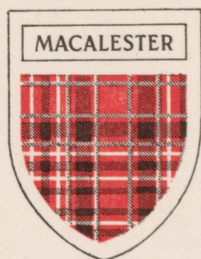


MACALESTER
COLLEGE
BULLETIN



Announcement of Courses
for the
Academic Year

1963 – 1964

Saint Paul 1, Minnesota

Vol. 51

April, 1963

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COLLEGE CALENDAR FOR 1963 - 1964

1963

September 5-10	Freshman Orientation and Registration
September 9-10	Registration for upper classes
September 11	Classes begin, 8:00 a.m.
October 12	Homecoming
October 21-25	Midterm tests
October 28	Grades due
November 20 (noon)-25	Thanksgiving recess
November 25	Classes resume, 8:00 a.m.
December 18-21	Final examinations
December 21	Saturday, 5:30 p.m., fall term ends

1964

January 6-31	Interim Term
February 4-5	Registration for spring term
February 6	Spring term begins
March 16-20	Midterm tests
March 23	Grades due
March 25	5:30 p.m., Easter recess begins
April 2	8:00 a.m., Classes resume
May 19-22	Final examinations
May 23	Alumni Day
May 24	Baccalaureate
May 25	Commencement
	Summer Session, 1964
June 15-July 31	

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COLLEGE PERSONNEL

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*Alumni Representative

Administration

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Earl Spangler, B.S., M.A., Ph.D., Assistant Dean in the Office of the Dean of the College
John Maxwell Adams, B.A., B.D., D.D., Chaplain
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Robert A. Bauman, B.S., M.S. in Ed., Director of Audio-Visual Education
Alfred K. Scharlemann, Comptroller
Rodney Hunt, Alumni Secretary
Dorothy Jacobson, R.N., Director of Health Center
Margaret L. Day, B.A., Coordinator of Special Events, Development Council

Department Chairmen

See departmental entries.

PURPOSES AND GOALS

Macalester College is a Christian liberal arts college that endeavors to unite excellence in academic achievement with dedication in service. Its purpose is to help able young persons to develop, through serious study in the liberal arts and wholesome participation in the life of the College, significant capacities for full and selfless leadership grounded in free inquiry, justice, and compassionate concern for all human beings.

Believing that worthwhile life and a free society hinge upon enlightened intelligence, the College takes its primary task to be the sharing of great ideas among growing minds. The College leads the student so to discern, ponder, discuss, and apply the best that men have thought, felt, and done in the arts, humanities, and sciences that he may grow to be wise in judgment, reasonable in discourse, and resolute in action. The College leads the student in time to bring his studies to focus in a scholarly discipline to the end that he may gain respect for all such disciplines, skill in methods of responsible inquiry, and solid foundations for further study and expanding personal and vocational experience.

Taking good will rooted in faith to be basic, the College seeks to constitute a community exemplifying the spirit of brotherhood. Christian in spirit and Presbyterian in background, but not sectarian in outlook, Macalester endeavors in its instruction, activity and worship to enable the student to develop a philosophy and way of life rooted not only in knowledge and useful capacity, but also in character, sensitivity and reverence. Macalester seeks to cultivate in all its students constructive citizenship and aspires to bring out in many fearless zeal for justice, freedom and human well-being.

ACADEMIC ADMINISTRATION

General Statement

The present publication replaces in part the usual Catalog Number of the Macalester College Bulletin. No annual catalog will be issued for 1963-64. Information ordinarily provided in the catalog issue will be found in this Bulletin together with other publications and statements available in the offices of the Registrar, the Director of Admissions, the Dean of Students and in other administrative offices of the College.

Postponement until 1964-65 of the publication of a regular catalog issue was necessitated by the fact that the spring of 1963 found the faculty still occupied with the final stages of a calendar and curriculum revision that had been under study for two years. This Announcement of Courses, 1963-64, presents the basic outcomes of that study, including descriptions of academic offerings and such additional information as is deemed most useful to students in planning their programs of study. Supplementary announcements will contain information not given herein concerning details of programs and regulations many of which were still under consideration at the time this publication went to press. Among the matters to be covered in supplementary statements are the program of honors at graduation and certain academic regulations governing registration, student classification, assignment of grades, and course changes.

The curriculum described in this Bulletin becomes operative in September 1963. It will be applicable to all new students beginning with the entering class that month. It will be optional for students who had enrolled in the college at an earlier date. Such students may, however, within the structure of the new course offerings and provided they continue to make normal academic progress, complete their college work under the degree programs and under the general and departmental requirements of the previous curriculum.

The Bachelor of Arts degree is the sole undergraduate degree for which students may enroll beginning with the entering class in September, 1963. The only other degree the College will continue to offer after the students presently enrolled in Bachelor of Science degree programs have completed their studies, is the Master in Education degree. The requirements for this degree are stated in connection with the offerings of the Department of Education. For information about the Bachelor of Science degree programs, please refer to the 1962-63 Catalog.

The changes in the Macalester College curriculum that are described in the following paragraphs and incorporated in the course offerings announced below, flow from and are intended to promote the achievement of the purposes and goals set forth on page 6. The new calendar and course pattern and the new program of general and concentration requirements represent an attempt to provide an education which will yield in the fullest degree depth and breadth of understanding and opportunity for individual intellectual growth.

Graduation Requirements for the Bachelor of Arts Degree

* Minimum Number of Courses (not including those taken in Interim Terms)	31 courses
** Freshman Composition and Literature	1-2 courses
*** Foreign Language (above introductory level)	2 courses
Physical Education Activities	6 non-credit courses
Man and His World (for all freshmen)	2 courses
Biblical Studies	1 course
**** Natural Science and Mathematics. At least one must be a laboratory science course. Mathematics courses numbered 14 or above may be included.	2 courses
**** Social Sciences	2 courses
**** Humanities. One course to be chosen in Philosophy or the Fine Arts (Art, Music, or Speech and Drama), and one course to be chosen in Literature, Foreign Literature, or Religion in addition to the course fulfilling the general graduation requirement in biblical studies.	2 courses
Major Concentration (see specific requirements	6-12 courses
<u>or</u> as stated under the	<u>or</u>
Core Concentration department concerned)	12 courses
A statement about comprehensive examinations for seniors will be made in a supplementary announcement.	

No student who enrolled prior to September, 1963 will be held for more than the minimum general graduation requirements of either the previous or present curriculum. In cases where adjustments in requirements in the core or major concentrations are indicated, such adjustments will be made by the head of the department involved in consultation with the Registrar.

Students who elect to continue work toward the baccalaureate degrees that are being discontinued will follow, as far as possible, all requirements as they appear in the 1962-63 catalog. These degrees must be earned no later than August, 1966.

- * Students are required to enroll in an Interim Term course, for which a grade but no credit is given, for each full academic year in which they are enrolled as regular students.
- ** Students showing sufficient mastery of the basic techniques of reading and writing may be excused from one of these courses.
- *** Students entering from high school with two or more years of a language and who wish to continue that language at Macalester will take a placement test in that language. All those who make a grade above the established minimum will go into the second year (unless they make an extremely good score, in which case, if they elect to take further study in that language, the department concerned will decide what course they should enter.) Those who fall below the minimum will be allowed to enter a first year course for credit, after consultation with and approval by the head of the department concerned.
- **** A student whose core or major concentration falls within one of these curricular divisions does not need to meet the general graduation requirements in that division.

Calendar and Course Patterns

The revised academic calendar includes an Interim Term of four weeks to take place in January between fall and spring terms of 14 weeks each. In each of the 14 week terms a student will take four courses, each of which will occupy one-fourth of his study time. This reduction in number of courses is seen as giving the student a better chance to pursue in depth a smaller set of subjects in place of spreading his time and energies over a larger scattering of offerings. In the Interim Term a student will take one course only for which no credit will be given. Grades of Pass or Fail, but not grades of A, B, C or D will be assigned in courses taken in an Interim Term.

Patterns of Concentration

To insure appropriate depth within some area of knowledge, students are required to elect one or the other of two alternative patterns of concentration: (1) a major concentration or (2) a core concentration. The major concentration is intended for students who wish to take a fairly intensive program of work centered largely in a single department. The core concentration is intended for students who, requiring somewhat less depth in a single department, wish to incorporate courses from the central department in an organized pattern of related courses taken from other departments.

Major Concentration. A major concentration consists of from six to ten courses within a department and up to six (0-6) courses outside the department, the total not to exceed twelve. Ten is the maximum number of courses in a given department which a department may require of a student in his major concentration. Six is the maximum number of courses outside a given department which a department may require of a student in his major concentration. A department may recommend that its students take as electives additional courses from among its own offerings or supporting courses to meet norms imposed, for example, by some scholarly societies, or by the student's own career objectives.

Core Concentration. A core concentration consists of two sets of six courses, one set to be within a department, the other set outside it. In general, departments suggest one or more patterns of courses with particular reference to the sequence within the department. The student, in consultation with his adviser, will plan a pattern of six courses outside of the department offering the core concentration, which pattern will meet the needs of the individual student and which will also have some rational coherence with some pattern of courses within the department. Each student's total plan for a core concentration must be approved by the department concerned.

Regulations Concerning Concentrations. Students shall file an approved plan for their concentration no later than their fourth semester, although such a plan may be made earlier. The plan is to be filed with the chairman of the department in which the concentration is centered. Concurrent approval of two departments may be necessary, where the courses in a concentration have two departmental focuses.

Independent Study and Honors

A substantial extension of Independent Study and Honors work is provided for in the new curriculum. The details of these programs will be announced in a supplementary statement upon completion of faculty action.

The Interim Term

Courses in the Interim Term are planned to afford the student an opportunity for uninterrupted and intensive study of a subject which particularly elicits his interest. They are intended to provide scope for the greatest possible exercise of creative imagination and independent inquiry under learning conditions ordinarily different from the usual pattern of classroom teaching. These conditions may include research in libraries, studios, museums or laboratories, contacts with visiting scholars, scientists or creative writers brought especially to the campus for this period; and field trips and off-campus projects for the study of political and social institutions and other cultural phenomena.

Absence of the customary credit and grading provisions, it is hoped, will encourage exploration of subjects a student might otherwise avoid and also encourage pursuit of intellectual inquiry for its own sake. Students are invited to share with the faculty members suggestions for course topics.

The Course in Man and His World

This two course sequence for all freshmen is planned to introduce the new student to the major areas of knowledge treated in the liberal arts curriculum. The student will, through reading and discussion of the great ideas and cultural products of the past and present, have an opportunity to consider their interrelationships and their values as they affect our contemporary civilization. He will be enabled to gain an understanding of and to think critically and constructively about significant concepts in the natural sciences, the social sciences, philosophy, religion and the arts. The course will provide a common base of understandings to students who, in the new curriculum, will be increasingly free to plan quite individual programs.

Preparation for Careers and Professions

Careers in Business. Macalester offers the student an opportunity to secure adequate training in both Economics and Business Administration, so that he is prepared to understand the operations of the individual business unit and the economy in which it functions. In view of the growing importance of quantitative controls, Macalester offers a program of courses which qualifies a student to sit for the examination given by the Minnesota State Board of Accountancy. Representatives of over one hundred business firms visit our campus each year to interview seniors about job opportunities with their companies.

Pre-Engineering. The pre-engineering program is developed in recognition of the need for engineers who are more than specialists in their fields. They must also be liberally educated men of the Twentieth Century society in which they live. Macalester has developed a five year program in cooperation with a select group of engineering schools. The first three years of the program are

at Macalester, where the students complete all of the requirements for the B.A. degree except certain advanced courses in the major field. The last two years of the program are taken at the engineering school. Upon completion of the five year curriculum, the student is granted the appropriate engineering degree from the engineering school, and the B. A. degree from Macalester.

For the Study of Law. Most of the accredited law schools of the country require three or four years of an undergraduate prerequisite to the study of law. Macalester advises a full four year course as the best possible preparation for entering upon professional studies in the leading law schools. Students interested in the study of law are urged to consult on their course of study with the college pre-law adviser in the department of Political Science.

Pre-Dentistry. See page 24.

Pre-Medicine. See page 23.

Teaching. See page 31.

College Policies and Regulations

Student Load. Each course offered in the Macalester College curriculum (with the exception of the non-credit courses in physical education activities and in music ensemble and studio work) is equivalent to four credits in the American collegiate semester system. Four courses taken for credit is the normal and maximum load a student may carry. However, a student may, in addition audit one course with the permission of his adviser and the instructor concerned.

Classification of Students. Sophomore standing is granted upon the completion of 7 courses and an established number of honor points. Junior standing is granted upon completion of 15 courses and an established number of honor points. Senior standing is granted upon completion of 23 courses and an established number of honor points. Condensed Education and Master in Education classifications are established upon admission to the college as degree candidates. Special student classification is assigned to non-degree candidates.

Chapel and Convocation Attendance. Attendance upon chapel and convocation each week is required of all students except those excused by the Dean of the College.

Rules Concerning Registration. Rules defining and governing late registration will be announced. The college reserves the right to exclude from attendance students whose influence it regards as undesirable.

Size of classes. The college does not hold itself bound for instruction in any elective course for which fewer than five students have registered. Such classes may, however, be organized at the option of the department head.

Advanced Placement, Testing Out, and Credit by Examination. Students whose mastery of an area of knowledge is exceptional may, upon approval of the Dean of the College and the head of the department concerned, take an examination for college credit or for a waiver of requirements or prerequisites in courses

in which a student is eligible to receive credit in the ordinary manner. Only a superior rating will qualify for college credit and only a very good rating will qualify for a waiver.

Academic Regulations. A student whose scholarship indicates that he is not making normal progress toward graduation will be placed on academic probation, the conditions of which will be determined by the Dean of the College under policy established by the faculty. Students who have failed in half the work of one semester, except for freshmen in the first semester of residence, may not register the following semester.

Residence Requirement. A bachelor's degree candidate shall have been in attendance at Macalester College for the full four years. However, students may transfer a maximum of 16 courses or the equivalent of the first two years of college work. The number of years spent in residence is to be not less than two except in the Condensed Education Program. The senior year must, in all cases, be spent in residence, or in an approved professional school if the first three years have been in attendance at Macalester College.

THE STUDENT AND THE COLLEGE

Student Personnel Program

Macalester College is a friendly, cooperative community in which the total development of the individual student is the paramount concern. The College is vitally interested in the intellectual, social, moral, spiritual, and emotional growth of every student as a person and as a citizen. To serve this objective Macalester College maintains a professionally staffed student personnel program dedicated to assisting the individual student to maximum growth and maturity and to promoting a total campus environment that encourages and nourishes this growth.

Counseling

Friendly, helpful relationship between faculty members and students is an outstanding feature of life at Macalester.

To utilize these friendly relationships to the maximum an extensive counseling program operates under the supervision of the Dean of the College and the Dean of Students. Basically, counseling is a part of the whole teaching process in college. It is individualized teaching concerned with the student's total personality development - intellectual, social, emotional, vocational, and moral. The goal is the steady development of intelligent and responsible self-management by the student as he progresses through his college experience.

Two areas of counseling services are provided: (1) academic counseling and (2) specialized counseling. Each student has available the assistance of (1) his faculty counselor, (2) his upperclass student counselor (for new students), (3) the officers of the College, (4) the specialized counseling of the office of the Dean of Students. A new student is notified of the names of his faculty and student counselors a few weeks before beginning college.

The faculty counselor carries on educational and vocational counseling with the student and periodically helps the student review his plans and progress. Conferences with faculty counselors are scheduled during registration periods but are usually voluntary at other times.

Professional counseling of the Dean of Students Staff is available in the areas of personal and social adjustments, psychological test interpretation, vocational and career planning and military affairs. In addition to the regular counseling services available, foreign students on the campus are assisted by a Foreign Student Adviser concerning their problems of adjustment.

Student Housing

A student's living arrangements and relationships are influential factors in his personal development during the college years. A residence hall is a miniature and intimate community, providing an opportunity for the student to receive some of his most effective education in human relations. The residence hall directors and the residence counselors in their counseling role cooperate with the student resident hall councils in planning and encouraging a high level of general citizenship and active social life. Those students who are not living in residence halls must apply to the office of the Dean of Students for approved off-campus housing. Any exceptions to living in approved off-campus

housing must be cleared by the office of the Dean of Students. Arrangements for working for room and board in a private home are also made through this office.

Financial Aid Program

Macalester College has an extensive financial aid program to assist students financially who otherwise would be unable to attend Macalester. This program includes scholarships, grants-in-aid, loans, part-time work for the College and off-campus part-time work. A more extensive description of this program can be obtained in the booklet Student Aid and Self-Support available from the Admissions Office.

Winton Health Service

The Student Health Service is located at 1595 Grand Avenue. William H. A. Watson, M.D., consulting physician, is at the Health Service from 8:00 a.m. to 12 noon, Monday through Friday. Dorothy S. Jacobson, R.N., Director of the Health Service, and a registered nurse assistant live in residence at the Health Service. Health Service office hours are 8:00 a.m. to 5:00 p.m. Monday through Friday. Saturday hours are 8:00 a.m. to 12 noon. Nurses are on duty for emergencies 24 hours daily.

Services available include free consultation with the doctor, laboratory facilities, physiotherapy which includes whirlpool, diathermy, infra-red lamp, ultra-violet lamp (the use of ultra-violet lamps in the dormitories or rooming houses is not permitted), x-ray, and in-patient care for minor illnesses. One and one-half days hospitalization at the Health Service each term are free; thereafter the rate is \$6.00 per day. All cases requiring major surgery and all serious illnesses are cared for at local hospitals. The College is not responsible for expenditures in such cases. A minimum fee is charged for antibiotics, special drugs, and x-rays. All other medications are given free of charge.

A voluntary plan of accident reimbursement insurance is available to our students. The policy provides reimbursement up to \$1,000 for each accident for any medical expenses originating from an accident in which the student is injured. The plan protects all participating students twenty-four hours a day for a twelve month period. Full protection is assured during interim vacations, and participation in all activities including athletics, either on or off campus, are covered.

The cost of this insurance per student for twelve months is nominal. The premium will be added to the student's account and payment made at the time of settlement of the account with the College.

Medical and Surgical Group Insurance with Blue Cross and MII is also available at favorable group rates to all students. Premiums for this coverage are payable in October for the six months period beginning November 1 and in April for the six months period beginning May 1.

Additional information will be furnished upon request.

COURSES OF STUDY

- I. Area Studies and Interdepartmental Programs
- II. Departmental Courses

Numbering of Courses

1 through 49 are lower division courses, 50 through 99 are upper division courses. Non-credit courses such as physical education activities and applied music courses are numbered 100 through 199 (first year level), 200 through 299 (second year level), 300 through 399 (third year level), and 400 through 499 (fourth year level). Master in Education level courses are numbered 500 through 549.

* * * * *

AREA STUDIES PROGRAM

Dr. Yahya Armajani, Coordinator

The Area Study Program provides students, faculties, and administrators of the four participating colleges (Hamline, Macalester, St. Catherine's and St. Thomas) with an opportunity to study together, work together and plan together, to the end that levels of scholarship may be raised, interest in serious study may be stimulated, and closer bonds of friendship and understanding may be developed; to offer to students in four independent Christian liberal arts colleges in St. Paul a series of integrated studies on the upper class level, given cooperatively by qualified professors in the four colleges, as an unique contribution to American undergraduate education; to contribute to the life of the community by sharing special lectures and programs as widely as possible with the citizens of St. Paul within the area selected for special study.

Area study courses will consider the history, foreign policy, and political, economic, and social institutions as well as the geography, nationalities, natural resources, art, literature, music, religion, education, manners, morals, and customs of the various areas.

50, 51. AREA STUDY OF AFRICA. Upperclass standing. Fall and spring terms. Tuesday and Thursday 3:30-5:00 p.m.

52, 53. AREA STUDY OF RUSSIA. Upperclass standing. Fall and spring terms. (Not offered 1963-64.)

54, 55. AREA STUDY OF LATIN AMERICA. Upperclass standing. Fall and spring terms. (Not offered 1963-64.)

56, 57. AREA STUDY OF THE MIDDLE EAST. Upperclass standing. Fall and spring terms. (Not offered 1963-64.)

58, 59. AREA STUDY OF THE FAR EAST. Upperclass standing. Fall and spring terms. (Not offered 1963-64.)

GENERAL SCIENCE

Professor J. A. Jones, Coordinator

The core concentration in General Science is designed to prepare students to teach general science in the secondary schools. To provide the broad science background needed to teach general science, the curriculum is planned to include courses from each branch of science and to insure an adequate background in mathematics.

CORE CONCENTRATION

A core concentration in General Science will consist of a six-course sequence in one science (Biology, Chemistry, Physics, or Geology) and two courses in each of the other three sciences. Students who do not have an adequate preparation in mathematics for the physics and chemistry courses must take as electives sufficient mathematics to correct this deficiency. The student's final plan for the core concentration is to be approved by the Coordinator and filed with him. This program is restricted to those students who plan to teach. (See Department of Education.)

(For a general statement about the nature of a core concentration see page 9.)

TEACHERS COURSE: See Education 51.

THE HUMANITIES PROGRAM

Dr. Borghild K. Sundheim, Coordinator

The aim of the Humanities Program is to present for study and discussion certain classic and seminal statements (both in letters and in art) that express characteristic views of God, man, and the world, especially in Western civilization.

GENERAL GRADUATION REQUIREMENT

Any of the courses in Humanities can satisfy general college graduation requirements.

CORE CONCENTRATION

The Humanities core shall consist of six (6) courses. The required courses are 25, 26, 55, 56, 96 and 98. Supporting this concentration will be six courses chosen from one of the following groups, all in close consultation with the adviser.

Option A: Intellectual and Cultural History. Six (6) courses with at least one from each of the first three disciplines:

- Art History
- Music (Advanced courses in History of Music or Music Literature)
- Philosophy (Courses devoted to the great thinkers)
- The Oriental World (Humanities 65)

Speech (Selected courses in Rhetoric and Theater)
Religion (Selected courses)
History (Selected courses)

Option B: Foreign Language Core Concentration. Six (6) courses in literature beyond the elementary courses in a foreign language, excluding "conversation" courses. (This six-course concentration would be a non-teaching concentration, since conversation courses necessary for teaching would not be included except in excess of the basic six.)

Option C: A Humanities and English Core Concentration. A six (6) course core concentration, beyond the Freshman Course, in English Literature. Survey of English Literature, a course required in all English core concentrations, is required here.

(For a general statement about the nature of a core concentration, see page 9.)

25. THE MODERN WORLD. Classics of European art and letters from the 17th and 18th centuries. Fall term.

26. THE MODERN WORLD. The 19th and 20th centuries. Spring term.

55. THE ANCIENT WORLD. Classics of Greece, Rome, and Israel. Prerequisite, junior standing or permission. Fall term.

56. THE MEDIEVAL AND RENAISSANCE WORLD. Classics of European art and letters. Prerequisite, junior standing or permission. Spring term.

65. THE ORIENTAL WORLD. Classics of Eastern art and letters.

96. INDEPENDENT STUDY. Further reading and the writing of papers based upon the matter of the core and supporting courses. Senior standing and permission. Either term.

98. TOPICS IN THE HUMANITIES. Seminar or independent study to fill out and pull together the matter of the first four courses. Prerequisite, junior standing. Fall term.

TEACHERS COURSE: See Education 51.

INTERNATIONAL STUDIES PROGRAM

Dr. Dorothy Dodge, Coordinator

The International Studies concentration is designed for (1) students who plan a career in the foreign service and other governmental agencies, in the service of international organizations, in journalism, in the foreign service of banks, industrial or commercial organizations, in the missionary field, in the educational field, and for (2) students who wish to obtain a general understanding of international relations for a more intelligent citizenship in our modern world community. Students interested in this functional core concentration should consult with the coordinator of the program of International Studies for further information.

CORE CONCENTRATION

The core concentration in International Studies consists of a minimum of six (6) advanced courses in Political Science which may include the Area Studies program, three (3) courses in History, and three (3) courses in Economics, Geography and Sociology.

The selection of courses must include Political Science 42, Political Science 62, History 53, and Economics 62. Additional courses may be selected from the following panel of courses:

Sociology:	Comparative Anthropology
Geography:	Political Geography Eurasian Geography Latin American Geography African Geography
Area Study of:	Russia Asia Middle East Africa Latin America
History of:	Far East Middle East European Colonization, 1817 -- the Present Russian History
Political Science:	Governments of Europe Governments of the Soviet Bloc Governments of Latin America Governments of Asia Governments of Africa and the Middle East.

Since International Studies is not a department, it is not offering a major concentration.

(For a general statement about the nature of a core concentration, see page 9.)

For detailed descriptions of courses listed above, see the individual departmental write-ups.

SOCIAL SCIENCE PROGRAM

Dr. Forrest A. Young, Coordinator

Both the major and the core concentrations in Social Science are designed to prepare students to teach the social sciences at the elementary or secondary school levels.

The following sequences are recommended:

I Social Science is the major concentration for those preparing to teach in Elementary Education

Students who have been accepted in the Elementary Education program may elect a major concentration in Social Science which consists of:

- A. Six (6) courses in any one of the following departments:
Economics, Geography, History, Political Science, or Sociology.
- B. Four (4) additional courses from the above listed departments and Psychology. These additional courses must not be taken from the core department. These courses may be from (a) four different departments or (b) two courses each from two different departments or (c) two courses from one department and one course from each of two additional departments.

The requirements may be stated in formula form as follows:

6-1-1-1
6-2-2
6-2-1-1

II Social Science is the core concentration for those preparing to teach in Secondary Education

Students who have been accepted in the Secondary Education program may elect a core concentration in Social Science which consists of:

- A. Six (6) courses in any one of the following departments:
Economics, Geography, History, Political Science, or Sociology.
- B. Six (6) additional courses from the above listed departments and Psychology. These additional courses must not be taken from the core department. These courses may be from (a) five departments, in which case two would be from one department or (b) from four departments in which case three must be from one department or (c) from four departments in which case two would be from each of two departments and one from each of two departments.

These requirements may be stated in formula form as follows:

6-2-1-1-1-1
6-3-1-1-1
6-2-2-1-1

(For a general statement about the nature of a core concentration, see page 9.)

TEACHERS COURSES: See Education 51 and 63.

ART

Professor Anthony Caponi, Department Chairman

The Art Department is oriented to meet the needs of four groups of students:

- (1) Those who wish to explore another approach to knowledge that aims at developing and refining their aesthetic values, through contact with art media in the studio and art theory in the lecture classes.
- (2) The student with special aptitudes in practical art who plans for a career as an artist or who plans to continue his studies in a professional art school.
- (3) The student who wishes to concentrate further in the theory and history of art in graduate school.
- (4) The student who plans to teach art in the public schools. Such students will require a major concentration in art plus five (5) courses in Secondary Education or eight (8) courses in Elementary Education.

GENERAL GRADUATION REQUIREMENT

The general graduation requirements in the Fine Arts may be met with Art 49, 60, or 61. Electives may be chosen from (1) all lecture courses and (2) studio courses at the freshman and the sophomore level.

MAJOR CONCENTRATION

A major concentration will consist of twelve courses, ten from the Art Department and two from without the department. It will include Art 30, 34, 35, 49, 60, 61, 66, 71 or 72, 98, and one additional course selected from the Art curriculum. Two courses are to be selected as follows: (1) Philosophy 71 - Aesthetics, and (2) one course chosen from Speech (Interpretation), or Music, or Literature.

CORE CONCENTRATION

A core concentration will consist of six (6) courses in Art: 30, 34, 35, 49, 60, 61, and six (6) additional courses to be selected outside of the Art Department. They should not include more than two disciplines. They should be contained within one or two of the following departments: (1) English (Literature), (2) History, (3) Languages, (4) Music, (5) Philosophy, (6) Psychology, (7) Sociology, (8) Speech and Drama, and (9) Religion.

(For a general statement about the nature of a core concentration, see page 9.)

FURTHER PREPARATION

The Art Department recommends the following courses for students planning to enter graduate schools or professional art schools: Art 50, 70, and 96.

RELATIONS WITH THE MINNEAPOLIS SCHOOL OF ART

Realizing that many students will have to make a choice between attending a professional art school or a liberal arts college, the Art Department allows its students to take from one to three courses at the Minneapolis School of Art and receive credit at Macalester College. Choice of courses would vary with individual needs and must be approved by the Chairman of the Art Department.

29. ART FOR ELEMENTARY SCHOOL TEACHERS. Familiarization with basic art experiences in drawing, painting, sculpture and crafts; with particular reference to the expressive needs of the growing child. Four hours of studio, one hour of lecture, one hour of discussion per week. (Not offered 1963-64)

30. DRAWING. Still life, landscape and the human figure through various approaches and materials. Four two hour periods per week. Fall and spring terms.

34. PAINTING. Oil and water color, various subject matter and approaches. Four two hour periods per week. Fall and spring terms.

35. SCULPTURE. Various techniques and materials involving modeling, carving, welding, and bronze casting. Four two hour periods per week. Fall and spring terms.

49. PRINCIPLES OF ART. A philosophical approach to the creative field, relating art to man, the creator and consumer; and to the social and psychological. Three hours of lecture and discussion; two hours of studio per week. Fall and spring terms.

50. GRAPHICS. Etching, block printing, and serigraphy. Four two hour periods per week. Spring term. (Not offered 1963-64)

60. HISTORY OF ART. Western Art through the Renaissance. Four hours per week. Fall term.

61. HISTORY OF ART. Baroque through Contemporary Art. Four hours per week. Spring term.

66. DESIGN. Elements and principles of design, traditional and contemporary approaches. Four two hour periods per week. Fall term.

70. ADVANCED DRAWING. Drawing from the human figure; various approaches and materials. Four two hour periods per week. Fall and spring terms.

71. ADVANCED PAINTING. Oil, encaustic, egg tempera, and fresco, with emphasis on the personal approach. Four two hour periods per week. Fall and spring terms.

72. ADVANCED SCULPTURE. Modeling, carving, and casting, with emphasis on the personal approach. Four two hour periods per week. Fall and spring terms.

96. SPECIAL PROBLEMS. Independent work in any medium within the Art curriculum. Advanced students in Art concentrations only. Hours arranged. Fall and spring terms.

98. SENIOR SEMINAR. A synthesis of the knowledge acquired in the Art Department with that of other areas of study. Students in Art concentrations only. Every other year. (Not offered 1963-64.)

TEACHERS COURSES: See Education 41 and 51.

BIOLOGY

Dr. O. T. Walter, Department Chairman

The courses offered by the Department of Biology are planned to serve two purposes in a college of science and liberal arts: One, to meet the needs of liberally educated men and women by giving them a deeper appreciation of the interrelationship of all living organisms and a better understanding of themselves, toward more healthful and effective living in our complex society. Two, to enable the student majoring in biology to gain mastery of fundamental knowledge for the successful pursuit of a career in professional biology, teaching, or to continue further study in graduate or professional schools.

GENERAL GRADUATION REQUIREMENT

Non-science oriented students who desire to take courses in biology to fulfill science requirements or as supporting courses for other fields of concentration may take Biology 11, 31, or 50 as terminal courses without prerequisites. Other courses have the prerequisite of Biology 11 or its equivalent.

MAJOR CONCENTRATION

A major concentration in biology includes the following: Biology 11, 12, 14, 51, 52, two (2) additional courses elected from those numbered 50 or above, and course 95 or 96, Chemistry 38, Mathematics 21 or 31, according to individual qualifications, and Physics 22.

CORE CONCENTRATION

Core I. This course sequence is recommended for the student with special interests or needs but who does not plan on graduate study in Biology. It would be of value to students planning to teach on the elementary level. This core concentration consists of six (6) courses in biology including 11, 12, 14, 52, and two (2) courses elected from those numbered 50 or above; together with Mathematics 21 and five (5) courses selected from at least three other of the natural sciences. The core concentration should be programmed in consultation with a faculty member of the Biology Department.

Core II. This core sequence is specifically programmed to meet the needs of students interested in the teaching of Biology on the secondary level and is as follows: Biology 11, 12, 14, 52, one additional course numbered 50 or above, 95 or 96; Chemistry 11, 12, 37, 38; Physics, one course; plus one course to be chosen from sciences or mathematics other than Biology in consultation with the adviser.

Core III. This course sequence is specifically programmed to meet the needs of students primarily interested in physical education with adequate supporting courses in biology and is as follows: Physical Education courses 20, 40, 60, 65, 80, and 85; Biology courses 11, 12, 14, 31 or 52, 65, and one additional course numbered 50 or above. It is also recommended that students interested in this core concentration elect an additional course in physical education and one course in physics. This program should be planned in consultation with a faculty member of the Physical Education Department.

For the statement about the Core Concentration in General Science, see page 16.

(For a general statement about the nature of a core concentration, see page 9.)

PREPARATION FOR GRADUATE STUDY

Students contemplating graduate study will ordinarily select the following courses to be included within their electives: An additional course in quantitative chemistry, Mathematics 31, and reading ability in scientific French, German, Russian, or Spanish. Students must plan this program in consultation with a faculty member of the Biology Department.

PRE-PROFESSIONAL PROGRAMS

The Bachelor of Arts degree with a major concentration in biology strengthened with the further preparation specified above prepares the graduate to pursue any one of the various careers in biology. The following are principal areas of professional biology in which the prospective student may be interested.

BIOLOGIST. There are many technical level positions open in industry, governmental agencies and research, for graduates with the B.A. degree and the quality of training in biology and related natural sciences as offered at Macalester College. However, graduates wishing to enter biological careers are advised to consider graduate courses for acceptance to higher level positions in the many fields of biology.

GRADUATE STUDY. The strengthened major concentration in biology provides an adequate preparation in breadth and depth for students contemplating graduate study leading to the Master's and/or Doctor of Philosophy degrees in any of the many fields of biological science. A grade average of "B" or better will assure acceptance to the graduate school of the student's choice and will qualify him for scholarships, fellowships, or research or teaching assistantships.

MEDICINE. The student preparing to enter the profession of medicine should plan his program carefully with his faculty adviser, taking into account the entrance requirements of the medical school of his choice. In general, the student is best prepared by completing the requirements for the Bachelor of Arts degree. In addition to the general graduation requirements, the following program is recommended as meeting the requirements for entrance to most medical schools: Biology 11, 12, 14, 51, 52, 64, 95 or 96; Chemistry, one year of general, one year of organic, one term of quantitative analysis; Mathematics, calculus competence; Physics, one year; Psychology, one year.

DENTISTRY. The pre-dental student planning to take the Bachelor of Arts degree will follow substantially the same program as outlined above for Pre-Medical Science. The student not planning to meet graduation requirements for the Bachelor of Arts degree may elect those courses meeting the entrance requirements of the dental school of his choice.

MEDICAL TECHNOLOGY. Macalester College offers an excellent academic opportunity for students wishing to prepare for a career in the profession of Medical Technology. Upon completing all graduation requirements and the awarding of the Bachelor of Arts degree with a strengthened major concentration in biology from Macalester College, the student completes a fifth year of study at the Charles T. Miller Hospital in St. Paul, Minnesota, under the directorship of the Chief Pathologist and Director of Laboratories. After satisfactorily completing the fifth year at Miller Hospital, the student is eligible to apply for the National Board of Registry Examination. On passing this examination the student receives certification as a professional "Registered Medical Technologist", M.T. (American Society of Clinical Pathologists). Students interested in this program should write the Macalester College Admissions Office for a special pamphlet concerning the Medical Technology Program.

DEGREE NURSING. For students wishing to take advantage of a liberal arts background of one or more years prior to entering a school of nursing offering the Bachelor of Science degree, the Macalester biology program offers a course of study with modern emphasis and thorough preparation. Students in this program are responsible for knowing the specific requirements for admission to, and graduation from, the nursing school of their choice.

DEPARTMENTAL ACTIVITIES

The Biology Department sponsors seminars each term open to all interested persons on the campus. In addition, students and faculty periodically take special field trips, attend lectures by special guests, view outstanding films, and enter into other activities of both an academic and recreational nature. The department sponsors an active chapter of Alpha Delta Theta, a professional organization for young women in the medical technology program.

11. PRINCIPLES OF BIOLOGY. A one-term course considering the historic fundamental principles of biology in light of more recent developments. This course is required as the first in a sequence of three courses, 11, 12, and 14, for all students planning on biology as their field of concentration. Three lectures, one three-hour laboratory period per week, and one optional discussion session per week. Fall term.

12. ANIMAL BIOLOGY. A one-term course devoted to the study of those principles of biology best illustrated by animal life. Required of all biology concentrations. Elective for others. Prerequisite, Biology 11. Three lectures, two two-hour laboratory periods per week. Spring term.

14. PLANT BIOLOGY. A one-term course devoted to the study of plant life. Required of all biology concentrations. Elective for others. Prerequisite, Biology 11. Three lectures, two two-hour laboratory periods per week. Spring term.

31. HUMAN PHYSIOLOGY. A study of the structure and functions of the human body. Three lectures, one two-hour laboratory period per week. Fall term.

50. FIELD ZOOLOGY. An extensive study of the local fauna, and to some extent, the local flora, including identification, collection, and preservation of materials. Three lectures, two two-hour laboratory periods per week. Spring term.

51. GENETICS. A study of the laws and principles of inheritance relating to animals and plants. Prerequisite, Biology 11. Three lectures, one three-hour laboratory period per week. Fall term.

52. GENERAL PHYSIOLOGY. A study of the principles underlying life functions. Prerequisite, Biology 12 or 14. Three lectures, two two-hour laboratory periods per week. Spring term.

53. CYTOLOGY AND HISTOLOGY. A study of microstructure of higher animals. Prerequisite, Biology 12. Three lectures, two two-hour laboratory periods per week. Fall term.

60. PARASITOLOGY. A study of the biology of parasitism best illustrated from among the macro-and microparasites of man, and domesticated and wild animals. Prerequisite, Biology 12. Three lectures, two two-hour laboratory periods per week. Spring term.

61. ECOLOGY. A study of natural communities and the principles which underlie their structure and change. Population dynamics, energy capture and transfer, and conservation are considered. Prerequisite, Biology 11. Three lectures, two two-hour laboratory periods per week. Fall term.

63. ADVANCED PLANT SCIENCE. An advanced study of developmental plant anatomy and evolution including techniques and principles dealing with identification and classification of plants. Prerequisite, Biology 14 or consent of the instructor, and a field collection of plants made by the student during the summer previous to taking the course. Three lectures, two two-hour laboratory periods per week. Fall term.

64. DEVELOPMENTAL ANATOMY. A comparative study of vertebrate development and morphology. Prerequisite, Biology 12. Three lectures, two two-hour laboratory periods per week. Fall term.

65. MICROBIOLOGY. A study of microbial organisms and their relationship to higher organisms. Prerequisite, Biology 12 or 14. Three lectures, two two-hour laboratory periods per week. Fall term.

95,96. INDIVIDUAL PROBLEMS, RESEARCH OR INDEPENDENT STUDY. With consent of instructor. Fall and spring terms.

TEACHERS COURSE: See Education 51.

CHEMISTRY

Dr. Chester H. Shiflett, Department Chairman

The Chemistry curriculum is designed to serve three purposes:

1. To enhance and broaden the general culture of all its students by a consideration of some of the great intellectual achievements and current frontiers in the science.
2. To provide the instruction in chemistry necessary for the allied professions of engineering, medicine, dentistry, medical technology and nursing.
3. To lay the foundation for graduate study and professional careers in chemistry in the academic research or industrial fields.

GENERAL GRADUATION REQUIREMENT

Chemistry 10, 11, 12, 13, may be used for general graduation requirement without specific college level prerequisites.

MAJOR CONCENTRATION

The major concentration in Chemistry consists of Chemistry 11, 12 (or 13), 23, 37, 38, 53, 65 and 66; Physics 21 and 22, and Mathematics 31 and 32.

CORE CONCENTRATION

The core concentration in Chemistry may take several patterns:

Chemistry 11, 12 or 13, 23, 37, 38, and 65, with Physics 22, Mathematics 21, 31, and 32, and Biology 11 and 12.

Or the above Chemistry courses and Mathematics 21, Physics 21, 22, and Biology 11, and 12.

For the statement about the core concentration in General Science, see page 16.

(For a general statement about the nature of a core concentration, see page 9.)

FURTHER PREPARATION

Students contemplating graduate school should elect additional courses in Chemistry in consultation with the department. The Chemistry Department is approved by the Committee of The American Chemical Society for Professional Training, and students wishing to meet the requirements recommended by this Committee should confer with the chairman of the department.

10. FOUNDATIONS OF CHEMICAL SCIENCE. Evidence for the atomic theory and the structure of molecules. Three lectures, two hours laboratory a week. Fall term.

11. GENERAL CHEMISTRY. Atomic, kinetic and equilibrium theories as illustrated by the common elements and their compounds. Three lectures, three hours of laboratory a week. Fall term.

12. GENERAL CHEMISTRY AND QUALITATIVE ANALYSIS. Continuation of Chemistry 11. Laboratory work devoted to qualitative analysis. Three lectures, three hours laboratory a week. Fall term.

13. GENERAL CHEMISTRY AND QUALITATIVE ANALYSIS. A one term combination of courses 11 and 12. For students who have made a satisfactory grade on the Advanced Placement Examination. Three lectures, six hours laboratory a week. Fall term.

23. ANALYTICAL CHEMISTRY. Equilibrium theory as applied to analytical process. Laboratory work includes gravimetric, volumetric and instrumental analysis. Prerequisite, 12 or 13. Three lectures, six hours laboratory a week. Fall and spring terms.

37. ORGANIC CHEMISTRY. The carbon compounds, structure, reaction mechanisms and synthesis. Prerequisite, 12 or 13. Three lectures, six hours laboratory a week. Fall term.

38. ORGANIC CHEMISTRY. Continuation of course 37. Three lectures, six hours laboratory a week. Spring term.

39. PHYSIOLOGICAL CHEMISTRY. The chemical aspects of human physiology. Prerequisite, 23 and 37. Three lectures, two hours laboratory a week. Spring term.

53. INORGANIC CHEMISTRY. Reactions and structure of inorganic compounds. Prerequisite, 11 or 13. Two lectures, six hours laboratory a week. Fall term.

54. INORGANIC AND RADIOCHEMISTRY. Continuation of course 53 with nuclear and radiochemistry. Two lectures, six hours laboratory a week. Spring term.

61. QUALITATIVE ORGANIC ANALYSIS. Identification of representatives of the major homologous series. Prerequisite, 38. Two lectures, six hours laboratory a week. Fall term.

62. ADVANCED ORGANIC CHEMISTRY. Stereochemistry and reaction mechanism. Prerequisite, 38. Three lectures, three hours laboratory a week. Spring term.

63. ADVANCED ANALYTICAL CHEMISTRY. Prerequisite, 65 or permission of instructor. Two lectures, six hours laboratory a week. Spring term.

65. PHYSICAL CHEMISTRY. Laws, theories and generalizations relating physical and chemical properties. Prerequisite, 23, 38, and Physics 22, Mathematics 32. Three lectures, six hours laboratory a week. Fall term.

66. PHYSICAL CHEMISTRY. Continuation of course 65. Three lectures, six hours laboratory a week. Spring term.

95. INDEPENDENT STUDY. Laboratory and library research on an original problem with a thesis. Prerequisite, junior standing and permission of department. Either term.

TEACHERS COURSE: See Education 51.

ECONOMICS AND BUSINESS ADMINISTRATION

Dr. Forrest A. Young, Department Chairman

The major objective of this department is the preparation of men and women for useful living and for good citizenship. The Department seeks to prepare students for the graduate schools and for careers in business, the civil service, teaching and research. Students should consult their advisers about the more desirable academic program for specific career goals.

Departmental Activities:

Bureau of Economic Studies: Studies and research projects are conducted under the direction of Dr. Arthur R. Upgren. Publications of the Bureau are given wide distribution.

Honor Societies: High ranking students are eligible for membership in Omicron Delta Epsilon, national honor fraternity for Economics and Business major or core concentrators. They may also be elected to membership in Pi Gamma Mu, national honor society in Social Science.

Clubs: All students are eligible for membership in Macalester's collegiate chapter of the U. S. Junior Association of Commerce, a campus service and business club which brings students into contact with Twin Cities business firms.

Metropolitan Area Studies: Annual trips are made by classes to the grain exchange, banks, Ford plant, brokerage firms, Federal Reserve Bank, and leading manufacturing plants.

Economics and Business Laboratory: Investment manuals, business services, tax and common market reports, corporation reports, and many publications of special interest to students in Economics are housed in a special section in the Library Reference Room. The Bureau of Economic Studies is located at 161 Macalester Street.

GENERAL GRADUATION REQUIREMENT

Any course in the Department of Economics, with the exception of Business Law, Statistics, and Accounting Courses, will satisfy the general graduation requirement.

MAJOR CONCENTRATION

The student may select one of the following: (1) A major concentration in Economics or (2) a major concentration in Business Administration or (3) a core concentration in Economics, or (4) an interdepartmental core concentration in Economics and Political Science.

The major concentration in Economics consists of a minimum of eight (8) courses of which the following six (6) are required:

Principles of Economics	Principles of Accounting
Intermediate Micro Economic Analysis	Economic Statistics
Intermediate Macro Economic Analysis	Two (2) additional elective
Money, Banking, and Public Policy	courses from the department.

The major concentration in Business Administration consists of a minimum of eight (8) courses of which seven (7) are required as follows:

Principles of Economics	Financial and Tax Accounting
Intermediate Micro Economic Analysis	Economic Statistics <u>or</u> Managerial
Intermediate Macro Economic Analysis	Accounting
Money, Banking, and Public Policy	One (1) additional elective course
Principles of Accounting	from the department.

CORE CONCENTRATION

A core concentration is also available in Economics. The requirements are:

The six (6) required courses listed under the major concentration in Economics.

Six (6) additional courses from other departments approved in advance by this department. Four of these would ordinarily be from one department. These courses, together with the departmental courses must form a definite pattern for attaining specific goals, career objectives or graduate study programs. For example, a student interested in operations research or graduate work in quantitative economics might supplement his work in Economics with a program of courses in Mathematics.

A student may also elect an interdepartmental core concentration involving Economics and Political Science. It consists of (1) the six required courses listed under the major concentration in Economics and (2) six courses in Political Science which must be approved by the Chairman of that Department. See page 65 under Political Science.

(For a general statement about the nature of the core concentration, see page 9.)

FURTHER PREPARATION

Students who intend to sit for the examination given by the Minnesota State Board of Accountancy are advised that the Board requires them to complete successfully 12 specified courses in Economics, Accounting and Business Law before they are allowed to take the examinations. These candidates should include a course in Mathematics in their program and take the major concentration in Business Administration together with the additional required courses. They should consult as early as possible with Professor Buckwell about the proper sequence of courses to follow.

11. PRINCIPLES OF ECONOMICS. Micro and Macro; production, prices, economics of the firm, national income, economic growth, stability, economic welfare, selected economic problems. Either term.

22. PRINCIPLES OF ACCOUNTING. Use, summary, reporting, theory (alternatives with implications on financial actions) use of accounting for basic forms of business organization; preparation, analysis of accounting statements. Fall term.

24. ECONOMIC STATISTICS. Gathering of group data; graphic presentation; frequency distributions; averages; dispersion; correlation; trend analysis; index numbers. Spring term.

26. BUSINESS LAW. Contracts; agency, negotiable instruments; property; credit transactions; business organizations; wills; mortgages. Fall term.

28. FINANCIAL AND TAX ACCOUNTING. Accounting problems of the corporation; cash flows; statement analysis; sources and uses of funds; individual, partnership income tax problems. Prerequisite, one accounting course. Spring term.

50. INDUSTRIAL ORGANIZATION AND THE MARKET ECONOMY. Market structure in the setting of society as a whole; distribution channels; the firm's buying and selling markets; management of the marketing function. Prerequisite, one Economics course. Fall term.

52. MANPOWER ECONOMICS. Labor movement theories; labor union history and organization; collective bargaining; labor disputes; wage theories; social security; industrial relations; labor legislation. Prerequisite, one Economics course. Spring term.

54. MANAGERIAL ACCOUNTING. Uses and basic systems of cost accounting; capital budgeting; inventory valuation; costs as they apply to business decisions; cases and problems. Prerequisite, two courses in accounting. Fall term.

56. CAPITAL MARKETS. Financial intermediaries, securities markets, investment banking; sources and management of business funds; short-term, intermediate and long-term capital; factors influencing financial decisions; regulation. Prerequisite, one Economics course. Spring term.

58. PUBLIC FINANCE AND FISCAL POLICY. Objectives, implications, methods of federal, state, local finance. Economic analysis of expenditure and revenue-raising policies. Prerequisite, one Economics course. Spring term.

60. ADMINISTRATIVE ACCOUNTING. Intermediate theory and problems of corporate accounting. Prerequisite, two accounting courses. Fall term. (Not offered 1963-64.)

62. INTERNATIONAL ECONOMICS. World economy; regional groupings, EEC, EFTA and others; trade policies; commodity agreements; GATT; finance, investments; economic organizations; grants, loans, assistance; gold and balance of payments. Prerequisite, one Economics course. Spring term.

64. ADVANCED ACCOUNTING PROBLEMS. Complex accounting problems in specialized areas, viz., leaseholds, consolidations, receiver's statements, partnership formation, liquidation; C.P.A. problems. Prerequisite, two accounting courses. Spring term.

66. MONEY, BANKING AND PUBLIC POLICY. Financial institutions; commercial banking system; Federal Reserve system, policies; money standards, role of gold; credit control; monetary theories, policies, goals. Prerequisite, one Economics course. Fall and spring terms.

72. ECONOMIC THOUGHT, CONCEPTS AND SYSTEMS. Historical development of methodology and structure of economic theory. Comparative economic systems with emphasis on the Soviet economy. Prerequisite, Intermediate Theory. (Not offered 1963-64.)

74. PUBLIC ACCOUNTING. Verification of accounts, internal control, reports and working papers. Corporate income taxation, C.P.A. problems. Prerequisite, three accounting courses. Spring term. (Not offered 1963-64.)

76. BUSINESS CONDITIONS AND ECONOMIC ANALYSIS. Business and economic environment; nature of economic change; analysis of methods used to predict change; oral and written reports. Prerequisite, majors, senior standing. Fall term.

78. INTERMEDIATE THEORY. Advanced micro and macro theory. Required of 1963-64 seniors. Prerequisite, four economics courses. Fall term.

80. INTERMEDIATE MICRO ECONOMIC ANALYSIS. Advanced theory of prices, production function, factor pricing and economics of the firm; method of price theory. Prerequisite, four economics courses, senior standing. (Not offered 1963-64.)

82. INTERMEDIATE MACRO ECONOMIC ANALYSIS. Advanced macro theory of national income, employment, economic growth; the dynamics of national income theory. Prerequisite, four economics courses, senior standing. (Not offered 1963-64.)

96. INDEPENDENT STUDY. Further study in fields of special interest. Readings, conferences, field work, reports. Prerequisite, majors, senior standing. By permission. Either term.

EDUCATION

Dr. H. Arnold Holtz, Department Chairman

The Department of Education offers courses designed to fulfill requirements for certification of elementary and secondary teacher candidates. Kindergarten and junior high endorsement are also available. A condensed program and a Fifth Year Program are offered to persons with a baccalaureate degree.

The education offerings for certification comply with the requirements of the State of Minnesota, which stipulates that the following areas be taught: (1) orientation to teaching, (2) human growth and development, (3) materials and methods of instruction, and (4) laboratory experience---directed student teaching. The department does not offer a major concentration or a core concentration.

Therefore, candidates for elementary and secondary teaching must have academic preparation in at least one major, or core concentration. For major or core concentrations, refer to the various departmental write-ups in the catalog.

Many combinations of core concentrations are possible for the elementary teacher candidate. Core concentrations for secondary candidates may be advisable in such areas as Physics, for example; however, it is strongly recommended that a major concentration in a teaching area be elected by secondary teacher candidates.

Students are advised to consult with faculty members in the departments concerned and with members of the Department of Education. It is also recommended that students familiarize themselves with subject combinations in demand, through teacher openings as reported to the Teacher Placement Office.

The Macalester teacher education programs are accredited by the State of Minnesota, the North Central Association of Colleges and Secondary Schools, and the National Council for Accreditation of Teacher Education.

ELEMENTARY PROGRAM

While students may be identified with the elementary program as freshmen, ordinarily they are encouraged to make formal application to the Elementary Teacher Selection Committee by the end of the sophomore year. Each individual will be reviewed by the committee, and acceptance into the elementary program is based on (1) scholarship, (2) recommendations from the major department, (3) health and physical conditions adequate to the needs of the profession, (4) command of English, both written and oral, and (5) possession of traits of character and personality expected in a teacher. A 1.25 overall average is required before admission to the program.

In addition to the general graduation requirements and a major or core concentration, elementary teaching candidates are required to take the following courses in education:

- | | |
|--|---|
| 40. Educational Foundations | 53. Elementary Curriculum and Instruction |
| 41. Fine Arts in the Elementary School | |
| 50. Educational Psychology | 63. Elementary Curriculum and Instruction |
| 52. Reading in the Elementary School | 65. Student Teaching, (2 courses) |

Elementary education students will take Physical Education 217, 218 as part of the six required physical education activities courses.

SECONDARY PROGRAM

Candidates for secondary school certification should make application for admission to the secondary program at the time they take their first course in education or by the end of their sophomore year. Applicants must have an overall grade point average of 1.5 and an average of 1.6 in their major or core concentration. Each individual applicant will be considered by the Secondary Teacher Selection Committee, and acceptance is based on the same criteria as listed under the elementary program.

In addition to the major or core concentration and the general graduation requirements, the following courses in education must be taken by students in the secondary program.

40. Educational Foundations
50. Educational Psychology
51. Secondary Curriculum and Instruction
64. Student Teaching, (2 courses)

Application forms and further information are available in Wood Hall, the Department of Education Building.

CONDENSED PROGRAM FOR CERTIFICATION

The condensed program is designed for the individual who already holds a bachelor's degree from an accredited college and who wishes to prepare for teaching on the elementary or secondary level.

For graduates of Macalester College, this means taking the required courses in education. Students who are graduates of other colleges must fulfill requirements for a degree from Macalester because the State of Minnesota will issue teaching permits only to individuals who are recommended for certification by the institution from which they earn a teaching degree. This entails taking the required courses in education and developing an academic or teaching major or core concentration to be built on a minor or group of courses already earned. Courses designed to broaden background may be required, depending upon the Registrar's evaluation of credits from other institutions. Usually at least two terms and one Summer Session of full-time work are needed to complete this condensed program.

Persons interested in this program should consult with Dr. Arnold Holtz, Chairman of the Department of Education, and with Mrs. Dorothy Grimmell, Registrar.

FIFTH YEAR PROGRAM

The Fifth Year Program, leading to the Master in Education degree, is designed to help elementary and secondary teachers improve both their subject-matter background and their ability to instruct. Most candidates enter the program with initial teaching certification. Applicants should have earned in their undergraduate work an overall average of 1.6 and an average of 2.0 for the final two years.

The program of studies (8 courses) for the M. Ed. degree is divided as follows: 5 to 6 courses in an academic concentration and 2 to 3 courses in professional education. The areas of concentration available are Art, English, Foreign Language, Mathematics, Music, Science, and Social Science.

Application forms and a bulletin with detailed information on the program may be obtained in Wood Hall, the Department of Education building.

DEPARTMENTAL ACTIVITIES

Student NEA. A student organization designed to acquaint prospective teachers with matters of professional interest. Affiliated with the National Education Association and the Minnesota Education Association. Open to all students interested in teaching as a life work.

Kappa Delta Pi. An honor society in education. Members elected on the basis of superior scholarship. Undergraduate members and alumni members meet regularly to discuss pertinent educational problems.

Teacher Placement Office. All Macalester graduates certified to teach may avail themselves of the services of the Teacher Placement Office, Wood Hall. A fee of \$5.00 is charged.

REQUIRED COURSES:

40. EDUCATIONAL FOUNDATIONS. Directions in curriculum based on a sociological and philosophical approach. Required of elementary and secondary students. Fall and spring terms.

41. FINE ARTS IN THE ELEMENTARY SCHOOL. Concepts of learning as they apply to the areas of art, music, and literature in the elementary school. Time allotment 2-2-1, respectively, for the areas listed. Required of elementary students. Fall and spring terms.

50. EDUCATIONAL PSYCHOLOGY. Human growth and development in the areas of childhood and adolescence. Required of elementary and secondary students. Fall and spring terms.

51. SECONDARY CURRICULUM AND INSTRUCTION. First half devoted to general principles and procedures in instruction, second half to application of these in the specific areas. Required of secondary students. Fall and spring terms.

52. READING IN THE ELEMENTARY SCHOOL. Approaches to the building of skills, abilities, and competencies in a developmental reading program. Required of elementary students. Fall and spring terms.

53. ELEMENTARY CURRICULUM AND INSTRUCTION. Science, health, and arithmetic in the elementary school. Methods and materials stressed. Required of elementary students. Fall and spring terms.

63. ELEMENTARY CURRICULUM AND INSTRUCTION. English-language arts and social studies in the elementary school. Special area methods and materials stressed. Required of elementary students. Fall and spring terms.

64. STUDENT TEACHING. Student teaching in the public schools at the secondary level. Observation as well as actual student teaching. Required of secondary students, two courses. Fall and spring terms.

65. STUDENT TEACHING. Student teaching in the public schools at the elementary level. Observation as well as actual student teaching. Required of elementary students, two courses. Fall and spring terms.

ELECTIVE, GENERAL CULTURE, AND FIFTH YEAR COURSES:

84. PHILOSOPHY OF EDUCATION. System approaches and philosophical analysis approach to education and educational language, respectively. One term and Summer Session.

90. GUIDANCE IN EDUCATION. Theories and principles and their application in teaching and counseling programs in elementary and secondary schools. Alternate years and Summer Session.

91. MEASUREMENT IN EDUCATION. Construction of teacher-made tests, statistical analysis of tests results, research methods, and understanding of standardized tests. Alternate years and Summer Session.

92. SCHOOL AND SOCIETY. Church and state, nationalism and education, politics and educational ideology, pressure groups and education, structure. Alternate years.

93. COMPARATIVE EDUCATION. Major national education systems on elementary, secondary, and collegiate levels in terms of aims, curriculum organization, and teaching methods. Summer Session.

96. INDEPENDENT STUDY IN:

CHILDREN'S LITERATURE
HISTORY OF EDUCATION
CURRICULUM
ADMINISTRATION AND SUPERVISION

PRE-SCHOOL CHILD
EDUCATION OF THE GIFTED
EDUCATION PROBLEMS

501. LEARNING IN EDUCATION. Theories and constructs with application to education. For Fifth Year Students. Summer Session and as demand warrants.

502. RESEARCH IN EDUCATION. Methodology--descriptive and experimental, statistical tools, and education design needed for M. Ed. paper. For Fifth Year Students. Summer Session and as demand warrants.

503. ELEMENTARY AND SECONDARY CURRICULUM. History, organization, control patterns, and trends of elementary and secondary school curriculum. For Fifth Year Students. Summer Session and as demand warrants.

504. FIFTH YEAR INTERNSHIP. General observation and participation in varied activities, plus actual teaching, in elementary or secondary schools. For Fifth Year Students. Fall and spring terms.

ENGLISH

Dr. Ray Livingston, Department Chairman

For profit and delight the Department of English teaches reading and writing by presenting for study the best that has been thought and written in the language. In its offerings of courses and in its counselling of students the department intends to shape both instruction and programs to the needs of the individual student.

GENERAL GRADUATION REQUIREMENT

Any course in English beyond the freshman level, excluding English 81, will satisfy general graduation requirements. Courses in Humanities also will satisfy general graduation requirements.

MAJOR CONCENTRATION

Eight (8) courses beyond the freshman level, generally excluding English 25 and 26. English 57 and 77 are especially recommended to those planning to attend graduate school. English 81 is recommended for those planning to teach in high schools. To complete this concentration, four (4) courses are to be elected in consultation with the adviser, generally from the humane disciplines and especially from the first two philosophy courses, humanities, and foreign literature.

CORE CONCENTRATION

Six (6) courses beyond the freshman level, including English 25 and 26, and usually at least one course devoted to a major figure --- Chaucer, Shakespeare, or Milton. The remaining courses, generally in the humane studies, should be arranged in consultation with the adviser.

(For a general statement about the nature of a core concentration, see page 9.)

FURTHER PREPARATION

Careful study of the works listed in the Syllabus for English and American Literature (provisional title) is recommended for all English majors, and especially for those planning graduate studies. In the senior year, all students applying for honors must secure a passing grade in an examination based upon these readings.

Students intending to go on to graduate studies should develop a proficient reading knowledge of one foreign language plus some acquaintance with its literature. At least one year of a second foreign language -- French, German, Latin or Greek -- is also recommended.

ADDITIONAL INFORMATION.

The first three sequences at the junior level -- 51, 52; 55, 56; 59, 60 -- may be taken by sophomores majoring in English or having the instructor's permission.

11,12. FRESHMAN ENGLISH. The reading of great works of literature and the writing of papers on these works.

25,26. SURVEY OF ENGLISH LITERATURE. Major figures from Beowulf through Eliot. The first term ends with Milton.

27,28. THE TWENTIETH CENTURY. Recent poetry and prose, some in translation, including the drama and the novel.

51, 52. LITERATURE IN THE UNITED STATES. From colonial times to the present. The second term begins with Twain.

55, 56. THE NINETEENTH CENTURY. Poetry and prose from Wordsworth through Hardy. The first term ends with Keats.

59, 60. THE RESTORATION AND THE EIGHTEENTH CENTURY. Poetry and prose from Dryden to Blake. The first term ends with Pope.

71. THE SEVENTEENTH CENTURY. Poetry and prose to 1660. Fall term.

72. MILTON. Major and minor poems and selected prose. Spring term.

75. SHAKESPEARE. Selected plays and the Sonnets. Spring term.

76. MEDIEVAL AND RENAISSANCE. Major works from Beowulf through The Faerie Queene, excluding Chaucer and Langland. Fall term.

77. CHAUCER AND HIS CONTEMPORARIES. Major works plus Piers Plowman. Spring term.

81. GRAMMAR AND RHETORIC. Principles, plus application in advanced writing. Designed for secondary school teachers. Fall term.

96. INDEPENDENT READING. Open to seniors who are candidates for departmental honors, fifth-year students preparing a paper, and others with the permission of the department. Either term.

97. TOPICS: (This course will be designated according to its content, which will vary. It may be Elizabethan drama, or imaginative writing; it may be literary criticism, or Spenser, etc.) Prerequisite, junior standing and permission of the department.

TEACHERS COURSE: See Education 51.

FRENCH

Dr. Borghild K. Sundheim, Department Chairman

There are three major objectives of the French Department, (1) progressive development of the ability to pronounce correctly, to understand, and to use the language orally; development of the ability to read books, periodicals, magazines and newspapers within the scope of the student's interests and intellectual powers, (2) development of an interest in the history, the institutions and the ideals of France, and (3) for advanced students, a survey knowledge and a critical evaluation of the leading writers and main currents of French literature.

In all Elementary, Intermediate, and Conversation courses extensive use will be made of the Foreign Language Laboratory.

GENERAL GRADUATION REQUIREMENT

The foreign language requirement may be met (a) by completing successfully two courses in French above the elementary level (e.g. French 31-32) or (b) by passing a test demonstrating language proficiency equivalent to that attained through successfully completing intermediate level courses (French 31-32) or (c) by completing successfully one course above the intermediate level.

MAJOR CONCENTRATION

A major concentration in French shall consist of a minimum of eight (8) courses beyond the elementary level (French 11,12 or equivalent). Required courses: French 31,32: Intermediate French, --- unless the student enters with a good preparation to begin on an advanced level, French 51,52: Elementary and Intermediate Conversation and Composition, French 53: French Civilization, French 73: The Classical Age, A Survey of Seventeenth Century French Literature.

To complete his major concentration a student may choose from among the other advanced course offerings.

At least four (4) supporting courses, chosen according to the student's vocational interest, are strongly recommended: (1) for those students who intend to teach French - courses in a second foreign language, English, Humanities, or history; (2) for those students who are going into government work, business or allied fields - supporting courses in Political Science, History, Economics, Geography.

CORE CONCENTRATION

The French Department offers two possibilities under the core plan: (1) Those who wish to specialize in language skills should take French 31, 32, 51, 52, 53, and 71; (2) Those who wish to specialize in literature should take French 31, 32, and four additional courses to be chosen from any of the advanced literature courses. For either of these patterns, the second sequence of six (6) courses are to be from outside the department; they are selected by the student with the approval of his adviser and the department(s) concerned. Some acceptable patterns would be:

- (a) Six courses in a second foreign language beyond the elementary level
- (b) Six courses in the Humanities
- (c) Six courses in English Literature beyond the freshman level
- (d) A combination of (b) and (c)
- (e) Six courses in History, Political Science, Geography which are relevant to France and the study of the French language.
- (f) Six courses from a group in the Comparative Arts, with at least one from each of the following: Art History, Music, Philosophy; the three other courses may be chosen from Religion, Speech, Humanities or English Literature.

(For a general statement about the nature of a core concentration, see page 9.)

11,12. ELEMENTARY FRENCH. Pronunciation, elementary conversation and reading, essentials of grammar. Five hours a week in class and laboratory.

31,32. INTERMEDIATE FRENCH. Review of grammar essentials, conversation and the reading of modern French texts. Four hours a week. Prerequisite: French 12 or two years of French in high school or equivalent, plus satisfactory score on the placement test.

34. SCIENTIFIC FRENCH. A reading course for students majoring in a science, elective as a substitute for French 32. Four hours a week. Prerequisite: French 31 or equivalent. Spring term.

51,52. ELEMENTARY AND INTERMEDIATE CONVERSATION AND COMPOSITION. Phonetics, intensive drill in comprehension, pronunciation and conversational practice. Review of the fundamentals of French grammar, and composition based on modern texts accompany the oral work. Four hours a week. Prerequisite: French 32 or equivalent.

53. FRENCH CIVILIZATION. The geography, history, institutions, and most important social, economic and political problems of modern France. Extensive use of audio-visual materials. Four hours a week. Prerequisite: French 32 or equivalent. Fall term.

61. ROMANTICISM. Early nineteenth century literature. Emphasis on the works of Chateaubriand, Mme de Stael, Lamartine, Hugo, Vigny and Musset. Four hours a week. Prerequisite: French 32 or equivalent. Fall term.

62. REALISM, NATURALISM, SYMBOLISM. Later nineteenth century literature. The novel and short story; Balzac, Flaubert, Maupassant, Daudet, Zola; drama; Dumas fils, Augier, Becque, Curel, Rostand; poetry: Parnassian and Symbolist groups. Four hours a week. Prerequisite: French 32 or equivalent. (French 61,62 will alternate with French 73,74.) Spring term.

71. ADVANCED CONVERSATION AND COMPOSITION. (Not offered 1963-64.)

73. THE CLASSICAL AGE. Seventeenth century literature. The great classic writers: Corneille, Racine, Moliere, Descartes, Pascal, LaFontaine, Boileau, and others. Four hours a week. Prerequisite: French 32 or equivalent. Fall term. (This course will alternate with French 61. Not offered 1963-64.)

74. THE AGE OF ENLIGHTENMENT. Eighteenth century literature. Major emphasis on Montesquieu, Voltaire, Rousseau, and the Encyclopedists. Four hours a week. Prerequisite: French 32 or equivalent. Spring term. (This course will alternate with French 62. Not offered 1963-64.)

76. CONTEMPORARY FRENCH LITERATURE. Contemporary novel, drama, poetry. Four hours a week. Prerequisite: French 32 or equivalent. Spring term.

95,96. INDEPENDENT STUDY. Advanced students may undertake individual projects involving library or laboratory research with a comprehensive report or thesis. Prerequisite, junior or senior standing, departmental approval. Either term.

98. SENIOR SEMINAR IN FRENCH LITERATURE. Studies to round out the field of the major concentration. Prerequisite, senior standing, departmental approval. Spring term.

TEACHERS COURSE: See Education 51.

GEOGRAPHY

Professor Hildegard B. Johnson, Department Chairman

An understanding of patterns of geographic distribution in the world, the ability to master geographic concepts, critical and intelligent use of geographic tools, particularly maps, are an integral part of liberalizing education. Human Geography is a liberal arts course serving students from all fields as well as those who want a concentration in geography. Systematic courses such as political, historical and economic geography, as well as the regional courses, enrich the background of students from various other fields of concentration. A core concentration in geography is designed to prepare the student for the teaching profession, work as a planner in federal agencies, business and industry, and for graduate school.

GENERAL GRADUATION REQUIREMENT

Any course in Geography may be used to fulfill the general graduation requirement in Social Science with the exception of Senior Seminar; however, Human Geography is considered as the course which would best serve the needs of students in fields other than geography.

CORE CONCENTRATION

A core concentration in Geography will consist of six (6) courses in Geography, which must include Geography 11, unless the student is excused by the instructor, and six (6) courses selected by the student in consultation with the department.

(For a general statement about the nature of the core concentration, see page 9.)

FURTHER PREPARATION

To meet minimum requirements for graduate work, a student pursuing a core concentration in Geography must also select Meteorology from the Physics department and Elementary Statistics from the Mathematics department.

11. HUMAN GEOGRAPHY. Introduction to basic concepts, principles and patterns of distribution, including units on population, physical environment, patterns of settlement, and urbanization. Introduction to map projections and shading techniques. Fall and spring terms.

40. EURASIA. The geography of Europe and the Soviet Union, including the Eastern European countries, with encouragement to intensify individual study of a country or region for which a student has a foreign language qualification. Fall term.

42. LATIN AMERICA. The geographic environment and cultural realm of Spanish and Portuguese speaking Americans. The study of Aztecs, Incas and other Indian pre-white settlement periods is encouraged. Spring term.

44. ECONOMIC GEOGRAPHY. Agricultural and industrial resources, trade patterns, phenomenology of location and dynamics of transportation. Resource attitudes and resource management. Spring term.

52. PHYSICAL RESOURCES. Emphasis on the physical geography of Anglo-America. One two-day and several half-day field trips. Spring term or summer camp.

55. CARTOGRAPHY AND AERIAL PHOTO INTERPRETATION. Skill in planning and designing simple maps and charts, understanding of techniques in applying data of modern techniques of mapping data. The role of aerial photography in planning. Fall or spring terms.

63. POLITICAL GEOGRAPHY. Boundaries and international problems, systematic study of boundary types, theories in political geography, intensive study in this course on specific problems of boundary friction for the purpose of training for an understanding of basic long-term contrasted with temporarily arising situations. Spring term.

65. HISTORICAL GEOGRAPHY. Geographic beliefs and traditions. History of related cultural landscapes with emphasis on the Middle West. Field observation and outside consultation of study aids in archives, map collections, and exercises in techniques of field notes and individual field work. Fall term.

90. AFRICA. The basic geographic features of Africa including climate, soils, landforms, water sources, etc. The cultural geography and the regional analysis are geared to the recognition of the ethnocentric viewpoints under which the knowledge about Africa developed. Spring term.

98. SENIOR SEMINAR. For geography core concentrations only. Individual study of the history of geographic thought and geographic discoveries. One paper on a topic selected by the student must include field work based on consultations with the instructor. Ability to read simple articles in French or German by French or German geographers will be promoted. Students will be encouraged to participate in research undertaken by the instructor. Fall or spring terms.

TEACHERS COURSE: See Education 51.

GEOLOGY AND ASTRONOMY

Dr. Waldo S. Glock, Department Chairman

The Department of Geology and Astronomy has two purposes: (1) cultural--to provide non-science oriented students with an understanding of the earth and its life, in space and time; and (2) professional--to prepare qualified students for graduate school or for geological surveys. These purposes are carried out by attention to principles, to discussion, to scientific literature, to field work, and to individual problems.

GENERAL GRADUATION REQUIREMENT

The standard sequence in first-year Geology consists of Physical Geology and Historical Geology. The four first-year courses are, in general, open individually or in sequence to anyone who has had no college geology. All other courses are open to qualified students or by permission of the department.

MAJOR CONCENTRATION

Eight (8) or nine (9) courses in geology exclusive of Geology and Man and Ancient Life; Senior research project and thesis; Mathematics 21, and Chemistry 12

CORE CONCENTRATION

Six (6) courses (including only two (2) first year courses) in geology and six (6) courses outside the department selected by the student in consultation with the department.

(For a general statement about the nature of a core concentration, see page 9.)

FURTHER PREPARATION

Students preparing for graduate study with a major concentration in the Geosciences should ordinarily elect the following in consultation with the department: two (2) courses in Mathematics, two (2) in Chemistry, two (2) in Physics, and one in Biology. A reading knowledge of either German, French, or Russian is strongly recommended.

DEPARTMENTAL ACTIVITIES

- a) A seminar and Geology Club meeting is held one hour per week, open to all who are interested.
- b) Field trips are an integral part of all courses in geology. Non-majors and others interested are encouraged to participate.
- c) Visiting geoscientists are guest speakers in the department from time to time.
- d) THERE IS A COOPERATIVE PROGRAM BETWEEN MACALESTER COLLEGE AND THE MUSEUM OF NORTHERN ARIZONA.

The Northern Arizona Society of Science and Art, Inc., which operates the Museum of Northern Arizona and the Research Center, and Macalester College have agreed that the facilities of the Research Center and the Museum of Northern Arizona provide unusually fine training and research facilities in the fields of Biology, Geology, Anthropology, and Art.

Field work and independent research for a limited number of Macalester students can be undertaken at the Museum's Research Center with the approval of the department concerned and the Director of the Museum.

The Museum offers summer research assistantships in Biology, Geology, Art and Anthropology, for which qualified students at Macalester may apply, subject to prior approval by the Department Chairman, the Director of the Museum and the Dean of the College.

- e) The Tree-Ring Research Laboratory carries on investigations in tree growth and climate; students interested in research may participate.

11. PHYSICAL GEOLOGY. Materials of the earth's crust and the processes shaping and changing features of the earth. Three lectures and one two-hour laboratory period a week, local field trips. Fall term.

12. HISTORICAL GEOLOGY. Origin of the earth and solar system; geologic development of the North American continent and the life it has supported throughout geologic time. Three lectures and one two-hour laboratory period a week, local field trips and all-day field trip to Taylor's Falls in May. Spring term.

15. GEOLOGY AND MAN. Work of wind, water, and glaciers in shaping the land features of the earth; the history of the earth and of the chief advances in life throughout geologic time. Three lectures and one two-hour laboratory period a week, local field trips, all-day field trip to Taylor's Falls. Fall and spring terms.

16. ANCIENT LIFE. Origin and development of life on the surface of the earth as determined from sedimentary rocks and their contained fossils. Three lectures, one two-hour laboratory period a week and an all-day field trip to southeastern Minnesota. Fall and spring terms.

31. MINERALOGY. Crystallographic structure and symmetry of minerals and identification of economic minerals through their physical, chemical and optical properties. Prerequisite, one course in chemistry. Three lectures and one two-hour laboratory period a week. Fall term. (Offered alternate years.)

32. STRUCTURAL GEOLOGY. Original and secondary features of rocks. Mechanics of rock deformation and structural techniques. Problems in orogenesis and geotectonics. Prerequisite, Geology 11 and 31. Three lectures and one two-hour laboratory a week. Three-day field trip to Baraboo, Wisconsin. Spring term. (Offered alternate years)

51. INVERTEBRATE PALEONTOLOGY. Taxonomy, morphology, ecology, and evolution of the invertebrate fossils. Prerequisite, Geology 12 or consent of instructor. Three lectures and one two-hour laboratory period a week, local field trips and one all-day field trip to southeastern Minnesota. Spring term. (Offered alternate years.)

61. GEOMORPHOLOGY. Physiographic processes affecting the development of land forms with attention to current problems and research. Prerequisite, Geology 11. Three lectures and one two-hour laboratory period a week, three-day field trip to Baraboo, Wisconsin. Fall term.

62. ADVANCED HISTORICAL GEOLOGY. Details of the Historical Geology of North America, distribution of strata, columnar sections, and analysis of current problems. Prerequisite, Geology 11 and, for the geology major concentration, Geology 32. Three lectures and one two-hour laboratory period a week. Spring term.

64. REGIONAL GEOLOGY OF THE UNITED STATES. Physiography, structure, stratigraphy, and mineral deposits of the physiographic divisions of the United States. Prerequisite, Geology 11, 12, 31 and 32. Three lectures and one two-hour laboratory period a week. Spring term. (Offered alternate years.)

95,96. INDIVIDUAL RESEARCH PROBLEMS. Independent study of geologic problems or in tree-ring analysis; preparation of senior research thesis. Prerequisite, Geology major concentration or by consent of department head. Either term.

ASTRONOMY

13. ASTRONOMY. The solar-system -- its constitution, its intra- and inter-relationships, its dynamics, and its position in the universe. Three lectures and one evening laboratory in the Wilkie Observatory a week. Fall term.

14. ASTRONOMY. Our galaxy and other stellar systems -- their constitution, inter-relationships, dynamics, and position in the universe. Three lectures and one evening laboratory in the Wilkie Observatory a week. Spring term.

TEACHERS COURSE: See Education 51.

GERMAN

Professor Evelyn A. Albinson, Department Chairman

The purpose of the major sequence is to equip the student with language skills necessary to the study of German literature and culture, and to prepare him to teach the language or to continue the study of the literature in graduate school.

In all Elementary, Intermediate and Conversation courses extensive use will be made of the Foreign Language Laboratory.

GENERAL GRADUATION REQUIREMENT

The general graduation language requirement may be met:

- a. by completing successfully two courses in German above the elementary level, (Courses 11 and 12).
- b. by passing a qualifying test and demonstrating language proficiency equivalent to that attained by successful completion of intermediate level course.
- c. or by completing successfully one course above the intermediate level.

MAJOR CONCENTRATION

A departmental major in German shall consist of: a minimum of eight (8) courses beyond the elementary level (German 11 and 12, or their equivalent). A major shall include the following required courses: 31, 32, 51, 52, 53. At least four supporting courses to be chosen according to the vocational interests of the students are strongly recommended. For those interested in teaching German: 1) another foreign language; 2) humanities; 3) English; 4) history. For those interested in government service: 1) political science; 2) economics; 3) history.

CORE CONCENTRATION

The core concentration for teachers shall include six (6) courses: German 31, 32, 51, 52, 53, and one additional literature course.

The core concentration for those planning graduate study courses should include six (6) courses: German 31, 32; and four courses to be chosen from literature offerings.

In addition courses from outside the department to be selected by the student with the approval of his adviser and the department concerned would include the following acceptable patterns: 1) six courses in a second foreign language beyond elementary level; 2) six courses in humanities; 3) six courses in English literature beyond freshman level; 4) a combination of 2 and 3; 5) six courses in history, political science, and geography to be chosen from courses relative to German; 6) six courses from the comparative arts with at least one from each of the following disciplines: art history, music, philosophy. The other three may be chosen from religion, speech, humanities, and English literature.

(For a general statement about the nature of a core concentration, see page 9.)

11,12. ELEMENTARY GERMAN. Intended for beginning students in German or for students with insufficient knowledge for Intermediate German. Four class hours a week plus a regularly scheduled laboratory period.

31,32. INTERMEDIATE GERMAN. Grammar review, conversation and selected readings in classical and modern German texts. Students with two years of high school German will be admitted after satisfactorily passing a qualifying foreign language examination. Prerequisite, German 12. Four hours a week.

34. SCIENTIFIC GERMAN. Reading material from the various sciences forms the basis for a study of vocabulary and translation techniques. Prerequisite, German 31 or by examination. Four hours a week. Spring term.

51. ELEMENTARY CONVERSATION AND COMPOSITION. Special emphasis placed on pronunciation and general audio-lingual proficiency. Four hours a week. Fall term.

52. INTERMEDIATE CONVERSATION AND COMPOSITION. Prerequisite, German 51, or its equivalent. Four hours a week. Spring term.

53. HISTORY OF GERMAN LITERATURE. From its beginnings up to modern times. Prerequisite, German 31, 32, 34, or equivalent. Four hours a week. Fall term. (Offered alternate years.)

61. GERMAN LYRIC POETRY FROM LUTHER TO RILKE. Including consideration of German contributions to music. Prerequisite, German 53. Four hours a week. Fall term. (Offered alternate years.)

62,63. THE CLASSICAL PERIOD IN GERMAN LITERATURE. Selected representative works of Lessing, Goethe, and Schiller, etc. Prerequisite, German 53. Four hours a week. (Offered alternate years.)

64. GERMAN NOVELLE OF THE 19th CENTURY. Including the works of the German romanticists Eichendorff, Brentano, Tieck, and Hoffman; and of the German realists Kleist, Keller, and Meyer. Prerequisite, German 53. Four hours a week. Spring term. (Offered alternate years.)

65. GERMAN DRAMA OF THE 19th CENTURY. Featuring dramas of Kleist, Hebbel, and Grillparzer. Prerequisite, German 53. Four hours a week. Spring term. (Offered alternate years.)

66. 20th CENTURY LITERATURE. Selected readings of contemporary German writers. Prerequisite, German 53. Four hours a week. Spring term.

95. INDEPENDENT STUDY. Advanced students may undertake individual projects involving library or laboratory research, with a comprehensive report or thesis. Prerequisite, departmental approval. Either term.

97. SPECIAL STUDIES FOR SENIORS. Studies to round out the field of the major or core concentration in German. Also designed to give students an opportunity to study German texts related to their major or core concentrations originating in other departments such as History, Philosophy, Psychology, Religion, Sociology, and others. Prerequisite, German 53. Either term.

TEACHERS COURSE: See Education 51.

GREEK

Dr. Georgiana P. Palmer, Department Chairman

The program in Greek intends to give the student progress in the knowledge and understanding of the Greek language, literature, and culture, especially in their relation to our own language and literature.

GENERAL GRADUATION REQUIREMENT

The General Graduation Requirement in language may be met by the completion of two courses above the elementary level. In Greek the student may select from courses 31, 32, 33, and 35. It is also possible to demonstrate proficiency at the intermediate level by (a) testing out or (b) by completing successfully one course above the intermediate level.

MAJOR CONCENTRATION

Eight (8) courses beyond the elementary level. History 54 and Philosophy 11 are strongly recommended.

CORE CONCENTRATION

Six (6) courses in Greek plus six (6) courses in Latin or another language or six (6) courses to be chosen from: History 54 and relevant courses in Literature, humanities, fine arts, philosophy, and social sciences.

(For a general statement about the nature of a core concentration, see page 9.)

11. ELEMENTARY GREEK. A study of the elements of the language. Drill in forms, vocabulary, and composition. Fall term.
12. ELEMENTARY GREEK. Continuation of the study of grammar with readings from Xenophon's Anabasis. Spring term.
31. HERODOTUS. Offered only once in three years. Fall term.
32. NEW TESTAMENT. Spring term.
33. ILIAD. Offered only once in three years. Fall term.
35. PLATO. Apology, Crito, and part of Phaedo. Offered only once in three years. Fall term.
- 53, 54. GREEK CIVILIZATION. Readings in Greek and English on history, art, religion, and mythology.
63. GREEK ORATORY. Reading in Greek. (Not offered 1963-64.)
64. GREEK TRAGEDY. Reading in Greek. Spring term.
- 95, 96. ADVANCED READING. Chosen after consultation between teacher and student. Possible choices include comedy, lyric poetry, and philosophy. Either term.

HISTORY

Dr. Yahya Armajani, Department Chairman

The Department of History offers courses in the development of ideas and institutions throughout the different eras and in different cultural centers. Courses in history contribute to the preparation of students for teaching, the ministry, foreign service, research, and a better understanding of one's place in society.

GENERAL GRADUATION REQUIREMENT

11. TWENTIETH CENTURY WORLD fulfills the requirement in Social Science for the general graduation requirement. If properly prepared, a student may elect higher level courses to fulfill the general graduation requirement.

MAJOR CONCENTRATION

A. History

- Eight (8) courses to be chosen from the following areas:
- American History--Two courses (may include Area Studies)
 - European History--Two courses (may include Area Studies)
 - Non-Western History--Two courses (may include Area Studies)
 - Philosophy of History--One course
 - Elective--One course

(At least two of the above courses must be seminars, one of which is Philosophy of History.)

B. Supporting courses

Since those who choose History as their field of concentration have varied post-college plans, it is undesirable to hold them to a predetermined and rigid program. Consequently students will be advised individually and will take four supporting courses depending upon their plans.

CORE CONCENTRATION

Six (6) courses in History to be distributed as follows:

Philosophy of History -- One course

Five other courses, two from each of two areas and one from the remaining area. (For description of areas, see "A" under the major concentration)

The additional six courses will be selected from the field desired by the student in consultation with the chairman of the Department of History.

The above pattern will apply to the program of Social Science core concentration. (see page 19.)

A core concentration may also be taken in connection with the American Studies Sequence consisting of six courses in history, three in political science and three courses in American literature and philosophy.

(For a general statement about the nature of a core concentration, see page 9.)

PARTICIPATION IN OTHER PROGRAMS

The Department of History cooperates in the Area Studies Program and in the Program of International Studies.

11. TWENTIETH CENTURY WORLD. Causes of the two world wars; rival philosophies such as Democracy, Fascism, and Communism; the breakdown of imperialism; and the phenomena of the emerging nations. Fall and spring terms.

50. NATIONAL HISTORY OF THE UNITED STATES TO 1865. Institutional, political, and cultural development. Fall term.

51. NATIONAL HISTORY OF THE UNITED STATES SINCE 1865. Institutional, political, and cultural development. Spring term.

52. TWENTIETH CENTURY AMERICA. Progressivism, Liberalism, and Conservatism, and world relations. Fall term. (Not offered 1963-64.)

53. AMERICAN DIPLOMATIC HISTORY. Foreign relations of the United States. Spring term.

54. THE ANCIENT WORLD. The Middle East, Greece, and Rome. Fall term. (Not offered 1963-64.)

55. FRENCH REVOLUTION. Political, social, economic and intellectual antecedents; the Revolution ideologically and institutionally; and the Napoleonic era. Spring term.

56. EUROPE AND THE WORLD, 1815-1914. Development of such forces as nationalism, science, imperialism, religion, and materialism. Fall term.

57. EXPANSION OF EUROPE. European colonialism and rising nationalism 1878 to the present. Spring term. (Not offered 1963-64.)

58. ENGLISH HISTORY. Social, political, economic and constitutional. Fall term.

59. HISTORY OF RUSSIA. Social, religious, and political institutions of Tzarist Russia and their transformation under Marxian philosophy in the Soviet period. Spring term.

60. HISTORY OF THE FAR EAST. India, China, and Japan before and after their encounter with the West. Fall term. (Not offered 1963-64.)

61. HISTORY OF THE MIDDLE EAST. The political, social and religious institutions of Islam in Iran, Turkey and the Arab world and their transformation in the encounter with the West. Spring term. (Not offered 1963-64.)

92. SECTIONAL APPROACH TO AMERICAN HISTORY TO 1865. Inter-relationship of geographic factors to the history and development of the United States. Seminar. Fall term.

93. SECTIONAL APPROACH TO AMERICAN HISTORY SINCE 1865. Inter-relationship of the geographic factors to the history and development of the United States. Seminar. Spring term.

94. AMERICAN THOUGHT AND CIVILIZATION. The interplay of political, religious, social, economic and scientific thought and institutions in the United States. Seminar. Fall term.

97. RENAISSANCE REFORMATION. Intellectual, religious and political foundations of Western Civilization. Seminar. Spring term. (Not offered 1963-64.)

98. PHILOSOPHY OF HISTORY. Historiography and an analysis of different philosophies of history from the ancient times to the present. Seminar, senior standing. Fall term.

NOTE: The above courses, except for course 93, may be taken as independent study courses by special arrangement with the chairman of the department.

TEACHERS COURSE: See Education 51.

JOURNALISM

Professor Ivan C. Burg, Department Chairman

The objectives of the department are to prepare students for careers in news media, teaching, research, and graduate study. In the writing courses, stress will be placed on the correct use of the English language. Students planning to enter graduate school should acquire a minimum of four journalism courses. The

department offers neither a major nor a core concentration. These courses may be taken as electives as part of a concentration in a related field.

FURTHER PREPARATION

Students who wish to prepare for professional or graduate work in journalism may, upon consultation with the chairman of the department, choose courses in journalism for such qualification.

11. INTRODUCTION TO AND HISTORY OF JOURNALISM. A study of the news media and its history in the United States. Four hours per week. Fall term.

12. NEWS REPORTING AND EDITORIAL WRITING. A study and practice of writing the news, reporting it, and commenting upon it. Four hours per week. Fall term.

33. NEWS EDITING, COPYREADING, AND TYPOGRAPHY. Newspaper copyreading methods, news display, headline writing, newspaper makeup, evaluation of news stories, types, and typefaces. Four hours per week. Spring term.

34. PUBLIC OPINION AND NEWS ANALYSIS. A study of propaganda techniques and a study of media through which contemporary events reach the public. Four hours per week. Spring term.

65. MAGAZINE WRITING AND PUBLISHING. An analysis of the magazine publishing field and practice in writing magazine articles. Four hours per week. Fall term.

66. PRINCIPLES OF ADVERTISING. Organization of the advertising industry media with concentration on methods of determining advertising effectiveness; retail advertising, the economic and social aspects of advertising. Four hours per week. Fall term.

77. PRINCIPLES OF PUBLIC RELATIONS. A study of the techniques of, and the results between institutions and their publics; the manner and media by which good results are obtained. Four hours per week. Spring term.

78. LAW OF THE NEWS MEDIA. A study of news media, libel, and the laws that govern news media. Four hours per week. Spring term.

98. SEMINAR COURSE. Open with the consent of the department to advanced students. Either term.

LATIN

Dr. Georgiana P. Palmer, Department Chairman

The Department of Latin intends to make the student as familiar as possible with the Latin language and with the literature and culture of ancient Greece and Rome, especially in their relation to our own language and literature.

GENERAL GRADUATION REQUIREMENT

The general graduation requirement in language may be met by the completion of two courses above the elementary level. In Latin the student may select

courses 31 and 32. It is also possible to demonstrate proficiency at the intermediate level by (a) testing out or (b) by completing successfully one course above the intermediate level.

MAJOR CONCENTRATION

A major concentration shall consist of a minimum of eight (8) courses beyond the elementary level, or its equivalent. 53, 54, and 55 must be included. History 54 strongly recommended as a supporting course.

CORE CONCENTRATION

Six (6) Latin courses beyond the elementary level. Those intending to teach must include 53, 54 and 55. Also required are (a) six (6) courses in another language or (b) six (6) courses to be chosen from History 54 and relevant courses in literature, humanities, fine arts, philosophy, and social sciences.

(For a general statement about the nature of a core concentration, see page 9 .)

11,12. ELEMENTARY LATIN. A study of Latin grammar with the reading of easy Latin, followed in the spring term by selections from Ceasar.

31. INTERMEDIATE LATIN. A thorough review of first year grammar followed by readings from Cicero. Fall term.

32. INTERMEDIATE LATIN. Vergil's Aeneid. Spring term.

53,54. ROMAN CIVILIZATION. Literature, life, and art. Some materials read in English and some in Latin.

55. READING AND COMPOSITION. Composition based on Latin prose writers. Fall term.

63. LUCRETIUS AND LYRIC POETRY. Fall term.

64. NARRATIVE POETRY AND SATIRE. Spring term.

95,96. ADVANCED READING. Author and choice of materials determined by needs and preferences of student. Either term.

TEACHERS COURSE: See Education 51.

MATHEMATICS

Professor Ezra J. Camp, Department Chairman

The Department of Mathematics has four principal objectives:

- 1) To bring to students who are not concentrating in science an appreciation of the nature, methods, and applications of mathematics.
- 2) To develop in science students competence in the use of mathematics.

- 3) To give a sound preparation to future teachers of high school mathematics.
- 4) To provide a thorough undergraduate training to those students who will go on to graduate study of mathematics.

Course 16 (and perhaps courses 14 and 70) is designed for the first group. The remainder of the courses are primarily intended to serve the needs of the other three groups of students. Courses numbered above 52 are primarily intended for the latter two groups.

It is important, however, that each student work out his program of mathematics courses in consultation with a faculty member who is familiar with the content of the various offerings, and with the requirements of the vocations in which the student is interested.

GENERAL GRADUATION REQUIREMENT

Each course offered by the Department of Mathematics, with the exception of course 11, will apply toward the graduation requirement of a non-laboratory course in Science. For those students who will not need a knowledge of calculus, courses 14 or 16 are perhaps most advisable.

MAJOR CONCENTRATION

The major concentration will consist of a minimum of eight (8) courses selected from courses numbered 21 or higher.

CORE CONCENTRATION

The core concentration should ordinarily consist of six (6) courses in mathematics, and six (6) courses not in mathematics. At least four (4) of the latter must be in a single department. In all cases the pattern for the core concentration of work must be approved by the head of the department. Following are two sample core concentrations:

- I Mathematics 21, 31, 32, 61, 62, and 70
and
Philosophy 11, 22, 40, and 65
and
Psychology, Introductory 11 and 12

- II Mathematics 14, 21, 31, 32, 51, and 61
and
Four courses in Economics, two courses in a Social Science

(For a general statement about the nature of a core concentration, see page 9 .)

FURTHER PREPARATION

Any student who wishes to prepare for graduate work or research in mathematics should obtain a reading knowledge of German, Russian, or French.

PLACEMENT TEST

Students who intend to take courses involving calculus should take the mathematics pre-test, preferably when entering Macalester, to determine whether they should enroll in Mathematics 11 or 21.

11. BASIC COLLEGE MATHEMATICS. For students who are not prepared to enter course 21. Will emphasize college-level topics in algebra and trigonometry, and is intended to prepare students for satisfactory work in Mathematics 21. Fall and spring terms.

14. INTRODUCTION TO STATISTICS. An introduction to the theory and applications of statistics, suitable for students in the physical, biological, and social sciences, and for liberal arts students in general. Students should have a knowledge of high school algebra. The course will stress both logical development and practical utilization. Topics to be considered include: probability, distributions, measures of dispersion, sampling, testing of hypotheses, and correlation. Spring term.

16. FUNDAMENTAL MATHEMATICS. Designed to give students in the social sciences, humanities, and the arts some knowledge of the nature, logical structure, and application of mathematics, in addition to some proficiency in the elementary algebraic operations. Topics to be considered will include, logic, the nature of mathematical proof, number systems, algebraic systems, and sets. Spring term.

21. ANALYTIC GEOMETRY AND CALCULUS. An integrated course in analytic geometry and calculus, open to students who have a strong background preparation in algebra and trigonometry. Prerequisite, satisfactory score on pre-test or Mathematics 11. Fall and spring terms.

31. CALCULUS. Further study of the differentiation and integration of functions of a real variable, with applications in geometry and the sciences. Prerequisite, Mathematics 21. Fall and spring terms.

32. CALCULUS. Solid analytic geometry, infinite series, partial derivatives, multiple integrals, applications in geometry and the sciences. Prerequisite, Mathematics 31. Fall and spring terms.

50. DIFFERENTIAL EQUATIONS. A study of the more common types of ordinary differential equations which occur in geometry, mechanics, and physics; special emphasis on equations of first and second order and linear equations with constant coefficients. Prerequisite, Mathematics 32 or consent of instructor. Fall term.

51. MATHEMATICAL STATISTICS. A mathematical treatment of selected topics from statistics. Prerequisite, Mathematics 14 and 32. Spring term. (Offered 1964-65 and alternate years.)

52. ADVANCED CALCULUS. The calculus of vector-valued functions. Topics to be considered will include line integrals, transformations of multiple integrals, improper integrals, the inverse function theorem, the theorems of Green, Gauss, and Stokes, and Fourier series. Prerequisite, Mathematics 32. Spring term.

54. MODERN GEOMETRY. The various postulates of Euclidean and non-Euclidean geometry. Projective geometry and its relations to affine, Euclidean, hyperbolic, and elliptic geometries will be considered. Prerequisite, Mathematics 32. Fall term. (Offered 1963-64 and alternate years.)

61. LINEAR ALGEBRA. Vectors and vector spaces, matrices, systems of linear equations, determinants. Prerequisite, Mathematics 32. Fall term. (Offered 1963-64 and alternate years.)

62. ABSTRACT ALGEBRA. Topics to be considered will include groups, rings, fields, and properties of number systems. Prerequisite, Mathematics 61. Spring term. (Offered 1963-64 and alternate years.)

70. SYMBOLIC LOGIC. Basic procedures and findings of modern symbolic or mathematical logic. Also listed as Philosophy 70. Prerequisite, Philosophy 40. Spring term. (Offered 1963-64 and alternate years.)

81. THEORY OF FUNCTIONS. (Complex Variables). Topics covered will include the algebra of complex numbers, analytic functions, the Cauchy-Riemann equations, Cauchy's theorem, the Cauchy integral formula, Taylor and Laurent series, the residue theorem, and conformal mapping. Prerequisite, Mathematics 52. Fall term. (Offered 1964-65 and alternate years.)

82. THEORY OF FUNCTIONS. (Real Variables). Will cover such topics as the topology of the real line, metric spaces, continuity and differentiability of functions, functions of bounded variation, the Riemann-Stieltjes integral, the Stone-Weierstrass theorem, and an introduction to the Lebesgue integral. Prerequisite, Mathematics 52. Spring term. (Offered 1964-65 and alternate years.)

95. INDEPENDENT STUDY. Will be conducted as a seminar, with the students lecturing. The subject matter will vary from year to year, and will usually be in the field of special competency of the supervisor. Open only on the consent of the instructor, and limited to students who have at least a B average in five or more courses in Mathematics. Fall term.

96. INDEPENDENT STUDY. A continuation of course 95. Each student will be assigned a special topic to investigate, under the guidance of a supervisor, and the results of the investigation must be written up in a paper which is acceptable to the supervisor and to the Mathematics Department. Prerequisite, Mathematics 95. Spring term.

TEACHERS COURSE: See Education 51.

MUSIC

Professor Ian A. Morton, Department Chairman

The Department of Music provides or prepares for the training essential to professional musical activity. Courses of study, private lessons in a variety of instruments and voice, and public musical performance are carefully balanced in the sequences designed for students concentrating in music.

Students who wish to pursue music as an avocation or for its enjoyment as a cultural resource will find opportunities for private study, ensembles and particular courses which may fit their individual purposes. Such studies may be undertaken either within the core concentration sequence or independently of it. Any Macalester student may begin or continue private study on an instrument or in voice, and all Macalester students are invited to audition for membership in the Band, Choir, Little Choir, Orchestra, Pipe Band, and Chamber Music Ensemble.

GENERAL GRADUATION REQUIREMENT

Normally Music 10 will be taken to satisfy the general graduation requirement. Permission may be granted by the Head of the Music Department to substitute Music 41, 42, 43, 52, or 53.

MAJOR CONCENTRATION

Major Concentration in Music. Music 11, 12, 21, 22, 41, 42, 43, 52, 53, and one elective from 91, 92, 93, or 94.

Major Concentration in Music For Teacher Preparation. Music 11, 12, 21, 41, 42, 43, 52, 53, 71 and 72.

CORE CONCENTRATION

Music 11, 12, 21 and any three courses from Music 41, 42, 43, 52, and 53. Six (6) courses outside the department selected by the student in consultation with the department.

(For a general statement about the nature of a core concentration, see page 9.)

10. BACH, MOZART, BEETHOVEN, STRAVINSKY. The music of these four composers in the context of their cultural surroundings. Fall and spring terms.

11. BEGINNING HARMONY. Rudiments of musical notation, theory of tonal relationships, beginning composition in simple homophonic forms. Fall term.

12. BEGINNING COUNTERPOINT. Simple contrapuntal compositions of tonal nature. Prerequisite, piano sufficiency. Spring term.

21. THEORY OF HARMONIC STRUCTURE. Advanced harmonic structures related to the views of various theoreticians. Fall term.

22. COMPOSITION. Preparation of original pieces for public presentation. Spring term.

41. HISTORY OF THE PRE-BAROQUE ERA. A synopsis of the music in early civilizations and a general history of music's development from the Golden Age of Greece through the Renaissance. Fall term.

42. MUSIC LITERATURE - BAROQUE. Performance by students and others of selected works written from the time of Monteverdi to Handel. Considerations of history and analysis of style and form. The music literature courses are coordinated with the individual student's private instrumental or vocal lessons. The

literature sequence may be started only in the second term. Three class meetings and one private lesson each week. Spring term.

43. MUSIC LITERATURE - CLASSIC. Same as Music Literature - Baroque, except the period covered is from the Mannheim School to early Beethoven. Fall term.

52. MUSIC LITERATURE - ROMANTIC. Same as Music Literature-Baroque, except the period covered is from middle Beethoven through Mahler. Spring term.

53. MUSIC LITERATURE - CONTEMPORARY. Same as Music Literature - Baroque, except the period covered is from Debussy to the present. Fall term.

71. SECONDARY SCHOOL MUSIC - INSTRUMENTAL. The principal instruments of orchestra and band, and methods of teaching them, together with their solo and ensemble literature. Fall term.

72. SECONDARY SCHOOL MUSIC - CHORAL. The voice and its development. The choral literature for secondary schools. Spring term.

91. MODAL COUNTERPOINT. Writing in the forms and employing the practices of the 16th century. Prerequisite, Music 22. Fall and spring terms.

92. ADVANCED COMPOSITION. Preparation and public presentation of at least one original major composition. Prerequisite, Music 22. Fall and spring terms.

93. EXPERIMENTAL MUSIC. Preparation and public presentation of an original work involving unusual techniques or sound sources such as music for tape recorder, music derived by change, music for percussion alone. Fall and spring terms.

94. INTERPRETATION. Performance style developed from studies of masterworks involving typical interpretive problems. Prerequisite, Music 53. Fall and spring terms.

MUSICAL ORGANIZATIONS

The following organizations are open to all Macalester students. Selection of members is normally made on the basis of audition in the fall. All members are expected to remain active throughout the entire year.

111,112. THE MACALESTER COLLEGE BAND. Public presentation of selected works from the concert band literature.

113,114. THE MACALESTER COLLEGE PIPE BAND. Instruction in the pipes and drums. Performances at Macalester and community functions.

115,116. THE MACALESTER COLLEGE ORCHESTRA. Public presentation of selected works from the orchestral literature.

117,118. THE MACALESTER COLLEGE CHOIR. Public presentation of at least two major choral works with full orchestra, anthems and other music for the college chapel, other collegiate and community appearances.

215,216. THE MACALESTER CHAMBER MUSIC ENSEMBLE. Preparation of trio, quartet, and small ensemble literature.

217,218. THE MACALESTER COLLEGE LITTLE CHOIR. A selected group of about 40 singers from the Macalester College Choir. Presentation of chamber music with and without orchestra.

STUDIO COURSES

Private lessons may be taken by any Macalester student with or without credit. When taken in conjunction with music literature courses (Music 42, 43, 52, or 53), a grade and credit is given. When taken apart from these courses, a grade, but no credit is given.

121,122. CLASS LESSONS IN PIANO. Open to students with less than one year of previous piano study. Each class consists of four students.

101,102. PRIVATE MUSIC LESSONS. Instruction in instrument or voice, Freshman level.

201,202. PRIVATE MUSIC LESSONS. Instruction in instrument or voice, Sophomore level.

301,302. PRIVATE MUSIC LESSONS. Instruction in instrument or voice, Junior level.

401,402. PRIVATE MUSIC LESSONS. Instruction in instrument or voice, Senior level.

TEACHERS COURSE: See Education 51.

PHILOSOPHY

Dr. Hugo W. Thompson, Department Chairman

The purpose of philosophy courses is to assist the student in careful interpretation and evaluation of material from all fields of human experience and inquiry. Emphasis is placed upon solid grounding in logical thinking and in the history and major problems of philosophy. As a field, concentrations may lead one to college teaching, or become ground for religious, political, or other careers. As a method, philosophy encourages attention to a sound theoretical framework in the sciences, the arts, education, and all fields of academic or practical endeavor.

GENERAL GRADUATION REQUIREMENT

Philosophy 11 will fulfill the graduation requirement, but 21, 22, 40, 50, or other courses may be substituted with the consent of the department.

MAJOR CONCENTRATION

A major concentration consists of eight (8) courses including 21, 22, 40, 97 with 50 and/or 65. The student will take at least three (3) courses in a field related to his special philosophical interest.

CORE CONCENTRATION

A core concentration consists of six (6) courses including 21, 22, 40, 97 and 50 or 65, together with three (3) courses in each of two (2) other departments or four (4) or more courses in one other department, selected for relevance to a special field of philosophical interest. For example:

- a. For Social Philosophy, take History, Political Science, or other Social Sciences.
- b. For Philosophy of Science, take Mathematics and a laboratory science.
- c. For Aesthetics, take Literature, Fine Arts and Humanities courses.
- d. For Philosophy of Education, take 4 to 6 courses in Education.
- e. For Metaphysics, take Religion and Science.
- f. For Problems of Knowledge, take Psychology, Mathematics, or Fine Arts.

Note a wide range of other possibilities. The student will plan his core concentration with his adviser.

(For a general statement about the nature of a core concentration, see page 9.)

11. GREAT PHILOSOPHERS. Selected works of Plato, Aristotle, Augustine, Berkeley, Nietzsche, Whitehead. Fall and spring terms.

21. PHILOSOPHICAL FOUNDATIONS. From the beginning of Western philosophical thought, using ancient and medieval sources, and early modern thinkers to Kant. Fall term.

22. RECENT PHILOSOPHY. Major philosophers of the nineteenth and twentieth centuries. Spring term.

40. LOGIC AND SCIENTIFIC METHOD. Principles and methods of critical inquiry, analysis of meaning, formal logic, the logic of modern science. Fall term.

50. VALUE THEORY AND ETHICS. The nature of value and of moral obligation, with applications to selected problems of personal and social behavior. Fall and spring terms.

65. KNOWLEDGE AND METAPHYSICS. Basic concepts and presuppositions underlying all modes of inquiry, including the nature of knowledge and the tests of truth. Spring term.

70. ADVANCED LOGIC. Procedures and findings of symbolic or mathematical logic. Identical with Mathematics 70. Prerequisite, Philosophy 40 and permission. Spring term.

71. AESTHETICS. The nature of aesthetic experience and the basis of aesthetic evaluation. Fall term.

72. INDIAN AND CHINESE PHILOSOPHIES. Selected Hindu, Buddhist, Confucian, and Taoist texts and philosophies. Fall term.

82. POLITICAL PHILOSOPHY. Western political thought. Identical with Political Science 82. Fall term.

84. PHILOSOPHY OF EDUCATION. Identical with Education 84. Spring term.

85. PHILOSOPHY OF RELIGION. Analysis of problems and viewpoints represented in the great religions, and of the function of religion in human life. Fall term.

86. PHILOSOPHY OF SCIENCE. Methods, presuppositions, and modes of confirmation common to the major divisions of science; problems peculiar to each division; the role of science in contemporary civilization. Spring term.

95. READINGS. Works of a specific philosopher or school, or study of a philosophical problem. Either term.

97. SEMINAR. A flexible course of concentrated study upon some movement, problem, or philosopher. Spring term.

98. PHILOSOPHY OF HISTORY. Analysis and evaluation of various interpretations of structure and meaning in history. Identical with History 98. Fall term.

99. FUNDAMENTALS OF THOUGHT AND CONDUCT. A summary examination of college experiences and learning set against issues of the times, pointed toward the essentials of wise conduct. Spring term.

DEPARTMENTS OF MEN'S AND WOMEN'S PHYSICAL EDUCATION

Men's Physical Education: Professor Ralph Lundeen, Department Chairman

Women's Physical Education: Professor Dorothy M. Michel, Department Chairman

Activity Program:

It is the aim of the departments, through their physical education activity courses, to provide the student with the opportunity to participate in activities which are physically, mentally and socially worthwhile. Regular intramural participation is available in a variety of sports activities.

A special effort is made to interest all men in athletic competition. Varsity teams compete in baseball, basketball, cross country, football, golf, hockey, swimming, tennis, track and field and wrestling.

GENERAL GRADUATION REQUIREMENT

Six (6) terms of physical education activity courses are required of all students. Each student shall take one activity from each of the four (4) sections except those students in the physical education certification program. The requirement for Section III may be fulfilled by passing a minimum test administered at the beginning of each school year.

Section I -- Team Sports. Instruction and participation in the skills in basketball, field hockey, soccer, softball, touch football and volleyball. Advanced fundamentals, game strategy and coaching techniques in baseball, basketball, football, hockey and volleyball.

Section II -- Individual and Dual Activities. Instruction and participation in the beginning and intermediate skills in archery, badminton, bowling, golf, gymnastics, handball, horseshoe, tennis and tumbling. Advanced skills and coaching techniques in track and field and wrestling.

Section III -- Aquatics. Instruction in all levels of aquatic activities including beginning, intermediate and advanced swimming, life saving, water safety, synchronized swimming and springboard diving. Fundamentals of competitive swimming, coaching techniques, and swim meet strategy.

Section IV -- Dance. Instruction and participation in fundamental movements and techniques used in folk and square dance, modern dance, and social dance.

Professional Program:

The professional program of Physical Education will consist of courses 20, 40, 60, 65, 80, and 85 which meet state requirements. To be certified to teach physical education and/or coach, a student will take Education 40, 50, 51, and 64. The program provides a sound foundation for graduate study in physical education and health.

The Biology Department offers the following core concentration for physical education students. Biology 11, 12, 14, 31 or 52, 65, and an elective course numbered over 50; Physical Education 20, 40, 60, 65, 80, and 85. In addition, women select six (6) appropriate non-credit activity courses in consultation with their adviser. Men are required to take the following non-credit activity courses: 123, 311, 316, 318, 325, 328 and swimming proficiency.

Certification may also be obtained by completing: a major concentration; the professional Physical Education courses, including Biology 11 and 31; and the required education courses.

A third program for certification is possible by completing: a core concentration in another area (History, English, etc.); the Professional Physical Education courses, including Biology 11 and 31; and the required education courses.

Special certification for coaches, qualifying men to be head coaches in the public schools, is available. Courses required are Physical Education 40, 60, 80, and 85, and a minimum of four (4) activities selected from 311, 316, 318, 319, 325, 328, and 335 and participation at the varsity level in at least one sport.

20. INTRODUCTION AND HISTORY OF PHYSICAL EDUCATION. The scope of Physical Education, Health and Recreation from ancient cultures through modern times. The role of these areas in education and society. Fall term.

30. COMMUNITY AND CAMP RECREATION. The practices and policies involved in the operation and administration of recreational programs. The development and scope of the various types of recreational systems in society. Spring term. (Offered alternate years.)

40. ANATOMIC AND KINESIOLOGIC FOUNDATIONS FOR HUMAN MOTION. The anatomical relationships which deal principally with osteology, arthology, myology and neurology. Physical principles and analysis are stressed as they apply to basic mechanical and kinesiological interpretation of normal and abnormal motor functions. Fall term.

50. THEORY AND ORGANIZATION OF ACTIVITIES. An analysis of skills as they relate to different group activities. Understanding and interpretation of techniques used in the instruction of groups. Spring term. (Offered alternate years.)

55. HEALTH PROBLEMS AND ADAPTIVE PROGRAMS. A survey of school, community, county, and state health programs. Considers the broad scope of health as it relates to the total educational program. Consideration of deviations from normal health and adaptation of activities in a program of reconstruction. (Offered alternate years. Not offered 1963-64.)

60. PRINCIPLES OF HUMAN FUNCTIONS. A study of the physiological changes in humans due to physical activity. The application of principles of health for evaluating and regulating conditioning procedures. The purpose and use of therapeutic aids and support techniques. Fall term.

65. DEVELOPMENT AND METHODS OF TEACHING ACTIVITIES. The analysis and procedures of instruction. The origin and development of selected activities. Fall term.

70. MEASUREMENT AND RESEARCH IN PHYSICAL EDUCATION. An investigation of available tests and evaluation devices, their use, construction and interpretation. The development, evaluation and application of tests in health and physical education. An analysis of current problems and trends in the field. The use and interpretation of elementary statistical techniques with application to physical education, health and recreational research. Fall term. (Offered alternate years.)

80. ORGANIZATION AND ADMINISTRATION IN PHYSICAL EDUCATION. The operation and function of various aspects of the physical education and health programs. Explore the areas of director responsibility, curricular development and community relations. Spring term.

85. PHILOSOPHY AND PRINCIPLES OF PHYSICAL EDUCATION. An investigation of physiological, psychological and sociological findings as they relate to physical education. Interpretation and application of historical and philosophical bases of physical education. Spring term.

TEACHERS COURSE: See Education 51.

PHYSICS

Professor Russell B. Hastings, Department Chairman

Two levels of specialization in physics seem desirable. These are outlined in detail under the headings, Major Concentration in Physics and Core Concentration in Physics, which follow. It will be noted that each is founded upon the same six fundamental courses, but that after this a marked divergence occurs. One follows a rigorous specialization in physics and mathematics and is primarily for those who wish to qualify for graduate study in physics or who wish to prepare for specialized work in industry. The other offers more breadth of choice, such as might be desired by those preparing to teach physics in secondary schools.

Course offerings in the Department of Physics:

- Physics 10- The Physics of Sound
- Physics 11- Foundations of Physics for Non-Science Concentrations
- Physics 12- Meteorology
- *Physics 21- Introductory Physics - Mechanics, Heat, Sound
- *Physics 22- Introductory Physics - Light, Electricity, and Modern Physics
- *Physics 31- Analytical and Experimental Mechanics
- *Physics 32- Magnetism and Electricity
- **Physics 33- Heat and Thermodynamics
- **Physics 34- Light and Wave Motion
- **Physics 42- Radio and Electronics
- *Physics 52- Atomic Physics
- **Physics 54- Great Experiments in Physics
- **Physics 56- Nuclear Physics
- *Physics 96- Advanced Experimental Physics

GENERAL GRADUATION REQUIREMENT

The following courses may be used: Physics 10, 11, 12, 21, 22.

MAJOR CONCENTRATION

This sequence of courses should be followed by those students who wish to qualify for graduate study in Physics, or who for some good reason wish to avail themselves of the most rigorous preparation in the field that the college offers. To complete this major concentration the student should:

- (1) Satisfactorily complete all single-starred courses in the list
- (2) Satisfactorily complete four (4) additional courses from those double-starred.
- (3) Elect supporting courses in Mathematics, depending upon the student's preparation and upon consultation with the faculty adviser.

CORE CONCENTRATION

This sequence of courses should be followed by those who do not plan to continue on into graduate work in Physics, but who nevertheless wish to avail themselves of the opportunity to specialize in Physics and to be able to include supporting courses outside the department. To complete this core concentration the student should:

- (1) Satisfactorily complete all single-starred courses in the list.
- (2) Satisfactorily complete six (6) additional courses, normally from the area of the Natural Sciences and Mathematics, but not necessarily so. Courses from outside this area may be selected by mutual consent of the student and his adviser.
- (3) Elect supporting courses in Mathematics, depending upon the student's preparation and upon consultation with the adviser.

(For a general statement about the nature of a core concentration, see page 9.)

FURTHER PREPARATION

Students with a major concentration in Physics, contemplating graduate study in physics, should have completed mathematics through differential equations and advanced calculus.

For the core concentration in Physics, the student should complete mathematics through calculus.

10. THE PHYSICS OF SOUND. Musical acoustics, the physics of musical instruments and technical applications of sound; experiments in sound are included. Three lectures, one hour laboratory a week. Fall term.

11. FOUNDATIONS OF PHYSICS. Basic physics for the non-science oriented student, presented from the non-mathematical point of view. Three lectures, one two-hour laboratory a week. Fall term.

12. METEOROLOGY. The physics of the lower atmosphere, origins of weather and climate, collection and analysis of meteorological data. Three lectures and one observation period a week. Spring term.

21. INTRODUCTORY PHYSICS. Mechanics, Heat and Sound, including laboratory experiments and extensive demonstrations. Three lectures, two two-hour laboratories a week. Fall term.

22. INTRODUCTORY PHYSICS. Light, Electricity and Modern Physics, including laboratory experiments and extensive demonstrations. Prerequisite, Physics 21. Three lectures, two two-hour laboratories a week. Spring term.

31. ANALYTICAL AND EXPERIMENTAL MECHANICS. Motion, particle dynamics, statics of rigid bodies, gravitation, simple harmonic motion. Pre or co-requisite, Physics 22 and Mathematics 21. Three lectures, one two-hour laboratory a week. Fall term.

32. MAGNETISM AND ELECTRICITY. Field and potential theory, development of Maxwell's equations, Kirchhoff's laws, electromagnetic induction, magnetic properties of matter, electromagnetic oscillations. Pre or co-requisite, Physics 22 and Mathematics 31. Three lectures and one two-hour laboratory a week. Spring term.

33. HEAT AND THERMODYNAMICS. Reversible and irreversible systems, first and second laws of thermodynamics, gas laws, Carnot cycle, entropy, physics of low temperatures. Pre or co-requisite, Physics 22 and Mathematics 31. Three lectures, one two-hour laboratory a week. Fall term.

34. LIGHT AND WAVE MOTION. Application of Maxwell's equations, reflection, refraction, interference, diffraction, polarization, wave and quantum theory of radiations. Pre or co-requisite, Physics 22 and Mathematics 31. Three lectures, one two-hour laboratory a week. Spring term.

42. RADIO AND ELECTRONICS. AC and DC circuits, vacuum tubes and transistors, oscillations, detection, amplification, modulation. Cathode rays and photo-sensitive devices. Prerequisite, Physics 22. Two lectures, two two-hour laboratories a week. Fall term.

52. ATOMIC PHYSICS. Atomic concepts of matter, electricity and radiation, X-rays, relativity, matter waves, radioactivity, fission, cosmic rays. Prerequisite, Physics 22. Three lectures, one demonstration laboratory a week. Spring term.

54. GREAT EXPERIMENTS IN PHYSICS. The laboratory portion of Atomic Physics. Students may select projects from a list of available experiments in atomic physics and electronics. Prerequisite, Physics 22. Laboratory work by appointment.

56. NUCLEAR PHYSICS. The nucleus, nuclear transformations, wave mechanics, fission and fusion, nuclear energy levels. Prerequisite, Physics 52 and Mathematics 31. Four lectures a week. Fall term.

95. ADVANCED EXPERIMENTAL PHYSICS. Students in either the major concentration or core concentration in Physics select a subject for independent investigation and preparation of a senior thesis. Independent reading and experimentation by arrangement. Prerequisite, junior standing and satisfactory progress toward a concentration in Physics. Either term.

TEACHERS COURSE: See Education 51.

POLITICAL SCIENCE

Dr. G. Theodore Mitau, Department Chairman

The Department of Political Science aims to provide students with pre-professional training for government service and for graduate school, and with a general background of knowledge about government which is a part of every well educated citizen. The courses which follow seek to achieve these objectives and include the following areas of political science: Division A, American Government, Politics, and Public Law; Division B, International Affairs; Division C, Comparative Government of Asia and Africa; Division D, Comparative Government of Europe and Latin America; Division E, Political Philosophy and Senior Seminar in Political Science.

GENERAL GRADUATION REQUIREMENT

Any course or courses in the department may be taken to satisfy the general graduation requirement in the Social Sciences.

MAJOR CONCENTRATION

A major concentration consists of seven (7) courses and must include one course in each of the 5 Divisions of political science, Division A through E.

CORE CONCENTRATION

A core concentration consists of six (6) courses and must include one course in each of 3 divisions of political science, Division A through E.

An interdepartmental concentration is offered between political science and economics. The student may take a core concentration of 6 courses in political science and select 6 courses in the department of economics in consultation with the chairman of that department. (See Economics write-up.)

Or a student may select his core concentration in the department of economics and then build his political science sequence of 6 courses in consultation with the chairman of the department of political science.

A core concentration in political science may also be taken in connection with an American studies sequence consisting of 6 courses in political science, 3 courses in American history and 3 courses in American Literature and Philosophy.

For political science offerings in connection with the program of area studies and international studies, consult those descriptions in the catalog.

(For a general statement about the nature of a core concentration, see page 9.)

FURTHER PREPARATION

It is recommended that students who wish to do graduate work in political science include Mathematics 14, Introduction to Statistics, as one of their courses in fulfillment of their science and mathematics graduation requirements.

Students who are interested in a law career are advised to consult with the department concerning their pre-law sequence in political science.

The department stipulates no requirements outside its area.

The department wishes to encourage students to take independent work. All courses except those with asterisks may be taken on this basis under the personal supervision of the instructor.

Division A: American Government, Politics, and Public Law

11*. THE MODERN ISMS. The nature and clash of Political Ideologies: Communism, Fascism, Socialism, "Welfarism", Liberalism, and Conservatism. Fall and spring terms.

20*. AMERICAN NATIONAL GOVERNMENT. Federal governmental institutions and process. Emphasis on problems faced by the Federal government, including problems of the Presidency, regulatory agencies, the legislature, and inter-governmental relations. Fall term.

30. PROBLEMS IN AMERICAN STATE AND LOCAL GOVERNMENT. The role of state constitutions, city charters, governors, mayors, judges, state legislatures, city councils, county commissioners, and metropolitan authorities in governing state, city, county, township, and special districts. Spring term.

40. AMERICAN POLITICAL PARTIES, ELECTIONS, AND VOTING BEHAVIOR. Nature of political campaigns, party organization, election processes, interest group politics, and voting behavior research. Spring term.

80. THE REGULATORY PROCESS. Various aspects of governmental regulation of business: the anti-trust laws, regulatory agencies, administrative procedure. Spring term.

84. AMERICAN CONSTITUTIONAL LAW AND THOUGHT. Survey and analysis of leading national and state constitutional decisions and of their contributions to this country's governmental and political development and thought. Spring term.

Division B: International Affairs

42*. INTERNATIONAL POLITICS. Forces and movements affecting the international political process. Emphasis upon state sovereignty, nationalism, comparative foreign policies, the alliance systems, and regionalism. Fall term.

62. INTERNATIONAL ORGANIZATION AND WORLD LAW. Traditions and contemporary developments of international organization and law. Emphasis upon the League of Nations, the United Nations, the Common Market, Disarmament, and the Law of War. Spring term.

Division C: Comparative Government of Asia and Africa

44. GOVERNMENTS OF ASIA. Political traditions and governmental structures of China, Japan, and India. Emphasis upon the differing political philosophies of the three states, including "Maoism" and "neutralism." Fall term.

46. GOVERNMENTS OF AFRICA AND THE MIDDLE EAST. Political traditions and governmental structures of Africa south of the Sahara and the Middle East. Emphasis upon emerging constitutional patterns and political party development. Spring term.

Division D: Comparative Government of Europe and Latin America

45. LATIN AMERICAN GOVERNMENTS. Political traditions and governmental institutions of Latin American countries. Spring term.

48*. EUROPEAN GOVERNMENTS. Political traditions and governmental institutions of Great Britain, France, West Germany, and other selected European states, and including the European Economic Community. Emphasis is placed upon political institutions as part of a basic cultural climate. Fall term.

50. SOVIET BLOC GOVERNMENTS. Political traditions and governmental institutions of the Soviet Union and its satellites, except Red China. Emphasis is placed upon Marxist philosophy and its application to the Soviet Union. Spring term.

Division E: Political Philosophy and Senior Seminar in Political Science

82. POLITICAL PHILOSOPHY. Western Political thought from Plato to the present, including major contributions by American political thinkers. Fall term.

94. SENIOR SEMINAR IN POLITICAL SCIENCE. Conferences, research papers, and reports based on independent work in fields of political science jointly selected by the student and departmental faculty. Required of all students whose major concentration is Political Science. Spring term.

PSYCHOLOGY

Dr. Paul G. Jenson, Department Chairman

The Psychology Department seeks to foster a scientific approach to the study of behavior.

GENERAL GRADUATION REQUIREMENT

Any course or courses in the department satisfy the general graduation requirement in the social sciences.

MAJOR CONCENTRATION

A major concentration in psychology consists of eight (8) courses and includes Psychology 11, 12, 31, 32, 97, and three advanced courses to be selected from a group including psychology 61, 62, 64, and 66, and a group including Psychology 71 and 73. At least one course must be selected from each group. In addition, Mathematics 14 is required.

CORE CONCENTRATION

The six (6) courses which comprise the core concentration in psychology include Psychology 11 and/or 12 and 31 and/or 32. The remaining are selected by the student, and approved by the department, depending upon his interests and objectives.

(For a general statement about the nature of a core concentration, see page 9.)

FURTHER PREPARATION

Students considering graduate work in psychology or allied subjects are urged to take courses in biology, mathematics, and sociology. Individual programs to meet special interests or needs may be arranged by consultation with members of the department.

11. INDIVIDUAL BEHAVIOR.. A developmental approach in the study of human behavior, emphasizing individual differences, personality, and psychology of adjustment. Fall and spring terms.

12. BASIC PROCESSES. Fundamental psychological concepts of motivation, perception, and learning and the approaches used in their study. Spring term.

31. OBSERVATION, DESCRIPTION, AND MEASUREMENT. Techniques used in observing, describing, and measuring psychological phenomena. Fall term.

32. EXPERIMENTAL DESIGN AND INFERENCE. Techniques used in experimental investigation, including appropriate statistical designs and methods of analysis. Spring term.

45. INDEPENDENT STUDY. Either term.

51. PSYCHOLOGICAL STUDY OF SOCIAL ISSUES. Psychological analysis of topics of current social concern such as automation, systems development, mental health, and arms control. Prerequisite, sophomore, junior and senior standing. Spring term.

53. HUMAN BEHAVIOR. Historical and current systematic approaches to the study of human behavior including analysis and implications. Prerequisite, sophomore, junior and senior standing. (Not offered 1963-64.)

55. THEORIES OF PERSONALITY. Consideration of the structure, organization, and nature of personality as presented in theoretical positions of Freud, Jung, Allport, Rogers, and others. Prerequisite, sophomore, junior and senior standing. Fall term.

61. DEVELOPMENTAL PSYCHOLOGY. Development during infancy and childhood, including the psychology of exceptionalities. Prerequisite, sophomore, junior and senior standing. Fall term.

62. DEVELOPMENTAL PSYCHOLOGY. Development during adolescence, maturity, and old age. Prerequisite, sophomore, junior and senior standing. Spring term.

64. BEHAVIOR PATHOLOGY. Investigation of evidence and theories of behavioral abnormalities, illustrated in problems of causation, diagnosis and treatment. Prerequisite, sophomore, junior and senior standing. Spring term.

66. INDIVIDUAL DIFFERENCES. Measured individual and group differences on psychological variables and the genetic and environmental sources of individuality. Fall term.

71. LEARNING AND COGNITIVE PROCESSES. Theory and research in learning, perception, thinking, and language. (Not offered 1963-64.)

73. EMOTION, MOTIVATION, AND CONFLICT. Theory and research in affective and motivational processes. Spring term.

95. INDEPENDENT STUDY. Either term.

97. SEMINAR ON CONTEMPORARY PSYCHOLOGICAL RESEARCH AND THEORY. Selected problems of current interest in psychology, including design, execution, and defense of the student's senior research project. Spring term.

RELIGION

Dr. J. Donald Butler, Department Chairman

The function of the Department of Religion is to provide opportunity for serious study of the Christian faith at a high level of intellectual discipline and integrity. Curricular means to this end are courses broad in scope which at the same time are sufficiently selective to have genuine depth. In so far as possible these courses are based on primary sources. Flexibility and variety in the conduct of courses offers the maximum in occasions for guided study in small groups as well as individualized instruction. This program of studies, regardless of academic specialization or vocational choice, should help the student to become an informed participant and leader in the local church.

As a church-related institution the College has a general graduation requirement in the field of biblical studies. Selection of courses in biblical studies, Christian thought, Church history and some inter-disciplinary explorations provide opportunities for serious study beyond this requirement. The offerings also make possible a concentration in religion for those who on the basis of a sound rationale choose so to concentrate. There is also a vocational concentration in Christian education.

Normally for students intending to go on to theological seminary a college education is the unique opportunity to pursue liberal studies. Such a broad liberal education is a valuable foundation for advanced theological study as well as other related vocational specializations at the graduate level. Many different disciplines may provide a good area of concentration for pre-theological students. It is possible, provided there is a good rationale for it, that a core concentration in religion may be wisely pursued by such students. Because of entrance requirements at a number of theological institutions, a degree of mastery of Greek commensurate with the breadth of liberal study should be seriously considered.

In consultation with their advisers and members of the faculty in religion, students not anticipating a career of theological study following college may discover valid reasons for a major concentration in religion, or for combining a cluster of courses in religion with other disciplines as is made possible by the core concentration.

GENERAL GRADUATION REQUIREMENT

The general graduation requirement in biblical studies, in addition to the one-half course component of biblical theology in Man and His World, (see page 10) is one full course. The courses qualifying as this full course in biblical studies are Religion 10 and 11. In some cases, to be determined in consultation with a member of the department the course, Religion 50, may also be accepted as meeting this requirement.

MAJOR CONCENTRATION

The major concentration in religion is comprised of seven (7) courses in religion, including either or both of the two courses which fulfill, together with Man and His World, the general graduation requirement in religion, and also three courses in related or reinforcing disciplines such as philosophy, history,

literature, psychology, sociology or political science. The major concentration of each student will be planned individually, as to the particular courses comprising it, in consultation with a member of the Department of Religion, a representative of the department in which the related courses are to be pursued, and the student's adviser.

CORE CONCENTRATION

The core concentration in religion is comprised of six (6) courses in religion and six (6) courses in related areas as determined by a particular problem or theme the student wishes to explore. Formulation of the problem or theme around which courses of the core concentration will cluster and the resultant selection of these courses will be determined in consultation with a member of the Department of Religion, representatives of the departments in which related courses are being pursued, and the student's adviser. As may be indicated by a given problem or theme, the following may be examples of the variety of possible patterns of courses which may comprise the core concentration additional to the six (6) courses in religion: courses in selected languages; courses in philosophy and history; and courses in philosophy, history and political science.

(For a general statement about the nature of a core concentration, see page 9.)

CHRISTIAN EDUCATION

Courses in Christian education are offered in order that students may be aided by means of this discipline in becoming more effective participants in the life of the local church, although not as a vocation or a means of livelihood.

Also, a major concentration in Christian education is provided for those students who, parallel with a liberal education, desire a vocational preparation which will qualify them to become members of the staff of the local church as Assistants in Christian Education or to do similar educational work in church-associated and character-building agencies.

The major concentration in Christian education is comprised of 3 courses in biblical studies, 1 course in Church history, 1 course in modern Christian thought, 3 courses in Christian education, including the course Religion 62, and also 3 courses in a related or reinforcing discipline such as philosophy, psychology, sociology, or education. Either or both of the two courses which fulfill, together with Man and His World, the general graduation requirement in religion may be included among the 3 biblical courses comprising a part of the major concentration. Appropriate guidance will be given students who concentrate in Christian Education in order that their major concentration may be complemented by a total program of study which will constitute a liberal education in the truest sense.

10. INTRODUCTION TO BIBLICAL STUDIES. The Bible, both Old and New Testaments, the interpretation by the Jewish and Christian communities of the history it relates, and the light shed upon these by the critical study of the Bible of the last century. Fall and spring terms.

11. JESUS AND HIS INTERPRETERS. The understanding of Jesus found in the New Testament, the ancient Church, and selected periods in the history of the Christian Church from the New Testament age to the present. Fall and spring terms.

50. BIBLICAL THOUGHT. Introduction to the sources of Christian thought in the Old and New Testaments; methodological concerns such as the history of biblical criticism, the relation of biblical and systematic theology, contrasts of Hebrew and Greek thought, and contrasts of ancient and modern thought; also, selected major themes of the Bible such as God and his self-disclosure, man and his relation to God, human history as the setting of this relationship, Jesus Christ, biblical ethics, and the Christian hope. Fall and spring terms.

63. HISTORY OF CHRISTIANITY: The Apostolic Age to the Reformation. The Church from New Testament times to the eve of the Reformation, critical response to the Church in secular movements, both treated as a history of events and history of thought, anticipation of the Reformation and post-Reformation developments by a concluding overview of the Church during and subsequent to the Reformation. Spring term.

64. HISTORY OF CHRISTIANITY: The Reformation to the Present. The Christian Church from the Reformation until now in the perspective of the entire history of the Church, both history of events and history of thought, major thinkers during the Reformation and in subsequent periods, the traditions stemming from the Reformation and others emerging from it. Fall term.

65. RELIGIONS OF THE WORLD. The principal religious systems of the world, the Indian system, the East Asian system of religions, Buddhism as influencing the systems of India and East Asia, the West Asian system, and Zoroastrianism both as contact between East and West and as influencing Judaism, Christianity and Islam; two major critical emphases in analysis of each system, the challenge Western civilization presents, and the nature of the discourse when each system is confronted by the Christian Faith. Spring term.

66. MODERN CHRISTIAN THOUGHT. The thought of the Christian Church in our time, traditions of Christian thought in contemporary expression, acquaintance in depth with selected emphases and major themes, Christian thought both as a systematic and critical discipline bearing upon the issues of human life. Fall term.

67. CHRISTIAN ETHICS. The biblical thought, history of ethical concerns, and aspects of modern Christian thought pertaining to concrete ethical issues, both individual and corporate; also, study in concreteness of problems such as marriage and the family, Church and State, nationalism, race relations, and economic justice. Spring term.

CHRISTIAN EDUCATION

51. FOUNDATIONS AND PROGRAMS OF CHRISTIAN EDUCATION. Historical perspective for the educational ministry of the Church, theological and biblical backgrounds for nurture, the nature of teaching, and selective acquaintance with curriculum literature and developments in Roman Catholicism and Judaism as well as within the Protestant Churches. Fall term.

61. THE CHRISTIAN NURTURE OF CHILDREN AND YOUTH. The development of man from infancy through adolescence both descriptively and interpretively, the Christian home and the Church as agencies of nurture, Christian education as continuous with revelation, the responses of faith and Christian freedom; students enrolled in this course whose major or core concentrations are in Christian Education will

be assigned to a local church for staff work on Sundays; the course should be taken in another term of the same year that the student enrolls for 62, in order to have continuity of practice in the local church to which he is assigned. Fall and spring terms.

62. OBSERVATION AND PRACTICE IN CHRISTIAN EDUCATION. Supervised practice in the local church, individual conferences between teacher and student, group study and discussion in the classroom; students enrolled in the course whose major or core concentration is Christian Education will be assigned to a local church as a staff member on week days and Sundays; the course should be taken in another term of the same year that the student enrolls for 61, in order to have continuity of practice in the local church to which he is assigned. Fall and spring terms.

RUSSIAN

Dr. Georgiana P. Palmer, Department Chairman

The general objectives are to teach students the reading, writing and speaking of the Russian language, with some understanding of the people, country, and literature.

GENERAL GRADUATION REQUIREMENT

The general graduation requirement in language may be met by the completion of two courses above the elementary level. In Russian these courses normally would be 31 and 32. It is also possible to satisfy the requirement by (1) testing out, or (2) successfully completing one course above the intermediate level.

CORE CONCENTRATION

The Department does not offer a major concentration. However, a core concentration in Russian Studies is offered; it consists of:

- (1) Six (6) courses in the Russian language and literature beyond the first year, plus
- (2) Six (6) additional courses to be chosen from:

Area Study of Russia
History of Russia
Eurasian Geography
Political Science
Governments of the Soviet Bloc
and other relevant courses in social science, literature, humanities,
fine arts, philosophy.

(For a general statement about the nature of a core concentration, see page 9.)

11,12. ELEMENTARY RUSSIAN. An introduction to the reading, writing, and speaking of the language.

31,32. INTERMEDIATE RUSSIAN. A continuation of the study of Russian; reading, writing, speaking, and the beginning of acquaintance with the literature. Pre-

requisite, Russian 12 or an equivalent knowledge of the language.

51,52. CONVERSATION AND COMPOSITION. Speaking and writing based on contemporary materials. Prerequisite, Russian 31 or consent of instructor.

53,54. RUSSIAN LITERATURE IN THE LANGUAGE. The reading in historical context of representative works of important Russian writers. Prerequisite, Russian 32 or consent of instructor.

95,96. ADVANCED READING. Reading of materials to be chosen after consultation between teacher and student. Prerequisite, consent of instructor.

TEACHERS COURSE: See Education 51.

SOCIOLOGY

Dr. Paul M. Berry, Department Chairman

The concerns of contemporary sociology believed to be particularly appropriate to undergraduate education have been clustered around six core areas. Each of these is represented by a year long course sequence. The first term of the sequence introduces the significant body of theory, knowledge, principles and vocabulary appropriate to the respective core area. It is designated as an A type course. The conventional course procedures are likely to prevail here. The second term in the sequence (B type course) makes more allowance for differences in student interest and gives more opportunity for him to pursue a pattern of study more to his own choosing. Here he is expected to build upon the work of the first term by following through with the implications of selected aspects of that work as they may be expressed in some problem area, or by intensive inquiry into some selected phase of the first term's work. This he might do through independent study under direct supervision of the instructor or he may join with some others who have similar or related interests in a seminar type enterprise or possibly a field project. Such an endeavor will usually culminate in a major paper. Flexibility of course structure with assured instructor guidance and supervision is the hallmark of the B type course.

Two pre-professional social work courses are provided within the department and may be taken as alternative second term courses in the respective course sequences. They are designated as C type courses, and reflect a more specialized extension of some of the basic materials introduced in the respective A course of the given sequence.

The introductory course (20) is a prerequisite to all courses in the department.

GENERAL GRADUATION REQUIREMENT

Any course within the department may be used to satisfy general graduation requirements providing the prerequisite introductory course has been taken.

MAJOR CONCENTRATION

Seven (7) courses in addition to Sociology 20 are required for a departmental major including 88, 89, and a minimum of one additional B type course. More

than two (2) courses in a given course sequence is not advised for application toward the major concentration. Students will be encouraged to take Mathematics 14 and advised that it may be applied toward satisfaction of the science and mathematics requirement.

CORE CONCENTRATION

Six (6) courses from within the department, including Sociology 20, together with six (6) chosen by the student from outside the department will constitute a core concentration. As early as feasible in his academic career the student will field with his departmental adviser an overall course plan together with a statement giving his rationale for the selection. His plan must show some internal consistency and it should reflect his interest and capabilities. Ordinarily the selection of courses outside the department should be limited to not more than two disciplines and should be contained within one of the following departmental groupings: Behavioral Sciences, including Biology, Economics, Geography, Political Science, Psychology, Education; or Humanities, including Art, History, Literature, Music, Religion. The course plan must be approved by the sociology department before taking the proposed courses. The student is expected to submit a major paper in his senior year demonstrating his competence to draw upon the respective fields meaningfully to the end that his paper represents for him something of a new integration of sociology with the other disciplines represented in the core concentration.

(For a general statement about the nature of a core concentration, see page 9.)

20. INTRODUCTION TO SOCIOLOGY. Using both sociological and anthropological data, the examination of the varieties of society and the groups within them. Fall and spring terms.

68. THE CHANGING COMMUNITY - A. Locality, size and density, and the sense of community. Changing functions of land-use; the nature and effects of socio-cultural change. Fall term.

69. THE CHANGING COMMUNITY - B. Intensive studies in special aspects, such as theories of change, human ecology, cross-cultural comparisons of locality-systems, field-studies in nearby localities and neighborhoods. Spring term.

72. SOCIAL SYSTEMS - A. Forms of social organization; division of labor, distribution of power, authority, and status, decision making, communication, relationship of systems to larger ones of which they are a part. Fall term.

73. SOCIAL SYSTEMS - B. Intensive study of selected systems such as family, church, economic organizations, governmental agencies, correctional institutions, from the perspective of 72A. Spring term.

74. SOCIAL WELFARE SYSTEMS - C. Growth of public and private welfare programs; their integral role, goals, and philosophy related to needs of a complete socio-economic order. Field placement in an appropriate agency; observation and practice under supervision. Fall term.

76. SOCIAL DEVIANCY - A. Major approaches used in sociology to examine individual maladjustment and problem behavior such as legal offenders, gangs,

marital conflict, addiction. Social change and the breakdown of societal controls. Spring term.

77. SOCIAL DEVIANCY - B. Selected studies in such as delinquency, race conflict, broken homes, or other expressions of social disorder or breakdown. Fall term.

80. COMPARATIVE ANTHROPOLOGY - A. History of the field, theoretical models used, and basic concepts. Cross-cultural analysis of institutions such as technology, economy, kinship, language, art. Relation of culture and personality. Spring term.

81. COMPARATIVE ANTHROPOLOGY - B. Intensive work in cross cultural study of any selected institution; ethnological examination of some cultural area such as Plains Indians, East African Cattle Culture. Fall term.

84. INDIVIDUAL IN SOCIETY - A. Social psychological approach to socialization of the child; development of self, and adaption of societal variability through role enactment. Human behavior as influenced by perceiving and responding to others. Role theory stressed. Fall term.

85. INDIVIDUAL IN SOCIETY - B. Selected studies, e.g., impact of society-culture on personality, attitudes, aspirations; role consensus, norm formation in different socio-cultural settings; faulty socialization; social mobility and behavior change. Spring term.

86. INDIVIDUAL IN WELFARE SYSTEMS - C. Generic social work principles used in an agency setting to assist persons or groups with psycho-social problems which impair interpersonal relationships and person adequacy. Field placement in an appropriate agency; observation and practice under supervision. Spring term.

88. DEVELOPMENT AND METHODOLOGY - A. Sociology's 19th Century beginnings, its competing perspectives, and theories of current reference. Sociology of knowledge. Spring term.

89. DEVELOPMENT AND METHODOLOGY - B. Field work problems in the use of current instruments and techniques; methodological problems; theory-building in relation to empirical research. Fall term.

SPANISH

Professor Robert J. Dasset, Jr., Department Chairman

GENERAL GRADUATION REQUIREMENT

The foreign language requirement may be met in Spanish by: (a) completing two courses above the elementary level or (b) by passing a test demonstrating language proficiency equivalent to that attained through successful completion of Spanish 31, 32, or by (c) completing successfully one course above the intermediate level.

MAJOR CONCENTRATION

A major concentration in Spanish shall consist of a minimum of eight (8) courses beyond the elementary level (Spanish 11, 12, or equivalent).

Required courses: 31, 32, 51, 52, 53.

At least four (4) supporting courses to be chosen according to vocational interests.

1. For majors including those going into teaching - another foreign language, English, humanities, or history.
2. For those going into government work or some field of business - political science, economics or history.

CORE CONCENTRATIONS

The Spanish Department offers two possibilities within the department under the core plan, each consisting of six (6) courses beyond Spanish 11 and 12: (a) for those who wish to specialize in language skills - Spanish 31, 32, 51, 52, 53 and one literature course; (b) for those who wish to specialize in literature - Spanish 31, 32, and four courses in literature.

Six (6) courses outside the department are to be selected by the student with the approval of his adviser and the department concerned. Acceptable patterns would be: (a) six courses in a second foreign language; (b) six courses in the humanities; (c) six courses in English literature beyond 11, 12; (d) a combination of b and c; (e) six courses in history, political science, and geography relevant to Spanish; (f) six courses from the comparative arts with at least one from each of the following: art history, music, philosophy. The other three may be chosen from religion, speech, humanities, or English literature.

(For a general statement about the nature of a core concentration, see page 9.)

MEXICAN CARAVAN.

During the month of August twenty to twenty-five Macalester students travel by auto in Mexico under leadership supplied by the Spanish Department. All students are eligible, but preference is given to those studying Spanish.

11,12. ELEMENTARY SPANISH. Pronunciation, grammar essentials, conversation and reading. Four class hours a week plus one hour of laboratory.

31,32. INTERMEDIATE SPANISH. Grammar review, conversation, readings from Spanish and Latin American authors. Prerequisite, Spanish 12 or satisfactory score on placement test.

51. CONVERSATION AND PHONETICS. Simple conversational patterns and composition. Sound changes and pronunciation. Prerequisite, Spanish 31. Fall term.

52. ADVANCED CONVERSATION. Oral discussion of a number of modern plays of both Spain and Latin America. Prerequisite, Spanish 51. Spring term.

53. SPANISH CULTURE. The principal political, economic, social and artistic movements in Spain from pre-Roman times to the present. Prerequisite, Spanish 32 or equivalent. Fall term.

61. SURVEY OF SPANISH LITERATURE. Includes 18th, 19th, and 20th centuries. Prerequisite, Spanish 32. Spring term. (Offered 1964-65.)

62. SURVEY OF SPANISH LITERATURE. Medieval Period through the Golden Age. Prerequisite, Spanish 32. Spring term. (Offered 1964-65)

65. READINGS IN LATIN AMERICAN LITERATURE. Significant works with their social and historical background. Prerequisite, one of the following: 53, 61, 62. Fall term. (Not offered 1963-64.)

68. SPECIAL TOPICS IN SPANISH LITERATURE. The material will alternate year to year between 19th century novel including works of Caballero, Valera, Alarcon, Galdos, Bazan, Ibanez, and the 20th century novel from the Generation of '98 to the present. A student may repeat this course once. Prerequisite, one of the following: 53, 61, 62. Spring term. (20th century offered in 1964-65)

75. CERVANTES AND THE QUIJOTE. Prerequisite, one of the following: 53, 61, 62. Fall term. (Not offered 1963-64.)

95. INDEPENDENT COURSE. For the occasional advanced student who wishes to carry on a project requiring library research or laboratory work. Consent of instructor. Either term.

98. SEMINAR. Areas not regularly offered in literature or syntax. Prerequisite, consent of instructor. Spring term.

TEACHERS COURSE: See Education 51.

SPEECH AND DRAMA

Professor Mary G. Owen, Department Chairman

Speech and Drama Department courses are designed to give scholarly study in historic and contemporary theories of the speech arts areas and to teach the fundamental techniques of performance in the phases of Interpretation and Theater, Rhetoric and Public Address.

Those students preparing for graduate study should choose either emphasis in Interpretation and Theater or Rhetoric and Public Address. The State of Minnesota, Department of Education, Certification Division, requires teachers of speech to have fulfilled the requirements of either a major or minor in Speech. The Macalester Department of Speech and Drama will recommend that a student be certified by the state to teach speech only upon completion of a General Speech Concentration which would include courses to be approved by the head of the Speech Department.

Any student in the department with demonstrated academic ability and a capacity to do individual creative work in the area of the speech arts is encouraged to integrate independent study with the honors program. Curricular provisions for inter-discipline supporting courses as well as the core concentration should also encourage students to explore more fully the total area of the liberal arts.

GENERAL GRADUATION REQUIREMENT

General Service Speech Course: Students wishing to elect a general speech course should take Speech Fundamentals 11. Although essentially rhetorically based, it includes liberal amounts of skill emphasis in public speaking, manuscript reading, oral interpretation and discussion.

Possible Fine Arts Electives: A student wishing to fulfill the general humanities requirement by electing a fine arts course in the area of Speech and Drama may choose from 4 courses: Speech 18, 20, 30, and 35.

MAJOR CONCENTRATION

The Speech and Drama Department offers three general areas of concentration of 10 courses each: Drama, Rhetoric and Public Address, and a General Speech concentration for teacher certification. Each major concentration requires six (6) specific courses in the area, two (2) electives from within the department, and two (2) supporting courses from other disciplines to be approved by the head of the department.

REQUIRED COURSES:

- A. Drama: 11, 12, 20, 30, 40, and 64
- B. Rhetoric and Public Address: 11, 12, 20, 25, 38, and 46
- C. General Speech: 11, 12, 20, 25, 30, 46, and 64

CORE CONCENTRATION

The six (6) courses taken in the Speech Department are: 11, 20, 30, 44, 46 and 48. A student may substitute another speech course for one of the above six courses upon petition to the department head.

For the additional six (6) courses the student will work out his program in consultation with the department.

(For a general statement about the nature of a core concentration, see page 9.)

DEPARTMENTAL ACTIVITIES

Each year the Speech and Drama Department presents the best of classic and modern theater in a season of four major productions as well as a series of student directed one act and three act plays.

Nationally famous artists, as well as dance and theater groups are invited to the campus to share with the students the inspiration of their art form.

In addition to campus activities students have the opportunity to participate in the Tyrone Guthrie student corps as well as in many local community theater productions. Students are encouraged to attend the numerous professional touring companies appearing in the Twin City area.

The department sponsors both a Drama Club and an active local chapter of the National Collegiate Players of which Miss Ethel Waters, Miss Agnes de Mille, Miss Margaret Webster are numbered among its honorary members.

One of the unique offerings of the Speech and Drama Department is its Drama' Choros. This group, organized and directed by Professor Mary Gwen Owen, has gained national distinction for its outstanding performance on the group reading medium. As well as many campus appearances this group makes an annual spring tour performing for colleges, high schools, and civic organizations. Each spring a Drama Choros Festival is held in the Macalester Theater. Modern dance, music, costume, lighting, and group movement are used to emphasize variety in interpretative moods.

The Debate team participates extensively in local, regional, and national tournaments. An annual debate with United College, Winnipeg, Canada, is held each year in connection with the Macalester Canadian-American Conference.

Debate teams from Oxford of England, Yale, Harvard, and Princeton appear with Macalester teams periodically at campus convocations.

The department sponsors an active chapter of Pi Kappa Delta, a national honorary debate and forensic fraternity.

Participants in forensics have the opportunity to compete in campus, Twin City, State, and Regional contests. Each winter a Forensic Festival is held on campus in which students are invited to enter the Collins Extempore Speaking Contest, the Stringer Oratorical Contest, the Pauline Krieger After Dinner Speaking Contest, and the Owen Interpretation Contest.

Departmental activities are climaxed with a Spring Awards Dinner. Theater, Forensic, and Debate trophies are presented to those students showing outstanding achievement in these areas. Three student assistantships as well as the Pi Kappa Delta, Drama Club, and Grace Whitridge Scholarships are presented at the dinner.

11. SPEECH FUNDAMENTALS. Historic and contemporary theories and techniques of performance in the speech arts areas. Emphasis in rhetoric, public speaking, manuscript reading, and oral interpretation. Fall and spring terms.

12. SPEECH FUNDAMENTALS. Continued study and practice in the speech arts. Emphasis in critical thinking, discussion, and debate forms. Prerequisite, Speech 11. Spring term.

18. CONTEMPORARY THEATRE. Trends, ideas, and literature of the contemporary theatre. Laboratory crew experience. Spring term.

20. ORAL INTERPRETATION. Analysis, adaptation, and program building of classical and contemporary literature for individual platform performance. Fall term.

22. ACTING. Historic and contemporary theories and techniques studied and performed. Spring term. (Offered odd numbered years.)

25. ARGUMENTATION AND DEBATE. Basic theories and techniques of argumentation. Participation in inter-scholastic debate tournaments required. Fall term.

28. TELECOMMUNICATION. A brief history and development of television and radio. A study of the relationship between entertainment and information. Fall term. (Offered even numbered years.)

30. INTRODUCTION TO THEATRE. The art and craft of the theater. Elements of technical production and direction culminating in the production of a one act play. Laboratory crew experience. Fall term.

32. DISCUSSION AND PARLIAMENTARY PROCEDURE. Basic forms of small group discussion and group dynamics processes; fundamentals of parliamentary procedure. Spring term. (Offered even numbered years.)

35. HISTORY OF THE THEATRE. Evolution of theatrical forms from the Greek through the 19th century. Theatre architecture and dramatic literature studied in relation to man's development. Laboratory crew experience. Fall term. (Offered odd numbered years.)

38. FUNDAMENTALS OF PERSUASION. Classical and contemporary theories of individual and institutional persuasion. Examining ethics of persuasion, motivational analysis, and non-logical appeals. Fall term. (Offered odd numbered years.)

40. TECHNICAL THEATRE. Advanced work in the arts and crafts of the theatre. Emphasis on design, construction, and mounting of the production. Laboratory crew experience. Prerequisite, Speech 30. Spring term.

44. MASS COMMUNICATION. Influence of television and radio on thought and action in the modern world: nature of programming, of public consumption and individual and national consequences. Fall term. (Offered odd numbered years.)

46. AMERICAN AND BRITISH PUBLIC ADDRESS. History and criticism of models of eloquence of British Public Address of the 18th and 19th centuries, of American Public Address of the 19th and 20th centuries. Spring term. (Offered odd numbered years.)

48. SPEECH AND LANGUAGE IN HUMAN AFFAIRS. A linguistic-semantic study of speech and language in our culture; importance of language in perception, categorizing, and thinking. Fall term. (Offered even numbered years.)

60. CLASSICAL RHETORIC AND SPEECH CRITICISM. Classic and contemporary modes of speech criticism with emphasis upon a historical and critical study of Greek and Roman rhetoric, rhetoricians, and public speaking. Fall term. (Offered even numbered years.)

62. ADVANCED ORAL INTERPRETATION. Reading, analysis, and adaptation of literature for solo and group performance. Prerequisite, Speech 20. Spring term.

64. DIRECTION. History, theory, and techniques of directing, culminating in the production of an edited three act play. Laboratory crew experience. Prerequisite, Speech 30. Spring term. (Offered odd numbered years.)

97. SEMINAR.

TEACHERS COURSE: See Education 51.

COLLEGE FINANCES

Tuition and Expenses

Tuition and fees are due and payable at the beginning of each term, before completion of registration and before the student is admitted to classes. A student may, however, pay his fees in installments. For information on the installment plan, write to the Business Office, Macalester College, St. Paul 1, Minnesota.

Effective in the fall of 1963, a guaranteed tuition plan will be in effect. New students and those not registered in the spring term of 1963 will enroll under the following guaranteed tuition plan.

	Per Year
1963.....	\$1,000
1964.....	950
1965.....	900
1966.....	900

The above guaranteed tuition rate is contingent on preregistration and payment of the \$50.00 non-refundable tuition deposit each spring.

Full tuition is assessed to students carrying 3 to 4 courses for credit.

A deposit of \$50.00, later applied to tuition, will be collected with the applying student's acceptance of his notice of admission. Each person notified of admission will be given thirty days from that notice to accept the admission and pay the deposit.

Other fees are as follows:	Per Term
Activity Fee.....	\$14.00
Change of Course.....	1.00
Guarantee Breakage Fee (for residence hall students).....	2.50
Graduation Fee (diploma).....	5.00

All new students must make a payment of \$10.00 with their application for admission. This payment is not refundable.

Enrollment after the scheduled registration period each term is subject to a fee of \$1.00 for the first day thereafter and 50¢ for each subsequent day.

Music Fees

Per Term

Private lessons in piano, organ, voice, violin and wind instruments

Full-time student..... \$45.00

Special student..... 55.00

Class lessons in piano, each student..... 15.00

Rental fees of practice organs in churches near the campus are established by the churches.

Education - Student Teaching Fees

Education 64 Student Teaching (Secondary)..... \$25.00

Education 65 Student Teaching (Elementary)..... 25.00

Tuition Refunds

Tuition is not refunded after midterm except in cases of illness. For purposes of calculating the tuition refund during the first half of the term, two weeks are added to the date of the cancellation notice and the refund is calculated on the proportion that the unused portion bears to the total term. No tuition refunds are granted without first receiving a proper notice of cancellation from the Academic Dean's Office.

In case of prolonged illness which removes the student from college for a period of a month or more, refunds are made on tuition and room from the end of a two weeks' period following the beginning of illness, according to the records of the college nurse. Board is charged to the nearest weekend after the beginning of illness. No tuition is refunded on courses completed for credit.

Students who fail to meet accounts when due are denied classroom privileges and credits are withheld until satisfactory settlement is made with the Business Office.

If a student leaves the institution at any time after entrance without the approval of the faculty, or because he has been suspended or dismissed, no tuition is refunded.

Residence Halls

Macalester College provides a residence hall program of six halls that accommodate 275 men and 425 women. Kirk Hall and Dayton Hall are occupied by men; women students reside in Bigelow, Summit, Turck and Wallace Halls. In the fall of 1964, additional residence halls will be completed raising the total occupancy to 550 men and 550 women.

Applicants interested in residing in a residence hall will be provided with a residence hall application at the same time they receive notice of admission to the College, and should return it immediately to the Admissions Office if they desire accommodations. Residence hall accommodations are assigned in order of the receipt of residence hall applications accompanied by a reservation fee of \$25.00. This fee is applied toward the room charges at the time of registration. If registration is cancelled before June 1st, the fee will be refunded.

Room rents and board are paid in the manner prescribed for tuition and fees. Arrangements may be made with the Business Office to pay these expenses in installments in the same manner as the payment of tuition and fees.

Room and Board Charges for the School Year 1963-64

	Per Term
Double Room	\$150.00
Single and Suites	160.00
Triples	120.00
Board, 5 Day Week	170.00

Board at Wallace Hall, Turck Hall and Bigelow Hall is furnished 5 days a week in the dining room in each hall. Boarding in dining rooms is required of all students residing in Wallace Hall, Turck Hall and Bigelow Hall.

Board for residents of Kirk Hall, Dayton Hall and Summit House, as well as for residents of Wallace Hall, Turck Hall and Bigelow Hall, on weekends, and for those students living in private homes in the vicinity of the campus, is available in the Student Union Cafeteria. Students living in Summit House are required to buy a meal book of \$170.00 per term, as are students living in Kirk and Dayton Halls; no refund will be made on this charge. This meal book will not provide full board which is estimated to cost about \$240.00 per term. Prices are subject to change.

The residence halls and dining halls are closed during Christmas vacation; for the shorter vacations, Thanksgiving, term break and Easter, provisions are made for students to reside in one of the halls. Students are charged for their rooms by the term and until they are formally vacated and keys surrendered. Each dormitory resident is held responsible for the rent for the entire term whether he has occupied the room continuously or not. A deposit of \$2.50 is required from each student each term as a damage fee.

Applicants interested in residing in residence halls will be provided with a residence hall application at the same time they receive notice of admission to the College, and should return it immediately to the Residence Office if they desire accommodations. Residence hall accommodations are assigned in order of the receipt of residence hall applications, and are subject to the availability of space. This fee is applied toward the room charges for the year of registration. If registration is cancelled before June 1st, the fee will be refunded.

Room fees are paid in the manner prescribed for tuition and fees. Arrangements may be made with the Business Office to pay these expenses in installments in the same manner as the payment of tuition and fees.

For information on the various types of rooms and rates, please refer to the Residence Office.

Double Room \$150.00
Single Room \$100.00
Triple Room \$120.00
Quad Room \$80.00

ACCREDITATION AND MEMBERSHIP

Macalester College is fully accredited as a member of the North Central Association of Colleges and Secondary Schools and the National Council for Accreditation of Teacher Education. Macalester College is also a member of the Association of American Colleges, the Presbyterian College Union, the Minnesota Association of Colleges, and the American Association of Colleges for Teacher Education. Women who hold Macalester College degrees are eligible for membership in the American Association for University Women.

Residence halls are available in the Student Union Center for students living in Kirk Hall. The Student Union Center is located on the corner of 1st and 2nd streets, and is a modern building with a large dining hall and a lounge. The Student Union Center is open to all students, and is a great place to meet and socialize. The dining hall is open from 11:30 a.m. to 2:00 a.m., and the lounge is open from 11:30 a.m. to 2:00 a.m. The Student Union Center is a great place to study and relax.

Residence Halls

Macalester College provides a residence hall program for students. The residence halls are located on the campus, and provide a safe and comfortable living environment for students. The residence halls are open to all students, and are a great place to live and study. The residence halls are a great place to meet and socialize, and are a great place to study and relax.



THE GUARANTEED TUITION PLAN

A guaranteed tuition plan is now in effect. Rates per year for students entering in the fall of 1964, are:

1964-65.....	\$1,100.00
1965-66.....	1,050.00
1966-67.....	1,000.00
1967-68.....	1,000.00

Macalester College ❧ St. Paul 1, Minnesota