Photographs:
Page 13 — Old Main Portico by Larry Pry ’79
Page 27 — Winter Conversation by Stu West ’70/Photogenesis
Page 33 — Rice Hall of Science by Stu West/Photogenesis
Page 45 — Weyerhaeuser Library by Larry Pry
Page 155 — The Macalester Pipe Band by David Jackson ’76

Coordinated by the Macalester College News and Publications Office:
Evelyn Cottle, publications director
Linda Gebhard, news director
Linda Wisner ’73, publications assistant/designer
Macalester College is an academic and a humane community, Christian in spirit, Presbyterian in background but non-sectarian in terms of its student body, faculty and staff. It is dedicated to the intellectual and personal growth of its members, it cherishes and strives to nurture each individual's capacities for compassion, understanding, judgment, knowledge and action.

We believe in the fundamental worth of a broad exposure to human intellectual and artistic achievement. We value as a preeminent liberating instrument the opportunity to ponder and enjoy the best that has been thought and said about human nature, the world we inhabit, our place in it, and our relationships one to another.

We believe in the advantages of students and faculty closely engaged in common pursuits. The faculty, students and administration of Macalester College bring specialized competencies, individual expectations and mutual responsibilities to a common commitment to intellectual endeavor. We believe that this can best be achieved through the close association of members of a heterogeneous group, tolerant of diversity but sharing a sense of community.

We believe that teaching and learning are the central activities of this institution. This means that in the composite of teaching, service and research generally expected of faculties, the primary responsibility is teaching which fosters the intellectual growth of the students. The primary responsibility of the students at Macalester is to develop skills in the methods by which knowledge is acquired, critically evaluated and appropriately applied.

We believe that Macalester College has an obligation to be sensitive and responsive to significant changes in knowledge, technology and society. Moreover, the College is committed to preparing its students to discern the important issues of their time, to see them in some historical perspective, and to deal with them intelligently, humanely and effectively.
### 1976-1977 Calendar

#### Fall Term 1976

<table>
<thead>
<tr>
<th>Date</th>
<th>Day</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>August 27-31</td>
<td>Friday-Tuesday</td>
<td>New student orientation</td>
</tr>
<tr>
<td>September 1</td>
<td>Wednesday</td>
<td>Upperclass validation</td>
</tr>
<tr>
<td>August 31</td>
<td>Tuesday</td>
<td>Freshman registration</td>
</tr>
<tr>
<td>September 2</td>
<td>Thursday</td>
<td>Classes begin</td>
</tr>
<tr>
<td>September 6</td>
<td>Monday</td>
<td>Labor Day — Holiday</td>
</tr>
<tr>
<td>September 16</td>
<td>Thursday</td>
<td>Last day to register</td>
</tr>
<tr>
<td>September 23</td>
<td>Thursday</td>
<td>Last day to add a class</td>
</tr>
<tr>
<td>September 23</td>
<td>Thursday</td>
<td>Last day to drop a class without notation on record</td>
</tr>
<tr>
<td>September 23</td>
<td>Thursday</td>
<td>Incompletes due from Spring 1976 first seven-week classes</td>
</tr>
<tr>
<td>October 22</td>
<td>Friday</td>
<td>Mid-term grades due</td>
</tr>
<tr>
<td>October 25-29</td>
<td>Monday-Friday</td>
<td>Mid-term break</td>
</tr>
<tr>
<td>November 1-4</td>
<td>Monday-Thursday</td>
<td>Interim registration</td>
</tr>
<tr>
<td>November 4</td>
<td>Thursday</td>
<td>Last day to withdraw from a course with a &quot;W&quot; grade</td>
</tr>
<tr>
<td>November 10-24</td>
<td>Wednesday-Wednesday</td>
<td>Incompletes due from Spring and Summer 1976</td>
</tr>
<tr>
<td>November 25</td>
<td>Thursday</td>
<td>Spring term registration</td>
</tr>
<tr>
<td>December 1</td>
<td>Monday</td>
<td>Thanksgiving recess begins</td>
</tr>
<tr>
<td>December 14</td>
<td>Tuesday</td>
<td>Classes resume</td>
</tr>
<tr>
<td>December 15-17</td>
<td>Wednesday-Friday</td>
<td>Final examinations</td>
</tr>
<tr>
<td>December 27</td>
<td>Monday</td>
<td>Final grades due</td>
</tr>
</tbody>
</table>

#### Interim Term 1977

<table>
<thead>
<tr>
<th>Date</th>
<th>Day</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 3</td>
<td>Monday</td>
<td>Classes begin</td>
</tr>
<tr>
<td>January 28</td>
<td>Friday</td>
<td>Classes end</td>
</tr>
<tr>
<td>February 4</td>
<td>Friday</td>
<td>Interim grades due</td>
</tr>
</tbody>
</table>

#### Spring Term 1977

<table>
<thead>
<tr>
<th>Date</th>
<th>Day</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>February 1</td>
<td>Tuesday</td>
<td>Validation of registration</td>
</tr>
<tr>
<td>February 2</td>
<td>Wednesday</td>
<td>Classes begin</td>
</tr>
<tr>
<td>February 11</td>
<td>Friday</td>
<td>Last day to register</td>
</tr>
<tr>
<td>February 22</td>
<td>Tuesday</td>
<td>Last day to add a class</td>
</tr>
<tr>
<td>February 22</td>
<td>Tuesday</td>
<td>Incompletes due from Interim 1977</td>
</tr>
<tr>
<td>February 22</td>
<td>Tuesday</td>
<td>Last day to drop a class without notation on record</td>
</tr>
<tr>
<td>March 29</td>
<td>Tuesday</td>
<td>Mid-term grades due</td>
</tr>
<tr>
<td>March 29</td>
<td>Tuesday</td>
<td>Incompletes due from Fall 1976</td>
</tr>
<tr>
<td>March 29</td>
<td>Tuesday</td>
<td>Last day to withdraw from a class with a &quot;W&quot; grade</td>
</tr>
<tr>
<td>April 2</td>
<td>Saturday</td>
<td>Easter recess begins</td>
</tr>
<tr>
<td>April 11</td>
<td>Monday</td>
<td>Classes resume</td>
</tr>
<tr>
<td>April 25-May 4</td>
<td>Monday-Wednesday</td>
<td>Pre-registration for Fall</td>
</tr>
<tr>
<td>May 13</td>
<td>Friday</td>
<td>Classes end</td>
</tr>
<tr>
<td>May 16-18</td>
<td>Monday-Wednesday</td>
<td>Final examinations</td>
</tr>
<tr>
<td>May 21</td>
<td>Saturday</td>
<td>Baccalaureate and Commencement</td>
</tr>
<tr>
<td>May 25</td>
<td>Wednesday</td>
<td>Final grades due</td>
</tr>
<tr>
<td>Chapter</td>
<td>Title</td>
<td></td>
</tr>
<tr>
<td>---------</td>
<td>-------</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>General Information</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Admissions, Expenses and Financial Aid</td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>Student Services</td>
<td></td>
</tr>
<tr>
<td>33</td>
<td>Instructional Policies and Programs</td>
<td></td>
</tr>
<tr>
<td>45</td>
<td>The Curriculum</td>
<td></td>
</tr>
<tr>
<td>155</td>
<td>College Personnel</td>
<td></td>
</tr>
<tr>
<td>173</td>
<td>Additional Information</td>
<td></td>
</tr>
<tr>
<td>200</td>
<td>Index</td>
<td></td>
</tr>
</tbody>
</table>
Campus Map

- East to Downtown St. Paul
- West to Downtown Minneapolis
- Southwest to Airport
- Southeast to Katharine Ordway Natural History Study Area (30 miles)
The Campus

1. Old Main
The oldest building on campus, Old Main was dedicated in 1885 when the College opened with 36 students and seven faculty members. Since then it has been expanded and remodeled as the physical plant has grown. In 1885 it housed the entire College; today it houses the offices of the President, the Dean of Students, Housing, Counseling and Minority Programs, Personnel (including Student Employment), Development and the departments of History, Philosophy, Political Science, Religion, Sociology, Anthropology, and Journalism, as well as many classrooms.

2. Carnegie Science Hall
Built in 1910 as a gift from philanthropist Andrew Carnegie, this building now houses the departments of Economics and Business, Education, and Geography. It is also the home of the Twin Cities Institute for Talented Youth, an imaginative summer program for area high school students.

3. 77 Macalester
Acquired by the College in 1969, this remodeled apartment building now houses the offices of Admissions, Financial Aid, Registrar and Academic Records, Cashier, Comptroller, Accounts Payable and the Loan office.

4. Weyerhaeuser Library
Named in memory of Rudolph H. Weyerhaeuser, a long-time member of the Board of Trustees, the library was built in 1942 and expanded in 1960. Currently it holds approximately 265,000 books, periodicals, newspapers, microfilms and microfiches. It provides seating for almost 500 students in reading rooms, individual carrels, lounges and small study rooms. The library offers a number of services including audio-visual supplies and equipment; a microfilm room; an inter-library system that enables students to check out anything from all other college libraries in the Twin Cities, including the University of Minnesota library; free reprints of articles held by other libraries and a curriculum library of texts used in elementary and secondary education fields. Art prints can also be checked out from the Macalester library.

5. Weyerhaeuser Memorial Chapel
An ecumenical place of worship, this beautiful hexagonal, glass-walled structure was dedicated in 1969. It was a gift of the family of Frederick Weyerhaeuser, who was a trustee of the College from 1957 until his death in 1961. The chapel and the lounge are used frequently by the College community not only for worship but for lectures, films, recitals, meetings and weddings.

6. Bigelow Hall
Primarily a freshman residence hall, Bigelow was built in 1947 and is named in memory of Charles H. Bigelow, chairman of the Board of Trustees from 1925 to 1936, and Frederick R. Bigelow, his brother who succeeded him as chairman from 1937 to 1946. Bigelow is con-
The Campus

connected to Wallace and Doty residence halls by a tunnel system. Floors in Bigelow are co-ed. Most rooms are doubles, each having a sink, built-in closet space, wall shelves and attached desks. Approximately 80 students live in Bigelow.

7a. Wallace Hall
"Wally" was built in 1907 as the first women's dormitory on campus and is now co-ed. Its age presents some disadvantages such as long stairways and complaining pipes, but it also contributes to the character of Wallace. This hall, which houses about 100 students, was named to honor James Wallace, fifth president of the College and a faculty member for 52 years.

7b. Board of Trustees Dining Room
A private dining area used for special luncheons, dinners and meetings.

8. Turck Hall
A residence for 140 students, Turck was opened in 1957 and has been traditionally a freshman dorm. It is named in honor of Charles J. Turck, president of the College from 1939 to 1958. Turck has single-sex floors and all rooms are doubles.

9. Doty Hall
Doty, a semi-highrise residence hall that opened in 1964, houses about 160 students. Usually occupied by a mixture of upperclassmen, freshmen and transfer students, this hall contains a basement recreation room, a sundeck and a ceramic workshop. Doty hall was named to honor the late Margaret MacGregor Doty '14, dean of women from 1924 to 1960.

10. Dupre Hall
Dupre is the largest residence hall on campus, housing 280 students. This hall is co-ed by wing and student rooms are either doubles or singles. A sewing room and darkroom are located in the basement of this dorm. Dupre Hall is named in honor of J. Huntley Dupre, professor of history from 1946 to 1964, and dean of the College from 1951 to 1961.

11. Kagin Dining Commons
Named in honor of the late Edwin Kagin, professor of religion at Macalester from 1926 to 1952, the Dining Commons can seat 700 students at one time in the main dining room on the second floor. The glass-walled commons is operated by Saga food service which prepares three meals Monday through Friday and two on Saturday and Sunday. The building also has small dining rooms for special groups including the Tartan Inn, a restaurant for faculty and staff.

12. Winton Health Service
Free health services are available here to students. The building houses offices, examination, physical therapy and X-ray rooms; a laboratory, wards and an isolation room. A registered nurse is on duty every day and a physician is available during regular office hours by appointment or in case of emergency. The College's Safety and Physical Plant Offices are also located in this building.
13. Student Union
Almost all students on campus probably stop in this building at least once a day to pick up mail at the Post Office where they each have their own P.O. box. The Student Union houses student organization offices, a Grille, the information center and switchboard, and a game room. Among the student organization offices in the union are those of the Mac Weekly (campus newspaper), KMAC (campus radio station), the Community Council (student government) and the Program Board. Also housed in the union are the Community Involvement Programs (CIP) Office, which coordinates student internships and volunteer help in the community; the Office of Campus Programming, which plans activities and publishes a weekly calendar of events at the College; and the Office of Career Planning and Placement, which offers post-graduate and educational counseling. This office also helps students find both part-time jobs during their years at Macalester and full-time jobs after graduation. The union’s two-story Cochran Lounge is frequently used for social and academic functions. The second floor James Room is used for seminar groups.

14. Dayton Hall
Dayton is a small residence hall, housing between 80 and 90 students in double and single rooms. Completed in 1957, this dorm was named for George D. Dayton, who was a Macalester trustee from 1894 until his death in 1938.

15. Kirk Hall
Kirk is one of the most popular residence halls on campus. It is built on a quadrangle with all nine sections opening into a central court. This dorm is co-ed by section and is arranged in suites of study rooms with adjoining bedrooms. Kirk, which is reserved for upperclassmen, is named for E. B. Kirk, longtime Macalester trustee. It houses approximately 150 students.

16. Gymnasium and Pool
Students participating in Macalester’s popular intramural program put the gymnasium to good use. It is also used often for a classroom. In addition to the pool, the gym features wood floors, an indoor track, handball court, kinesiological laboratories, locker rooms and offices.

17. and 18. Field House and Tennis Courts
The Fieldhouse, which is connected to the gymnasium, also houses classrooms and offices in addition to the athletic facilities. Because of the building’s moveable bleachers and 3M Tartan floor, it can easily be converted into five tennis or four basketball courts. A complete weight and exercise room in this building is also available to students. The three outdoor tennis courts at the south end of the Fieldhouse are in almost constant use during warm weather.
The Campus

19. Stadium
The College's football stadium was built in 1964. It seats 4,000 and houses perhaps the most unusual residence hall on campus. The Stadium dorm is actually the interior of the stadium. Remodeled in 1969 to house 23 students, this dorm features carpeted and air conditioned rooms. All have high ceilings and most are constructed with a sleeping loft. Despite the long walk to the Dining Commons, this dorm is popular and open only to upperclassmen.

20. The Athletic Field
Intercollegiate football, soccer and baseball games are held here. The field also features a one-quarter-mile-long all-weather Tartan track with eight running lanes, one of the first installed in the nation.

21. Olin Hall of Science
One of the newest buildings on campus, Olin Hall of Science houses the departments of Mathematics, Chemistry, Physics and Astronomy. Made possible by a gift of the Olin Foundation, this building's facilities include a science library, planetarium and astronomical observatory.

22. Harvey M. Rice Hall of Science
Also made possible by a grant from the Olin Foundation, this building is adjacent to the Olin Hall of Science. The newest building on campus, it was dedicated in 1970 and named after Dr. Rice, president of Macalester from 1958 to 1968. The departments of Biology, Psychology and Geology are located in this building. Equipment housed in Rice Hall and available to students includes an IBM 1130 computer, a nuclear accelerator, NMR spectrometer and an electron microscope. Animal labs, a greenhouse and a perception laboratory that is reflection-proof are also among the facilities in this building.

23a., b., c., d. Janet Wallace Fine Arts Center
This complex houses, in separate buildings, the departments of (a.) Speech and Dramatic Arts, (b.) Music, (c.) Art and (d.) Humanities. The four buildings are linked by a central building containing the Lila Wallace Garden Court, faculty and commuter student lounges and exhibition galleries. There are two theaters within the complex, one for studio work and the other for formal productions with staging and seating on hydraulic lifts for flexibility. The humanities building houses the departments of Classics, English, French, Spanish, Germanic Languages and Literatures, and Slavic Languages and Literatures. A very fine concert hall, with moveable ceiling parts for acoustical tuning, is located in the music building. The art building facilities range from air tools and kilns to a large sculpture studio and excellent lecture hall. Beneath the Fine Arts Center, a huge central power plant supplies heat for the entire College and runs the cooling system for Olin and Rice Halls as well as for the Fine Arts complex. The Fine Arts Center was a gift of DeWitt and Lila Acheson Wallace, founders and co-chairmen of the Reader's Digest, and is named in honor of Mr. Wallace's mother.
The Campus

24., 25., 37. Indian Center/Black House/Hispanic House
The Indian Center, 176 Vernon Street; Black House, 1626 Portland; and the Hispanic House, 1662 Princeton, are centers for minority students on campus where meetings, educational and cultural programs, and social activities take place for students as well as persons from the Twin Cities area.

26. Macalester Women’s Thrift Shop
Located in a little house just west of the Janet Wallace Fine Arts Center, the Thrift Shop is run by the Macalester Women’s Organization. The shop sells everything from secondhand clothes to used books. The shop’s proceeds endow a scholarship at the College.

27. Macalester Plymouth United Church
Located across Macalester Street from the campus, this church was used for College religious services before Weyerhaeuser Memorial Chapel was built in 1969.

28. The Hugh S. Alexander Alumni House
This 14-room residence at 1685 Lincoln Avenue is named in honor of Dr. Alexander, an 1899 graduate of Macalester who was chairman of the geology department for 42 years before his retirement in 1948. The building houses the alumni staff and facilities for a variety of activities and services.

29. Mac Market
A converted auto-body shop, the Mac Market is now an arcade housing the Hungry Mind bookstore, where Macalester students purchase their textbooks; Yokoso Restaurant and The Yarnery. The Market is located one-half block off campus on Grand Avenue, a shop-lined street popular with Macalester students.

30., 31., 32., 33. Language Houses
For foreign language students at Macalester who wish to live the language, these four residences are available: (30.) German House, 34 Cambridge Street; (31.) Russian House, 41 Macalester Street; (32.) French House, 37 Macalester Street (upstairs) and (33.) Spanish House, 21 Macalester Street. These language houses, all located near the campus, provide facilities for some classes, conversation sessions, informal gatherings and club activities, and are “home” for a small number of students vitally interested in using the language in everyday affairs.

32. Hebrew House
This Jewish religious and cultural center, located at 37 Macalester Street (downstairs), serves as a residence for students as well.

34. President’s House
This stately colonial home, located on Summit Avenue on the campus, has been the official residence of Macalester presidents since 1925. A gift of the Dayton Family of Minneapolis, it is often used when the President entertains College groups.
35. The Stella Louise Wood Children’s Center
This nursery and kindergarten laboratory school at 1652 Summit Avenue, is administered by the College’s education department and used as a resource center for Macalester student teachers. It offers open classroom learning for children between the ages of three and five years. Its enrollment includes many faculty children along with other community children. The center grew out of Miss Wood’s Kindergarten and Primary Training School, which was founded by Stella Louise Wood in 1897 and which became part of Macalester in 1949.

36. The International Center
Situated near the campus at 1635 Summit Avenue, the International Center serves as a focus for foreign students’ activities at Macalester. The International Center staff directs the College’s many international programs including individually designed study projects in countries all over the world and programs abroad coordinated through the language departments. They also provide host families in the Twin Cities area for Macalester foreign students. The International Center houses the World Press Institute, which brings foreign journalists to America for a year of intensive American studies, internships and extensive travel.

The Katharine Ordway Natural History Study Area
These 280 acres of land border the Mississippi River about 30 miles southeast of the campus. The area was given to the College in 1967 by Katharine Ordway, sister of former Macalester trustee Richard Ordway. It includes a lake, two forests, several ponds, spring marshes and prairie land. A laboratory-field station with research, lecture and dorm facilities is often used for Macalester classes.
The History

Founded “to afford instruction in English literature, in Ancient and Modern Languages, in Mathematics, the Natural Sciences, and the Professions,” and chartered in 1874, Macalester College opened its doors to students in 1885. Named for a generous donor of Scottish ancestry, Charles Macalester, the College was the continuing successor of Baldwin Academy (1853), Saint Paul College and Jesus College, all of which had been established by Edward Duffield Neill, a distinguished Presbyterian clergyman and educator. In 1880, the College was adopted by the Presbyterian Synod of Minnesota and, though independent of church control, continues among the colleges related to the United Presbyterian Church. From the beginning some women students were admitted to the College, and in 1893 the College became fully coeducational.

The first few decades of the life of the College were marked by the dedicated scholarship and the courageous endeavors of its leaders to keep the College solvent. Especially notable were the sacrificial efforts of Dr. James Wallace, president of the College (1894-1906) and teacher of Greek (1887-1927), who wrote with deep feeling that “the educational road from the old log college to present has been long and arduous . . . and many have been the heroic men that have fallen in that weary way.”

The second quarter of the present century found the College academically sound and committed, under the leadership of President Charles J. Turck, to the broadening of its base of community service. To the stream of ministers and other professional men and women who had graduated from the College were added, in enlarged numbers, teachers, nurses, scientists, civil servants and statesmen. The College was also distinguished by its significant program for foreign students and its lively interest in civic and national affairs.

In the decade of the ’60s, the generous gifts of many friends, including the challenge gifts of Mr. and Mrs. DeWitt Wallace, enabled the College to make marked advances. During this period, the College engaged in a concerted effort to strengthen its faculty, enrich the quality of its student body and enhance its instructional program.

Macalester has sought to couple its emphasis upon quality education with academic and co-curricular programs which are sufficiently flexible to meet the individual needs of an exciting and heterogeneous student body. And the College’s traditional commitment to serving society has found expression in one of the nation’s most ambitious programs of minority education. Macalester moves into the future mindful of its rich heritage and dedicated to bringing the best of that tradition to its students and to the broader society.

The endowment of the College has grown from $25,000 in 1885 to $17,000,000 book value in 1976. The value of the campus and buildings is $25,200,000 today.
The History
Degrees and Accreditation
Academic Honorary Societies

In the summer of 1972 the College successfully completed a 10-year, $32,000,000 Challenge Program to provide endowment for additional faculty, scholarships and facilities for learning. The program began in 1963 with a challenge gift from Mr. and Mrs. DeWitt Wallace.

In 1975 Mr. DeWitt Wallace again responded to the financial needs of the College by permitting several million dollars of his previously restricted endowment to be used to pay off an accumulated debt of the late 1960s and early 1970s so that as of 1976 the College is, in his words, "relieved of the burden of debt." In response to this generous act, trustees, alumni and friends of the College contributed more than $2,300,000 in current operating funds for the College budget — an amount nearly double that which has ordinarily been raised for current purposes in any year.

Degrees and Accreditation

The Bachelor of Arts degree is awarded to students who fulfill the requirements for graduation. Macalester is fully accredited as a member by the North Central Association of Colleges and Secondary Schools and the National Council for Accreditation of Teacher Education. Approved by the American Chemical Society, Macalester is also a member of the Association of American Colleges, the Presbyterian College Union, the Minnesota Association of Colleges, the American Association of Colleges for Teacher Education, the Associated Colleges of the Twin Cities, the National Association of Schools of Music, and the Associated Colleges of the Midwest. Macalester also holds a Phi Beta Kappa charter.

Academic Honorary Societies

The Macalester chapter of Phi Beta Kappa, Epsilon of Minnesota, was established in 1968. This national honorary fraternity recognizes and encourages broad cultural interests and outstanding scholarship in the liberal arts and sciences. While the grade-point average is not the only criterion applied, students nominated are ordinarily expected to have achieved a GPA of at least 3.50 in liberal arts courses, or one which places them in the upper twelve per cent of their class. Factors also taken into consideration are outstanding work in honors and other evidence of intellectual achievement in liberal arts studies. All candidates must have demonstrated a knowledge of mathematics and of a foreign language at least minimally appropriate for a liberal education.

National honorary societies in various disciplines with chapters at Macalester are: Alpha Kappa Delta (sociology); Delta Phi Alpha (German); Kappa Delta Pi (education); Omicron Delta Epsilon (economics); Phi Alpha Theta (history); Phi Epsilon Delta (dramatics); Phi Lambda Upsilon (chemistry); Pi Kappa Delta (speech); Pi Mu Epsilon (mathematics), and Pi Sigma Alpha (political science).
Admissions

Admissions Policies
Any person may apply for admission to Macalester College. All applications will be equitably considered by the Admissions Office, and no applicant shall be barred from admission to the College on the basis of race, religious preference or national origin.

The quality of students and faculty who make up the College is of basic importance in determining the impact that the educational process will have on an individual. It is essential that students have the opportunity to live and study with others who can contribute insights into people and events that their background may have failed to provide. The College therefore strives to insure that both students and faculty represent varied economic, social and cultural backgrounds.

General Information
Admission is based on students’ school records, including rank in class, personal commitment, performance on the College Entrance Examination Board (SAT) or the American College Testing Program (ACT) test, and on potential success at the College, as evaluated by advisers and others who know them well.

The composite of these items will provide a comprehensive overview of the students’ abilities, achievements and, as now developed, plans for the future. Evidence of social and ethical concerns, leadership potential and extracurricular involvements — in addition to academic qualifications — are important considerations noted by the Admissions Committee.

Since the number of qualified students exceeds the number of spaces in the class, the Admissions Committee will give preference to students whose credentials are most satisfactory and who appear to have the greatest probability of having a successful experience at Macalester.

Special consideration is given to students who apply for admission under the Minority Program for Black, Native American and Hispanic students whose educational and economic backgrounds are such that they might not otherwise consider applying to Macalester.

The formal admissions application booklet may be obtained by writing to the Admissions Office, Macalester College, Saint Paul, Minnesota 55105. Since the Macalester application must be filed in every instance, Minnesota applicants are advised not to file the "Minnesota College Admission Form." The application should be accompanied by a non-refundable application or service fee of $15. New students are accepted for entrance for Spring or Fall terms only; not for the January Interim term.

Visitors to the Campus
Prospective students and others desiring guided campus tours should go to the Admissions Office, 77 Macalester Street. It is recommended that visitors notify the office of their arrival time in advance. Appointments for tours and interviews will normally be made between the hours of 9 a.m. and 3:30 p.m. Administrative offices are open from 8 a.m. to 4:30 p.m.
Admissions

Monday through Friday. The Admissions Office is also open for appointments and tours until noon on Saturdays during that portion of the year when classes are in session. The Office of Admissions is closed on legal holidays, such as Christmas, New Year's, Memorial Day, Fourth of July, Good Friday and the following Saturday. Because Thanksgiving is a popular time to visit campus the Admissions Office will be open the Friday and Saturday following Thanksgiving but not Thanksgiving Day.

Prospective students may wish to spend a day and night on campus. Arrangements for overnight visits to the campus must be made at least one full week in advance. Prospective students are housed with Mac students, therefore, overnight visits are limited to one night only. One meal is provided by the Admissions Office, so students should be prepared to pay for extra meals. More detailed information on overnight visits is available by writing to the Admissions Office.

Entrance Requirements
In general, the admission of students to Macalester College is based upon the following factors:

1. Graduation from a secondary school with a scholastic record and test scores which indicate that the student is likely to succeed in college.

2. All candidates for admission as freshmen are required to take either the PSAT or SAT test of the College Entrance Examination Board, or the ACT test of the American College Testing Program. If students choose to test through the College Entrance Examination Board we strongly advise them to test in their senior year. The Achievement Tests of the College Entrance Examination Board are not required for admission, however, they are used for placement in mathematics, the sciences and languages. Students considering these fields for further study are advised to take these Achievement Tests.

Information about these tests may be obtained from high school counselors or by writing directly to:
College Entrance Examination Board
Box 592
Princeton, NJ 08540

American College Testing Program
P.O. Box 168
Iowa City, IA 52240

These programs will supply students with a Bulletin of Information containing rules for filing applications and paying fees as well as a listing of examination centers.

Macalester prefers that these tests be taken no later than during January of the student's senior year. Achievement tests may be taken as late as the summer testing dates.

3. Recommendation as to personal commitment and intellectual ability by the student's adviser or college counselor.
Admissions

4. Additional evidence regarding the student's intellectual curiosity and academic potential, creativity and personal qualities. Such evidence would come from persons who know the student outside of school: employers, records of extracurricular and religious activities, professors who know the student's capabilities, and other available sources. Macalester asks for two such personal recommendations.

5. A written personal statement by the candidate designed to convey an experience, a philosophy or a viewpoint.

Methods of Application for Freshmen
Macalester College offers several application options to students applying for admission. For freshmen, they include Regular Application, Early Decision, the Single Application Method (SAM) of the Associated Colleges of the Midwest (ACM), and Early Admission.

Procedures for applying are nearly the same for all options. However, they vary according to the date the applicant will receive the admissions and financial aid decision. If an applicant is applying for aid we strongly advise him or her to request the admissions decision no later than the April 15 notification date. Further information on these options is given below.

Regular Application
Students applying under the Regular Application procedures have a choice of notification and reply dates. Although there are no absolute application deadlines, students who do not observe the dates given below may find their admission application not considered if the class has been filled or their financial aid application not considered because available funds have been allocated.

If you wish notification on March 1, you should file all application materials including financial aid information by February 1 and will be expected to notify the Admissions Office as to your decision by April 1;
If you wish notification on April 15, you should file all application material including financial aid information by March 15 and plan to make your decision by May 1;
If credentials are not received by the preferred dates, the application will be considered as soon as possible after your file is complete. Your choice of dates will have no bearing on the admissions or financial aid decision.

Early Decision
The Admissions Committee will make an earlier evaluation of the credentials of students who have completed all application procedures and who have decided that Macalester is their first-choice college.

Early Decision candidates should rank in the top fourth of their graduating class through the junior year and file application by December 15 of the senior year. Consideration will be given when all credentials are complete, including the Parents' Confidential Statement and Macalester's financial aid forms if the student seeks financial aid.
Admissions

Students accepted under Early Decision are not required to withdraw applications at other schools, but are expected to send non-refundable deposits of $50 toward tuition and $50 toward residence hall charges, if applying for on-campus housing, within 15 days of the date of their letter of approval. If admission is not granted upon first review, an Early Decision application will automatically be considered again and the student notified early in March.

Single Application Method (SAM)

As a member of the Associated Colleges of the Midwest (ACM), Macalester offers applicants who wish to apply to more than one ACM school the opportunity to apply to three colleges through the Single Application Method (SAM) for a single application fee of $15. The SAM method of application should be used only if the applicant is interested in two or more ACM colleges and is willing to state his or her order of preference among them. SAM applicants should take the appropriate college entrance examination(s) no later than the December test dates. If the student is applying for aid, the Parents' Confidential Statement must be filed by January 1. Files must be complete by February 1. Transfer students are not eligible to use this method. More detailed information concerning the plan is available through the Admissions Office.

Early Admission

A few students who have not yet been graduated from secondary school are admitted to Macalester at the end of their junior year. Among the major considerations for Early Admission are the judgments of the Admissions Committee and the secondary school principal about the student's maturity and qualifications to do distinguished work in college, and whether or not he or she will profit more by beginning college work than by continuing in secondary school. The regular admissions process is used by students seeking Early Admission.

The Minority Program for Black, Mexican-American, Native American and Puerto Rican Students

This program provides financial aid to students who could not otherwise afford to attend a private college such as Macalester. The program also provides academic support, as well as counseling, to insure that its students function successfully in the Macalester College community.

Program students usually are from socio-economic backgrounds which may have deprived them of adequate high school preparation for college. Participants are selected on the basis of an assessment of their academic and social potential. Recommendations by counselors and others who know the student and his or her capabilities, as well as past performance, are given primary consideration for admission. Applicants for the Minority Program use the same application and aid procedures as other applicants.
Admissions

Methods of Application for Transfer Students
Transfer students should follow Regular Application procedures and file a Dean of Students' Recommendation from their most recent college, plus transcripts of all college work. Those who will have completed less than two years of college-level work must also submit their secondary school transcripts. Those who will have completed two years or more of college need not file high school information. It is normally expected that the transfer applicant will present a record of "C" average or better.

Transfer students are notified of the Admissions decision and the Financial Aid decision as their applications are completed.

Credits from other institutions of higher learning including general colleges, teachers colleges, professional schools and polytechnic institutes will be evaluated according to the nature and quality of work presented as judged by the Office of Student Academic Records. Students who have attended non-accredited institutions must have their work validated by examination or by showing competency to carry advanced work successfully. Award of credit in such cases may be delayed for one or two terms awaiting such validation.

The procedures outlined above are general guidelines. Do not hesitate to inquire if unusual circumstances make an application a special case.

College Entrance Examinations
All candidates for admission as freshmen are required to take either the PSAT or SAT test of the College Entrance Examination Board, or the ACT test of the American College Testing Program. If students choose to test through the College Entrance Examination Board we strongly advise them to test in their senior year. The Achievement Tests of the College Entrance Examination Board are not required for admission, however, they are used for placement in mathematics, the sciences and languages. Students considering these fields for further study are advised to take these Achievement Tests.

Since most admissions decisions are made during February, it is strongly recommended that the required examinations be completed on or before the January test dates. The March test date is satisfactory for those who elect April 15 notification. Whatever your preference, an early start will give you more flexibility.

Advanced Placement Program
Students whose scores on the College Board Advanced Placement Examinations are rated 3 (creditable), 4 (honors) or 5 (high honors) will be considered for advanced placement and appropriate credit. Freshmen who wish to apply for advanced placement should arrange to have the test and results transmitted to the Admissions Director of the College. In some cases, it may be necessary for the student to have a conference with the appropriate department chairman during freshman orientation week. A maximum of six courses may be counted toward a bachelor of arts degree. A grade of 2 will receive no credit, but
the department chairman may recommend some exemption. A grade of 1 will carry neither credit nor exemption. Awarding of credit may be deferred until the end of the academic year in order to give students a chance to prove themselves.

Macalester does not recognize the College Level Examination Program (CLEP) tests for advanced placement.

Notification and Reply Dates
All students who apply to Macalester have a choice of notification and reply dates. These dates are also used as financial aid notification and reply dates. **If you are applying for financial aid be sure your admissions application and aid forms are complete no later than the last notification date of April 15.**

Any applications received after the April 15 notification date will be reviewed as they become complete. However, financial aid may not be available after April 15.

A student applying to several colleges will want to choose a reply date that is common to all of them in order to consider all choices and make a decision without jeopardizing acceptance at another college. Macalester’s notification and reply dates are listed below. Applications for both admission and financial aid are cancelled if the student has not replied by the reply deadline in order to award available spaces and funds to other students. However, applications may be reconsidered upon request.

**Early Decision**
File: by December 15.
Notification Deadline: as soon as file is complete.
Reply not later than: within 15 days of notification.

**Regular Admission Options**
File: by (1) February 1, (2) March 1.
Notification Deadline: (1) March 1, (2) April 15.
Reply no later than: (1) April 1, (2) May 1.

**SAM**
File: by February 1.
File: PCS by January 1.
Notification Deadline:
- From First Choice College — February 22.
- From First Alternate College — March 8.
- From Second Alternate College — March 15.
Reply no later than: April 1.

**Expenses and Deposits**
All charges assessed by the College are due and payable on or before August 15 (fall term) and January 15 (spring term). Fees are charged for late payment.
Expenses

A non-refundable application fee of $15 must accompany the completed application. Students admitted pay a non-refundable tuition deposit of $50 to reserve places in the entering class. At registration, the deposit is applied to tuition charges.

Students assigned to College residence halls pay an additional non-refundable room deposit of $50 which is credited against room charges.

Parents of Macalester students who wish to pay education costs on a monthly installment basis may obtain information and application materials by writing to the Bursar’s Office, Macalester College, Saint Paul, Minnesota 55105.

Tuition, Fees and Room and Board 1976-77
The tuition rate for full-time students entering September 1976 is $3,400 per year. This fee includes all expenses except books and those fees listed below. Information about the 1977-78 fees will be available in the Admissions Office.

Application Fee .................................. $ 15
Late Registration Fee .............................. $ 15

Tuition
Deposit (applied toward tuition during first semester) ........ $ 50
Full-time Student—per academic year—Classes of 1977 and 1978 $3,200
Full-time Student—per academic year—
    New Students and Class of 1979 ....................... $3,400
Student Activities Fee ......... $ 35
Part-time Student—per course ........ $ 400
Part-time Student (over age 55)—per course ............. $ 100
Adult Scholarship (2 courses per semester for 2 semesters). $ 200
Part-time Student—special courses—Education 125
    (Human Relations or Drug Education) ................. $ 100
    Physical Education ................................ $ 50
Audit Fee (only full-time student; when taken as 5th course). $ 10
Audit Fee for Alumni ............................... $ 25
Activity Fee for Adult Physical Education
    (non-Macalester student) ......................... $ 25
Fifth Course ..................................... $ 250
Music Lessons
    Private—per term (academic year)
        Full-time non-major student .................. $ 78
        Special or Part-time student ............... $ 88
    Class—per term (academic year)—piano .......... $ 30
Interim Term ................................... Negotiated
Credit by Examination ......................... $ 50
Expenses

Room and Board
Deposit ........................................ $ 50
Full-time Student—per academic year .......... $1,300
   (Room — $650)
   (Board — $650)
Student Houses (room only) ..................... $ 800
Hebrew House (room only) ....................... $ 700

Interim Term Tuition
Full-time Student (non-refundable) ............. No additional charge
Full-time one-term Student ....................... $ 150
Special or Part-time Student .................... $ 300
Interim Make-up ................................ Same as Summer tuition

Interim Term Room and Board
Full-time Student ................................ No additional charge
Room and Board for Interim only .... $ 168

Residence Halls
Students interested in living in college housing will be provided with a residence hall ap­
lication at the time they receive notice of admission to the College. The completed
room application card and $50 room deposit should be returned immediately to the Ad­
misions Office. Housing is assigned to new students in order of receipt of the residence
hall application and deposit.

Refunds
The tuition and room and board deposits made by an applicant are non-refundable. There­
fore, if students have difficulty with deposit deadlines they should contact the Admissions
Office.

No tuition is refunded or credited after mid-term. For purposes of calculating the pro
rata tuition refund during the first half of the term, two weeks are added to the date of
cancellation notice and the refund or credit is calculated on the proportion that the un­
used portion bears to the total term. No tuition refunds or credits are granted without
first receiving a notice of cancellation from the Dean of Students.

In the case of prolonged illness which requires the student’s withdrawal from the College,
refunds or credits are made in tuition and room and board from the end of a two-week
period following the beginning of illness, according to the records of the College Health
Service. No tuition is refunded or credited on courses completed.

Students leaving the College any time after registration without approval, or by reason of
suspension or dismissal, will not be eligible for any refund.
Financial Aid

The cost of a college education is of major concern to the institution as well as to students and their families. The primary responsibility for meeting the cost remains with the families and the students themselves. As cost often exceeds the resources of many students and their families, Macalester seeks to assist students who could not otherwise attend for financial reasons. However, the College should be expected to contribute only when the family and student have provided as much as they are able. No student interested in attending Macalester should hesitate to apply because of his or her financial situation.

The financial aid program assists those who are accepted for admission but who cannot meet college costs through their available resources. It is designed to give a reasonable amount of financial assistance to a large number of students. In addition to helping the individual student, financial aid also assists the College in achieving diversity in backgrounds among the student body — an important part of a Macalester education.

Macalester's financial aid program is open to all full-time students attending classes during the nine-month period from September through May. Financial aid is not available for summer term courses, although the College can help students secure outside loans to help with expenses during this period.

All students are required to seek and maintain scholarships offered by organizations in their communities, parents' employers, and clubs and lodges. Students who are Minnesota residents are also expected to apply for aid through the Minnesota State Scholarship and Grant Program, and all students must file an application for a Basic Educational Opportunity Grant. All assistance should be reported to the Financial Aid Office, even if it is received after the Macalester award has been made.

All students seeking financial aid should file the admissions and financial aid applications no later than March 1.

Confidential Financial Statements
All financial aid is awarded on the basis of established financial need. Need is defined as the difference between the amount a student and his or her parents can reasonably be expected to contribute toward the college expenses. To be considered for financial aid, a student's parent or guardian must submit either a Parent's Confidential Statement (PCS) to the College Scholarship Service (CSS), or a Family Financial Statement (FFS) to the American College Testing Program (ACT). The contribution expected of the student and his or her family is determined by an analysis of the PCS or FFS data submitted to the computing service, along with an evaluation provided by the Macalester Financial Aid Office. Upon determination of the expected contribution, a student's need is derived and an aid package is put together.
Financial Aid

The College Scholarship Service also provides a Financial Aid Form (FAF) for students who are financially independent of their families. Independent students must state their special circumstances in writing; show proof that they will not be claimed as a dependent for income tax purposes by anyone (except a spouse) for the calendar years prior to and following the year in which aid is to be received (i.e. a student seeking aid for the 1977-78 academic year cannot be claimed as a dependent on a 1976 tax return); cannot live with their parents for a period of more than two weeks during this same three year period; and these students cannot receive more than $600 support from their families.

Only those filing an FAF as incoming students will be considered for financial aid on an independent student basis for succeeding years. Students considering filing for aid as independent students are encouraged to contact the Admissions Office before completing their applications.

In addition to the confidential statement, a Macalester Financial Aid Application and Work-Study Application are required. These forms are included in the Admissions Application Booklet.

Financial assistance for subsequent years is not renewed automatically. Students who seek aid must file the College application forms and submit a financial statement each year they are in attendance at the College. Financial assistance is subject to review annually and to adjustment if financial need or academic status has changed. It is also subject to adjustment in view of the total dollar need of all students and the funds available for financial aid.

By January 15, returning students must file the Macalester Financial Aid Applications for the following fall and submit the renewal confidential statement so results are returned to the College by the computing service by March 1. Students on leaves of absence who wish to apply for financial aid are responsible for applying in the same manner as returning students.

In unusual circumstances, the College Financial Aid Office will compute CSS or ACT forms for a fee of $10.

Types of Assistance

Financial Aid is generally awarded in the form of a package including scholarship, work, and loan funds. The amount of each type of aid varies according to the College's funds and the student's need. During 1975-76 about 47 percent of Macalester’s 1,600 students received financial assistance. The 1976-77 financial aid budget is approximately 1.4 million dollars. Aid awards range from $100 to the full cost of tuition and room and board. In addition, many Macalester students receive scholarship funds from outside the College.

Students interested in the Macalester/Rush Nursing Program should write Macalester College for information on financial aid for that program.
Financial Aid

Scholarships and Grants

General Scholarships
General scholarships, provided from the College budget, are awarded to freshmen and transfer students as well as upperclassmen who have financial need. Students need not apply for specific scholarships since they will automatically receive consideration for all funds for which they may be eligible.

Endowed Scholarships
A large number of endowed scholarships are available as a result of generous gifts from friends and alumni of the College. The income from these funds is generally awarded to sophomores, juniors and seniors who have shown superior academic performance.

Minnesota State Scholarship/Grant Program
Residents of the State of Minnesota must apply for funds under this program. The appropriate application forms are available through high school guidance offices or the Macalester Admissions Office. The deadline for this application is February 1.

National Merit Scholarships
Macalester is seventh among the nation’s colleges and universities in number of National Merit Scholars graduated. Through the College-sponsored program, 25 scholarships were available to freshmen entering in the Fall of 1976.

National Achievement Scholarship Program
Macalester is a college sponsor of this program for outstanding minority students.

National Presbyterian College Scholarships
Macalester is third in total numbers of Presbyterian Scholars (both Agency and Board sponsored and College sponsored) in the nation since 1956. If you are a member of the Presbyterian Church, please apply to this program early in your senior year of high school. Applications are available in your church office or through the Macalester Admissions Office. The deadline for this application is December 1.

Minority Scholarships
Macalester’s Minority Program, as well as being an academic support program, provides 25 new students each year up to total assistance. All minority applicants are eligible to be considered for this assistance by making application to the College.

The Edward Duffield Neill Scholarship
As part of the centennial observation of Macalester’s chartering in 1874, a new scholarship program was established to honor Dr. Edward Duffield Neill, pioneer Presbyterian clergyman-educator who founded Macalester and predecessor schools dating back to 1853. All freshman applicants are eligible for the $500 renewable grants, which are awarded by a committee of seven faculty members on the basis of academic performance and potential, talent and social commitment.
**Financial Aid**

**Supplemental Educational Opportunity Grants**  
Established by Congress to help colleges enroll qualified students of exceptional financial need, this program is administered by Macalester.

**Loans**

**Federally Insured Student Loans (FISL)**  
Students on financial aid, and many students not receiving financial aid through the College, are eligible to apply for a Federally Insured Student Loan. Under this program a student may borrow up to $2,500 per year subject to a total undergraduate borrowing limit of $7,500. The interest rate is seven percent per year, paid by the Government while a student is enrolled at the College, if his or her need qualifies. Certification of such need is required annually in order to qualify for this interest subsidy. This type of loan can be obtained either through a local bank or through the Minnesota Student Loan Program. The State Loan Program is open to all students regardless of state residency.

**National Direct Student Loans (NDSL)**  
The College awards National Direct Student Loans on a limited basis because our available funds are dependent on collections from previous NDSL loans and a yearly allocation to the fund from the Federal Government. The interest rate on this loan is three percent, paid by the Government while a student is enrolled in College. Interest and repayment begins nine months after leaving college or graduate school.

**Work**

**The Federal Work-Study Program**  
The majority of the employment opportunities on campus are reserved for students receiving Federal work-study funds as part of their financial aid award. The program provides students with many interesting opportunities to work with faculty, staff and administrators. Students normally work approximately 10 hours a week and are able to set up their work schedule around the times they attend classes.

**Other Campus Employment**  
While there is a limited amount of money available for work by students not on financial aid, campus employment is generally reserved for students who are receiving financial assistance.

**Off-Campus Employment**  
The Career Planning and Placement Office maintains a file of off-campus jobs available to Macalester students and will assist students in finding employment.
Financial Aid

Changes in Financial Aid Policies

This has been an attempt to provide accurate and up-to-date information regarding Macalester's financial aid policies. Please be aware, however, that this is a two-year catalog and changes may occur in federal government programs for student financial assistance resulting in changes made by the College in an attempt to best meet the needs of students requesting financial assistance.

Tuition Payment Plans

Various finance plans are available that make it possible for students to spread the annual costs of their education over a period of months rather than making large payments at the beginning of each term. Information regarding these finance plans is available through the Bursar's Office.

How to Apply for Financial Aid

Prospective students who are candidates for financial aid at Macalester College must take the following steps:

1. File a formal application for admission with the Admissions Office.
2. File the Macalester Application for Financial Aid and the Work-Study Application with the Admissions Office.
3. File a Basic Educational Opportunity Grant Application.
4. File an application for a Minnesota State Scholarship Grant if you are a Minnesota resident.
5. Submit either the PCS, FAF or FFS to the appropriate computing service, by December 1 for SAM applications and January 15 for regular applications, and request that a copy be sent to Macalester College. These aid application forms are normally available in the office of your school principal or counselor. If necessary, it may be obtained from the Macalester Admissions Office.
Student Services

Dean of Students Office

There are a variety of service and activity resources available to students to meet the needs of a diverse student population including Orientation, Comprehensive Counseling and Advising Services, Housing, Health, Athletic and Social Programs, Minority Programs, Community Involvement Programs, the Chaplaincy, Career Planning and Placement, Campus Programming and Commencement. A concerted effort is continually being made to respond to change and enlist student input to focus on current needs.

Community Involvement Programs (CIP)

CIP places 25 percent of the student body in Twin Cities community settings for "real world" experiences. Students choose among several different pathways to their off-campus service/learning: they volunteer; they do internships where they receive academic credit for their applied learning; or, they receive their field experience placements through CIP, which are required components of certain courses. Some of the placement agencies for any of the above include: alternative and traditional schools, hospital emergency wards and psychiatric units, community health clinics and nursing homes, legal and welfare rights organizations, and governmental bodies and legislatures. For more information, see the statement on internships elsewhere in this catalog.

Health Service

The Winton Health Service is located at 1595 Grand Avenue. A registered nurse is on duty from 8 a.m. to 4:30 p.m., Monday through Friday; from 10 a.m. to 12 noon, Saturday. A doctor is on duty for consultative services two to three hours per day.

Campus Activities and Organizations

The student Program Board is responsible for initiating and coordinating out-of-class activities on campus. Its goal is a living-learning situation in which students can plan and attend the activities they feel are relevant to their educational and personal goals.

Other student organizations provide a variety of social, educational, cultural, recreational and volunteer activities. They include:

- Academic Clubs — Classics, French, Geology, German and Spanish Clubs; the Macalester Debate Society; in addition to academic honorary societies.
- Athletics — Scots Club (lettermen); Cheerleaders; Rowing Club; Ski Club; Co-Rec (coed) and Women's Recreation Association, and an extensive intramurals program.
- Citizenship and Community Action — Black Liberation Affairs Committee (BLAC), Hispanics Liberados, Native American Coalition (NAC), International Club, Student Project for Amity Among Nations (SPAN), Young Democrats, Ripon Society, Macalester Republican Club, Young Socialists, Macalester Association of Commuting Students (MACS), Macalester Student Feminists, and Minnesota Public Interest Research Group (MPIRG).
Student Services

Communications and Publications — The Chanter (literary magazine); KMAC (campus radio station); Mac Weekly (newspaper); and the Spotlite (directory).

Music — Symphony Orchestra; Symphonic Band; Concert Choir; Festival Chorale; Pipe Band and Highland Dancers.

Religious Organizations — Hebrew House and Macalester Christian Fellowship.

Speech and Theatre Arts — Drama Club; Macalester College Debate Union; Macalester Symposium; National Collegiate Players.

The Macalester College Student Government (MCSG)
The major organ of the Macalester student government is the Community Council. It provides official representation for the student body in the governing of the College and fulfills such needs as the coordination of student action and the allocation of funds. Meeting regularly throughout the year, the Council serves as a forum for the expression of student viewpoints.

Religious Life
Believing that the religious dimension is an essential part of education, Macalester College offers credit courses in the department of religious studies and a variety of other opportunities for growth in religious understanding and expression of the religious spirit. The College is surrounded by excellent Christian churches of many denominations and by Jewish congregations.

The Weyerhaeuser Memorial Chapel, dedicated in 1969, with its ecumenical sanctuary seating 375, its offices, lounge area, conference room, library and kitchen serves as a campus center for worship, for lectures and concerts, and for student groups that engage in Bible study, fellowship and community service. The College Chaplain seeks to stimulate religious inquiry and commitment, enlisting faculty members in various programs and providing pastoral counseling. On occasion, there are all-College worship services in the Chapel. Hebrew House sponsors special Jewish religious programs. Many opportunities for Christian service in the community beyond the campus are offered through Community Involvement Programs, as described above.

The Office of Career Planning and Placement provides vocational and career counseling for all students, freshmen through seniors, as well as alumni. Extensive files; pamphlets and information sheets on careers are maintained for all students’ use.

The Minority Program for Black, Mexican-American, Native American and Puerto Rican Students provides financial aid to students who could not otherwise afford to attend a private college such as Macalester. The program also provides academic support, as well as counseling, to insure that its students function successfully in the Macalester College community.
Student Services

Program students usually are from socio-economic backgrounds which may have deprived them of adequate high school preparation for college. Participants are selected on the basis of an assessment of their academic and social potential. Recommendations by counselors and others who know the student and his or her capabilities, as well as past performance, are given primary consideration for admission.

Study Skills Center provides a laboratory where students can improve their general communication skills and specific skills in academic areas of concern by working with study skills counselors and tutors in a non-threatening atmosphere. The Center provides both individual and group assistance in skills development, and is available to all Macalester students.

Counseling and Academic Advising provides professional counseling services to assist students in focusing on issues of personal and educational growth and development. This office also offers specialized psychological counseling and testing.

Assistance is provided in academic planning. Special counseling is available for students who experience academic, personal or social problems. The Coordinator of Counseling and Academic Advising assigns faculty advisers to freshmen and transfer students and counsels students who take leaves of absence.

Student Housing

The residence halls serve as miniature communities, providing an opportunity for students to receive some of their most effective education in human relations. The residence hall directors and the resident assistants cooperate with the student residence hall councils in planning and encouraging an active intellectual and social life.

The College places primary responsibility for policies governing residence halls with the people who live in them. Each hall council establishes and enforces policies under authority delegated from the Residence Hall Policy Council, which the faculty has empowered to establish social policy in College housing. Under RHPC policy, College housing is co-educational. Some residence halls house men and women on alternate floors.

Residence Halls

Macalester College accommodates approximately 60 percent of its students in campus residence halls. Four buildings adjacent to and owned by the College house four language houses (French, German, Russian and Spanish) and a Hebrew culture house.

Each student assigned to a residence hall is furnished with a single bed, pillow, mattress and pad, desk, desk chair, a wardrobe or closet and a chest of drawers. The occupant furnishes sheets, pillowcases, towels, blankets, an alarm clock, a desk lamp and other personal necessities. Rooms are usually for double occupancy. A recreation room, lounges, vending machines and storage areas are provided in each hall. Students living in residence halls must take their meals in the dining hall.
Instructional Support

The Office of the Registrar and Student Academic Records is responsible for class scheduling, maintenance of academic records of all students, and the collection and dissemination of certain institutional data. In addition, the office administers all student registrations for fall, interim and spring terms; initiates changes of course registration; publishes in advance fall and spring term final examination schedules; endorses teacher certification applications; evaluates transfer credits; acts upon readmission applications; issues transcripts and statements certifying full-time attendance and/or good standing; and certifies to the faculty those students eligible for graduation.

Library Services
Library services of the College support and extend the academic programs of its students, assist in meeting the teaching and research needs of its faculty, and provide study facilities, research materials and recreational reading for the College community. Housed in the Weyerhaeuser Library and Olin Science Library, the collection now numbers about 250,000 volumes. The library receives nearly 1,000 current periodicals, journals and newspapers.

Copies of a “Guide to the Weyerhaeuser Library” are available at the library. This pamphlet gives detailed information to assist all library users.

Monographs and journals of interest to the disciplines supported are in the Olin Science Library and are indexed in the Weyerhaeuser Library card catalog.

Special collections of the library include the memorial library of Edward Duffield Neill, strong in early American and Minnesota history; the Arthur Billings Hunt books on American hymnology; the Gustavus Loewinger Shakespeare collection; the Stella Louise Wood collection of juvenile literature; the J. Harold Kittleson collection of Sinclair Lewis materials, and smaller collections of Willa Cather and Adlai Stevenson materials; the Cyrus B. Yandes collection on field sports; the Norman H. Strouse collection of Mosher imprints; the Charles W. Ferguson Word Library; the Frances Densmore Ethnological Library; the Tartan Room, housing college archival materials; a treasure room for rare books; and collections of art prints, phonograph records and tapes. The library continues to rely on gifts and special purchases to strengthen subject collections in particular areas.

Trained librarians organize the collections and provide expert assistance to students and faculty in bibliographic search, book selection, reference work and related areas of academic library service. Members of the staff conduct initial student visits to the library as a part of the freshman orientation program; appear in classes at the invitation of faculty members to discuss with students various methods of making effective use of the library’s resources; and offer a formal course, “Introduction to Bibliography,” for students who wish to develop competency in doing library research. Another course, “Methods of Research in Government Publications,” is offered for students who desire expertise in this area.
Instructional Support

Library services at Macalester are backed up by major research collections accessible from the campus. These include: the James Jerome Hill Reference Library, the Saint Paul Public Library, the library and manuscript collections of the Minnesota Historical Society, the Minnesota State Law Library, the University of Minnesota Libraries, the Minneapolis Public Library and special libraries in the metropolitan area. In addition, through Cooperating Libraries in Consortium (CLIC), Macalester students may obtain virtually anything they need through inter-library loan.

Audio-Visual Department (Library)
This department is dedicated to the expansion of learning possibilities for students and faculty through the use of non-book media. It attempts to inform members of the community about new developments in the audio-visual area and to assist the faculty in developing instructional uses of non-print materials. With facilities for photographic and graphic arts work, the audio-visual staff is available to produce instructional materials or to advise on where such services can be obtained. The department includes a video tape studio for closed-circuit television and a large film library. All kinds of audio-visual equipment are provided on free loan for classroom use, and services and equipment are also available at reasonable fees for other purposes.
Instructional Policies and Programs

General Information about Calendar, Course Patterns and Student Load
The academic calendar at Macalester is divided into a 14-week fall term (September-December), a four-week interim term (January) and a 14-week spring term (February-May). In addition, there is a two-term summer session.

Each course offered in the curriculum is equivalent to four semester credits, except courses in physical education activities, forensic and speech activities, music ensemble and studio work, and human relations and drug education. The credit for these latter courses is specified in the departmental sections of this catalog (under Curriculum).

A student usually enrolls in four courses during each of the fall and spring terms and must register for one course or project during interim term. A student may register for a fifth course by petition to the Director of Student Academic Records: Approval is normally granted students in good academic standing who have no courses uncompleted.

The Interim Term
When Macalester adopted the interim term in 1964, it was one of the first colleges in the nation to set aside the month of January for special learning experiences. Hundreds of other institutions have followed suit. Interim continues to afford opportunities for intensive study in a single area. Students register for only one course or project. In a typical January, more than 70 group courses are offered by Macalester faculty. Many of these treat non-traditional topics not covered in the regular curriculum. Some are interdisciplinary in nature and others represent advanced disciplinary specialties. Interim courses often include research in libraries, studios, laboratories or museums, and field trips are not uncommon. Some courses are initiated and led by students with the supervision of faculty members. Interim is also a popular time for independent study, with approximately half of the student body exercising this option. Many of these students do internships with businesses, agencies, and institutions both in the Twin Cities and nationally. The Upper Midwest Association for Intercultural Education (UAMIE) offers interim courses overseas, and each year a number of Macalester students spend interim term on another cooperating college campus. All interim term courses and projects are graded on a satisfactory/no credit basis.

The Summer Session
Macalester offers a summer session of two four-week terms. In a typical summer, more than 100 courses taught by Macalester faculty are offered. These are listed in a separate summer session catalog. Students are permitted to enroll in one course each term. In addition, those with strong academic records may register for an independent study course spread over the two terms. Macalester admits students from other colleges and advanced high school students to the summer session. Several institutes are also held on campus, including the Twin City Institute for Talented Youth, which enrolls more than 800 high school students from St. Paul and Minneapolis.
Graduation Requirements

A. Courses: 31 courses successfully completed are required for graduation.

B. Interim: Four interim term projects successfully completed are required for graduation. If a student does not register for and successfully complete an interim term, he or she must make it up in the summer. Make-up projects must be approved by the Interim Term Subcommittee. The tuition fee is the same as for summer school. An exception to the four-interim term rule is made for students who, through an accelerated program, have met all the requirements except the fourth interim term by the end of seven regular terms. Such students will be excused from the fourth interim term. Transfer students must meet reduced interim term requirements, depending upon the number of terms they are in residence at Macalester.

C. Patterns of Concentration: To insure appropriate depth within an area or related areas of knowledge, students are required to elect among (1) a departmental major concentration, (2) a core concentration, (3) an established interdepartmental major concentration or (4) an individually-designed interdepartmental major concentration.

1. A departmental major concentration consists of not less than seven nor more than eleven courses within one department (including prerequisites) and up to seven supporting courses outside the department, the total not to exceed sixteen. Departments will determine those courses, and sequences of courses, which constitute the various patterns for the major in that field. A department may also recommend (but not require) additional electives from among its own offerings or in supporting fields as indicated by the student's educational and career objectives.

2. A core concentration in a given department consists of two sets of six courses, one set to be within the department, the other set outside of it. These two sets of courses are designed to be complementary. Typically, various options exist in both the departmental and the auxiliary course offerings, permitting some latitude in preparing for specific careers or professional schools.

3. An interdepartmental major concentration established by the faculty shall consist of not less than nine nor more than 16 courses, including supporting courses and prerequisites. The sponsoring departments will determine those courses, and sequences of courses, which constitute the various patterns for the major in that field. The departments may also recommend additional electives as indicated by the student's educational and career objectives.

4. An individually-designed interdepartmental major concentration, reflecting a disciplined area of inquiry crossing departmental lines, may be constructed by an individual student. It will have a minimum of nine courses and not more than 16, including supporting courses. Such a program requires the support of three faculty members, one of whom must agree to serve as the student's major adviser.

5. A student may obtain two concentrations by fulfilling the respective course requirements in those concentrations. Individual courses, where appropriate, may be counted toward both concentrations.
Instructional Policies and Programs

D. General Distribution Requirements: Each student must take at least one course in the academic division of the Natural Sciences and Mathematics — Biology, Chemistry, Geology, Mathematics, Physics and Astronomy; at least one course in the division of the Social Sciences — Economics and Business, Geography, History, Political Science, Psychology, Sociology, and Anthropology; and at least two courses in the division of Humanities and Fine Arts — Humanities: Classics, English, French, German, Humanities, Philosophy, Religion, Russian, Spanish; Fine Arts: Art, Music, Speech Communication and Dramatic Arts.

Courses may be counted both toward the general distribution requirements and concentration requirements. Of the 31 courses submitted for graduation, no more than 24 courses may be taken within any one of the following four areas: Social Sciences, Natural Sciences and Mathematics, Humanities, and Fine Arts. Certain courses are regarded as "non-divisional." While they count as general electives, they do not satisfy distribution requirements. Included are freshman seminars and courses in Education, Environmental Studies, Journalism and Physical Education.

To identify the specific courses which satisfy general distribution requirements, see the Curriculum section elsewhere in this catalog.

Curricular Recommendations

A. Basic Competency:
1. English: Oral and written skills in English are an integral part of all educational work in the Macalester liberal arts program, and departments will provide for development and evaluation of these skills with recommendations for remedial work where necessary. English as a second language is offered for foreign students who require such instruction.

2. Mathematics: Courses in basic mathematics are available for students who require additional instruction in fundamental concepts and operations. More advanced courses present quantitative methods required by the natural and social sciences.

3. Foreign Languages: Students are encouraged to develop proficiency in a foreign language and familiarity with the literature and culture associated with that language. As one means of achieving this objective, the College endeavors to provide interested and qualified students with the opportunity to study in a foreign country.

B. Individualized Learning:
1. Freshman Seminars: In keeping with its commitment to individualized learning in a liberal arts community, Macalester encourages freshmen to participate in a freshman seminar or other similar small-group course to develop an awareness of the student's own educational needs, the art of self-instruction, a familiarity with various methods of inquiry and an appreciation of the relationships among various fields of knowledge.

2. Independent Study: Students are encouraged to complete an exceptional piece of independent work of intellectual or artistic merit.

3. Internships: The urban location of Macalester affords many opportunities for students to participate in credit-bearing internships in a broad variety of organizations
Instructional Policies and Programs

and occupations. In some instances, arrangements for internships are made through the sponsoring department, but in most cases the staff of the Community Involvement Program assists students and faculty in obtaining appropriate placement. Participants negotiate individually with faculty members to determine learning goals and evaluative criteria.

Students have served as tutors for children and adults in community centers and in homes, and as teacher aides in schools and day care centers. Others have worked in hospital emergency wards and psychiatric units, community health clinics, and nursing homes. Students have also held research, planning and administrative positions with governmental and quasi-governmental bodies; and, have held client advocacy positions with legal rights and welfare rights organizations. Still others work in local business firms.

Internships are particularly valuable in assisting students to make sound educational and vocational decisions and in testing their abilities and interests against the demands of the extra-academic world. A typical part-time internship involves 10 to 25 hours of work per week and bears one or two course credits. A limited number of students are able to devote an entire semester to full-time internships.

C. International Programs: Macalester encourages as many students as possible to participate in a study program abroad. The available opportunities are described elsewhere in this catalog.

Regulations Concerning Concentrations

Students must file an approved plan for a pattern of concentration (major or core) no later than the end of their fourth term. This is a prerequisite for registration for the junior year and obtaining junior status. The plan is to be filed with the Office of Student Academic Records. Students in the teacher education program must also receive approval from the chairman of the education department.

Departments (and “coordinating committees” for non-departmental concentrations) may develop and implement diagnostic and evaluation processes and procedures for students in their programs of concentration which are in addition to processes or procedures occurring within courses.

When students declare an area of concentration, they will be given in writing a full description of the requirements for completing that concentration. This will include, in addition to course work, a description of any diagnostic and evaluation processes and procedures required as part of the concentration. Where such processes and procedures are included, copies of representative examinations or other instruments involved will be furnished in department offices and in the library for student use. When changes in programs of concentration occur, students already declared in that area will be permitted to complete the program under the description given them at the time of original declaration or under the new program, at their discretion.

Each student seeking an individually-designed interdepartmental major must present, no later than the end of the fourth term, a completed major proposal to the IDIM Curriculum
Review Board for consideration, recommendation and transmittal to the Curriculum Committee.

For graduation, all courses in the program of concentration must carry an overall average of "C" or better. A "D" grade may be included in the program of concentration provided that it is approved by the chairman of the sponsoring department. (See also Grading Systems below.)

Credit by Examination
Under certain conditions and with certain limitations (specified in the Student Handbook) Macalester College students may receive credit for a course listed in the catalog by the successful completion of an examination or other requirements.

Residence Requirement
A bachelor's degree candidate will normally 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 not to be less than two. The senior year must be spent in residence.

Teacher Certification Requirements
A student who works toward a teaching certificate takes the courses required by the State of Minnesota for teacher certification in addition to those required for his or her concentration. Students interested in teaching should begin to set up their study programs early and should consult with the education department.

Student teaching is one of the requirements for certification to teach in elementary or secondary schools. Two student teaching experiences are required, and may be taken during spring, fall, interim or summer term.

Grading Systems
For the fall, spring and summer terms, two grading options apply: A-B-C-D-NC (no credit) and S (satisfactory) -D-NC. Interim term and fractional-credit activity courses are graded only on the S-NC basis. In some classes written evaluations will also be provided at student request. Regulations governing the limitations on S-D-NC options and the time of selection of the grading options are published in the Student Handbook.

Grades are reported to students each semester and are recorded on a permanent transcript. Grade point averages are computed and form the basis for Latin honors at graduation. Regulations applying to incomplete grades and their removal are included in the Student Handbook.

Academic Regulations
Many of the detailed regulations pertaining to the academic program of Macalester College are summarized in the Student Handbook. This publication includes a schedule specifying the minimum and normal rate of progress towards a degree; regulations governing probationary status, dismissal, withdrawal, leaves of absence and re-admission; procedures for registration, validation, changes in registration and filing petitions for exemptions from
academic regulations. These statements of policy and procedure are very important and students are encouraged to study them carefully.

Honors Program
The Honors Program is grounded on the premise that students who graduate with honors are characterized by recognizably superior intellectual capacity and achievement, communicatory ability, creativity and breadth of interest. The honors program provides a special opportunity for a rewarding educational experience and can be either disciplinary or interdisciplinary in nature.

A student interested in entering the Honors Program may apply to the honors administrator as early as the middle of his or her sophomore year or as late as the second term of his or her junior year. Any student with a minimum 3.0 GPA may apply for admission to the Honors Program. This requirement may be relaxed if the petition for admission includes evidence from the prospective adviser that the student can perform well in the Honors Program. Normally, a student designates, at the time of application, a faculty adviser from any department who has agreed to supervise the development of the honors project.

Participation in the Honors Program involves completion of an honors project. This project shall be pursued over several semesters and shall involve the production of creative, original work. It may include research and writing, composition and performance of a major musical piece, involvement in precepting, or another project which is individualized and specialized. Examiners from within or without the College evaluate the quality of the student's honors work, and the student may be recognized by the examination committee as graduating with Honors or Highest Honors.

International Programs
Macalester has a long tradition of international involvement. Recent enrollments of foreign students have amounted to over five percent of the total student body. And every year, many Macalester students live and study abroad as participants in the programs described below. The International Center is the campus focal point for all of these activities. The staff of the Center administers the Macalester programs, counsels foreign students and provides information and advice to students interested in overseas opportunities. In addition, the International Center serves as an informal meeting place for foreign and American students, and as the site of numerous social activities. Macalester will not discriminate on the basis of race, religion, sex or politics in the selection of students for any exchange program, international or domestic.

Overseas Studies Programs
Overseas studies programs for credit are sponsored by various academic departments and administered by the International Center; registration for these programs is in the Office of Academic Records. Students enrolled in approved study abroad programs retain their financial aid and are also eligible for supplemental travel grants from the International Study Scholarship (ISS) Fund awarded on the basis of demonstrated need. Students who
Instructional Policies and Programs

wish to participate in another institution's study abroad program, not approved by the Macalester faculty, may do so on a leave-of-absence after filing the intended transfer credits with the Office of Academic Records. Scholarship funds do not apply to leave-of-absence programs, but ISS travel grants may be requested.

Students interested in study abroad should contact the International Center for information and individual counseling. Programs offered for credit are described below.

Approved Macalester Study Abroad Programs

The following programs are approved for semester and year study abroad. A student need not be a language major to apply, but must have studied the language of the host country or countries.

1. The French department offers two possibilities for students with varying proficiencies in the French language at the Centre d'Etudes Francaises (affiliated with the Institute for American Universities) in Avignon; for students with one and one-half to two years of French, the fall semester; for students with two and one-half years or more, the spring semester. Students selected for the spring of 1977 also spend interim term in Paris. Fall students join this group in Paris for two weeks.

2. The German department begins its study abroad program in January with two months of intensive language training at a Goethe Institute in Germany. From March 1 until the end of June, participants study with professors from the University of Vienna and with the Macalester professor who directs the program. Students must have two years of college German study or its equivalent. The two phases of the program are separable, but only those attending the March-June session are eligible for the ISS grants.

3. The Spanish department has an arrangement with the Great Lakes Colleges Association (GLCA) allowing our students to participate in their Bogotá, Colombia program on a semester basis. The program emphasizes Spanish language and the social sciences focused on Colombia and Latin America. Students who participate in the fall program take their courses at the Centro de Estudios Universitarios Colombo-Americano (CEUCA). Participants in the spring study at CEUCA and at the University of the Andes and the Javeriana University. Applicants should consult with the Spanish department about requirements for admission.

4. The department of Slavic Languages and Literatures has established a studies program in the Russian Language Department of the University of Zagreb, Yugoslavia. Students with a minimum of two years of Russian language study must also have studied Serbo-Croatian the year or summer prior to going to Yugoslavia. Course work with Russian and Yugoslav professors includes conversation and composition, syntax, literature and intensive Serbo-Croatian. A trip to the U.S.S.R. is arranged during the year.

5. University of Stirling-Macalester Exchange. The College has an exchange program with the University of Stirling, Scotland. Macalester students pay tuition, room and board at Macalester while Stirling students pay theirs at home. Then the selected participants ex-
Instructional Policies and Programs

change places for a year of study in the other institution. Selection is by the departments; financial and travel arrangements are made by the International Center. Participants apply for their junior year.

6. The Sendai Exchange. Macalester students with a background in Japanese language, history and culture are invited to contact Jerry Fisher and David Sanford concerning the exchange program between Macalester and Miyagi University in Sendai, Japan. A wide variety of courses are available including intensive work in the Japanese language. Students are housed in dormitories and may apply for one semester or an entire year.

7. The Cairo Exchange. During the 1976-77 academic year, Macalester will initiate an exchange program with the American University of Cairo. The program is open to sophomores and juniors and is designed to provide the participants with intensive experience in the Arabic language and the culture of the Middle East.

8. Macalester is a member of the Associated Colleges of the Midwest (ACM). Other participating colleges are: Beloit, Carleton, Coe, Colorado College, Cornell, Grinnell, Knox, Lake Forest, Lawrence, Monmouth, Ripon and St. Olaf. ACM offers overseas programs to which Macalester students may apply their scholarship aid.

a. Japan Study. After a summer of orientation and language study in Japan, students spend fall and winter terms or a full academic year studying at Waseda University in Tokyo and living with a Japanese family. The formal curriculum at Waseda encompasses courses in Japanese language and electives covering many facets of Japanese history, culture and contemporary social and economic affairs. The family living experience provides informal coverage of these areas and is in many ways the dominant feature of the program, offering total immersion in Japanese culture.

b. India Studies. Through intensive language and area courses at an ACM college followed by on-site study, observation and experience in India, students are introduced to a rich and complex non-Western civilization. While in India, program participants will be regularly enrolled students in the University of Poona's certificate program in Marathi language and culture. They will be offered courses designed to give historical perspective to various aspects of Indian culture with special reference to Maharashtra, and will complete the independent study projects begun during orientation. Among projects chosen by past students have been: Batik technique and design; Indian women; a history of Parvati temples; a comparison of Hindu, Jain and Buddhist caves as a reflection of daily religious life; Kathak dance; the place of animals in India; Indian design and jewelry; Indian nuclear chemistry. Poona, center of some of the most interesting political and intellectual activities in present day India, boasts among its population leaders in the fields of art, music, dance, theatre, religion, government, politics and social work.

c. Arts of London and Florence. A broad introduction to the arts for the non-specialist student. The courses offered during the seven weeks in each location concentrate on the historical, cultural and artistic significance of the two cities and are supple-
Instructional Policies and Programs

mented by considerable exposure — in the form of concerts, museum visits, theatre, excursions — to other facets of the arts.

d. Florence. The Florence program is designed to give majors in art, history, modern languages and the humanities an intensive experience in the city's rich artistic and cultural heritage. Renaissance-oriented studies are complemented by courses offering historical context and a broad perspective of Italian contributions to world civilization.

e. Latin American Studies. The fifteen-week Latin American Studies Program emphasizes Spanish language and Latin American culture. Courses vary from year to year but remain within the basic areas of Latin American language and literature, drama, ethnography and ecology. San Jose, Costa Rica, is home base for the program. Midway through the semester students spend two weeks with rural farm families.

f. Costa Rican Development Studies. Interdisciplinary field research in the biological and empirically-oriented social sciences. Students and faculty members work together on research projects related to the land settlement program, problems of tropical food production, the country's political activity and other questions crucial to national development. San Jose, Costa Rica, is home base. Students live with local families to gain close contact with the Costa Rican people and their culture and to aid the rapid acquisition of language facility.

g. Chinese Studies. The British Crown Colony of Hong Kong provides the setting for the study of Chinese language and culture. Participants enroll at Chinese University's New Asia College for one or two semesters, completing required courses in Mandarin language and Chinese studies, and electives ranging from political ideology to calligraphy.

SPAN (Student Project for Amity Among Nations)
Each year, SPAN selects four countries for intensive study. Students interested in SPAN must apply in the spring, a year in advance of their departure. Applications may be obtained at International Center. If the application is accepted, the student begins orientation and language training in the fall. A faculty adviser, who will accompany the students to their countries, meets with them and begins planning for a study project. In June, students go to their countries and spend eight weeks working on their project and four weeks traveling. Financial aid is available through the SPAN Foundation.

UMAIE (The Upper Midwest Association for Intercultural Education)
Macalester participates in UMAIE, a consortium of 10 regional colleges which plans a foreign interim term curriculum each year. Other institutional members of the organization are Gustavus Adolphus College, Bethel College, Luther College, St. John's University, the College of St. Benedict, the College of St. Catherine, Hamline University and Augustana College. Recent UMAIE student participants have studied and traveled in Russia, Germany, Sweden, Great Britain, France, Austria, Denmark and Hawaii.
Instructional Policies and Programs

Programs for International Understanding
The International Affairs Program of the International Center is an effort to focus attention on the global context of intercultural relations. The program includes non-credit foreign language classes open to the community, cooking classes, folk singing sessions, discussions, seminars, films and lectures. There is an international week and an international students' talent show. The International Student Organization, composed of foreign and American students, is responsible for most of the programming.

The International Center collects and maintains a library of material on summer study and work abroad possibilities. Students interested in volunteer work camps, social service opportunities, farm labor and internships should contact the Center. Travel information is also available.

The World Press Institute brings 12 working journalists to the United States each year for a program of study, work and travel. The journalists are in residence at Macalester during the first semester and attend classes and special seminars to learn about the United States. During the second semester, they work with various media organizations, travel throughout the Western and Southern states, spend three weeks in Washington, D.C., do independent research and then return to Macalester for a year-end summation in May.

Macalester College also sponsors the Ambassadors for Friendship program, which provides an opportunity for foreign and American students to tour the USA and to meet Americans in their homes and on their jobs — to learn of America firsthand. Selected foreign students travel for four weeks during the January interim term, American students from Macalester serving as drivers and tour coordinators.

Consortium-Based Opportunities
Associated Colleges of the Twin Cities (ACTC)
According to an agreement among Augsburg College, Hamline University, the College of St. Catherine, the College of St. Thomas and Macalester, students may take one course per term at any one of the other four colleges tuition free, provided that the home institution has approved the course. In addition to accepting credit from the other colleges for courses in the liberal arts fields offered at Macalester, the College accepts courses in the following fields offered at one or more of the other colleges: Business Administration (with approval of the economics and business department), Computer Science, Library Science, Nutrition, Quantitative Methods, Scandinavian Studies and Social Work. The five colleges publish a joint class schedule. Macalester students should contact the Office of Student Academic Records for information on registration procedures and transferability of credit.

Associated Colleges of the Midwest Program (ACM)
In addition to the overseas programs listed previously, the following special opportunities are available to students from ACM member colleges:
Instructional Policies and Programs

1. Argonne Semester. Advanced students in chemistry, physics and mathematics sample the life of a working scientist as junior members of research teams headed by scientists at the Argonne National Laboratory. While engaged in research, participants also attend seminars in their major fields and an interdisciplinary seminar directed by resident ACM faculty members.

2. Geology in the Rocky Mountains. The geologic history of the Rocky Mountains near Colorado Springs, Colorado, is traced and analyzed by ACM students and "pre-freshmen" through field trips, laboratory work and discussions. Students spend most of their time in the field either near Colorado College, where the program is based, or in other more distant areas for study of rock formations and collection of specimens. Two courses are offered: Introductory, to familiarize students with varied rock types, geologic structures and landforms; Environmental, an intermediate course dealing with such environmentally-sensitive geologic phenomena as replenishable resources, waste disposal, catastrophic processes.

3. Newberry Library Program in the Humanities. One of America's great research libraries provides the setting and materials for this program of individual and cooperative research in the humanities. Students attend seminars, meet with resident scholars, and conduct their own examination of a selected topic or historical period, aided by the privilege of full access to the Newberry Library's million volumes and four million manuscripts. In addition to the semester-length fall program, students may enroll in short-term (three week) seminars on selected topics during the spring, or may pursue independent study, under the direction of faculty members from their own colleges, for any time period suitable to their needs.

4. Urban Education. This Chicago program seeks to provide the student teacher illustrations of, and firsthand experience with, the learning problems peculiar to the urban child. Participants observe and student-teach in the metropolitan area's schools: Public and private, elementary and secondary, urban and suburban. The program cooperates closely with additional contemporary approaches to learning (Montessori, Gestalt, open-classroom and others); placements for those interested in bi-lingual education, learning disabilities or special education may also be arranged. Students interested in non-teaching service-oriented professions such as counseling, social work or specific therapeutic occupations will find the practical experience of great value.

5. Urban Studies. The social forces which create and distort American cities — urban renewal, a political machine, youth movements, pollution, the daily press, the poor, high culture and mass culture, the corporate elite — are all present in Chicago. Students' awareness of problems of urban life is heightened by seminars on urban issues and a core course which involves all students. Augmenting the formal curriculum are volunteer work assignments in which the students become actors in the institutional life of the city.

6. Wilderness Field Station. The Boundary Waters Canoe Area of northern Minnesota serves as a summer classroom for courses in Botany, Field Invertebrate Zoology, Field Vertebrate Zoology or Environmental Biology (a course for non-science majors). Students explore the roadless wilderness on foot and by canoe, collecting and classifying specimens and pursuing individual research projects.
The Curriculum
The Curriculum

Macalester College offers departmental and interdepartmental programs leading to the Bachelor of Arts degree with major or core concentrations (except as noted) in the following fields:

- Anthropology
- Latin American Studies (major in Spanish or Geography)
- Art
- Linguistics (major only)
- Biology
- Mathematics
- Chemistry
- Music
- Classics
- Philosophy
- Economics and Business
- Physics
- English
- Political Science
- East Asian Studies
- Psychology (major only)
- Geography
- Religious Studies
- Slavic Languages and Literatures
- French
- Social Science (see Education Department)
- Russian Area Studies
- Humanities (core only)
- Political Science
- Germanic Languages and Literatures
- Psychology
- General Science (core only; see Education Department)
- Religious Studies
- History
- Social Science
- Humanities (core only)
- Social Science (see Education Department)
- International Studies (major only)
- Urban Studies
- (See also Individually-designed Interdepartmental Major.)

The College offers courses, but not degree programs, in the departments of Education, Journalism, and Physical Education. Programs leading to certification for nursery school, kindergarten, elementary and secondary teaching are offered by the education department in cooperation with other departments of the College.

Independent Study

One aspect of the individualized learning fostered by Macalester's curriculum is the opportunity for independent study. This program makes it possible for the student to complete a term-long project in a one-to-one relationship with a faculty member. A student may initiate an independent study to pursue in depth certain aspects of a subject previously studied or to investigate an area of academic interest not covered in a regular course. Any department may offer independent study courses. They are classified into four categories:

95 Tutorial
Closely supervised individual (or very small group) study with a faculty member in which a student may explore, by way of readings, short writings, etc., an area of knowledge not available through the regular catalog offerings.

96 Independent Project
The production of original work (paper, thesis, extended research, art exhibit, musical or dramatic program, etc.).

97 Internship
Work that involves the student in practical (usually off-campus) experience, such as internships and career explorations.

98 Preceptorship
Work in assisting faculty in the planning and teaching of a course, precepting or tutoring.

Approval of the supervising instructor is required for registration in an independent study option. Interested students should consult with the appropriate instructor and department to develop the content of the project or study before registration.

Topics Courses

Many departments offer topics courses. These courses are designed to accommodate interest of students and faculty in current issues in the subject area or to offer an experimental course which later may become part of the regular curriculum. They are numbered 50 and are announced in the class schedule at registration. The titles of some past topics courses are listed with the departmental offerings.
Departmental Courses and Programs

Anthropology

David McCurdy (Chairman), Michael Rynkiewich, James Spradley

The department of anthropology seeks to foster an understanding of human behavior through detailed insight into people's cultural knowledge, their categories and strategies for adapting to the demands of daily life. Courses are taught with a cultural perspective by exposing the student to detailed case material from a variety of non-Western societies as well as from our own. We all believe that doing anthropology is a crucial part of the learning process. We encourage our students to conduct research in the Twin Cities metropolitan area, other parts of the United States, or in other countries through the College's international programs. Students study such diverse cultural scenes as urban fire houses, law firms, federal corrections institutions, women's life in a Greek village, or curing techniques of Nepali shamans. We also encourage students to learn effective writing and offer them an explanatory framework in the form of social and psychological theory.

Students may design a program in preparation for graduate studies in anthropology. An anthropology concentration, however, will also prepare students for careers in law, business, government, medicine, or any other occupations that require a knowledge of and appreciation for someone else's viewpoint and an understanding of social relations. We encourage students to plan summer work, internships and course work in light of their general career objectives. Because of this need to plan, students should choose course work carefully in consultation with their advisers.

A and B Courses

Several courses in the department are offered in two parts, e.g., Anthropology 60 (Urban Anthropology A) and Anthropology 61 (Urban Anthropology B). In every case, the A section presents the main body of data and theory characteristic of a particular area of study. The B course is designed to give both the student and the instructor added flexibility for continued investigation of the subject. Typically students who take a B course will pursue their own interests within a particular area with the agreement of the instructor. It is possible, however, for the B course to involve several students if they and the instructor wish to follow a particular line of inquiry. A courses are a prerequisite to all B courses, but may be taken without the following B course.

Major Concentration

A major in anthropology consists of eight courses including Anthropology 11 or 12, Anthropology 30 and Anthropology 88. Majors are also expected to complete a senior project that may form the focus of their work in Anthropology 88.

Core Concentration

A core in anthropology consists of six courses, together with six additional courses chosen by the student in other departments. Students who take a core must take either Anthropology 11 or 12, and
Anthropology

should design their remaining pattern of courses in consultation with their advisers.

Honors are available in the anthropology department through the college-wide honors program.

Introductory Courses — Open to Freshmen
11 Cultural Anthropology
The cultural perspective on human behavior including case studies, often illustrated by motion pictures or slides, of non-Western and American cultures. Includes some field interviewing and the cross-cultural treatment of social, economic, legal, political and religious institutions. Survey of major approaches to the explanation of cultural variety and human nature.

12 Archaeology and Human Evolution
The origin and development of prehistoric peoples and cultures. The concepts, methods and theories of prehistoric archaeology, human paleontology and human biology as a framework for examining the fossils and artifacts left by humans. Course includes detailed site descriptions to facilitate an understanding of archaeological discovery procedures.

Intermediate Courses
Open to students who have taken either Anthropology 11 or 12 including freshmen.

30 Cross-Cultural Research: Interviewing
An introduction to ethnographic field interviewing learned in the context of individually-run student field projects. Focuses on the anthropologist-informant field relationship and the discovery of cultural knowledge through participant observation and ethnomsemantic interviewing techniques. Normally to be taken concurrently with Anthropology 31.

31 Cross-Cultural Research: Writing
An introduction to writing descriptive ethnography on the basis of field research. Focus will be on organizing interview data, the nature of cultural description, the writing process, outlining the first draft, and rewriting. Normally to be taken concurrently with Anthropology 30.

50 Topics in Anthropology
Examination of some selected topic of concern to anthropologists to be announced prior to registration.

52 Cultural Ecology and Colonialism in the Pacific
The study of the origins of the people of the Pacific Islands (Melanesia, Micronesia and Polynesia) and their adaptations to island and atoll environments. Cultural ecology as an explanation for present diversity and distribution of island societies. Includes a discussion of colonial and post-colonial change, the impact of the many European nations that colonized the islands, and the defenses of islanders against colonial governments.

60 Urban Anthropology A
Survey of anthropological approaches to the study of urban culture. Selected anthropological studies of urban cultures will be examined. The experience of living in cities and the nature of cities will be discussed from a cultural perspective. Usually to be taken concurrently with Anthropology 62.

61 Urban Anthropology B
Intensive study of one selected topic or problem as a follow-up course to Anthropology 60.
62 Urban Research
A field research course in which students will select a topic that involves field observation or interviewing. Each student will undertake an original research study of some aspect of urban culture. Discussion of methods will be included but it is recommended that students should have already taken Anthropology 30 or 31. Normally to be taken concurrently with Anthropology 60.

64 Political Anthropology
An examination of local-level organizations for the control of resources and the maintenance of intergroup relations. Study of a variety of non-Western societies to provide cultural and social context for understanding leadership, alliance, strategy and warfare.

65 Law and Dispute Settlement
The study of the processes of dispute settlement in a variety of societies, both non-Western and Western. Emphasis on courts, case law, and the cultural and social contexts of face-to-face dispute settlement procedures. Concentration on detailed dispute cases in small community situations.

66 Local-Level Economics
A survey of folk systems of technology, production and exchange in the United States and non-Western societies. Focuses on the detailed strategies people employ to produce and exchange goods and services with each other. Includes treatment of intimate economic relations such as tipping, husband and wife exchange, and cutting corners on the job.

68 Magic, Religion, and Witchcraft A
Survey of varieties of magical and religious ritual and belief in Western and non-Western societies. The function of magic, religion and witchcraft. Opportunity to conduct field research in Twin Cities magical, religious or witchcraft organizations.

69 Magic, Religion, and Witchcraft B
Intensive study of one selected topic or problem as a follow-up course to Anthropology 68.

Advanced Courses
Open to juniors and seniors. Students should have at least two courses in anthropology including Anthropology 11 or 12, or the permission of the instructor.

82 Psychological Anthropology A
A survey of the sub-field of culture and personality within anthropology. The relationship of this sub-field to other disciplines and a review of its basic concepts and contributions as illustrated through specific studies. The influence of culture on the development of personality as well as psychological processes of culture change. Usually taken concurrently with Anthropology 84.

83 Psychological Anthropology B
Intensive study of one selected topic or problem as a follow-up to Anthropology 82.

84 Cultural Life History
An examination of the life history in anthropology. The value of life history studies in an understanding of non-Western cultures. Discussion of principles in collecting life histories and writing a cultural autobiography. Opportunity for each student to write a cultural life history. Usually to be taken concurrently with Anthropology 82.
Anthropology

86 Social Anthropology A
Institutional structures in cross-cultural perspective, focusing on systems of kinship and marriage in relation to economic and political institutions, and the significance of this approach for methods and theory in anthropology.

87 Social Anthropology B
Intensive study of one selected topic or problem as a follow-up of Anthropology 86.

88 Senior Seminar
Course designed for senior majors working on senior projects. Students will meet with staff to discuss their projects and report on results. May be taken twice.

95 Tutorial
Closely supervised individual (or very small group) study with a faculty member in which a student may explore, by way of readings, short writings, etc., an area of knowledge not available through the regular catalog offerings. For anthropology, work might include the study of such areas as India, the Pacific, North American Indians, Latin America, Cognitive Anthropology, and a host of other topics.

96 Independent Project
The production of original work such as a paper, thesis or extended research project. Especially appropriate for student-initiated ethnographic field research projects.

97 Internship
Work that involves the student in practical (usually off campus) experience, such as internships and career explorations.

98 Preceptorship
Work in assisting faculty in the planning and teaching of a course, precepting or tutoring.

Art

Anthony Caponi (Chairman), Roger Blakely, Donald Celender, William Donovan, Carol Emanuelson, Gail Kristensen, Jerry Rudquist, William Saltzman

The art department is oriented to meet the needs of four groups of students:

Group I
Those who wish to explore an 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.

Group II
Those with special aptitudes in practical art who plan for a career as artists or who plan to continue their studies in a professional art school.

Group III
Those who plan to teach art in the public schools. Such students will also require courses in secondary education or in elementary education (see Education).

Group IV
Those who wish to concentrate further in the theory and history of art in graduate school.

General Graduation Requirements
Art 30, 34, 35, 42, 49, 60, 61 and 62 count toward the general graduation requirement in the fine arts and humanities.

Major Concentration
Plan A
(for students in Groups I, II and III): A major concentration for these students will consist of 12 courses, 10 from the art department and two from outside the department. It will include Art 30, 34, 35,
Plan B
(for students in Group IV): A major concentration for these students will consist of 12 courses, 10 from the art department and two from outside the department. It will include Art 42, 49, 60, 61, 62, 75, 76, 77, 78, 98; one course selected from Painting, Drawing or Sculpture; Anthropology 21 (Cultural); and one history course beyond the social science requirement.

Core Concentration
A core concentration will consist of six courses in Art: 30, 34, 35, 49, 60, 61 and six additional courses to be selected outside the art department. These should not include more than two disciplines and should be programmed with the approval of the art department adviser.

Honors are available in the art department through the college-wide honors program.

30 Drawing
Studio practice in many fundamental techniques and approaches in developing individual and basic drawing "know-how." Understanding and exploring the full range of such media as charcoal, carbon pencil, graphite bar, litho crayon, lead pencil, conte, chalk and ink on varied papers. Methods of obtaining quality in line, cross-hatching, shading, washes, rubbings, transfers, etc. are fully explained. Subject matter varies from the posed figure, landscape still life and imaginative content. Class critiques summarize daily works displayed in the studio gallery. Matting the work for final presentation is included in the course. Four two-hour periods per week.

34 Painting
An introduction to painting using acrylic paint on a variety of supports ranging from paper to stretched canvas. Exploration of basic visual characteristics and possibilities of painting through a series of visual problems of increasing complexity. Slide lectures, discussions and critiques supplement studio work by relating student work to the history of painting. Four two-hour periods per week.

35 Sculpture
Various techniques and materials involving modeling, carving, welding and bronze casting. Four two-hour periods per week.

36 Graphics
Hand-and photo-originated imagery created within the possibilities of etching, lithography, screen printing and collographs. Students normally explore in some depth one or two media during the course. Four two-hour periods per week.

37 Ceramic Art
The course offers a working experience in the execution of functional and nonfunctional ceramic art forms. Emphasis is on techniques, craftsmanship and creativity. Students individually participate in the total ceramic process, the mixing of high fire stoneware clays and glazes and the kiln firings. Four two-hour periods per week.

42 Art, Its Processes and Application
Four hours of studio to familiarize the student with basic art experiences and techniques in drawing, painting, sculpture and crafts. Two hours of lecture and
discussion relating art to individual growth and its broader applications to life. Recommended for students in education, psychology and sociology. Six hours per week.

49 Principles of Art
A philosophical approach to the creative arts, relating art to man, the creator to the consumer; and to the social and psychological. The major thrust of the course is a series of visual experiences encompassing numerous activities and attitudes of visual artists of the Western world. Four hours per week, one of which involves a creative project.

50 Topics
Work in a special area of art, to be announced in advance of registration. Some of the past topics have included Ceramics, Watercolor, and Fibers.

60 History of Art-I
Western Art through the Renaissance. Four hours per week.

61 History of Art-II
Baroque through Contemporary Art. Four hours per week.

62 Art of the Last Ten Years
Major trends in "Advanced Art" including painting, sculpture, architecture and the minor arts will be surveyed with special emphasis on historical, aesthetic and philosophical development. New directions in the visual arts will be studied in depth with the hope of projecting future trends. Four hours per week.

66 Design
Concentration in various systems of organizing basic visual elements of line, color, form, space and texture in relation to pattern, mass, shape, light, movement, time and physical senses. Consideration of theory and practical function of man/nature relationships. Specific exercises explore design potentials leading into a major project of application. Four two-hour periods per week.

70 Advanced Drawing
Extension of Art 30 wherever needed with greater emphasis upon individual expression and a major direction of inventive concepts. Four two-hour periods per week.

71 Advanced Painting
Continuation of Art 34. Meets simultaneously with Art 34. Projects and work in directions initiated by students. Weekly group discussions and critiques. Four two-hour periods per week.

72 Advanced Sculpture
Modeling, carving and casting, with emphasis on the personal approach. Four two-hour periods per week.

73 Advanced Graphics
Meets simultaneously with Art 36. Opportunity to explore in greater depth media worked with in Art 36 or to work with new media. Four two-hour periods per week.

74 Advanced Ceramic Art
A continuation of Ceramic Art 37 with emphasis on furthering skills and developing individual expression. Four two-hour periods per week.

75 American Art
A survey of painting, sculpture, architecture and the household arts of the United States from Colonial times to the present with particular reference to European influences as well as indigenous tendencies. This course begins with the art of the
American Indian and ends with contemporary trends in America today. Four hours per week.

76 Far Eastern Art
The art and architecture of India, China and Japan as they relate to Oriental philosophies and the aesthetic principles prevalent throughout the history of these countries. Influences and counter-influences will be examined for a better understanding of all aspects relevant to political, socio-economic, religious and cultural dimensions of these Far Eastern cultures. Four hours per week.

77 Primitive Art
A comprehensive view of the cultures of Africa, Oceania and the Americas with particular emphasis on ritualistic objects and the role art plays in everyday life. Four hours per week.

78 Classical Art
Studies in the art and architecture of ancient Greece and Rome; aesthetic principles, relation to ancient philosophies and beliefs. Four hours per week.

88 Senior Seminar
A synthesis of the knowledge acquired in the art department with that of other areas of study. Students in art concentrations only. Two two-hour periods per week.

96 Independent Projects
Independent work in any art medium or in the history of art, with departmental approval. Advanced students in art concentrations only.

See also Education 41, Fine Arts in the Elementary School, and Education 51, Secondary Curriculum and Instruction.

Art

Biology

Gerald Dahling, Eddie Hill, James Jones, Edwin Robinson, James Smail, Claude Welch (Chairman), Russell Whitehead

The objective of the biology department is to educate its students in the content, methods, history and philosophy of biological science and to relate this science to certain practical and philosophical problems of man. Some of the departmental offerings cover the subject areas recommended by the AIBS Subcommittee on Facilities and Standards as a desirable curricular structure for biology, while other courses examine selected fields in some depth and contribute to a well-rounded major program.

These courses, with the addition of supporting work in other sciences and mathematics, allow preparation for careers based on biological science, with or without formal postgraduate training. These include: professional biology, with Ph.D. training leading to college or university teaching and research; industrial and government research; medicine, veterinary medicine, dentistry, nursing, medical technology, physical therapy and a variety of para-medical specialties; hospital administration; environmental work; and business careers in the drug and other industries.

A number of departmental activities contribute to the general education of biology students. Phi Delta Mu is a local organization of pre-medical and pre-dental students which brings speakers to the campus, arranges trips to places of interest, holds social events and helps to disseminate information about preparation for professional school. The visiting speaker
program and other sources are used to bring prominent biologists into the department for visits ranging from a day or so to a term. These visitors work with classes, honors program groups and individual project students, and also give general lectures open to all students interested in biology. The members of the department staff have skills and a wide range of materials to use in coordinated pre-professional and career advising, as well as in finding part-time or summer positions suitable for biology students.

The department features special strength in field, genetic, developmental and physiological biology. However, most of the major fields of undergraduate biology are represented in its offerings, and the major requirement is flexible so that emphasis can be given to one particular interest.

The field biology teaching effort is supported by a 270-acre field biology teaching area near the campus, where teachers and students have ready access to natural aquatic and terrestrial habitats adapted to ecological study. Physical facilities have been added to the natural ones. Two field biology courses and the first course include extensive field work. Several distant field trips are made each year under the auspices of the department, which complement the field biology offerings. Each interim term several off-campus field biology courses are offered. These usually include Marine Biology, taught in Hawaii; Desert Ecology taught in Arizona, and Winter Ecology taught in Minnesota.

The department is housed on the campus in a new (1970), well-equipped laboratory building which also contains the electron microscope lab and computer.

Major Concentration
The biology major consists of eight courses of biology, two courses of chemistry, and two elected courses in any department of the science division or the philosophy department.

The biology courses are Biology 11, 12 and 13, and five advanced courses selected in consultation with and approved by the major adviser. These advanced subjects must constitute a reasonable sequence within themselves and with the elected courses, but students are free to propose their own programs. Only one of the five advanced courses can be in individual research and independent study (Biology 45, 46, 95, 96). The first three courses should be completed by the end of the sophomore year.

Chemistry 11 and 12 are required. Qualified students may take Chemistry 13 in place of these, in which case they would have three elected courses in the major instead of two.

The elected courses ordinarily would be chosen from among mathematics offerings relevant to biology, such as calculus and statistics; from geology courses with a strong biological component; from advanced chemistry, particularly organic and analytical; college physics; additional biology; and philosophy courses concerned with logic, metaphysics, or the philosophy of science. Other courses, and subjects in other departments, will be considered if the student proposing them can justify their inclusion in a worthwhile program.

All students who expect to undertake work toward any kind of graduate degree after leaving Macalester should realize that certain
science courses in addition to biology are among prerequisites of graduate and medical schools. These most often include organic chemistry, college physics, calculus, quantitative analysis and, less frequently, other chemistry or mathematics courses. The members of the biology department are prepared to assist students in determining the prerequisites of these schools, and in designing a course of study which will include the necessary subjects.

Core Concentration
The department provides for the use of the core concentration plan for students whose interests either do not require a full biology major, or which may demand some courses which cannot fit into a biology major concentration. The six biology courses in a core are Biology 11, 12 and 13, and three advanced courses selected in consultation with the faculty adviser. The remaining six courses may be in any of several other departments, and are selected according to the student's particular requirements, such as preparation for science teaching at the secondary level, physical education teaching, or preparation for medical or dental school. The 12 courses must bear a sensible relationship to each other, and all core concentrations require the approval of the department chairman.

Honors are available in the biology department through the college-wide honors program.

10 Biology, Its Human Implications
This is a general course intended for students who do not plan to major in the natural sciences. The course will emphasize the cellular, organismal and ecological aspects of biology as they apply to the human condition. The course is not suitable for biology majors or cores. It will fulfill the science distribution requirement, however, and is suitable for interdisciplinary concentrations with approval of the involved cooperating departments. No prerequisites. Four lectures per week.

11 Principles of Biology
An introductory course considering fundamentals and concepts of biology in terms of historical background and with emphasis on modern developments. No prerequisite. Three lectures and one three-hour laboratory period per week.

12 Introduction to Zoology
The course is divided between a study of vertebrate and invertebrate animals. The structure, evolution and physiological function of organs and organ systems, especially of mammals, is the emphasis given in the vertebrate part of the course. In the invertebrate portion, a typical survey is made of the taxonomy, structure and habitat of selected types from eight phyla. About one week is spent on embryology, including an introduction to serial sections of chick embryos. Prerequisite, Biology 11. Three lectures, two two-hour laboratory periods per week.

13 Introduction to Botany
An elementary course which covers botanical principles. Particular emphasis is given to the principles exemplified by seed plants. Prerequisite, Biology 11. Three lectures, one three-hour laboratory period per week.

40 Field Zoology
A study of the local fauna, including phylogenetic relationships, taxonomy, life histories, distribution and behavior. The importance of these animals economically, ecologically, aesthetically, and in human
Biology

health, is emphasized. Study of natural groups of animals in the laboratory is followed by extensive field observations. Prerequisite, for biology majors, Biology 11 and 12; for others, permission of the instructor. Three lectures, two two-hour laboratory periods per week.

41 Ecology
A study of natural communities and the principles which underlie their structure and change. The physical factors of the environment, population dynamics, energy flow and conservation are emphasized. Prerequisite, Biology 11; Biology 12, 13 and 40 are recommended. Three lectures, two two-hour laboratory periods per week.

42 Parasitology
The adaptations of parasites and some other kinds of animal symbionts to solutions of their biological problems are studied, with emphasis on structure, ecology and life cycles. All phyla containing parasitic species are covered. There is an elementary taxonomic treatment, and special topics such as immunity and resistance are treated in the latter part of the course. Prerequisite, Biology 12. Three lectures, two two-hour laboratory periods per week.

43 Microbiology
A course devoted to the study of microorganisms, with the emphasis on determinative bacteriology. Prerequisite, Biology 12 or 13; Chemistry 37 recommended. Three lectures, two two-hour laboratory periods per week.

44 Vertebrate Anatomy and Evolution
The study of the origin, evolution and natural history of living and fossil vertebrates as revealed by their anatomical, ecological and behavioral adaptations. Laboratories stress the comparative anatomical study of preserved specimens representing all major Chordate groups. Lectures stress theoretical aspects. Prerequisite, Biology 12. Three lectures, two three-hour laboratory periods per week.

49 Embryology
A comparative study of vertebrate development and differentiation. Laboratory work stresses the anatomical development of the frog, chick and pig. Lectures emphasize experimental and theoretical aspects of development. Prerequisite, Biology 12. Three lectures, two two-hour laboratory periods per week.

52 Genetics
A general genetics course giving equal emphasis to the classical and the modern phases. Prerequisite, Biology 11. Three lectures and one three-hour laboratory period per week.

53 Advanced Microbiology
A presentation of topics in microbiology which include: viruses, host parasite relations, pathogenic microorganisms, microbial ecology, the algae and fungi. Prerequisite, Biology 43. Three one-hour lectures and one three-hour laboratory per week.

54 Human Physiology
A study of the functioning of the organ systems in the human body. The organ systems which will ordinarily be studied are the muscle, digestive, respiratory, excretory, nervous, reproductive, circulatory, skeletal and endocrine systems. Prerequisite, Biology 12. Three hours of lectures and one three-hour laboratory per week.
61 Histology
A study of the microscopic structure and ultrastructure of animals, with particular attention to structure-function correlations. Prerequisite, Biology 12; Chemistry 12 or 13 recommended. Three lectures per week, and directed independent study laboratory equivalent to six hours per week.

63 Plant Physiology
The physiology of plant nutrition, metabolism, and growth and development. Topics include: photosynthesis, intermediary metabolism, mineral nutrition, water relations, auxins and growth, and tropisms. Prerequisites, Biology 13 and Chemistry 37. Three lectures, one three-hour laboratory period per week.

64 Cell Physiology and Biochemistry
The study of structural and functional relationships of cells and their physicochemical environments as revealed by biochemical methods and the electron microscope. Laboratories, while stressing activities of the cell, bring students into contact with current techniques of investigation and analysis such as cell fractionation, micro-respirometry, electron microscopy, electrophoresis, chromatography, etc. Prerequisites, Biology 12 and Chemistry 37. Three lectures, one three-hour laboratory period per week.

65 Advanced Botany
An intensive study of field and ethnobotany. Systematic, evolutionary and ecological relationships of vascular plants will be stressed. A “Plants and Human Affairs” approach will be followed and a knowledge of the local flora will be developed by use of lectures, laboratory and field work. Prerequisite, Biology 13 or permission of the instructor. Three lectures and one three-hour laboratory per week.

88 Senior Seminar
Classic books in biology will be read, reviewed and discussed. Prerequisite, senior with a major in biology.

96 Individual Research and Independent Study
For juniors and seniors, including honors work. Prerequisite, permission of the instructor.

Chemistry
Earl Doomes, Kathleen Parson, A. Truman Schwartz, Emil Slawinski, Fred Stocker (Chairman), Wayne Wolsey

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 field of chemistry.
2. To lay the foundation for graduate study and professional careers in chemistry in the academic, research or industrial fields.
3. To provide the training in chemistry necessary for those who plan professional careers in biology, biochemistry, geology, medicine or dentistry.

General Graduation Requirement
Chemistry 10, 11 or 13 may be used to fulfill the physical science requirement without specific college level prerequisites.

Major Concentration
The major concentration in chemistry consists of Chemistry 11 and 12, or 13, plus 23, 37 and 38, 55 and 56, 63, Physics
Chemistry

21 and 22, or 26 and 27, Mathematics 22, and 31, and one year of a foreign language.

Core Concentration
The core concentration in chemistry includes Chemistry 11 and 12, or 13 and 23, plus 37 and 38, and 55 and either 56 or 58. Required supporting courses are Physics 21 and 22 or 26 and 27 and Mathematics 19 and 22. Two additional science courses are required and may be chosen from the fields of biology, geology, physics or mathematics.

Honors are available in the chemistry department through the college-wide honors program.

Further Preparation
Students contemplating graduate work 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; students wishing to meet the requirements recommended by this committee should confer with the chairman of the department.

10 Chemical Concepts
A one-semester introduction to the intellectual excitement and useful ubiquity of chemistry, designed primarily for non-science students. The course will trace the development of some of the fundamental ideas of chemistry — the organization, structure and reactions of matter — and explore their applications and implications, with as much rigor as is consistent with limited reliance on mathematics. Four lectures a week.

11 General Chemistry
An introduction to the principles of chemistry. The chemical and physical properties of substances are considered and related to the atomic, kinetic and equilibrium theories. Three lectures, three hours laboratory a week.

12 General Chemistry
Continuation of Chemistry 11. Laboratory work in part devoted to qualitative analysis. Prerequisite, 11. Three lectures, three hours laboratory a week.

13 General Chemistry
A one-term combination of 11 and 12. For students who have good preparation in chemistry and an aptitude for mathematics. Three lectures, three hours laboratory a week.

23 Analytical Chemistry
Application of chemical principles to problems in chemical analysis. Laboratory work includes volumetric, gravimetric and instrumental methods for quantitative analysis. Prerequisite, 12 or 13. Three lectures, six hours laboratory a week.

34 Radiochemistry
Nuclear and radiochemistry and their applications to chemistry and biology. Prerequisite, 23 or permission of the instructor. Three lectures, three hours laboratory a week.

37 Organic Chemistry
The carbon compounds, their structures, reactions and syntheses. Prerequisite, 12 or 13. Three lectures, four hours laboratory a week.

38 Organic Chemistry
Continuation of 37. Three lectures, four hours laboratory a week.

50 Topics in Chemistry
Examination of a topic of general interest in chemistry, the topic to be announced in
advance of registration. Prerequisite, permission of the instructor.

55 **Physical Chemistry**  
Thermodynamics, quantum theory and reaction rate theory as related to chemical systems. Prerequisites, 12 or 13, Physics 22 and Mathematics 22. Three lectures, three hours laboratory a week.

56 **Physical Chemistry**  
Continuation of 55. Three lectures, three hours laboratory a week.

58 **Biochemistry**  
Application of physicochemical theory and methodology to problems of biological importance. Topics covered include structure, function and biosynthesis of proteins and nucleic acids; enzyme kinetics; metabolism of carbohydrates, lipids, amino acids and nucleotides. Prerequisites, Chemistry 55 and Biology 11 or permission of the instructor. Three lectures, three hours laboratory a week.

61 **Qualitative Organic Analysis**  
Identification of representatives of the major homologous series. Prerequisite, 38. Two lectures, six hours laboratory a week.

62 **Advanced Organic Chemistry**  
Stereochemistry and reaction mechanisms. Prerequisite, 56; may be taken concurrently. Three lectures.

63 **Advanced Inorganic Chemistry**  
Reactions and structures of inorganic compounds. Prerequisite, 56 or permission of the instructor. Three lectures.

64 **Advanced Analytical Chemistry**  
Instrumental methods of analysis. Prerequisite, 56; may be taken concurrently. Two lectures, three hours laboratory a week.

66 **Advanced Physical Chemistry**  
Statistical and quantum mechanics, molecular spectra and structure, and kinetics of chemical reactions. Prerequisite, 56. Seminar.

96 **Independent Project**  
Laboratory and library research on an original problem with a thesis. Prerequisite, permission of the department.

---

**Classics**

*William Donovan, Edward Brooks (Chairman), Jeremiah Reedy*

The department of classics offers two programs. In the first, courses are taught in the Greek and Latin languages and literatures for students who are interested in foreign languages and for those who need a knowledge of Latin or Greek for study in other fields (New Testament Greek for pre-seminarians, for example).

The second program is designed for those whose interest in the world of Greece and Rome is more general. Courses offered in this program do not require a knowledge of Greek or Latin and cover the history and literature, the art and archaeology, the mythology and religion of Greece and Rome.

Both programs are designed to make the student more aware of the close relationship of those civilizations and their problems to our own. Both may be used to prepare for graduate study in classics, in classical archaeology, in comparative literature or related fields.
Concentrations in Classics

1. Major Concentration in Greek and Latin
A major concentration shall consist of (a) a minimum of eight courses in Greek and one in Classical Civilization, or (b) a minimum of eight courses in Latin and one in Classical Civilization, or (c) a minimum of eight courses in Latin and Greek and one in Classical Civilization.

2. Core Concentration in Greek and Latin
A core concentration shall consist of (a) six courses in Greek, or (b) six courses in Latin, or (c) six courses in Greek and Latin.

3. Major Concentration in Classical Civilization and Archaeology
A major concentration shall consist of a minimum of nine courses selected from the offerings of this department. Related courses offered by other departments may, on occasion, be substituted when approved in advance by the department of classics.

4. Core Concentration in Classical Civilization and Archaeology
A core concentration shall consist of six courses selected from the offerings of the department and six related courses selected from those offered by other departments.

Honors are available in the classics department through the college-wide honors program.

Greek

15 Rapid Introduction to Greek
This course seeks to introduce the student to the reading of Greek literature as quickly as possible.

35 New Testament
Rapid reading of selections from the New Testament. This course is designed to follow Classics 15.

57 Herodotus
An introduction to the philosophy and methods of the Father of History. Attention will be directed to the anthropological and geographical interests of Herodotus.

58 Greek Tragedy
An examination of the Greek view of Tragedy as exemplified in the plays of Aeschylus, Sophocles or Euripides.

61 Plato
Readings selected from the Dialogues of Plato to illustrate the philosopher's thought and style. The emphasis of this course will be on developing the student's ability to read Greek with greater ability and precision.

62 Homer's Iliad
Men at war as seen in Homer's epic poem; the Homeric Question and life in early Greece will also be discussed.

87 Advanced Reading in Greek
Authors chosen after consultation between instructor and student.

96 Independent Project

Latin

11, 12 Elementary Latin
A study of the Latin language; reading easy Latin and Caesar.

31 Intermediate Latin
A thorough review of Latin grammar followed by a study of Vergil and other poets of the Augustan Age.
32 Intermediate Latin
A study of Roman prose authors, with particular emphasis on the letters and speeches of Cicero.

51 Classical Latin Rhetoric
A survey of the theory and practice of Latin rhetoric. Readings from the Ad Herennium, Cicero's rhetorical works, Tacitus' Dialogus and Quintilian.

52 Latin Elegy
A survey of Latin elegiac poetry. Readings from Catullus, Propertius, Tibullus and Ovid.

64 Lucretius, De Rerum Natura
Readings from the De Rerum Natura with discussions of the style, language and structure of the poem. Epicureanism will be studied intensively and contrasted with Stoicism.

71 Roman Satire
Readings from Horace, Persius, Martial, Juvenal, Seneca, Petronius and Apuleius with discussions of the origin, development and nature of satire.

83 Advanced Reading in Latin
Authors chosen after consultation between instructor and student.

96 Independent Project

Classical Civilization (knowledge of Latin/Greek not required)

18 Athens and Jerusalem: A Conflict of Cultures (Same as Humanities 18 and Religion 18)
Through a study of selected classical and biblical readings inquiry is made into distinctive features of two major sources of Western civilization. Lectures and discussion.

19 Classical Mythology
A survey of the major myths of classical antiquity with emphasis on the content and treatment of myth in such classical authors as Homer, Hesiod, Vergil and Ovid. Some attention will be paid to the psychology of myth-making and to modern theories of mythology.

21 Classical Epic and Lyric Poetry
The study of a process in which the Greeks took traditional forms and materials and molded them into art. Attention will be given to the change from conditions which produced the poetry of Homer and Hesiod to those which favored the expression of the emotions and experiences of the individual. Special emphasis will be placed on the qualities which distinguish Roman literature from its Greek predecessors.

22 Greek and Roman Drama
A study of the Greek and Roman dramatic forms and their modes of expression, with particular emphasis on the Attic tragedians, Aristophanes, and Seneca. Close attention will be given to the concern of Greek tragedy with the basic problems of life and death, and especially with man’s relation to the gods. Aristotle’s Poetics will be studied as a basis for criticizing the plays themselves.

30 Ancient and Mediaeval Philosophies
(Same as Philosophy 30)

60 Introduction to Classical Art
(Same as Art 60)

69 History of Greece
(Same as History 69)
Classics
Economics and Business

70 History of Rome
(Same as History 70)

78 Classical Art and Archaeology
(Same as Art 78)

96 Independent Study

Economics and Business

Paul Aslanian, Robert Bunting (Chairman), Karl Egge, Leslie Farber, Todd Petzel, Adolf Vandendorpe

The purpose of the department of economics and business is to develop basic analytical skills which are necessary for making sound business decisions, which serve as a valuable foundation for postgraduate studies in the fields of economics, business and law, and which can be used to understand and appraise the workings of our own and other economic systems.

Career Orientations
The curriculum is designed to develop the analytical and empirical skills needed for rewarding careers in business, government and public service, as well as preparation for advanced work in graduate and professional schools. It is recommended that students interested in law school combine their work in this department with a core in political science; students interested in secondary school teaching are encouraged to take a joint economics and business-political science core concentration along with the required five courses in the education department. For those especially interested in accounting, it is possible to design a program of study leading toward certification as a C.P.A.

Department Activities
The Bureau of Economic Studies: The Bureau undertakes studies of economic problems and issues. Its facilities are available for faculty research and for introducing students to research skills and discipline.

Honor Societies: Outstanding academic achievement makes economics and business students eligible for membership in Omicron Delta Epsilon, national honor society in economics.

Study Abroad: This department cooperates with the French, German, Russian and Spanish departments in arranging semesters abroad in France, Austria, Yugoslavia, and Colombia, South America.

General Graduation Requirement
Any course in the department, with the exception of statistics and accounting courses, will satisfy the general graduation requirement in the social sciences.

Major Concentration
The major concentration in this department consists of a minimum of eight courses, of which the following are required:
- Principles of Economics
- Advanced Principles of Economics
- Intermediate Micro Economic Analysis
- Aggregative Economic Analysis
- Basic Financial Accounting
- Statistics I

Core Concentration
A core concentration is also available in economics and business. The requirements are as follows:

Six courses in the department, four of which shall be the first four courses listed above.
The department is especially interested in encouraging interdepartmental programs involving a core in this department in combination with cores in the departments of political science and mathematics. In each case such a program would consist of: (1) a six-course core in economics and business as described immediately above, and (2) six courses in the departments of political science or mathematics as approved by the chairmen of those departments.

Honors are available in the department of economics and business through the college-wide honors program.

11 Principles of Economics
An introduction to elementary economic analysis with applications to a range of problems such as inflation, unemployment, farm price supports, balance of payments difficulties, poverty and the distribution of income. (A written statement of the emphasis in each Economics 11 section is available in the departmental office.)

12 Advanced Principles of Economics
A more advanced and detailed treatment of the topics presented in Economics 11; topics given special emphasis are: the evolution of economic ideas (Smith, Ricardo, Marx, Keynes, etc.); macro or aggregative economic issues (national income determination, monetary and fiscal policy and the balance of payments); and contemporary economic issues. Prerequisite, Economics 11.

22 Basic Financial 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.

23 Managerial Accounting
Problems of administering complex organizations. Cost functions, cash flows, responsibility centers, budgeting, bureaucratic structures, standards, analysis of variances, sources and uses of funds, and capital budgeting. Prerequisite, Economics 22.

24 Statistics I
An introduction to the theory of statistics with applications to problems in the social sciences. Probability theory; frequency and probability distributions; presentation of data; measures of central tendency and variability; testing of hypotheses. Study of the computer runs throughout the course. No prerequisite.

25 Statistics II
A continuation of Statistics I. Topics included are analysis of variance, correlation and regression, nonparametric statistics. The normal, binomial, t, chi-square and F distributions are studied. Use of the computer continues throughout the course. Prerequisite, Statistics I or equivalent.

51 Intermediate Micro Economic Analysis
Methodology of economic science; theory of consumer behavior; theory of the firm; market structure and price determination; income distribution; general equilibrium analysis. Prerequisites, Economics 11 and 12.

52 Aggregative Economic Analysis
The theory of income, prices and employment, neo-classical and neo-Keynesian models, the role of the Federal Reserve, commercial banks and other financial institutions in the money supply process, monetary and fiscal policy in economic
stabilization, macroeconomic experience. Prerequisites, Economics 11 and 12.

53 Issues in American Economics History
An overview of American economic history with particular emphasis on selected topics, such as the economics of slavery, the economic effects of the Civil War, the Turner thesis, the "leading sector" thesis and railroads, monetary history, and technological change. Prerequisite, Economics 11.

54 Managerial Implications of Federal Taxation
This course is designed to familiarize the student with the impact federal income taxation has on managerial decision making. In particular, the difference between maximizing pretax and post tax earnings will be studied. These distortions will be studied from the view of the individual, the firm and public policy. This course is not intended to produce a person highly skilled in the preparation of an individual tax return; rather, it is intended to make the student aware of the behavioral implication of a pervasive, complex revenue system. Time permitting, the course will include problems associated with wealth preservation: a general analysis of the estate and gift taxes and their behavioral consequences. Prerequisites, Economics 11 and 22.

55 Application of Mathematics to Economics and Business
Mathematical treatment of a diversity of limited topics in business and economics; e.g., capital and interest, business decision making, selections from micro and macro economics. Readings of professional articles of an elementary to intermediate level of difficulty. The aim of the course is not to develop any particular area in depth, but to develop student familiarity with elementary mathematical problem solving in a variety of areas in economics and business. Prerequisites, Economics 11 and 12, and Mathematics 19 or 21.

56 Capital Markets
There are three inter-related topics studied in this course: (1) the structure, operation, regulation and economic role of financial markets and institutions; (2) the theory of security analysis including present value techniques, forecasting earnings, interest rates and risk, analyzing financial statements, and application to valuing and explaining differences in yields on U.S. governments, stocks, convertibles and options; and (3) the random walk hypothesis of stock prices, portfolio theory and the efficient frontier, and introductory capital market theory (characteristic lines, betas and mutual fund ratings). Prerequisite, Economics 11. Economics 22 recommended.

57 Theory of Finance
The application of economic and finance theory to the firm; managerial finance, capital budgeting, cost of capital, mergers, leasing, working capital and asset management, and the impact of financial structure and decisions on the value of the firm. Prerequisite, Economics 11. Economics 22 and 56 recommended.

58 Public Finance
Economic analysis of sources of government revenues and types of public expenditures; applications of public sector decision-making models to the determination of public expenditure patterns; the impact of public expenditures on wealth distribution
and resource allocation; the impact of different methods of taxation on resource allocation and wealth distribution; principles of deficit finance; cost-benefit analysis as applied to public project evaluation; state and local fiscal problems; fiscal policy. Prerequisite, Economics 11. Economics 12 recommended.

59 Theories and Critiques of Capitalism
Comprehensive theories of capitalism; emphasis upon the classic view of Smith, Marx and Weber, and upon the more recent thought of Sombart, Friedman, Galbraith, Schumpeter and various radical authors such as Dobb, Hunt and Sweezy. Prerequisite, Economics 11 or permission of the instructor.

61 Labor Economics
Advanced topics in labor markets, such as the history of wage theory, productivity, wage differentials, women in the labor force, investment in human resources, inequality and poverty, and the effects of labor unions. Prerequisite, Economics 11. Economics 12 recommended.

62 International Economics

63 Economic Development
Economic conditions associated with underdevelopment and the particular economic problems of the less developed nations. Study of economic theory in the area of development and critical examination of current economic development policies and programs. Prerequisite, Economics 11.

66 Money and Banking
The role of money in a specialized economy; monetary standards; commercial bank portfolio behavior; commercial banks and the Federal Reserve as creators of money; monetary theory; monetary policy; money and business cycles; international monetary issues. Prerequisite, Economics 11. Economics 12 recommended.

71 Industrial Organization
The impact of industrial structure on resource allocation and economic welfare; an analysis of the pricing behavior of firms; industrial structure and economic progress; the extent of monopoly; the role of the state as a regulator of business; the impact of factor market structure on the distribution of income; antitrust policy. Prerequisite, Economics 11. Economics 12 recommended.

77 Applications of Economic Theory
Applications of intermediate microeconomic and aggregative economic theory, encompassing the theory of economic growth, economic stabilization, welfare economics, public finance, income distribution and international trade. Applications will be treated on both a theoretical and empirical level. Prerequisites, Economics 11 and 12.

88 Honors Seminars

96 Independent Project
Further study in fields of special interest. Readings, conferences, field work, reports. Prerequisite, permission of the instructor.
The State of Minnesota requires that all who are engaged in public school teaching from Nursery School and Kindergarten through 12th grade be certified by the State Department of Education. State requirements are generally as follows: For teaching in the elementary schools, a teacher must have a college degree, must have taken a program which included at least 30 semester hours in professional education with a minimum of six semester hours in student teaching, and must be recommended for certification by the College. For teaching in the secondary schools, including seventh and eighth grades, a teacher must have a college degree, must have taken a program which included at least 18 semester hours of professional education with a minimum of four semester hours of student teaching, have a teaching major, and must be recommended for certification by the College. For teaching in the secondary schools, including seventh and eighth grades, a teacher must have a college degree, must have taken a program which included at least 18 semester hours of professional education with a minimum of six semester hours in student teaching, and must be recommended for certification by the College. In Minnesota a teacher who spends more than half-time teaching in a subject must have a college major in that subject. Teaching assignments of one-half time or less require a minor in that field.

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.

As candidates prepare themselves for teaching, they will be counseled by an adviser in their major or core concentration and by a second adviser in education. In addition to the general graduation requirements and the completion of a core or major concentration, the candidate must complete the professional education sequence. After successful completion of the program and graduation, the candidate is recommended by the College to the State Department of Education for certification.

All candidates should familiarize themselves with the current demands in the different teaching fields, e.g., history, English, science, languages. It is generally recommended that students preparing themselves for secondary school teaching select major concentrations though some core concentrations are desirable as preparation for secondary school teaching. The differences between the social science major and core concentrations should be noted. A major concentration or core concentration in any area may be selected by those preparing to teach in the elementary schools. Students should not hesitate to question members of the education department and the various academic departments regarding these differences as well as possible combinations of courses. The Macalester course offerings are designed to meet the career needs of the students as well as preserve the integrity of the disciplines.

### Elementary Teacher Certification Program

Ordinarily, students may be identified with the elementary education program as sophomores. However, they are encouraged to make formal application for admission to the elementary education program to the teacher education committee no later than the first term of their junior year. Each individual will be reviewed by a faculty...
selection subcommittee of the teacher education committee which is composed of faculty and students comprising a cross section of the academic areas of the College. For admission to both the program and student teaching, the applicant must satisfy the following requirements: Good standing in the College and major department; a satisfactory recommendation by the major department adviser and the education adviser. After admission to the program, and during the junior year, the student must make application for permission to student teach.

In addition to the general graduation requirements and a core or major concentration in any academic area, elementary teacher candidates must satisfactorily complete the following courses in education:

40 Educational Foundations (An Integrated Approach to Education) or
82 School and Society or
84 Philosophy of Education
41 Fine Arts in the Elementary School
49 Educational Psychology
52 Elementary Curriculum and Instruction: Reading, Children's Literature
53 Elementary Curriculum and Instruction: Mathematics, Science, Health
63 Elementary Curriculum and Instruction: Language Arts, Social Studies
65 Student Teaching (Two units)

Elementary education students must also take Mathematics 16, Physical Education 217, Education 125-01 and Education 125-03.

Two different experiences of student teaching are required. The elementary candidate may decide to fulfill this requirement within a two or three-unit program. The candidate may elect to receive one or two units for a fall or spring semester. The choice will be dictated by the candidate's program. This student teaching constitutes one experience. A second experience may be taken during the interim term for one unit. The interim term student teaching provides the opportunity for an all-day student teaching experience in the public schools. It is also possible for a limited number of elementary candidates to elect one unit of student teaching during the summer session.

Elementary education students who desire Kindergarten endorsement should take an additional course, Education 81, Kindergarten Theory. One of the student teaching units will be completed in the Macalester Children's Center or in a public school kindergarten (Education 66).

Those wishing a Nursery School endorsement must take, in addition to the elementary sequence, Sociology 63, The Troubled Family; Psychology 61, Developmental Psychology; Education 50-07, Nursery School Theory; Education 50-09, Practicum and Seminar in Early Childhood Education; and a unit of student teaching at the nursery school level (Education 68).

Students who wish a Junior High School endorsement added to their elementary school teacher certification must take an additional course, Education 95, The Junior High School. The student teaching assignment will include one unit in a junior high school (Education 67).

Secondary Teacher Certification Program
Macalester College provides programs for
Education
certification as secondary teacher in 14 disciplines. It also has two interdisciplinary certification programs. The 14 disciplines in which certification programs exist are: Art (K-12), Biology, Chemistry, Earth Science, English, French, German, History, Mathematics, Music (K-12), Physics, Russian, Spanish, Speech-Theatre Arts.
The two interdisciplinary programs are: General Science and Social Science. Additional information on these two programs is included below.

Candidates for secondary school certification should make application for admission to the secondary program during their first education course preferably no later than the first term of their junior year. Each individual applicant will be considered by a faculty selection subcommittee of the teacher education committee and acceptance is based on the following: good standing in the College and major department; a satisfactory recommendation by the major department adviser and the education adviser. After admission to the program and during the junior year, the student must make application for permission to student teach.

In addition to the major or core concentration (the teaching major) and the general graduation requirements, the following courses in education must be satisfactorily completed by students in the secondary program:

64 Student Teaching (Two units)

Additional Requirements of all Teacher Certification Candidates
All education students must satisfactorily complete work in these additional programs for certification by the State of Minnesota (detailed information is available in the education department): a) 125-01 Drug Education, b) Health and Physical Education (for students in the elementary program, PE 217 and for students in the secondary program, PE 101), c) Education 125-03 Human Relations. In addition, all education students must pass a proficiency test in the use of audio-visual materials.

General Science Core Concentration
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.

A core concentration in general science is basically a core concentration in one of the science fields. It consists 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. This program is restricted to those students who plan to teach.

Social Science Major and Core Concentrations
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. It is advisable to discuss the program with the coordinator, who must sign the approved program, not later than the junior year. The following sequences are recommended:

I. Preparation 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 courses in any one of the following departments: Economics, geography, history, political science or sociology.
B. Four additional courses from the above listed departments, excluding the core department, and psychology. 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:
6-1-1-1-1
6-2-2
6-2-1-1

II. Preparation 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 courses in any one of the following departments: Economics, geography, history, political science or sociology.
B. Six additional courses from the five above listed departments, excluding the core department. One course must be taken in each of the four non-core departments.
C. Two additional courses must be taken from the four non-core departments and psychology.

Certification After Graduation
Individuals with a Baccalaureate degree from Macalester or another accredited college may apply for admission into the teacher education program to work toward certification. The candidate for elementary or secondary certification will be screened by the appropriate selection subcommittee of the teacher education committee. If the elementary candidate lacks preparation in certain areas, i.e., modern math, he or she will be required to take such courses. If the secondary candidate does not present a major comparable to the Macalester major, he or she will be required to take additional courses. In addition, the candidate must finish the professional education sequence as outlined under the elementary and secondary sections and additional requirements section and must successfully complete the student teaching requirements.

Persons interested in this program should consult with the department of education and with the office of student academic records.

Student Teaching
The culmination of the professional education program is student teaching. After the candidate’s application for student teaching has been approved by the appropriate selection subcommittee of the teacher education committee, he or she will be assigned to the appropriate classroom or grade level in the public schools. Macalester candidates are placed in the public schools of Minneapolis,
Education

St. Paul and the surrounding metropolitan area. One of the two experiences of elementary student teaching may be taken in Chicago under the Urban Teaching Program. Secondary student teaching may also be taken under the Urban Teaching Program provided the student also has a student teaching experience under the supervision of a supervisor from Macalester's education department. For further information contact Michael Obsatz in the education department.

The candidates are responsible for their own transportation. In cases of accidents traveling to and from the schools, liability resulting from such accidents involves the insurable interest of the individual auto owners or pedestrian and auto owner — as the case may be. While the candidates are on the premises of the participating schools, they must have liability insurance. This may be obtained by joining the student MEA or the student MFT, or by obtaining private insurance.

Teacher Placement
The College operates a Teacher Placement Bureau which assists Macalester education graduates in finding teaching positions. The primary functions of the bureau are:

(1) keeping a current file of the teacher's credentials,
(2) scheduling appointments with prospective employers and
(3) maintaining lists of available teaching positions.

The responsibilities of the teacher are: a) paying a placement fee and the compiling of credentials, b) initiating contacts with prospective employers and c) informing the Teacher Placement Bureau when a position has been obtained.

Placement folders or credentials should be compiled early in the senior year. Materials on placement procedures are available at the Teacher Placement Bureau in the education department office.

40 Educational Foundations
Social, philosophical and historical concepts and developments as these are related to education.

41 Fine Arts in the Elementary School
Concepts of learning and instruction as they apply to the areas of art and music in the elementary school.

49 Educational Psychology
Human growth and development in childhood and adolescence as they relate to education learning theories.

50-05 Photography in Education
This course is an attempt at creativity in education. A project is chosen by the student and illustrated photographically. Instruction will be given in film development and print making. There is a limited enrollment because of the darkroom facilities. Permission of the instructor is required.

50-07 Nursery School Theory
Processes and approaches to learning and teaching in the nursery school situation.

50-09 Practicum and Seminar in Early Childhood Education
Regular participation in a day care center combined with seminars and readings based on child development theories.

51-01 Secondary Curriculum and Instruction
General principles and procedures in instruction and application of these in the specific secondary teaching areas.

51-03 Secondary Curriculum and Instruction
Professional Semester — A student can combine Secondary Curriculum and Instruc-
tion with Student Teaching, the Drug and Health Seminar and the Human Relations Component requirements in the Professional Semester. The plan for this is to take a concentrated course of Secondary Curriculum and Instruction during the first seven weeks; the student will observe and assist at the assigned school for at least one hour a day. Following this, the student will do student teaching full-time by teaching three classes and being at the school all day for seven weeks. Regular seminars will be held for students during student teaching — arranged by their college supervisors. It is possible to take one independent course in addition to this professional semester. Special permission by the instructor is required.

52 Elementary Curriculum and Instruction: Reading, Children's Literature
Various approaches to the teaching of reading. A survey and critical analysis of literature for children.

53 Elementary Curriculum and Instruction: Mathematics, Science, Health
Methods, materials and approaches in building skills, abilities and competencies in elementary school science, health and mathematics.

63 Elementary Curriculum and Instruction: Language Arts, Social Studies
Methods, materials and approaches in building skills, abilities and competencies in elementary school language arts and social studies.

64 Student Teaching (Secondary)
Student teaching in the public schools at the secondary level. Observations as well as actual student teaching.

65 Student Teaching (Elementary)
Student teaching in the public schools at the elementary level. Observations as well as actual student teaching.

66 Student Teaching (Kindergarten)
Student teaching at the kindergarten level. Observations as well as actual student teaching.

67 Student Teaching (Junior High)
Student teaching in the public schools at the Junior High School level. Observations as well as actual student teaching.

68 Student Teaching (Nursery School)
Student teaching at the Nursery School level. Observations as well as actual student teaching.

81 Kindergarten Theory
Processes and approaches to learning and teaching in the kindergarten situation.

82 School and Society
The tensions and problems of the human condition in technological society. Religion, nationalism, politics, educational ideology, structure, pressure groups, etc. An attempt will be made to assess the place and function of the school.

84 Philosophy of Education
System approaches and philosophical analysis approach to education and educational language, respectively.

96 Independent Project
English

Joel Baer, John Bernstein, Roger Blakely, Giles Gamble, Alvin Greenberg, W. Harley Henry, Howard Huelster, Patricia Kane, J. Michael Keenan, Celestia Meister, Peter Murray (Chairman), Susan Toth, Robert Warde

General Graduation Requirement
Any English course with a number above 20, or any course in English 18 that includes the study of literature, may be counted toward the fulfillment of the general graduation requirement in the humanities.

Major Concentration
Eleven courses in English to include: three or two courses in British literature before 1660, three or two courses in British literature 1660-1900 (to a combined total of five including English 80 as an option to count as the third course in either period); one course in American literature before 1900; and one course in British and/or American literature of the 20th century. Any course offered by the department may count as an elective for the major.

Each student must develop a major plan with his or her adviser. Students are reminded that appropriate topics and seminar courses may be applied toward the distribution requirements in British and American literature outlined above. The department strongly recommends that major plans include a variety of modes of study; i.e., courses dealing with one or two major authors; courses dealing with a literary type, such as the novel or drama; courses dealing with literary periods; and courses of an advanced and specialized nature, such as topics, seminars, literary criticism or independent study.

The work of English courses will regularly include written assignments, but the department recommends English 18 (Literature and Writing) for basic writing skills, and English 21 (Literature in Critical Perspectives) for students who plan to take a substantial number of English courses.

Although there are no supporting courses required for the English major, the department encourages students, with counsel from faculty advisers, to develop programs of study in related curricular areas, and encourages students to explore career interests combining work in English with these other areas. Thus programs can be developed combining work in English with other areas for careers in writing of various kinds, from journalism and the media to technical writing in the professions, the sciences, business and government, as well as creative writing and the fields of advertising and public relations. Other career possibilities including work in English are to be found in the law, medicine, and administration, as well as in the more traditional fields of editing and publishing, library work, and education.

And English alone or in combination with undergraduate work in related fields such as other languages, linguistics, the other humanities, the arts and the social sciences can lead to careers in research and teaching upon completion of further work in a graduate school.

In addition to working with students in courses and independent study to develop these interests, the faculty will help students develop special career-related programs such as internships with appropriate individuals, community groups and other organizations, and will help students to
make contact with alumni and other interested persons for consultation in career planning and development.

**Individually Designed English Major**

A plan is first prepared in consultation with advisers, then is presented in writing for consideration by the department before registration for the junior year.

**Creative Writing Plan for English Major**

Eleven courses, to include: one or two courses in British literature to 1660 and one or two courses in British literature 1660-1900 (to a combined total of three); one course in American literature before 1900; two courses in 20th century literature; four courses in creative writing; and one elective.

English 34 is the first of the creative writing courses to take, and will be the prerequisite for any other work in creative writing, unless an exception is approved by the department. To enter English 34 a student will submit a manuscript and consult with the instructor. Students may of course take English 34 who do not plan to do further work in creative writing.

After a student has completed English 34, normally the next creative writing course to take is English 94. Admission to this course will be determined by the departmental creative writing committee, and will constitute acceptance into the creative writing major program.

After completing English 94, a student may take independent study in creative writing, or take 94 for credit again, or take special topics or seminar courses that may be offered in creative writing.

It is recommended that one of the two required courses in 20th century literature should be in foreign literature, either in translation or in the original language.

English 29 may be taken for this, or a course in a foreign language department. (The major plan of a student taking a course in a foreign language department for this requirement will show 10 courses in English and one supporting course in the other department.)

Students should give high priority to participating in a program for teaching creative writing — perhaps during the interim term — as a means to further insight into the writing process; e.g., an Outreach or Poetry-in-the-Schools program.

**Certification to Teach**

Those who plan to teach English as a major subject in secondary schools must include English 80 as one of the 11 courses. Beyond these courses they must also take Speech-Dramatic Arts 11, Principles and Practice of Public Speaking and either Speech-Dramatic Arts 18 or 23, and the required courses in education.

For a teaching minor in English, there are the same requirements in speech-dramatic arts and education, but only five English courses are required. These must include English 80 and may include English 18.

**Core Concentrations**

I. **Basic Core Concentration in English.**

Six courses in English and six from one or two other departments. The six courses in English may not include 18 and shall include: one course in British literature before 1660; one course in British literature 1660-1900; one course in American literature before 1900; and one course in American and/or British literature of the
20th century. Certifying teachers must also take 80 as one of their courses.

The six supporting courses must come from one or at the most two related departments. The student is required to present a written rationale for these supporting courses before the core plan is approved by his or her adviser and the department.

II. American Studies Core Concentration in English (Patricia Kane, adviser)
Six courses in American Literature 50 or above, including 51, 52, 53. Three of these six courses must be taken during the junior and senior years.

The six supporting courses must include three American history courses and three other courses in American culture selected from such departments as art, geography, journalism, political science, sociology, anthropology, and philosophy.

III. British Studies Core Concentration in English (Joel Baer, adviser)
Six courses in British literature from one of the following epochs: a) Medieval through Renaissance; b) Renaissance through Romantic; c) Mid-18th century to the present; together with six supporting courses relevant to the epoch of British literature selected. The six English courses must be chosen from one of the following groups: a) 25, 60, 61, 62, 71, 72, 75, 80; b) 26, 55, 61, 62, 63, 64, 65, 66, 72, 75, 80; c) 26, 28, 30, 55, 56, 64, 65, 66, 80. When the topics are appropriate, English 31, 50, and 88, and work in independent study or tutorials may be included in these sequences.

The six supporting courses must be composed of: one course in European history; one course in the literature of France, Spain, Germany, Russia or the Classical World; and four courses with appropriate topics from art, philosophy, political science, geography, music, humanities, religion.

18 Literature and Writing
Sections are organized by the instructor around a topic which will be described in advance of registration. Emphasis on composition. May be taken twice for credit, but counts only once toward an English major. Does not count for a core concentration in English.

21 Literature in Critical Perspectives
Study of selected poems, plays and fiction from the perspectives of several critical approaches — social, psychological, formalistic and archetypal. Study of models of these critical approaches by practicing critics, and the writing of several types of critical papers. Especially recommended for freshmen and sophomores considering a core or major in English.

23 American Writers
Intensive study of important figures in 19th and 20th century American literature. May count as an elective for the major or the basic core concentration, but does not fulfill the specified requirements in American literature for any major or core in English.

24 Modern Dramatic Literature
Study of the development of modern drama from Ibsen to the present by reading and discussion of the major late 19th and 20th century European and American dramatists such as Strindberg, Chekov, Lorca, O’Neill, Beckett, Miller, Bolt, Pinter, etc.

25 Survey of English Literature to 1660
The historical development of English literature from its beginnings in the Old
English

English period, through the Middle Ages and the Renaissance, including the folk tradition and tracing the development of prose, drama and verse forms.

26 Survey of English Literature, 1660-1900
The development of English literature from the Restoration of the Stuart monarchy in 1660 through the 18th and 19th centuries. Readings in satire (e.g., Dryden, Pope, Swift and Shaw), the Romantic and Victorian poets (Blake, Wordsworth, Coleridge, Tennyson and Browning), and the early novelists (Fielding, Walpole, Dickens and Hardy).

28 Twentieth Century British and American Poetry
An analysis of 20th century poetry from the more traditional figures such as Yeats, Frost, and Eliot through contemporary writers such as William Stafford, Adrienne Rich, James Dickey, etc. This course will also stress close analytical reading of individual poems.

29 Modern Literature in Translation
A study of selected works of modern fiction in translation in the attempt to define a significant line of contemporary literary development which, from its beginnings in 19th century Russian fiction, has in the 20th century expanded across many continents, many cultures. Readings include short stories and novels by such authors as Gogol, Dostoevsky, Mann, Kafka, Camus, Beckett and Borges.

30 Classics of Modern Fiction
Reading of selected novels and short fiction, chiefly by such major American and British writers of fiction, 1900-1950, as Conrad, Joyce, Lawrence, Wharton, Faulkner, Hemingway, Fitzgerald, Woolf, Mansfield, Wright, Ford, Forster, Huxley, etc.

31 Studies in Modern Fiction
Examination of 20th century fiction, chiefly British and American, with emphasis on particular themes, techniques and practitioners not necessarily included among the more representative readings in English 30. Students should see posted reading lists.

33 Advanced Composition
For students who wish to develop a personal style, or to master the elements of form and style peculiar to a particular discipline, or both. Additionally, those persons who wish to examine the intricacies of the prose, non-fiction, writing process, and how it is taught and learned, may do so. There will be common readings in the areas of linguistics, rhetoric, composition and stylistics. Examples of excellent writing from fields related to the interests of the students will be studied. Each student will produce a major paper, as well as write many minor ones. Admission will be by interview; writing samples may be required.

34 Creative Writing
The focus of this course will be on the development of skills for writing poetry and short fiction through a close study of the techniques of these forms, analysis of model literary works and frequent writing exercises. There will be a basic prosody text, to be supplemented by anthologies of poetry and short stories. This course is open to all interested students on the basis of manuscript submission and consultation with the instructor; it is a prerequisite for English 94 (Advanced Creative Writing) and independent work in creative writing.

50 Topics
Several topics courses are offered each year. The topics are announced in advance of registration and have recently included inter-
disciplinary studies such as “The Victorians” and “The Quality of Urban Life,” studies of single authors or of groups of authors such as women writers from several periods, and studies of important themes in literature such as the relations of humans to nature.

51 Early American Literature
Nineteenth century literature from Cooper through Whitman, and including writers whose careers began before the Civil War such as Poe, Emerson, Thoreau, Hawthorne and Melville. Course assumes some background in literature.

52 American Literature of the Gilded Age
Nineteenth century writers whose careers began after the Civil War from Twain through Crane, and including Howells, James, Frederic, Chopin and Dickinson. Course assumes some background in literature.

53 American Literature of the Twentieth Century
Major writers such as Dreiser, Frost, T.S. Eliot, Eugene O’Neill, Hemingway, Katherine Anne Porter, Faulkner, Robert Lowell and Saul Bellow will be studied in their social/historical context and in their relationships with each other so as to determine the trends, themes and artistic conventions dominating American literature of the period.

54 Afro-American Literature
The study of selected authors, topics and periods in the development of Afro-American literature.

55 The British Novel in the Eighteenth Century
The rise of the novel as illustrated in the works of Defoe, Richardson, Fielding, Sterne, Smollett and Goldsmith. Emphasis on the depiction of English social history and the authors’ distinctive criticism of contemporary life.

56 The British Novel in the Nineteenth Century
The fiction of such authors as Scott, Austen, Dickens, Thackeray, the Brontes, Trollope, Eliot, Meredith and Hardy. In addition to a study of individual texts, some time is devoted to an examination of the novel’s evolving form and function.

60 Old and Middle English Literature
Study of Beowulf and other Old English Poetry; some attention to the medieval lyric and poetry of dream vision (Pearl and Piers Plowman), and major emphasis on the development of Arthurian romance and legends of the holy grail in both British and Continental versions.

61 Elizabethan Literature
A study of 16th century non-dramatic literature, beginning with John Skelton and Thomas More and culminating in the major work of Edmund Spenser. Almost half of the course is devoted to Spenser’s poetry. Other writers studied are Sidney, Shakespeare, Wyatt, Gascoigne, Surrey, Daniel, Davies, Campion, Raleigh, and Lyly.

62 The Early Seventeenth Century
A study of early 17th century poetry and prose, beginning with a concentrated study of the “metaphysical” poet John Donne and the “classicist” Ben Jonson. We then study Herrick, Herbert, Carew, Waller, Suckling, Lovelace, Crashaw, Denham, and Cowley. We focus finally on the poetry of Andrew Marvell. We’ll also do short readings in the prose works of Bacon, Burton, Browne, Earle, Overbury, and Walton.
63 The Age of Satire
A study of the major British writers from 1660 to 1740: Dryden, Swift, Pope, Congreve and their contemporaries, from the point of view of their contributions to the form and function of satire in a highly self-conscious society. The course will examine the historical background of such political, religious and social satires as *Gulliver's Travels*, *The Way of the World* and *The Dunciad*, and seek to determine their value as models for critics of today's society.

64 Mid and Late Eighteenth Century Literature
A study of major British poetry, prose and drama from 1740 to 1800, including the works of Fielding, Smollett, Sterne, Johnson, Sheridan, Burns and Blake. Emphasis will be placed on the writers' response to the radically changing social and intellectual climate of the period, and on their contributions to the shaping of that climate.

65 The Romantic Period
The poetry of Coleridge, Wordsworth, Keats, Shelley and Byron in the context of the rapid cultural changes in the period 1789-1832 in England. Emphasis on the distinctive responses of each of the poets and on the development of the romantic meditative poem.

66 The Victorian Period
British literature from the 1830's to World War I, emphasizing poetry and non-fiction prose drawn from the work of Tennyson, the Brownings, Arnold, the Rossettis, Morris, Swinburne, Carlyle, Mill, Ruskin, Pater, Wilde and others. Attention is paid to social, economic, political and scientific developments of the age, and Victorian music, painting and architecture are briefly examined.

71 Chaucer
Reading and discussion primarily of *The Canterbury Tales* (in Middle English). The course works to develop the 14th century religious and literary context within which Chaucer wrote and to point out significant differences and similarities between the Middle Ages and our own time.

72 Shakespeare
Reading and discussion of major plays of all genres — tragedy, history, comedy and romance — with concern for the staging of the plays, their contexts in Elizabethan thought, and modern ideas of how they are to be interpreted.

75 English Drama to 1642
Major emphasis on such contemporaries of Shakespeare as Christopher Marlowe, Ben Jonson and John Webster, but beginning with the development of the drama in the Middle Ages from religious ritual into the Mystery Plays and Morality Plays. Then in the Elizabethan drama, study of the fusion and conflicts of the tragic, the romantic, the demonic and the satiric in the major genres, including such distinctively Elizabethan types as the revenge play, tragic satire, and tragicomedy, and noting the rise of such significant "modern" figures as the romantic rebel, the villain-hero and the alienated idealist.

80 The English Language
We will study certain topics in common for the first half of the course: the history of the English language, the history of grammatical study, the nature of certain current grammars, and dialect studies. In addition each student will explore an interest area and carry out a project in that field of interest. Explorations will usually result in one or several book reports to the class;
projects may take the form of words, or words and tapes, or words, tapes, and illustrations.

88 Seminar
Several seminars are offered each year, and their topics are announced in advance of registration. Typical subjects include the study of William Faulkner, John Milton, and other major writers; interdisciplinary courses such as Myth and Medieval Romance, Social Roles and Dramatic Roles, and the Writer and History; and courses studying the creative process, literary movements, or particular literary types. Enrollment is limited to 12 or 15 students.

92 Literary Criticism
A study of the historical development of literary theory and criticism; the major schools of 20th century critical thought; and practical application of critical methods.

94 Advanced Creative Writing
A writing workshop that stresses group discussion and criticism of the writings produced by its members. No texts are used, and formal assignments are rarely given, thus providing each student with a maximum amount of time in which to pursue his or her own projects. Prerequisites, English 34 and permission of the creative writing committee.

96 Independent Project
Permission of instructor and department committee required.

Opportunities for independent study (English 96) with one or more members of the department supplement the regular course offerings. Such study is not a substitute for course work, but a chance to extend genuine interests beyond the scope of the existing curriculum, where it is evident that an individual is qualified to independently accomplish the task proposed. When appropriate, students may outline a program involving interdepartmental work with willing faculty members from both English and other departments. Typical activities include: examination of an author or authors not fully covered by regular courses; research into particular (sometimes highly specialized) aspects of a literary period; the writing of a lengthy thesis; pursuance of creative writing projects (ordinarily after completion of English 34 and 94); involvement in community or career-oriented programs outside the College that relate in one way or another to English skills.

French

Charles Johnson, Philip Lee, Helene Peters, Karl Sandberg (Chairman), Virginia Schubert

Objectives
The French department has a triple objective: a) to prepare competent majors and cores in French language, culture and literature, b) to provide the kinds of language training needed by non-French majors for study in their own fields, for travel, or for future professional needs, c) to provide the broadening knowledge of a new language and culture which has traditionally been a part of the liberal arts education.

Career Orientation for French Majors
Recent French majors from Macalester have made careers in various fields such as...
foreign service, international banking and commerce, library science, publishing, special education and teaching French. Others have gone on to professional schools or to graduate programs of French language and literature, linguistics or teaching English as a second language.

Students are encouraged to supplement their concentration in French with cores in other fields. Such complementary specializations will widen the range of career opportunities.

Major Concentration
A major concentration in French consists of eight courses beyond 31, to include: a) one advanced language course (from the 50 listings), b) two literature courses (from the 70 listings), c) two courses in civilization, arts and cultural or intellectual trends (from the 60 listings) and d) a senior project completed during the senior year, either as an independent course or within the framework of an existing course.

In addition, the student will choose four supporting courses according to the needs of his or her program. Those strongly recommended are: a) for those students who intend to teach French — courses in linguistics, a second language, English, humanities or history, b) for those students who are going into government work, business or allied fields — supporting courses in political science, history, economics, geography.

Strongly recommended is the Study Abroad Program (see below).

Core Concentration
The core plan consists of six courses beyond 31, among which are included: a) for those specializing in language skills, two advanced language courses (from the 50 listings), a civilization course, a literature course and a senior project; b) for those specializing in literature, an advanced language course (51 or above), a civilization course, two literature courses and a senior project.

For either of these patterns six additional courses are to be chosen from outside the department with the approval of the adviser and the department(s) concerned. Some acceptable patterns would be:

1. Six courses in a second foreign language beyond the elementary level.
2. Six courses in the humanities and fine arts.
3. Six courses in English literature beyond the freshman level.
4. A combination of (2) and (3).
5. Six courses in history, political science, geography which are relevant to France and/or the study of the French language.
6. 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.

Study Abroad Program in Paris-Avignon, France
This program lasts six months, with a January orientation — interim term in Paris, the spring term in Avignon, and a summer open to travel/work options.

Direction is by Macalester faculty jointly with the Institute for American Universities and the University of Avignon. Course offerings are in French language and litera-
ture and other fields, e.g. linguistics, geography, art, German, Italian, history, philosophy and government, and are taught by French university professors. The program is open to students with two courses beyond French 42. Participants need not be French majors. While in France the students attend regular university classes with French students and live in the homes of local residents. The courses will transfer as regular Macalester courses (four courses per term and one interim course). No more than two courses will be counted toward the French major, normally. They cannot be substituted for the following courses: 51, 63. The French major will have to take, on campus, any additional courses necessary to meet the departmental graduation standards at the end of his or her senior year.

Senior Examinations
Majors and cores are advised to take the Graduate Record Examination and are required to take a written-oral examination, testing general language skills and the synthesis of the materials in the program of the individual concerned. The senior examination will also require familiarity with the works on a basic departmental reading list, available on request at the departmental offices.

Honors are available in the French department through the college-wide honors program.

Placement Tests
Students who have studied French before and desire to continue it should plan to take the placement tests given during Orientation Week so that they may begin at the appropriate level.

11 Elementary French
A rapid and comprehensive introduction to the structures of French essential for reading; mastery of the sound-phonics system; development of aural comprehension and an elementary speaking of the language.

12 Elementary French
Continuation of the development of the skills of reading, aural comprehension, speaking and writing with increasing emphasis on the practice of speaking and writing.

21, 22 French for Reading Knowledge
This sequence is designed for students who wish to acquire or enhance an ability to read French texts in literature, the arts or the sciences. Although no attention is given to speaking or writing, the student is introduced to the sound system of French. Programs for each student may be individualized to include readings in French from the student’s major field. French 21 presupposes no previous acquaintance with French. French 22 is intended for students who have some background in French.

25 Introductory Conversation
Intensive practice of conversational French for students planning to travel, work or study abroad. Speaking and understanding are emphasized, with only slight attention given to reading and writing. Students with a basic oral facility in French should register for French 31, 32 or 51. Beginners who plan to continue French should enroll in French 11 and 12.

31 Intermediate French: Reading and Speaking
While giving some attention to aural comprehension and writing, this course will
French

place primary emphasis on the consolidation and development of conversation and reading. Prerequisite, French 12 or placement test or permission of the instructor.

42 Writing and Literature
The course begins by developing reading speed and comprehension. It then uses this reading skill as the basis for studying and writing about plays, novels and poetry. Practice in listening comprehension, note-taking and writing is provided by the use of films. All discussions and class work are carried out in French. Prerequisite, French 31 or placement test or permission of the instructor.

50 Topics
Special courses organized according to student interest. See departmental announcement of courses intended for the forthcoming term.

51 Advanced Conversation
Intensive training in oral usage and phonetics. Study of special grammatical patterns. Small conversation groups with natives. Four hours a week, daily laboratory work. Prerequisite, French 42 or equivalent.

55 Advanced Oral and Written Usage
Special problems of phonetics and stylistics. Four hours a week and laboratory work. Problems of translation (theme et version). Prerequisite, French 51 or equivalent.

63 France in the Twentieth Century
French society, French culture and art, French life; their structures, their relationships, how they function within an historical, geographical and aesthetic framework. Students may select an area of interest and pursue independent projects in consultation with instructor. Four hours a week. Prerequisite, French 42 or equivalent.

68 Art and Ideas in French Culture
The course will study the idees maitresses of French society from the medieval period through the 19th century in their cultural and historical settings (e.g. the cathedral schools, the salons, the cafes), and it will examine the relation of these ideas to the art, architecture and music of the various periods. Lectures and readings will be in English, with discussion sections and readings in French for French majors. No prerequisite.

70 The Existential Woman
An existential view of the feminine myths and archetypes as represented in literature, art and life, based on the writings of French existential authors: Sartre, de Beauvoir, Camus, etc. Starting with the existential definition of the human person, the course will assess dominant female figures from Isolde to Simone de Beauvoir and Doris Lessing as they appear in literature (French, English, American) and in biographical or autobiographical materials (journals, diaries, etc. . .). Lectures and readings in English; readings in French for French cores and majors. No prerequisite.

75 The French Theatre
The form, spirit and technique of theatre as seen in plays from the medieval period and in the works of such major French dramatists as Corneille, Racine, Moliere, Beaumarchais, Musset, Anouilh, Claudel and Giraudoux. In French. Prerequisite, French 42 or equivalent.
French Geography

76 Contemporary Trends in French Literature
A study of selected trends in 20th century literature studied with their cultural background:
Surrealism and Cubism: from Apollinaire to Aragon;
The human condition: man's fate from Malraux to Bernanos;
The theatre of the absurd and of violence from Ionesco to Arrabal;
The new novel: Alain Robbe-Grillet et al.

In French. Prerequisite, French 42 or equivalent.

77 The French Novel
The French novel as a medium for social comment, psychological analysis and philosophical treatment. The development of the genre from its medieval beginnings to modern times. Novelists to be studied include Mme de Lafayette, Diderot, Balzac, Stendhal, Flaubert, and Zola. In French. Prerequisite, French 42 or equivalent.

78 French Poets and Poetry
The experience of poetry and its expression in major French poets from Villon to the present, including Ronsard, La Fontaine, Hugo, Baudelaire, the Symbolists, Claudel and Valéry. The relationship of poetry to religion, psychology and philosophy will also be studied. In French. Prerequisite, French 42 or equivalent.

96 Independent Project
Advanced students may undertake individual projects involving library or laboratory research with a comprehensive report or thesis. Prerequisite, junior or senior standing, departmental approval.

Geography

David Lanegran (Chairman), Gerald Pitzl
The department of geography seeks to provide students with the knowledge and skills that will enable them to begin careers in urban or regional planning, location and market analysis, environmental management or analysis, and graphic communication through classroom and laboratory activities as well as internship experiences. In addition, the department offers courses that intend to convey meaningful knowledge of peoples in their different physical surroundings. The department participates in several interdisciplinary programs. (See East Asian Studies, Environmental Studies, International Studies and Urban Studies.)

General Graduation Requirements
All courses but Geography 25, 26 and 55 may be used to fulfill the general graduation requirements in social science. However, Geography 11 best serves the general educational needs of students and is required as a preparation for upper division courses except for 52 which has no prerequisite. Students certifying in social science education should take Geography 11 and 26.

Major Concentration
Each student is expected to design his or her own major or core program in consultation with a member of the faculty. A major program must contain at least seven geography courses and must include Geography 11, 25, 26, 41, one regional course, a field research course and senior seminar. In addition, a facility in a foreign language or quantitative methods (whichever is appropriate to a student's interests) is expected.
The department offers three major types of programs: urban and regional planning, environmental management and international studies. Suggested course sequences and material on internship experiences are available from departmental advisers.

Whenever possible students are urged to avail themselves of the various opportunities offered by the College for study abroad or elsewhere in the United States.

Core Concentration
A core concentration in geography consists of six courses in geography which must include Geography 11, unless the student is excused by the chairman of the department, and six complementary courses selected by the student in consultation with the adviser and in consideration of his or her vocational goals.

Honors are available in the geography department through the college-wide honors program.

Further Preparation
To meet requirements for graduate study, a student with a major or a core concentration in geography should select supplementary courses from the social sciences, the natural sciences, and the humanities and fine arts in consultation with the department adviser.

11 Human Geography
Introduction to the basic concepts and fundamental questions of geography. Major topics covered will be human perception of earth space and spatial ordering systems; the growth and distribution of human population, the localization and functioning of primary circulation systems on the surface of the earth; human ecology and man’s perception of his environment; principles of the analysis of spatial diffusion.

25 Cartography
Designed to develop basic skills and logic in preparation of maps. Assignments center on the representation of qualitative and quantitative data.

26 Physical Geography
Human land use and settlement patterns in their physical environment. Weather and climate, micro-climatology and pollution, water-balance, soils and vegetation, on local and world regional scales. Landscape erosion (Geomorphology) with particular emphasis on Anglo-America. Field trips to contrasting environments in local region. Map and air photo laboratory sessions.

40 Europe Including U.S.S.R.
General regional characteristics of the physical resources and the patterns of circulation. Forces underlying the unity and diversity of cultures and economies; regional differences in the stages of economic development. Political and economic geography of the Common Market, Efta and Comecon. American and Soviet interests in Europe. Emphasis on those countries of students’ regional and language interests.

41 Urban Geography
A discussion of the phenomena of urbanization in relation to patterns of circulation and distribution of resources. Study of models and theories useful in urban geography and their relation to the contemporary city with focus on the Twin Cities and their hinterland. A survey of major world cities. An examination of problems confronting cities and attempts at their solution. Field work required.
44 East Asia
Regional geography of China, Japan and Korea; distribution of resources, land use patterns, characteristics of the populations. Comparative analysis of countries within the East Asian realm. Interrelatedness of East Asia with other regions in the world; prospect for future economic development and areal interaction.

50 Topics in Geography
Examination of special topics of interest to faculty and students, such as a study of the processes by which the spatial environment is mentally organized by man, geographical problems in economic development, etc.

52 Regions of North America
Study of geographical regions within the United States and Canada; regional variants in physical and cultural realms. Identification and analysis of major economic activities, settlement and land use patterns, and population characteristics. Interrelatedness of North America with other regions in the world.

53 Africa
The basic geographic features of Africa including climate, soils, landforms, water resources. Cultural, regional and political geography of African countries south of the Sahara.

54 Latin America
A seminar focusing upon the major manland relationships in selected regions including agriculture, the distribution of settlement, the process of urbanization, internal migration and the use of mineral resources. Pre-historical and historical development of spatial patterns discussed as important background to contemporary problems. See Latin American Studies.

55 Advanced Physical Geography: Environmental Management
Elements of weather and climate and their basic controls; mechanisms of the general circulation of the atmosphere; weather disturbance in middle latitudes; description and analysis of climatic types.

56 Urban Geography Field Seminar
A research methods course in which students will conduct an individual inquiry in one of the following sub-fields of Urban Geography: spatial structure of urban areas; spatial interaction; problems of economic localization; problems of environmental quality and factors in intra-urban residential mobility. All work is expected to be focused within the Twin Cities metropolitan area or other accessible locations. Students will be expected to participate in group projects and to complete an individual study which may produce either a written report or a map. Prerequisite, Geography 41.

64 Political Geography
Boundaries and the role of geography in international affairs. Theories in political geography, intensive study of reasons for boundary frictions.

65 Historical Geography
The genesis of American landscapes. Emphasis on the Middle West and settlement geography. Field trips and individual projects.

88 Senior Seminar
For geography majors only. The history of geographic thought and methods is studied through individual reports and papers.

96 Independent Project

97 Internship
The introductory courses in geology (Geology 11 through 22) are designed chiefly for the non-science major. These courses seek to provide the general college student with an appreciation of the scientific principles and techniques that are used to investigate planet Earth, and to inform students about the composition, materials, major processes and history of the planet. Although the regular departmental major concentration is intended principally for students planning careers in geology, special programs involving cooperative work in biology, chemistry, physics or mathematics are available for those interested in such interdisciplinary fields as geochemistry, geophysics, paleontology or planetary geology. Graduate study is a prerequisite for most professional work in the earth sciences and our major program is designed to prepare students for such advanced work.

Not all geology majors continue in the discipline. In recent years several graduates have entered law school with the plan of working in environmental or corporate law. Geology is one of the departments participating in the Environmental Studies Program and some of our majors are in that program. Still others use the geology major as a stepping stone into the business world.

During the past two decades there has been a marked upsurge in the demand for secondary school teachers of earth science. The core concentration in geology is most frequently selected by students wishing to enter this field.

**General Graduation Requirement**
Students wishing to fulfill the general graduation requirement in science may take Geology 11, 12, 15 or 22.

**Major Concentration**
The major concentration consists of the following courses: Geology 11, 12, 31, 32, 36, Chemistry 11 and 12 (or 13), Mathematics 21 or 14, plus two courses in biology or physics. In addition, students must select at least three electives in geology. Those students planning careers in such fields as geochemistry, geophysics or paleontology may substitute advanced courses in biology, chemistry, physics or mathematics for some or all of the geology electives. Some proficiency in a foreign language is recommended for students anticipating graduate work in one of the earth sciences.

**Core Concentration**
The core concentration consists of six courses in geology and six courses from a related field or fields. This program is particularly suited for environmental studies majors or for prospective secondary school earth science teachers. Core majors should take Geology 11, 12, 31, 32, 36 plus one geology elective. The additional six courses in outside fields must be selected in consultation with members of the department.

**Further Preparation**
A course in physical chemistry is strongly recommended for those students preparing for graduate study in geology. A summer field course or one or more summers of field experience in the mining or petroleum industry is frequently a requirement for
admission to graduate programs in geology. Consult with members of the department for recommended field courses and for summer employment opportunities in geology.

11 Physical Geology
Materials and structure of the earth. Processes acting on and in the crust of the earth to produce change. Origin of landforms. Three hours lecture and two hours laboratory per week. Local field trips.

12 Historical Geology
Origin of the earth and solar system, physical history of the earth, particularly of North America, and history of life on earth. Three lectures and two hours of laboratory per week. Field trip.

15 Oceanography
An introduction to the marine environment covering such topics as the heat balance of the seas, oceanic circulation, the composition, configuration and origin of the sea floors, geochemical cycles, history of seawater, and marine ecology. The role of the oceans as a potential source of food and raw materials will be investigated.

22 Water Resources
Analysis of the hydrologic cycle, including study of precipitation, runoff, evapotranspiration, infiltration and groundwater flow. Physical and chemical properties of water. Water pollution studied from a scientific (rather than political) viewpoint. Problems of water management.

31 Mineralogy
Crystallography and crystal chemistry. Physical and chemical properties and occurrence of the common minerals. Identification of minerals in hand specimen; microscopically and by X-ray diffraction. Three hours lecture and four hours laboratory per week. Prerequisite, one course in chemistry and permission of the instructor.

32 Structural and Field Geology
Primary and secondary structures of rocks, mechanics of rock deformation. Use of orthographic and stereographic projections in solving structural problems. Introduction to mapping techniques. Three hours lecture and four hours laboratory per week. Prerequisite, Geology 12.

36 Stratigraphy and Sedimentation
Principles of stratigraphy and sedimentation and their application in the interpretation of sedimentary environments. Classification and origin of sediments, sedimentary structures, diagenesis, index fossils and depositional environments. Three hours lecture and two hours laboratory per week. Prerequisite, Geology 12 or permission of the instructor.

50 Topics in Geology
In past years the department has offered topics courses in Oceanography and Water Resources. Both of these courses have become part of our regular curriculum. We propose to offer a topics course on Mineral and Energy Resources in the fall of 1976. The preceding courses carried no prerequisite. In addition, we have offered courses on topics such as Geotectonics for students with some background in geology.

51 Paleontology
Taxonomy, morphology, paleoecology and evolution of both vertebrates and invertebrates. Use of fossils in stratigraphy and as indicators of paleoenvironments. Three lectures and one two-hour laboratory per week. Local field trips and one all-day field trip to southern Minnesota. Prerequisite, Geology 12 or permission of the instructor.
65 Petrology
The origin and occurrence of igneous, sedimentary and metamorphic rocks. Introduction to experimental phase equilibria studies with applications to natural systems. Geochemistry of element distribution in the crust. Use of the petrographic microscope in the study of rock thin sections. Three hours lecture and four hours laboratory per week. Prerequisite, Geology 31.

67 Economic Geology
Occurrence, characteristics and origin of mineral deposits. Factors controlling the distribution of elements in the earth's crust. Relation of mineral deposit theory to problems of mineral economics, discovery and evaluation of deposits. Field trip to mining regions. Three hours lecture and two hours laboratory per week. Prerequisite, Geology 11 and permission of the instructor.

96 Independent Project
Independent study of geologic problems or preparation of senior research thesis. Prerequisite, junior standing and permission of the instructor.

Germanic Languages and Literatures

German Major and Courses
The purpose of the major sequence is to equip students with language skills necessary to the study of German literature and culture, to study significant literature in original texts, to prepare them to teach the language and/or to continue the study of the literature and the language in graduate school, and to prepare for a career in multinational business.

Students who have advanced somewhat in their German studies are encouraged to live during one of their undergraduate years at Macalester's German House, which also serves as a focal point for the department's social activities.

Beginning in 1969, between 12 and 16 students have participated each year in Macalester's German Study Abroad Program, open to non-majors as well as majors. Students who possess the requisite background (competence in the language equivalent to at least German 32 or 42) are encouraged to participate in the program, which includes winter study (usually at a Goethe Institute) followed by spring term at the University of Vienna.

Major Concentration
A departmental major in German consists of a minimum of nine German courses beyond the elementary level (German 11 and 12 or their equivalent). Students who place initially above the intermediate level need eight courses to complete a major. For those seeking secondary certification, the State of Minnesota recommends 10 courses beyond the elementary level. A major shall include 31, 32 and 42 (or their equivalent), 47 and 51. In addition, all majors must include German 70 in their program of study, and all must include either 63 or 64, as well as one of the following: 62, 66 and 68.

For majors intending to teach, the department strongly recommends German 49 and 58.

For majors planning graduate study, German 58 and 60 are strongly recommended.
The department also requires five supporting courses from outside the department. A list of courses recommended for this purpose can be obtained from the department.

A core concentration consists of four courses beyond the intermediate level, to include courses 47 and 51.

As a specific application of College provisions for credit by examination, the department of Germanic languages and literatures began awarding credit for German 12 (second semester Elementary German), in the 1975-76 academic year, to any student who, based on performance in a departmentally-approved placement examination, places in German 31 or any higher course.

10 Basic Conversational German
A one-semester, accelerated course in everyday German with grammar learned inductively. Normally, this is a terminal course, but those who perform in a superior manner may pass into 29 or 31 with permission of the instructor.

12 Elementary
Essentials of grammar, elementary conversation and reading. For beginning students whose goal is competence in the four skills: reading, writing, speaking and understanding. Four hours per week plus laboratory periods.

15 Accelerated German for Reading I
Essentials of grammar and graded readings. For beginning students whose goal is reading mastery only. Open to students at all levels. Four hours per week.

29 Accelerated German for Reading II
Reading material from the various sciences and the humanities forms the basis for a study of vocabulary and translation techniques. Students will be required to translate as their major project an article of professional caliber in their field. Prerequisite, German 15 or the equivalent as determined by the instructor. Four hours a week.

31 Intermediate
Grammar review, conversation and selected readings in classical and modern German texts. Students with two or three years of high school German will be admitted after placement by examination. Prerequisite, German 12 or 15 or the equivalent. Four hours per week plus laboratory periods.

32 Intermediate, continued
Prerequisite, German 29 or 31 or the equivalent. Four hours per week plus laboratory periods.

42 Conversation and Composition
Special emphasis on pronunciation, general audio-lingual proficiency and the improvement of writing techniques. An alternative to German 32. Prerequisite, German 29 or 31 or the equivalent. Four hours per week.

43 German Literature in Translation
Designed for non-majors, this course will involve a particular author or literary movement of significance in world literature.

47 Introduction to German Literature
A transitional course between the intermediate level and advanced literature classes. An examination of the main literary genres through the reading of representative German texts. Prerequisite, German 32 or 42 or the equivalent.

49 German Culture and Civilization
The development of German culture and its contribution to civilization of the present
period in terms of social, historical, political, intellectual and artistic figures and events. Prerequisite, German 32 or 42 or the equivalent.

50 Topics
The subject matter of this course will vary from term to term, depending upon instructor's interest and student desire. Prerequisite, German 47 or permission of the instructor.

Examples of Topics courses offered in recent years:
"The Dutch" — an introduction to the culture, art and history of the Hollanders;
"Anglo-Saxon" — A study of the morphology and syntax of Old English with readings from the *Anglo-Saxon Chronicle*, *The Wanderer*, *The Seafarer*, and *Beowulf*;
"Suffering and Survival — The German Experience under the Nazis" — A study of German actions and reactions while under the Fascist jack-boot, with stress upon the literature and its propagandistic perversion.

51 Advanced Composition and Conversation
Prerequisite, German 32 or 42 or the equivalent. Four hours per week plus laboratory periods.

58 Advanced Grammar and Stylistics
Intensive study of the more sophisticated points of German grammar and style through translation into German of material from the works of major writers and the writing of critical essays in German on literary subjects. Prerequisite, German 51 or permission of the instructor.

60 Introduction to Germanic Philology
Fundamentals of comparative linguistics, phonetic and phonemic systems, the history of German from its Indo-European origins to the rise of New High German and German dialects. Prerequisite, one course numbered above 40 or permission of the instructor.

62 Early Literature
Study of the various genres and their exponents from the Old High German beginnings to the Enlightenment. Prerequisite, German 47 or permission of the instructor.

63 Age of Goethe I
Selected works from the Enlightenment, Sturm and Drang and early Classicism. Prerequisite, German 47 or permission of the instructor.

64 Age of Goethe II
The later works of Goethe and Schiller, the works of Tieck, Wackenroder, Novalis and the Schlegels. Prerequisite, German 47 or permission of the instructor.

66 Nineteenth Century Literature I
Comprises the writings of the later romantics and the major 19th century contributors to the novelle and lyric poetry. Includes works by Hoffmann, Heine, Mörike, Stifter, Keller, Storm, Meyer, Fontane and Hauptmann. Prerequisite, German 47 or permission of the instructor.

68 Nineteenth Century Literature II
The drama, including works of Kleist, Grillparzer, Hebbel, Hauptmann and the early dramas of Schnitzler and Hofmannsthal. Prerequisite, German 47 or permission of the instructor.

70 Twentieth Century Literature
Selected readings of writers from Impressionism to the present. Prerequisite, German 47 or permission of the instructor.
Germanic Languages and Literatures

History

Chris Cavender, Mahmoud El-Kati, Jerry Fisher, David Itzkowitz, Emily Rosenberg, Norman Rosenberg, Ernest Sandeen, Paul Solon, James Stewart (Chairman), Peter Weisensel

The department of history offers courses in the development of ideas and institutions in different eras and cultural areas. Courses in history contribute not only to general education but to the preparation of students for graduate education in history and allied fields, teaching, law, the ministry, international service and relations, library and archival work, the foreign service, research and understanding of an individual's place in society.

General Graduation Requirement
History 10, 11, 23, 24, 26, 31, 32, 33, 34, 35, 36 and 37 fulfill the requirement in social science. If properly prepared, a student with the permission of the instructor may elect a higher level course to fulfill the general graduation requirement.

Major Concentration
No fewer than nine nor more than 11 history courses and from five to seven supporting courses outside the history department, selected in consultation with a student's history department faculty adviser.

Core Concentration
Six courses in history and six additional courses in a related field, selected in consultation with a student's history department faculty adviser.

American Studies
A major concentration in American studies may be arranged with the consultation of members of the staff especially concerned
History

with American history. For further information consult Professors Stewart and Sandeen in the history department, and Professors Kane and Henry in the English department.

Honors are available in the history department through the college-wide honors program.

Every course listed in the history department is taught at least one semester out of each four and most are offered annually.

Introductory Courses (10-37)
These courses are designed to meet the needs of students who have no previous collegiate experience with the study of history.

10 Europe to 1789
A survey of European history from antiquity to the French Revolution, concentrating on three unifying themes; the role of the Christian church, the nature of Western pre-industrial society, and the development of the nation-state system.

11 Europe Since 1789
A survey of major issues and events of European history from the French Revolution to the present.

13 African Civilization
A survey of African civilization from earliest times to the present, followed by in-depth study of selected topics.

23 American Civilization
A topical analysis of United States history designed primarily for underclassmen who wish a general examination of significant periods and problems. Subject matter and teaching approach will vary widely from section to section, with section descriptions to be published in advance of registration.

History majors and cores should not take History 23 more than once; other students may take two History 23 courses with specific departmental permission.

24 Introduction to American Studies
A thematic introduction to American history which utilizes art, architecture and novels as well as traditionally conceived historical sources.

26 American Indian History: A Survey
A survey of Native American history from early man to modern times. The course will focus mainly upon Native American societies on the North American continent. Special emphasis will be given to interaction among Native American tribes; interaction between Native Americans and whites; the development of federal Native American policy and its impact. Attention also will be given to persistence, change and adaptation in Native American cultures to contemporary social conditions.

31 History of Sex Roles and Family
A historical survey of attitudes toward male and female sexual roles and of changes in family structure, considering differences among social classes and ethnic groups.

32 American Architectural History
A survey of the history of American architecture from 1600 to the present, emphasizing the history of domestic architecture but including church, business and public buildings. Frequent illustrated lectures and field trips to buildings in St. Paul, especially on Summit Avenue.

33 Modern China
A study of leading institutions and movements of 19th and 20th century China. Major emphases include the impact of Western imperialism, the transformation of
peasant society through revolution, U.S.-China foreign affairs, the rise of Mao Tse-Tung, the Great Proletarian Cultural Revolution and China today.

34 Modern Japan
Japan's rapid industrialization in the latter part of the 19th century and its phenomenal rise to the number three economic power in the world after the devastation wrought by World War II has led many scholars to declare Japan a model worthy of emulation for all "developing" nations. After an examination of feudal Japan, this course probes the nature and course of Japan's "amazing transformation" and analyzes the consequences of its strengths as a nation-state. Considerable study of Japanese art and literature will be conducted and American attitudes toward the Japanese and their history will also be examined.

35 The Black Experience Since World War II
Survey of the major political social events in African-American life; post-war dynamics in America, the impact of the civil rights movement, the visibility of the ghetto etc., are major themes.

36 Intellectual History of East Asia
A study of Chinese and Japanese philosophy and intellectual history from Confucius to Mao Tse-tung. Taught in conjunction with Philosophy 37. Students may take the course for either history credit or philosophy credit, or both. Previous course in East Asian history preferred.

37 Latin America
Two courses will be offered in alternate years. "Introduction to Latin America" will be a broad, topical study covering colonial times to the present. "Mexico and the Caribbean" (no prerequisite) will focus on the historical development primarily of those countries which have been the homelands for most of the Spanish-speaking population of the United States — Mexico, Puerto Rico and Cuba.

Intermediate Courses
These courses assume previous college level history experience, but not necessarily in the same field. Any specific prerequisites are at the discretion of the individual instructor.

50 Topics
Courses numbered 50 are occasional, often experimental courses, offered by instructors at their own initiative, or in response to student requests. The following is a sample of past offerings:

The Victorians (a course taught jointly with the English Department), American Popular Culture; Urban History, Scandinavian History; History of American Law. In the 1976-78 academic years, the department will offer the following 50-level courses: History of American Violence, Fall, 1976-77; Native American History and Education, Fall, 1976-77; The Future as History, Fall, 1977-78; Comparative Revolutions in Western History, Spring, 1977-78; and The History of Slavery in the Americas, Fall, 1977-78.

56 Pre-Industrial Europe: Cultural Myth and Social Reality
A survey of the evolving relationship between European material conditions and the cultural tradition from the fall of Rome to the beginnings of industrialization. This study will be conducted by inquiring into the sources and implications of themes such as the Arthurian Legend and the Faustian myth as well as such cultural movements as the Renaissance and Enlightenment.
57 Modern European Social History
An investigation into the textures of everyday life as experienced by the people of western Europe in the period since the middle of the 18th century. Included will be such topics as social structure, family patterns, work and leisure, housing, education and medicine.

58 The Origins of Modern Legal Systems
A survey of the origins of the European Nation-State system focusing on such issues as the development of the coercive state, the evolution of international law, the growth of parliamentary government and the common law in England, church history, and the development of the ideal of constitutional government.

59 Europe Since 1914
A survey of the major socio-economic, intellectual and political developments in Europe from the outbreak of World War I to the present. Topics covered will include World War I and the decline of European world hegemony, European fascism, the Soviet Union under Lenin and Stalin, European economic and political revival after World War II, and Europe's future in the world political system.

60 The Experience of War
A study of the origins, conduct and legacy of war taught on a comparative basis through scholarly and artistic sources as well as primary documents. The course will focus on three major wars: The Peloponnesian Wars, the Hundred Years' War, and the wars of 20th century Europe.

61 American Thought and Culture
A series of courses utilizing the American Studies format, based upon a selection of primary materials from art, architecture, religion and literature (novels, history, social tracts), but limited to a specific era such as the Federal period, the Gilded Age or the 1930s.

62 Studies in U.S. Society and Politics to 1900
Topical and chronological inquiries stressing the interplay of ideologies, political parties, social institutions, reform movements and wars in American history to 1896. The following periods will be taught in regular rotation, with each period taught once every two years: 1689-1830; 1830-1896.

63 History of the American South
A topical and chronological study of the American South from colonial times to the present, with emphasis on slavery and race relations, poor white folk cultures, southern violence, and evolutions in social and economic life.

65 Twentieth Century America
Two courses, "The Origins of Supersociety: the U.S. from 1900 to 1940" and "America since 1940" will be offered in alternate years. Both courses will include analysis of the major political, technological and social changes, the disruptions arising from such changes, and the various attempts to stabilize American institutions. Reading materials include a wide variety of historical documents as well as a diverse selection of interdisciplinary secondary accounts.

66 American Legal Culture
A historical survey which analyzes the development of the American legal system from a broad social, technological and cultural perspective. Subjects discussed include the relationship between law and capitalism, the impact of technology on legal culture, the development of the legal profession, the legal safeguards for individual liberties, the emergence of formal
History

agencies of social control (police and prisons), and the successive challenges to the legal establishment by political and social radicals.

67 Studies in U.S. Foreign Relations
This course will cover topics such as principles of U.S. foreign policy, the growth of formal and informal empire, the development of trade and investment, the response to war and revolution.

68 Dakota History
A survey of Native American history in the Upper Midwest region from early man to modern times. Primary attention will be given to the Dakota, especially in Minnesota. Persistence, change and adaptation in Native American cultures to contemporary social conditions will be studied.

69 Greece
A study of the political, constitutional and cultural history of Greece from the earliest times to Alexander the Great. Special attention is given to the origins of Greek institutions in the Minoan-Mycenaean civilization (Late Bronze Age), the development of the city-state as a political unit and the height of democracy under Pericles, the Greek world of the fourth century, the rise of Macedonia and the expansion of the Hellenic world through the conquests of Alexander. (Same as Classics 69).

70 Rome
A study of the political, constitutional and social history of Rome from its beginnings to the disintegration of ancient civilization following its climax in the second century A.D. There will be emphasis on such large aspects of Roman history as the development of the Roman constitution, Rome's conquest of the Mediterranean from the time of the Punic Wars to 133 B.C., the last century of the Roman Republic and the causes of its fall, the establishment of the principate and the reasons for the decline of the Empire. (Same as Classics 70).

72 French Revolution
Studies in the history of one of the most turbulent periods in European history. The origins, course and results of the revolution will be examined and the significance of the revolution in a wider context will be considered.

74 Tsarist Russia
A survey of Russian history from the foundation of the medieval Kievian state to the reign of the last tsar, Nicholas II. The major political, intellectual and socio-economic developments of medieval Russia will be discussed but the emphasis will be on the 18th and 19th centuries.

75 History of the Soviet Union
A survey of Russian and Soviet history from the reign of the last tsar, Nicholas II, to the present. Topics include the Russian Revolutionary movement, the Bolshevik Revolution of 1917, Bolshevik rule and its tsarist heritage, society under Lenin and Stalin, dissent in the USSR, and the Soviet Union and the future of world peace.

76 Germany to 1871
The history of Central Europe from Luther to the Bismarckian unification. Major economic, intellectual and social developments as well as purely political history will be considered, as well as the Reformation, the rise of Brandenburg-Prussia, the military in German politics, the German Enlightenment, and German nationalism and the unification movement.
77  Germany from 1871 to the Present
A survey of the history of German society and politics from the Bismarckian unification to the present with emphasis on the origins of the German and world catastrophe of 1933-45. Among the major issues covered will be Bismarck and his legacy for German politics, the army and German political life, the Weimar Republic and German political culture, the origins and development of the Nazi Party, and Germany between the U.S. and the USSR.

78  Tudor-Stuart England
A survey of English life, politics and society in the days of the Tudor and Stuart monarchs. The course will focus on a number of major themes including the emergence of the English nation; the struggle between royal and parliamentary authority; the English roots of the American tradition; and the relation of social structure, religious belief and political action.

79  Modern Britain
The development of English politics and society from the time of George III to the 20th century. Among the topics to be considered are: the transition from rural to urban society; the American Revolution; the rise and decline of Britain as world leader; Victorian and Edwardian society; England and Ireland; the future of Britain in the modern world.

80  Historiography
A study of the nature and history of historical studies and its relation to other disciplines.

Advanced Courses
These courses are intended to be small seminars or independent study projects for students well-prepared for special work on selected topics.

90  Special Advanced Studies
(at least one offered each semester 1976-78)
Studies in American History
Topical or chronological treatment of an area or region, or of a special topic in intellectual, political, social, urban or diplomatic history.

Studies in European History
Topical or chronological study in depth of major problems or areas such as Tudor-Stuart England, modern European intellectual history, socialist and labor history and diplomatic history.

Studies in Non-Western History
Topical or chronological study of major problems or areas such as China, or Japan in the 20th century; the Meiji Restoration in Japan; the Chinese Revolution, the colonial experience in Asia and the thought of Mao Tse-tung.

Special Studies
Topics which are not confined to a particular area or region, such as nationalism, philosophies of history, and imperialism and colonialism.

88  Senior Seminar

Independent Studies
95  Tutorial
96  Independent Project
97  Internship
98  Preceptorship
Journalism

George Moses (Chairman)
The journalism department offers a career-oriented approach to journalism education, with strong emphasis on a broadly supportive liberal arts foundation. The department offers five courses (20 semester credits) plus advanced independent study and internships, as available, for students who have demonstrated competence in the course offerings. Internships include legislative reporting for professional publications. The chairman counsels students about courses in other departments of particular value to journalists. With the approval of departments offering an inner core, the journalism offerings may be made the basis of a supporting core. (See Core Concentration descriptions.) Journalism 50 and 57 are not open to freshmen.

18 The Information Machines—An Introduction to Our News Channels
Our menu for this course will be newspapers of all kinds, the news departments of radio and television stations, and news magazines. We’ll look at them as if we were first-time readers, listeners or viewers. Students will be assigned, and present, special studies.

50 Magazine Writing and Publication
In this course we will learn how to write and sell non-fiction magazine articles. Students will write three major magazine articles. Prerequisite, at least one course in reporting or permission of the instructor.

57 News Reporting and Writing
This course emphasizes learning by doing. We will study basic techniques in straight news, feature and interpretive stories. We will also learn the basics of copy editing and headline writing.

59 History of News Media and Media Law
Development of communications industry in U.S. and of laws and regulations governing it.

64 The Press and Society
A study of the interaction between society and press—especially newspapers, television and radio. Topics include the news media as opinion-shapers, the political use of television, the press and government, the public opinion polling industry, and the cultural environment of opinion and opinion change.

96 Independent Project

97 Internships
Opportunity for further study in a variety of communications fields. Includes, as available, internships with professional media. Open by permission to a limited number of juniors and seniors.

Mathematics

Murray Braden, Allan Kirch, Joseph Konhauser (Chairman), Jean Probst, A. Wayne Roberts, John Schue
The department of mathematics offers courses in pure and applied mathematics for students with the necessary motivation and insight to prepare for graduate study in mathematics, for students preparing for elementary and secondary school teaching, for students majoring in the natural and social sciences, and for students who wish to acquire an appreciation of the spirit of modern mathematics. The department chapter of Pi Mu Epsilon, national mathematics honorary society, regularly sponsors guest speakers and student programs.

General Graduation Requirement
Mathematics 14, 15, 16, 18, 19 or any higher numbered course may be used toward the
fulfillment of the graduation requirement in the natural sciences and mathematics. Courses 10 and 11 may not be used for this purpose. Courses 14, 15, 16 and 18 are designed to meet special needs as stated in the course descriptions. Mathematics 19 is Introductory Calculus.

**Major Concentration**

Course requirements for a major in mathematics are Mathematics 19, 22 and 31, or their equivalent; at least five additional courses in mathematics numbered 51 or higher, including at least four of the following: 51, 57, 58, 61, 62; plus a fall-term Mathematics 88.

Students electing to either major or core in mathematics are encouraged to announce their intentions before the end of their sophomore year. Admission to either concentration program requires the recommendation of two members of the department of mathematics and approval of the department as a whole. Application forms are available in the departmental office.

Students preparing to teach mathematics in the secondary schools are required to include courses 51, 54, 56, 61 and 62 in their program of upper level courses in order to meet Minnesota requirements for certification.

Students preparing for graduate work in mathematics should include courses 57, 61, 62, 81 and 83 in their program.

**Core Concentration**

Course requirements for a core in mathematics are Mathematics 19, 22 and 31, or their equivalent, plus at least three additional courses in mathematics numbered 51 or higher. In addition, the program should include six relevant courses in a related field or fields. The core concentration should be elected only in those instances where the student’s total program does not allow time for a major.

**Further Preparation**

It is strongly recommended that any student who wishes to prepare for graduate work or research in mathematics should obtain a reading knowledge of French, German or Russian.

**Topics Courses**

In the past several years, when student interests have warranted and when faculty teaching loads have allowed, the department of mathematics has offered a variety of topics courses in areas of mathematics not covered in regularly scheduled courses, including: Convexity in Geometry; Topics in Number Theory; Point Set Topology; Modern Applied Algebra; Optimization Techniques and Applications; Topics in Analysis.

**Placement Tests**

Entering students who expect to take one or more courses in mathematics in their college career are encouraged to take the mathematics placement test which is administered during Orientation by the Coordinator of Counseling and Academic Advising. Entering students who are planning to take Mathematics 11, Algebra and Trigonometry, or Mathematics 14, Introduction to Statistics, should take Part I of the placement test. Entering students who intend to take Mathematics 19, Introductory Calculus, should take Parts I and II. Entering students who have studied calculus in high school and who wish to enroll in a course more advanced than Mathematics 19 should consult the department of mathematics. When available, scores on the College Entrance Examination Board achievement test in mathematics (Level II) will be used to place students.
10 Basic Algebra
Basic algebraic techniques including manipulation of fractions, exponents, radicals, factoring, solution of polynomial equations, inequalities, logarithms. Only students with particularly weak backgrounds, wishing to prepare for Mathematics 14 or 19, should take Mathematics 10. Students with stronger backgrounds wishing to take Mathematics 19 and 22 should take Mathematics 11. Mathematics 10 does not fulfill the graduation requirement in natural science and mathematics and may not be taken by examination.

11 Algebra and Trigonometry
Polynomials and rational functions, equations and inequalities, systems of linear equations, trigonometric functions, identities, inverse functions, complex numbers. Mathematics 10 provides the minimal essential background for Mathematics 14 and 19. Mathematics 11 provides a more thorough preparation and enables the student to take both Mathematics 19 and Mathematics 22, which includes trigonometry. Mathematics 11 does not fulfill the graduation requirement in natural science and mathematics and may not be taken by examination. Students may not receive credit for both Mathematics 10 and Mathematics 11.

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. The course stresses both logical development and practical utilization. Topics include: probability distributions, descriptive statistics, sampling, testing of hypotheses and correlation. Prerequisite, satisfactory score on placement test.

15 Introduction to Computing
Designed to provide the student with the basic knowledge and experience necessary to use computers effectively in the solution of problems. Serves to develop an understanding of the concept of an algorithm, to train the student in two high-level languages (FORTRAN and, to a lesser degree, APL), and to acquaint the student with the basic characteristics and properties of digital computers. Problem-solving by computer is emphasized. Both numerical and non-numerical problems are treated. Prerequisite, three years of high school mathematics.

16 Mathematics — Its Content and Spirit
Topics in modular arithmetic, $2 \times 2$ matrices, axiomatic systems in algebra and finite geometries. Familiar number systems are examined from a more mature vantage point. Outside readings cover the relationship of mathematics to science, certain aspects of the history of mathematics and reasons for teaching (or studying) mathematics. Designed for non-science students seeking to broaden their general education. Recommended for students in elementary education. Not intended to prepare students for further courses in mathematics. Prerequisite, proficiency in the elementary algebraic operations.

18 Finite Mathematics
Designed and recommended for students in the social and behavioral sciences. Topics in logic, set theory, linear algebra and probability, with particular emphasis on Markov chains, game theory and linear programming. Concepts are developed using an intuitive rather than a mathematically rigorous approach. Prerequisite, reasonable background in high school mathematics.

19 Introductory Calculus
An intuitive treatment of the differential calculus of one and several variables and the
Mathematics

integral calculus of one variable. Applications in the social, behavioral and physical sciences. Prerequisite, Mathematics 10 or 11, or satisfactory score on placement test. No trigonometry is required.

22 Calculus
Further study of the differentiation and the integration of functions of a real variable. Infinite series. Applications in geometry and the sciences. Prerequisite, Mathematics 19.

25 Computers and Programming
Designed to familiarize the student with the basic structure and language of machines. Topics include computer structure, machine language, assembly language, data representation, addressing techniques, discussion of the principal units of a digital computer, systems software. Prerequisite, Mathematics 15 or permission of the instructor.

31 Multi-Variable Calculus and Differential Equations
Solid analytical geometry, partial derivatives, multiple integrals and an introduction to differential equations. Prerequisite, Mathematics 22.

51 Mathematical Statistics
An introduction to the theory and application of statistics, employing calculus where it is appropriate. Topics include: probability, descriptive statistics, sampling, estimation of parameters, hypothesis testing and correlation. Continuous probability distributions are treated much more extensively than in Mathematics 14. Prerequisite, Mathematics 31 or permission of the instructor.

54 Modern Geometry
Modern elementary geometry. Convexity. Transformations. The postulates of Euclidean and non-Euclidean geometry. Projective geometry and its relations to affine and Euclidean geometry. Prerequisite, permission of the instructor.

56 Foundations of Mathematics
Introductory treatment of the foundations of mathematics and of concepts that are basic to mathematical knowledge. Historical development of the logical structure of the main branches of mathematics, with special attention to geometry, algebra and analysis. Particular attention to deductive systems and their role in modern mathematics. Prerequisite, Mathematics 34.

57 Basic Analysis
Theorems for continuous functions, infinite series, power series, uniform convergence, Riemann integral. Prerequisites, Mathematics 31 and permission of the instructor.

58 Applied Analysis
Ordinary and partial differential equations. Fourier series and integrals, boundary-value problems, special functions, coordinate transformations, vector analysis. Prerequisites, Mathematics 31 and permission of the instructor.

61 Linear Algebra

62 Algebraic Structures
Elementary group theory with emphasis on finite groups, rings, fields, constructibility, introduction to Galois theory. Prerequisite, permission of the instructor.

70 Advanced Logic
(Same as Philosophy 70)
Procedures and findings of symbolic or mathematical logic. Prerequisites, Philosophy 40 and permission of the instructor.
Mathematics

Music

81 Theory of Functions of a Complex Variable
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 31.

83 Theory of Functions of a Real Variable (Course 1)
Elementary set theory, the real number system, topology of the real line, metric spaces, continuity and differentiability of functions, functions of bounded variation. Prerequisite, Mathematics 34.

88 Topics in Mathematics Seminar
Students and instructor share the lectures. Subject matter varies from term to term. Fall-term Mathematics 88, required of all majors, includes a variety of topics determined by the special interests of the students and the instructor. Spring-term Mathematics 88 contains a concentration of particular topics usually in the field of special competency of the instructor. Subject to departmental approval, students may include Mathematics 88 in their program more than one time. Prerequisites, junior standing and permission of the instructor.

96 Independent Study
Individual project including library research, conferences with instructor, oral and written reports on independent work in mathematics. Subject matter may complement but not duplicate material covered in regular courses. Arrangements must be made with a department member prior to registration. Prerequisite, departmental approval.

Music

Donald Betts, Edouard Forner, Jane Frazee, Harry Hammer (Chairman), Alvin King, Luther Stripling, Dale Warland

The department of music offers courses for the following: (1) those planning to concentrate in performance, musicology or composition within a liberal arts program; (2) those planning careers in secondary or elementary music education; (3) those wishing to increase general musical knowledge and appreciation as non-majors.

A careful balance is maintained among courses in theory, literature, history and performance, and creative work in composition.

All music courses with appropriate prerequisites are also available to students working primarily to increase their general knowledge and appreciation of music.

Any Macalester student may begin or continue private study on an instrument or in voice, and all students are invited to audition for Band, the Choirs, Orchestra, Opera Workshop, Pipe Band, Highland Dancing and Chamber Music. Students who are taking a major or core concentration are expected to be taking private lessons and performing in one of the ensembles each semester. Fees for studio courses are described elsewhere in this catalog. It should be noted that students taking studio work during an interim term must arrange to pay directly to the instructor, a fee which will be agreed upon at that time with the instructor.

General Graduation Requirement
Music 10 or 80 will normally be used to satisfy the humanities and fine arts general graduation requirement. Other music courses, particularly Music 11, may also be
used for this purpose, with permission of the instructor.

**Major Concentration**

Music 13 or a qualifying exam must be passed for entrance and further study in the program. Both Music 13 and Music 14 should be taken during the freshman year if possible, and no later than the sophomore year, since these courses are prerequisite to most of the other required music courses. The history-literature sequence should begin no later than the fall term of the student’s junior year.

a. **Major Concentration in Music:** Music 13, 14, 23, 24, 41, 42, 53, 54; one course from Music 61, 74, 90 or 92; two elective music courses; music lessons on primary instrument and ensemble performance for each semester in residence.

b. **Major concentration in Music for Teacher Preparation:** Music 13, 14, 23, 24, 41, 42, 53, 54, 71, 72; Music 74 or 90; music lessons on primary instrument and major ensemble performance each semester. Music 76 is strongly recommended for those planning to teach in elementary school. Education requirements include: one course from Education 40, 84, 92, 93; 49, 51; 64 and/or 65, 67. Also to satisfy state requirements the student must take Physical Education 101, Education 125-01 and 125-03. (One course credit is given for this combination). Note that: (1) Education 51 provides the secondary school director with experience in applying teaching principles and procedures in secondary instruction; (2) Music 71 and 72 should be taken before the junior year; (3) practice teaching should be taken the senior year; (4) for a K-12 position (teaching music only at any level from K to 12) students should plan to take one practice teaching course at the elementary level and one at the secondary level. The K-12 program will be discontinued in 1982. Another program will be instigated at that time.

**Core Concentration**

Music 13 should be taken no later than the fall of the junior year. Core concentration: Music 13, 14; two courses in music literature and two additional music courses approved by the chairman; a minimum of four semesters of music lessons and two semesters of ensemble; six supporting courses outside the department approved by the department chairman.

**Senior Projects**

The music department will recommend to its outstanding majors that they undertake projects involving performance, composition or music research during their senior year. Projects will be evaluated by the music faculty and made a part of the students’ permanent records.

Honors are available in the music department through the college-wide honors program.

**Graduate Study**

Students preparing for graduate study should continue their work in piano to a point where they can meet graduate school piano proficiency entrance requirements. In addition to required courses, as many of the following as possible should be taken as electives: Music 61, 92, 93.

**Department Activities**

A variety of activities is open to all students, including productions involving surrounding area colleges, informal chamber music groups, specific performance assignments and student activities of the Music Educators National Conference (MENC).
10  Music Appreciation
Featuring masterpieces of music in context of their cultural surroundings and in relation to other world cultures.

11  Basic Theory
Fundamentals of music for those with minimal background in music.

13  Theory I — Elementary Theory
Key and time signatures, scales, modes, intervals, primary chords, ear-training, sight-singing, elementary keyboard harmony. No prerequisite, but some musical skill is recommended.

14  Theory II — Advanced Theory
Continuation of ear-training, sight-training, written and keyboard harmony through extended alteration of tertian harmony. Prerequisite, Music 13 or permission of the instructor.

23  Theory III — Contemporary Theory
Study of compositional techniques of 20th century music with emphasis on analytical skills and composition. Prerequisite, Music 14 or permission of the instructor.

24  Theory IV
Study of composition, counterpoint and ear training. Prerequisite, Music 23 or permission of the instructor.

41  Music Literature I
A synopsis and general history of music's early development through 1650. Prerequisite, Theory II or permission of the instructor.

42  Music Literature II
The study and analysis of music written from 1650 to 1770. Prerequisites, Music Literature I and Theory II or permission of the instructor.

50  Topics

53  Music Literature III
The study and analysis of music written from 1770 to the 20th century. Prerequisites, Music Literature II and Theory II or permission of the instructor.

54  Music Literature IV
The study and analysis of music written in the 20th century. Prerequisites, Music Literature III and Theory III or permission of the instructor.

61  Principles of Vocal Pedagogy
Designed for serious voice students who intend to become choral directors or vocal pedagogues. Presents physiological and phonetic approaches to the teaching of singing, and will include such topics as vocal performance, comparative pedagogy, English, French, German and Italian diction, vocal acoustics and demonstration lessons, and anatomy and physiology of the voice.

71  Instrumental Methods I
Playing string and woodwind instruments, survey of publishers and methods. Class and laboratory sessions, and conducting.

72  School Music — Instrumental Methods II
Playing brass and percussion instruments, survey of publishers and methods. Class and laboratory session, and conducting.

74  Choral Conducting
Emphasis on basic technique, score reading, rehearsal techniques, phrasing, choral literature and the organization and development of choral ensembles. Prerequisite, Music 14 or permission of the instructor.

76  Elementary School Music
Elementary school music literature. Organizing and directing music programs in the elementary school.
80 Afro-American Music
A historical survey designed to treat the dual aspects of the Black musician's role of creating a new music and enriching the European based musical traditions of America by tracing the music of Black Americans from West Africa to modern times. Particular emphasis will be given to the socio-economic and political forces which greatly influenced Afro-American music. Open to music majors and non-majors.

88 Seminars
90 Instrumental Conducting
Basic baton technique, problems of score preparation and reading, clef transposition, rehearsal and performance techniques. Moderate piano proficiency is necessary. Prerequisite, Music 14 or permission of the instructor.

92 Orchestration
Scoring for orchestra, band and smaller instrumental groups. Transposition, instrumental coloring, terms, symbols and manuscript preparation. Prerequisite, Music 23 or permission of the instructor.

93 Electronic Music
History and development, techniques of tape manipulation, sound synthesis and recording. Students will work in the synthesizer studio. Prerequisite, permission of the instructor.

96 Independent Project
Creative, interpretive and research projects. Prerequisite, permission of the instructor.

Performance Studies
Course credits may be earned as follows: (1) A course unit will consist of four terms of performance studies either in one subject or two subjects. If in two subjects, each shall consist of two consecutive terms. If in one subject, each block of two terms must be consecutive (consecutive terms may be fall-spring, or spring-fall). (2) Performance studies will be graded on an S-NC basis; a student must receive an S for each term to receive an S for the whole course. (3) A student may receive no more than two course units of credit for performance studies, but no limit is placed on continued participation without credit. (4) A student may take performance studies courses in two subjects each term and earn a full course credit at the end of two consecutive terms.

Music Ensembles and Organizations
Ensembles and organizations are open to all Macalester students. Selection of members is usually made on the basis of auditions in the fall. Students joining an organization are expected to remain active in it throughout both fall and spring terms. However, it is possible in certain cases to join an ensemble through audition in the second term.

111, 112 The Macalester Symphonic Band
Readings, preparation and performance of 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 Symphony Orchestra
Readings, preparation and performance of orchestral literature. Performances on campus, in the community and on tour.

117, 118 The Macalester Festival Chorale
Public presentation of major choral works with orchestra; campus and community appearances.
Music

Philosophy

119, 120 Highland Dance
Instruction in traditional Scottish highland dances. Performances at Macalester and community functions.

215, 216 The Macalester Chamber Music Ensemble
Preparation of trio, quartet, and small ensemble literature for public presentation.

217, 218 The Macalester Concert Choir
A selected group of about 40 singers. Presentation of chamber music with and without orchestra; performances on campus, in the community and on tour.

220 Opera Workshop
A selected group of singers, instrumentalists and production technique people will receive ensemble credit. Presentation of a fully-staged opera or set of short operas.

221, 222 Early Music Ensemble
Instruction and experience in Medieval, Renaissance and Baroque performance, practice in playing the recorder, krummholts, capped reeds, rebec, psaltery, viol and percussion. Three public performances during the year.

Music Lessons (Private and Class)
Private half-hour lessons may be taken by any Macalester student in voice, piano, organ, guitar, orchestral and band instruments. Credit for all these may be earned as described under the performance studies listed above.

Fees are listed elsewhere in this catalog. Class lessons in piano and recorder are at a reduced fee. Macalester will pay for lesson fees on the major instrument for music majors who have satisfactorily completed Music 13. A bulletin describing the music lesson program in detail may be obtained from the music department office.

101, 102 Private Music Lessons
Instruction in instrument or voice.

121, 122 Class Lessons in Piano
Open to students with less than one year of piano study.

123, 124 Class Lessons in Recorder
Open to students with less than one year of recorder study.

Philosophy

Martin Gunderson, John Linnell, Russell Trenholme, Henry West (Chairman), David White

The principal endeavor of the philosophy department is to develop in students the ability to analyze and evaluate basic concepts of human knowledge and moral action, as well as concepts from the humanities, social and natural sciences. To realize this goal, the department offers courses and seminars exploring both Western and Asian modes of philosophical analysis. In recognition of the special interests and requirements of students interested in non-Western philosophy, and in the philosophy of science, the department offers majors in these areas in addition to the usual major which encompasses the core of the Western philosophic tradition. Philosophy lends itself to a variety of interdepartmental concentrations and should appeal to those students who, although specializing in some other subject,
wish to broaden their critical understanding of the basic concepts and presuppositions of that subject. A major or core concentration in philosophy thus provides a foundation for careers in teaching, science, law, religion and almost any other area in which the modes of critical analysis and precise expression emphasized by the department are required.

Major Concentration
A major in philosophy consists of eight departmental courses, including: Philosophy 25 (Ethics); Philosophy 31 (Foundations of Modern Philosophy); Philosophy 32 (The Analytic Tradition); Philosophy 40 (Logic); Philosophy 88 (Seminar: Ethics) or Philosophy 88 (Seminar: Epistemology).

A major in the philosophy of science consists of a core (or major) concentration in one of the sciences, social sciences or mathematics and seven courses in the philosophy department, including: Philosophy 32 (The Analytic Tradition); Philosophy 40 (Logic); Philosophy 60 (Philosophy of Science); Philosophy 88 (Seminar: Epistemology); and an independent project or tutorial in the philosophy of the particular science for which the science core (or major) is offered.

A major in Asian philosophy consists of seven departmental courses including: either Philosophy 30 (Ancient and Medieval Philosophy) or Philosophy 31 (Foundations of Modern Philosophy); Philosophy 25 (Ethics) or 32 (The Analytic Tradition) or 40 (Logic); Philosophy 36 (Indian Philosophies); Philosophy 37 (Chinese and Japanese Philosophies); Philosophy 85 (Philosophy of Religion); Philosophy 88 (Seminar: Asian Philosophy) or an independent project on either Hindu systems or Buddhist systems; and the following supporting courses: History 14 (East Asian History) or the ACM semester in India or Japan; Anthropology 68 (Music, Religion, and Watchcraft) or Anthropology 86 (Social Anthropology); Religious Studies 24 (Survey of Asian Religion) or Religious Studies 35 (Buddhism in India and Southeast Asia); Art 76 (Far Eastern Art) or Humanities 65 (The Oriental World).

Core Concentration
A core concentration in philosophy is an interdepartmental program with a core of six courses in philosophy supplemented by four or more related courses in another single department or six related courses in a variety of other departments. It is expected that the student will work out an individualized program with the assistance of a member of the philosophy department. For example a pre-law student might offer Philosophy 15, 25, 34, 45, 73 and 88, with supporting courses from political science, history or other social sciences. There are no specific course requirements for a core, but the following are recommended if a student’s program permits: Philosophy 25 (Ethics); Philosophy 31 (Foundations of Modern Philosophy); Philosophy 32 (The Analytic Tradition); Philosophy 40 (Logic); Philosophy 45 (Philosophical Analysis); Philosophy 88 (Seminar).

Honors Program
Students with a deep interest in philosophy are urged to accept the challenge of a senior honors program, consisting of an honors paper and a comprehensive oral examination. At the beginning of their senior year, honors majors should choose a faculty adviser to work with in preparing an honors paper. The final draft should be completed by the end of Interim. Generally, honors papers will be read to the biweekly philosophy discussion group. The honors comprehensive examinations are generally given in the spring term,
Philosophy

but may be scheduled in the fall by special arrangements. The department has available a reading list of works considered of major significance which should be a guide to preparing for the exam. Students taking the exam may also submit a one-page outline of topics in which they are particularly interested. Students in the philosophy of science or Asian philosophy programs should see their advisers for a list of works of particular importance in preparing for exams in those areas.

The Thomas Hill Prize
Each year a prize will be awarded to the graduating senior whose work is considered by the members of the department to be the most outstanding. Particular weight will be given to the quality of the student's written work. Currently the prize consists of a subscription to a philosophy journal selected by the recipient.

15 Problems of Philosophy
An introduction to philosophy dealing with a selection of topics found in classical philosophical writings, such as the problems of truth and knowledge, mind and body, freedom and determinism, right and wrong, and the existence of God.

25 Ethics
An alternative introduction to philosophy, concentrating on normative philosophical concepts and issues, such as the nature of value, duty, right and wrong, and the good life, with applications to selected problems of personal and social behavior.

30 Ancient and Medieval Philosophies
Major philosophers of Greece, Rome and the medieval period.

31 Foundations of Modern Philosophy
The founders of modern philosophy from Descartes to the 19th century.

32 The Analytic Tradition
The 20th century analytic tradition, from Russell and Wittgenstein through logical positivism to recent work in England and America. Prerequisite, Philosophy 31. Philosophy 40, though not a prerequisite, is recommended.

34 Great Political Thinkers and Ideas
(Same as Political Science 34) Western political thought.

36 Indian Philosophies
Introductory study of selected Hindu and Buddhist texts and philosophies.

37 Chinese and Japanese Philosophies
A study of selected Buddhist, Confucian and Taoist texts, including Japanese Buddhist works. Prerequisite, sophomore standing or Philosophy 36.

40 Logic
An introduction to the methods of modern formal logic, including the sentential and predicate calculus. (Students primarily interested in studying methods of informal reasoning or in logical argumentation are advised to take Philosophy 15 or 45).

45 Philosophical Analysis
This course is designed to develop skill in techniques of philosophical analysis. These include the analysis of arguments and concepts and the careful reading of texts to detect hidden premises, inconsistencies and ambiguities. There will also be emphasis on developing skills in writing philosophical essays. A previous course in philosophy is recommended but not required.

50 Topics
Recent offerings have been: Marxism; Aristotle; Philosophy, Psychology, and Myth; Modern Physics and Asian Metaphysics.
Some anticipated offerings are: Philosophy of Socialism; The Continental Tradition; Idealism, Phenomenology, and Existentialism; Marxism.

60  Philosophy of Science  
Methods, presuppositions and modes of confirmation common to all divisions of science; history and logic of problems relating to particular divisions of science; functions of science in contemporary civilization.

61  Philosophy of Social Science  
Selected problems relating to the nature of explanation, theory formation and testing in the social sciences.

66  Philosophy of Mind  
The debate between materialists, who see mind as an aspect of the body, and dualists, who believe mind to exist independently of the body. Emphasis will be on recent applications of linguistic philosophy, behavioristic psychology, and automata theory to the ongoing debate.

68  Philosophy of Language  
Examination of classical and contemporary linguistic theories and study of special problems concerning reference, meaning and the logical or syntactical structures of language.

70  Advanced Logic  
The Completeness Theorem for First Order Predicate Calculus; Godel's Incompleteness Results for Arithmetic; and a variety of topics in the philosophy of logic. Prerequisite, an 'A' in Philosophy 40 or permission of the instructor.

71  Aesthetics  
The nature of aesthetic experience and the basis of aesthetic evaluation.

73  Philosophy of Law  
An analysis of fundamental legal concepts and the problems of justifying various legal practices. Topics will include criminal responsibility, the justifiability of punishment, the distinction between criminal and civil law, rights, and the relationship between law and morality. Prerequisite, Philosophy 25.

84  Philosophy of Education  
(Same as Education 84.)

85  Philosophy of Religion  
Analysis of problems and viewpoints represented in the great religions, and of the function of religion in human life.

88  Seminar: Ethics  
An examination in depth of one or two topics in ethics, varying from year to year. The topics may be metaethical theories, such as emotivism, naturalism or prescriptivism, or normative topics such as utilitarianism, human rights, justice or the ethics of punishment. Prerequisite, Philosophy 25.

88  Seminar: Epistemology  
Study in detail of several problems in the theory of knowledge. Typical problems are: Can skepticism be refuted? Is a phenomenalist reconstruction possible? What is the nature of perception? How can we have knowledge of the future? Prerequisites, Philosophy 32 and Philosophy 40 or permission of the instructor.

88  Seminar: Asian Philosophy  
Study of the text and thought of a selection from Asian philosophy, in most years the Bhagavad Gita, leading to the writing and presentation of a seminar paper. Prerequisite, Philosophy 36 or permission of the instructor.
Philosophy
Physical Education

88 Seminar: Topics
Study of some movement, philosopher, or problem not classified above. Recent topics have been "Kant" and "Hume." Prerequisite, permission of the instructor.

95 Tutorial

96 Independent Project

97 Internship

98 Preceptorship

Physical Education

John Bachman, Douglas Bolstorff, Sheila Brewer, Maria Cheng, Ralph Lundeen, Patricia Wiesner (Chairman)

The physical education department fulfills a multiple role in Macalester’s educational program. The academic program provides an opportunity for students to be certified for coaching. The activity program provides opportunities for students to: 1) gain an understanding of the role of physical activity as it relates to their functional fitness; 2) acquire physical activity skills for the worthwhile use of leisure time, and 3) develop and maintain an optimum level of personal functional fitness. The intramural and recreational programs provide an opportunity for all students to participate in activities of their choice in a variety of organized and unorganized settings. The intercollegiate athletic program offers students opportunity to participate on varsity athletic teams. Sports for men are baseball, basketball, cross country, football, golf, hockey, soccer, swimming, tennis, track and field (indoor and outdoor); for women they are basketball, cross country, swimming, tennis, track and field and volleyball.

Academic Coaching Certification Courses
Students wishing to certify for coaching in the public schools may gain needed qualifications by successfully completing P.E. 61, 62, 71 and 72 and complementary achievement in officiating, skill performance and coaching.

61 Psychological and Sociological Kinesiology
The effects of motivation, aspiration, leadership, individual differences, cultural differences, physical growth and development on human movement. Consideration also given to sex and age differences.

62 Anatomical and Mechanical Kinesiology
Physical principles and analysis are stressed as they apply to basic anatomical and mechanical interpretation of kinesiology. An introduction to approaches for motion analysis and data reduction is provided. A lecture-laboratory course with three lectures and a two-hour laboratory each week. Prerequisite, P.E. 61.

71 Physiological Kinesiology
A study of applied physiology associated with human movement. Consideration is given to the physiological effects of conditioning, as well as the influence of exercise on health and fitness. A lecture-laboratory course with three lectures and a two-hour laboratory each week. Prerequisite, P.E. 62.

72 Medical Kinesiology
A study of first aid, the care and prevention of athletic injuries, corrective and adaptive kinesiology with consideration given to growth-development theory.

96 Independent Project
Advanced students may undertake individual projects involving library or laboratory research. Prerequisite, departmental approval.
Activities Program

Students may elect to enroll in the activities program for credit or no credit. A course unit of credit counting toward the 31 courses required for graduation may be acquired by successfully completing four terms (not necessarily consecutive) of physical education activities classes. One of the four successfully completed offerings in the credit series must be P.E. 101, Physical Fitness. A particular activities course successfully completed may not be repeated for credit. Grading of all activities courses will be on an S-NC basis. The S grade in each of the four activities courses in the credit series is necessary if these courses are to be counted together as one course unit. Text materials may be used. Evaluation will include both written and performance examinations when appropriate. In cases of sequences of activities courses of the same kind, such as the three courses in beginning, intermediate and advanced tennis, a student will be placed by the department at the appropriate level.

An activity course(s) may be taken in addition to a student’s four academic courses at no additional charge.

Locks are issued by the locker room attendant for a $6 fee, $5 of which is refunded when the lock is returned at the end of the season. Towels will be supplied by student participants.

Activity Courses

101 Physical Fitness
103 Cross Country
105 Track and Field
107 Beginning Basketball
114 Beginning Volleyball
116 Paddleball — Raquet Ball
117 Yoga
120 Beginning Gymnastics
122 Beginning Handball
123 Beginning Badminton
124 Beginning Tennis
125 Beginning Weight Training
126 Beginning Golf
131 Beginning Swimming
140 Skiing and Ski Touring
141 Beginning Folk Dance
143 Beginning Social Dance
144 Beginning Modern Dance
207 Intermediate Basketball
208 Relaxation
214 Intermediate Volleyball
217 Physical Education Elementary School
220 Intermediate Gymnastics
223 Intermediate Badminton
224 Intermediate Tennis
225 Intermediate Weight Training
226 Intermediate Golf
230 Intermediate Skiing
231 Intermediate Swimming
232 Water Safety Instruction
241 Intermediate Folk Dance
243 Intermediate Social Dance
244 Intermediate Modern Dance
307 Basketball
314 Advanced Volleyball
331 Advanced Swimming and Diving
333 Life Saving
341 Advanced Folk Dance
343 Advanced Social Dance
344 Advanced Modern Dance

Athletics

Opportunity for men to participate in 10 varsity sports — baseball, basketball, cross country, football, golf, hockey, soccer, swimming, tennis and track. Members MIAC, NAIA, NCAA athletic associations for men. Facilities include football stadium with Tartan running track, five indoor tennis courts and five basketball courts.
Women's varsity athletic teams participate in basketball, cross country, track and field, swimming, tennis and volleyball. Members AIAW, Region 6, MAIAW for women.

Intramural Activities
An extensive program includes:
- Badminton — Men's, Women's, Coed
- Basketball — Men's, Women's, Coed
- Bowling — Coed
- Broomball — Men's, Women's, Coed
- Cross Country — Men's, Women's
- Handball — Men's
- Floor Hockey — Men's
- Golf — Coed
- Mini Soccer — Men's, Women's
- Racquetball — Men's, Women's, Coed
- Soccer — Men's Women's
- Softball — Men's, Women's, Coed
- Swim Meet — Coed
- Table Tennis — Men's, Coed
- Tennis — Men's, Women's, Coed
- Touch Football — Men's, Women's
- Volleyball — Men's, Women's, Coed
- Water Polo (in inner tubes) — Coed
- Wrestling — Men's

Physics and Astronomy

Russell Hastings, Sung Kyu Kim, Raymond Mikkelson, James Roberts (Chairman), Sherman Schultz, Edward Strait

The physics department provides opportunities to study physics on many levels. Special emphasis is given to courses for the non-science major. These courses are designated by numbers below 20 and on occasion by Special Topics (Physics 50). Two levels of specialization in physics are available. These are outlined in detail under the headings, Major Concentration in Physics and Core Concentration in Physics. One provides a rigorous study of many topics in the field of physics and is particularly appropriate for those wishing to qualify for graduate study in physics or engineering, for those preparing for positions in technologically-oriented business and industry, or for those desiring an in-depth understanding of fundamental processes. The other offers more breadth of choice, such as might be desired by those preparing to teach physics in secondary schools. Students expecting to follow a concentration in physics are urged to make early contact with the department for assistance in planning course sequences.

Courses 21 and 22 constitute a two-term sequence for students wishing a more extended coverage than that offered in Physics 11, but whose mathematical preparation does not permit entering Physics 26 and 27.

Physics 25, 26 and 27 constitute a desirable sequence for students planning a major in one of the physical sciences, or who for other reasons wish an introduction to physics which makes use of the calculus.

Various interdisciplinary topics courses are given from time to time. Among those that have been given in recent years are seminars on energy, nuclear energy—its physics and social challenge, and building science in the third world.

General Graduation Requirement
Any course in the department may be used to count toward the general graduation requirement.

Major Concentration
The following sequence of courses should be followed by those students who wish to qualify for graduate study in physics, or who wish to avail themselves of the most rigorous preparation in the field that the College
Physics and Astronomy

offers. These courses are Physics 21 or 26, 22 or 27, 31, 43, 44, 61, 93 or other advanced laboratory course, and two additional courses selected from 25 and courses numbered above 30. Physics 81 is recommended for those planning to do graduate work in physics. Students not intending to qualify for graduate work may elect, with departmental approval, to substitute for Physics 43, 44 and 61 other courses numbered above 30.

Core Concentration
The core concentration consists of six courses in the department, of which at least one must be in modern physics, plus six additional courses normally from the area of the natural sciences and mathematics, but not necessarily so. Courses outside these areas may be selected with department approval. For those interested in preparation for teaching, the core concentration is suggested.

Honors are available in the physics and astronomy department through the college-wide honors program.

The Argonne Semester Program
This program is sponsored at the Argonne National Laboratory by the Associated Colleges of the Midwest and affords students a six-month period of study and research participation at the Laboratory. The department makes every effort to support applications of qualified students for participation in the program. Four course credits in physics are granted to physics majors who complete the program.

Further Preparation
Students with a major concentration in physics contemplating graduate study in physics, should have completed mathematics through differential equations and advanced calculus, and have a background in at least one other course. A reading knowledge of French, German or Russian is desirable.

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. Four hours per week, including laboratory.

11 Contemporary Concepts
The course is specifically designed for the nonscientist who desires a completely non-mathematical, yet wholly faithful, acquaintance with the revolutionary concepts of contemporary physics. Topics will include: 1) Relativity and its fantastic consequences, 2) Electromagnetic nature of light (can there be yet another dimension to the setting sun’s awesome beauty?), and 3) Atomic structure and quantum theory, including a discussion of the elusive neutrino (which, incidentally, has neither mass nor charge, and yet constantly spins, left-handedly at that!).

The underlying assumption of the course is that physics examined as a daring way of thinking can be vitally relevant and challenging to students of all intellectual persuasions. Three lectures, one-hour discussion a week.

13 Elementary Astronomy
A descriptive course covering the solar system, constellations, galaxies and other stellar systems, and the present theories on the origin of the universe. Four lecture hours per week. Occasional evening viewing sessions.
21 Introductory Physics I
Mechanics, heat and sound, including laboratory experiments and extensive demonstrations. Three lectures, one two-hour laboratory per week.

22 Introductory Physics II
Electricity and magnetism, light and optics, modern physics, including laboratory experiments and extensive demonstrations. Three lectures, one two-hour laboratory per week.

25 Introductory Modern Physics
This course is designed for entering students who are considering the possibility of studying physics in some depth during their college careers. It assumes a high school level background in physics and builds on this background as it considers the topics which are at the heart of modern physics: 1) space, time and cosmology, as described by the theories of special and general relativity; 2) atomic properties, as described by the wave theory of matter and quantum mechanics, and 3) nuclear and elementary particle properties, as they are currently understood. Through the use of analogies, pictorial and graphical representations, and a reliance on experimental results, these fascinating areas are discussed on a level that is accessible to science-oriented students who may not have a background in calculus. An introduction to computer use is an integral part of the laboratory portion of this course. Three lectures, one two-hour laboratory per week.

27 Principles of Physics II
Electricity and magnetism, light and optics, modern physics, including laboratory experiments and extensive demonstrations. Presupposes a working knowledge of calculus. Prerequisite, Mathematics 19. Three lectures, one two-hour laboratory per week.

31 Intermediate Modern Physics
Relativity, quantum theory, atomic structure, solid state, nuclear structure, elementary particles. The course is designed for students who desire a moderately sophisticated acquaintance with the foundations of modern physics. In addition to the theoretical treatment of the topics there will be laboratory exercises which recreate the spirit and excitement of the pioneering experiments. Prerequisites, Physics 21 or 26, 22 or 27, and Mathematics 22. Three lectures, one two-hour laboratory per week.

34 Optics
Principles of optics including laboratory experience in basic optical experiments. Prerequisite, Physics 22 or 27. Three lectures, one two-hour laboratory per week.

42 Electronics
Fundamentals of electric circuits, diodes and transistors, power supplies and amplifiers, modulation, and digital circuits. Laboratory topics may include special projects. Three lectures, two three-hour laboratories a week.

43 Electricity and Magnetism I
This course treats the interactions between electrical charges in free space by developing the concepts of potential, electric and magnetic fields, and electromagnetic induction. Maxwell’s equations are developed and used to derive the properties of plane electromagnetic waves in free space. Prerequisite, Multi-variable Calculus (Math 31) or equivalent.
Physics and Astronomy

44 Electricity and Magnetism II
This course treats the electromagnetic properties of matter, especially the solid state, and the properties of electromagnetic radiation and waves. Special emphasis is placed on boundary value problems and other useful calculational techniques. Prerequisite, Physics 43.

50 Experimental Nuclear Physics
Radioactivity, nuclear reactions, including nuclear fission, interaction of charged particles with matter, energies of alpha, beta and gamma rays, neutron activation, and half-lives. Extensive use of nuclear instrumentation, such as geiger counters, scintillation and semi-conductor detectors, pulse amplifiers, coincidence and scaling circuits, single channel and multichannel analyzers, 150-keV particle accelerator. Students learn through laboratory experience how some experimental knowledge of nuclear matter is obtained. Prerequisites, Physics 21 or 26, 22 or 27, and one year of calculus. (Physics 42 is advised but not required. Instructor should be consulted.)

61 Mechanics
Particle dynamics, the central force problem, conservative motion, moving coordinate systems and Lagrange's equations of motion. Prerequisites, Physics 21 or 26 and Mathematics 31 and 58. Four lectures a week.

62 Theoretical Mechanics
The Lagrangian and Hamiltonian formulation of mechanics, rigid body motion and the special theory of relativity. Prerequisites, Physics 61 and Mathematics 34. Four lectures a week.

68 Thermal Properties of Matter
The laws of thermodynamics, conditions for thermodynamic equilibrium, statistical mechanics. Prerequisites, Physics 21 and 22, or 26 and 27, and Mathematics 31. Four lectures a week.

81 Quantum Mechanics
The concepts and techniques of quantum mechanics, developed and applied to atomic and molecular systems. Prerequisites, Mathematics 31 and permission of the instructor. Four lectures a week.

82 Solid State and Nuclear Physics
A study of modern physics with special emphasis on the solid state, nuclear structure and particle physics. Prerequisite, Physics 81 or permission of the instructor. Four lectures a week.

88 Senior Research
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, senior standing and departmental approval of the project prior to registration.

93 Comprehensive Laboratory
An emphasis on experimental physics, including participation in a departmental seminar and opportunities to work in departmental research programs and other experimental projects. Prerequisites, junior standing and permission of the instructor. Eight hours of laboratory a week.

96 Independent Project
Prerequisite, permission of the instructor.
Political Science

The department of political science provides a broad curriculum for students who wish pre-professional training for legal, urban, communications, international, or administrative careers, or for advanced graduate degrees; as well as students who seek a general background of knowledge about government and politics as part of their liberal arts education.

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 eight courses and must normally include: 1) one introductory course before taking intermediate courses or internship, 2) any number of intermediate courses, selected in terms of the student's interests and career goals after consultation with faculty adviser; two intermediate courses required before taking advanced course, 3) a minimum of two advanced courses or a senior research or internship project which may be arranged for one or two terms, and 4) at least one course from each of the four curricular divisions listed below:

American Politics and Law: Course Numbers 11, 18, 40, 47, 52, 54, 55, 57, 58, 74, 81, 83, 85; Political Analysis: Course Numbers 13, 30, 34, 35, 36, 39, 77, 92; Cross-National Politics: Course Numbers 28, 37, 38, 41, 44, 60, 65, 79; International Politics: Course Numbers 16, 62, 63, 66, 86.

The department recommends that majors take statistics and the political science research methods course (30).

Independent study may be arranged for courses not normally offered by the department and with the consent of the instructor. It is generally available to juniors and seniors to provide an opportunity for extensive research in a field of the student's choice.

Internship Opportunities exist in public administration, legislative offices, legal agencies, and government offices at the local, state and national levels, as well as private agencies. Internships are normally restricted to sophomores, juniors and seniors, and it is recommended that a student take a relevant course in preparation for the internship; i.e. an urban planning internship should be preceded by Urban Decisions, or a legislative internship should follow Legislative Behavior. No more than two internships may be counted for the student's political science major.

Special programs are offered by the department in pre-law, urban affairs, international relations, public administration, comparative cross-national politics. Descriptive literature on these programs is available in the department office, 316 Old Main.

Core Concentration
A core concentration consists of six courses. Please see the department chairman for individual program descriptions. Interdepartmental concentrations are offered by political science and other departments such as economics, history, geography, sociology and psychology.

A core concentration in political science may also be taken in connection with an American studies sequence consisting of six courses
Political Science

in political science, three courses in American history and three courses in American literature and philosophy.

Honors are available in the political science department through the college-wide honors program.

Further Preparation
The department encourages students whose career goals would be assisted by language skills to make arrangements to prepare themselves adequately. Students are also encouraged to avail themselves of the opportunities for overseas study or travel available at Macalester College. (See Overseas Programs listings.)

Introductory Courses — Open to Freshmen
Students majoring in political science will normally not take more than two introductory courses.

11 Politics and Social Change
An introduction to political science with emphasis on American public policy problems, policy analysis and relationships to social change.

13 Western and Non-Western Political Ideas
An introduction to the main ideas in both Western and non-Western political thought in an atmosphere which invites comparison and contrast. Included are the nature of the individual, politics and allocation of resources, the nature of the state and dissent.

16 World Politics
An introduction to international relations with emphasis on the problems of war and peace, diplomacy, and conflict resolution. Historical examples and future scenarios are used to illustrate the contemporary predicament.

18 American Politics
A broad-ranging and critical analysis of American governmental institutions and political processes. Survey of dominant and competing belief systems in American society. Focus on specific contemporary political issues to clarify and illuminate the dynamics of American politics.

Intermediate Courses
Open to students with an introductory course in political science or second semester freshman standing.

28 Comparative Politics
Cross-national analysis of politics in industrial and developing societies, with an emphasis on political culture, governmental structure, and patterns of political behavior. Examples from China, USSR, India, Britain, France and other countries. Consideration of quantitative data and methodological problems.

30 Empirical Research Methods
Techniques of design, observation, description and measurement in contemporary political research including survey research, aggregate analysis and experimental/quasi-experimental research. Prerequisite, Mathematics 14 or equivalent recommended.

34 Great Political Thinkers and Ideas
Western political thought from Plato to the present, including major contributions by American political thinkers. Same as Philosophy 34.

35 American Political Thought
A historical-analytical treatment of the main currents of American political thought from Colonial times to the present, including post-liberal thought.
Political Science

36 Modern Political Thought
Study of a wide spectrum of Western political thought occurring since World War II.

37 Cross-National Urban Policy
The course centers on such aspects of cross-national urban policy as urban growth rates and spatial density patterns and resultant or related political and social problems. Student should complete course with knowledge of world urban patterns and varying political responses. Urban planning forms a significant core of the course, providing exposure to administrative procedures, processes and methods, including quantitative skills.

38 Comparative Legal Systems
Study of the institutions of the law at various levels of societal development and in differing cultures; attention will be directed to differing definitions of law, its function, presuppositions, methods and scope.

39 Empirical Political Theory
Introduction to modern political explanation, theory building and analysis of major empirical theories, models and concepts.

40 Urban Decision-Making
U.S. urban decision-making systems and political issues related to urban policy and planning. Topics to be explored will include demographic patterns and population movement, land use, transportation styles, housing conditions and development of environmental standards.

41 Comparative Political Parties
Analysis of political parties and electoral behavior in industrial and developing societies. Emphasis on comparison of U.S. party roles and structures, patterns of political participation, and interest articulation with other countries.

43 Third World Politics
Employs data from African and Asian states and explores a number of developmental steps including the creation of a sense of national identification; the emergence of new political institutions; and the transfer of power from traditional elites to a new leadership. Alternative paths of response to these developmental steps will be analyzed.

47 Intergovernmental Relations
The role of federal agencies and policies, state constitutions, city charters, governors, mayors, judges, state legislatures, city councils, county commissions and metropolitan authorities in governing state, city, county, township and special districts.

50 Topics
Analysis of selected political issues of general interest, specific issue to be announced in advance of registration.

American Campaigns and Elections
The functions and strategies of political campaigns and elections and the analysis of voting behavior at the national, state and local level.

Non-Electoral Participation
Study of various forms of political behavior including community action, interest group organization and functions, mass demonstrations and other policy-influencing techniques. Topics courses previously offered include: Community Power Systems and Black Americans, Political Ethnography of St. Paul, Third World: Urbanization and Political Change, Political Efficacy and the Citizen, Presidential Behavior, Criminal Justice.

52 Legislative Behavior
Investigation of the national policy-making process. Emphasis on Congress, its internal
operations and the functions it performs in the larger political system. Exploration of theories used by students of Congress and the various methodological approaches associated with these theories.

54 Executive Processes and Behavior
Analysis of institutional political leaders including the American presidency, governors, mayors and examples from other selected national political systems; emphasis on recruitment patterns and decisional behavior.

55 Contemporary Legal Problems
Course consists of two parts; first a major research paper on a socio-legal problem; and second a classroom study of the general principles of American law. Research instruction and law library tour.

57 Public Administration
Introduction to public administrative organizations, processes and problems; survey of bureaucratic theories and analyses of the administration of public policy.

58 Administrative Law
Legal problems inherent in the administrative process which grow out of the rule-making and judicial activities of governmental agencies.

60 Politics in Post-Industrial Societies
Analysis of politics in Western Europe, Japan and the Anglo-American democracies, focusing on problems of change and stability, affluence and its impact, and policy solutions to common problems. The role of citizen input through elections, parties and groups is assessed in the light of growing bureaucratic centralization and control.

62 International Law
An explanation of the role of international law and world law in international relations, including the rules and cases that compose the body of international law, legal methods for settlement of international disputes and the vital questions surrounding law enforcement.

63 International Organization
Analysis of contemporary problems in international organization. Emphasis on international cooperation, regionalism and international government. The United Nations and the European Community will be studied in detail.

65 Comparative Communism
Analysis of politics in the USSR, Eastern Europe and China, emphasizing the role of ideology, party organization and governmental bureaucracy in building contemporary "people's democracies."

66 Foreign Policy
Analysis of the foreign policy-making process in comparative perspective, emphasizing the role of historical precedent, governmental structure, elite involvement and domestic restraints. Special attention is given to American policies and processes since 1945 and to their equivalents in several other countries.

Advanced Courses
Open to juniors and seniors. It is assumed the student would have at least two semesters of political science or permission of the instructor.

74 Federal Social Policy
An advanced public policy analysis class. Contemporary public issues will be analyzed from the standpoint of formulation, implementation and impact.

77 Political Behavior
Theory and research on social-psychological variables in political behavior. Topics in-
include socialization, personality, language, attitudes, beliefs, values and motivation as correlates of individual behavior.

79 Comparative Political Change
Course centers on developing states and the transformation processes occurring in the modern world, including demographic and economic growth, social mobilization and population change, and rates of assimilation and social learning and behavior.

81 Judicial Behavior
Introduction to and investigation of the judicial policy-making processes. Primary emphasis on analysis of the U.S. Supreme Court, yet with some attention to state, local and foreign courts, and judges. Introduction to quantitative techniques useful in the study of the judicial process.

83 Administrative Behavior
Theories and analysis of public bureaucracies, their environments and their problems; emphasis on human behavior and performance.

85 American Constitutional Law and Thought
Survey and analysis of leading national and state constitutional decisions and their contributions to this country’s governmental and political development and thought.

86 International Theory and Communications
An examination of foreign policy behavior, centering on factors significant to foreign policy output such as the communications process, the role of the decision-maker, the decision-making process, policy strategies and conflict behavior.

88 Senior Research Seminar
Topics in advanced political research. Consent of instructor required.

Urban Seminar
The Twin City metropolitan conglomerate as a case study. Field work on a selection of topics such as mobility patterns, political institutional style, land use, demographic characteristics, or environmental impact. Field work will be preceded by exploration of methodological techniques employed in urban planning research.

Other Senior Seminars will be on Public Law, International Affairs, and/or selected Policy Topics.

95 Tutorial
96 Independent Project
97 Internship
98 Preceptorship

Psychology
Raymond Johnson, Lynda LaBounty, Walter Mink, Jack Rossmann, Charles Torrey (Chairman), Gerald Weiss, Hans Wendt

The psychology department seeks to foster a scientific approach to the study of behavior. The department offers a broad curriculum to serve both those students who will later specialize in research or applied psychology and those who will terminate their formal education with the bachelor’s degree. Students who plan to continue their study are prepared for programs leading to college teaching and research or to such applied fields as personnel work, educational administration, human engineering, civil service, counseling, social work, and clinical practice in such agencies as child guidance, clinics and hospitals for the mentally ill. The student who does not continue his or
her formal education receives a broad course of study in which stress is placed upon the application of scientific method to the complex problems of individual behavior.

The psychology curriculum includes an introductory course and a course in methods of studying behavior which are prerequisite for most other courses, intermediate courses dealing with special topics of general interest for both those who are and those who are not concentrating in psychology, and advanced courses and independent study in specific content areas. Throughout the curriculum, laboratory work, observational experience and independent projects are introduced wherever possible.

**General Graduation Requirement**

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

**Major Concentration**

The major in psychology will include Psychology 10 and 30, at least two psychology courses numbered in the 60s, at least two psychology courses numbered in the 70s, plus two other regular courses in the department, for a total of eight courses. Except by departmental permission, topics courses and courses numbered in the 90s may not be counted among the eight courses for the major.

**Core Concentration**

The core in psychology will include Psychology 10 and 30 and at least four other regular courses in the department plus at least six courses from outside the department, the elective courses to be chosen in consultation with the student’s departmental adviser. Except by departmental permission, topics courses and courses numbered in the 90s may not be counted among the psychology courses required for the core.

Honors are available in the psychology department through the college-wide honors program.

**Further Preparation**

Students concentrating in psychology, particularly those considering graduate work in psychology or related fields, are urged to take courses in biology, mathematics, linguistics and sociology. Mathematical work in statistics is highly recommended (Mathematics 14 or 51). In general, individual programs to meet special needs or interests may be arranged by consultation with members of the department.

**10 Orientation to Psychology**

An introduction to psychological thinking about problems and processes of behavior. In addition to a common core of material to be covered by all students, the course offers a wide variety of optional activities for partial credit. No prerequisite.

**30 Methods in Psychological Research**


**32 Methods of Experimental Psychology**

Covers a range of topics relevant to psychological research, including the preparation of literature reviews, experimental design, the execution of experiments, elementary data analysis and the writing of scientific research reports. Laboratory work is involved. Prerequisites, Psychology 10 and 30.
50  Topics in Psychology
Examination of a topic of general interest from the point of view of the science of behavior, the topic to be announced in advance of registration. Representative topics courses offered in recent years include: Fine Arts Therapies; Space Perception and Spatial Behavior; Philosophy, Psychology and Myth; Behavior Modification. Prerequisite, permission of the instructor.

55  Theories of Personality
Consideration of the structure, organization and nature of personality as presented in various theoretical positions as those of Freud, Jung, Erikson, Rogers and others. Prerequisite, permission of the instructor.

57  History and Systems
An introduction to the history and systematic development of contemporary schools and theories in psychology from ancient Greece through the schools of structuralism, functionalism, behaviorism, Gestalt and psychoanalysis to the present. No prerequisites.

61  Developmental Psychology: Infancy and Childhood
Theory and research on the nature and development of behavioral processes during infancy and childhood. Prerequisite, Psychology 10.

63  Social Psychology
Theory and empirical or experimental research on the influence of social factors on behavior. Prerequisites, Psychology 10 and 30.

64  Behavior Disorders
A study of psychological interpretations of deviant and disordered personality. Biological, social and literary perspectives are used to examine the sources, development and therapeutic change of disordered behavior.

66  Differential Psychology
Consideration of principles of measurement and testing, examination of typical psychological tests, and survey of research on sources and correlates of measured group and individual differences. Prerequisites, Psychology 10 and 30.

71  Learning
Theory and research on the basic phenomena of conditioning and learning, dealing in large measure with the animal level. Laboratory participation. Prerequisites, Psychology 10 and 30.

72  Cognition
The study of theoretical models and experiments concerned with how knowledge is acquired and used. Major emphasis is given to current investigations of memory and psycholinguistics, but the historical interpretations of mental organization are also noted. Laboratory activities provide a major component of the course. The courses in cognition and perception (Psychology 75) are designed to be complementary and joint registration is encouraged. Prerequisite, Psychology 10. Psychology 30 is a useful supporting course but is not required.

73  Motivation, Emotion and Conflict
Theory and research in motivational and affectional processes. Prerequisites, Psychology 10 and 30.

74  Physiological Psychology
An introduction to neuroscience, the study of the nervous system. The neural correlates of action, perception, motivation, emotion, learning and cognition form the major topics
of the course. Anatomical, physiological and pharmacological aspects of neuroscience are also covered. Laboratory activities form a major component of the course. Prerequisite, Psychology 10. Courses in biology and chemistry are helpful but not required.

75 Perception
Processes involved in the gathering and initial use of stimulus information constitute the main themes of the course. Both classical problems and current research will be considered, and there will be frequent demonstrations of the phenomena under discussion. The courses in perception and cognition (Psychology 72) are designed to be complementary and joint registration is encouraged. Prerequisite, Psychology 10. Psychology 30 is a useful supporting course but is not required.

88 Seminar
Open to junior and senior majors who wish to explore in depth a topic in psychology or an approach to the discipline which is not represented in other courses. Prerequisite, major standing and permission of the department.

95 Tutorial
Prerequisite, permission of instructor.

96 Independent
Prerequisite, permission of instructor.

97 Internship
Prerequisite, permission of instructor.

98 Preceptor
Prerequisite, permission of instructor.

Religious Studies
John Butt, David Hopper (Chairman), Calvin Roetzel

The courses of the department of religious studies focus on the study of Christianity, in both its historical and contemporary expressions, as well as major non-Christian religious traditions. While our introductory courses are broad in scope, they seek to be selective enough to allow an in-depth encounter with source documents through historical understanding. Methods of instruction include not only lectures and seminars but also ample opportunity for individual instruction. The program of studies aims not only at the student whose academic specialization or vocational choice is related to religion, but also at supporting a student's total curriculum by courses that can help unlock the religious dimensions encountered in other disciplines.

Students intending to go to a theological seminary after college would certainly profit from an exposure to the theological discipline at the college level, though many different disciplines will provide a suitable area of concentration for the pretheological student. A core concentration in religious studies may be wisely pursued by such students.

Over recent years increasing numbers of students who do not intend a career of theological study following college have majored in the department. This possibility has been enhanced by the option of the double major and the core concentration. Here, vocational orientations in other fields have been supported and enriched by an exploration of the various offerings of the religious studies department.
Major Concentration
The major concentration in religious studies consists of eight courses in religion, two courses in history and/or philosophy, one course in English. Reading proficiency in at least one foreign language is advised for students contemplating graduate study in theology. An oral comprehensive (a "senior dialogue" with the members of the department) is required of all majors.

Core Concentration
The core concentration in religious studies consists of 12 courses directly related to a particular problem or theme, six of which shall be in the department of religious studies. Formulation of the theme and the prerequisite courses will be determined in consultation with the chairman of the department of religious studies. An oral comprehensive (a "senior dialogue" with the members of the department) is required of all cores.

Honors are available in the religious studies department through the college-wide honors program.

18 Athens and Jerusalem: A Conflict of Cultures
(Same as Classics 18 and Humanities 18)
Through a study of selected classical and biblical readings inquiry is made into distinctive features of two major sources of Western civilization. Lectures and discussion.

20 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.

24 A Survey of Asian Religion: Introduction to the Comparative History of Religion
A historical survey of some of the world's major religious traditions and forms of faith. The purpose of this survey is to introduce both the variety and continuity of human religiousness and to illuminate what these various traditions have meant or mean to their participants as well as their significance to the rest of mankind. Primary attention will be given to the following religious communities: Hindu, Buddhist, Confucian, Taoist and Shinto.

26 Modern Critiques of Religion
A study of some of the major ways of approaching and understanding human religiousness. Selected writings by scholars representing a variety of interpretations and methodological approaches (psychological, sociological, anthropological, philosophical, phenomenological, historical and theological) will be read and discussed. Attention will be given to the works of Freud, Jung, William James, Durkheim, Weber, Marx, Geertz, Bellah, Otto, Eliade and W.C. Smith.

31 The History and Theology of the New Testament
The historical critical study of the rise of Christianity in the ministry of Jesus and the early church against its Old Testament background and its expression in the Hellenistic world.

35 Buddhism in India and Southeast Asia
A historical study of the rise and development of the Buddhist tradition from its earliest forms in India to contemporary expressions in Southeast Asia. Attention will be focused on how Buddhists themselves have at various times understood and interpreted their faith and on the ways in which this
understanding has affected their lives individually, socially and culturally.

47 History and Myth in the Ancient Near East
After being introduced to the character and structure of myth, the student will examine legendary materials in the Old and New Testaments in the light of non-Biblical materials (for example, the Epic of Gilgamesh, Enuma Elish, and the Baal and Anath myth). The course will also explain the relationship of myth (which deals with the timeless) to history (which deals with time).

50 Topics in Religion
Examination of special topics of interest to faculty and students, such as a study of certain crucial questions which the various religious traditions raise and attempt to answer. Over the last few years, the following topics courses have been offered: History and Theology, Jewish Mysticism, The Thought of Paul Tillich, Modern Catholic Thought, Christian Mysticism, New Religious Movements, Religion and Society, Jewish Religion and Culture, Bonhoeffer.

54 Existentialism and Theology
An examination of the nature of existentialism and an exploration of the lines of convergence and divergence with the theological tradition.

58 Science and Religion
An examination of historical points-of-conflict between science and the Western religious tradition since the Middle Ages. An analysis of scientific and religious methods of knowledge represents a major component of the course as well as a survey of current issues and problems, e.g., the ecological crisis.

63 The History of Christianity
An introduction to the history of Christianity with attention to the development of Christian thought. The focal point of this course will shift in different terms between such topics as The Early Church, The Church in the Middle Ages, The Reformation, The Modern Period, or American Christianity. The main thrust of the course is to introduce students to the methodology of historical theological study, rather than to stress a general survey.

66 20th Century Christian Thought
A survey of major theological statements of Christian faith in the light of the historical realities of the contemporary world.

67 Christian Ethics
A survey of the major patterns of Christian ethical thought. Examination is made of the relationship of Christian ethical thinking to the Biblical materials and the traditional doctrine of natural law. Special problems in the areas of Church and State, economic justice, medical ethics, etc. will also be discussed.

68 Seminar on Biblical Interpretation
An intensive study of one aspect of the Biblical writings (for example, letters of Paul, Synoptic Gospels, John, Revelation, Genesis, Jeremiah, etc.). The particular subject of study will be announced prior to registration. Seminar format. Prerequisites, Religion 20, 30 or 31.

95 Tutorial
96 Independent Project
97 Internship
98 Preceptorship
Slavic Languages and Literatures

David A. Lowe, Alexander Guss (Chairman)

The general objectives of the department are to teach students the reading, writing and speaking of the Russian language, equip students with the skills necessary for the study of Russian culture and literature and prepare them for the continuation of Russian studies.

A major concentration in Russian provides a study in depth of Russian literature, language and culture. In all courses, extensive use will be made of the Foreign Language Laboratory.

Major Concentration
A major concentration in Russian shall consist of nine courses beyond the elementary level (Russian 11, 12); required courses are: 31, 32, 41, 55, 61, 62, 71, 76 and 83. To complete a major concentration, students may choose from other advanced course offerings within the department. A number of supporting courses is possible, to be chosen according to the student’s vocational interest: for students intending to teach Russian — courses in a second foreign language, English, humanities or history; for students going into business and government work — supporting courses in political science, history, economics and geography.

Core Concentration
The core concentration in Russian studies consists of six courses in Russian language and literature beyond the first year, plus six additional courses which could include History of Russia, Geography of Europe and USSR, and other relevant courses in social science, literature, humanities, fine arts and philosophy.

Honors are available in the department of slavic languages and literatures through the college-wide honors program.

Interim Term Program
The Tolstoy Farm, a Russian community in New York, provides a special opportunity for study. During the January interim, a group of Macalester students and their professors spend four weeks attending a Russian-language workshop, where they are immersed in a transplanted but nonetheless typical and stimulating native Russian atmosphere in which they hear Russian spoken constantly.

Interim Term in the Soviet Union
An additional interim course is a five-week study program in the Soviet Union under the auspices of UMAIE, of which Macalester College is one of the participating institutions.

A number of on-campus courses and seminars are available during the interim term.

Junior Year Abroad
Students have the opportunity to participate in a program of Russian or Serbo-Croatian studies abroad for one year at Zagreb, Yugoslavia. A four-week study and travel visit to the Soviet Union is included in the program. Participants need not be Russian majors, but must have completed a minimum of two years of Russian and have some knowledge of Serbo-Croatian.

11-01
12-01 Elementary Serbo-Croatian
An introduction to the reading, writing and speaking of the language. This course is recommended for all students wishing to take the junior year abroad at Zagreb, Yugoslavia.
11-03
12-03 Elementary Russian
An introduction to the reading, writing and speaking of the language.

31, 32 Intermediate Russian I and II
A continuation of language study with special emphasis on vocabulary and increased comprehension. Prerequisite, Russian 12 or approval of the department chairman.

41 Elementary Conversation
Speaking based on contemporary materials. Prerequisite, Russian 12 or permission of instructor. Students with high school Russian may be admitted on approval of instructor.

50 Topics Seminar: Solzhenitsyn
This course is especially designed for students interested in a study in depth of Solzhenitsyn's works. Special attention will be given to his language. Open to freshmen. Conducted in English.

50 Topics Seminar: Russian Folklore
This course will be conducted in English and will introduce students to the Russian Bylina (heroic epic poems), tales, laments, customs, sayings, proverbs, etc. No knowledge of Russian is required. Open to freshmen.

55 Russian Culture and Civilization
The most important socio-economic, intellectual and ideological factors in the evolution of Russian culture, both prerevolutionary and Soviet.

61 Intermediate Conversation
Prerequisite, Russian 32 or 41 or permission of the instructor.

62 Advanced Conversation
Prerequisite, Russian 32 or 61 or permission of the instructor.

71 Advanced Russian Grammar and Composition
A course for advanced students providing foreign language study in depth. Prerequisite, Russian 32. The course is conducted in Russian.

73 Comparative Russian-English Structure and Syntax
Comparison of the structures of the Russian and English languages, with emphasis on practical difficulties in pronunciation and grammar. Prerequisite, Russian 62 or 71.

76 Soviet Literature (in English)
A survey of Soviet literature from 1917 to the present. Reading of representative authors such as Fadeyev, Gorky, Yevtushenko, Sholokhov, Gladkov, Pasternak and others. Material covered will include: early post-revolutionary writers, the Stalin period, socialist realism, the "thaw" period, and Soviet literature today. Students majoring in Russian will read certain assigned materials in Russian.

83 Russian Literature from Pushkin to Chekhov (in English)
An introduction to the Russian novel, drama, poetry and literary criticism, with main concentration on Pushkin, Lermontov, Gogol, Turgenev, Tolstoy, Dostoevsky and Chekhov. Students majoring in Russian will read certain assigned materials in Russian.

88 Senior Seminar
Seminars on selected topics on the Russian literature and language may be arranged. For advanced students only; conducted in Russian. Prerequisite, Russian 71 or approval of department chairman.
Courses in the department of sociology focus on the discovery, description and explanation of human social behavior and cultural knowledge. They reflect at least two important human characteristics: a need to live in social groups and a capacity to learn and communicate vast amounts of complex knowledge. Sociologists seek to describe and account for the full range of cultural knowledge, social actions and social arrangements that exist as part of the everyday life of human beings. They also investigate how people satisfy their own desires within the confines of a wider social system. The course offerings regularly reflect these concerns. We also believe that doing sociology is an important part of the learning process. We encourage our students to conduct inquiry in the Twin Cities metropolitan area, to participate in internship programs and to study abroad through the College’s international programs.

The department offers several career alternatives. Students may design a program in preparation for graduate studies in sociology, for teaching, or for entrance into the helping professions such as social welfare and corrections. We encourage students who know what they want to do after graduation to choose courses in other disciplines, internships, and other work, travel and research experiences that provide the best career training. Departmental offerings can help to prepare people for any work that requires an understanding of social organization or the discovery of another person’s point of view. Students should choose course work carefully in consultation with their advisers.

A and B Courses

Many courses in the department are offered in two parts, e.g., Sociology 76 (Social Deviancy A) and Sociology 77 (Social Deviancy B). In every case, the A section presents the main body of data and theory characteristic of a particular area of study. The B course is designed to give both the student and the instructor added flexibility for continued investigation of that subject. Typically students who take a B course will pursue their own interests within a particular area with the agreement of the instructor. It is possible, however, for the B course to involve several students if they and the instructor wish to pursue a particular line of inquiry in depth. A courses are a prerequisite to all B courses and may be taken without the following B course.

Major Concentration

A major in sociology consists of eight courses including Sociology 20. Topics (50) and independent study (96, 97) may not be counted among the eight courses for the major without departmental approval. Students planning to major should take Mathematics 14, and are strongly advised to take courses 64, 70, 71, and either 72 or 82. A major program should include one B-type or a department approved independent study course.

Core Concentration

Six courses (exclusive of Sociology 74 and 84) together with six additional courses chosen by the student from outside the de-
partment constitute a core concentration. The pattern of courses is to be designed by students in consultation with their advisers. We strongly recommend that a core in sociology include Sociology 20 and two of the following: 70, 71, 72, 82, and should be supported by Mathematics 14. Students should be prepared to provide a rationale for their selections in terms of the internal consistency of their proposed course pattern. It is possible to test out of Sociology 20, as well as receive credit by examination for that and some other courses.

Honors are available in the sociology department through the college-wide honors program; interested sophomores and juniors should consult their advisers.

Preparation for Human Services Fields
Although the college does not offer a major in social work, students intending to enter a human services field upon graduation can obtain excellent pre-professional preparation through careful choice of course work. A program should include a major or core in sociology or psychology supplemented by work in political science, anthropology, economics, mathematics and geography. Student interest will determine the exact sequence chosen.

The department of sociology offers two pre-professional social work courses (numbered 74 and 84) which build upon knowledge gained from all of the behavioral and social sciences and require a supervised field placement concurrent with the regular class work. Ordinarily, these courses would be taken in the junior year; 74 should precede 84. Seniors should include an internship (97) in a social or planning agency. Up to two internship credits may be included in the eight necessary for a sociology major.

The following courses in sociology are strongly recommended for pre-professional preparation for work in human services fields: * Indicates courses considered essential.

20* Analysis of Society
30* Criminology
40* Minorities in the United States
63 The Troubled Family
65 The Sociology of Work
66 Urban Social Structures
72 Social Organization
74* Introduction to the Social Welfare System
76 Social Deviancy
78* Social Stratification
82 Social Psychology
84* Individual Human Rights and Social Work Practice
85 Sociology of Medicine
86 Sociology of Behavior Disorders
97* Internship

Anthropology
11* Cultural Anthropology
30* Cross-Cultural Research: Interviewing
31 Cross-Cultural Research: Writing
60 Urban Anthropology
62 Urban Research

Psychology
10* Orientation to Psychology
50 Behavior Modification
61* Developmental Psychology: Infancy and Childhood
50 Developmental Psychology: Adolescence through Old Age
64 Behavior Disorders
66 Individual Differences
71 Learning

Economics
11* Principles of Economics
Sociology

22 Basic Financial Accounting
61 Labor Economics

Political Science
11 Politics and Social Change
18 American Politics
47 Intergovernmental Relations
54 Executive Processes and Behavior
57* Public Administration
74* Federal Social Policy
83* Administrative Behavior

Mathematics
14* Introduction to Statistics
19 Introductory Calculus
25 Computers and Programming

Geography
11 Human Geography
41* Urban Geography
56 Urban Geography Field Seminar

Other Recommended Courses:
History 26 Native American History
History 64 The Black Experience since World War II
History 66 History of Sex Roles and Family Philosophy 25 Ethics
*Speech Communication and Dramatic Arts
25 Principles of Argument
*Speech Communication and Dramatic Arts
38 Persuasion
*Speech Communication and Dramatic Arts
50 Intercultural Communication

Sociology Courses:
Sociology 20 is normally prerequisite to all courses.

20 Analysis of Society
Survey of principal concepts and methods with emphasis on sociology as a mode of analysis or way of knowing. Study of individual, collective and institutional behavior using materials largely drawn from contemporary American society.

30 Criminology
The major forms of anti-social behavior, with emphasis upon crime and delinquency in the United States. Theories of such behavior and attempts at control, rehabilitation and alleviation.

40 Minorities in the United States
The nature of racial, ethnic and religious minority groups. Social and economic adjustments in the U.S. of Negro, Indian, Asiatic and various nationality groups. Intergroup relations and the problems of conflict and tensions.

50 Topics in Sociology
Examination of some selected topic of concern to sociologists to be announced prior to registration on a year by year basis. Prerequisite, permission of the instructor.

62 Social Change: Topics in the Non-Western World
Theories of social change. Programs of social change and development in non-Western countries. Evaluation of these theories and programs in terms of change-phenomena in significant areas of the modern world. Evolution, revolution, reform, reconstruction, utopias and other ideal-typical images.

63 The Troubled Family
An analysis of what can be reliably determined about changes in nuclear family life and kinship relations which are now occurring. Alternative/emergent forms will be discussed both as to their role-structure and their accommodation to or expression of changes in the larger society.

64 Modes of Sociological Thinking
Identification of the frames of reference in use today, noting the special problems each
tries to solve and the methodological implications of each. Brief attention is paid to the sources and development of these somewhat diverse perspectives.

65 The Sociology of Work
The meaning of work for the individual and for the society. Trends in labor force characteristics and trends in the nature of work. Work as subculture with values and norms; consumption and recreational styles; political attitudes; family characteristics; ethnicity; and traditions.

66 Urban Social Structures — A
Main focus on contemporary urbanism with an emphasis on urban social institutions, value systems and social change. Examination of contemporary urban culture and its identity seekers including a macro-level analysis of structural changes in institutions and stratification systems.

67 Urban Social Structures — B
Intensive study of one selected topic or problem as a follow-up of course 66.

68 The Changing Community — A
The search for community in Megalopolis; historical origins and forms that shaped a sense of community; the significance of the urbanizing process and the resultant problems, both in social relations and in perspectives.

69 The Changing Community — B
Intensive studies in special aspects, such as theories of change, human ecology, cross-cultural comparisons of locality-systems, field work in nearby localities and neighborhoods. Prerequisite, Sociology 68 or permission of the instructor.

70 Data Gathering
Problems of research design; sampling; fieldwork problems in the use of current instruments and techniques, with emphasis on survey methodology; theory-building in relation to empirical research. Prerequisite, Mathematics 14 or an introductory statistics course. Students must also register for Sociology 71.

71 Data Analysis
Introduction to selected non-parametric techniques; bivariate and multivariate analysis; introduction to the use of "canned" computer programs; writing research reports. Prerequisite, Sociology 70; students must register for both Sociology 70 and 71.

72 Social Organization — A
Presents basic principles of social organization with particular attention to their operation in the large-scale complex organization. Explores such elemental features of organizations as division of labor, group meaning structures, systems of action and the interrelationships among organizational parts. The perspective of this course is at the level of group generated action and the impact of these phenomena on the everyday lives of individuals in the organization.

73 Social Organization: Formal and Informal Systems — B
Intensive study of some one form of large-scale organization or research on some phase of the small group. Prerequisite, Sociology 72 or permission of the instructor.

74 Introduction to the Social Welfare System
Historical development and survey of current social welfare services in relation to social needs, social agencies, their purpose and function, and methodology and philosophy of social work practice. Field placement required.
75 Collective Behavior in Mass Society
Social movements, mass demonstrations and outbursts; panic, disaster and crowd behavior. Collective action growing out of crisis situations. Influence of mass communication media on behavior.

76 Social Deviancy — A
Major approaches used in sociology to examine and explain individual and group deviation from social norms: social pathology, social disorganization. The concept of deviation as a normal response to inconsistencies in social structure, social change and the breakdown of social control.

77 Social Deviancy — B
Selected studies of social structure and deviancy in such behavior areas as delinquency, race conflict, broken homes, or other expressions of social disorder or breakdown. Prerequisite, Sociology 76 or permission of the instructor.

78 Social Stratification — A
Types and functions of stratification systems such as caste, apartheid, class; the impact of social class and rank systems on values, goals and behavior. Fundamental theories of stratification.

79 Social Stratification — B
Specialized studies in sociology of stratification. Prerequisite, Sociology 78 or permission of the instructor.

81 Social Structure and Violence
An examination and analysis of forms of individual and collective violence as manifestations of social structural factors. Consideration and exploration of the historical, institutional, ideological and sociocultural factors underlying acts of violence in America and cross-culturally. Prerequisite, Sociology 20 and/or permission of the instructor.

82 Social Psychology — A
Stresses the symbolic and language mediated interaction among persons and their surroundings. Explores language phenomena in self-concept development and focuses on the individual’s conscious involvement in the socially constructed world. Includes treatment of motivational, judgmental and interpretative action from the micro-analytic perspective.

83 Social Psychology — B
Selected studies, e.g., impact of society-culture on personality, attitudes, aspirations; role consensus, norm formation in different socio-cultural settings; faulty socialization. Prerequisite, Sociology 82 or permission of the instructor.

84 Individual Human Rights and Social Work Practice
The purpose of this course is to acquaint the student with the attitudes and philosophy of the social work profession in order to better understand certain basic value principles that underlie a social worker’s approach to his client and to problems of social living, and to convey an understanding of the importance of the attitudes of the helping person toward the helping process and the individual seeking help. Field placement required.

85 The Sociology of Medicine
The social organizational context of healing. The historical emergence of various healing professions and the relations within and between these relative to legitimacy, authority and status. The hospital as a complex organization and as an ecological complex of skills and special places.

86 The Sociology of Behavioral Disorders
Mental illness as residual deviance: a case study of extrusion, labeling and isolation in the management of deviance. The social
psychology or personality disorganization; the self-system; differential distribution of rates and types of mental illness in the U.S. and cross-culturally. Prerequisite, Sociology 76 or 82.

96 Independent Project
97 Internships
Prerequisite, permission of the instructor.

Spanish

Donald Fabian, Robert Dassett (Chairman), Maria Doleman

Objectives
The Spanish department's objectives are:
1. to prepare competent majors and cores in Spanish language, and the culture and literature of both Spain and Latin America.
2. to provide appropriate language training needed by non-Spanish majors for study in their own field, for travel or for future professional needs.

Career Orientation for Spanish Majors
Recent Spanish majors from Macalester have begun careers in the foreign service, special education, banking, bilingual education, banking and commerce, and teaching. Others have gone into the Peace Corps, Vista or are in graduate programs in Spanish language and literature, Spanish-American area studies, etc. Students are finding it increasingly desirable for practical reasons to combine a Spanish major with a compatible major in another field. Some examples are: Spanish and economics, Spanish and political science, Spanish and geography, and others.

Major Concentration
A major concentration in Spanish consists of a minimum of eight courses in Spanish beyond the elementary level, plus the Senior Seminar in Spanish Civilization; a total of nine courses. (For those who begin the concentration with Spanish 51 or 61, the total, including the Senior Seminar, may be eight.)

Required courses: 31, 32, 51 (unless excused from these three by placement), 54, 65, 88. For those specializing in Latin-American Studies, see coordinator of Latin-American Studies.

Four supporting courses chosen according to a student's interests. Some suggested patterns are:
1. For majors including those going into teaching — another foreign language, English, humanities or history or geography.
2. For those going into government work or some field of business — political science, economics, history or geography.
3. For those majoring in Latin-American Studies — History 37 and two additional courses in geography, history, sociology, political science or Portuguese, to be chosen in consultation with the departmental adviser.

Core Concentration
The core concentration consists of six Spanish courses numbered 31 or higher, plus the Senior Seminar (Spanish 88) and six courses chosen from a related area. In all cases, the pattern of the core concentration of work must be approved by the department.

Honors are available in the Spanish department through the college-wide honors program.

Study in South America
The Spanish department sponsors a study-abroad program in Bogotá, Colombia. Fifteen to twenty students, not necessarily
Spanish majors, are selected to spend the spring term (summer optional) studying at the Centro de Estudios Universitarios Colombo-Americano and other participating institutions, including the Universidad de los Andes. Two courses may be counted toward the Spanish major. The student majoring in Spanish will have to take, on campus, all additional courses that are necessary to meet the departmental graduation standards. Spring semester participants in this program also receive an interim term course, "Orientation to Colombia," in Bogotá, which includes an introduction to the important cultural, political, economic and geographical aspects of the country. This program is recommended for Spanish majors.

Mexican Caravan
When enough interest is expressed in group travel to Mexico, the Spanish department provides leadership.

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

15 Elementary Conversational Spanish
Concentrated aural-oral practice in the most necessary forms of the spoken language for use in traveling, living or working in the Spanish-speaking countries. Very little attention will be given to reading and writing. Students with a basic oral facility in Spanish should register for Spanish 31, 32 or 51.

Note: Spanish 11, 12, 31 and 32 constitute the basic sequence in Spanish for further study in conversation and literature.

31 Intermediate Spanish
Intensive oral and written grammar review during first five to seven weeks. Last half of semester reading and conversation.

32 The Spanish Speaking World
The land, the people and their culture as seen through the eyes of the nationals of the several countries. Conversation, writing with some grammar review. This course or its equivalent will normally be the preparation for upper level conversation or literature courses. Prerequisite, Spanish 31 or equivalent.

50 Topics
In recent years these have included courses on selected Spanish-American writers, Borges, Baroja, Unamuno, and the Novel of the Mexican Revolution.

51 Conversation
Conversational practice with special emphasis on aural-oral skills. Prerequisite, permission of the instructor.

52 Grammar Review and Writing
Developing skills of writing through a close study of advanced grammar. Writing will include: compositions, letters, newspaper or magazine articles and creative writing. Prerequisite, Spanish 32 or equivalent.

54 Survey of Modern Spanish Literature
19th and 20th centuries. Prerequisite, Spanish 32 or equivalent.

62 Classical Spanish Literature
Medieval period through the Golden Age. Prerequisite, Spanish 32.

65 Reading in Spanish-American Literature
Novels, short stories and poetry of the Spanish-American nations. Borges, Cortázar and Neruda, and other contemporary writers are included.
Spanish

Speech Communication and Dramatic Arts

67 The Novel
Spanish and Spanish-American fiction. Prerequisite, Spanish 54 or equivalent.

68 Twentieth Century Spanish Literature

71 Advanced Conversation and Creative Writing
Examination of selected readings in Spanish and Spanish-American literature from the perspective of their vocabulary, idiomatic expression, grammatical structure and style. The study of these models will lead into oral expression and creative writing. Translation from Spanish into English and vice-versa will be included. Prerequisite, senior standing or permission of the instructor.

88 Senior Seminar*
Spanish and Spanish-American Civilization. Required of all majors and cores.

95 Tutorial

96 Independent Study

97 Internship

*Note: The Senior Seminar in Civilization is offered only in the fall term. This course is required of all majors in lieu of senior comprehensive.

Portuguese

11, 12 Elementary Portuguese
Basic instruction in speaking and understanding the language. Elementary reading.

Speech Communication and Dramatic Arts

Douglas P. Hatfield, Roger K. Moswick (Chairman), Scott Nobles, Michael E. Stano, Jeffrey Thomson, M. Glen Wilson

The department of speech communication and dramatic arts is committed to the fundamental worth of broad liberal education through exposure to human intellectual and artistic achievement. In honoring intellectual development as primary in the liberal arts focus of the College, this department strives to maintain appropriate balance between knowledge and theory on one hand and their practical application on the other. Curricular and co-curricular programs are designed to illuminate theoretical and substantive knowledge through performance and experience. Majors in dramatic arts, general speech and speech communication are designed as liberal arts curricula, not professional or vocational ones, and to this end students are encouraged to choose electives outside the department which provide broad complementary substance and relevance.

Those students preparing for graduate study should choose either emphasis in dramatic arts or speech communication. 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 communication, general speech or dramatic arts.

English Teaching Certification Requirement
The State Department of Education requires that prospective teachers of high school
Speech Communication and Dramatic Arts

English and language arts must take academic instruction in each of two areas of speech and dramatic arts. The student must take Speech 11*, Principles and Practice of Public Speaking, and either Speech 18, Introduction to the Theatre, or Speech 23, Oral Interpretation.

*Students may request substitution of another speech communication course by department petition two weeks prior to pre-registration.

Major Concentration
The department offers two basic types of programs: a) A major area of concentration for students intending to receive a liberal arts degree and/or planning to engage in graduate study in either speech communication or dramatic arts, and B) A certification major or minor area in general speech, speech communication or dramatic arts in compliance with recently revised state certification requirements for students who intend to teach high school.

Each major requires from nine to ten courses specified by course or area from within the department; each minor requires five to six courses similarly specified. In addition, all majors and minors are required to participate in co-curricular speech activities appropriate to the field of study and the needs of each student. Students in each major field have the option of substituting for one of the required courses any other departmental course, seminar or independent which meets the approval of the appropriate area committee and which will, in the case of certification majors, insure that the student meets state requirements in specified areas of competence.

Pre-Professional Programs
The department participates in the teacher education program described below as the General Speech program, and in two interdepartmental programs, the Linguistics program, and the Law and Society program for pre-law majors.

Major Programs
1. Speech Communication: Ten courses, eight of which must be Speech Communication, plus a seminar or independent devoted to scholarly writing. Required courses: 25, 32, 37, 38, 42, 49, 60, 98.
2. Theatre: Nine courses from within the department plus three electives from outside the department which are related to the student's major concentration and approved by the student's adviser and area committee. Required courses: 18, 22, 23, 26, 29, 64, and two of the following three courses; 33, 34, 35.

Certification Majors
1. General Speech Major: Ten courses. Required courses: 18, 21, 23, 25, 29, 32, 36, 37 or 60, 38 or 49, 64.
2. Speech Communication Major: Ten courses. Required courses: 21 or 23, 25, 32, 36, 38, 49, 42 or 60.
3. Theatre Major: Ten courses. Required courses: 18, 21, 22, 23, 26, 29, 64, 11 or 25, and two of the following three courses; 33, 34, 35.)
4. General Speech Minor: Required courses; 11, 18, 23, 25, 32, 64.
5. Speech Communication Minor: Required courses; 11 or 37, 21 or 36, 23, 25 or 32, 38 or 49 or 60.
6. Theatre Minor: Required courses; 18, 23, 26, 33, 64.
Speech Communication and Dramatic Arts

Core Concentration
All core programs require six department courses individually programmed by the student and his or her adviser, with the exception of the theatre core for which the following courses are specified: 18, 33, one course from 21, 23 or 26, plus three other electives from within the theatre area. The six other courses elected from outside the department must be appropriately related to the student's core field of study and subject to his or her faculty adviser's approval.

Suggested Program Sequence—Dramatic Arts
Freshman year—fall: 18 or 22, 21 or 23 spring: 29, 21 or 23
Sophomore year—fall: 22, 26, 33 spring: 26, 34
Junior year—fall: 64 spring: 31, 35, 65
Senior year—fall: 64, 97 spring: 31, 65, 96, 97

In basic courses all qualified students may request an examination to test out of any of the basic department courses during a period from one week prior to beginning of the semester to the end of the second week of the semester.

11 Principles and Practice of Public Speaking
A practical and theoretical investigation of public discourse, combining lecture, discussion and student presentation. The course's main focus will be on practical application of sound principles relating to research, development and support of ideas, organization, style, audience adaptation and delivery. Student exercises will cover both informative and persuasive speaking, with extensive verbal and audio-visual feedback.

12 Communication Theory
A survey of contemporary theory and principles of speech communication focusing on communication models, interpersonal communication, nonverbal communication, intercultural communication and small group communication. Course allows for study of selected literature and concentrations in areas of special interest.

18 Introduction to Theatre
An introductory study of the art of theatre. Major emphasis is given to dramatic theory, criticism, play analysis and appreciation; secondary emphasis to the principles of acting, directing and design. Attendance at theatre performances and laboratory crew experiences are integral to the course.

21 Voice and Diction
A study of the anatomy and physiological processes of voice production and articulation. Introduction to the International Phonetic Alphabet and its application to various levels of English pronunciation; introduction to elementary theory of speech correction; individualized programs of self-analysis and self-improvement. Same as Linguistics 28.

22 Introduction to Acting and Direction
Course stresses the interdependence of acting and directing in the theatre, focusing on both theory and practice. Laboratory experiences are integral to the course. Intended as a basic course for dramatic arts majors, it is also for non-majors and students with less committed interest.

23 Oral Interpretation of Literature
Development and use of fundamental techniques for analysis and reading aloud of prose and poetry.
25 Argumentation
Principles and practice of argument; study of adaptation of logic and evidence to rational decision making and to effective advocacy.

26 Acting
Basic theories and techniques of acting are studied and applied.

27 Creative Dramatics
The history and development of creative dramatics and its relation to the educational philosophy of John Dewey. Through participation in classroom exercises and in the design and teaching of class sessions, students develop concepts and techniques of creative dramatics for use in elementary and high school teaching, small group conference work and group counseling.

29 Technical Theatre
Study in the arts and crafts of the theatre. Emphasis on construction and mounting of the production. Laboratory crew experience. Prerequisite, Speech 18.

31 Costuming and Lighting
The course first deals with styles of period costumes and construction techniques for modern theatre production. The second part of the course examines lighting theory and practical applications of lighting for the stage. Laboratory experiences are integral. Prerequisite, Speech 29.

32 Small Group Communication and Decision-making
Basic forms of small group discussion, group dynamics processes and small group decision-making. Video analysis of group discussion, simulation of decision-making approaches and lectures from business and industry will be used.

33 History of Theatre I
Survey of the origins and development of theatre as an art form during the Classical, Medieval and Renaissance Periods. In addition to dramatic literature, emphasis is placed on theatre architecture and dramatic production. Oriental theatre also surveyed.

34 History of Theatre II
A sequel to Speech 33, studying Western theatrical movements, influences and practices from the Baroque to the beginning of Modern Theatre.

35 History of Theatre III
A sequel to Speech 33-34, examining European and American Theatre arts since the advent of Modern Realism. Reading of representative plays and attendance at relevant productions in the community. Prerequisite, Speech 33 or 34.

36 Communications and the Mass Media
A study of the electronic media as a creative and communicative art form. Examples of film, radio and television are compared and contrasted in terms of use of communication theory, media organization and techniques of production. The socio-cultural impact of the media as an educational tool, taste-maker and inculcator of values is examined through study of documentaries, dramatic productions, advertising and political campaigns. Each student will write and produce a laboratory production of a documentary, dramatic piece or advertising series.

37 Speech and Language
A behavioral and interdisciplinary study of the impact of speech and language upon human behavior. Major emphasis is given to the importance of language acquisition and development in perception, categorizing and
thinking. Other topics include: origins of speech, information processing, semantics, animal communication and disturbed communication. Same as Linguistics 29.

38 Persuasion
A study of motivation in decision making. Treats persuasive discourse from viewpoints of advocate, responder and societal impact.

40 Organizational and Interpersonal Communication
A study of communication processes, structures and modes in organizational and interpersonal contexts. Organization-communication interface is examined with reference to various theories of management, and appropriate communication systems and techniques. Processes and problems of interpersonal communication are explored via simulation games and exercises, video-tape feedback in dyadic and small group interaction.

49 Theory and Criticism of Rhetoric
A study of classical and modern theories of rhetoric, with major focus on theories and structures applicable to critical appraisal of spoken and written persuasion. Students will examine theories of selected writers from Aristotle to Kenneth Burke. They will apply principle by critical evaluation to historical and contemporary speeches, essays, novels and plays. Critical methods for studying spokesmen, movements and historical periods will be analyzed.

Topics Courses:
The following are some of the topics courses which have been offered in the past few years: Intercultural Communication, Dramatic Criticism and Play Analysis, Children's Theatre, Nonverbal Communication, Puppetry, Business and Professional Communication, Readers Theatre, Political Communication and Ghostwriting, Advanced Acting, Political Persuasion and Campaign Rhetoric.

50 Intercultural Communication
The study of communication patterns between different cultural, co-cultural, racial and ethnic groups. Special attention is paid to the clash of values, assumptions, norms and expectations as they are expressed in linguistic and nonverbal behavior. Guest lectures and discussions with individuals representing diverse cultural backgrounds will be part of the course.

56 Legal Communication
The study of the role of communication in American legal institutions. The course includes analysis of communicative behavior of lawyers, judges, clients and juries. Processes studied include conference, interviews, bargaining, advocacy, jury deliberation and decision writing.

60 History and Criticism of American Public Address
A study of the rhetoric of selected leaders in government, law, religion and social reform in American history; colonial period to the present.

64 Direction
History, theory and techniques of directing, culminating in the production of an edited three-act play. Laboratory crew experience. Prerequisite, Speech 18 or Speech 22.

65 Theatrical Design
Study of the concepts, principles and techniques of scene, lighting and costume design in the modern theatre. Exercises employ methods of illustrating ideas and visual concepts. Prerequisites, Speech 29, 33 or 34. Required for majors, others by permission of the instructor.
96 Independent Project
For the advanced student capable of independent study requiring library research and/or experimental work in the theatre or the Communications Research Laboratory. Prerequisite, permission of the instructor.

97 Seminar in Theatre
Advanced study of such topics as acting, lighting, children's theatre.

98 Seminar in Rhetoric
Advanced study of such topics as classical rhetoric, speech criticism, experimental methodology, listening.

99 Seminar in Oral Interpretation
Critical analysis of selected topics, persons and works related to Oral Interpretation theory. Prerequisite, Speech 23.

Practicum Credit in Speech
The following are co-curricular activity courses. The maximum of one full course credit may be earned by successful completion of four terms and approval of the speech communication and dramatic arts department chairman.

205 Practicum in Forensics
Credit may be earned by participating in several forensic tournaments or by extensive participation in the public audience symposium program.

207 Practicum in Theatre
Credit may be earned by play production participation in major roles as an actor or in major positions as a technician or theatre manager.
Cooperative Programs

The Cooperative Program in Liberal Arts and Nursing
Macalester-Rush students spend their first two years on the Macalester campus, their last two years on the Rush-Presbyterian-St. Lukes campus in Chicago. It is important to stress that this is one program; the student does not transfer schools or in some sense apply to Rush. When the requirements of the first two years have been successfully completed, the student simply moves on to the other location. Details of the program at Rush are given in that school’s catalog.

During the two years at Macalester, the student must satisfy:
Chemistry Requirements (2 courses)
- Chemistry 13 or Chemistry 11 and 12 — General Chemistry
- Chemistry 37 — Organic Chemistry

Biology Requirements (4 courses)
- Biology 11 — Principles of Biology
- Biology 12 — Introduction to Zoology
- Biology 43 — Microbiology
- Biology 54 — Human Physiology

Social Science (3 courses)
Though not required, it is recommended that these courses be selected from the departments of psychology, sociology or anthropology. It is required that one of them be Developmental Psychology.

Mathematics (1 course)
Recommended:
- Mathematics 14 — Introduction to Statistics
- Mathematics 16 — Fundamental Mathematics
- Mathematics 18 — Finite Mathematics

Distribution Requirements (2 courses in Humanities and Fine Arts)
Students who meet the requirements above will of course have fulfilled college requirements in natural science and mathematics, and in social science. The Macalester-Rush student is required to complete Macalester’s distribution requirement, meaning that two courses must be selected from the division of Humanities and Fine Arts.

General Requirements
The Macalester-Rush student must obtain credit for two interim term courses, corresponding to the two years spent on the Macalester campus. Also, credit must be earned in 15 courses to complete the Macalester phase of the program.

The Cooperative Program in Liberal Arts and Engineering
An arrangement between Macalester and Washington University at St. Louis makes it possible for a student to earn a B.A. degree from Macalester and a B.S. degree in engineering or applied science from Washington in five years — the first three to be spent at Macalester and the latter two at the School of Engineering and Applied Science at Washington. There is considerable flexibility in the program, but students should expect to take calculus through differential equations, computer programming, chemistry and physics at Macalester, as well as five or more courses in the area of social science and humanities. Interested persons may obtain more information about this program from Professor Murray Braden at Macalester, or Dean Harold Brown at the Engineering School at Washington University.
Pre-professional Programs

The Pre-law Program at Macalester
The College offers a great deal to the student who is contemplating a career in law. In particular, expert counseling is available through faculty members who keep current concerning important factors pertinent to the selection of an appropriate law school. In addition, a number of courses are offered in various departments which deal with legal materials and research and so help the student decide whether this sort of enterprise is congenial. As an adjunct, opportunities are present for internships in a legal setting; and it is possible for students to take an interdisciplinary major concentration in legal studies by utilizing the appropriate course offerings in the several departments.

The Pre-medical Program at Macalester
For each of the past several years, Macalester has had approximately 15 of its graduates admitted to medical school. Most of these students go to state medical schools, particularly those in Minnesota and Wisconsin, but we currently have students at such private medical schools as Harvard, Duke and Johns Hopkins.

Pre-medical students at Macalester complete a major in one of the departments in the College as well as fulfill the course requirements for admission to medical school. At Macalester, the pre-med requirements in science are met by taking the following courses:

Chemistry 11 and 12 or Chemistry 13; Chemistry 23; Chemistry 37 and 38; Biology 11 and 12; Mathematics 19 and 22; Physics 21 and 22 or Physics 26 and 27.

In addition, pre-medical students must take at least two courses in English and literature and at least five courses in the social sciences and humanities.

Most pre-medical students major in one of the sciences, usually biology or chemistry, although this is by no means necessary. Of those students who do well in their pre-medical program at the College, between 80 and 90 percent are admitted to medical school.

Interdisciplinary Studies
A number of significant areas served by the Macalester curriculum do not coincide directly with single departments but rather span two or more. Special efforts have been made to develop programs which build upon the existing departmental offerings to provide the interdisciplinary breadth required by these fields of inquiry. Members of various departments have collaborated to plan the core or major programs described below. The special interdisciplinary courses which are offered as part of some of the programs (e.g. Humanities and Linguistics) are generally not restricted to students majoring in the program, but are more broadly available. It should be noted that a number of courses not associated with interdisciplinary programs are cross-listed in two or more departments and that some of these courses are team-taught by collaborating faculty members.

East Asian Studies
Jerry K. Fisher (Macalester Coordinator)

The purpose of this inter-college, interdepartmental major concentration is to enable interested five-college students to acquire a broad knowledge of China and Japan as major cultures and to provide a basic un-
derstanding of the language of one or both countries.

Program Planning
The key to a coherent East Asian Studies major for each individual is careful planning between the student and his or her adviser. Members of the five-college East Asian Studies Faculty Coordinating Committee may assist the student in selecting an appropriate adviser.

Major Concentration
A major concentration plan is constructed for each student with the advice and assistance of his or her adviser. A major plan normally consists of 10 courses distributed under one of the following general categories:

East Asian Culture: Two language courses including one year of Chinese or Japanese; two introductory history courses; four to six courses in cultural specialization and/or comparative studies; two or more independent study and/or seminar courses.

East Asian Language and Culture: At least four language courses (a two year concentration in either Chinese or Japanese is encouraged, however, one year of each language is acceptable); two introductory history courses; two to four courses in cultural specialization and/or comparative studies; and two or more independent study and/or seminar courses.

Courses
Language: The following courses will be available during the 1976-77 academic year, and are open to students from any of the five colleges without prior approval by the host institution:

<table>
<thead>
<tr>
<th>Course Title</th>
<th>College</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginning Chinese I</td>
<td>Hamline</td>
</tr>
<tr>
<td>Beginning Chinese II</td>
<td>Hamline</td>
</tr>
<tr>
<td>Beginning Japanese I</td>
<td>St. Catherine</td>
</tr>
<tr>
<td>Beginning Japanese II</td>
<td>St. Catherine</td>
</tr>
<tr>
<td>Introductory History</td>
<td></td>
</tr>
<tr>
<td>Modern China</td>
<td>Augsburg</td>
</tr>
<tr>
<td>Introduction to Japanese Civilization</td>
<td>Hamline</td>
</tr>
<tr>
<td>Introduction to Chinese Civilization</td>
<td>Hamline</td>
</tr>
<tr>
<td>Modern Japan</td>
<td>Macalester</td>
</tr>
<tr>
<td>Modern China</td>
<td>Macalester</td>
</tr>
<tr>
<td>East Asian Civilization</td>
<td>St. Catherine</td>
</tr>
<tr>
<td>Cultural Specialization and Comparative Studies</td>
<td></td>
</tr>
<tr>
<td>Oriental Art</td>
<td>Macalester</td>
</tr>
<tr>
<td>East Asia</td>
<td>Macalester</td>
</tr>
<tr>
<td>Imperialism in East Asia</td>
<td>Hamline/</td>
</tr>
<tr>
<td>Nationalism in Japan and China</td>
<td>Macalester</td>
</tr>
<tr>
<td>Modern China</td>
<td>St. Catherine</td>
</tr>
<tr>
<td>Intellectual History of China and Japan</td>
<td>Macalester</td>
</tr>
<tr>
<td>Chinese and Japanese Philosophy</td>
<td>Macalester</td>
</tr>
<tr>
<td>Government and Politics of East Asia</td>
<td>Hamline</td>
</tr>
<tr>
<td>Courses including East Asian area material:</td>
<td></td>
</tr>
<tr>
<td>Cultural Ecology and Colonialism in the Pacific</td>
<td>Macalester</td>
</tr>
<tr>
<td>Economic Development</td>
<td>Hamline</td>
</tr>
<tr>
<td>Literature of India, China, Japan</td>
<td>Hamline</td>
</tr>
<tr>
<td>Modern Non-Western World</td>
<td>Augsburg</td>
</tr>
<tr>
<td>Historical Evidence and Analysis</td>
<td>Hamline</td>
</tr>
<tr>
<td>Topics: International Politics</td>
<td>Augsburg</td>
</tr>
</tbody>
</table>
East Asian Studies
Environmental Studies

Western/Non-Western Politics Macalester
Third World Politics Macalester
Buddhism in India and South East Asia Macalester
Survey of Asian Religions Macalester
Social Change: East Asia Macalester

Note: In choosing cultural specialization and comparative studies courses, students are encouraged to be eclectic, to include both China and Japan; both ancient and modern periods. Students' adviser can assist in these decisions.

Independent Study/Seminar
One course should deal with basic topics in East Asian history and the other will be a choice mutually agreed upon with the student’s major adviser.

The purpose of these two courses is to provide knowledge of the major intellectual problems and research in the field, as well as be a capstone activity for senior students in the major.

Instructors
In addition to the language and independent study/seminar courses, students must take courses from at least two different instructors.

Study Abroad
The cooperative East Asian Studies major includes the opportunity to study in Hong Kong, Taiwan, and/or Japan. Since the arrangements change from year to year, students must consult their advisers.

Environmental Studies
David Southwick (Coordinator)

The goal of the interdepartmental major concentration in Environmental Studies is to provide students with the background they need for a broad but basic understanding of environmental processes and issues. The major includes a foundation in the physical and life sciences, and study of the ways in which individuals and societies react to and influence their environment. Thus the major concentration recognizes two directions to environmental study: a natural science focus (biology, chemistry, geography, geology and physics), and a social science focus (anthropology, economics, geography, political science and sociology). The objective of the program, then, is to develop in the student a basic competency and associated set of skills in an environmentally related traditional discipline representing one chosen focus of Environmental Studies, plus to allow for the student to acquire knowledge of the interplay of the other recognized focus. In conjunction with judiciously chosen supporting courses, the broadly-based program below will provide students with an adequate basis for further work in the environmental field or in more specialized disciplinary study.

Major Concentration
The interdepartmental major in Environmental Studies consists of 14 course credits. Four courses are selected from a short list of required and alternative introductory courses. A group of six courses (one course of which may be also one of the aforementioned four introductory courses) is selected from one of the nine primary contributing academic departments. Two or three supporting courses (the number depending on the circumstances described in 3.a. below)
Environmental Studies

are selected from the specified interdepartmental list. The final two courses are specific to Environmental Studies: an off-campus part-time junior year internship and a senior year seminar.

Details of the program are as follows:

1. Introductory courses (four)
   a. Required of all students: Biology 11, Principles; Geology 11, Physical; and
   b. Required of students with a natural science focus: Chemistry 11 or 13, General; Geography 26, Physical; or
   c. Required of students with a social science focus: Economics 11, Principles; Geography 11, Human.

2. Primary department specialization courses (five or six)
   a. Students are required to present an approved group of six courses in one of the following academic departments: anthropology, biology, chemistry, economics, geography, geology, physics, political science, or sociology. The six courses are to be selected with the consultation and approval of the adviser.
   b. Students selecting biology, chemistry, economics, geography or geology may use the respective introductory course taken as part of 1. above as one of the six courses in the primary course group.

3. Secondary supportive courses (two or three)
   a. Students who have selected for their primary course group one of the five departments listed in 2.b. above must take three courses from the list found in 3.e.; students taking their primary course group in anthropology, physics, political science or sociology must take only two courses from the list of 3.e.

b. One of the supportive courses must be in the alternative focus area than the primary one of the student.

c. No course may be counted more than once toward the total of 14 courses needed for the Environmental Studies major concentration.

d. Students may not include courses from their primary department specialization for secondary supportive course credit.

e. Secondary supportive courses are the following (note prerequisite requirements included with some courses as listed in the catalog):

   Anthropology
   11 Cultural
   60 Urban

   Biology
   40 Field Zoology
   41 Ecology
   65 Field Botany

   Chemistry
   11 or 13 General
   23 Analytical
   37 Organic

   Economics
   11 Principles
   51 Intermediate Micro Analysis
   58 Public Finance

   Geography
   11 Human
   26 Physical
   41 Urban
   55 Advanced Physical

   Geology
   22 Water Resources
   61 Geomorphology
   67 Economic
Environmental Studies

Physics
10 Physics of Sound
25 Introductory Modern
21 or 26 Introductory I/Principles I
22 or 27 Introductory II/Principles II

Political Science
11 Politics and Social Change
47 Intergovernmental Relations

20 Introduction Sociology
66 Urban Social Structures

Topics or Other Course
A topics or other course which can be shown to strengthen the student's major in environmental subject matter may be taken for supportive course credit with the approval of the adviser.

4. Environmental Studies courses (two)

a. Internship, taken during the junior year or first semester of the senior year. The student, under the direction of the adviser, will complete a part-time internship for one course credit. The internship with a government agency, public interest group or business should provide the student with an off-campus working experience which will permit the student to explore or develop an environmental interest or concern. It should be noted that under some circumstances (such as an appropriate internship not being available) and with the approval of the adviser, an off-campus independent research project may be substituted for the internship course.

b. Senior Seminar on Environmental Problems, taken in the senior year.

Recommended Courses
Because of the interdisciplinary nature of Environmental Studies and the College limit on the number of courses that can be required in any concentration plan, no prescribed curriculum can possibly include all that is useful or even essential for a student of the environment. Students who intend to pursue graduate work in any of the core disciplines or in Environmental Studies should at an early stage acquaint themselves with prospective graduate school expectations and are well advised to select their courses so that these expectations will be satisfied. Similarly, if employment in an environmental area is being considered upon graduation, courses again should be carefully selected, particularly with respect to ones which will strengthen the student's work application in the area of specifically identifiable skills. Skills and associated courses which should be emphasized by the student as the program is developed in Environmental Studies include: effective oral and written communication, graphic presentation, data analysis and understanding of administrative organization.

1. Several additional courses are strongly recommended for students pursuing the physical and biological sciences:

a. Chemistry 12, General; 34, Radiochemistry; 38, Organic
b. Geography 25, Cartography
d. Speech 11, Principles and Practice of Public Speaking
e. Other mathematics and science courses selected by the student and in consultation with his or her adviser.
2. Several additional courses are strongly recommended for students pursuing the social sciences:
   a. Economics 12, Advanced Principles
   b. Geography 25, Cartography
   c. Mathematics 14, Introductory Statistics (or other statistics course); 15, Introductory Computing; 19, Introductory Calculus
   d. Political Science 32, Public Administration; 37, Cross-National Policy; 40, Urban Decision-Making; 58, Administrative Law; 83, Administrative Behavior
   e. Speech 11, Principles and Practice of Public Speaking
   f. Psychology courses (selected individually with advice from the psychology department)
   g. Other social science courses selected by the student in consultation with his or her adviser.

3. Supplementary courses in philosophy, especially ethics and philosophy of science are recommended for all students in the concentration.

Implementation of the Current Program
Students filing their program for the major in Environmental Studies before the end of the Fall semester, 1976, may follow at their choice either the earlier or present major plan. All programs filed after Fall semester, 1976, must follow the plan described above.

88 Senior Seminar on Environmental Problems
A course for seniors in the Environmental Studies concentration focusing in detail on selected environmental topics. Students will use the knowledge and methods learned in other courses to analyze a particular problem or group of problems. This course will be team-taught and will attempt to bring together the perspectives of the natural sciences and the social sciences. The course will not satisfy distribution requirements in natural or social science. Prerequisite, senior standing and satisfactory progress in the Environmental Studies concentration.
Humanities

International Studies

Speech (Selected courses in rhetoric and theater)
Religion (Selected courses)
History (Selected courses)

Option B:
Foreign Language Core Concentration. Six courses in literature beyond the elementary courses in a foreign language normally excluding “conversation” courses.

Option C:
English Literature. Six courses in English literature (excluding English 18) chosen so as to make a meaningful pattern.

Senior Comprehensive Examinations
Those concentrating in humanities are required to take a final written/oral comprehensive examination at the end of their senior year.

18 Athens and Jerusalem: A Conflict of Cultures
(Same as Classics 18 and Religion 18)
Through a study of selected classical and biblical readings inquiry is made into distinctive features of two major sources of Western civilization. Lectures and discussion.

25 The Modern World – I
Classics of European art, philosophy and literature from the 17th and 18th centuries.

26 The Modern World – II
Classics of European literature and philosophy of the 19th century, with some attention to corollary movements in music and the arts.

27 The Modern World – III
Studies in the 20th century literature, arts and philosophy of Europe and the Americas.

50 Topics in the Humanities
For example: Eros and Thanatos: The love and death theme in selected modern works, including Mann’s Death in Venice, Camus’ The Plague, Pasternak’s Doctor Zhivago, Hemingway’s Farewell to Arms, Eliot’s Waste Land, and Faulkner’s Light in August.

56 The Medieval and Renaissance World
Classics of European theology, philosophy, and literature, with some attention to corollary movements in art and architecture.

68 Art and Ideas in French Culture
(Same as French 68) The course will study the idées maîtresses of French society from the medieval period through the 19th century in their cultural and historical settings (e.g. the cathedral schools, the salons, the cafés), and it will examine the relation of these ideas to the art, architecture and music of the various periods. Lectures and readings will be in English, with discussion sections and readings in French for French majors. No prerequisite.

96 Independent Study
An interdisciplinary project building on the core and supporting courses and culminating in a paper or presentation. Prerequisites, senior standing and permission.

International Studies

Paul Solon (Coordinator), Michael Rynkie-wich (Anthropology), Adolph Vandendorpe (Economics), Karl Sandberg (French), Gerald Pitzl (Geography), Otto Sorensen (German), Paul Solon (History), David White (Philosophy), Roger Brooks (Political Science), Maria Doleman (Spanish), John Butt (Religion), Alexander Guss (Slavics)

The 14-credit International Studies Program is divided into three major components: 1) a curricular portion providing the student...
International Studies

with an informational and methodological base for a career or for further study in international affairs; 2) an experiential portion providing the practical background essential to a full understanding of diverse cultures; and 3) a skills portion providing tools essential for international involvement.

Curricular Component
Each international studies major will core in one or more of the following departments: Anthropology, Economics, French, Geography, Germanic Languages and Literatures, History, Philosophy, Political Science, Religion, Slavic Languages and Literatures, or Spanish. These will be considered the "participating departments." A core generally consists of six courses.

The core will be supplemented by at least six additional courses from a list of courses approved by the International Programs Committee. These courses will be among the regular curricular offerings of the participating departments. The student will select courses from at least two different participating departments, neither of which can be the student's "core" department. This will ensure a broad sampling.

In addition, each student will select, in the course of his or her program, at least two interdisciplinary topical seminars. These will be intermediate or advanced seminars, taught jointly by faculty from at least two participating departments and joined by one or more Fellows of the World Press Institute as co-teachers when available. Seminars will bring to bear the perspectives of diverse experiences, theories and methodologies on specific problems of global or inter-cultural concern. The International Programs Committee will coordinate these seminar offerings, ensuring the participation of appropriate faculty, WPI Fellows and foreign students. At least one such seminar is offered each semester.

Experiential Component
Each student majoring in international studies is required to spend one semester (preferably in the junior year) on either an approved study abroad program or an approved international internship program.

Skills Component
Each student majoring in international studies is required to master certain skills relevant to the study of international affairs. Other skills may be strongly recommended for specific students. Each student will work out a goal attainment schedule with the adviser which will specify which skills will be acquired.

Required skills, for which specific courses may be recommended, include the following: a) Foreign language. Each student will demonstrate competence in at least one foreign language. This may be demonstrated by taking at least four semesters of a given foreign language with passing grades, or by passing an equivalency examination. b) Oral Communication in English. Each student is expected to be articulate and should have some experience with creative oral communication. c) Written Communication in English. Each student is expected to write concise, jargon-free technical reports and should have some exposure to creative writing. d) Bibliographic Skills. Each student is required to demonstrate an ability to discover basic sources of information and opinion.

Recommended skills, for which specific courses may be recommended, include the following: a) Data Analysis. Each student
International Studies
Latin-American Studies
Linguistics

should be able to analyze and present numerical information. Some students may want to acquire statistical and/or computer programming skills. b) Accounting. Each student should be able to prepare and criticize budgets. c) Administrative. Each student should be familiar with the workings of administrative organizations. d) Visual Communication. Each student should be competent in the use of photography and video means of communication and research. e) Cartography. Each student should be able to analyze spatial problems through cartography and airphoto interpretation as well as be able to present information with maps and to criticize other forms of graphic communication.

Latin-American Studies
Donald Fabian and Emily Rosenberg (Coordinators)

The Latin-American Studies Program is designed for students with regional interests in South and Central America who plan a career in governmental agencies, in journalism, in education abroad, or work in services to Latin-Americans under the auspices of private groups.

For further details, see either of the coordinators.

Linguistics
Richard Clark (Coordinator)

The purpose of the interdepartmental major concentration in linguistics, offered in cooperation with the other colleges of the five-college consortium, is to enable the student to gain a broad knowledge of the phenomenon of language and its relation to other disciplines, to acquire the methods and techniques used in studying it, and to relate his or her knowledge of theory and methodology to various practical problems involving language.

A linguistics concentration or individual courses thereof will therefore be useful and desirable for:

a. those who wish to go into foreign language teaching, including teaching English as a second language;
b. those who plan to go into bilingual education;
c. those who wish to take advanced work in linguistics;
d. those in elementary or secondary education who plan to work in the teaching of reading, remedial reading, composition or in special education;
e. those interested in the linguistic aspects of psychology, literature, anthropology, sociology or speech;
f. those who wish a general acquaintance with the phenomenon of language.

Requirements
The linguistics concentration shall consist of 12 courses distributed according to the following categories:


Three courses to be selected from the following, or from topics courses or independents in this area:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Linguistics 25</td>
<td>Introduction to Linguistics (required of all linguistics majors)</td>
</tr>
<tr>
<td>Linguistics 27</td>
<td>Linguistics and Language Problems in Education</td>
</tr>
<tr>
<td>Linguistics 28</td>
<td>Phonology (Same as Speech 21, Voice and Diction)</td>
</tr>
</tbody>
</table>
Linguistics

2. Sociolinguistics (the study of the social function and context of language: language and culture, language loyalties and ethnicity, language and social processes). Three courses from among the following, or from topics or seminar courses in these areas, or from related courses in English, speech and other areas such as studies of style or rhetoric dealing with these matters. Courses not specifically listed must be approved by the Linguistics Coordinating Committee.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Linguistics 27</td>
<td>Linguistics and Language Problems in Education. (If Linguistics 27 is elected in this group, it cannot be elected in Group I)</td>
</tr>
<tr>
<td>Linguistics 29</td>
<td>Speech and Language in Human Behavior (Same as Speech 37)</td>
</tr>
<tr>
<td>Linguistics 30</td>
<td>Language and Culture: Field Techniques (Same as Anthropology 30, Methods in Anthropological Research)</td>
</tr>
<tr>
<td>Linguistics 88</td>
<td>Language and Culture Theory (Same as Anthropology 88, Culture and Cognition)</td>
</tr>
</tbody>
</table>

3. History and structure of individual languages. Three courses in either of the two following groups or in topics or seminar courses in these areas:

<table>
<thead>
<tr>
<th>Group I</th>
<th>Three courses in three different languages not one's own, e.g. Chinese 11 and 12; French 11 and 12; German 11 and 12; Japanese 11 and 12; Russian 11 and 12; Serbo-Croatian 11 and 12; or a combination of two courses in one of the above languages and one in another.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group II</td>
<td>Two courses in two different languages not one's own plus one of the following: Spanish 60, Introduction to Romance Linguistics, or German 60, Introduction to Germanic Philology, or Russian 90, History of the Russian Language, or English 91, The English Language</td>
</tr>
</tbody>
</table>

4. In addition the student will elect three appropriate supporting courses, as approved by the Linguistics Coordinating Committee, chosen from those mentioned above or from the following areas: Anthropology, Classics, Education, English, French, German, History, Journalism, Philosophy, Political Science, Psychology, Religion, Russian, Sociology, Spanish, Speech and Theatre.

5. Linguistics 25 will meet the Humanities distribution requirement; all other cross-listed courses will meet the distribution requirement of the department under which they appear, e.g. Linguistics 30 will meet the social studies divisional requirement.

Language Competency Courses
In addition to the six languages in which Macalester offers a major (French, German, Spanish, Russian, Latin and Greek) instruction but not a major is offered in the follow-
Linguistics

ing: Danish (German department), Nether­
dlandic (German department), Portuguese
(Spanish department), Serbo-Croatian (De­
partment of Slavic Languages and Litera­
tures), Hebrew (according to student re­
quests), English as a second language
(according to student requests).

Language Theory Courses

25 Introduction to Linguistics
A general orientation to the fields of inter­
est and activity open to linguists and the
kinds of questions they deal with. The
general techniques of the structural linguist
as specifically exemplified in the study of
morphology, phonology and syntax of
English.

28 Phonology
(Same as Speech 21, Voice and Diction)
A study of the anatomy and physiological
processes of voice production and articula­
tion. Introduction to the International
Phonetic Alphabet and its application to
various levels of English pronunciation;
introduction to elementary theory of
speech correction; individualized programs
of self-analysis and self-improvement.

29 Speech and Language in Human
Behavior
(Same as Speech 36) A linguistic-semantic
study of speech and language in our culture;
importance of language in perception, cate­
gorizing and thinking. Exercises and obser­
vational studies in non-verbal communica­
tion and inter-cultural communication are
also explored.

30 Language and Culture:
Field Techniques
(Same as Anthropology 30, Methods in An­
thropological Research) An introduction to
ethnographic field methods learned in the
context of individually run student field
projects. Focuses on the anthropologist-
informant field relationship and the discov­
ery of cultural knowledge through partici­
pant observation and ethnosemantic
techniques.

50 Topics: Intercultural Communication
(Same as Speech 50) The study of the com­
munication patterns and problems between
different cultural, sub-cultural, racial and
ethnic groups. Special attention is paid to
the clash of values, norms and expectations
as they are expressed in linguistic and non­
verbal behavior. Guest lectures from and
discussion with individuals representing
diverse cultural backgrounds will be part of
the course.

53 Linguistics and Language Problems
in Education
A survey and analysis of language related
problems encountered in education, with
special emphasis on the contribution of
linguistics to the teaching of reading and
composition and to the education of non-
English speaking minorities in the U.S.
Study of the questions of language and
cultural identity, language and pedagogical
problems, and specific programs of bilingual
education. Satisfies humanities divisional
requirement.

55 Linguistics and English as a Second
Language
Based on theory from structural linguistics,
psycholinguistics and sociolinguistics, this
course describes the strategies and tech­
niques for teaching English to non-native
learners, including pronunciation, conversa­
tion, structure, reading and composition. It
includes a practicum of a minimum of 20 hours of supervised teaching or tutoring. Prerequisite, Linguistics 25 or permission of the instructor. Linguistics 53 is recommended; does not meet any divisional requirements.

60 Introduction to Germanic Philology
(Same as German 60) Fundamentals of comparative linguistics, phonetic and phonemic systems, the history of German from its Indo-European origins to the rise of New High German and German dialects. Prerequisite, one German course numbered above 40 or permission of the instructor.

61 Introduction to Romance Linguistics
The historical development of the Romance languages from Latin; the linguistic techniques used in the scientific description of these languages, and the role and techniques of applied linguistics in a teaching of Romance languages. Prerequisite, some background in a Romance language or Latin or permission of the instructor.

68 Philosophy of Language
(Same as Philosophy 68) Examination of classical and contemporary linguistic theories and study of special problems concerning reference, meaning and the logical or syntactical structures of language.

English as a Second Language
Karl Sandberg (Director)

ESL 12 Development of Reading Skills in English
This course is intended for students who do not yet have the reading proficiency to carry a full academic load in subject matter courses. It is a flexible, individualized course in which each student starts at his or her present level and builds reading speed, comprehension and vocabulary range with the goal of attaining approximately the 12th grade reading level.

ESL 15 Intermediate Conversation and Aural Comprehension
A course intended to bring students to the level where they can converse easily and understandably in English, and understand classroom lectures, and can participate in the give-and-take of seminars. Attention is given to problems of pronunciation. Regular language laboratory attendance is required as part of the course. Placement in the course is determined by standardized examinations.

ESL 18 Problems of Composition
A study and practice of the structural and organizational patterns of English intended to bring the student to the point of being able to do the kind of academic writing required on the college level. The course is designed for students beyond the intermediate level, and placement in the course is determined by an examination taken at the beginning of the semester. The course gives abundant practice in notetaking and in writing paragraphs, essays and papers.

The above ESL courses will satisfy the Humanities divisional requirement.

Russian Area Studies

Robert Bunting, Dorothy Dodge, Alexander Guss, Peter Weisensel (Coordinating Committee)

The aim of the Russian Area Studies Program is to give students an opportunity for a broader understanding of Russian life, people, government, history, economics, geography, language and literature. The Russian Area Program is intended for stu-
Russian Area Studies
Urban Studies

dents interested in teaching at the college level, engaging in further research, or seeking careers in government service, journalism and similar fields. It will be an excellent preparation for graduate study in this area and an aid to students interested in international relations.

Major Concentration
A major concentration in the Russian Area Studies Program shall consist of a minimum of 11 courses, chosen from those listed below.

1. Required Courses
   a. Russian Language—The ability to read Russian is a requirement for graduation with a Russian area major, with a minimum of two courses beyond the elementary level. 
      Russian 31: Intermediate Russian (Macalester) or Russian 33: (Hamline) and Russian 32: Intermediate Russian (Macalester)
   b. History 74: Czarist Russia and History 75: Twentieth Century Russia or equivalent courses offered at the College of St. Catherine.
   c. Political Science 44: Comparative Politics and Political Science 13: Western and Non-Western Political Ideas or equivalent courses offered at St. Thomas, Hamline and Augsburg.
   f. Geography 40: Europe including U.S.S.R.

2. Additional Courses Strongly Recommended:
   a. Area Study of Russia/the Soviet Union
   b. Senior Seminars in the Soviet Area
   c. Russian Folklore
   d. Culture and Civilization
   e. News Reporting and Writing

Core Concentration
A core concentration in the Russian Area Studies Program will consist of nine courses.
1. Russian 31 and 32: Intermediate Russian
2. Seven courses chosen from those described above.

Urban Studies

Dorothy Dodge, Karl Egge, Judith Erickson, David Lanegran, Jeffrey Nash (Coordinating Committee)

The Urban Studies major is directed toward the student who is interested in urbanization and the application of various disciplines' theoretical frames to the problems of city life. The program combines a sound theoretical and experiential base complemented by a broad range of technical competencies. The 14-course Urban Studies major is divided into two parts: a curricular portion which will provide the student with a theoretical and methodological base from which to study or to manage urban phenomena; an experiential portion which will provide the student first-hand contact with aspects of the city new to him or her. A third, additional skills, portion will provide the student with tools which will enable him or her to make an effective contribution to research or management. See brochure for five-college offerings in Urban Studies.
Urban Studies

Major Concentration
A major concentration in urban studies will consist of 14 courses distributed in the following manner:

1. Curriculum
   a. Each urban studies major will "core" in either economics, geography, political science or sociology (6 courses).
   b. This core will be supplemented by at least three of the starred courses from the following list, excluding courses taken as part of the core (3 courses). Students will be encouraged to take other courses on the list.

   **Economics**
   22 Basic Financial Accounting*
   23 Basic Managerial Accounting
   56 Capital Markets
   57 Theory of Finance*
   58 Public Finance

   **Geography**
   41 Urban Geography*
   56 Urban Field Geography
   65 Historical Geography*

   **Political Science**
   37 Cross-National Urban Policy
   40 Urban Decision-Making
   47 Intergovernmental Relations
   74 Federal Social Policy
   83 Administrative Behavior*

   **Anthropology**
   60 Urban Anthropology
   62 Urban Research

   **Sociology**
   66 Urban Social Structure*
   68 Changing Community
   75 Collective Behavior in a Mass Society
   78 Social Stratification*

   c. **Interdisciplinary Urban Studies Seminar**—All students will take the urban studies seminar. This is a senior level, team-taught course which will normally last for two semesters. Students will bring their particular expertise and experience to a specific research problem in the Twin Cities.

2. Experiential Aspect—(A maximum of 3 course credits to be applied to the major; these course may be taken on an S/D/NC basis.) All urban studies students will be required to serve a part-time internship for at least one term in government, a social agency or private business firm. Participation in the ACM Chicago Urban Affairs program or the Minneapolis Urban Study Term may be substituted for the internship. Students will be encouraged to complete this as part of the program during their junior year.

3. Technical Competency—Urban studies majors should attempt to master several of the following communication and technical skills. With their advisers they will develop goal attainment schedules for each of the required skills. All students will not be equally proficient in all skills.
   a. **Required Skills**
      (1) Oral Communication—Students will be expected to be articulate and should have some experience with creative oral communication. These skills may be obtained through Macalester's speech communication program.
      (2) Written Communication—All students will be expected to write concise, jargon-free technical reports and should have some exposure to creative writing. These skills may be obtained from journalism and English courses at Macalester or the College of St. Thomas.
Urban Studies

Freshman Seminars

(3) Data Analysis—All students will be expected to be able to analyze and present numerical information. They should also understand the elements of computer programming. These skills may be obtained from courses at Macalester and the College of St. Thomas. A quantitative methods course should be taken in the department in which the student cores.

b. Recommended Skills

(1) Accounting—Students should be able to prepare and criticize budgets. This skill can be obtained in accounting courses at Macalester and St. Thomas.

(2) Administrative—Students should be familiar with the workings of administrative organizations. These skills may be obtained in political science classes, in the Minneapolis Urban Studies Term and a course in the speech department of Macalester.

(3) Bibliographic—Students should be familiar with the basic sources of information and opinion. These skills can be obtained in a special bibliography course at Macalester or the College of St. Catherine.

(4) Visual Communication—Students should be competent in the use of photography and video means of communication and research. These skills can be developed in co-curricular activities or through mini-courses in Macalester’s audio-visual department or elsewhere.

(5) Cartography—Students should be able to analyze spatial problems through cartography and airphoto interpretation as well as be able to present information with maps and criticize other forms of graphic communication. These skills may be obtained in Macalester’s cartography course.

Freshman Seminars

Freshman Seminars offer the opportunity for first-year students to work closely with a faculty member on a subject of mutual interest in order to develop a genuine sense of intellectual and social community. The Seminar instructor also serves as academic adviser to the enrolled students. A Freshman Seminar counts as an elective course. Listed below are the Freshman Seminars offered during 1976-77.

1. Prophets of Doom
2. Paradigms of Consciousness
3. Non-Western Paradigms of Consciousness
4. The Study of Lives
5. Power: An Interdisciplinary Analysis
6. New Religions
7. Biographies in Science and Religion
8. Essay in Word and Picture
9. Futurism and Decision Making
10. Analyzing Philosophical Problems
11. Education, Liberty and the American System: Perspectives on Theory, Practice and Change
12. Mexico, the Real and the Stereotype
13. The Romantic Rebellion in France
14. The Beast Within
15. Rebel With a Cause: A Study of Anti-establishment Youth of the 1960s
Board of Trustees

Officers
Donald E. Garretson, Chairman
John M. Mason* (B.A. '60), Vice Chairman
Cargill MacMillan, Jr., Vice Chairman
Mrs. Alpha Richardson, Vice Chairwoman
Sally E. Howard* (B.A. '58), Secretary
Carl B. Drake, Jr., Treasurer

Trustees
H. Brewster Atwater, Wayzata, Minn.
Sidney Barrows, St. Paul
David A. Bell* (B.A. '65), Minneapolis
Charles S. Bellows, Wayzata, Minn.
Josephine B. (Mrs. Thomas K.) Carpenter, Wayzata, Minn.
John B. Davis, Jr., ex officio, President, Macalester College
George D. Dayton II, Wayzata, Minn., former chairman
Carl B. Drake, Jr., St. Paul
W. John Driscoll, St. Paul, immediate past chairman
Donald E. Garretson, St. Paul
Mary S. (Mrs. Richard P.) Hoffmann* (B.A. '53), St. Paul
Sally E. Howard* (B.A. '58), Minneapolis
Barbara (Mrs. Herbert) Klemme, Stillwater, Minn.
Cargill MacMillan, Jr., Wayzata, Minn.
George A. Mairs III (B.A. '50), St. Paul
Hon. David E. Marsden (B.A. '48), St. Paul
John M. Mason* (B.A. '60), Minneapolis
Rev. Dr. Donald M. Meisel (B.A. '45; D.D. '68), Minneapolis
Joseph E. Murphy, Jr., Minneapolis
David S. Nicholson, White Bear Lake, Minn.
David A. Ranheim* (B.A. '64), Minneapolis
Alpha (Mrs. Ray) Richardson, Milwaukee, Wis.
Richard L. Schall (B.A. '51), Edina, Minn.
Nancy Slaughter* (B.A. '58), Minneapolis
John M. Warder, Minneapolis

Trustees-at-Large
A. L. Cole (LL.D.'74), Greenwich, Conn.
Frederick L. Deming, Minneapolis, former chairman
John S. Holl, St. Paul
Dr. Harry N. Huntzicker (B.A. '27), Evanston, Ill.
Dr. Stanley J. Idzerda, Ithaca, N.Y.
George P. Leonard (B.A. '27, LL.D.'75), Stinson Beach, Calif.
Dr. Harvey M. Rice (L.H.D.'68), Webster, Wis.
Mary (Mrs. Loring) Staples, Excelsior, Minn.

Trustees Emeriti
John C. Benson, Minneapolis
Warren E. Burger (LL.D.'53), Washington, D.C.
Geraldine (Mrs. Leonard G.) Carpenter, Crystal Bay, Minn.
Paul H. Davis, Carmel, Calif.
Margaret (Mrs. Walter B.) Driscoll (Litt.D.'48), Santa Fe, N.M.
Edwin S. Elwell, Minneapolis
Benjamin G. Griggs (L.H.D.'76), St. Paul
A. B. Jackson (LL.D.'72), Stillwater, Minn., former chairman
Helen (Mrs. Carl W.) Jones, Minneapolis
Dr. Arnold H. Lowe (LL.D.'49), Tuscon, Ariz., former chairman
George A. Mairs, Jr., St. Paul
Oakley R. Tripp (B.A. '12, L.H.D. '76), Minneapolis
Rev. Dr. Irving A. West (L.H.D. '52), St. Paul
F. K. Weyerhaeuser, St. Paul
David J. Winton, Wayzata, Minn., former chairman

Earl T. Winget, Jr., Edina, Minn.
E. W. Ziebarth, St. Paul
*Nominated by ballot of alumni.
Officers of the College
Administrative Offices and Departments

**Officers of the College**

President
Vice President for Academic Affairs
Vice President for Finance
Dean of Students
Vice President for Development and Alumni Affairs

**Administrative Offices and Departments***

**Academic Affairs**
Staff Associate

**Admissions**
Director
Assistant Director
Admissions Officer
Admissions Officer

**Associated Colleges of the Twin Cities**
Executive Director
Assistant Executive Director

**Athletic Programs**
Director of Intercollegiate
Director of Intramural

**Career Planning and Placement**
Director (Associate Dean of Students)

**Chaplain**
Chaplain

**Community Involvement Programs**
Coordinator
Coordinator

**Comptroller**
Comptroller
Bursar
Chief Accountant
Loan Officer

John Linnell, B.A., M.A., Ph.D.
Earl W. Bowman, Jr., B.A. ('50), M.Ed. ('71)
Alexander G. Hill, B.A. ('57)

Dorothy Grimmell

Mary Ackerman Lundblad, B.A. ('70)
Carol Stack, B.A. ('74)
Deborah Dana, B.A.
Craig Waldron, B.A. ('75)

Andrew E. Helmich, B.A., B.D., M.A., Ph.D.
Mary Rose Geisheker, B.A., M.A., Ph.D.

Ralph J. Lundeen, B.S., M.Ed. (Men)
Patricia Wiesner, B.S., M.A. (Women)
To be designated

Sue Lund, B.A., M.A.

To be designated

Helen Drotning-Miller
To be designated

John T. Logan, B.B.A., C.P.A.
Lewis A. Dohman, B.A.
Douglas Arnold, B.A.
Dorothy Nelson
Administrative Offices and Departments

Computer Services
Director
Bruce L. Gaarder

Counseling and Minority Programs
Director
James L. Haynes, B.S., M.S.
Coordinator of Counseling and
Academic Advising
Thaddeus W. Wilderson, B.S., M.Ed.
Educational Skills Counselor
Charles M. Norman, B.A.
Study Skills Counselor
Clyde R. Weaver, B.A.
Counselor
Janice Dolejsi, B.S., M.S.
Coordinator of Black Students Programs
Mary Sheppard, B.A.
Coordinator of Indian Program
Ronald McKinley, B.A.
Indian Student Adviser
Percilla Paulson, B.A.
Coordinator of Mexican-American
Program
Maximillian H. Von Rabenau, B.A.
Coordinator of Puerto Rican Program
Michael O'Reilly, B.A.
Director of Upward Bound
Alfreda Garibaldi, B.A.

Development and Alumni Affairs
Associate Director of Development
James Young, B.A.
Assistant Director of Development
Mary M. Hill, B.A.
for Grants
Margaret L. Day, B.A. ('35)
Assistant Director of Development
Sandra Hoffman, B.A. ('71)
for Donor Relations
Barbara H. Clark, B.A. ('60)
Associate Director of Alumni Affairs
Evelyn Cottle, B.A.
Assistant Director of Alumni Affairs
Linda Gebhard, B.A.
Director of Publications

Financial Aid
Director
Ruthena Fink, B.A.

Health Services
Director
Clarence E. Henke, M.D.
College Physician
Daniel Gaither, M.D.
College Physician (for athletics)
Patricia Utecht, R.N.
College Nurse

High Winds
High Winds and Finance Officer
Alfred K. Scharlemann

International Center
Director
David B. Sanford, B.A., M.A., Ph.D.
Assistant to Director
Janice Dickinson, B.A. ('64)
Foreign Student Adviser
Sondra Decker, B.A. ('71)
Administrative Offices and Departments

Library
Director
Associate Director and Reference Librarian
Head of Technical Services
Head of Circulation
Cataloger

Director
Associate Director

Physical Plant
Director
Chief Engineer
Facilities Engineer
Chief Safety Officer

Residence Halls
Acting Director of Student Housing Programs
Dayton-Kirk Halls-Stadium

Residence Hall Director
Doty-Turck Halls

Residence Hall Director
Bigelow-Wallace Halls
Residence Hall Director, Dupre Hall

Student Academic Records
Registrar and Director

World Press Institute
Executive Director
Program Director
Assistant to Director

Daniel J. Gore, B.A., M.A., M.S.
Jean K. Archibald, B.S.
Marymina Stenger, B.A.
Pam Cameron, B.A., M.A.
Ruth Newcomb, B.A. ('38)
Duane R. Elvin, B.A.
Dorothy M. Stanton
James D. Rognlie
Dennis M. Dasovic
Simon Asuncion, B.S.E.E., B.S.M.E.
Richard Barrett
Betty Krohnberg, B.A., M.A.
Thomas Gladitsch, B.S.
Amy Yeoman, B.S., M.S.
Howard Barnes, B.A. ('70)
Laurie Davis, B.A.
Anne Powell, B.A. ('71)
C. Theodore Miller, B.A.
Terrance Randolph, B.A.
Janice Dickinson, B.A. ('64)

* Appointed on or before July 1, 1976.
Presidents
Professors Emeriti

Presidents
Rev. Edward Duffield Neill,* D.D., 1874-1884
Rev. Thomas A. McCurdy,* D.D., 1884-1890
Rev. David James Burrell,* D.D. 1890-1891
Rev. Adam Weir Ringland,* D.D., 1892-1894
James Wallace,* Ph.D., LL.D., D.D., 1894-1906
Thomas Morey Hodgman,* LL.D., 1907-1917
Rev. Elmer Allen Bess,* D.D., 1918-1923
John Carey Acheson,* A.M., LL.D., 1924-1937
John B. Davis, Jr., B.A., M.Ed., D.Ed., 1975-

*Deceased

Professors Emeriti
(Dates in parenthesis indicate years of first appointment at and official retirement from Macalester College.)

John Maxwell Adams
Chaplain, Professor of Religion (1947-67); B.A., Wabash College, 1923; B.D., McCormick Theological Seminary, 1926; D.D., Alfred University, 1940; D.D., Macalester College, 1968.

Yahya Armajani
James Wallace Professor of History (1946-74); B.A., College of Emporia, 1930; Th.B., Princeton Seminary, 1933;

M.A., Princeton University, 1933; Ph.D., Princeton University, 1939; D.H.L., Macalester College, 1975.

A. Phillips Beedon
Director of Alumni Affairs; Associate Professor of Journalism (1933-71); B.A., Macalester College, 1928; M.A., University of Minnesota, 1930.

Paul McCoy Berry
Professor of Sociology (1946-74); A.B., Pasadena College, 1931; M.A., College of Pacific, 1932; Ph.D., University of Southern California, 1960.

Anne Helene Blegen
Associate Professor of French (1946-65); B.A., University of Minnesota, 1921; M.A., University of Minnesota, 1930.

Raymond Jay Bradley
Professor of Education (1932-59); B.S., Cornell College, 1912; Ph.D., University of Minnesota, 1929.

Ivan Charles Burg
Assistant Professor of Journalism (1936-71); B.A., Macalester College, 1934.

J. Donald Butler
James Wallace Professor of Religion (1961-72); A.B., University of Omaha, 1929; M.R.E., Biblical Seminary in New York, 1933; Ph.D., New York University, 1937.

Donald N. Ferguson
Professor of Music (1950-66); B.A., University of Minnesota, 1904; M.A., University of Minnesota 1922.

Lucius Garvin
Executive Vice President and Provost; Professor of Philosophy (1961-71); A.B.,
Brown University, 1928; A.M., Brown University, 1929; Ph.D., Brown University, 1933; L.H.D., Macalester College, 1971.

Waldo S. Glock
Professor of Geology (1948-66); B.A., State University of Iowa, 1920; Ph.D., Yale University, 1925.

Russell Byron Hastings
Professor of Physics (1929-69); B.A., Clark University, 1924; M.A., Clark University, 1925; D.Sc., Macalester College, 1976.

Thomas English Hill
Elizabeth Sarah Bloedel Professor of Philosophy (1946-74); A.B., Davidson College, 1929; B.D., Union Theological Seminary, 1932; M.A., University of Richmond, 1934; Ph.D., University of Edinburgh, 1937; D.H.L., Macalester College, 1975.

Kenneth Leeds Holmes
Professor of History (1925-61); B.A., Yale University, 1917; M.A., University of Louisville, 1925; L.H.D., Macalester College, 1973.

Hildegard Binder Johnson
Professor of Geography (1947-75); M.A., University of Berlin, 1933; Ph.D., University of Berlin, 1934.

A. Elizabeth Leinbach
Associate Professor of Religious Education (1948-66); B.S., University of Minnesota, 1926; M.A., Columbia University, 1928.

Royal Archibald Moore
Assistant Professor of History (1941-59);


Mary Gwen Owen
Professor of Speech and Drama (1928-68); B.A., Macalester College, 1923; M.A., University of Minnesota, 1936; L.H.D., Macalester College, 1972.

John Howe Scott
Professor of Chemistry (1941-76); A.B., Clark University, 1930; M.S., State University of Iowa, 1931; Ph.D., State University of Iowa, 1933.

Chester Hines Shiflett
Professor of Chemistry (1929-66); B.A., Kingfisher College, 1921; M.A., Clark University, 1923; Ph.D., University of Minnesota, 1933; D.Sc., Macalester College, 1976.

William Alva Swain
Professor of Sociology (1948-76); B.A., University of Minnesota, 1946; M.A., University of Minnesota, 1952.

Hugo W. Thompson
Professor of Philosophy (1943-68); B.A., University of Minnesota, 1923; Ph.D., Yale University, 1935; D.H.L., Macalester College, 1976.

William Lawrence Thompson
Research Associate Professor of English Literature (1950-75); B.A., University of Maine, 1934; M.A., University of Maine, 1936; Ph.D., Stanford University, 1946.

Arthur R. Upgren
F. R. Bigelow Professor of Economics (1957-65); B.A., University of Wisconsin, 1920; Ph.D., University of Minnesota, 1937.
Professors Emeriti
Staff Emeriti
Faculty

Otto Theodore Walter
Professor of Biology (1922-63); B.A., State University of Iowa, 1916; M.A., 1917; Ph.D., 1923; D.Sc., Macalester College, 1975.

Forrest Albert Young
Professor of Economics (1929-65); B.S., Monmouth College, 1922; M.A., University of Chicago, 1926; Ph.D., State University of Iowa, 1938; D.H.L., Macalester College, 1975.

Staff Emeriti
Dorothy Jacobson
College Nurse (1946-74); R.N., University of Minnesota.

William H. A. Watson
College Physician (1948-73); B.A., Macalester College, 1942; M.D., University of Minnesota, 1947.

Faculty
Following is the Macalester College faculty as of May 1, 1976.
(Date in parentheses indicates year of first appointment at Macalester College.)

Marc R. Anderberg
Instructor in Political Science (1976); B.A., University of Missouri, 1971; M.A., University of Iowa, 1973.

Evelyn Antonsen Albinson
Professor of German (1947); B.A., University of Minnesota, 1941; M.A., University of Minnesota, 1944; Ph.D., University of Minnesota, 1967.

Jean K. Archibald
Adjunct Associate Professor (1966); B.S., Simmons College, 1939.

Paul J. Aslanian
Vice President for Finance; Associate Professor of Economics (1967); B.A., University of Washington, 1963; M.B.A., University of Washington, 1967; C.P.A., State of Washington, 1968.

John C. Bachman
Professor of Physical Education (1967); B.S., Springfield College, 1950; M.S., Springfield College, 1951; Ed.D., University of California, Berkeley, 1960.

Joel H. Baer
Assistant Professor of English (1966); A.B., University College (NYU), 1960; M.A., Princeton University, 1965; Ph.D., Princeton University, 1969.

Duncan Hall Baird
Associate Professor of Political Science (1961); B.A., Yale University, 1939; LL.B., University of Michigan, 1942;
Faculty

M.A., University of Minnesota, 1960; Ph.D., University of Minnesota, 1962.

John Bernstein
Associate Professor of English (1967); A.B., Haverford College, 1957; Ph.D., University of Pennsylvania, 1961.

Donald Betts
Professor of Music (1959); M.M., Indiana University, 1959.

Roger Kellogg Blakely
Professor of English (1946); B.A., Macalester College, 1943; M.A., University of Minnesota, 1949.

Douglas Bolstorff
Associate Professor of Physical Education (1959); B.S., University of Minnesota, 1957; B.S., University of Minnesota, 1959; M.A., University of Minnesota, 1966.

Earl W. Bowman, Jr.
Dean of Students; Lecturer in Education (1969); B.A., Macalester College, 1950; M.Ed., Macalester College, 1971.

C. Murray Braden
Professor of Mathematics (1956); B.S., Northwestern University, 1939; M.S., University of Minnesota, 1950; Ph.D., University of Minnesota, 1957.

Sheila L. Brewer
Instructor in Physical Education (1967); B.S., Wisconsin State University, 1960; M.S., University of Oregon, 1966.

Edward Brooks, Jr.
Associate Professor of Classics (1964); A.B., Harvard University, 1944; M.A., University of Minnesota, 1962; Ph.D., University of Minnesota, 1967.

Roger Alan Brooks
Assistant Professor of Political Science (1971); B.A., University of Michigan, 1966; M.A., Michigan State University, 1967; Ph.D., Michigan State University, 1973.

Robert Logan Bunting
F. R. Bigelow Professor of Economics (1969); M.A., University of Chicago, 1948; Ph.D., University of Chicago, 1958.

John W. Butt

Anthony Caponi
Professor of Art (1949); B.S., University of Minnesota, 1948; M.Ed., University of Minnesota, 1949.

Chris C. Cavender
Assistant Professor of Education and History (1974); B.S., St. Cloud State College, 1964; M.A., University of Minnesota, 1971; Ph.D., University of Minnesota, 1974.

Donald Dennis Celender
Edith M. Kelso Associate Professor of Art History (1964); B.F.A., Carnegie Institute of Technology, 1956; M.Ed., University of Pittsburgh, 1959; Ph.D., University of Pittsburgh, 1964.

Richard Coleman Clark
Professor of German (1968); B.A., Temple University, 1942; M.A., University of Pennsylvania, 1949; Ph.D., University of Pennsylvania, 1954.
Faculty

Gerald Vernon Dahling
Assistant Professor of Biology (1974); B.S., Winona State College, 1968; M.S., University of Minnesota, 1970; Ph.D., Harvard University, 1974.

Robert Jay Dassett, Jr.
Associate Professor of Spanish (1947); B.A., University of Minnesota, 1939; B.S., University of Minnesota, 1942; M.A., University of Minnesota, 1953.

Richard Bruce Dierenfield
Professor of Education (1951); B.A., Macalester College, 1948; M.Ed., Macalester College, 1951; Ed.D., University of Colorado, 1958.

Dorothy Dodge
James Wallace Professor of Political Science (1955); B.A., University of Minnesota, 1949; M.A., University of Minnesota, 1950; Ph.D., University of Minnesota, 1955.

Maria Elena Doleman

William P. Donovan
Professor of Classics (1966); A.B., Washington University, 1951; M.A., Washington University, 1952; Ph.D., University of Cincinnati, 1961.

Earl Doomes
Associate Professor of Chemistry (1969); B.S., Southern University, 1964; Ph.D., University of Nebraska, 1968.

R. Ellis Dye
Associate Professor of German (1966); B.A., University of Utah, 1960; M.A., Rutgers University, 1963; Ph.D., Rutgers University, 1966.

Karl Albert Egge
Associate Professor of Economics (1970); B.A., University of Montana, 1965; M.A., Ohio State University, 1967; Ph.D., Ohio State University, 1973.

Lincoln G. Ekman
Associate Professor of Education (1962); B.E.E.-ASTP, New York University, 1944; B.E.E., University of Minnesota, 1947; LL.B., Minneapolis College of Law, 1951; B.S., University of Minnesota, 1956; Ph.D., University of Minnesota, 1966.

Mahmoud El-Kati

Carol J. Emanuelson
Lecturer in Art and Education (1970); B.A., Macalester College, 1968.

Judith Erickson
Assistant Professor of Sociology (1970); A.B., Wheaton College, 1955; M.A., University of Minnesota, 1968; Ph.D., University of Minnesota, 1974.

Donald LeRoy Fabian
Professor of Spanish (1965); B.A., University of Chicago, 1941; M.A., University of Chicago, 1941; Ph.D., University of Chicago, 1950.

Thomas Llewellyn Faix
Associate Professor of Education (1965); B.A., Princeton University, 1947; M.Ed., Harvard University, 1959; Ph.D., University of Wisconsin, 1964.

Leslie Farber
Instructor in Economics (1972); B.B.A., City College of New York, 1968.
<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Years</th>
<th>Education Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Martin Gunderson</td>
<td>Assistant Professor of Philosophy (1973)</td>
<td>1973</td>
<td>B.A., Macalester College, 1968; M.A., Cornell University, 1971; Ph.D., Cornell University, 1972.</td>
</tr>
<tr>
<td>Alexander Guss</td>
<td>Associate Professor of Russian (1963)</td>
<td>1963</td>
<td>B.S., Sophia University, 1956; M.S., Georgetown University, 1960.</td>
</tr>
<tr>
<td>Douglas P. Hatfield</td>
<td>Professor of Dramatic Arts (1955)</td>
<td>1955</td>
<td>B.S., University of Minnesota, 1951; M.A., University of Minnesota, 1961; Ph.D., University of Minnesota, 1969.</td>
</tr>
<tr>
<td>Eddie P. Hill</td>
<td>Professor of Biology (1964)</td>
<td>1964</td>
<td>B.A., Nebraska State Teachers College, 1952; M.A., Colorado State College, 1957; Ph.D., University of Nebraska, 1962.</td>
</tr>
<tr>
<td>H. Arnold Holtz</td>
<td>Professor of Education (1946)</td>
<td>1946</td>
<td>B.S., Wisconsin State, 1940; M.A., University of Minnesota, 1944; Ph.D., University of Minnesota, 1959.</td>
</tr>
</tbody>
</table>
Faculty

David C. Itzkowitz
Assistant Professor of History (1974); B.A., Amherst College, 1965; M.A., Columbia University, 1966; Ph.D., Columbia University, 1972.

Nancy Johansen
Associate Professor of Education (1961); A.A., Stephens College, 1949; B.S., Wisconsin State College, 1954; M.A., University of Minnesota, 1956; Ph.D., University of Missouri, 1965.

Charles R. Johnson
Assistant Professor of French (1969); B.A., Phillips University, 1949; M.A., George Peabody College, 1958; M.A., University of Arizona, 1968; Ph.D., University of Arizona, 1974.

Raymond Gustaf Johnson
Associate Professor of Psychology (1961); B.A., Augustana College, 1950; M.A., Syracuse University, 1952; Ph.D., University of Minnesota, 1967.

James Albert Jones
Professor of Biology (1948); B.E., St. Cloud Teachers' College, 1939; M.S., University of Minnesota, 1948; Ph.D., Iowa State University, 1973.

Patricia L. Kane
Professor of English (1947); B.A., Macalester College, 1947; M.A., University of Minnesota, 1950; Ph.D., University of Minnesota, 1961.

John Michael Keenan
Associate Professor of English (1965); B.A., Hobart College, 1957; A.M., University of Rochester, 1958.

Sung Kyu Kim

Alvin J. King
Professor of Music (1967); B.A., Ohio State University, 1941; B.Mus., Yale University, 1948; M.Mus., University of Colorado, 1950; D.Mus.A., University of Colorado, 1966.

Allan Marshall Kirch
Associate Professor of Mathematics (1968); A.S., Joplin (Missouri) Junior College, 1956; B.A., University of Minnesota, 1958; M.A., University of Minnesota, 1960; Ph.D., University of Minnesota, 1967.

Joseph D. E. Konhauser
Professor of Mathematics (1968); B.S., Pennsylvania State University, 1948; M.A., Pennsylvania State University, 1951; Ph.D., Pennsylvania State University, 1963.

Gail Kristensen
Adjunct Assistant Professor of Art (1969); University of Minnesota.

Lynda LaBounty

David A. Lanegran
Associate Professor of Geography (1969); B.A., Macalester College, 1963; M.A., University of Minnesota, 1966; Ph.D., University of Minnesota, 1970.

Lucy C. Lange
Lecturer in Education and Music (1973); B.A., Mary Washington College of University of Virginia, 1963; M.Ed., University of Maryland, 1966.
Faculty

Philip A. Lee, Jr.
Assistant Professor of French (1966); A.B., Bowdoin College, 1956; M.A., University of North Carolina, 1961; Ph.D., University of North Carolina, 1967.

Henry Lepp
Professor of Geology (1964); B.S., University of Saskatchewan, 1944; Ph.D., University of Minnesota, 1954.

John Linnell
Vice President for Academic Affairs; Professor of Philosophy (1976); B.A., Augustana College, 1947; M.A., University of Iowa, 1948; Ph.D., University of Minnesota, 1954.

David A. Lowe
Instructor in Slavic Languages (1975); B.A., Macalester College, 1969.

Ralph J. Lundeen
Professor of Physical Education, Director of Athletics (1954); B.S., University of Minnesota, 1946; M.Ed., University of Minnesota, 1947.

Jean Lyle
Associate Professor of Education and Director of Stella Louise Wood Children’s Center (1964); B.A., State College of Iowa, 1950; M.S., University of Tennessee, 1954.

David W. McCurdy
Professor of Anthropology (1966); B.A., Cornell University, 1957; M.A., Stanford University, 1959; Ph.D., Cornell University, 1964.

Celestia Anne Meister
Associate Professor of English (1948); B.A., Macalester College, 1938; B.S., University of Minnesota, 1940; M.A., University of Minnesota, 1941.

Raymond Charles Mikkelsen
Professor of Physics (1965); B.A., St. Olaf College, 1959; M.S., University of Illinois, 1961; Ph.D., University of Illinois, 1965.

Walter D. Mink
Professor of Psychology (1958); A.B., Hiram College, 1950; Ph.D., University of Minnesota, 1957.

G. Theodore Mitau
Professor of Political Science (1940); B.A., Macalester College, 1940; M.A., University of Minnesota, 1942; Ph.D., University of Minnesota, 1948.

George Moses
Associate Professor of Journalism (1969); B.A., University of Minnesota, 1937; M.A., University of Minnesota, 1969.

Roger K. Mosvick
Associate Professor of Speech Communication (1956); B.A., Macalester College, 1952; M.A., University of Minnesota, 1959; Ph.D., University of Minnesota, 1966.

Peter B. Murray

Jeffrey E. Nash
Assistant Professor of Sociology (1974); B.A., Baylor University, 1964; M.A., Louisiana State University, 1965; Ph.D., Washington State University, 1971.
Faculty

W. Scott Nobles
Professor of Speech Communication (1969); B.A., Southeastern Oklahoma State College, 1947; M.A., Western Reserve University, 1948; Ph.D., Louisiana State University, 1955.

Michael Obsatz
Associate Professor of Education (1967); B.A., Brandeis University, 1963; M.A., University of Chicago, 1964; Ph.D., University of Chicago, 1967.

Kathleen K. Parson
Assistant Professor of Chemistry (1974); B.A., Macalester College, 1967; Ph.D., University of Minnesota, 1973.

Helene Nahas Peters
Professor of French (1961); M.A., University of Toulouse, France, French-1939, English-1949; Ph.D., University of Minnesota, 1954.

Todd E. Petzel

Gerald R. Pitzl
Assistant Professor of Geography (1972); B.S., University of Minnesota, 1964; M.A., University of Minnesota, 1971; Ph.D., University of Minnesota, 1974.

Jean Probst
Instructor in Mathematics (1950); B.A., Macalester College, 1949; M.A., University of Minnesota, 1973.

Jeremiah Reedy
Associate Professor of Classics (1968); S.T.B., Gregorian University, 1958; M.A., University of South Dakota, 1960; M.A., University of Michigan, 1966; Ph.D., University of Michigan, 1968.

Irwin Daniel Rinder
Professor of Sociology (1968); B.A., University of Idaho, 1947; M.A., University of Chicago, 1950; Ph.D., University of Chicago, 1953.

Arthur Wayne Roberts
Professor of Mathematics (1965); A.A., Morton Junior College, 1954; B.S., Illinois Institute of Technology, 1956; M.S., University of Wisconsin, 1958; Ph.D., University of Wisconsin, 1965.

James H. Roberts
Professor of Physics (1963); B.S., University of Arizona, 1937; M.S., University of Arizona, 1938; Ph.D., University of Chicago, 1946.

Edwin James Robinson, Jr.
Professor of Biology (1963); A.B., Dartmouth College, 1939; M.S., New York University, 1941; Ph.D., New York University, 1948.

Calvin J. Roetzel
Associate Professor of Religion (1969); B.A., Hendrix College, 1952; B.D., Perkins School of Theology, 1955; Ph.D., Duke University, 1968.

Emily S. Rosenberg
Assistant Professor of History (1974); B.A., University of Nebraska, 1966; M.A., State University of New York at Stony Brook, 1970; Ph.D., State University of New York at Stony Brook, 1973.

Norman L. Rosenberg
Assistant Professor of History (1975); B.A., University of Nebraska, 1964; M.A., University of Nebraska, 1967; Ph.D.,
State University of New York at Stony Brook, 1972.

Jack Eugene Rossmann  
Professor of Psychology (1964); B.S., Iowa State University, 1958; M.S., Iowa State University, 1960; Ph.D., University of Minnesota, 1963.

Jerry J. Rudquist  
Professor of Art (1958); B.F.A., Minneapolis College of Art and Design, 1956; M.F.A., Cranbrook Academy of Art, 1958.

Michael Allen Rynkiewich  
Assistant Professor of Anthropology (1971); B.A., Bethel College, 1966; M.A., University of Minnesota, 1968; Ph.D., University of Minnesota, 1972.

William Saltzman  
Professor of Art (1966); B.S., University of Minnesota, 1940.

Karl C. Sandberg  
Professor of French (1968); B.A., Brigham Young University, 1954; M.A., Brigham Young University, 1957; Ph.D., University of Wisconsin, 1960.

Earnest R. Sandeen  
James Wallace Professor of History (1963); B.A., Wheaton College, 1953; M.A., University of Chicago, 1955; Ph.D., University of Chicago, 1959.

David B. Sanford  
Director of the International Center; Lecturer in German (1966); B.A., University of Minnesota, 1959; Ph.D., University of Minnesota, 1966.

Virginia Schubert  
Assistant Professor of French (1965); B.A., College of St. Catherine, 1957; M.A., University of Minnesota, 1961; Ph.D., University of Minnesota, 1973.

John R. Schue  
Professor of Mathematics (1962); B.A., Macalester College, 1953; Ph.D., Massachusetts Institute of Technology, 1959.

Sherman W. Schultz, Jr.  
Lecturer in Astronomy (1958); O.D., Illinois College of Optometry, 1945.

Albert Truman Schwartz  
Associate Professor of Chemistry (1966); A.B., University of South Dakota, 1956; B.A., Oxford University, 1958; M.A., Oxford University, 1960; Ph.D., Massachusetts Institute of Technology, 1963.

Emil John Slowinski  
Professor of Chemistry (1964); B.S., Massachusetts State College, 1946; Ph.D., Massachusetts Institute of Technology, 1949.

James Richard Smail  
Associate Professor of Biology (1963); A.B., Oberlin College, 1957; Ph.D., University of Illinois, 1965.

Paul Douglas Solon  
Assistant Professor of History (1970); B.A., University of California, 1964; M.A., University of California, 1966; Ph.D., Brown University, 1970.

Otto M. Sorensen  
Associate Professor of German (1967); A.B., Stanford University, 1950; M.A., Stanford University, 1952; Ph.D., University of Washington, 1966.

David LeRoy Southwick  
Professor of Geology (1968); B.A., Carleton College, 1958; Ph.D., Johns Hopkins University, 1962.
Faculty

James P. Spradley

Michael E. Stano

James B. Stewart
Associate Professor of History (1969); B.A., Dartmouth College, 1962; M.A., Case Western Reserve, 1966; Ph.D., Case Western Reserve, 1968.

Fred B. Stocker
Professor of Chemistry (1958); B.S., Hamline University, 1953; M.S., University of Minnesota, 1955; Ph.D., University of Colorado, 1958.

Edward N. Strait
Professor of Physics (1965); B.A., University of Wisconsin, 1941; Ph.D., Massachusetts Institute of Technology, 1948.

Luther Stripling
Assistant Professor of Music (1971); A.B., Clark College, 1957; M.Mus., University of Kentucky, 1968; D.Mus.A., University of Colorado, 1971.

Jeffrey Thomson

Charles C. Torrey
Associate Professor of Psychology (1966); B.A., Swarthmore College, 1955; Ph.D., Cornell University, 1963.

Susan Toth
Associate Professor of English (1969); B.A., Smith College, 1961; M.A., University of California, 1963; Ph.D., University of Minnesota, 1969.

Russell Shannon Trenholme
Assistant Professor of Philosophy (1974); B.A., New York University, 1961; Ph.D., Princeton University, 1974.

Adolf L. Vandendorpe
Associate Professor of Economics (1971); Ingenieur Commercial, Louvain University (Belgium), 1961; Ph.D., Massachusetts Institute of Technology, 1970.

Robert Hall Warde
Instructor in English (1970); B.A., Princeton, 1965; M.A., Harvard University, 1968.

Dale E. Warland
Professor of Music (1967); B.A., St. Olaf College, 1954; M.A., University of Minnesota, 1960; D.M.A., University of Southern California, 1965.

Gerald F. Webers
Professor of Geology (1965); B.S., Lawrence College, 1954; M.S., University of Minnesota, 1961; Ph.D., University of Minnesota, 1964.

Peter Weisensel
Assistant Professor of History (1973); B.S., University of Wisconsin, 1963; M.S., University of Wisconsin, 1965; Ph.D., University of Minnesota, 1973.

Gerald Weiss
Associate Professor of Psychology (1965); B.A., Brooklyn College, 1953; M.A., University of Iowa, 1954; Ph.D., University of Iowa, 1965.
Faculty Assistants

Claude A. Welch
O.T. Walter Professor of Biology (1969); B.S., Michigan State University, 1948; Ph.D., Michigan State University, 1957.

Hans W. Wendt
Professor of Psychology (1968); B.A., University of Hamburg, 1949; Ph.D., University of Marburg, 1952; Honorary Professor, University of Marburg, 1971.

Henry R. West
Professor of Philosophy (1965); A.B., Emory University, 1954; M.A., Duke University, 1958; B.D., Union Theological Seminary, 1959; Ph.D., Harvard University, 1965.

Franz Xavier Westermeier
Associate Professor of German (1947); B.A., College of St. Thomas, 1941; M.A., University of Minnesota, 1955.

David B. White
Elizabeth Sarah Bloedel Professor of Philosophy (1948); B.S., Northeastern State (Oklahoma), 1937; M.A., Oklahoma State College, 1939; Ph.D., University of Pacific, 1959.

Russell A. Whitehead
Associate Professor of Biology (1969); B.S., Northland College, 1954; M.S., Oregon State University, 1962; Ph.D., Oregon State University, 1966.

Patricia Wiesner
Professor of Physical Education (1950); B.S., Iowa State Teachers College, 1948; M.A., University of Southern California, 1955.

Doris Y. Wilkinson
Professor of Sociology (1970); B.A., University of Kentucky, 1958; M.A., Case Western Reserve University, 1960; Ph.D., Case Western Reserve University, 1968.

M. Glen Wilson
Professor of Speech Communication and Dramatic Arts (1968); B.S., West Virginia University, 1948; M.A., West Virginia University, 1949; Ph.D., Ohio State University, 1957.

Wayne C. Wolsey
Associate Professor of Chemistry (1965); B.S., Michigan State University, 1958; Ph.D., University of Kansas, 1962.

Technical Assistants
Leo T. Collins
Athletics (1973); B.B.A.

James R. Hessler
Physics and Astronomy (1966)

Dwane Kostron
Art (1968)

Departmental Assistants
Russell P. Allen
Music (1973); B.A. (1974)

Richard Christman
Biology (1970)

Cherie Doyle
Art (1975); B.A. (1972)

Graduate Assistant
Richard Lesicko
Forensics (1975); B.A. (1975)
Studio Instructors

Artists-in-Residence

Studio Instructors

Betty Benthin (1)
Viola (1975)

Edward D. Berryman
Organ (1963); B.A., M.A., S.M.D.

Morris Brand
Percussion (1974)

James Clute (1)
String Bass (1975); B.M., M.A.

Daniel Estrem
Guitar (1971); B.A.

Lea Foli* (1)
Violin (1971)

Roger Frisch (1)
Violin (1974); B.M., M.M.

Rachel Green
Oboe (1974); B.S.

Florence Hart
Highland Dance (1965)

Ruben Haugen (1)
Saxophone (1971); B.M., M.M.

Merrimon Hipps (1)
Trumpet (1966); B.M.E., M.M.

Gladys Hubner (1)
Harp (1971)

Benjamin Kamins (1)
Bassoon (1975)

Richard Kilmer* (2)
Oboe (1972); B.A., M.M., M.M.A.

Priscilla McAfee (2)
French Horn (1975); B.M., M.M.

Charles McDonald (1)
French Horn (1974)

Celeste O'Brien
Piano (1969); B.A.

Ronald Ricketts (1)
Trombone (1972); B.M., M.M.

Sarita Roche
Voice (1974); B.M., M.M.

Emma Small
Voice (1975); B.M.

Charlotte Straka
Voice (1969)

Madeline Titus
Piano (1952); B.M.

Ross Tolbert (1)
Tuba (1968)

Jeffrey Van
Guitar (1964); B.A., M.A.

Beverly White
Recorder, Viol and Harpsichord (1972); B.A., M.A.

Lawrence Wilson
Piano (1974); B.A., M.M.

Mary Wilson
Flute (1954); B.A., B.M.

Sidney Zeitlin* (1)
Flute (1971); B.M.

(1)—member of the Minnesota Orchestra
(2)—member of the St. Paul Chamber Orchestra

*—lessons by special arrangement only

Artists-In-Residence

Joseph Roche
Violin, Macalester Trio (1971)

Camilla Heller
Cello, Macalester Trio (1974)
The Macalester College Alumni Association was incorporated in 1918 as a social or charitable corporation under the laws of Minnesota.

The Board of Directors of the Association is the governing body and meets bi-monthly on the campus during the school year on the first Thursday of September, November, January, March and May. There are 40 directors—39 alumni who serve for three-year terms, and one student representative elected annually by the student body.

Two alumni, one of whom must have attended Macalester within the preceding 15 years, are elected annually to the College's Board of Trustees to serve three-year terms.

In addition to providing liaison functions between the College and alumni, the Association is active in the development of programs relating to continuing education, church and community relations and undergraduate activities. In other programs, Macalester graduates offer one-to-one career counseling to undergraduates, while alumni throughout the country serve on Alumni Admissions committees which aid in recruitment of prospective students. The Association also sponsors special events such as Homecoming and the Annual All Alumni Weekend.

By action of the Board of Directors of the Alumni Association on May 2, 1968, the Hugh S. Alexander Alumni House was established; it was dedicated May 25, 1969. This facility—a 14-room building at 1685 Lincoln Avenue—houses the professional staff and provides accommodations for nearly 150 persons for such varied activities as seminars, meetings, conferences, receptions and open houses.

Macalester Clubs (Clans), whose membership is made up of both graduates and former students, are active in some 50 centers in the United States and abroad.

The official publication of the Association is Macalester Today.
Endowed Scholarships
The following scholarships have been created at Macalester College by generous gifts of endowed funds. The income from these funds is awarded annually through the financial aid program to outstanding students — usually upperclassmen — who otherwise would be financially unable to avail themselves of a Macalester education. The name of the scholarship appears in bold face and is followed by the year in which the fund was established, the name or class of the donor or donors, and the preference, if any, to be given in awarding the scholarship. Most of these endowed scholarship funds were established in consideration of matching gifts made by DeWitt Wallace, who contributed a substantial majority of the funds.

Anstice T. Abbott (1962). Established by the national Wood's School Alumnae Association for an elementary education major. Principal, $5,010.


Barclay Acheson (1959). Established by members of his family in memory of Dr. Acheson, who was director of Near East Relief and, later, of the International Editions of the Reader's Digest. A 1910 graduate of Macalester, he served on the Board of Trustees (1937-1957). Principal, $29,626.


Lonnie O. Adkins (1975). Established by his wife, children and friends for a Black student who has demonstrated academic achievement. To be awarded by the College in cooperation with Hallie Q. Brown Community Center, St. Paul. Principal, $3,275.


Horace M. Albright (1961). Established by Horace M. Albright, nationally known conservationist and former director of the National Park Service. Principal, $5,000.


Endowed Scholarships

Charles and Ellora Alliss and George and Wilma Leonard Minnesota Charter Scholarship Fund (1974). Established by the gifts of the Charles and Ellora Alliss Educational Foundation and George and Wilma Leonard, members of the Macalester Class of 1927, and supporting gifts from Mr. and Mrs. John S. Holl, Mrs. Reuel D. Harmon, Mr. and Mrs. Charles Thomas, Mr. and Mrs. Ray D. Johnson and the Hoerner-Waldorf Company, for students from Minnesota who are highly qualified and merit admission to Macalester, but who may not be able to afford a private liberal arts education. Principal, $446,000.

Alumni (1958). Established by former Macalester students through contributions so designated to the Annual Alumni Fund. Principal, $24,879.

American Cyanamid Company (1962). Established by the American Cyanamid Company. For upperclassmen who are taking a pre-medical course in preparation for entrance to a medical school. Principal, $50,000.

American Friends of the Middle East (1963). Established by American Friends of the Middle East for a student attending Macalester from a Middle Eastern country. Principal, $7,500.


Clarence D. Baker — Dr. James Wallace (1958). Established by Harry D. Baker, president of the Baker Land and Title Co. of St. Croix Falls, Wisconsin, in memory of his brother, Clarence D. Baker, Class of 1898, and of Macalester's fifth President, Dr. James Wallace. To be paid twice annually, when most needed by beneficiaries, to deserving rural students with satisfactory scholastic records and outstanding reputation for industry and integrity, and who show determination to make their own expenses as far as possible. Principal, $12,500.

George F. Baker Trust (1967). Established by the George F. Baker Trust of New York City. For young men or women of the highest overall promise. Principal, $250,000.
Endowed Scholarships


Bruce Barton (1957). Established by the New York advertising executive, author and former United States Representative. For a student of high scholastic standing who has shown unusual qualities of leadership. Principal, $21,750.


William Benton (1957). Established by the chairman of the board of Encyclopaedia Britannica and former United States Senator and Assistant Secretary of State. For students of unusual ability who plan on a career in government. Principal, $26,000.

Frank Stanley Beveridge (1958). Established by the Frank Stanley Beveridge Foundation in memory of the founder of Stanley Home Products, Westfield, Massachusetts. Principal, $5,000.


Frederick O. Bohen (1959). Established by the chairman of the Meredith Publishing Company, Des Moines, Iowa, publishers of Better Homes and Gardens and Successful Farming. Principal, $5,000.

Maude Fielding Brashares (1963). Established by Mrs. Brashares through a bequest in her will for academically able students who are in financial need. Principal, $9,155.

Lee H. Bristol Memorial (1962). Established by the former chairman of the board of Bristol-Myers Company. Principal, $13,695.

Charles H. Brower (1963). Established by the chairman of the board of Batten, Barton, Durstine and Osborn, Inc. Principal, $10,500.


Burlington Northern Foundation (1967). Established by the Northern Pacific Railway Company of Saint Paul. Principal, $25,000.
Endowed Scholarships


**John S. Campbell** (1959). Established by Mr. Campbell, a Macalester alumnus and former president of Malt-O-Meal Company of Minneapolis. Principal, $2,500.

**Cass Canfield** (1965). Established by the former chairman of Harper & Row, New York City. Principal, $5,000.

**George E. Carlson** (1964). Established by Robert W. Carlson, president of the Minnesota Rubber Company, in honor of his father. For a male student majoring in one of the natural or physical sciences. Principal, $100,000.


**George Champion** (1964). Established by the chairman of the board of Chase Manhattan Bank, New York City. Principal, $7,000.

**Chemical Bank** (1967). Established by the Chemical Bank of New York City. Principal, $25,000.


**Christian Service Scholarship** (1953). In memory of Gertruida Niemeyer; established by her daughters, Gertrude and Joanne, and her son Reinder, in memory of their mother, who immigrated to the United States from Holland. Preference is given a student from Merriam Park Presbyterian Church, Saint Paul, who is planning to enter Christian service sponsored by the church. Principal, $4,880.

**Church Vocation Scholarship of Merriam Lexington Presbyterian Church** (1963). Established by the congregation of the Merriam Park Presbyterian Church, Saint Paul. For students who wish to prepare for a church occupation. Principal, $10,259.

**Blake Clark** (1963). Established by Mr. Clark, Capitol Car Distributors, Ltd., Takoma Park, Maryland. Principal, $5,000.

**Glenn Clark** (1957). Established by friends and alumni in memory of Professor Clark, chairman of the English department and track coach at Macalester (1912-1944). Principal, $7,924.

**Class of 1910** (1967). Established by Miss Ann Elizabeth Taylor. For children of United Presbyterian ministers whose income is less than the median salary of all Presbyterian ministers at the time. Principal, $6,000.
Endowed Scholarships

Class of 1927 (1957). Established by members of the Macalester Class of 1927. Principal, $4,350.


Homer P. Cochran (1963). Established by the senior vice president of the Morgan Guaranty Trust Co., New York City. Principal, $10,000.


H. W. Coffin (1926). Established by Mrs. Mary E. Coffin, Duluth, Minnesota. For a student who is a relative of the H. W. Coffin family, or who is from the Glen Avon Presbyterian Church, Duluth, preparing for the ministry or missionary work, in the order named. Principal, $2,500.

A. L. Cole (1957). Established by the vice president and director of The Reader’s Digest Association, Inc. Principal, $36,000.

Colgate-Palmolive Company (1967). Established by the Colgate-Palmolive Company, New York City, for male students who plan a business career. Principal, $12,500.

Consolidated Foods Corporation (1967). Established by the New York food processing and distributing company. Principal, $25,000.

Mary Louise Conrad Memorial Fund (1970). Established by students, friends and relatives in memory of Mary Louise Conrad ’73 to provide awards for achievement in Art. Principal, $1,035.


Mary M. Coulter (1971). Established by bequest in the will of Edwin V. Coulter to honor his wife. Principal, $10,000.

Gardner Cowles (1961). Established by the chairman, Cowles Communications, Inc. Principal, $24,000.

Ira L. Crawford (1903). Established by his brothers and sisters in memory of Ira L. Crawford, a pioneer of Rock County, Minnesota. Principal, $2,500.

Charles A. Dana (1962). Established by the industrialist. Awarded only to students in the upper three classes of the College. Principal, $50,000.

Victoria David Memorial (1960). Dr. David, orthopedic surgeon, Houston, Texas, Macalester Class of 1913. Principal, $26,000.


George W. Davis (1958). Established by friends and alumni in memory of George W. Davis, professor of Hebrew and biblical literature (1892-1899) and professor of social and political science (1892-1934). Principal, $8,091.

The George W. Davis Memorial Scholarship Fund in Religion (1959). Established by Ethel Mary Davis in memory of her husband. This fund is awarded by the department of religious studies to juniors (for use in their senior year) who in the judgment of the department have attained the highest degree of excellence. Principal, $25,535.

Walter H. and Lydia Juuemann Deubener (1964). Established by the Deubener-Juenemann Foundation and named for Mr. and Mrs. Deubener, who developed the paper shopping bag. Principal, $49,100.


Cleveland E. Dodge (1959). Established by Mr. Dodge, a director of Phelps Dodge Corporation, copper company, New York City. Principal, $28,500.


Margaret M. Doty (1960). Established by Miss Ann Elizabeth Taylor, Macalester Class of 1910, Austin, Minnesota. Principal, $15,783.

John M. Dozier (1974). Established by members of the Macalester Board of Trustees in recognition of the contributions of John M. Dozier, vice president (1966-1974), to the College and awarded on merit to students expecting to major in economics and the related arts of business administration. Principal, $47,826.
Endowed Scholarships

Carl A. and Katharine D. Dreves (1965). Established by Mr. Dreves on Mrs. Dreves' 75th birthday. Principal, $25,000.

Carl and Margaret Dreves (1963). Established by Mr. Dreves, a retired Saint Paul businessman. Principal, $25,000.

Margaret Weyerhaeuser Driscoll (1960). Established by Mrs. Walter B. Driscoll, member Macalester Board of Trustees since 1946. Principal, $7,000.

Pendleton Dudley (1957). Established by the senior partner of Dudley-Anderson-Yutzy of New York City, who was known as dean of the public relations profession. For an unusually talented young man who aspires to be a teacher. Principal, $19,000.

Dr. and Mrs. J. Huntley Dupre (1967). Created by alumni and friends for upperclass majors in history or political science interested in teaching or in public service, at home or abroad, to honor Dr. Dupre, professor of history (1946-1964) and dean of the College (1951-1961), and his wife. Principal, $11,205.


Frederick H. Ecker (1958). Established by the president and chairman of the Metropolitan Life Insurance Company. Principal, $6,500.

Charles Edison (1957). Established by the former governor of New Jersey, former Secretary of the Navy and son of inventor Thomas Edison. For a student of unusual promise interested in a career in science. Principal, $19,500.


Edwin S. Elwell – Middle East (1964). Established by Mr. Elwell and the directors of the American Friends of the Middle East for a student attending Macalester from a Middle Eastern Country. Principal, $30,000.


First Presbyterian Church of Lake Crystal, Minnesota (1960). Established by the Presbyterian Church of Lake Crystal with money received from the R. G. James estate. Principal, $3,000.
Endowed Scholarships

Raoul H. Fleischmann (1959). Established by the president and chairman of the New Yorker Magazine. Principal, $10,000.

Arthur S. Flemming (1971). Established by students, trustees, faculty, staff, alumni and friends to honor Macalester's 11th president (1968-1971). To be awarded to a Minnesota freshman from a minority group. Principal, $12,438.

Henry N. Flynt (1967). Established by Mr. Flynt, an attorney from Greenwich, Connecticut. Principal, $12,500.


D. Fraad Jr. (1959). Established by the chairman of the board of Allied Maintenance Corporation of New York City. Principal, $8,000.

Wilfred Funk (1957). Established by Mr. Funk, New York City book and magazine publisher. For a student of unusual ability. Principal, $10,000.

General Electric Foundation (1966). Established by the General Electric Foundation for students majoring in chemistry. Principal, $40,000.

General Foods Fund, Inc. (1962). Established by the manufacturers of cereals and packaged foods. Principal, $25,000.

Robert B. Gile — Middle East (1963). Established by Mr. Gile and the directors of the American Friends of the Middle East for a student attending Macalester from a Middle Eastern country. Principal, $10,000.

Robert and Jean Gilruth (1964). Established by Dr. Robert R. Gilruth, head of the Manned Space Center who was responsible for selection and training of astronauts for Project Mercury. To assist a student majoring in the physical sciences or one who is working on a special science project. Principal, $5,000.


Samuel Goldwyn (1962). Established by the chairman of the board, Samuel Goldwyn Productions, Inc. Principal, $10,000.

Grace Presbyterian Church (1961). Established by the Women's Association of Grace Presbyterian Church of Minneapolis and George P. Leonard of California. Principal, $2,850.

Grace Presbyterian Church, Winona, Minnesota (1931). Established by the First Presbyterian Church of Winona to be awarded to a candidate nominated by Grace Presbyterian Church. Principal, $1,000.

Theodore Granik (1962). Established by the founder and director of "American Forum of the Air." Principal, $14,000.
Endowed Scholarships

William T. Grant (1956). Established by the chain store executive of New York City. For a student of outstanding academic achievement. Principal, $20,000.


Ruth and Fred Guinzburg (1961). Established by Mr. and Mrs. Guinzburg, New York City. Principal, $5,000.


James Guy (1960). Established by James Todd Guy, attorney at law, Milwaukee, Wisconsin, Macalester Class of 1908, in memory of his father, who was a member of the College staff at the turn of the century. Principal, $2,500.

J. H. (Mo.) (1929). From an anonymous donor of Missouri. Principal, $48,000.

John P. Hall (1961). Established by Dr. L. Margaret Johnson, Macalester Class of 1920, in memory of Professor Hall, registrar and professor of Greek (1897-1945), baseball coach and Men's Glee Club director. Principal, $6,900.


Charles Hattauer (1958). Established by the New York dental surgeon. Principal, $8,000.

Mr. and Mrs. Wendell O. Hawkins (1966). Established by Mr. and Mrs. Hawkins, Minneapolis. Principal, $4,761.

G. L. Heegaard (1960). Established by the Minneapolis industrialist, who was a student at Macalester's Baldwin Academy. Principal, $16,800.


Highland Drug Center (1967). Established by Mr. and Mrs. Harold B. Shapira of Saint Paul to assist an Israeli student to attend Macalester under the International Exchange Plan. Principal, $25,000.

Mell and Lydia Hobart (1964). Established by Mell W. Hobart, Macalester Class of 1908 and former Macalester Trustee, in memory of his wife, also a Macalester graduate, and supplemented by Ministers Life and Casualty Union. Principal, $27,500.
Endowed Scholarships

Oveta Culp Hobby (1964). Established by the president and editor of the Houston (Texas) Post. Principal, $10,000.

Minnie C. Hoffmann (1967). Established by Mrs. Edwin C. Johnson, Alexandria, Virginia, in memory of her sister, who was a former teacher at Humboldt High School, Saint Paul. Principal, $2,000.


IBM (1965). Established by International Business Machines Corporation, to be awarded to students majoring in mathematics. Principal, $40,000.

Dr. and Mrs. Kano Ikeda (1960). Established by Dr. Charles W. Jarvis, Macalester Class of 1942, Saint Paul physician, in memory of Kano Ikeda, M.D., chief pathologist at the Charles T. Miller Hospital, and member of the Macalester faculty. For a student majoring in medical technology. Principal, $3,804.


Howard Johnson (1958). Established by the chain restaurant executive of New York City. Principal, $65,000.


Walter H. Judd (1963). Established by the former Minnesota congressman for a student who is concentrating on studies in government or international relations. Principal, $11,000.
Endowed Scholarships

**Edwin Kagin Prize Scholarship** (1960). Established by Dr. and Mrs. William H. A. Watson and other former students and friends of Dr. Kagin, professor of religion (1926-1952). Awarded to a junior who is preparing for a church vocation. Principal, $15,927.

**Mary Frances Johnstone Kagin Memorial** (1966). Established by her husband, Dr. Edwin Kagin, relatives and friends. To be awarded to a student planning for a full-time church vocation for use during the sophomore year. Principal, $16,414.

**Henry J. Kaiser Family Foundation** (1959). Established by the Henry J. Kaiser Family Foundation of Oakland, California, and named for the industrialist and builder. For a pre-medical student who qualifies on the basis of ability, character and financial need. Principal, $20,000.

**Robert J. Keith Memorial** (1973). Established by the Pillsbury Company, Minneapolis, in memory of its late chairman and chief executive officer. Mr. Keith was a member of the Macalester College Board of Trustees. Principal, $25,000.

**Dr. William H. Kendall** (1960). Established by Dr. Kendall, a clergyman of Florissant, Missouri, Macalester Class of 1904. Principal, $2,500.

**Susan E. Kennedy Memorial** (1971). Established by family, fellow students and other friends in memory of Susan Kennedy, a sophomore at Macalester at the time of her death, with preference given to a pre-medical student. Principal, $4,000.

**Mildred Phillips Kindy** (1967). Established by Miss Ann Elizabeth Taylor in memory of her classmate. For students specializing in piano or voice. Principal, $223.

**David N. Kingery Memorial** (1964). Established by family, former students and other friends of David Newton Kingery, who served Macalester as professor of science (1896), registrar (1897-1912) and professor of mathematics and astronomy (1906-1938). Principal, $1,290.


**Timothy Kirk Memorial** (1969). Established by his parents, Mr. and Mrs. Wayne Kirk, Edina, Minnesota, classmates and other friends in memory of Timothy Kirk, a member of the Class of 1968. Principal, $1,619.

**Julius Klein** (1959). Established by the consultant of Latin American governments and former United States Secretary of Commerce. Principal, $5,000.

**Water Knott** (1964). Established by the founder of Knott's Berry Farm and Ghost Town, Buena Park, California. Principal, $20,000.

**Edward Lamb** (1964). Established by Mr. Lamb, Toledo, Ohio, lawyer and business executive. Principal, $77,363.
Endowed Scholarships

Thomas S. Lamont (1963). Established by Mr. Lamont, a director of the Morgan Guaranty Trust Co. Principal, $10,000.


Justus Baldwin Lawrence (1964). Established by the chairman of the International Fact Finding Institute, New York City, as a memorial to his wife, Mary Peace Lawrence. Principal, $10,235.


George P. Leonard (1960). Established by Mrs. George P. Leonard, Macalester Class of 1927, Stinson Beach, California, in honor of her husband. Principal, $33,255.

Mrs. William H. Leonard (1959). Established by Mr. and Mrs. George P. Leonard, Macalester Class of 1927, Stinson Beach, California, in memory of Mr. Leonard’s mother. Principal, $16,725.


Hobart and Edith Lewis (1960). Established by Mr. and Mrs. Hobart Lewis of Katonah, New York. Principal, $7,000.

Edmund W. and Doris E. Lienke (1966). Established by Edmund Lienke, Class of 1938, and his wife. To be awarded to a junior or senior majoring in business or economics with special consideration to anyone interested in the field of life insurance. Principal, $6,000.

Walter A. Lienke (1961). Established by his bequest and supplemented by the members of his family and friends. To be awarded to students majoring in music. Principal, $9,460.


Endowed Scholarships


Macalester Club of New York (1967). Established by alumni with priority use for students from the East Coast. Principal, $11,669.


Macalester Women's Thrift Shop (1973). Established by the Macalester Women's Organization to provide scholarship assistance for full-time students who have completed at least six courses at Macalester. Preference is given to women. Principal, $10,000.


William H. and Helen Hoye Mahle (1964). Established by Mr. and Mrs. William H. Mahle, Macalester Classes of 1936 and 1934. Principal, $18,716.

George M. Mardikian (1957). Established by the San Francisco restaurateur (Omar Khayyam's) and author. For a journalist from the near East who is enrolled in Macalester's World Press Institute. Principal, $18,500.

Marsh & McLennan (1967). Established by the New York City insurance brokers. Principal, $10,000.

Edward Everett McCabe (1920). Established through a bequest in the will of Mr. McCabe, Macalester Class of 1914, who was a Lieutenant in the U. S. Aviation Corps, World War I and the first Macalester alumnus to leave a legacy to the College. Principal, $2,500.

Norman H. McRae (1957). Established by alumni and friends in memory of Norman H. McRae, who was superintendent of buildings and grounds at Macalester (1924-1943), and then founded Multi-Clean Products, Inc. Saint Paul, manufacturers of floor and building maintenance equipment. Principal, $10,246.

Mead Corporation (1965). Established by the Mead Corporation, Dayton, Ohio. Principal, $10,000.

Merriam Lexington Presbyterian Church (1926). Established by members of this Saint Paul church. For two students, nominated by the church, who aspire to careers in religious work. Principal, $3,871.


James A. Michener (1968). Established by the author. Principal, $5,000.

Jeremiah Milbank (1962). Established by Mr. Milbank, a New York City corporation executive. Principal, $26,000.
Endowed Scholarships


Mando (1959). Established by Minnesota and Ontario Paper Company, manufacturers of specialty papers, newsprint and insulation materials. Students from International Falls, Minnesota, and Fort Frances and Kenora, Ontario, area are given preference. Freshmen eligible. Principal, $6,000.

Minnesota Rubber Company (1968). Established by the Minneapolis corporation for students majoring in the natural and behavioral sciences with first consideration given to children of their employees. Principal, $100,000.

Mobil (1967). Established by Mobil Oil Corporation to be awarded to promising upperclass students interested in pursuing chemistry, physics or business as a career. Principal, $25,000.

Lois and James Monahan (1958). Roving editors of the Reader’s Digest. Mrs. Monahan writes under the name Lois Mattox Miller. Principal, $8,500.

Moore – Middle East (1963). Established by Mrs. Allan Q. Moore and the directors of the American Friends of the Middle East, for a student attending Macalester from a Middle Eastern country. Principal, $16,666.

Malcolm Muir (1962). Established by Mr. Muir, a director of Newsweek magazine. Principal, $5,000.

James Mulvey Memorial (1922). Established by the Misses Jessie and Edna Mulvey in memory of their father, James Mulvey, a lumberman. For a student committed to full-time church service. Principal, $12,500.

Carl Bertram Myers (1921). Established by S. F. Myers of Saint Paul in memory of his son. Principal, $2,500.

Kathryn Jo Neily Memorial (1963). Established by Mr. and Mrs. Joseph E. Neily in memory of their daughter, who died during her freshman year at Macalester. Principal, $50,273.


Edward John Noble Foundation (1958). Established by the chairman of both the American Broadcasting Company and the Beech-Nut Life Savers Corporation, New York City, and continued by the Foundation. Principal, $26,000.


Endowed Scholarships


Ella M. Osborne (1942). Established through a bequest in the will of Mrs. Edwin W. Osborne of Saint Paul, wife of the former chief fire and insurance inspector of the Northern Pacific Railroad. Principal, $2,800.

Outward Bound (1966). Established by John P. Stevens Jr., of New York City to assist Macalester students to attend Outward Bound Schools. Principal, $20,000.

William S. Paley (1967). Established by the chairman of the board of the Columbia Broadcasting System. Principal, $5,000.

Georgiana P. Palmer (1968). Established by friends and colleagues of Georgiana P. Palmer, for 37 years professor of classical languages and Russian at Macalester College. Preference is given to students majoring in these languages. Principal, $2,705.

Carlo M. Paterno Foundation (1967). Established by Mr. Paterno, North Salem, New York. Principal, $5,000.

Dr. and Mrs. Robert Lee Patterson Jr. (1967). Established by Dr. and Mrs. Patterson, New York City. Principal, $10,067.


Polk Foundation (1968). Established by the Polk Foundation with preference given to men majoring in economics or men or women majoring in the behavioral sciences. Principal, $125,000.

David C. Primrose (1956). Established by his family, friends and former students in memory of Professor David C. Primrose, director of physical education and track coach at Macalester (1926-1954). For a junior man who participates in intercollegiate activities, has leadership ability and satisfactory academic standing. Principal, $8,683.
Endowed Scholarships

Samuel F. Pryor (1965). Established by the vice president of Pan American Airways. Principal, $5,000.


Samuel Wesley Raudenbush Memorial (1956). Created by Mrs. Alma M. Raudenbush as a memorial to her husband and awarded to a Protestant woman junior music major. Principal, $5,000.


Rexall Drug Company (1962). Established by the drug store chain. Principal, $5,000.

Charles A. Rheinstrom (1967). Established by a vice president of J. Walter Thompson Company advertising agency, New York City. Principal, $7,800.

Bryan McDonald Rice (1961). Established by Macalester president (1958-1968) and Mrs. Harvey M. Rice and friends in memory of their son, who died in his freshman year at Macalester. Principal, $43,000.


Frances M. Rogers (1964). Established through testamentary bequest by Miss Rogers, member of a pioneer Saint Paul family, to help needy men students defray their college expenses. Principal, $20,000.

George W. Romney (1961). Established by the former governor of Michigan, who later became Secretary of Housing and Urban Development. Principal, $5,100.

Rotary Club of St. Louis Park (1964). Established by the Rotary Club of St. Louis Park, Minnesota, with preference given to students who are residents of St. Louis Park. Principal, $5,746.

S. W. Royce (1957). Established by Mr. Royce, president of the Pasadena-Sheraton Corporation of California. For a student of unusual promise. Principal, $14,000.

Harry J. Rudick (1958). Established by the New York University professor of law, and partner of the New York City law firm of Lord, Day & Lord. Principal, $13,750.

The St. Paul Companies, Inc. (1976). For students with scholastic promise who without financial assistance could not afford a private, liberal arts education. Principal, $10,000.
Endowed Scholarships

**St. Paul Presbytery** (1931). Established by the Presbytery. For a student nominated by the Presbytery. Principal, $2,500.

**Clarke Salmon Memorial** (1959). Established by Mr. and Mrs. DeWitt Wallace in memory of the New Orleans editor, Clarke Salmon, who was a founder of the American Society of Newspaper Editors and of the Associated Press Managing Editors Association. Principal, $3,000.

**Mr. and Mrs. Plato E. Sargent** (1965). Established by Plato E. Sargent, Macalester Class of 1915, and Mrs. Sargent for students seeking to enter vocations in the Presbyterian Church. Principal, $12,789.

**David Sarnoff** (1959). Established by The Radio Corporation of America in honor of its chairman of the board. Principal, $25,000.

**Harry Scherman** (1958). Established by the founder of the Book of the Month Club. Principal, $16,000.


**George E. Scotton** (1963). Established anonymously by an alumnus of the College to honor a fellow member of the Class of 1921, Mr. Scotton, who directed Macalester's admissions office for 30 years. Awarded to an outstanding scholar and athlete. Principal, $21,920.

**John W. Seale Memorial** (1968). Established by Paul H. Davis, Macalester trustee-at-large emeritus, in memory of Mr. Seale, general secretary of Macalester College. Principal, $40,005.

**Thomas Shaw** (1931). Established by Professor Shaw, who was a member of the Board of Trustees (1891-1918) and President of the Board (1901-1919). For a student nominated by the Central Presbyterian Church of Saint Paul. Principal, $3,044.

**Chester H. Shiflett** (1966). Established by former students and friends to honor Professor Shiflett on his retirement as professor of chemistry (1929-1966). To be awarded to a student majoring in chemistry. Principal, $26,231.


**Lawrence E. Spivak** (1963). Established by the producer of “Meet the Press” television program. Principal, $2,500.
Endowed Scholarships


**Admiral Lewis L. Strauss** (1960). Established by friends of Admiral Strauss in appreciation of his distinguished public career and for his commencement address (1960) at Macalester. Principal, $14,125.


**Borghild K. Sundheim** (1968). Established by alumni, colleagues and friends in memory of Dr. Sundheim, professor and chairman of French (1927-1967), the recipient to be an upper-class French major nominated each year by the French department. Principal, $4,217.

**Synod** (1931). Established by Presbyterian churches in the Synod of Minnesota. Principal, $2,325.

**Henry J. Taylor** (1957). Established by the United States Ambassador to Switzerland. For an unusually promising young man. Principal, $6,000.

**Ann Elizabeth Taylor** (1967). Established by Miss Taylor, Macalester College graduate, Class of 1910, Austin, Minnesota, for students majoring in history. Principal, $1,595.


**Lowell Thomas** (1957). Established by the author, newscaster and lecturer. Principal, $18,000.

**Hugo W. Thompson** (1968). Established upon his retirement by colleagues, former students and other friends in honor of Hugo W. Thompson, professor of philosophy (1943-1968), for students from minority backgrounds. Principal, $1,050.

**Tobin-Smith** (1962). Established by Chester M. Tobin and Edward M. Smith, Saint Paul. Awarded to students accomplished in the Scottish arts of piping or drumming. Principal, $20,000.

**James E. Tripp** (1968). Established by Mr. and Mrs. Oakley Tripp, Class of 1912, to be used for a student from a minority group — American Indian or Negro, or, on occasion, for a foreign student. Principal, $10,000.

Endowed Scholarships

Gene Tunney (1967). Established by the former boxing champion. Principal, $5,000.


Robert A. Uppgren Memorial (1967). Given by the family and friends of Robert A. Uppgren, Macalester Class of 1946, to be awarded with preference to a student of the biology of natural resources. Principal, $3,273.


DeWitt Wallace — Lila Acheson Wallace Honorary Scholarship Fund (1959). Established by the Macalester faculty and staff to honor Mr. and Mrs. Wallace in appreciation of their magnificent contributions to the College. To be awarded to a student of high intellectual promise and in serious financial need. Two thousand dollars has been added to the principal by an anonymous donor. Principal, $17,977.

James Wallace (1916). Established by the family of Dr. Wallace, Macalester professor (1887-1939) and president (1894-1906). Principal, $35,126.

Janet D. Wallace (1959). Established by John C. Benson, Minneapolis attorney and Macalester trustee emeritus, in memory of Janet D. Wallace, the wife of Dr. James Wallace, Macalester's fifth president. Principal, $14,750.


O. T. and Kathryn M. Walter (1954). Established by his former students in honor of Dr. Walter, chairman of biology at Macalester (1922-1963) and in memory of Mrs. Walter. For a senior pre-medical student who has made the most of his opportunity at Macalester College and who by his character, scholarship and citizenship gives great promise of success in his chosen profession. Principal, $20,581.


F. Earl Ward (1965). Established by students, friends and colleagues of Professor F. Earl Ward, chairman of the College's English department, the recipient and upperclass English major nominated each year by the English department. Principal, $6,540.
Mr. and Mrs. Howard F. Ware (1953). Established by the estate of Clara M. Ware. Principal, $1,775.

Fred A. Waterous (1962). Established by the president of the board of the Waterous Company, Saint Paul. Principal, $5,000.

Ridley Watts (1965). Established by the retired New York textile manufacturer. Principal, $10,000.


Sidney J. Weinberg (1963). Established by the New York City investment broker. Principal, $10,000.


White Bear Lake Presbyterian Centennial (1963). Established by the First Presbyterian Church of White Bear Lake, Minnesota, for a student who plans to enter a church vocation. Principal, $15,000.

White-Olds (1960). Established by Dr. F. Laurence White and his wife, Dorothy Olds White, Macalester Class of 1923, missionary educators, in memory of their parents. Principal, $16,263.

Grace B. Whitridge (1956). Established by former students of Miss Whitridge, professor of drama and speech at Macalester (1900-1941). Preference is given to a student in speech. Principal, $12,222.

Mabel Wicker (1970). Established through a bequest in the will of Miss Wicker, Macalester Class of 1904, a public school teacher. Principal, $17,757.


William Brothers (1931). Established by Louis H. and Charles R. Williams of Minneapolis. Principal, $1,000.

Brent Williams Memorial (1971). Established by his parents, Mr. and Mrs. Robert Williams, Ottumwa, Iowa, relatives and friends including fellow students in memory of Brent Williams, who died during his sophomore year at Macalester, for students who show high promise in forensics and debate. Principal, $1,702.
Endowed Scholarships
Loan Funds


Stella Louise Wood (1964). Established by the alumnae of Miss Wood's School of Macalester, for students interested in elementary education. Principal, $13,010.

Anne Wunderlich (1965). Established by George P. and Wilma Fox Leonard of the San Francisco area. Principal, $25,000.

Marie Wunderlich (1959). Established by Martin Wunderlich, Omaha and San Francisco contractor, in memory of his mother, Marie Wunderlich, who brought him at the age of three to this country from Denmark. For a student preferably of Danish background. Principal, $10,000.

Martin Wunderlich (1965). Established by George P. and Wilma Fox Leonard of the San Francisco area. Principal, $25,000.

Forrest A. Young (1964). Established by Murel L. Humphrey, Macalester Class of 1934, to honor Dr. Young, economics department chairman (1929-1965), who was his former professor and major adviser. It is awarded to students majoring in economics. Principal, $30,915.

Mary S. and Thomas E. Young (1961). Established by Mr. and Mrs. Young, financiers, Portland, Oregon. Principal, $21,000.

Robert R. Young (1957-1964). Established by the president of the New York Central Railroad and augmented by his successor, Alfred E. Perlman, and other friends of Mr. Young. Principal, $8,556.

Loan Funds

Alliss Student Loan Fund (1968). Established by the Alliss Foundation. The principal is available to any needy Macalester students. Payments start four months after leaving the College. Principal, $272,596.

Carrie E. Alvord Student Loan Fund (1965). Established by the Alvord Foundation and available to any needy Macalester students and is interest-free until the borrower leaves the College. Principal, $15,906.
Judith Beach Memorial Book Loan Fund (1964). Established by Mr. and Mrs. Rex Beach and friends, in memory of their daughter who died in her freshman year at Macalester. Principal, $1,301.

Class of 1943 Loan Fund (1943). The Class of 1943 purchased war bonds as a Class memorial to be left with the College as a loan fund for Macalester ex-servicemen and their direct descendants. Principal, $300.

L. D. Coffman (1926). The principal of this fund is used as a general loan fund. Interest received from students is applied to increase the principal. Principal, $300.

Dames of the Round Table (1923). This fund was established in memory of Mrs. Jennie E. Straight. Loans are to be repaid not later than one year after the student has left college. An extension may be granted at the discretion of the College with consent of the donors. Principal, $120.

Paul A. Ewert Endowed (1925). This fund was established by the will of Paul A. Ewert, Class of 1894, the income of which is to be used in making loans to worthy students. Principal, $5,000.

James Faricy (1949). The principal of this fund is used as a general loan fund to worthy students. Principal, $200.


Jennie Hodgman (1942). This fund, administered by the Macalester Women’s Club, is used for loans to junior and senior women. Principal, $4,418.

Larry Honhart Memorial Book Loan Fund (1972). Established by his wife, Jeannie, Class of 1969, in memory of Lawrence P. Honhart, Class of 1968, for students with financial need to purchase textbooks. Principal, $505.

Knox Memorial Endowed (1926). This fund, established by Mrs. Jane Knox of Jackson, Minnesota, provides income for loans to worthy students. Principal, $2,500.

Macalester College Loan Fund (1967). This program provides for low-interest (2.5 percent), deferred-payment loans up to $1,000 per student per year. Interest is waived and payment of principal is deferred while the student is enrolled at Macalester, is attending a graduate school after graduating from Macalester, or is a full-time member of the U.S. Armed Forces. Repayment begins four months after discontinuance of full-time student or military status and must be completed within a five-year period. Principal, $259,888.

Memorial Loan Fund. Established through gifts to the College, it is used specifically for loans to students for college expenses. Principal, $18,576.
Loan Funds
Special and Annually Contributed Scholarships

National Defense Student Loans. Macalester College participates in the National Defense Student Loan program created under the National Defense Education Act of 1958. These loan funds are available to eligible students on a long-term basis at a low rate of interest (three percent) beginning nine months after the student ceases to carry half of the normal full-time workload at an eligible institution. Applications must be made to the Student Financial Aid Committee on forms provided by the College.

William F. Rogers Memorial Endowed (1927). This fund, bequeathed by Mr. Rogers, provides income which is available for student loans. Principal, $5,000.


Senior Loan Fund (1961). This fund has been created by Messrs. DeWitt Wallace, Charles B. Thomes and George P. Leonard for the specific purpose of providing needy senior students with low interest, easy payment loans; interest at four percent begins October 1 following graduation. Principal, $76,880.

Henry Strong Educational Foundation (1959). This fund was created under the will of General Strong for loans to juniors and seniors in the upper third of their class. Interest at four percent begins to accrue at graduation. Repayment may be made over a four-year period beginning at graduation. Principal, $38,393.

James Wallace Alumni Loan Fund (1939). This fund was established by the Alumni Association as a memorial to Dr. James Wallace. The principal of this fund is available for juniors and seniors who have maintained a scholastic average of C or better for the year preceding the granting of the loan. Principal, $28,191.

Special and Annually Contributed Scholarships

The Charles and Ellora Alliss Educational Foundation. An educational trust created by the will of Charles Clifford Alliss of Gull Lake, Minnesota, provides scholarships each year for undergraduate students preferably Minnesota residents in the upper 40 percent of their class.

California Scholarship Federation for Sealbearers. One scholarship for one year, value up to $2,000 depending on need. The College will select a CSF Sealbearer as the recipient, employing the same criteria that are used with the award of all other freshman scholarships. Applicants need not apply specifically for this CSF scholarship, but Sealbearer status must be verified by the CSF adviser. Scholarship is renewable if need continues and holder has satisfactory record of grades and conduct.

Macalester College National Merit and Achievement Scholarships. Macalester sponsors 40 scholarships in each entering class for finalists in the National Merit competition, and one
Special and Annually Contributed Scholarships and Annually Contributed Scholarships

Prizes

scholarship in each entering class for a finalist in the Merit Corporation’s National Achie­
vement competition for minority students. For many years, the Reader’s Digest Association, Inc., sponsored Merit Scholarships for finalists attending Macalester. Over the past decade, the College has been among the top 10 colleges and universities in the country in numbers of Merit Scholars enrolled.

Macalester Parents for International Relations Financial Aid Fund (1962). The organization contributes annually to a fund to be awarded to outstanding international students at Macalester College whose academic achievements merit financial assistance.

National Presbyterian College Scholarship Program. Open to members of the United Presby­terian Church in the U.S.A., these scholarships are awarded by the denomination’s Board of Christian Education to students attending Presbyterian-related colleges to recognize and en­courage scholastic ability and qualities of character and leadership.

The Presser Foundation Scholarship Fund for Music Students. Intended for music and music education majors who plan to become teachers.

Prizes

At Macalester College the following prizes are awarded in recognition of scholastic achieve­
ment and for accomplishment and proficiency.

H. S. Alexander Prize. In honor of Dr. Hugh S. Alexander, professor of geology at Macalester (1906-1948), a prize of $50 is awarded annually to the outstanding senior majoring in geology.

Twin Cities Chapter of the American Institute of Chemists Award. For an outstanding senior planning a career in chemistry.

Virginia McKnight Binger Prize in the Humanities. An award of $100 in cash and a copy of Bury’s History of Greece and Cary’s History of Rome to each of two students, one who shows the greatest proficiency in Greek, Latin or Ancient History, and one who shows the greatest proficiency in modern language or literature.

Case Prize in Western American History. Established by Leland D. Case, Class of 1922. An annual award of $150 to a student for original research or study of Western American History.

The Chemical Rubber Company Award. For outstanding achievement in freshman chem­
istry.

Collins Prizes in Extemporaneous Speaking. Established by the late Dr. G. Rowland Collins, Class of 1916, former dean, School of Business, New York University. Awarded annually.
Prizes

Mary Louise Conrad Endowed Awards for Achievement in Art. Established by parents and friends in memory of Mary Louise Conrad, Class of 1973. The endowed fund provides $50 annually for the purchase of art books to be awarded as prizes to students whose work is shown in the Spring Art Show.

Charles W. Ferguson Prizes in Public Speaking. Established by a senior editor of the Reader's Digest. Each year prizes from $50 to $300 are awarded to any regularly enrolled student on the basis of the student's demonstrated ability in public speaking during the entire forensic year. In particular, awards will be made to students who exhibit a sense of propriety in their remarks, and who gain instant rapport and maintain this rapport throughout the course of the speech.

Funk Prizes. For the encouragement of outstanding achievement in history, the Henry D. Funk Memorial Foundation, established in 1929 by his wife, offers $100 annually in three prizes. These prizes are awarded respectively to the senior and two juniors majoring in history, who have demonstrated the highest achievement in the work of the department.

Noyes Prizes. Established by Mrs. D. R. Noyes through a gift of $2,000, the interest of which is used as prizes for student scholarships. These are awarded to the first honor students of the senior, junior and sophomore classes.

Donald G. Paterson Award. Awarded by the Minnesota Psychological Association to the outstanding senior in Minnesota planning a career in psychology.

The Elaine Gartner Pilon Honorary Award. A year's subscription to Fortune Magazine is given annually to a senior major in economics and business: the criteria of choice are scholarly achievement and contribution to the department. Established by Elaine Gartner Pilon, Class of 1945.

Schubert Club Music Lesson Tuition Award. Given to two outstanding student performers.

Stringer Prize. In memory of her husband, Mrs. E. C. Stringer bequeathed $500 to the College, the income of which is awarded to the students who place first and second in an original oratorical contest.

Lowell Thomas Prizes in Public Speaking. Established by the author, newscaster and lecturer. Each year prizes from $50 to $300 are awarded on the basis of financial need to students who have made significant contributions while representing the College in intercollegiate debate and forensic competition.

The Wall Street Journal Prize. A medal of merit and a year's subscription to the Wall Street Journal is given annually to the outstanding senior in the field of economics and business.

Carol A. Wurtzebach Endowed Prize in Oral Interpretation. Established in 1965 by James W. Pratt and friends in memory of Carol A. Wurtzebach, this prize is to be awarded at the discretion of the speech department to a student, or students, for excellence in oral interpretation.
## Enrollment Statistics

### Fall Term Registration 1975-76

<table>
<thead>
<tr>
<th></th>
<th>Men</th>
<th>Women</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree Seeking Students</td>
<td>804</td>
<td>826</td>
<td>1630</td>
</tr>
<tr>
<td>Special Students</td>
<td>21</td>
<td>25</td>
<td>46</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>825</strong></td>
<td><strong>851</strong></td>
<td><strong>1676</strong></td>
</tr>
</tbody>
</table>

Candidates for Degrees, Class of 1976 | 378

### Geographical Distribution — Fall Term 1975

**Home States**
- Alabama (2)
- Alaska (1)
- Arizona (5)
- Arkansas (2)
- California (21)
- Colorado (14)
- Connecticut (25)
- Delaware (4)
- Florida (6)
- Georgia (7)
- Hawaii (6)
- Idaho (2)
- Illinois (194)
- Indiana (18)
- Iowa (47)
- Kansas (19)
- Louisiana (8)
- Maine (2)
- Maryland (26)
- Massachusetts (34)
- Michigan (23)
- Missouri (65)
- Montana (11)
- Nebraska (22)

**Home Countries**
- Argentina (1)
- Cameroon (2)
- Canada (1)
- Costa Rica (2)
- Colombia (1)
- Cyprus (1)
- England (2)
- France (1)
- Germany (2)
- Ghana (1)
- Hong Kong (1)
- India (2)
- Israel (1)
- Iran (6)
- Italy (1)
- Japan (5)
- Korea (1)
- Kenya (1)
- Kuwait (7)
- Malawi (1)
- Malaysia (27)
- Nigeria (2)
- Netherlands (3)
- Peru (1)
- Sierra Leone (1)
- South Viet Nam (1)
- Sudan (3)
- Taiwan (1)
- Thailand (1)
- Turkey (1)
- Venezuela (1)
- Zaire (1)

### Home Countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Number of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Hampshire</td>
<td>(3)</td>
</tr>
<tr>
<td>New Jersey</td>
<td>(22)</td>
</tr>
<tr>
<td>New Mexico</td>
<td>(2)</td>
</tr>
<tr>
<td>New York</td>
<td>(72)</td>
</tr>
<tr>
<td>North Carolina</td>
<td>(4)</td>
</tr>
<tr>
<td>North Dakota</td>
<td>(12)</td>
</tr>
<tr>
<td>Ohio</td>
<td>(76)</td>
</tr>
<tr>
<td>Oklahoma</td>
<td>(2)</td>
</tr>
<tr>
<td>Oregon</td>
<td>(11)</td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>(38)</td>
</tr>
<tr>
<td>Puerto Rico</td>
<td>(3)</td>
</tr>
<tr>
<td>Rhode Island</td>
<td>(1)</td>
</tr>
<tr>
<td>South Carolina</td>
<td>(2)</td>
</tr>
<tr>
<td>South Dakota</td>
<td>(10)</td>
</tr>
<tr>
<td>Tennessee</td>
<td>(3)</td>
</tr>
<tr>
<td>Texas</td>
<td>(16)</td>
</tr>
<tr>
<td>Vermont</td>
<td>(3)</td>
</tr>
<tr>
<td>Virginia</td>
<td>(11)</td>
</tr>
<tr>
<td>Washington</td>
<td>(6)</td>
</tr>
<tr>
<td>West Virginia</td>
<td>(1)</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>(84)</td>
</tr>
<tr>
<td>Wyoming</td>
<td>(1)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1676</strong></td>
</tr>
</tbody>
</table>

### Racial/Ethnic Background—Fall Term 1975

<table>
<thead>
<tr>
<th>Group</th>
<th>Percent</th>
<th>Number of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>White (including Foreign Students)</td>
<td>89.08</td>
<td>1493</td>
</tr>
<tr>
<td>Black American</td>
<td>6.98</td>
<td>117</td>
</tr>
<tr>
<td>Hispanic American</td>
<td>1.73</td>
<td>29</td>
</tr>
<tr>
<td>Native American</td>
<td>1.61</td>
<td>27</td>
</tr>
<tr>
<td>Asian American</td>
<td>0.60</td>
<td>10</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1676</strong></td>
<td></td>
</tr>
</tbody>
</table>
## Index

<table>
<thead>
<tr>
<th>Academic Advising</th>
<th>29</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Concentrations</td>
<td>35</td>
</tr>
<tr>
<td>Academic Honorary Societies</td>
<td>12</td>
</tr>
<tr>
<td>Academic Regulations</td>
<td>38</td>
</tr>
<tr>
<td>Activities</td>
<td>28</td>
</tr>
<tr>
<td>Activity Courses</td>
<td>109</td>
</tr>
<tr>
<td>Administrative Offices and Departments</td>
<td>157</td>
</tr>
<tr>
<td>Admissions Policies</td>
<td>14</td>
</tr>
<tr>
<td>Advanced Placement Program</td>
<td>18</td>
</tr>
<tr>
<td>Advising</td>
<td>29</td>
</tr>
<tr>
<td>Alumni Association</td>
<td>173</td>
</tr>
<tr>
<td>Ambassadors for Friendship</td>
<td>43</td>
</tr>
<tr>
<td>American Studies</td>
<td>74, 90</td>
</tr>
<tr>
<td>Anthropology</td>
<td>47</td>
</tr>
<tr>
<td>Application for Financial Aid</td>
<td>26</td>
</tr>
<tr>
<td>Application Methods</td>
<td>16</td>
</tr>
<tr>
<td>Art</td>
<td>50</td>
</tr>
<tr>
<td>Artists-In-Residence</td>
<td>172</td>
</tr>
<tr>
<td>Associated Colleges of the Midwest (ACM)</td>
<td>43</td>
</tr>
<tr>
<td>Associated Colleges of the Twin Cities (ACTC)</td>
<td>43</td>
</tr>
<tr>
<td>Astronomy</td>
<td>110</td>
</tr>
<tr>
<td>Athletics</td>
<td>109</td>
</tr>
<tr>
<td>Audio-Visual</td>
<td>32</td>
</tr>
<tr>
<td>Basic Competency</td>
<td>36</td>
</tr>
<tr>
<td>Biology</td>
<td>53</td>
</tr>
<tr>
<td>Buildings and Facilities</td>
<td>5</td>
</tr>
<tr>
<td>Business</td>
<td>62</td>
</tr>
<tr>
<td>Calendar</td>
<td>2</td>
</tr>
<tr>
<td>Campus</td>
<td>5</td>
</tr>
<tr>
<td>Career Planning and Placement</td>
<td>29</td>
</tr>
<tr>
<td>Certification After Graduation</td>
<td>69</td>
</tr>
<tr>
<td>Chemistry</td>
<td>57</td>
</tr>
<tr>
<td>Chinese and Japanese</td>
<td>141</td>
</tr>
<tr>
<td>Classics</td>
<td>59</td>
</tr>
<tr>
<td>College Entrance Examination</td>
<td>18</td>
</tr>
<tr>
<td>Community Council</td>
<td>29</td>
</tr>
<tr>
<td>Community Involvement Programs (CIP)</td>
<td>28</td>
</tr>
<tr>
<td>Competencies</td>
<td>36</td>
</tr>
<tr>
<td>Consortium-Based Opportunities</td>
<td>43</td>
</tr>
<tr>
<td>Confidential Financial Statements</td>
<td>22</td>
</tr>
<tr>
<td>Cooperative Programs</td>
<td>139</td>
</tr>
<tr>
<td>Core Concentration</td>
<td>35, 37</td>
</tr>
<tr>
<td>Counseling and Academic Advising</td>
<td>30</td>
</tr>
<tr>
<td>Credit by Examination</td>
<td>38</td>
</tr>
<tr>
<td>Credit Hours</td>
<td>34</td>
</tr>
<tr>
<td>Curricular Recommendations</td>
<td>36</td>
</tr>
<tr>
<td>Curriculum</td>
<td>46</td>
</tr>
<tr>
<td>Danish</td>
<td>90</td>
</tr>
<tr>
<td>Dean of Students Office</td>
<td>28</td>
</tr>
<tr>
<td>Degrees and Accreditation</td>
<td>12</td>
</tr>
<tr>
<td>Departmental Assistants</td>
<td>171</td>
</tr>
<tr>
<td>Departmental Courses and Programs</td>
<td>47</td>
</tr>
<tr>
<td>Departmental Major Concentration</td>
<td>35</td>
</tr>
<tr>
<td>Distribution Requirements</td>
<td>36</td>
</tr>
<tr>
<td>Dramatic Arts</td>
<td>133</td>
</tr>
<tr>
<td>Early Admission</td>
<td>17</td>
</tr>
<tr>
<td>Early Decision</td>
<td>16, 19</td>
</tr>
<tr>
<td>East Asian Studies</td>
<td>140</td>
</tr>
<tr>
<td>Economics and Business</td>
<td>62</td>
</tr>
<tr>
<td>Education</td>
<td>66</td>
</tr>
<tr>
<td>Elementary Education Program</td>
<td>66</td>
</tr>
<tr>
<td>Employment</td>
<td>25</td>
</tr>
<tr>
<td>Endowed Scholarships</td>
<td>24, 174</td>
</tr>
<tr>
<td>Engineering</td>
<td>139</td>
</tr>
<tr>
<td>English</td>
<td>72</td>
</tr>
<tr>
<td>English as a Second Language</td>
<td>151</td>
</tr>
<tr>
<td>Entrance Requirements</td>
<td>15</td>
</tr>
<tr>
<td>Environmental Studies</td>
<td>142</td>
</tr>
<tr>
<td>Expenses and Deposits</td>
<td>19</td>
</tr>
<tr>
<td>Faculty</td>
<td>162</td>
</tr>
<tr>
<td>Fees</td>
<td>20</td>
</tr>
<tr>
<td>Financial Aid Policies</td>
<td>22</td>
</tr>
<tr>
<td>French</td>
<td>78</td>
</tr>
<tr>
<td>Freshman Seminars</td>
<td>36, 154</td>
</tr>
<tr>
<td>General Distribution Requirements</td>
<td>36</td>
</tr>
<tr>
<td>General Science Concentration</td>
<td>68</td>
</tr>
<tr>
<td>Geography</td>
<td>82</td>
</tr>
<tr>
<td>Geology</td>
<td>85</td>
</tr>
<tr>
<td>Germanic Languages and Literatures</td>
<td>87</td>
</tr>
<tr>
<td>Grade Point Average</td>
<td>38</td>
</tr>
<tr>
<td>Grading Systems</td>
<td>38</td>
</tr>
<tr>
<td>Graduate Assistant</td>
<td>171</td>
</tr>
<tr>
<td>Graduation Requirements</td>
<td>35</td>
</tr>
<tr>
<td>Grants</td>
<td>24</td>
</tr>
<tr>
<td>Greek</td>
<td>60</td>
</tr>
<tr>
<td>Health Service</td>
<td>28</td>
</tr>
<tr>
<td>History</td>
<td>90</td>
</tr>
<tr>
<td>The History</td>
<td>11</td>
</tr>
<tr>
<td>Honorary Societies</td>
<td>12</td>
</tr>
<tr>
<td>Honors Program</td>
<td>39</td>
</tr>
<tr>
<td>Housing</td>
<td>21, 30</td>
</tr>
<tr>
<td>Humanities</td>
<td>145</td>
</tr>
<tr>
<td>Independent Study</td>
<td>36, 46</td>
</tr>
<tr>
<td>Individualized Learning</td>
<td>36</td>
</tr>
<tr>
<td>Individually-Designed Interdepartmental Major Concentration</td>
<td>35</td>
</tr>
<tr>
<td>Instructional Policies and Programs</td>
<td>34</td>
</tr>
<tr>
<td>Instructional Support</td>
<td>31</td>
</tr>
<tr>
<td>Interdepartmental Curriculum</td>
<td>46</td>
</tr>
<tr>
<td>Interdepartmental Major Concentration</td>
<td>35</td>
</tr>
<tr>
<td>Interdisciplinary Studies</td>
<td>140</td>
</tr>
<tr>
<td>Interim Term</td>
<td>34</td>
</tr>
<tr>
<td>International Affairs Program</td>
<td>43</td>
</tr>
</tbody>
</table>
Index

International Center - 10, 43
International Programs - 37, 39
International Studies - 146
Internships - 36, 46
Intramurals - 110
Japanese - 141
Journalism - 96
Language Study Overseas - 40
Latin - 60
Latin-American Studies - 148
Library Services - 31
Linguistics - 148
Loan Funds - 194
Loans - 25
Major Concentration - 35, 37
Map - 4
Mathematics - 96
Minority Program - 17, 29
Music - 100
Netherlandic - 90
Norwegian - 90
Notification and Reply Dates - 19
Nursing - 139
Officers of the College - 157
Organizations - 28
Overseas Study Programs - 39
Phi Beta Kappa - 12
Philosophy - 104
Physical Education - 108
Physics and Astronomy - 110
Political Science - 114
Portuguese - 133
Pre-Professional Programs
  (Pre-Law and Pre-Medical) - 140
Preceptorship - 46
Presidents - 160
Prizes - 197
Professors Emeriti - 160
Program Board - 28
Psychology - 118
Purpose and Belief - 1
Refunds - 21
Registrar - 31
Regulations Concerning Concentrations - 37
Religious Life - 29
Religious Studies - 121
Requirements - 35
Residence Halls - 21, 30
Residence Requirement - 38
Room and Board Charge - 20, 21
Russian - 125
Russian Area Studies - 151
Scholarships - 24, 174, 196
S-D-NC Grading - 38
Secondary Education Program - 67
Serbo-Croatian - 124
Single Application Method (SAM) - 17, 19
Slavic Languages and Literatures - 124
Social Science Concentrations - 68
Sociology - 126
SPAN (Student Project for Amity Among Nations) - 42
Spanish - 131
Speech Communication and Dramatic Arts - 133
Staff Emeriti - 162
Statement of Purpose and Belief - 1
Statistics - 199
Student Academic Records - 31
Student Government - 29
Student Housing - 30
Student Services - 28
Student Teaching - 69
Studio Instructors - 172
Study Abroad Programs - 40
Study Skills Center - 30
Summer Session - 34
Teacher Certification Requirements - 38, 68
Teacher Placement - 70
Technical Assistants - 171
Topics Courses - 46
Transfer Students - 18
Trustees - 156
Tuition - 20, 26
Tutorial - 46
UMAIE (Upper Midwest Association for Intercultural Education) - 42
Urban Studies - 44, 152
Urban Education - 44
Visitors - 14
Winton Health Service - 6, 28
Work - 25
World Press Institute - 43