228 CHAMBER BAND. No credit. This band offers instrumental music majors and other qualified players an opportunity to perform works particularly suited to a wind ensemble of about forty members. Open to a select group of players from the Concert Band. One rehearsal per week. *Mr. Geerdes.*

1967-68 INTERIMS

10 AN INTRODUCTION TO FORM IN MUSIC. A course intended for students with little or no experience in music, consisting of a study of the basic formal structures of music from the smallest units such as figures and motives to the larger forms such as the symphony. The emphasis is on aural understanding of formal structures through listening to music literature. *Mr. Topp.*

11 CHURCH MUSIC (Music 219 in the regular curriculum). A historical survey of the worship music of the Hebrews, early Christian Church, the Roman church, and the churches of the Reformation.



Principles of appropriate worship music are discussed in the light of the history of church music. *Mr. Hamersma.*

20 THE CANTATAS OF J. S. BACH. An examination in depth of the church cantatas of J. S. Bach. *Mr. Slenk.*

22 THE ART SONG. A study of the art song from its earliest known beginnings in the thirteenth century to those in the present, with emphasis upon the German *lied* of the nineteenth century. *Mr. De Jonge.*

30 CONTEMPORARY FORMS AND PRACTICES. A detailed study of the harmonic and melodic idioms of the twentieth century composers.

31 INDEPENDENT STUDY FOR SOLO PERFORMANCE. This course is for senior music majors concentrating in performance. The interim is to be used for preparation of the required senior recital. *Staff.*

Philosophy

*Professors Orlebeke, *A. Plantinga, Runner, Wolterstorff (chairman)*
*Assistant Professor *De Vos*
Instructor Mouw

BEFORE APPLYING for admission to a major program a student must have completed either 151 or 153 with a minimum grade of C (2.0). The program of concentration requires eight courses including one course in logic, two courses in Perspective in Philosophy (151-152), two historical period courses (300, 310, 320, 330), one historical figure or movement course, and two courses in systematics, including one from the advanced level. Students may also meet the departmental requirements by completing Introduction to Philosophy (153) and an intermediate-level systematics course instead of 151-152, provided the historical period courses are chosen from 300, 310, and 330. A four-unit cognate sequence approved by the student's adviser is required in another department.

ELEMENTARY COURSES

151 and 152 PERSPECTIVE IN PHILOSOPHY. F and S. A year-long introduction to philosophy which aims to give the student a Christian philosophical framework for his thinking, along with some awareness of important alternative philosophical frameworks (philosophical perspectives), and of important alternative answers to some of the fundamental problems. It also aims to give the student some sense of the history of philosophy. 151 is a prerequisite to 152. *Mr. Orlebeke, Mr. Prins, Mr. Runner, Mr. Wolterstorff.*

153 INTRODUCTION TO PHILOSOPHY. F and S. A one-semester introduction to philosophy, with fundamentally the same aims as the Perspective in Philosophy course, except that it will not aim to acquaint the student with the history of philosophy. *Mr. De Vos, Mr. Mouw.*

171 INTRODUCTION TO LOGIC. F and S. A course in elementary deductive and inductive logic with emphasis upon the use of logic in evaluating arguments. Suitable for freshmen; not recommended for students majoring in philosophy. *Mr. De Vos, Mr. Orlebeke.*

173 INTRODUCTION TO SYMBOLIC LOGIC. F. A course in elementary symbolic logic, including some modal logic. This course is designed for students majoring in philosophy, science, and mathematics. Open to qualified freshmen. *Mr. De Vos.*

INTERMEDIATE COURSES

All intermediate courses presuppose one course in philosophy.

203 PHILOSOPHY OF SCIENCE. F. A study of philosophical problems arising out of the methods and results of modern science. *Mr. Orlebeke.*

205 ETHICS. F and S. A course designed to deal both historically and situationally with the persistent problems of the moral life. *Mr. De Vos, Mr. Mouw.*

207 POLITICAL AND SOCIAL PHILOSOPHY. A systematic study of the prob-

lems of social and political thought, historically oriented, with emphasis on political and social ideals, such as political and social justice; equality and the law; the basis of social and political authority; rights and obligations. Not offered 1968-69.

208 AESTHETICS. S. A study of the nature of art and of aesthetic judgments. *Mr. Wolterstorff.*

209 PHILOSOPHY OF EDUCATION. A study of the nature, aims, and principles of education. Not offered 1968-69.

ADVANCED HISTORICAL COURSES

All courses numbered 300 and above presuppose two courses in philosophy.

300 HISTORY OF ANCIENT PHILOSOPHY. F and S. A history of philosophy in the Greek and Hellenistic periods. *Mr. Runner.*

301 PLATO. Study of the later Platonic dialogues. Not offered 1968-69.

302 ARISTOTLE. Advanced study of Aristotle. *Mr. Runner.*

310 HISTORY OF MEDIEVAL PHILOSOPHY. F and S. A history of philosophy from Augustine to the Renaissance.

311 THE PHILOSOPHY OF AUGUSTINE. An attempt is made to assess the philosophy of Augustine by studying particularly the *Classiacum* dialogues in the light of the philosophy of the period. Readings of later writings down through the *De Civitate Dei* and the *De Trinitate* in selection. Not offered 1968-69.

312 THE PHILOSOPHY OF THOMAS AQUINAS. A course in Thomistic thought, including analysis of portions of the *Summa Theologica*. Not offered 1968-1969.

320 HISTORY OF MODERN PHILOSOPHY. F and S. A study of selected philosophies of the seventeenth and eighteenth centuries. *Mr. Prins.*

321 KANT. Study of the *Critique of Pure Reason*. Not offered 1968-69.

322 HEGEL. A study of Hegel's philosophy. Not offered 1968-69.

323 THE PHILOSOPHY OF KIERKEGAARD. F. An intensive study of the major writings of Kierkegaard, especially *The Philosophical Fragments* and *The Concluding Unscientific Postscript*. Mr. Prins.

330 CONTEMPORARY PHILOSOPHY. F. A study of the history of philosophy in the past one hundred years, or of some major movements of this period. Mr. Mouw.

331 AMERICAN PHILOSOPHY. A critical study of major movements in the history of American philosophy, with special emphasis on the pragmatism of Peirce, James, and Dewey. Not offered 1968-69.

ADVANCED SYSTEMATIC COURSES

371 EPISTEMOLOGY. F. A study of the nature, sources, types, and limits of human knowledge. Mr. De Vos. Offered 1969-70.

381 ADVANCED LOGIC. Topics include the formalization of propositional and quantificational logic. Staff.

385 PHILOSOPHY OF RELIGION. F odd years. A study of the rational justifiability of certain beliefs central to Christianity.

395 ONTOLOGY. F. A study of selected topics in ontology. Mr. Wolters-torff.

400 SENIOR HONORS THESIS. S. Not offered 1968-69.

1967-68 INTERIMS

10 GREAT TRIALS IN HISTORY. See Department of History.

20 INDUCTIVE LOGIC AND THE JUSTIFICATION OF INDUCTION. An introduction to the principles and applications of inductive inference and an examination of the (Humean) problem of induction. Mr. De Vos.

21 NATURAL LAW. An historical and critical examination of the natural law tradition in moral and political theory. Materials will involve sources in ancient, medieval, and modern thought, lectures, discussions, and papers. Mr. Orlebeke.

22 INTERMEDIATE LOGIC. A continuation of 171, which is the prerequisite. This course continues the quantification theory through multiple general descriptions, relations, identity, and definite descriptions. It also includes logic and an evaluation of the adequacy of certain systems as representations of the implication and entailment relations.

23 DESCARTES. An intensive examination of Descartes' *Rules for the Direction of the Mind, Meditations, and Principles of Philosophy*. Lectures, discussions, and paper. Prerequisite: one course in philosophy excluding logic. Mr. De Vos.

30 THE CHRISTIAN IDEA OF SOCIETY. Beginning with a distinction between societal and political order, the course will survey theories of society beginning with the Greeks up to and including such recent views as Kuyperian sphere-sovereignty, Eliot's *Idea of a Christian Society*, and Munby's *Idea of a Secular Society*. Mr. Runner.

Physical Education

Professor Steen (chairman)

Assistant Professors Czanko, Tuuk, *M. Zuidema, Vroon

Instructors Honderd *K. Timmer, D. Zuidema

Assistant Instructors Knoppers, Vander Berg

Assistant Vredevoogd

The department serves dual functions — it provides a required but flexible two-year sequence of physical education for all students; it also offers professional training for physical education teachers and coaches.

Before applying for admission to the professional concentration a student must have completed 190 and Biology 205 with a minimum average grade of C (2.0). The program includes 190, 201, 212, four half-courses from the 230 series, 301, 302, 30, and Biology 205. The coaching minor requires 201, 212, two half-courses from the 230 series, 30, and Biology 205. The teaching minor must total at least six courses including 190, 201, and 302.

BASIC PHYSICAL EDUCATION

This program is concerned with the conditioning and training of the body and with the development of physical recreation competence and understanding. Emphasis is also given to an understanding of what occurs in man through muscular activity, how he can utilize and control this phenomenon, the relation of this activity to other cultural forces and disciplines, and the way man is formed by it.

The required program consists of four semesters of instruction and participation which should be taken in sequence—Foundations (100), typically taken during the Fall or Interim of the first year, followed by the Developmental Program (120-139), the Recreational Program (140-159), and the Advanced and Elective Program (160-179). This program may be modified for older students and for those with handicaps, who may be placed in the Adaptive Program (110). (Such students should confer with a departmental representative during registration.) Typically, the physical education requirement should be completed by the end of the student's second year.

100 FOUNDATIONS. F and I, quarter course. This introductory course serves as the basis for the entire physical education program. The intent of this course is: to help the student understand the Christian perspective of physical education; to develop within the student a Biblically-oriented outlook on physical efficiency and the role of recreation and sports in our culture; to aid the student in acquiring a realistic self-image concerning physical conditioning and training; to aid the student in understanding the anatomical and physiological function of man, and the role of this function in the mechanics of everyday living; to encourage the student to train in the various facets of physical efficiency; and to aid the student in planning his future in these areas. *Staff.*

110 ADAPTIVE PROGRAM F, I, and S, quarter course. This is a specialized program for students who have needs which cannot be met in the regular program (e.g. older students or students with physical handicaps.). Adaptive and corrective activities will be programmed. Students will be assigned to regular activities or special programs. Special in-

dividual programs are prescribed after consultation with the college physician. *Mr. Czanko and Miss Knoppers.*

120-139 DEVELOPMENTAL PROGRAM. I and S, quarter course. This course consists of two units of activities. Students are guided into these activities on the basis of their need to develop one or more aspects of physical efficiency and/or to develop interest and skill in culturally relevant sports.

140-159 RECREATIONAL PROGRAM. F and I, quarter course. This course consists of two units of activity designed to develop lasting interest and skill in recreational activities.

160-179 ADVANCED AND ELECTIVE PROGRAM. I and S, quarter course. This final course in the program seeks to cap the emphasis of the entire program. Students are given the opportunity to elect conditioning and/or training activities that will best contribute to their total needs and goals. Activities are offered that will provide an opportunity to continue to develop or maintain an optimal level of physical condition and/or to

continue to develop advanced training skills in recreational activities.

PROFESSIONAL COURSES

190 INDIVIDUAL COMPETENCES. The course will offer opportunity for physical education majors to develop the physical condition and skill necessary for the beginning teacher of physical education. It will require active participation and competence in a variety of skills. The course will run for the entire period of a student's work in his concentration. Students should apply for admission to this course as soon as they have decided to enter the field of physical education. Credit will be given only for skills acquired after admission. Students are required to have 240 hours of participation. A comprehensive examination will be given during the senior interim. Elements of this course are prerequisites for 230 courses. *Mr. Steen, Mrs. Vander Berg.*

201 HISTORY AND PERSPECTIVE. F. The course deals with two areas—the history of physical education in the civilized world, and the problems, purposes, and philosophical implications of physical education as they affect man in general and educational institutions in particular. *Mr. Steen.*

212 KINESIOLOGY. F. A study of human motion from the scientific standpoint. Particular attention is given to a mechanical analysis of musculoskeletal movements as applied to games, sports, and daily living. Prerequisite: Biology 205. *Mr. Honderd.*

221 ELEMENTARY SCHOOL ACTIVITIES AND PROGRAMS. F and S, half course. A course designed primarily to give those students who desire to teach at the elementary level a working knowledge of the fundamentals of physical education planning for elementary school children (Primary k-3; Intermediate 4-6). Not open to students majoring or minoring in physical education. *Staff.*

230-239 THE TEACHING AND COACHING OF ACTIVITIES. F, half course. Students with a major concentration in physical education must combine various courses to total the required two-course

credit. These courses may also be offered for a whole course credit with written permission of the department. Prerequisite: a record of participation in skill performance or completion of the same activity in 190.

230 Field Hockey/Soccer (for women). *Mrs. Vander Berg.*

231 Basketball/Softball (for women). *Miss Zuidema.*

232 Individual and Dual Sports. Volleyball/Gymnastics

233 Track and Field. *Mr. Tuuk.*

234 Basketball (for men). *Mr. Vroon.*

235 Soccer (for men) not taught 1968-69.

236 Football (for men). *Mr. Czanko.*

237 Baseball (for men). *Mr. Czanko.*

301 MEASUREMENT AND EVALUATION IN PHYSICAL EDUCATION. S. A study of the evaluation techniques in physical education. Emphasis on evaluation of physical fitness, body mechanics, growth, motor ability, sport skills, knowledge of health practices and sports activities, and program evaluation. 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. *Miss Knoppers.*

302 ORGANIZATION OF THE CURRICULUM AND PROGRAM OF PHYSICAL EDUCATION. S. A study of the structure and curricula of modern physical education programs of elementary and secondary schools and the closely-related areas of administration of athletics, intramurals, recreation, and health programs. Opportunity is given to construct total programs of physical education for selected schools. *Mr. Steen.*

303 TEACHING OF ACTIVITIES IN THE ELEMENTARY SCHOOL AND LEADERSHIP IN RECREATION PROGRAMS. S. The first half of this course deals with the elementary school program. The second section studies the organization of recreation programs and gives opportunity for observing programs in action, for structuring new programs, and for developing leadership skills.

1967-68 INTERIMS

10 PHYSICAL EDUCATION ACTIVITIES CLASSES. *Staff.*

20 PLAY AND RECREATION IN MODERN SOCIETY. A study of modern conceptions, attitudes, and possible trends of recreation and play in our culture. Designed to investigate the nature, the kinds, the philosophical aspects of play and recreation, and project the results of this study into various aspects of Christian life and service. *Mr. Steen.*

30 PHYSIOLOGY OF CONDITIONING AND INJURIES. The course will be concerned with the prevention and care of injuries which are the result of participation in

the physical education program. Prerequisite: 212 and Biology 205. *Mr. Czanko.*

31 PHYSICAL EDUCATION FOR ATYPICAL PERSONS. This course will attempt to acquaint the physical education student with the knowledge and skills necessary to plan and conduct a program of exercises and activity which will enable the atypical individual to correct his deviation from the norm. Prerequisite: 212 and Biology 205. *Miss Knoppers.*

Physics

Professors Ehlers, Griffioen (chairman)
Associate Professor Kromminga
Assistant Professors Menninga, Van Till, Van Zytveld
Assistant Instructor G. Vander Lugt

STUDENTS intending to major in physics are advised to enter college with four years of mathematics and to take their basic courses in mathematics (Math. 111, 112, 211, 212) and physics (Physics 126, 225, 226) during their freshman and sophomore years. A student may apply for admission to the department before completing 226 and Mathematics 212, but he must have completed the designated courses with a minimum average grade of C (2.0) before he can be admitted for the major. The program of concentration includes, in addition, 335, 336, 345, 346, 375, 376, 381 or an interim course in electronics, and 382 or an interim course in modern physics laboratory. Students planning to do graduate work in physics should also take 365, 400, and 401 or an interim course in research. The program for secondary teachers requires a minimum of nine college courses, including Philosophy 203, Physics 126, 225, 226, 335, 375 or an interim course in modern physics, 381 or an interim course in electronics, 382 or an interim course in modern physics laboratory, and 345-346 or an interim course in electricity and magnetism.

A teaching group major in physics and mathematics consists of Mathematics 111, 112, 211, 212, 309, and 320; Physics 126, 225, 226, 381, 382, and one course from: 335, an interim in modern physics, or an interim in electricity and magnetism. A group minor in the same fields consists of Mathematics 111, 112, and 211; Physics 126, 225, 226, 381, and 382.

INTRODUCTORY COURSES

110 PHYSICAL SCIENCE. F and S, core. This course evaluates the basic assumptions used in the scientific study of nature, discusses the methods of scientific

investigation and the development of scientific theories, and presents the results of scientific investigations in the fields of physics and chemistry. Its purpose is to acquaint students with the

fundamental laws of physics and chemistry and to explain certain important physical phenomena. This course is designed primarily for non-science majors, and is not open to those who have taken (or plan to take) Physics 112, 126, or 221. Prerequisites: high school algebra and Mathematics 109 or its equivalent. *Staff.*

112 PHYSICAL SCIENCE. F and S, one and a half courses, core. The lecture portion of this course is primarily the same as Physics 110. A laboratory is designed to emphasize the experimental aspects of the scientific method, and generally involves in-depth study of elementary topics, rather than the performance of standard experiments or the precise measurement of physical quantities. Not open to those who have taken or plan to take Physics 110, 126, or 221. Prerequisites: high school algebra and Mathematics 109, or its equivalent. *Staff.*

126 INTRODUCTORY PHYSICS. S. This is the first course of a three-semester sequence (126, 225, 226) for students of science and engineering. This sequence gives an introduction to the major fields of physics: mechanics, heat, waves, electricity and magnetism, atomic physics, and nuclear physics. Prerequisite: Mathematics 111. *Staff.*

221 GENERAL PHYSICS. F. This course is designed for those who do not intend to do further work in physics. The major areas of physics are discussed: mechanics, heat, electricity and magnetism, waves, relativity, quantum theory, and particle physics. Prerequisites: plane trigonometry and high school algebra. *Mr. Kromminga.*

222 GENERAL PHYSICS. S, core. A continuation of 221, which is a prerequisite. *Mr. Kromminga.*

225 INTRODUCTORY PHYSICS. F, core. A continuation of Physics 126. Prerequisites: 126 and Mathematics 112. *Staff.*

226 INTRODUCTORY PHYSICS. S. A continuation of Physics 225. Prerequisites: 126 and Mathematics 112. *Staff.*

ADVANCED COURSES

Prerequisites for all of the 300-level physics courses are 226 and Mathematics 212.

335 INTERMEDIATE MECHANICS. A review of the fundamental principles of Newtonian mechanics; a study of the motion of a particle in a central force field; a study of charged particles moving in electric and magnetic fields, with application to modern accelerators; the simple harmonic oscillator; the rotation of a rigid body about a fixed axis; non-inertial reference frames; special relativity. *Mr. Van Till.*

336 ADVANCED MECHANICS. S. A study of coordinate transformations and generalized coordinates; the development of the Lagrangian and Hamiltonian formulations of mechanics with applications in conservative and non-conservative motion; the motion of a rigid body in space, the inertia tensor; the theory of small vibrations; a study of wave motion in continuous media; further topics in special relativity. Prerequisite: 335. *Mr. Van Till.*

345 ELECTROMAGNETIC FIELDS AND WAVES. F. A vector treatment of the basic experimental laws of Coulomb, Ampere, and Faraday; the Poisson and Laplace equations and their solutions; the use of the vector potential; energy considerations in the fields; Maxwell's equations and their application; electromagnetic radiation; physical optics; the phenomena of interference, diffraction and polarization. *Staff.*

346 ELECTROMAGNETIC FIELDS AND WAVES. S. A continuation of 345, which is a prerequisite. *Staff.*

365 THERMODYNAMICS AND STATISTICAL MECHANICS. F. Discussion of the equation of state and the laws of thermodynamics with application to some simple systems; the thermodynamic potentials; kinetic theory. Treatment of statistical mechanics dealing mainly with ensembles and distribution functions, calculation of entropy and the thermodynamic potentials with application to crys-

tals and gases. Quantum statistical mechanics is considered. Prerequisites: 336 and 346. *Staff.*

375 MODERN PHYSICS. F. This course begins with a brief discussion of statistical mechanics and the fundamental experiments leading up to the quantum theory. The main emphasis is on wave mechanics and its application to atoms and molecules. One-electron atoms are discussed in detail. Additional topics discussed are electron spin, atomic spectra and structure, and x-rays. Nuclei and the solid state are also considered. Students are encouraged to take 336 before enrolling in this course. *Staff.*

376 MODERN PHYSICS. S. A continuation of 375, which is a prerequisite. *Staff.*

377 NUCLEAR PHYSICS. S. Properties and systematics of nuclei, forces between nucleons, nuclear models, and the dynamics of nuclear reactions. 376 should be taken concurrently. Not offered 1968-1969.

378 INTRODUCTION TO SOLID STATE PHYSICS. S. An elementary survey of the classification and properties of solids. Ionic, covalent, molecular, metallic, and semi-conducting systems. Dielectric, thermal, magnetic, conductive, and mechanical properties of solids. Superconductivity, ferromagnetism, defects in solids. 376 should be taken concurrently. Not offered 1968-69.

LABORATORY COURSES

Prerequisites for the laboratory courses are Physics 226 and Mathematics 212.

381 ELECTRONICS. F, half course. An introduction to, and an analysis of, some of the basic electronic circuits commonly used in science and engineering research. *Staff.*

382 MODERN PHYSICS LABORATORY. S, half course. 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. Pre-

requisite: 381 or permission of the instructor. *Staff.*

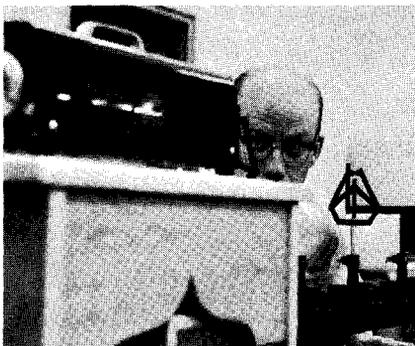
400-401 PHYSICS SEMINAR AND RESEARCH. F and S, half course. Library and laboratory research on an approved topic and presentation of the result of the research in a departmental seminar. Prerequisite: 382 and the approval of the department. *Staff.*

1967-68 INTERIMS

21 MODERN PHYSICAL SCIENCE. A study of some of the basic concepts and theories of modern physics and a discussion of the radically new description of physical phenomena to which they lead. Reading of some of the excellent paperbacks available for the layman. *Mr. Van Till.*

31 INTERMEDIATE MODERN PHYSICS. This course is intended for science majors other than physics majors intending to pursue graduate work in physics. Concepts from classical physics essential to an understanding of modern physics are reviewed. Major topics considered are kinetic theory, discovery of electrons and other fundamental particles, quantum effects, elementary quantum theory, atoms, solids, and nuclei. *Mr. Kromminga.*

32 EXPERIMENTS IN MODERN PHYSICS. This course consists of the study and performance of important experiments in modern physics. The emphasis is placed upon original work by individual students. It is intended that this course acquaint future graduate students with



intensive full-time research effort required of them in graduate work. *Mr. Ehlers.*

33 **SPECIAL TOPICS IN PHYSICS.** Readings in the journal literature of special areas of physics; independent study or experimental work in some of the same areas. Areas for 1967-68 interim: Experimental and Theoretical Low Energy Nuclear Physics, Atomic Physics, Mag-

netic Resonance, Solid State Physics. *Staff.*

34 **ELECTRONICS.** This course consists of a study of some of the basic electronic circuits commonly used in science and engineering research. The emphasis of the course is on an analysis of these circuits and their usefulness and limitations and not on the design of circuits. *Mr. Griffioen.*

Political Science

Professor Ippel (chairman, Department of History and Political Science)

Associate Professor Westra (student adviser)

Assistant Professors De Borst, Monsma

STUDENTS anticipating a major in political science or in related pre-law or foreign service programs must complete the Introduction to Politics (151) with a minimum grade of C (2.0). The major program requires, in addition, 201, 202, 203 or 304, 302, 305, 306, 307, and one interim course in political science. Cognates include two units in economics (Econ. 151 plus one from 321, 335, or 342), one unit in sociology, and one unit in psychology; or a four-course sequence, approved by the departmental adviser, in economics or history.

151 **INTRODUCTION TO POLITICS.** F and S, core. An introduction to political science. Analyzes the nature of the political process, the methods political scientists use in studying it, and some of the key concepts and terminology they have developed to explain it. *Staff.*

201 **AMERICAN POLITICS.** F. A study of American national politics. Emphasis is on the social context, constitutional foundations and the major institutions, process and functions of American politics. *Mr. Monsma.*

202 **AMERICAN POLITICS.** S. Continuation of 201. Includes a consideration of state and local politics. Prerequisite: Political Science 201. *Mr. Monsma.*

203 **COMPARATIVE GOVERNMENT—EUROPE.** F. A study of the government and politics of four major European states: Great Britain, France, Germany, and the Soviet Union. Prerequisite: 151. Not offered 1968-69.

300 **MODERN POLITICAL IDEOLOGIES.** F and S, core. Study of the major ideologies of the twentieth century: communism, fascism, democracy. *Mr. Westra.*

302 **POLITICAL BEHAVIOR.** F. A critical study of the methods and techniques used to study political behavior; the findings of representative behavioral studies; political parties, public opinion and pressure groups, with special reference to the United States. *Mr. Monsma.*

303 **COMPARATIVE GOVERNMENT—THE NON-WESTERN WORLD.** S. A study of government and politics in some of the new states of Asia and Africa; problems of representative government and democracy in under-developed areas. *Mr. Monsma.*

304. **AMERICAN POLITICAL THOUGHT.** The nature of American political thought; analysis of the contributions of the Calvinist and Puritan traditions; British constitutionalism and the American

Revolution; American constitutionalism; Jeffersonian and Jacksonian democracy; slavery and the nature of the Union; Social Darwinism and the age of enterprise and reform; traditional democracy and its critics. Not offered 1968-69.

305 HISTORY OF POLITICAL THOUGHT TO THE REFORMATION. F. The development of political thought from ancient Greece to the sixteenth century. *Mr. Westra.*

306 HISTORY OF MODERN POLITICAL THOUGHT. S. Representative political theorists from the Reformation to the present. *Mr. Westra.*

307 INTRODUCTION TO INTERNATIONAL POLITICS. F. Analysis and critique of various theoretical approaches to the study of international politics; concepts of power; the nation-state and the doctrine of sovereignty; diplomacy; nationalism; imperialism; war; balance of power; collective security; and world government. *Mr. De Borst.*

308 PRINCIPLES OF AMERICAN FOREIGN POLICY. S. An analytical view of American foreign policy; its domestic sources; process of formulating policy; instruments of American diplomacy; the nature of U.S. relations with hostile powers, allies, the emerging nations, and the United Nations; the limitations and potentials of American foreign policy. *Mr. De Borst.*

309 INTERNATIONAL LAW AND ORGANIZATION. Analysis of the development of international law and of its current status; international organization: the United Nations and its related agencies; other supra-national organizations. Not offered 1968-69.

310 CONSTITUTIONAL LAW. The American constitution as interpreted by the Supreme Court; analysis of leading cases, with special emphasis on constitutional limitations on government, problems of civil liberties. Not offered 1968-69.

Psychology

Professors Bijkerk (chairman), Daling, C. Plantinga

Associate Professor Youngs

Assistant Professors D. Entingh, Reynolds, Terborg, Van Opynen

INTRODUCTORY PSYCHOLOGY (151) is prerequisite to all courses in the department and must be completed with a minimum grade of C (2.0) by students intending to major in the department. All major programs require, in addition, 212, 305 or 306, 311, 331 or 332. Students intending to enter graduate school should complete at least nine courses, including 308, 312, one additional 300-level course, and 400, for which knowledge of statistics is a prerequisite. Those desiring a teaching major should take, in addition to the five basic courses, 250 or Mathematics 206, 308, and one 300-level course. A terminal major is possible with seven courses. Students planning to enter graduate school in social work or guidance and counseling are advised to take the same program as those desiring a teaching major. Cognate courses in philosophy of science, in anatomy and physiology, and in sociology are recommended.

151 INTRODUCTORY PSYCHOLOGY. F and S, core. An introductory course intended to give the beginner some orientation to the field of psychology in general. *Staff.*

204 DEVELOPMENTAL PSYCHOLOGY. F and S. 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. Prerequisite: 151. *Mr. Daling.*

212 **PSYCHOPATHOLOGY.** F and S. The wide range of ways in which personality may become disordered. The importance of psychopathology for the understanding of normal development (mental hygiene) is discussed. Problems concerning origin and treatment are also considered. Prerequisite: 151. *Mr. C. Plantinga, Mr. Youngs.*

216 **PSYCHOLOGY OF EXCEPTIONAL CHILDREN.** F and S. A study of typical children. This includes the gifted child, as well as children with partial defects of intelligence, personality disorders, neuroses, and various neurological conditions. Prerequisite: 151.

250 **DESCRIPTIVE STATISTICS FOR SOCIAL SCIENCES.** S. An introduction to the major forms of descriptive statistics (measures of central tendency, variability, linear transformation, area transformation, correlation.) Both an understanding of and proficiency in the application of these concepts and techniques in the areas of education, psychology, sociology, etc. will be sought. *Staff.*

305 **HISTORY OF IDEAS IN PSYCHOLOGY.** F. An introduction to the theories and movements in psychology, both historical and contemporary. Philosophical implications will also be treated. Prerequisites: two courses in psychology. *Mr. C. Plantinga.*

306 **THE GROWTH OF AMERICAN PSYCHOLOGY.** S. An account of the origin and development of psychology in America with emphasis upon recent contributions. Prerequisite: two courses in Psychology. *Mr. C. Plantinga.*

308 **INTRODUCTION TO EXPERIMENTAL PSYCHOLOGY.** F. 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. Laboratory work will be required. Open only to juniors and seniors intending to major in psychology who have had either 250 or Mathematics 206. *Mr. Terborg.*

310 **SOCIAL PSYCHOLOGY.** S. 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. Prerequisites: 151 and Sociology 203. Offered first semester by the Department of Sociology, second semester by the Department of Psychology. *Mr. Daling.*

311 **THEORIES OF PERSONALITY.** F and S. An introduction to modern American and European theories concerning the psychological structure and dynamics of the human person. Prerequisite: 212. *Mr. Bijkerk.*

312 **PRINCIPLES OF PSYCHOLOGICAL MEASUREMENT.** F. This course aims to give the student an introduction to the theoretical and practical issues, viewpoints, and techniques of psychological testing in the areas of both intelligence testing and personality measures. Open only to juniors and seniors who have had 250 or Mathematics 206. *Mr. Reynolds.*

314 **CLINICAL PSYCHOLOGY.** S. An introduction to the science, techniques, and art of employing psychological means to promote the welfare or mental health of a person. Prerequisites: 212, 311, and 312.

322 **PERSPECTIVES OF PSYCHOLOGY.** S. In this course the purpose is to explore relationships of psychology to (or its involvement in) various issues in our culture, in such areas as literature, religion, art, or morality. Normally, in any given semester, major emphasis will be focused on only one of these areas. Permission of the instructor is necessary to enroll in this course.

330 **PSYCHOLOGY OF EMOTION AND MOTIVATION.** S. A thorough discussion of the psychological study of emotion and motivation. Recent research findings as well as theory formation in the areas of emotion and motivation is included. Prerequisite: Psychology 151.

331 **PSYCHOLOGY OF SENSATION, PERCEPTION, AND COGNITION.** F. A detailed examination of the functions of perception and thought in man. Various theories as well as current research trends will be discussed. Prerequisite: Psychology 151. *Mr. Entingh.*

332 **PSYCHOLOGY OF LEARNING PROCESSES.** S. A presentation of empirical strategies and theory formation in the area of the psychology of learning. The importance of learning theory for psychology in general is stressed. Prerequisite: Psychology 151.

400 **SENIOR SEMINAR ON ISSUES IN CONTEMPORARY PSYCHOLOGY.** F. A presentation and discussion of papers based on current psychological literature and empirical research. Either modern foreign language competence or special statistical proficiency will be employed by the students. The seminar this year will be centered around the topic of expressive behavior in man. The final examination will cover all the areas explored in the individual projects. Open to seniors majoring in psychology. Prerequisite: statistical competence. *Mr. Bijkerk.*

1967-68 INTERIMS

310 **SOCIAL PSYCHOLOGY.** 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. *Mr. Daling.*

20 **PSYCHOLOGY OF RELIGION.** A study of the varieties of religious experience, primarily from the accounts of people who have undergone such experiences, as for example, St. Augustine. It is proposed also to study the role of religion in the development of the human personality, i.e., how faith in Christ is related to the functioning of the whole person. *Mr. Youngs.*

30 **PRACTICUM IN STANDARDIZED TESTING.** A course designed to give the student experience in the selection, analysis, administration, and interpretation of tests and their scores. *Mr. Reynolds.*

31 **READINGS IN PRIMARY SOURCES.** Reading of original texts of important psychologists, past or present. *Mr. C. Plantinga.*

Religion and Theology

*Professors J. Bratt (chairman), *Smedes, Spykman*

Associate Professors W. De Boer, Hoekstra, Holwerda, Minnema, Primus, Sweetman, C. Vos

Assistant Professor L. Vos

THE CURRICULUM of the department has been broadened to meet the needs of those preparing to teach Bible courses in the Christian schools. To be eligible for a major, a student must have completed either 103 or 107 with a minimum grade of C (2.0). The program of concentration requires a total of nine courses in the department, including 206, 207 and 208 or departmentally-approved substitutes, 301, 303, and 308. A four-unit cognate sequence is required in another department approved by the student's adviser. Students wishing to major in religious education (History and Literature of Religion) should take 107, 108, 206, 303, 308, 319, 399, plus three electives from department offerings, two of which may be in New Testament Greek. The director of this program is Mr. Hoekstra.

BIBLICAL STUDIES

103 **BIBLICAL THEOLOGY.** F and S, core. A study of the unfolding of the history of redemption as set forth within

the historical framework of the Old Testament, inter-testamentary, and New Testament eras. Biblical books and Apocryphal literature are analyzed and the major themes of Scripture are ex-

plicated. May not be taken with 107-108. *Staff.*

107 OLD TESTAMENT BIBLICAL THEOLOGY. F, core. Biblical theology for religious education majors. Sophomores other than religious education majors may be admitted to the course for core credit by special permission. *Mr. C. Vos.*

108 NEW TESTAMENT BIBLICAL THEOLOGY. S, core. Continuation of 107. Sophomores other than religious education majors may be admitted for core credit by special permission. *Mr. W. De Boer.*

207 THE OLD TESTAMENT PROPHETICAL LITERATURE. S even years. An intensive study of the place and role of the major and minor prophets in the canon of the Old Testament, the commentary they offer upon the history of redemption in Old Testament times, together with an exploration in depth of their basic themes: toward their fulfillment in New Testament revelation. Prerequisite: 103. *Mr. C. Vos.*

208 THE NEW TESTAMENT EPISTOLARY LITERATURE. F odd years. An intensive study of the place and role of the epistles in the canon of the New Testament, the doctrinal and ethical interpretations which these epistles give of the redemption portrayed in the Gospels, the light they shed on the early Christian Church, and their abiding relevance and significance. Prerequisite: 103. *Mr. W. De Boer.*

302 BIBLICAL ARCHEOLOGY. F even years. A study of the pertinent archeological data which provide a background for or throw light upon the Biblical narrative. Prerequisite: 103 and junior or senior standing.

THEOLOGICAL STUDIES

206 REFORMATION THEOLOGY. F and S, core. 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 those of other branches of Christendom. Calvin's *Institutes of the Christian Reli-*

gion serves as a basic text. Open only to juniors and seniors. *Staff.*

308 CONTEMPORARY THEOLOGY. F odd years. Selected writings of significant contemporary theologians are read and evaluated.

312 EARLY CHRISTIAN THEOLOGY. F even years. A study of the growth of the church towards self-conscious commitment to an articulation of its faith from the subapostolic age through St. Augustine. Development and growth of thought will be emphasized and selected writings of major theologians will be studied. Open only to juniors and seniors. Not offered 1968-69.

313 ROMAN CATHOLIC THEOLOGY. F odd years. The development of Roman Catholic theology from the medieval era to present times, finding its climax in Vatican II. The Council of Trent, the Counter-Reformation theology, papal encyclicals, and major schools of thought will be examined. *Mr. Spykman.*

HISTORICAL STUDIES

303 GENERAL CHURCH HISTORY. S even years. A survey of the history of the Christian Church from its beginnings to the present time, noting deviations from apostolic faith and practice, the interplay with the political, the great Church councils, the crises that emerge, divisions and reunions, and the confluence of forces that determine the complexion of the Christian Church today. Not open to freshmen. *Mr. J. Bratt.*

304 AMERICAN CHURCH HISTORY. S odd years. A consideration of the religious history of our country from the immigration period to the present. Attention is paid to the European background, the early church beginnings in their diversity, the colonial era, the westward movement, current ecumenism, and the major social and political developments in their influence upon the American religious scene. Consideration will also be given to the historical antecedents and the development of the Christian Reformed Church in America. Open only to junior and seniors. *Mr. J. Primus.*

RELIGIO-CULTURAL STUDIES

301 **STUDIES IN CALVINISM.** F and S, core. An historically oriented study of Calvinism and its basic concepts. Its origin and development are 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 to juniors and seniors only. *Staff.*

311 **HISTORY OF CHRISTIAN SOCIAL THOUGHT.** S odd years. A study of the interrelation of Christian teaching and society. From the history of the Christian Church certain periods and movements are selected to demonstrate the interaction of Christian faith and social forces. *Mr. T. Minnema.*

MISSIONS AND WORLD RELIGIONS

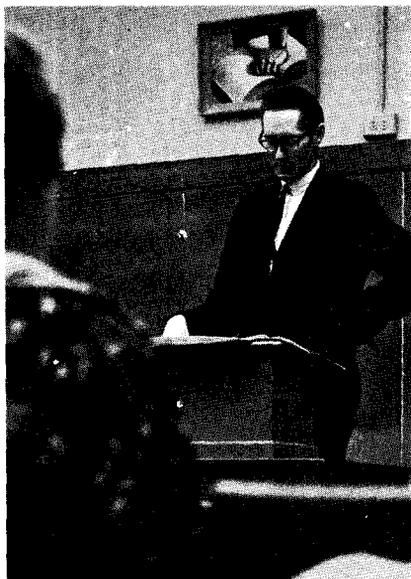
203 **PRINCIPLES OF MISSIONS.** F even years. A survey of Biblical material pertaining to missions. These materials are used in evaluating the contemporary problems of missions: i.e., renascent non-Christian religions, ecumenism, Mission in the ferment of social revolution. *Mr. L. Sweetman.*

204 **HISTORY OF MISSIONS.** F odd years. The record of missionary history through 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 great missionary conferences of the twentieth century are analyzed and evaluated. Not open to freshmen. *Mr. J. Bratt.*

205 **WORLD RELIGIONS.** S even years. An analytical and critical study of the major non-Christian religions of our day: Primitivism, Hinduism, Buddhism, Shinto, and Islam. Attention is given to cultural and religious relationships with Christianity and problems of missionary approach. Open to juniors and seniors only. *Mr. Sweetman.*

RELIGIOUS EDUCATION

319 **THEOLOGICAL AND HISTORICAL FOUNDATIONS OF RELIGIOUS EDUCATION.** F. A survey of the major religious edu-



cation programs from Old Testament times to the present. Through integrating theoretical study and examination of existing religious education programs, the students are guided in developing a relevant Biblical perspective on religious education. *Mr. Hoekstra.*

399 **SENIOR SEMINAR IN INTERPRETATION OF BIBLICAL LITERATURE.** S, half course. The principles of interpretation relevant to different types of Biblical literature are surveyed. The use of these principles in selected curriculum materials is analyzed and evaluated. Guidance is given in the practice of interpreting Bible passages for use in specific aspects of the program of religious education. *Mr. Hoekstra.*

1967-68 INTERIMS

10 **C. S. LEWIS, LITERARY THEOLOGIAN.** See English Department offerings.

11 **CHRISTIAN PERSONAL ETHICS.** A study of the Biblical foundations for personal morality, an investigation of several attempts in Christian history to relate the Biblical foundations to the moral life, and an effort to apply them to the moral decisions that persons must make today.

12 THE QUMRAN COMMUNITY AND THE DEAD SEA SCROLLS. A study of the documents. An attempt will be made to assess their importance for our understanding of Judaism at the time of Jesus and for our understanding of the New Testament. *Mr. Sweetman.*

13 THE PARABLES OF JESUS. A study and investigation of the parables of Jesus with particular emphasis on the main themes and emphases of the parables, the form and variations of form in the Synoptic Gospels, the application and variations of the application in the Synoptic Gospels, and the history of the interpretation of the parables from the early church period to the present. *Mr. L. Vos.*

20 MISSIONS IN OLD TESTAMENT AND NEW TESTAMENT PERSPECTIVE. An

examination of the passages pertinent to missions in the Bible showing how the particularism-universalism principle operated and the era of promise became the era of missionary challenge and opportunity. *Mr. J. Bratt.*

21 BIBLICAL ESCHATOLOGY. A survey of the thinking on "the end," "the last things," and the future life as found in the Old Testament, the inter-testamental period, and the New Testament. *Mr. W. De Boer.*

30 THE NEW QUEST OF THE HISTORICAL JESUS. A study of contemporary attempts to discover the historical Jesus behind the Gospels, involving an inquiry into the nature of the Gospels and the importance of history for faith. *Mr. Holwerda.*

Sociology

Professors Holstege, Rottman (chairman)
Associate Professor Wilson
Assistant Professors Rice, Smit

STUDENTS are expected to complete 151 and 203 with a minimum average grade of C (2.0) to be eligible for admission to the major program. The concentration requires 151, four courses in theory (203, 310, 317, and 318 or 320), and four additional 300-level courses, excluding those in social work (300 and 301). At least one of these four must be taken from the area of social organization (302, 306, or 308) and one from the area of social institutions (304, 309, or 311). A four-course cognate must also be presented in economics, history, political science, or psychology.

151 SOCIOLOGICAL PERSPECTIVE ON SOCIETAL ISSUES. F and S, core. Provides a brief theoretical and conceptual grasp of sociology as a body of knowledge dealing with group relationships as these affect both the individual and society. An attempt is made to articulate this knowledge and to demonstrate its use by showing how a sociological perspective offers a rational interpretation of issues current in our society. *Staff.*

203 PRINCIPLES OF SOCIOLOGY. F and S. The systematic study of the struc-

tures, functions, and changes of social relationships. The course will include an intensive treatment of theoretical and methodological implications of the nature of the subject matter, the socialization process, the cultural heritage, social organization, and institutional alignments. Prerequisite: 151. *Mr. Smit.*

210 PHYSICAL ANTHROPOLOGY. F and S. The main areas of physical anthropology are critically evaluated in terms of a Biblical view of man and the world. These areas are: man in antiquity, the

development of the races, and prehistoric archeology. Relevant Scriptural passages are considered. *Mr. Wilson.*

300 HISTORY AND THEORY OF SOCIAL WORK. F. The course begins with a brief overview of the various types of social work which exist in our society; social case work, group work, and community organization are treated historically; government and church are analyzed. Religious implications of professional ethics, and definitions of need are traced. Prerequisite: 203. *Staff.*

301 SOCIAL CASE WORK AND SOCIAL GROUP WORK. S. An analysis of social case work and group work principles, problems, and methods based upon theoretical and case material. Prerequisite: 300. *Staff.*

302 URBAN SOCIOLOGY AND COMMUNITY ORGANIZATION. S. A descriptive and theoretical analysis of the urban community and urban sub-cultures. The emphasis is on community structure, function, value systems, and style of life. Prerequisite: 203 or approval of department staff.

304 THE FAMILY. S. An intensive culturally comparative and historical analysis of the family as an institution. The contemporary courtship, marriage, and divorce patterns of the American family are also discussed. Prerequisite: 203. *Mr. Holstege.*

306 SOCIOLOGY OF DEVIANT BEHAVIOR. S. An analysis not only of the causes for, manifestations of, and ameliorative and preventive programs for, deviant behavior but also of the nature and source of the norms from which people deviate. Implications are drawn for various institutions, particularly the school and the church. Prerequisite: 203. *Mr. Rottman.*

308 POPULATION AND SOCIETY. F. Introduction to demographic analysis of society. Includes a consideration of the major demographic theories of population growth and how these contribute to an understanding of population explosion; review of how the socio-cultural dimension of human society affects major sources of population growth: fertility,

mortality, migration, and how variations in these reciprocally affect society; and analysis of causes and consequences of population size, distribution, and composition for human society. Prerequisite: 203. *Mr. Rice.*

309 SOCIOLOGY OF EDUCATION. S. The school as a social institution, school-community relations, social control of education, and structure of school society. Prerequisite: 203. *Staff.*

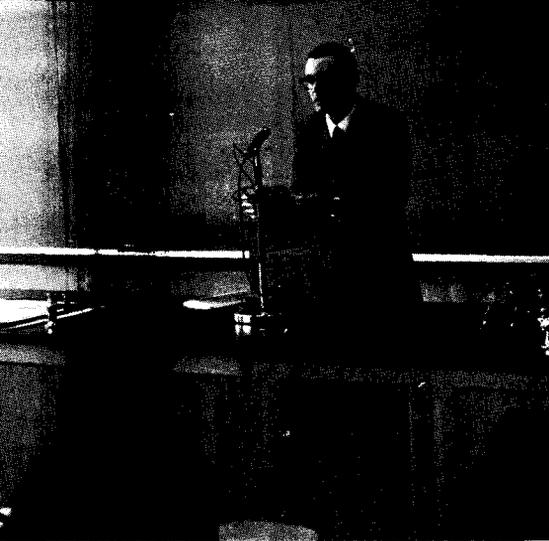
310 SOCIAL PSYCHOLOGY. F. Human behavior as a consequence of man's psychological make-up and his socio-cultural environment. Major attention is given to social interaction based on the reciprocal relationship which exists between personality structure and social structure. Special emphasis is given to concepts of self and role in the context of man's ability to communicate via symbols. Prerequisites: 203 and Psychology 151. *Mr. Rottman.*

311 SOCIOLOGY OF RELIGION. F. A study of the organizational forms of religion, with special attention being given to the influence and effectiveness of the church in its function as a social institution and to the social influences which have, in turn, affected the church. Prerequisite: 203. *Mr. Smit.*

317 SOCIAL ANTHROPOLOGY. F and S. A study of the historical trends in anthropology that have led to its present day perspective. The concepts of functionalism and cultural relativism are examined and evaluated. The course surveys various cultural patterns around the world. Prerequisite: 203. *Mr. Wilson.*

318 ADVANCED SOCIOLOGICAL THEORY. F. The development of sociology, with emphasis on its European backgrounds and formative stage in twentieth century United States. Appraisal of sociological pioneers, selected sociological concepts, theoretical and religious issues, and a general analysis of contemporary journal articles. Prerequisite: at least two courses in sociology beyond 203. *Mr. Holstege, Mr. Rottman.*

320 SOCIOLOGICAL RESEARCH. S. An intensive review of the research process



1967-68 INTERIMS

20 PROTEST LITERATURE. See English Department offerings.

21 SOCIAL IMPLICATIONS OF CONTEMPORARY THEOLOGICAL LITERATURE. A survey of writings by selected contemporary theologians, for example, Niebuhr and Cox. *Mr. Rice.*

22 PREHISTORIC ARCHEOLOGY. An introduction to the methods and techniques of modern prehistoric archeology and an examination of the cultural development of man in the Old and New Worlds to the beginning of written history. *Mr. Wilson.*

31 SOCIOLOGICAL PROFESSIONAL LITERATURE. A comprehensive search of the literature appearing in professional journals pertaining to an individually-selected theoretical or methodological problem. *Mr. Rottman.*

32 UTOPIAN COMMUNITIES. A study of theoretical types and of attempts to establish them. *Mr. Smit.*

as applied to the study of theoretical problems in social science. Provides instruction and direction to the student as he formulates sociological hypotheses, constructs a research design to test them, collects and analyzes the data. **Prerequisites:** at least two courses in sociology beyond 203 and Psychology 250. *Mr. Rice, Mr. Rottman.*

Spanish

Professor A. Otten (chairman, Department of Romance languages)

Assistant Professor Vila (adviser for Spanish)

Visiting Instructor Siebring

Visiting Lecturer Cortina

STUDENTS may declare for a program of concentration in Spanish after having completed two units of college Spanish with a minimum grade of C (2.0). The program of concentration includes eight regular courses and an interim. The regular courses are 201-202, 207-208, 303-304 or 307-308, and two courses chosen from 205, 305, or 306. Cognates in another foreign language through the 200-level, European or Latin American history, English literature, philosophy, history of music, or history of art are recommended. All courses above 102 meet core requirements in foreign language; all courses above 205 meet core requirements in the fine arts.

101 ELEMENTARY SPANISH. F. An introductory course in the use and comprehension of oral and written Spanish. *Staff.*

102 ELEMENTARY SPANISH. S. Continuation of Spanish 101.

201 INTERMEDIATE SPANISH. F, core. Review of essential grammatical structures and further training in spoken and written Spanish. Readings from significant Spanish authors. Prerequisite: 101 and 102 or their equivalent. *Staff.*

202 **INTERMEDIATE SPANISH.** S, core. Continuation of 201.

205 **ADVANCED SPANISH.** F. A course designed for the student desiring to pursue graduate studies in Spanish, to engage in the teaching of Spanish, or to achieve a high degree of competence in the language. Conducted in Spanish. Prerequisite: 202 or equivalent. *Mr. Vila.*

LITERATURE

207 **READINGS IN SPANISH AND LATIN AMERICAN LITERATURE.** F, core. An introduction to the major writers and movements in the history of the Spanish literature from the Middle Ages to the present day. The first semester deals with the literature of Spain, while the second semester deals with the literature of Latin America. Lectures, readings, and reports. Conducted in Spanish. Prerequisite: 202.

208 **READINGS IN SPANISH AND LATIN AMERICAN LITERATURE.** S, core. Continuation of 207. *Mr. Vila.*

303 **THE SPANISH NOVEL.** F even years, core. A study of the Spanish novel from *La Celestina* to the present. Reading and interpretation of key chapters in Spain's outstanding novels as well as complete works. A study is made of the chief characteristics of the various types of novels. Prerequisite: 202 or equivalent. Conducted in Spanish. Not offered 1968-69.

304 **THE SPANISH NOVEL.** S odd years, core. A continuation of 303. Not offered 1968-69.

305 **SPANISH AND LATIN AMERICAN POETRY.** F odd years, core. A study of the history and characteristics of Spanish poetry, by means of extensive readings and detailed examination of major poets. Special emphasis will be placed on the themes, forms, and techniques of poets of the last two centuries. Conducted in Spanish. Not offered in 1968-69.

306 **SPANISH AND LATIN AMERICAN POETRY.** S odd years, core. A study of the history and characteristics of Latin American poetry, by means of extensive readings and detailed examination of major poets. Special emphasis will be placed on the themes, forms, and techniques of poets from the Modernist generation to the present day. Conducted in Spanish. Not offered in 1968-69.

307 **THE LATIN-AMERICAN NOVEL.** F odd years, core. A study of the novels of Latin America with particular emphasis on the last two centuries. Attention will be paid to the conditions that gave rise to the different types of novels, as well as to the intrinsic literary value of the novels themselves. Conducted in Spanish. Not offered 1968-69.

308 **THE LATIN-AMERICAN NOVEL.** S odd years, core. A continuation of 307. Not offered 1968-69.

309 **THE SPANISH DRAMA.** F even years, core. A study of the dramatic expression of Spain's Golden Age of literature. Particular emphasis will be placed on the drama of Lope de Vega, Tirso de Molina Calderón, and Alarcón. Conducted in Spanish. Prerequisite: 202 or equivalent.

310 **THE SPANISH DRAMA.** S even years, core. A study of the dramatic expression of Echegaray, Benavente, Lorca, Casona, and Buere Vallejo. Conducted in Spanish. Prerequisite: Spanish 309.

1967-68 INTERIMS

102 **ELEMENTARY SPANISH.** This course is identical to the second semester of first-year work in the language; available to those who have completed 101. This interim course assumes that the student will be able to take a special course in the semester immediately following the interim, combining both semesters of Intermediate Spanish. *Staff.*

20 **SURVEY OF LATIN AMERICAN CULTURE.** An examination of the cultures of Latin America dealing with primitive

inhabitants, the colonial and independence periods, together with a study of the political and intellectual forces of

the present day Latin America and their influence upon the literary scene. *Mr. Vila.*

Speech

*Professors Berghuis (chairman), De Koster
Associate Professor M. Vande Guchte
Assistant Professors *Byker, Ozinga
Instructor Nykamp
Assistant Instructor Holquist
Assistant Korf
Director of Drama, Mrs. Boevé*

STUDENTS should complete 100 and 200 with a minimum average grade of C (2.0) before applying for admission to the major program. In addition to these courses the program includes 203, 215, 219, plus three other courses in the department, and an interim. Recommended cognates for students interested in oral interpretation and drama include aesthetics, history of art, introduction to musical literature, Shakespeare, and non-Shakespearean drama of the Renaissance; for those interested in speech education or speech correction, child psychology, psychology of exceptional children, descriptive statistics for the social sciences, and anatomy and physiology; for those interested in public address, logic or social psychology.

A secondary school teaching major consists of 100, 200, 203, 215, 219, plus five other courses. The elementary school teaching major includes 200, 203, 214, 215, 219, plus four other courses. A secondary school teaching minor should include 200, 203, 215, 219, plus two other courses.

PUBLIC ADDRESS

100 FUNDAMENTALS OF ORAL RHETORIC. F and S, half course. Fundamentals of composition for public address, including emphasis on physical elements contributing to directness in oral communication. *Staff.*

200 ADVANCED ORAL RHETORIC. F and S. Composition and presentation of types of speeches, readings in rhetorical theory and criticism of selected contemporary speeches, types of discussion, and parliamentary law. Prerequisite: 100 or equivalent. *Mr. Nykamp.*

230 BROADCAST COMMUNICATION. F. A course in mass communication which traces the development of radio and television as a social phenomenon and introduces the student to practice in the

medium. Prerequisite: 100 or equivalent. *Mr. Ozinga.*

305 THEORY AND PRACTICE OF PERSUASION. F and S. This course attempts to make the student a perceptive judge of persuasion in modern society and provides opportunities for persuasive speaking. Prerequisite: 200. *Mr. Ozinga.*

311 ARGUMENTATION, DISCUSSION, AND DEBATE. F. Theory and practice of argumentation, discussion, and debate in their various forms; the use of analysis, evidence, and informal logic. Prerequisite: 200 or permission of instructor. *Mr. Nykamp.*

312 INTERCOLLEGIATE DEBATE. Half course. Intercollegiate competition in debate. The activity runs throughout each school year.

325 ANCIENT AND MEDIEVAL RHETORICAL THEORY AND PRACTICE. S even years, core. The contributions of such theorists as Plato, Aristotle, Quintilian, and Augustine; the speaking of such orators as Pericles, Demosthenes, and Cicero. Prerequisite: 200. *Mr. Ozinga.*

326 RENAISSANCE AND MODERN RHETORICAL THEORY AND PRACTICE. F even years, core. Renaissance rhetoric, the elocutionary movement, and contemporary rhetorical theory and speeches, with emphasis on such theorists as Bacon, Sheridan, and Burke; and on such speakers as Webster, Lincoln, Roosevelt, Hitler, and Churchill. Prerequisite: 200. Not offered 1968-69.

SPEECH EDUCATION AND SPEECH CORRECTION

214 SPEECH FOR THE ELEMENTARY TEACHER. F and S. Designed to familiarize the prospective teacher with the speech arts used in the elementary classroom and to improve the prospective teacher's use of voice and articulation. *Mr. M. Vande Guchte.*

215 PRINCIPLES OF SPEECH CORRECTION. F and S. A study of the child's speech development and the types of speech defects that may occur. The course is designed to help the classroom teacher understand and correct minor defects and to handle speech improvement in the classroom. The course will also serve to introduce the student to the profession of speech pathology and audiology. *Mr. M. Vande Guchte.*

307 FUNDAMENTALS OF SPEECH SCIENCE. F even years. A study of the anatomy and physiology of the speech organs, the acoustic characteristics of speech production, speech sound formation, and phonetic transcription utilizing the International Phonetic Alphabet. Prerequisite: 215. *Mr. M. Vande Guchte.*

308 BASIC AUDIOLOGY AND AUDIOMETRY. S even years. A study of the fundamental aspects of hearing: the physics of sound, the anatomy of the ear, the nature of hearing and hearing impairment, and the testing of hearing.

Prerequisite: 307, or permission of instructor. Not offered 1968-69.

ORAL INTERPRETATION AND DRAMA

203 INTERPRETATIVE READING. F and S, core. A study of the history, principles, and techniques of interpretation. Analysis and oral interpretation of prose and poetry. *Mr. Holquist, Miss Walters.*

219 PRINCIPLES OF DRAMATIC PRODUCTIONS. F and S, core. 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. *Mrs. Boevé.*

220 THESPIAN PRODUCTIONS. Half course. 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 throughout the school year. *Mrs. Boevé.*

304 ADVANCED INTERPRETATION. S, core. Continuation of 203. Application of its principles to the novel and drama. Intensive study in preparation for a reading program. Prerequisite: 203. *Mr. Holquist.*

317 HISTORY OF THEATER AND DRAMA. S even years, core. A historical and analytical study of theater and drama from its origins to 1800. *Mrs. Boevé.*

318 HISTORY OF THEATER AND DRAMA. F even years, core. A continuation of 317. An historical and analytical study of theater and drama from 1800 to the present. Not offered 1968-69.

1967-68 INTERIMS

10 VOICE AND ARTICULATION. Intended to assist the student, through evaluation and intensive practice, to speak with greater flexibility in the various dimen-

sions of voice and articulation. *Mr. M. Vande Guchte.*

20 HISTORY OF AMERICAN PREACHING. A survey of preaching in the New World from the time of the Colonial preachers to the present. Representative preachers and movements in preaching will be studied.

21 CHILDREN'S THEATER. A study of the history of children's theater in America, requirements of a good script, children's theater audiences, and theories of production. The course will culminate with a production of a children's theater play. This course is designed for

those who have had little or no previous experience in theater. *Mr. Holquist.*

22 A COMPARATIVE STUDY OF CLASSICAL ACTING TECHNIQUES. A comparative study of a Greek drama, an Elizabethan drama, and a French Classical drama to determine the demands of each vocally and bodily upon the actor for effective presentation of the material. *Mrs. Boevé.*

30 THE RHETORIC OF CHURCHILL, HITLER, AND ROOSEVELT. A study of the ways of Churchill, Hitler, and Roosevelt made use of rhetoric in the pre-World War II and World War II days. *Mr. Ozinga.*

CURRICULUM before September, 1967

STUDENTS ENROLLED at Calvin College prior to September, 1967, may graduate by meeting all the regulations in effect when they entered or by meeting all of the requirements of the new curriculum. A summary of the former regulations is given below. If course numbers are not consistent with new course numbers, courses equivalent to those identified with the former course number should be taken. Students with particular problems should consult their faculty adviser or the registrar.

Bachelor of Arts degree, general

The requirements for the Bachelor of Arts degree, general college course, apply to all four-year students who complete the following curricula: general college, pre-seminary, pre-medical, pre-dental, pre-law, pre-engineering, pre-business administration, and music major.

The student must complete 125 hours of work or the equivalent (under the 4-1-4 program a course is the equivalent of 3.5 semester hours) with a cumulative grade-point average of C (2.0). Honor points are computed on the basis of registered hours.

Of the 125 hours of course credit required for graduation, the following courses or their equivalent are prescribed: Religion and Theology 103, 206, 301 (9); English 103 and 104 (6); History 101 plus three hours (6); Philosophy, not including logic, (6); Mathematics 109, Physics 110, and Biology 111 (12); two years of one foreign language and one year of a second foreign language, one of which must be an ancient language and the other a modern language. (Students who have earned credit for foreign language in high school may have this credit applied toward the fulfillment of the college language requirement. For the purpose of evaluating high school credit in a foreign language, one year of foreign language in high school will be regarded as the equivalent of one semester in college. 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.)

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, Spanish, and speech.

GROUP II. Biology, chemistry, geography, mathematics, physics, and psychology.

GROUP III. Religion and theology, economics, education, history, philosophy, political science, psychology, and sociology.

The student must distribute the total 125 hours, including those that are prescribed, among the three groups, complying with the following restrictions:

At least twenty-four hours must be taken in one subject chosen from one of the above three groups. This constitutes a major. In addition, at least twelve hours must be selected in another subject in the same group from which the major subject is chosen. This constitutes the required minor in the major group. Finally, at least eighteen hours must be chosen from one of the other two groups, that is, other than the major group. At least twelve of these eighteen hours must be in one subject. This constitutes a second minor.

A maximum of eight semester hours of credit in applied courses will be allowed toward the bachelor's degree, except for music majors concentrating in applied music, in which case the maximum is sixteen hours.

Upon 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 sixty or more hours in group II, he may elect to receive the degree of Bachelor of Science instead of Bachelor of Arts.

To be eligible for recommendation by Calvin College for a Michigan Provisional Teacher's Certificate, a student must complete all the requirements of the teacher-education program.

Bachelor of Arts degree, education

Students who wish to qualify for the Bachelor of Arts degree in Education must complete 125 hours, or the equivalent in courses under the course arrangement (one course is the equivalent of 3.5 hours), with a cumulative grade-point average of C (2.00). To be eligible for student teaching, he must attain a C average at the end of the school year preceding the year in which he plans to do his student teaching.

ELEMENTARY EDUCATION PROGRAM

General education degree requirements. Religion and Theology 103, 206, and 301; Biology 111; Physics 110, Mathematics 109; English 103 and 104; History 101 and 102, Psychology 201; Speech 109 or 303; four semesters of physical education; and fourteen hours of foreign language. (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. 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.)

Professional education courses. Education 202, 203, 204, 315, 322, and 343.

Additional prescribed courses. Art 201 or 306, Geography 103, Music 221 or 222, Psychology 204, and Sociology 203 or 204.

Major and minor sequences. A student is required to complete a major of thirty semester hours or equivalent in one area and eighteen semester hours in another. Recommended major and minor sequences include English Studies, Art and Music Studies, Social Studies, and Science Studies. Students should consult the 1966-67 college catalog (pp. 76 and 77) and Miss Gertrude Vander Ark for details of these programs.

SECONDARY EDUCATION PROGRAM

General education degree requirements. These are identical to the general education degree requirements of the elementary education program set forth above, except that a course in speech is not required.

Professional education courses. Education 202, 203, 204, 314, and 344.

Major and minor sequences. A student is required to complete a major of thirty hours and a minor of eighteen hours, these to be selected from the following subject matter areas: art, biology, chemistry, economics, English, French, geography, German, history, Latin, mathematics, music, physics, physical education, political science, sociology, Spanish, and speech.

Psychology may be selected as a minor, provided that sociology is not selected as a major or minor.

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

Directed teaching must be taken at Calvin College to receive credit for graduation and to be recommended for a Michigan Provisional Teacher's Certificate. Upon completion of requirements for the B.A. in Education degree, a student must make application to the director of teacher certification.

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Rienk B. Kuiper, M.A., B.D., 1930-33
Ralph Stob, Ph.D., 1933-39
Johannes Broene, M.A., 1939-40
Henry Schultze, B.D., 1940-51

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Coordinating Committee on Teacher Education, Vanden Berg (chairman), Bengelink, Beversluis, Edgar Boevé, Holstege, Snapper.

Counseling and Guidance Committee, Berghuis (chairman), Broene, G. Huisman, Menninga, Monsma, Rice, Terborg, Van Poolen.

Curriculum Study Committee, Wolterstorff (chairman), Harper, Miller, Spykman, Van Harn, the Dean of the College, and the President. This committee will continue to function during the period of transition to the 4-1-4 curriculum as an advisory committee on questions arising out of the introduction of the new curriculum.

Discipline Committee, Berghuis (chairman), W. De Boer, Greydanus, Hendricks, Spykman, Steen, Van Der Weele, Van Doorn, D. Westra, J. Wiersma.

Educational Policy Committee, Vanden Berg (chairman), Griffioen, Hoekstra, Ippel, K. Kuiper, Orlebeke, Primus.

Faculty Evaluation Procedures Committee, R. Bosscher, Prins, Ten Broek, and four students: Evan Reinders (chairman), James Barber, James Bratt, and Bill Prince.

Faculty Social and Special Academic Activities Committee, M. Van de Guchte (chairman), Geerdes, Kroese, Nykamp, Overvoorde, Topp, Van Till, Van Zytveld, Walters, Wilson, D. Zuidema.

Film Arts Council, Slenk, Van't Hul, Walters, and four students: J. Hoekema (chairman), Daniel De Vries, Paul Stub, Paul Ippel.

Honors Program Committee, Vanden Berg (chairman), P. De Boer, Hamersma, Holwerda, R. Otten, Rottman, Tiemersma, Van Kley.

Interim Program Committee, Vanden Berg (chairman), Ehlers, Hook, Jellema, A. Otten, Rienstra, P. Vande Guchte (advisor).

Lecture Council, Sweetman, Van Kley, and three students: J. Ouwinga (chairman), Daniel De Vries, Thomas Prins.

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Pre-Seminary Advisory Committee, Bos (chairman), Bijkerk, De Jonge, B. De Vries, D. Oppewal, Pekelder, Prins, Runner, Tuuk, Vila, L. Vos, Youngs.

Scholarship Committee, Berghuis (chairman), Lautenbach (secretary), W. Bratt, Mouw, Smit, J. Westra, Wolthuis, Miller (when graduate fellowships are involved).

Student Religious Activities Committee, Pekelder (chairman), Berghuis, Lucasse, Marsden, Minnema, Siebring, Van Opynen, Wevers, and four students.

Student Social Activities Committee, Lucasse (chairman), Berghuis, Bolt, Czanko, Pekelder, Piers, and seven students.

DEPARTMENTAL AND DIVISIONAL ORGANIZATION

The various departments are related as divisions: Division I, education, physical education, philosophy, and religion and theology (N. Wolterstorff, *chairman*); Division II, language, literature, and the arts (G. Harper, *chairman*); Division III, the natural sciences and mathematics (C. Sinke, *chairman*); Division IV, the social sciences (H. Ippel, *chairman*).

Art (II), Edgar Boevé, *acting chairman*

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Chemistry (III), Enno Wolthuis, *chairman*

Classical Languages (II), Robert T. Otten, *chairman*

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Education (I), Marion Snapper, *chairman*

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Germanic Languages (II), Wallace Bratt, *acting chairman*

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Music (II), John Hamersma, *chairman*

Philosophy (I), Nicholas Wolterstorff, *chairman*

Physical Education (I), Barney Steen, *chairman*

Physics (III), Roger Griffioen, *chairman*

Psychology (IV), Roelof Bijkerk, *chairman*

Religion and Theology (I), John Bratt, *chairman*

Sociology (IV), Theodore Rottman, *chairman*

Speech (II), Melvin Berghuis, *chairman*

Faculty

Faculty members on leave of absence for the 1968-69 academic year are indicated by an asterisk (*), those on leave for the first semester are indicated by a dagger (†), and those on leave the second semester are indicated by double asterisks (**).

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Professor of Chemistry, Emeritus
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Professor of History, Emeritus
- William Harry Jellema, M.A., Ph.D.
Professor of Philosophy, Emeritus
- Edwin Y. Monsma, M.S., Ph.D.
Professor of Biology, Emeritus
- Albert H. Muyskens, M.A.
Professor of Mathematics, Emeritus
- Henry J. Ryskamp, M.A., Ph.D.
Dean of the College, Emeritus
Professor of Economics and Sociology, Emeritus
- Seymour Swets, M.A.
Professor of Music, Emeritus
- Jacob G. Vanden Bosch, M.A.
Professor of English Language and Literature, Emeritus
- Helen Van Laar, M.A.
Assistant Professor of Art, Emeritus
- Henry Van Zyl, M.A., Ph.D.
Professor of Educational Methods, Emeritus
- Harry J. Wassink, B.S.
Professor of Engineering, Emeritus
- John Weidenaar, Th.M.
Associate Professor of Religion and Theology, Emeritus

-
- Henry James Baron, M.A. (Michigan, 1966), Adv. Cer. (Illinois, 1968)
Visiting Instructor in English
- Henry Bengelink, M.S. (Michigan, 1940)
Assistant Professor of Biology
- Melvin Earl Berghuis, M.A. (Michigan, 1949), Ph.D. (Michigan State, 1964)
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Chairman of the Department of Speech
- Nicholas Henry Bevershuis, Th.B. (Calvin Theological Seminary, 1943) Th.M. (Westminster Theological Seminary, 1944), M.A., Ed.D. (Columbia--Teachers College, 1950, 1966)
Professor of Education

- Roelof Jan Bijkerk, Dr. Phil. (Vrije Universiteit, Amsterdam, 1962)
Professor of Psychology
Chairman of the Department of Psychology
Director of the Psychological Institute
- Clarence Boersma, M.A., German, M.A., French, Ph.D. (Michigan, 1940, 1945, 1949)
Professor of Germanic Languages
- Edgar Gene Boevé, J. Franklin School of Professional Arts, M.S.D. (Michigan, 1954)
Associate Professor of Art
Acting Chairman of the Department of Art
- Ervin Boevé, M.A. (Michigan, 1954)
Director of Drama
- Robert Bolt, M.A. (Michigan, 1953), Ph.D. (Michigan State, 1963)
Associate Professor of History
- Helen Bonzelaar, M.A. (Western Michigan, 1964)
Instructor in Art
- Bert Peter Bos, M.A., Ed.D. (New York University—School of Education, 1931, 1937)
Director of Teacher Certification and Field Services
- Nell Bosma, M.S., Ph.D. (Michigan, 1927, 1931)
Professional Staff, Department of Biology
- James Peter Bosscher, M.S. (Purdue, 1957)
Associate Professor of Engineering
Acting Chairman of the Department of Engineering
- Robert Allen Bosscher, M.A. (Michigan, 1962)
Instructor in Economics
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Associate Professor of Biology
- John Harold Bratt, Th.B. (Calvin Theological Seminary, 1937), Th.M. (Columbia Seminary, Ga., 1938), S.T.M. (Harvard Divinity School, 1939), Th.D. (Union Seminary, Va., 1955)
Professor of Religion and Theology
Chairman of the Department of Religion and Theology
- Wallace Henry Bratt, M.A., Ph.D. (Michigan, 1956, 1966)
Associate Professor of Germanic Languages
Acting Chairman of the Department of Germanic Languages
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Curator, Colonial Origins Collection
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Professor of Economics
Chairman of the Department of Economics
- Conrad John Bult, M.A., M.A.L.S. (Michigan, 1962, 1965)
Librarian
- *Donald Byker, M.A. (Michigan, 1965)
Assistant Professor of Speech
- Elsa Cortina, Doctora en Pedagogia (Universidad Habana, 1951)
Visiting Lecturer in Romance Languages
- James Charles Czanko, M.A. (Michigan, 1965)
Assistant Professor of Physical Education
- John Thomas Daling, M.A., Ph.D. (Michigan, 1937, 1943)
Professor of Psychology

- John Lester De Beer, M.A., Ed.D.** (Columbia—Teachers College, 1936, 1951)
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Assistant Professor of History
- Margaret June De Boer, M.S.** (North Dakota, 1966)
Assistant Instructor in Biology
- Peter Pousma De Boer, M.A.,** Social Studies (New Jersey State, 1952), M.A., American Civilization (Iowa, 1961), Ph.D. (Chicago, 1968)
Professor of Education
- Willis Peter De Boer, Th.B.** (Calvin Theological Seminary, 1951), Dr. Th. (Vrije Universiteit, Amsterdam, 1962)
Associate Professor of Religion and Theology
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Assistant Professor of Political Science
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Visiting Instructor in Mathematics
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Director of the Libraries
- Anastasia den Hartog, M.A.** (Illinois, 1967)
Assistant Instructor in Romance Languages
- Gerrit Ludwig den Hartog, M.A.** (Washington, Mo., 1967)
Assistant Instructor in Germanic Languages
- **Peter Allen De Vos, M.A.** (Brown, 1964)
Assistant Professor of Philosophy
- Bert De Vries, B.D.** (Calvin Theological Seminary, 1964), M.A., Ph.D. (Brandeis, 1965, 1967)
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Assistant Professor of Psychology
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Assistant Professor of History
- Pieter H. Marsman, B.A.** (British Columbia, 1965)
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- Richard John Mouw, M.A.** (Alberta, 1965)
Instructor in Philosophy
- *Larry Ray Nyhoff, M.S.** (Michigan, 1961)
Assistant Professor of Mathematics

- Vernon D. Nyhoff, M.S. (Kansas State, 1950)
Visiting Instructor in Mathematics
- Delwin Gene Nykamp, M.A. (Northwestern, 1967)
Instructor in Speech
- Donald Oppewal, M.A. (Michigan, 1951), Ph.D. (Illinois, 1961)
Professor of Education
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Consultant, Educational and Psychological Measurements
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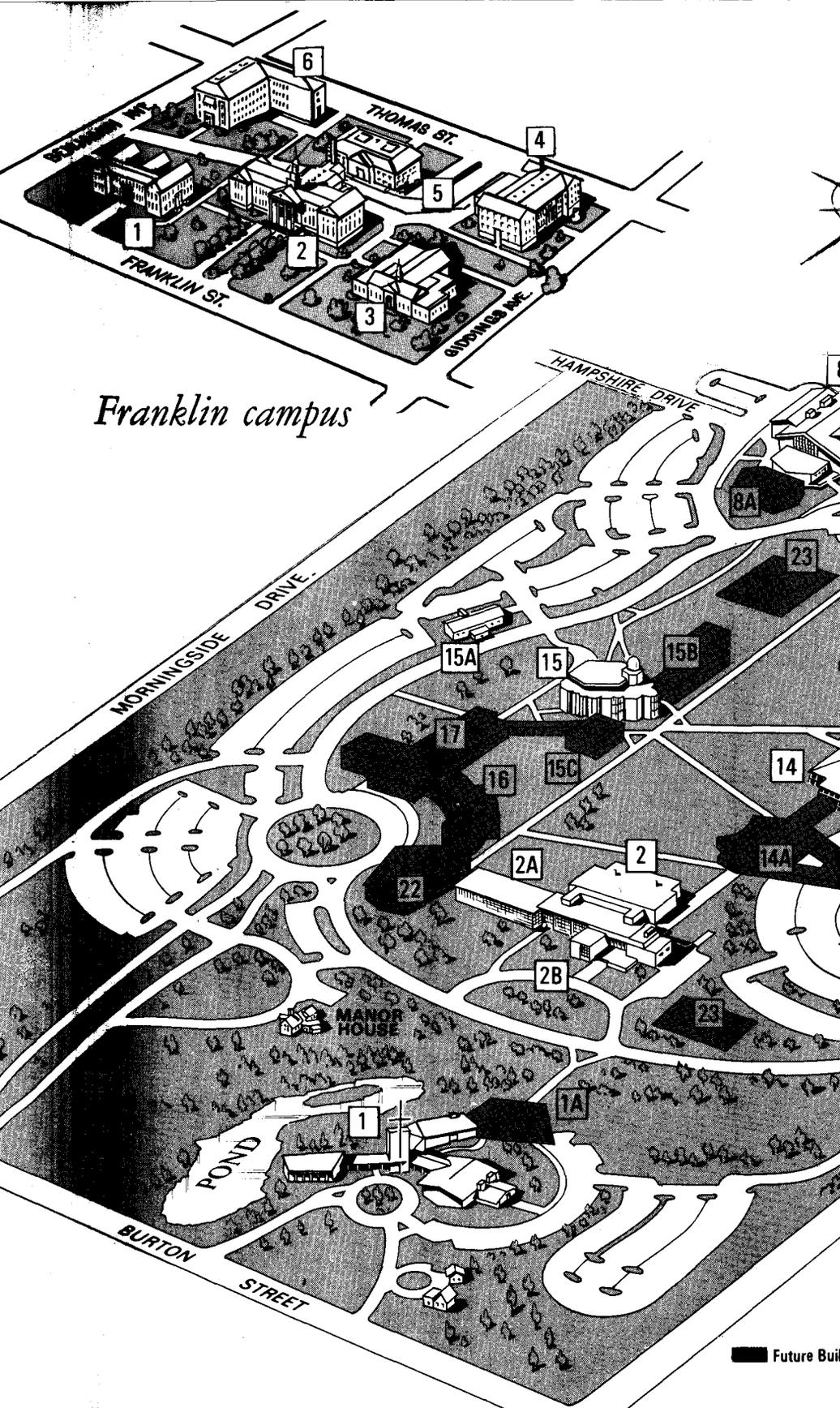
- Clarence John Vos, Th.B. (Calvin Theological Seminary, 1950), Th.M. (Westminster Theological Seminary, 1951), Dr.Th. (Vrije Universiteit, Amsterdam, 1968)
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Instructor in English



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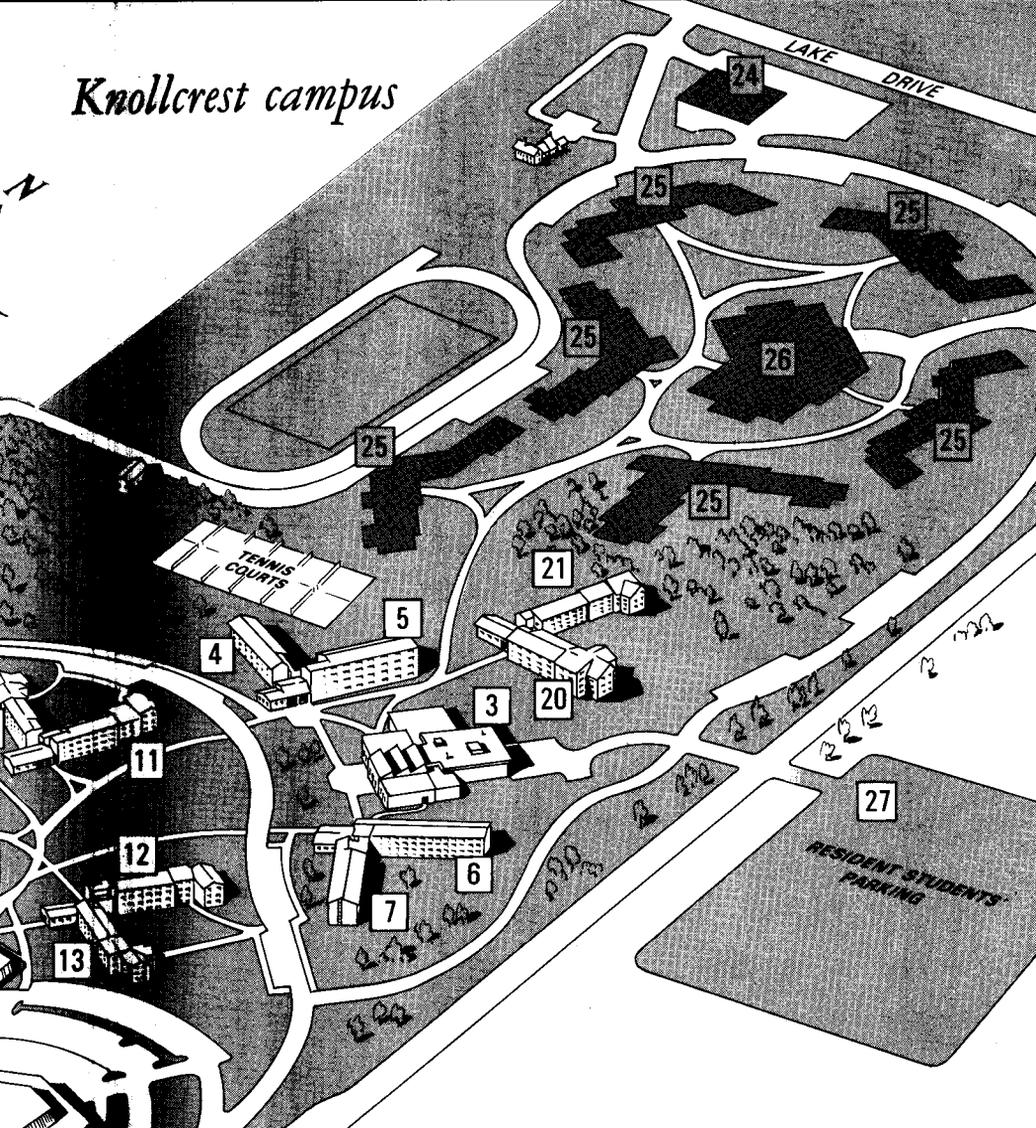
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Franklin campus

Knollcrest campus



KNOLLCREST CAMPUS

1. Seminary
 - 1A. Seminary Addition
2. Libraries
 - 2A. Hiemenga Hall
 - 2B. Heritage Hall
3. Knollcrest Dining Hall
4. Noordewier Hall (Men)
5. Vanderwerp Hall (Men)
6. Veenstra Hall (Women)
7. Beets Hall (Women)
8. Physical Education Bldg.
 - 8A. Natatorium-Future
9. Fine Arts Center
10. Rooks Hall (Men)
11. Van Dellen Hall (Men)
12. Eldersveld Hall (Women)
13. Schultze Hall (Women)
14. Commons 1st Phase
 - 14A. 2nd Phase
15. Science Bldg.
 - 15A. Science Service Bldg.
- 16-17. Classroom - Administration - Future
- 18-19. Residence Halls - 1969
20. Boer Hall (Men)
21. Bennink Hall (Women)
22. Chapel - Future
23. Classrooms - Future
24. Service - Future
- 25-26. Residence & Dining Halls - Future
27. Residence Hall Parking

FRANKLIN CAMPUS

- Hekman Building
- Administration Building
- Library
- Dormitory
- Commons
- Science Building

