Catalog Statement
All statements contained in this catalog reflect the approved policies of Macalester College that were in effect as of April 1, 1980. However, for the best possible educational experience of its students, or for unexpected financial reasons, the College reserves its right to change at any time any of the provisions, statements, policies, curricula, procedures, regulations, or fees. Such changes will be duly published and distributed.

Students, faculty and staff are responsible for all information and deadlines contained in this catalog and in the current Student Handbook (available in the Office of the Dean of Students). The Student Handbook supplements the College Catalog and expands upon College policies and procedures.

Nondiscriminatory Policy
Macalester College does not discriminate on the basis of age, sex, race, color, national and ethnic origin, religious preference, or handicap. Inquiries about the College's nondiscriminatory policy may be directed to the Office of the President.
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College Map
### 1980-81 Calendar

#### Fall Term 1980
- **Sept. 1-4/Mon.-Thurs.**
- **Sept. 4/Thurs.**
- **Sept. 5/Fri.**
- **Sept. 18/Thurs.**
- **Sept. 25/Thurs.**
- **Oct. 27-31/Mon.-Fri.**
- **Nov. 3-7/Mon.-Fri.**
- **Nov. 6/Thurs.**
- **Nov. 10-13/Mon.-Thurs.**
- **Nov. 17-Dec. 5/Mon.-Fri.**
- **Nov. 27-30/Thurs.-Sun.**
- **Dec. 12/Fri.**
- **Dec. 15-18/Mon.-Thurs.**

#### Interim Term 1981
- **Jan. 5/Mon.**
- **Jan. 7/Wed.**
- **Jan. 16/Fri.**
- **Jan. 30/Fri.**

#### Spring Term 1981
- **Feb. 3/Tues.**
- **Feb. 4/Wed.**
- **Feb. 17/Tues.**
- **Feb. 24/Tues.**
- **Mar. 23-27/Mon.-Fri.**
- **Apr. 7/Tues.**
- **Apr. 17/Fri.**
- **Apr. 27-May 7/Mon.-Thurs.**
- **May 15/Fri.**
- **May 18-21/Mon.-Thurs.**
- **May 23/Sat.**

#### Key Dates:
- **New Student Orientation**
- **New Student Registration**
- **Upperclass Validation and Beginning of Classes**
- **Last Day to Register or Validate**
- **Last Day to Add a Class, Drop a Class (No Notation), and Designate Grading Options**
- **Fall Mid-Term Break**
- **Interim 1981 Independent Registration**
- **Last Day to Withdraw; Incompletes Due from Spring, Summer 1980**
- **Interim 1981 Class Registration**
- **Spring 1981 Class Registration**
- **Thanksgiving Recess**
- **Classes End**
- **Final Examinations**
- **Classes Begin**
- **Last Day to Register, Add a Class, and Drop a Class (No Notation)**
- **Last Day to Withdraw from a Class**
- **Classes End**
- **Validation of Registration**
- **Classes Begin**
- **Last Day to Register or Validate**
- **Last Day to Add a Class, Drop a Class (No Notation), and Designate Grading Options; Incompletes Due from Interim 1981**
- **Spring Mid-Term Break**
- **Last Day to Withdraw; Incompletes Due from Fall 1980**
- **Easter Recess**
- **Fall 1981 Class Registration**
- **Classes End**
- **Final Examinations**
- **Baccalaureate and Commencement**
1981-82 Calendar

Fall Term 1981

Aug. 30-Sept. 2/Sun.-Wed. New Student Orientation
Sept. 2/Wed. New Student Registration
Sept. 3/Thurs. Upperclass Validation and Beginning of Classes
Sept. 7/Mon. Labor Day Recess
Sept. 17/Thurs. Last Day to Register or Validate
Sept. 24/Thurs. Last Day to Add a Class, Drop a Class (No Notation) and Designate Grading Option
Oct. 26-30/Mon.-Fri. Fall Mid-Term Break
Nov. 2-6/Mon.-Fri. Interim 1982 Independent Registration
Nov. 4/Wed. Last Day to Withdraw; Incompletes Due from Spring, Summer 1981
Nov. 9-12/Mon.-Thurs. Interim 1982 Class Registration
Nov. 16-Dec. 4/Mon.-Fri. Spring 1982 Class Registration
Nov. 26-29/Thurs.-Sun. Thanksgiving Recess
Dec. 11/Fri. Classes End
Dec. 14-17/Mon.-Thurs. Final Examinations

Interim Term 1982

Jan. 4/Mon. Classes Begin
Jan. 6/Wed. Last Day to Register, Add a Class and Drop a Class (No Notation)
Jan. 15/Fri. Last Day to Withdraw from a Class
Jan. 29/Fri. Classes End

Spring Term 1982

Feb. 2/Tues. Validation of Registration
Feb. 3/Wed. Classes Begin
Feb. 16/Tues. Last Day to Register or Validate
Feb. 23/Tues. Last Day to Add a Class, Drop a Class (No Notation), and Designate Grading Option; Incompletes Due from Interim 1982
Mar. 22-26/Mon.-Fri. Spring Mid-Term Break
Apr. 6/Tues. Last Day to Withdraw; Incompletes Due from Fall 1981
Apr. 9/Fri. Easter Recess
Apr. 26-May 6/Mon.-Thurs. Fall 1982 Class Registration
May 14/Fri. Classes End
May 17-20/Mon.-Thurs. Final Examinations
May 22/Sat. Baccalaureate and Commencement
Admission Policies

The value of a college is strongly affected by the people who study there; and this is particularly true for a small, undergraduate institution like Manchester. In the area of admissions, many factors are involved. First, we want to attract the best students we can find. Second, we want to attract the right kind of students to Manchester. We do not merely want to attract the best and brightest students; we want students who have the potential to contribute to campus life and to society in general. Third, we want to attract students who can afford to pay for a college education. We believe that a college education is valuable, and we want to make it as accessible as possible to all students who can benefit from it.

We consider the following factors when evaluating a candidate's application:

1. Academic record: We look at the academic record of each applicant, including grades, standardized test scores, and extracurricular activities.
2. Letters of recommendation: We ask for letters of recommendation from teachers, counselors, or anyone who knows the applicant well.
3. Personal statements: We ask applicants to submit a personal statement that describes their interests, goals, and why they want to attend Manchester.
4. Interview: We may conduct an interview with the applicant to get a better sense of their personality and how they will fit into campus life.

We believe that a college education is valuable, and we want to make it as accessible as possible to all students who can benefit from it.
<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
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</thead>
<tbody>
<tr>
<td>Aug 20-27</td>
<td>Classes Begin</td>
</tr>
<tr>
<td>Aug 28-31</td>
<td>Last Day to Register, Add a Class and Drop a Class (No Refund)</td>
</tr>
<tr>
<td>Sep 1-7</td>
<td>Last Day to Withdraw from a Class</td>
</tr>
<tr>
<td>Jan 15/16</td>
<td>Classes End</td>
</tr>
<tr>
<td>Feb 4/9</td>
<td>Validation of Registration</td>
</tr>
<tr>
<td>Feb 10/14</td>
<td>Classes Begin</td>
</tr>
<tr>
<td>Feb 15/20</td>
<td>Last Day to Register or Validate</td>
</tr>
<tr>
<td>Feb 22/26</td>
<td>Last Day to Add a Class, Drop a Class (No Refund), and Diagnostic Grading Option</td>
</tr>
<tr>
<td>Mar 8-14</td>
<td>Incompleting Date from Jan 16</td>
</tr>
<tr>
<td>Mar 15-21</td>
<td>Spring Break Week</td>
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<tr>
<td>Apr 18-24</td>
<td>Last Day to Withdraw Inscriptors Date from Fall 1981</td>
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<tr>
<td>Apr 25-May 1</td>
<td>Easter Holiday, Fall 1982 Class Registration</td>
</tr>
<tr>
<td>May 15-19</td>
<td>Classes End</td>
</tr>
<tr>
<td>May 20-22</td>
<td>Final Examinations</td>
</tr>
<tr>
<td>May 23</td>
<td>Baccalaureate and Commencement</td>
</tr>
</tbody>
</table>
Admission Policies

The nature of a college is strongly affected by the people who study there, and this is particularly true for a small, undergraduate institution like Macalester. It is the goal of the Admissions Office to bring to campus each year a group of entering students who will further long-standing traditions of scholarship, diversity and service to others.

Because Macalester prides itself on its academic excellence, a primary goal of its admission process is to select from among its applicants those students who show particular promise to profit from and contribute to intellectual life on campus. Our evaluation of this potential is a humanistic one, however; there are no cut-off points below which a student will not be considered for admission. While standard statistical measures such as test scores and class rank must of necessity be a part of an admission process which operates on a national, and even international basis, many other factors are also considered in our estimation of a candidate's intellectual promise. Among these are recommendations from instructors, the student's application essay and interviews with the Admissions Office staff.

It is a strong belief at Macalester that learning transcends the classroom, and that students can learn a great deal from each other, receiving insights into people and events that their own backgrounds may have failed to provide. We therefore strive to insure that Macalester students represent varied economic, social and cultural backgrounds.

In addition, we believe that a fulfilling college experience includes exposure to a dynamic campus life. Macalester students have long made significant achievements in non-academic areas—in the arts, in athletics, and especially in activities involving contributions to the world around them. For this reason, evidence of social and ethical concerns, leadership potential and the ability to contribute to campus activities are important considerations in our evaluation of a candidate's admission credentials.

Our admission evaluations are thus both comprehensive and complex, because there are many ways in which a student can show promise for contributing to Macalester. We seek a diverse student body who, while interested in their personal academic growth, also hope to contribute to campus life in individual ways.

Secondary School Preparation

It is expected that admitted candidates will have graduated from a secondary school with a scholastic record which predicts success at Macalester. While there is no cut-off in our admission process based on past academic performance, students should have done well in a strong curriculum at the secondary level.

No single course is required for admission. However, the following curriculum is strongly recommended: four years of English; three years of history or social science; and two years each of a foreign language, mathematics and laboratory science. In addition, students should normally have taken at least some of the honors or advanced courses available at their secondary school.

College Entrance Testing

All freshman candidates are required to take either the SAT test of the College Entrance Examination Board or the ACT test of the American College Testing program. Minnesota residents may submit their PSAT scores in place of the SAT or ACT although testing at the senior grade level is preferable. 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
further study should take these achievement tests.
Since most admissions decisions are made during February, it is strongly recom-

Methods of Application for Freshmen
Students applying for admission may obtain an application booklet by writing to the
Admissions Office, Macalester College, St. Paul, Minnesota 55105. Students may also
file the "Common Application" which is available in most secondary school counseling
offices. Minnesota residents who file the Minnesota College Admission Form, will be
required to submit supplemental information.

A $15.00 non-refundable application fee is required. The fee may be waived based
on written request from the student's secondary school counselor. This request must
include brief explanation of the factors necessitating the waiver.

Macalester offers three application options for freshmen: Early Decision, Regular
Application and Early Admission. While procedures are nearly identical for each option,
notification dates and deposit deadlines vary. Criteria for admission and financial
aid remain the same for all three decision dates. Students should choose the application
method that has notification and deposit deadlines similar to the other colleges
to which they are applying.

Early Decision: Early Decision candidates should rank in the top quarter of their class
through their junior year. Their application and supporting materials must be filed by
December 15 of the senior year. Financial aid forms should be submitted as soon after
the first of the year as possible. Students denied admission as Early Decision
candidates will be reconsidered in the Regular Admissions Process on March 1.
Candidates admitted under the Early Decision program are notified by January 15 and
must make a non-refundable deposit within two weeks of the date of acceptance or
receipt of the aid award. Therefore, this method is appropriate only for those students
who consider Macalester as their first choice college.

Regular Application: Students who choose to be notified by March 1 should file all
application materials including financial aid information by February 1. If accepted for
admission the student must make a non-refundable deposit by April 1 (or two weeks
after receipt of an aid award) to hold a place in the freshman class. Students whose
credentials are not received by the above dates will be considered if additional places
are available in the entering class. Housing and financial aid will also be subject to
availability.

Freshmen who are applying for financial aid should complete the Financial Aid Form
or Family Financial Statement using federal income tax information for the previous
year. (Applicants for the academic year 1981-82 should submit the 1980 financial
information. Applicants for the academic year 1982-83 should submit the 1981 financial
information.)

Early Admission: A few students who have not yet graduated from secondary school
are admitted to Macalester at the end of their junior year. Among the major considera-
tions for early admission are the judgments of the Admissions Committee, the
secondary school principal, headmaster or college adviser, and the candidate's parents
concerning the candidate's maturity and qualifications to do distinguished work
in college. An interview is almost always necessary. The regular admissions process
is used by students seeking early admission to Macalester.
Admission to the Minority Program

Macalester's commitment to a diverse student body brings to the campus many students from black, Indian and Hispanic backgrounds. Many of these students present a range of credentials similar to those of their classmates. In addition the college actively recruits those minority students with promising potential but whose socioeconomic background may have deprived them of an adequate preparation for college. For these students a flexible admission policy has been established based partially upon class rank and test scores. Special consideration and weight are placed upon recommendations by counselors and others who are familiar with the student's motivation and potential.

Minority Program services include academic, financial and personal counseling to insure that these students succeed at Macalester.

Students applying for the Minority Program use the same application and aid procedures as other applicants.

Advanced Placement Program

Students whose scores on the College Board Advanced Placement Examinations are rated 3, 4, or 5 will be considered for advanced placement and appropriate credit. Freshmen who wish to apply for advanced placement should arrange to have the test results transmitted to the Admissions Dean of the College. It may be necessary for the student to have a conference with the appropriate department chair during new student 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 chairs 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.

Methods of Application for Transfer Students

Transfer students should follow regular admission procedures and file a Dean of Students' Recommendation from their most recent college, plus transcripts of all college work. Those students who will have completed less than one full year of college-level coursework must also submit their secondary school transcripts. Transfer applicants should also present a record of "C" (or 2.0 average) or better.

Students considering transferring to Macalester may have their transcripts evaluated prior to applying by sending an official transcript and a letter of intent to the Admissions Office. This evaluation is not official, but is usually accurate enough to be very helpful in planning for transfer. Transfer applications are evaluated as soon as they are completed. Candidates are, when possible, notified of admission and financial aid decisions within two weeks of completion of their files.

Credits from accredited liberal arts colleges will be evaluated according to the nature and quality of the work presented as judged by the Registrar's Office. In general, students who have successfully completed courses with grades of "C" or better in the natural sciences, social sciences, fine arts and humanities (or, in the case of Community College transfer students, a transfer liberal arts program) will usually find that their credits transfer to Macalester. Four "semester credits" or six "quarter credits" equal one Macalester course; courses taken pass/fail must have a verified grade of "C" or better to transfer.

Students who have attended non-accredited institutions must have their work validated.
by examination or by showing competence to carry advanced work successfully. Award of credit in such cases may be delayed for one or two terms awaiting such evaluation.

**The Adult Scholar Program**

The Adult Scholar Program accepts up to twenty-five part-time students each year who want either to complete a B.A. degree, begin college for the first time, or complete another full major concentration. To qualify for the program, the student must be at least twenty-five years old and must not have been enrolled in a degree-seeking program for at least five years. The program is selective and admission is based on previous academic experience, life and work experience while out of school, the student's motivation and an admissions interview. Application materials are available in the Admissions Office. The fee for this program is one-half the regular per course tuition.

**Foreign Student Admissions**

International students should direct inquiries and make application to Macalester through the Office of Foreign Student Admissions, Macalester College, 1600 Grand Avenue, St. Paul, Minnesota 55105. They are not required to pay an application fee. An international student is any candidate who is not a citizen of the United States. Permanent residents of the United States should check with the Foreign Student Admissions Office to find out which admissions process (regular or foreign) is appropriate for them.

Foreign applicants must submit the following materials:

1. The Macalester College Foreign Student Application form.

2. Recommendation forms from three professors selected by the student. Forms for these recommendations will be sent upon receipt of your application.

3. Original or certified copies, signed by the proper authority, of your high school transcripts and any post-secondary course work (showing courses taken and grades earned). Please provide a certified English translation if necessary.

4. Original or certified copies signed by the proper authority of the results of final high school examinations (school leaving certificate) and the results of national examinations (WAEC, GCE or others). Many applicants will not have taken the examinations at the time of application. The results may be submitted later upon completion of the examinations. Please provide English translations of the results if necessary.

5. Proof of English language proficiency as documented by results of the Test of English as a Foreign Language or evidence on the candidate's secondary school transcript of substantial English language training. (The TOEFL test is administered periodically throughout the world. Arrangements to take this test should be made well in advance through your school, a U.S. or international agency in your area, or by writing to TOEFL, Box 899, Princeton, New Jersey 08541, U.S.A.) All students whose first language is not English are tested upon arrival and placed in English language courses as required.

6. Proof of financial support from parents and/or other sponsors, documented by proper authorities.

7. The results of the Scholastic Aptitude Test, if you have completed high school in the U.S. or in an American school abroad. Other students may wish to submit these scores because they are often helpful in our evaluation of your application. (This test is administered periodically throughout the world. Arrangements to take the examination...
should be made well in advance through your school, a U.S. or international agency in
your area, or by writing to SAT, Box 589, Princeton, New Jersey 08541, U.S.A.)

8. Non-Resident applicants requesting financial aid must complete a financial aid form
available upon request from the Office of Foreign Student Admissions. (Students who
are only applying to the English as a Second Language Program are not eligible for
financial aid.) Financial aid for non-residents is awarded only to students entering in
the fall semester (September) and all application materials must reach the Office
of Foreign Student Admissions on or before March 10.

Permanent residents should follow the regular financial aid procedure.

Students not applying for financial aid should complete the application process
no later than one month before the beginning of the term they wish to enter the College.

Special Students
If a course is not fully enrolled by degree-seeking Macalester students, Special Student
registration is sometimes possible. Financial aid is not usually available; however,
outside funds may become available and Special Students should inquire about this
possibility if they need financial aid. The different types of Special Students are listed
below. The application process, fees and tuition are different for each program.

High school students may take courses at Macalester while still enrolled in their
secondary school. If college credit is desired, the student must complete the Special
Student application with the $5 service fee, and submit a high school transcript.
An interview is required. The student must also have permission from the instructor
to enroll in the desired class. Tuition per course is $150.

Senior Citizens Persons 65 or older may enroll at Macalester as Special Students.
For information on registration, contact the Registrar's Office. Permission of the instructor
is required to enroll in each course. Tuition per course is $25.

Macalester Graduates may take courses for credit by completing the Application for
Re-Admission available in the Registrar's Office. No application fee is required.
Permission of the instructor is required to register for each course. Tuition is $100 per
course. Macalester graduates are also eligible to audit courses for $25 per course,
take Education 125, Drug Education and Human Relations for $50, or take physical
education activities for $25 per course.

Audit Students Persons who are not full-time Macalester students and who wish to
audit a course at Macalester should consult the Registrar's Office. Permission of the
instructor is required. The fee per course is $50.

Visitors to the Campus
Prospective students and others desiring guided campus tours should go to the
Admissions Office. 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.,
Monday through Friday. The Admissions Office is also open for appointments and tours
until noon on Saturdays during the regular academic year. The Office of Admissions is
closed on College holidays, such as Christmas, New Years, 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; students should be prepared to pay for any additional meals desired. More detailed information on overnight visits is available by writing or calling the Admissions Office.

Expenses

Newly admitted students pay a one-time, non-refundable enrollment deposit on $50 to reserve places in the entering class. This deposit is returned, with accrued interest, upon graduation or formal withdrawal.

Students assigned to College residence halls pay an additional room deposit of $50 per year, which is credited against the following semester’s room charges. The refund policy is explained later in this section.

All charges assessed by the College are due and payable on or before August 15 (fall term) and January 15 (spring term). A budget payment plan which requires payment of 40 percent of charges by the above dates, and 20 percent in each of the following months is available. Also available are several independently sponsored monthly payment plans with optional insurance and extended payment features. Information and application materials may be obtained by writing to the Bursar’s Office, Macalester College, St. Paul, Minnesota 55105.

Tuition, Fees and Room and Board 1980-81

The tuition rate for full-time students (three or four credit courses per semester) for 1980-81 is $4,725 per year. Information about the 1981-82 tuition and fees will be available in the Admissions Office.

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Fee</td>
<td>$15</td>
</tr>
<tr>
<td>Enrollment Deposit (returned upon graduation or formal withdrawal)</td>
<td>$50</td>
</tr>
<tr>
<td>Late Registration Fee</td>
<td>$25</td>
</tr>
<tr>
<td>Late Validation Fee</td>
<td>$25</td>
</tr>
<tr>
<td>Student Activity Fee</td>
<td>$45</td>
</tr>
</tbody>
</table>

Tuition

Regular:

- Full-time, per academic year ........................................ 4,725
- Part-time, per course .................................................. 530
- Fifth Course (per semester) ......................................... 350
- Audit—Fifth Course ................................................... 25

Special:

- Adult Scholars, part-time per course ................................ 265
- Macalester Graduates, per course ...................................... 100
- Senior Citizens, per course .......................................... 25
- High School students, per course ..................................... 150
- Audit, per course (Macalester Graduate $25) ....................... 50
- Education 125, Drug Education & Human Relations, for part-time students (Macalester Graduates $50) .................................. 200
- Physical Education activity, for part-time students (Macalester Graduates $25) ........................................ 50
Expenses

**Music Lessons:**
- Private lessons, per term, non-major students .................................................. 96
- Class lessons, per term ......................................................................................... 48
- Interim Term ................................................. Negotiated
**Credit by Examination** .................................................. 50

**Interim Term Tuition:**
- Full-time student (non-refundable) ................................................................. No additional charge
- Full-time one-semester student (non-refundable if the Interim Term is required for graduation) .................................................. 265
- Interim Term only student .............................................................................. 530

**Summer Session Tuition:** See Summer Session catalog

**Room and Board**
- Deposit .............................................................................................................. 50
- Per academic year ......................................................................................... 1,800
  - (Room — $925)
  - (Board — $875)
- **Language Houses (room only)** .......................................................... 1,025
- **Hebrew House (room only)** .................................................................. 975

**Interim Term Room and Board:**
- Full-time students (both semesters) ................................................................. No additional charge
- Full-time student (one semester) .................................................................. 110
- Interim Term only student .............................................................................. 220

**Summer Session Room and Board:** See Summer Session catalog

**Residence Halls**
Students interested in living in college housing will be provided with a residence hall application 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 Admissions Office. Housing is assigned to new students in order of receipt of the residence hall application and deposit.

**Refunds**
The enrollment deposit made by an applicant is **non-refundable**. Therefore, if new students have difficulty with deposit deadlines they should contact the Admissions Office.

Upon graduation or formal withdrawal from the College, the enrollment deposit, with accrued interest, will be returned. If a student informally withdraws or does not return by the specified time from an official leave of absence, he or she will forfeit the enrollment deposit and will be required to make a new enrollment deposit upon approval of an application for re-admission.

The room deposit made by new students is refundable only if 1) notice of cancellation is received prior to July 1 or 2) a student is unable to secure a space in the residence hall system due to lack of rooms. The room deposit made by returning students is **non-refundable**.

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 unused portion bears to the total term. The same procedure will be followed for calculating the refund when a student officially changes from full-time to part-time or officially drops or withdraws from a fifth course. Room and board refunds are made on
Expenses

Financial Aid

a pro rata basis from the date the room is vacated. No room refunds are made after mid-term unless the room contract can be sold. Students receiving financial aid who receive a pro rata tuition refund will receive a similar pro rata reduction in their total financial aid package. (See the Financial Aid section of the Macalester College Student Handbook for additional refund policy information.) No refunds or credits are granted without first receiving 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.

The fifth course fee is refundable if students enroll in three courses for the other semester of the same year. It is not refundable if students enroll in less than three courses or withdraw from a fourth course.

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. A student may receive up to eight semesters of aid, assuming other criteria are met. While the amount of financial aid a student may receive is dependent on his/her "need," the applicant must also be considered to be making satisfactory progress in his/her course of study. Students placed on a "required leave of absence" are not eligible for any College assistance during the leave period. 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. All students must apply for a Basic Educational Opportunity Grant and students who are Minnesota residents are also expected to apply for aid through the Minnesota State Scholarship and Grant Program. All assistance should be reported to the Financial Aid Office, even if it is received after the Macalester award has been made.
Financial Aid

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 a student's 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 and the college expenses including tuition, room and board, books, personal expenses and travel for students outside of the five state area. To be considered for financial aid, a student's parent must submit either a Financial Aid Form (FAF) 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 FAF 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 assembled.

In addition to the FAF, a Macalester Financial Aid Application is required. This form is included in the Admissions Application Booklet.

Students who are financially independent of their families must 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 the year in which aid is requested and the year in which aid is to be received (i.e., a student seeking aid for the 1980-81 academic year cannot be claimed as a dependent on his or her parents' 1979 or 1980 tax return); must not live with their parents for a period of more than six weeks during this same two year period; and must not receive more than $750 support from their families during this period.

Only incoming students filing for aid on an independent basis 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.

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 30, 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, the student's need, and the College aid policies. During 1979-80 about 54 percent of Macalester's 1,783 students received financial assistance. The 1979-80 financial aid budget was approximately 1.9 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.

Scholarships and Grants

**Basic Educational Opportunity Grant Program (BEOG).** Through the BEOG Program the federal government provides grant assistance to all students with qualifying financial needs who are attending an eligible institution on at least a half-time basis.

**General Scholarships.** General scholarships, provided from the College budget, are awarded to freshmen and transfer students as well as upperclass students 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 and who also show a demonstrated financial need. These scholarships are listed in the “Scholarships and Special Endowed Funds” section of this catalog.

**Minnesota State Scholarship/Grant Program (MSSG).** 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 Financial Aid Office. The deadline for this application is March 1.

**National Merit Scholarships.** Macalester ranks high among the nation’s colleges and universities in number of National Merit Scholars enrolled. Through the College-sponsored program, 25 scholarships will be available for 1980-81.

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

**National Presbyterian College Scholarships.** Macalester ranks high in total numbers of Presbyterian Scholars (both Agency and Board sponsored and College sponsored) in the nation since 1956. Prospective students who are members of the Presbyterian Church should apply to this program early in their senior year of high school. Applications are available at church offices or through the Macalester Admissions Office.

**Minority Scholarships.** Macalester’s Minority Program, as well as being an academic support program, can provide 25 new students each year with 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 to be considered for the $500 renewable grants, which are awarded by a committee of seven faculty members on the basis of academic performance and potential and talent.

**Supplemental Educational Opportunity Grants (SEOG).** Established by Congress to help colleges enroll qualified students of exceptional financial need, this program is administered by Macalester.
DeWitt Wallace Scholarships. Macalester awards DeWitt Wallace Scholarships to National Merit and National Achievement Commended students with high class standing. These scholarships may also supplement National Merit and Achievement Scholarships if a student qualifies on the basis of financial need.

Loans
Guaranteed Student Loans (GSL). Students on financial aid, and students not receiving financial aid through the College, are eligible to apply for a Guaranteed Student Loan. Under this program, for 1980-81, 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. Interest and repayment begin nine to twelve months after leaving college or graduate school. Guaranteed Student Loans can be obtained through either a local bank or 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 begin nine months after leaving college or graduate school.

Employment
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. While student job placement for the first year is limited primarily to the Food Service, Library, and Physical Plant, most upperclass students are able to work in an area of their interest. Students normally work approximately 10 hours a week and are able to set up their work schedule around the times they attend classes.

The State Work-Study Program. Macalester receives money from the State of Minnesota to assist those fulltime students who are Minnesota residents and who also qualify on the basis of their financial need.

Other Campus Employment. There are limited funds available for employing students not on financial aid. Generally, campus employment is 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.

Payment of Student Accounts
Students are billed for the first semester during mid-July and for the second semester on December 15. What is owed the College is determined by subtracting actual credits from the charges for the semester. For each term, 50 percent of the yearly Macalester scholarship/grant money awarded will be credited to a student’s account along with any other money that has been paid from an outside source. To the extent that work-study money has not been earned, loan proceeds not applied to the account and BEOG eligibility reports not submitted to the College, this “anticipated” money will not appear as a credit on the account and the balance must be taken care of by the student and his/her family.
To help students and their families pay their bill to the College, Macalester has a payment plan which makes it possible for students to spread a semester's payments over a period of months rather than making large payments at the beginning of each term. If there are additional questions related to the College billing procedures and the College payment plan, refer to the catalog section on “Expenses.”

How to Apply for Financial Aid

Prospective students who are candidates for financial aid at Macalester College must take the following steps. (Students who are not U.S. citizens or U.S. permanent residents apply for financial aid through the International Center.)

1. File a formal application for admission with the Admissions Office.
2. File the Macalester Financial Aid Application with the Admissions Office.
3. Submit either the FAF or FFS to the appropriate computing service 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, aid applications may be obtained from the Macalester Admissions Office. Minnesota residents must apply for a Minnesota State Scholarship/Grant by completing the FFS.
4. Apply for a Basic Educational Opportunity Grant (BEOG) by completing the appropriate box on either the FFS or FAF so that you will be considered for this type of federal assistance. BEOG Eligibility Reports will be sent directly to the students, and all Macalester aid recipients will be expected to submit this report to the College upon acceptance of their Macalester aid package.
5. All students receiving financial aid from the College will be expected to submit either their parents' or their own federal tax return to support the financial information on the FAF or FFS.

Changes in Financial Aid Policies

Macalester's financial aid policies do change from time to time due to federal/state requirements and/or the College's continued effort to serve students. This point is especially important since this is a two year catalog. Students should refer to the Macalester College Student Handbook which is updated annually and includes additional financial aid information.
The Academic Year

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, essentials of mathematics, 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 credit 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 credit course by petition to the Registrar: approval is normally granted students in good academic standing who have no courses uncompleted.

The Interim Term

As the graduation requirements indicate, the interim term is not merely a one-month version of the regular four-course semesters. Interim term courses often differ in content and approach, as well as in length, from regular semester courses. Students register for only one course or project for intensive study in a single area. Courses are available at Macalester, the other four ACTC colleges in the Twin Cities, at off-campus locations supervised by Macalester faculty, at some of the other colleges in the United States with an interim term through exchange agreements, and at overseas locations through The Upper Midwest Association for Intercultural Education (UMAIE) which usually offers several courses taught by Macalester faculty members. With advance preparation, permission of a faculty member and the department chair, and approval by the interim term subcommittee, students may register for an interim term project which will be supervised and evaluated by a faculty member, or jointly by a faculty member and a non-Macalester supervisor. Deadline for applying for individual projects is well in advance of registration for the interim term. All interim term courses and projects are graded on a satisfactory/no credit basis.

Interim term courses and projects are described in a separate catalog issued early in the fall semester. The majority of the courses offered at Macalester have no prerequisites and offer the student the opportunity to explore a subject out of interest rather than for a letter grade and the fulfillment of a specific requirement. Many treat topics not covered in the regular curriculum, some are interdisciplinary in nature, and others involve advanced disciplinary specialties. Interim courses often include research in libraries, studios, laboratories or museums, and involve films, guest lecturers or field trips. In addition to a course or project, students on campus have opportunities to briefly explore for no credit a subject or activity which interests them through workshops, short courses, guided field trips, and excursions to theaters, concert halls, and museums in the Twin Cities.

The Summer Session

Macalester offers a summer session of two four-week terms. In a typical summer, more than 100 courses are taught by Macalester faculty. 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 project as a third course spread over the two terms. Macalester admits students from other
The Academic Year
Graduation Requirements

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, the Taft Institute of Government, and Elderhostel.

Graduation Requirements

I. Thirty-one (31) courses successfully completed, including:
   A. One social science course
   B. One mathematics or natural science course
   C. Two humanities and/or fine arts courses
   D. No more than 24 courses in any one of the following four areas: Social Sciences, Natural Sciences and Mathematics, Humanities, and Fine Arts

II. Four interim term courses or projects successfully completed

III. Approved major or core concentration plan filed and completed

IV. Declaration of Intent to Graduate form filed

Explanations and Regulations Concerning Graduation Requirements

I. Courses: All credit courses offered in fall, spring or summer terms are applicable toward the 31 required courses. Course credits may also be earned through successful completion of sequences of activity courses in Education, Music, Physical Education, and Speech Communication and Dramatic Arts. (See departmental listings in the Curriculum section of this catalog.)

General Distribution Requirements:
Each student must take at least:
A. One course in the academic division of the Social Sciences—Anthropology, Economics and Business, Geography, History, Political Science, Psychology, Sociology, and some courses in Linguistics.
B. One course in the academic division of the Natural Sciences and Mathematics—Biology, Chemistry, Computer Studies, Geology, Mathematics, Physics and Astronomy.
C. Two courses in the academic division of the Humanities and Fine Arts: Humanities—Classics, English, French, Germanic Languages and Literatures, Humanities, Philosophy, Religious Studies, Slavic Languages and Literatures, Spanish, and some courses in Linguistics; Fine Arts—Art, Music, Speech Communication and Dramatic Arts, and some courses in Linguistics.

Not all courses satisfy divisional requirements. To identify specific courses which do, see the departmental listings in the Curriculum section of this catalog.

D. 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. Freshman Seminars, and courses in Education, English as a Second Language, Environmental Studies, Journalism, Library Science, and Physical Education are regarded as “non-divisional” and do not satisfy divisional requirements. In addition, independent study courses numbered 95, 96, 97, 98 do not satisfy divisional requirements.
II. Interim: Four interim term courses or projects successfully completed. 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 make-up 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 courses they complete at Macalester. Interim term courses may not be used to satisfy concentration requirements or distribution requirements.

III. 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. A student may obtain two concentrations by fulfilling the respective course requirements in those concentrations. Individual courses, where appropriate and approved by all department chairs involved, may be counted toward both concentrations.

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. The plan is to be signed by the student's adviser in that department, and the department chair, and filed with the Registrar's Office. Students in the teacher education program must also receive approval and the signature of the chair of the education department.
Departments (and “coordinating committees” for non-departmental concentrations) may develop and implement diagnostic and evaluation processes or procedures occurring within courses.

When students declare an area of concentration (file an approved, signed concentration plan in the Registrar’s Office), they will be given in writing from the department 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 (IDIM) must present, no later than the end of the fourth term, a completed, signed major proposal to the IDIM Curriculum Review Board for consideration. In consultation with an adviser and two sponsors of the student’s choosing, an IDIM may be designed by crossing departmental lines. A written rationale supporting a cohesive intellectual theme is an important part of the proposal. The pattern of courses, the rationale and recommendations from the adviser and the two sponsors must be filed and approved before registration for the junior year. However, an IDIM proposal may be filed as a second concentration no later than within the first three weeks of the senior year.

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, in writing, by the chair of the sponsoring department. “S” grades may be included only by written permission of the department chair.

IV. Intent to Graduate: All degree-seeking students must file with the Registrar’s Office their “Declaration of Intent to Graduate” form one year prior to the intended date of graduation.

The Bachelor of Arts degree is conferred at the end of the term in which the student successfully completes all graduation 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 to be not less than two. The senior year must be spent in residence.

Effective Catalog

Students are normally expected to satisfy the graduation requirements in effect at the time of their admission to Macalester (or readmission if they have withdrawn). If graduation requirements change after this date, students have the option of satisfying either the requirements in effect at the time of admission (or re-admission) or the requirements in effect at the time of graduation if such a change is feasible.
Instructional Policies

Grades

1. Grading Options: Regular Terms: For the fall, spring and summer terms the grading options are—A, B, C, D, NC (no credit); or S (satisfactory), D, NC.

Interim Term: The grades in interim term will be S and NC. A satisfactory grade represents work of C or better quality.

Activity Courses: S and NC will be the only grades in any of the activity courses in Physical Education, practicum courses in Speech Communication and Dramatic Arts, and human relations and drug education in Education. Music majors, cores, and minors will be graded A, B, C, D, NC for ensembles and performance courses; non-music majors, cores, and minors may opt for S, NC grades for these courses.

2. Written Evaluations: Instructors may provide written evaluations of performance for those students who request them. A student who opts for a written evaluation may take the course on either the A, B, C, D, NC or the S, D, NC option. A student who chooses a written evaluation is encouraged to file with the instructor a statement of his or her objectives on an appropriate form, to aid the instructor in the evaluation. The request for written evaluation must be made at the time of grading option selection and requires the approval of the instructor. Students may request to have the written evaluations accompany transcripts, with the understanding that either all or none of the written evaluations will be sent.

3. S, D, NC Option Regulations: Each student is limited to one credit course taken under the S, D, NC option without written evaluation, in the fall and spring terms. Courses may be taken under this option in a summer term, but each course so taken reduces by one the number of such options available to the student in the fall or spring terms. There is no limitation on the number of courses a student may take under the S, D, NC option with written evaluation, or in activity courses. Courses included in a major, core, or minor should not be taken on the S, D, NC basis, except with specific permission of the department chair. Ordinarily, if a student decides to change his or her concentration to a new area and already had taken courses in that area on an S, D, NC basis, the courses will be allowed by the department, but written permission must be given by the department chair.

4. Time of Selection of Grading Options: The choice of grading systems is made by the student from the available options during the first three weeks of the fall or spring term or three days of summer session terms.

5. Incompletes: Students are expected to complete the work in each course on schedule. Under unusual circumstances, an instructor may allow a student an additional specified time period, not to extend more than eight weeks after the beginning of the next regular term, (in the case of interim term, not more than three weeks after the beginning of spring term) for completion of the course. In any such case the instructor will submit "I" as the grade. The instructor will also file with his or her department chair a specification of the work to be completed by the student, and of the period allotted for so doing. If the course is completed satisfactorily within the specified time period, the instructor will report the appropriate grade to the Registrar's Office. After the eighth week of the next regular term (three weeks for interim term courses) any I's will be converted to NC's.
6. Grade-Point Averages: The grade-point average (GPA) will be calculated by the Registrar's Office on the basis of:

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<tr>
<th>Grade</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>NC</th>
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<tr>
<td>Points</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
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The GPA is calculated by dividing the total honor points by the number of courses attempted on the regular grading system. Courses taken under the S, D, NC option, or courses with a grade of W, will not figure in the GPA. Transferred courses and grades are not included in the GPA.

Repeated Courses—In cases where a course is repeated, both courses remain on the record and one course (if the grade is D or above) will be included toward the degree; both courses will be included in the GPA.

7. Latin Honors: Latin honors are awarded upon graduation. They are based exclusively on cumulative GPA and are independent of the Honors Program. To be eligible for Latin honors a candidate must have earned 15 of the 31 required credit courses at Macalester, and may have no more than the equivalent of one course per semester graded on the S, D, NC system.

Through August of 1981, to qualify for cum laude a candidate must attain a cumulative GPA of 3.30. For magna cum laude the GPA must be 3.60. For summa cum laude the average must be 3.75. After August 1981, to qualify for cum laude, the candidate must attain a cumulative GPA of 3.50. For magna cum laude the GPA must be 3.70. For summa cum laude the average must be 3.90.

8. Reporting of Grades: Instructors report grades to the Registrar's Office. Written evaluations will be reported on standardized forms provided along with the traditional grade report forms. Copies of written evaluations will be provided to the student and the instructor. The original copy will be kept in the Registrar's Office.

9. Recording of Grades: For each student there is only one transcript, and all grades are recorded on it. A copy of the written evaluations for each student will be filed as a supplement to the official transcript. Students choose whether or not to include the written evaluations with transcripts they request, with the understanding that either all or none of the written evaluations will accompany the transcript.

10. Auditing Courses: A regularly enrolled full-time student in good standing will be charged a fee of $25 for each course audited in a fall or spring term; if a student is taking only three courses for credit, however, no fee will be assessed for a single audit course. To audit a course an eligible student must register in the Registrar's Office with the approval of the instructor. No entry will be made on the student's transcript for auditing a course. For information on auditing courses during the interim or summer terms, refer to the Interim and Summer Session catalogs.

Final Examinations

The following policies are observed by students and faculty with regard to final examinations:

The Registrar announces in advance a final examination schedule. In this schedule, each course is reserved a place and a designated two-hour period for a final examination.

Students may negotiate exemptions or changes in schedule with instructors whenever circumstances warrant such considerations, as in the case of schedule conflict or special senior commitments. Students who are scheduled for three or more examinations on the same day have the option of rescheduling with their instructor.
one of these examinations. Proctoring, special materials, time allotment and other matters pertaining to the actual circumstances of the examination are entirely the responsibility of the instructor. Students and faculty are reminded of the policy on Student Violation of Ethical Practices in the statement on Student Rights, Freedoms and Responsibilities at Macalester College, found in the Student Handbook.

Registration and Validation
Students are required to register and/or validate (confirm previous registration) at definite times announced in advance by the Registrar's Office. Students are responsible for accurate registration; credit can be received only in those courses for which a student is properly registered. A student is also held responsible for every course for which he or she registers unless he or she officially cancels it within the stated deadlines explained below.

Registration and validation are not complete or official until fees are paid or arrangements for payments have been made with the College cashier.

Late Registration and Validation Fees: Returning students will be charged a late fee of $25 for registering or validating after the announced times of registration/validation. Late registration/validation will be accepted during the first two weeks of classes (the first three days of interim or summer terms) with the payment of the late fee. Students may not register or validate after that time except by special petition and payment of the $25 late fee; under such circumstances, students may be denied registration/validation or be asked to carry proportionately restricted academic loads.

Adding Courses
A student may add a course during the first three weeks of the fall or spring term (first three days in the summer and interim terms) by obtaining the signature of the instructor of the course on an add form available in the Registrar's Office. Forms must be returned to the Registrar's Office by the published deadlines.

Dropping and Withdrawing from Courses
A student may drop a course within the first three weeks of the fall or spring term (first three days in the summer and interim term) by obtaining the signature of the instructor of the course on a drop form available in the Registrar's Office. Forms must be returned to the Registrar's Office by the published deadlines. An officially dropped course will not appear on the student's record or transcript.

A student may withdraw from a course between the end of the third and eighth weeks of classes (between three days and the second week of the summer and interim terms) by obtaining the signature of the instructor of the course on a withdraw form available in the Registrar's Office and returning the form to the Registrar's Office by the published deadlines. If a student officially withdraws from a course, a “W” (withdraw) grade will be recorded on the record and transcript. (A “W” grade is not computed into the GPA.) If a student remains registered after the eighth week of classes (second week of the summer and interim terms), he or she must receive one of the grades described under Grading Options.
Classification of Students

Normal progress toward graduation is as follows:

Class standing granted: Sophomore Junior Senior

Number of courses successfully completed: 7 15 23

Special student classification is assigned to non-degree candidates.

Probation and Dismissal

Probation is intended as a warning to a student that he or she will, if he or she does not improve academically, be subject to dismissal or required to take a leave of absence. Every effort is made through the Counseling Office, special academic support counselors and services, and through faculty advisers, to provide counseling to students on academic probation.

Reinstatement to good academic standing is often possible by successful summer study either here or elsewhere. However, good academic standing does not necessarily mean that the student is making normal progress toward graduation.

A student will be placed on probation or may be considered for dismissal if he or she has not completed, with grades of S, A, B or C, a minimum number of courses by the end of a given number of four-month terms, as follows:

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<th>End of Terms</th>
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<tbody>
<tr>
<td>Regular Courses for Good Academic Standing</td>
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<td>9</td>
<td>13</td>
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<td>Regular Courses for Normal Progress</td>
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Part-time students will be governed by progress requirements proportionate to those outlined above.

Under this system, incomplete work can be as detrimental to a student as work unsatisfactorily completed. Courses in which completion is postponed may jeopardize a student's scholastic standing, or eligibility for financial aid.

Any student who is on probation and fails to make satisfactory progress toward good academic standing in the subsequent term shall be subject to dismissal or required to take a leave of absence. Students who wish to return after a required leave of absence must apply for re-admission to the College.

Withdrawal from the College

A student may request complete withdrawal from the College at any point in a term by consulting with the Counseling Office. In order to obtain tuition or room and board refunds, the student must follow the policy described under "Refunds." Unless applied for, enrollment deposits will be forfeited by students entering in the fall of 1978 or after. (See Expenses).

Petitions

The Sub-Committee on Petitions is charged by the Curriculum Committee to take action on petitions for adjustments to academic rules and policies. Rules were established by the faculty in support of good educational practice and efficient flow of necessary data. These factors will be taken into consideration. Neither negligence nor ignorance of the rules is regarded as good reason for granting approval.

Questions concerning petitions should be referred to the Staff Associate in the Office of the Dean of Students. The petition will be considered by the sub-committee on
petitions upon written request of the petitioner. For further regulations and explanations concerning petitions, see the current Student Handbook.

**Leave of Absence**

A voluntary leave of absence may be granted for a specified period of time to any student who applies to leave Macalester for personal reasons or for the purpose of attending another institution. Questions about a voluntary leave of absence should be addressed to the Counseling Office.

Certain specific regulations concerning the leave of absence are:

Any student who leaves Macalester for reasons of entering the military service shall be granted a leave of absence.

If a leave of absence is denied, the student may appeal the decision to the Student-Faculty Judicial Council.

Returning students should note the following: Applications for financial aid and housing in the term following a leave of absence, and room and board deposits, must be made by deadlines required of all students in residence. A leave of absence does not exempt or defer a student from repayment of Macalester loans, or extend the deadlines for the make-up of incomplete courses.

Students on leave are responsible for keeping the Registrar's Office and the Counseling Office apprised of their mailing addresses.

If a student does not return within the specified period of time, he or she must apply for an extension of his or her leave prior to its termination. If an extension is not obtained, application must be made for re-admission.

**Re-admission to the College**

Any student not on an official voluntary leave of absence, or who did not complete the prior semester at Macalester, is required to make application for re-admission to the college for the term in which he or she wishes to register. Application forms should be requested of and returned to the Registrar's Office at least one month prior to the date of intended registration.

**Credit by Examination**

Any full-time, degree-seeking Macalester student may receive credit for a course listed in the catalog by successful completion of an examination or other type of evaluation to be determined by the instructor. Credit and a grade will be certified to the staff associate, by the instructor and endorsed by the department chair. Such credit may be granted only during a fall or spring term in which the student is registered for at least three other courses, or a summer term in which the student is registered for one course. The grade received will be included in the student's GPA.

A student is limited to two course credits by examination in courses not described in the catalog and each such course must be approved by the Curriculum Committee before work is begun.

The student will receive no instruction from a faculty member in obtaining credit by examination. No such credit will be granted for a course previously registered, or audited. The student may not sit in on the class.

The student is expected to demonstrate a competence comparable to, but not necessarily identical with, that attained by students receiving credit for the course in the usual manner.

The fee for attempting credit by examination is $50 per course.
**Instructional Policies**

Curricular Recommendations

*Note:* Departments may designate those lower level courses for which credit may not be received if comparable courses have been taken at the secondary level.

**Transfer of Credit**

Credits from other accredited institutions of higher learning will be evaluated according to the nature and quality of work presented as judged by the Registrar. Generally, liberal arts courses comparable to Macalester courses and successfully completed with grades A, B, or C will be considered for transfer to the Macalester record to be included toward graduation. Grades of S or P must be certified in writing by the instructors to be the equivalent of C or better grades.

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.

One Macalester course is the equivalent of four semester credits or six quarter credits. A maximum of 64 semester credits or 96 quarter credits may be transferred toward the Macalester B.A. degree.

Air Force ROTC is available to Macalester students through the Associated Colleges of the Twin Cities at the College of St. Thomas. Although Macalester College does not grant credit for ROTC courses, participation in this program will be noted on the Macalester record.

**Minimum Size of Classes**

The College does not hold itself bound for instruction in any elective course for which fewer than five students have registered. Such classes may, however, be organized at the option of the department with approval by the Vice President for Academic Affairs.

**Curricular Recommendations**

**Basic Competency**

1. *English:* Since oral and written skills in English are an integral part of all educational work in the Macalester liberal arts program, departments 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. Various computer languages are offered by the mathematics and natural sciences departments.

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.

**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 another similar small-group course to develop an awareness of the student's own educational needs, the art of self-instruction, a familiarity with various
Curricular Recommendations

Statement of the Faculty

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: Through Community Involvement Programs (CIP), the center for service-learning at Macalester, over one-quarter of the student body participates in a wide array of field placements throughout the Twin Cities. As volunteers, interns, and work-study employees, students serve, work, and learn in community, government, and business placements suited to their interests and goals. These involvements enable students to integrate academic theory with its practical application, develop their liberal skills, grow personally and intellectually, and explore career interests—while contributing to the larger community. CIP assists students in using these field opportunities by offering the following services: assessment counseling; placement assistance; extensive placement listings and resource directories; workshops and seminars; and educational and procedural materials.

The following policies have been formulated with regard to internships:

a. Only Macalester departments may offer internships and only if they are listed in the departmental course offerings.

b. A maximum of six internships may be counted toward graduation.

c. Internships are not generally available to freshmen or part-time students.

d. Students may not take an internship if they have any incompletes, unless they have the permission of the instructor who assigned the incomplete.

International Programs

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

Statement from the Faculty

As an intellectual community we affirm our commitment to the liberal arts as the tradition best suited to help us achieve the intellectual and moral growth that is the central mission of the college. It is to foster that growth that our curriculum has been designed.

As practitioners of various academic disciplines we are united in our zeal for our disciplines and in our commitment to search for intellectual honesty in ourselves and in one another. We recognize that none of our disciplines holds a monopoly on truth or intellectual rigor, that the study of each of them merits a lifetime of devotion, and that the insights of one discipline illuminate the study of another. Finally, we recognize that the freedom to explore is itself a major factor in fostering intellectual growth and maturity.

We believe that it would be irresponsible for the college to allow its students to pursue their studies without guidance, but so too it would be presumptuous to suggest that any one particular course of study is the only appropriate one. For that reason our curriculum encourages both wide-ranging exploration of many disciplines and in-depth study of one or two. College distribution requirements are designed to ensure that no student will suffer from an excessively narrow and stifling specialization; department
major requirements are designed to ensure that no student will graduate from Macalester ignorant of the joys of in-depth study.

Macalester College Faculty
December 14, 1977

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
- Art
- Biology
- Chemistry
- Classics
- Computer Studies
- Dramatic Arts (see speech communication and dramatic arts department)
- East Asian Studies (major only)
- Economics and Business
- English
- Environmental Studies (major only)
- French
- Geography
- Geology
- General Science (core only; see education department)
- German
- History
- Humanities (core only)
- Individually Designed Interdepartmental Major
- International Studies (major only)
- Law and Society (major only)
- Library Science (major only; through the College of St. Catherine as a second concentration only)
- Linguistics
- Mathematics
- Music
- Philosophy
- Physics
- Political Science
- Psychology
- Religious Studies
- Russian
- Russian Area Studies (major only)
- Social Science (see education department)
- Sociology
- Spanish
- Speech Communication
- Urban Studies (major only)

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.
Minors
Students may add a minor program to their area(s) of concentration. These programs are available for those students who wish to study a particular subject beyond the introductory courses but not to the level of expertise required by a major or core. The Bachelor of Arts degree requires the completion of a major or core concentration. A student may not graduate with only a minor or a set of minors. The following departments offer minor programs:

- Biology
- Classics
- Computer Studies
- Dramatic Arts (see speech communication and dramatic arts department)
- East Asian Studies
- English
- French
- Geography
- Geology
- Humanities
- Journalism
- Linguistics
- Mathematics
- Music
- Philosophy
- Physical Education
- Political Science
- Religious Studies
- Russian
- Sociology
- Spanish
- Speech Communication (see speech communication and dramatic arts department)

Academic Advising
Through a strong faculty advising system, the College assists students in making informed curricular decisions. Students begin with freshman advisers who may be their instructors in freshman seminars or courses. After students select a major, they have an adviser in that department or program. Information about faculty advising is available through the Office of the Vice President for Academic Affairs.

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. The following departmental listings indicate which independent studies are available in each department. Independent studies 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 offerings.

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

97 Internship
A structured field experience in which students apply and acquire knowledge and skills, while working in a responsible role within a community, business or government setting. The student intern works and learns under the joint supervision of a site supervisor and a faculty sponsor. Students are advised to consult the section on curricular recommendations for policies governing internships.
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 course. Interested students should consult with the appropriate instructor and department to develop the content of the project or study before registration. Titles reflecting the nature of the work may be submitted at the completion of the semester.

Topics Courses

Many departments offer topics courses. These courses are designed to accommodate the interests 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.

The following course listings are for the fall and spring terms. Separate course listings are issued in the interim and summer term catalogs. Not all courses listed are offered every semester, and students must consult the class schedule for hours, classrooms and instructors.

Anthropology

David McCurdy, Michael Rynkiewich (Chair), James Spradley

The anthropology department 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 students 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 Greek village, or curing techniques of Nepali shamans. We also encourage students to learn how to write effectively 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.

**General Distribution Requirement**

All courses in the anthropology department will satisfy the general distribution requirement in the social sciences.

**Major Concentration**

A major in anthropology consists of eight courses including Anthropology 11 or 12, 30 and six other courses chosen in consultation with a department adviser.

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

**Honors**

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

**COURSES**

*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 economic, legal, political and religious institutions. Survey of major approaches to the explanation of cultural variety and human nature. Fall and spring semesters.

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. Alternate years, fall semester.

*Intermediate Courses*

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

30 CROSS-CULTURAL RESEARCH: INTERVIEWING (Same as Linguistics 30)

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 ethnosemantic interviewing techniques. Fall and spring semesters.

43 ARCHAEOLOGY OF GREECE IN THE BRONZE AGE (Same as Classics 43)

A survey of the physical remains of the culture which flourished in the Aegean area in the third and second millennia. Evidence for social and political institutions and for the development of metallurgical technology is examined. Special attention is given to the use of archaeological data to reconstruct the history of the rise and fall of the Minoan and Mycenaean civilizations.

50 TOPICS

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 postcolonial change, the impact of the many European nations that colonized the islands, and the defenses of islanders against colonial governments. Alternate years, fall semester.
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. Spring semester.

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. Normally to be taken concurrently with Anthropology 60. Spring semester.

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. Alternate years, spring semester.

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. Alternate years, fall semester.

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. Fall semester.

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. Fall semester.

89 HISTORY OF ANTHROPOLOGICAL THEORY
This course is designed for upperclass majors and cores who are interested in the origin and development of anthropology as a discipline. The course is organized chronologically around the major schools of thought (paradigms) emphasizing the assumptions made and questions asked by practitioners of the various approaches. Particular attention is given to certain recurring themes, e.g., the concept of culture, the idea of cultural relativity, the problems of moving from description (ethnography) to comparison (ethnology) to generate explanations, and the split between idealists and materialists. The class will be run as a seminar with lectures, student presentations, and written papers and essays. Spring semester.

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 INTERNSHIP
Work that involves the student in practical (usually off campus) experience. One option is the museum internship program.

*Museum Internship A*
Internship at the Science Museum of Minnesota in downtown St. Paul. A formal class will meet once a week to introduce students to the museum and museology. Students will then work in the collections, eventually developing their own project for the museum.

*Museum Internship B*
An internship reserved for those who have taken 97A and want to pursue their project further.

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

Art

Roger Blakely, Anthony Caponi (Chair), Donald Celender, William Donovan, Cherie Doyle, Gail Kristensen, Carol Ofsthun, Jerry Rudquist, William Saltzman

The faculty of the art department consists of professional, practicing artists and scholars to assure a rich and balanced curriculum for:

1. Students with creative aptitudes pursuing a career in fine arts and related fields of design;
2. Students interested in the historical and philosophical understanding of art;
3. Students wishing to gain familiarity with the practice and history of art to increase appreciation, utilization, and creative application of art principles in daily living.

The art department recognizes the need and interdependence of the creator, the scholar and the users of art. It assumes that high level performance in studio courses directly intensifies the educational climate for all other students.

The art building and its facilities are especially designed to permit coordination and synthesis for the practice, theory, and appreciation of art.

Another feature of the art department is its exhibition program, housed in its spacious, functional Art Gallery. This exhibition program is an integral part of classroom activities. Here students exhibit their own work at least once a year. Professional works are displayed to bring the art students in contact with current trends in the art world. Prominent artists show their work and meet with students in informal fellowship. Instructors tour the Gallery with students to further illustrate what is taught in class.

Through the exhibition program the academic and material results of class work converge in a meaningful experience.

**General Distribution Requirements**

Art 30, 34, 35, 42, 49, 60, 61, and 62 count toward the general distribution requirements in the fine arts and humanities.

**Major Concentrations**

A major in art may be earned through either: 1) *Studio plan* or 2) *Art History Plan*.

*Art Studio Plan*

Requirements consist of 12 courses including: Art 30, 34, 35, 49, 60, 61, 66, 71 or 72 or 73, 88; one elective course from the art curriculum, and two from Speech (Interpretation), Music, and Literature. A final comprehensive exhibition is also required in the senior year.
Art History Plan
Requirements consist of 12 courses including: Art 49, 60, 61, 62, 75, 76, 77, 78, and 88; two courses selected from Painting, Drawing, or Sculpture; one from Anthropology (Cultural) or History (beyond the social science requirements). A written final comprehensive is also required in the senior year.

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, which should be planned in consultation with a faculty adviser to insure that the supplementary courses are meaningfully related to the art courses. Either a written final comprehensive or a final art exhibition is also required.

Additional Requirement: Sophomore Review
All declared art majors and cores will be automatically accepted by the art department. Approval of the student's major or core concentration plan will be subject to a period of probation based on three or more courses taken in his/her first three semesters, after which time the combined teaching staff will review his/her progress to date. Freshmen who declare their major or core upon entering Macalester will be reviewed early in their fourth semester (Sophomore Review). The department will set a time and date once a year for the review of art majors and cores for evaluation of student effort and level of achievement; then share the results with the student and make recommendations relating to his/her educational and professional objectives. A student who declares his/her major after the freshman year is subject to the same procedure at the earliest possible date.

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

COURSES
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, crosshatching, shading, washes, rubbings, transfers, etc. may also be explored. Subject matter varies from the posed figure, landscapes, 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.

32 FIBERS
This course is an introduction to fibers as an expressive art form. The techniques of weaving, stitchery, batik, and macrame will be explored and used to create two-dimensional hangings, reliefs, and fiber sculpture. The course emphasizes creative, imaginative, and contemporary applications of traditional processes.

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
An introduction to sculpture in a variety of media including clay modeling, direct carving in stone and wood, welding, and bronze casting. All students are required to execute a bronze sculpture from a concept through the full range of mechanics to the ultimate phase of casting and refining of the final product. The student may choose his/her own medium for additional projects. Two four-hour periods per week.
36 GRAPHICS
Hand and photo-originated imagery created within the possibilities of etching, lithography, and collages. 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 non-functional 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. Two three-hour periods plus one two-hour period per week.

49 PRINCIPLES OF ART
A philosophical approach to the creative arts, relating art to humanity, 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 Watercolor and Fibers.

60 HISTORY OF ART I (Same as Classics 60)
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 the relationships between nature and human beings. 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 with greater emphasis on wet technique, air brush, transfer, rubbings, collage, etc. A major direction in developing individual, inventive concepts is encouraged. 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
More individualized approach to sculpture. Creative application of technical know-how, learned in Art 35, toward projects of greater complexity and scope. Greater emphasis on design quality and originality of work. Eight hours per week, arranged.

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. Two three-hour periods plus one two-hour period 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.
Art

Biology

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 (Same as Classics 78)
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 PROJECT
Independent work in any art medium or in the history of art, with departmental approval. Advanced students in art concentrations only.

97 INTERNSHIP
Available to advanced students in art concentrations only, with departmental approval. May be used in the art concentration only with approval of the department chair.

98 PRECEPTORSHIP
Available to advanced students in art concentrations only, with departmental approval. May be used in the art concentration only with approval of the department chair.

Biology

Eddie Hill (Chair), James Jones, Edwin Robinson, James Smail, Claude Welch, 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. Some of the departmental offerings cover the subject areas recommended by the AIBS (American Institute of Biological Sciences) 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.

The 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. The visiting speaker, department seminar programs and other sources are used to bring prominent biologists into the department for short term visits. 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. Three field biology courses and Biology 11 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; Winter Ecology, taught in Minnesota.

The department is housed on the campus in a well-equipped laboratory building which also contains a transmission and scanning electron microscope lab and computer terminals.

**General Distribution Requirement**

All biology courses will satisfy the college distribution requirement in the natural sciences and mathematics.

**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 advisor. These advanced subjects must constitute a reasonable sequence within themselves and 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 96, 97). 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 offers a core concentration plan for students whose interests do not require a full biology major. The six biology courses in a core are Biology 11, 12 and 13, and three advanced courses selected in consultation with the faculty advisor. Only one of the three advanced courses can be in individual research and independent study (Biology 96, 97). 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 chair.

Minor Concentration
A minor concentration consists of Biology 11, 12 and 13, and any two upper level biology courses that do not include Biology 96 and 97.

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

COURSES
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 prerequisite. Four hours of lecture 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 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 PARASITES, THEIR HUMAN IMPLICATIONS
A survey of animal parasites, based primarily on kinds that cause disease in human beings, and in some of the animals which are of concern to them. The biology of the parasites is related to the natural history of the diseases, especially the host-parasite relationships which damage the host, host defenses against the parasites, and means of controlling their transmission. Economic aspects of parasitism and diagnosis and treatment are included. Prerequisite, Biology 12. Three lectures, two two-hour laboratory periods per week.

43 MICROBIOLOGY
An introduction to the study of micro-organisms, 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.

50 TOPICS
Examination of a topic of general interest to faculty and students, the topic to be announced in advance of registration.

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 lecture 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. Prerequisites, Biology 12; Chemistry 12 or 13 recommended. Three lectures per week, and directed independent study laboratory equivalent to six hours per week.

62 IMMUNOBIOLOGY
An introduction to the immune system of vertebrates. The cells, substances and processes responsible for the major immune reactions in the body and in experimental situations are emphasized. Some attention is given to clinical aspects of immunology, and to the use of serological methods in other fields of biology and medicine. Prerequisites, Biology 12 and Chemistry 37, or permission of the instructor. Four lectures per week.

63 PLANT PHYSIOLOGY
A study of the physical, metabolic and chemical factors that regulate plant growth and development. Topics include: photosynthesis, intermediary metabolism, mineral nutrition, water relations, auxins and growth, and tropisms. Prerequisites, Biology 13, Chemistry 37 recommended. 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, and chromatography. Prerequisites, Biology 12 and Chemistry 37. Three lectures, one three-hour laboratory period per week.
65 FIELD BOTANY
A study of field and ethnobotany. Systematic and ecological relationships of vascular plants will be stressed. A knowledge of the local flora will be developed by the use of lectures, laboratory and field work. Prerequisites, Biology 13 or permission of the instructor. Three lectures and one three-hour laboratory per week.

96 INDEPENDENT PROJECT
For juniors and seniors, including honors work. Prerequisite, permission of the instructor.

97 INTERNSHIP
For juniors and seniors. Prerequisite, permission of the instructor.

Chemistry

Janet Carlson, Kathleen Parson, A. Truman Schwartz (Chair), Emil Slowinski, Fred Stocker, 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 Distribution Requirement
Chemistry 10, 11, or 13 may be used to fulfill the natural science and mathematics requirement without specific college level prerequisites. Any other course in the department, with appropriate prerequisites, may also be used to satisfy the general distribution requirement.

Major Concentration
The major concentration in chemistry consists of Chemistry 11 and 12, or 13, plus 23, 37 and 38, 55 and 56, and 63; Physics 21 and 22, or preferably 28 and either 29 or 30 (it is recommended that students take all three courses: 28, 29, and 30); Mathematics 22 and 23; and one year of a foreign language.

The chemistry department is on the approved list of the American Chemical Society. To earn the A.C.S. approved degree, students must have a Macalester chemistry major, plus Chemistry 67, plus two advanced courses selected from the following: Chemistry 58, Chemistry 68, Chemistry 96. In certain cases, advanced courses from other science areas or mathematics may be substituted for the advanced chemistry courses. Students interested in A.C.S. certification should confer with the department chair.

Core Concentration
The core concentration in chemistry includes Chemistry 11 and 12, or 13 and 23, plus 37 and 38, 55, and either 56 or 58. Required supporting courses are Physics 21 and 22, 28 and either 29 or 30; and Mathematics 21. Two additional science courses are required and may be chosen from the fields of biology, geology, physics or mathematics.

Senior Seminar
All senior chemistry majors or cores are expected to participate in the Chemistry Senior Seminar program. In this series of biweekly seminars, seniors have an opportunity to
describe the results of an independent project comprising research done either in the library or in the laboratory.

**Honors**

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.

**COURSES**

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. Spring semester.

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. Fall semester.

12 **GENERAL CHEMISTRY**

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

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 a week. Fall semester.

23 **ANALYTICAL CHEMISTRY**

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

34 **RADIOCHEMISTRY**

Nuclear and radio chemistry and their applications to chemistry and biology. Prerequisite, Chemistry 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, Chemistry 12 or 13. Three lectures, four hours laboratory a week. Fall semester.

38 **ORGANIC CHEMISTRY**

Continuation of 37. Three lectures, four hours laboratory a week. Spring semester.

50 **TOPICS**

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, Chemistry 12 or 13, Physics 22 and Mathematics 22. Three lectures, three hours laboratory a week. Fall semester.

56 **PHYSICAL CHEMISTRY**

Continuation of 55. Three lectures, three hours laboratory a week. Spring semester.

58 **BIOCHEMISTRY**

Application of physiochemical 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. Spring semester.

63 ADVANCED INORGANIC CHEMISTRY
Reactions and structures of inorganic compounds. Prerequisite, 56 or permission of the instructor. Three lectures, three hours laboratory a week.

67 SENIOR STUDIES
This course includes components of senior research, senior seminar, spectroscopy and other advanced instrumental methods of analysis plus special topics in advanced physical and advanced organic chemistry. Fall semester.

68 SENIOR STUDIES
Continuation of Chemistry 67. Spring semester.

96 INDEPENDENT PROJECT
Laboratory and library research on an original problem, usually with a thesis. Prerequisite, permission of the department.

97 INTERNSHIP
Ordinarily restricted to seniors. Prerequisite, permission of the instructor.

Classics

William P. Donovan, Edward Brooks, Jeremiah Reedy (Chair)

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 students more aware of the close relationship of those civilizations and their problems to our own.

General Distribution Requirement
Any course in the department may be used to satisfy the general distribution requirement in the humanities.

Major Concentration in Greek and Latin
A major concentration shall consist of (1) a minimum of eight courses in Greek and one in Classical Civilization, or (2) a minimum of eight courses in Latin and one in Classical Civilization, or (3) a minimum of eight courses in Latin and Greek and one in Classical Civilization.

Core Concentration in Greek and Latin
A core concentration shall consist of (1) six courses in Greek, or (2) six courses in Latin, or (3) six courses in Greek and Latin.

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; of these, some must be courses in either Greek or Latin, or both. Related courses offered by other departments may, on occasion, be substituted when approved in advance by the classics department.
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.

Minor Concentration
The classics department offers a minor concentration in four areas. A minor in Greek shall consist of no fewer than four courses in Greek and one in Classical Civilization; a minor in Latin shall require at least four courses in Latin and one in Classical Civilization; a minor in Latin and Greek shall consist of at least four courses in Latin and Greek and one in Classical Civilization; and a minor in Classical Civilization shall consist of a minimum of five courses selected from the offerings of this department.

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

COURSES
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.

95 TUTORIAL
Prerequisite, permission of the instructor.

96 INDEPENDENT PROJECT
Prerequisite, permission of the instructor.

Classical Civilization (Knowledge of Latin/Greek not required)
18 ATHENS AND JERUSALEM: A CONFLICT OF CULTURES (Same as Humanities 18 and Religious Studies 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 an individual's emotions and experiences. 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. 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)
Major philosophers of Greece, Rome and the mediaeval period.
43 ARCHAEOLOGY OF GREECE IN THE BRONZE AGE (Same as Anthropology 43)
A survey of the physical remains of the culture which flourished in the Aegean area in the third and second millenniums. Evidence for social and political institutions and for the development of metallurgical technology is examined. Special attention is given to the use of archaeological data to reconstruct the history of the rise and fall of the Minoan and Mycenaean civilizations.

60 INTRODUCTION TO CLASSICAL ART (Same as Art 60)
A survey of the art of Western man with particular emphasis on the Greco-Roman contribution.

69 HISTORY OF GREECE (Same as History 69)
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.

70 HISTORY OF ROME (Same as History 70)
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.

78 CLASSICAL ART AND ARCHAEOLOGY (Same as Art 78)
Studies in the art and architecture of ancient Greece and Rome; aesthetic principles, relation to ancient philosophies and beliefs.

95 TUTORIAL
Prerequisite, permission of the instructor.

96 INDEPENDENT PROJECT
Prerequisite, permission of the instructor.

97 INTERNSHIP
Previous course work in department required, as well as permission of the instructor.

Computer Studies

Joseph Konhauser (Coordinator; Mathematics)

Computer studies is an interdepartmental major, core, or minor program providing a basic understanding of the design, operation, setting, and applications of modern computing. Involving faculty from several cooperating departments, the program utilizes MacShare, the College's central timeshare computer system with over 30 terminals, including standard hardcopy, video and graphic display terminals, as well as plotting and printing units. The College also has real time laboratory computers, and various microprocessor installations. Computer studies offers grounding in programming, software and hardware systems organization, data structures and file processing with advanced opportunities in such areas as economics and business, the natural sciences and the social/behavioral sciences.

Major Concentration

A major concentration in computer studies consists of at least eight courses as described below. Some of these courses have prerequisites in supporting departments as noted in parentheses. They are:

Math 15 Computer Programming I (high-school mathematics)
Math 17 Computer Programming II (Math 15)
Math 25 Computer Systems and Organization (Math 15 or 17)
Math 40 Data Structures and File Organization (Math 15 or 17)
Math 42 Program Language Organization (Math 15 or 17)
The remaining three courses must be selected from: (Note that only one course numbered in the 90's may be counted toward this concentration.)

Phy 42 Electronics (Phy 22 or 30)
CS 50 Topics in Computing (instructor consent)
Phy 50 Topics in Laboratory Computing (Math 15 and consent)
Geog 57 Advanced Cartography and Computer Mapping (Math 15 and Geog 25)
Math 74 Numerical Analysis (Math 15 or 17 and 23)
CS 88 Senior Seminar in Computing (Math 21)
CS 96 Independent Projects in Computing (Jr.-Sr.; consent)
CS 97 Internship in Computing (Jr.-Sr.; consent)

The following are required supporting courses for the major concentration:
Math 21 and 22 Calculus

Core Concentration
The core concentration in computer studies consists of six courses as indicated below arranged to complement the “outer” core selected by the student. For example, a student choosing a computer studies and economics/business core concentration would arrange the computer studies courses to integrate with the pattern recommended by the economics/business department. The core concentration in computer studies includes (prerequisites in parentheses):

Math 15 Computer Programming I (high-school mathematics)
Math 17 Computer Programming II (Math 15)
Math 25 Computer Systems and Organization (Math 15 or 17)
Math 40 Data Structures and File Organization (Math 15 or 17)

or
Math 42 Program Language Organization (Math 15 or 17)

Two other courses from the Computer Studies major concentration list, determined in consultation with advisors. (Note that only one course numbered in the 90's may be counted toward this concentration.)

Minor Concentration
A minor concentration in computer studies can be developed in consultation with a student’s major concentration advisor and advisor in computer studies and includes (prerequisites in parentheses):

Math 15 Computer Programming I (high-school mathematics)
Math 17 Computer Programming II (Math 15)
Math 40 Data Structures and File Organization (Math 15 or 17)

or
Math 42 Program Language Organization

Any two other courses from the computer studies major concentration list, determined in consultation with advisors. (Note that only one course numbered in the 90's may be counted toward this concentration).

Economics and Business

Paul Aslanian, Robert Bunting, Karl Egge (Chair), Jeffery Evans, Julia Friedman, Warren Mack, Michael Rahm, Vasant Sukhatme, Adolf Vandendorpe
The purpose of the department of economics and business is to develop basic analytical skills which contribute toward the understanding of our own and other economic systems, which serve as a valuable foundation for post-graduate studies in the fields of economics, business and law, and which are necessary for making sound decisions in business or government careers.

**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 or with an interdisciplinary program in law and society; students interested in secondary school teaching should consult the education department program description about the additional requirements necessary for certification. For those especially interested in accounting, it is possible to design a program of study leading toward certification as a C.P.A. Students anticipating careers related to urban problems, the environment, or international relationships can build a strong background by combining a core or major in this department with an interdisciplinary program in urban studies, environmental studies, or international studies.

**Program in Agricultural Economics**

The department has recently developed a program in agricultural economics with the help of a generous grant from Cargill, Inc. The program is designed to introduce students in a private liberal arts college to the economics of agriculture. Under the program, several new courses have been developed to study the economic forces at work in the agricultural sector, both in the United States, and other advanced countries as well as in the low income countries of the world.

In addition, the program also sponsors student internships as well as visits of distinguished economists working in the field of agricultural economics and economic development.

**Internship Program**

Over the past six years the department has developed a diverse set of off-campus experiences, primarily with Twin Cities business firms, to supplement students' academic work. The program involves about 15 internships each year; student interns work for about 15 hours per week and receive course credit. In most internships students also receive payment for their work.

**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. It sponsors visiting speakers, supports the internship dinner-seminar program, publishes a series of occasional papers, and provides various means of contact between the College and the Twin Cities business community.

**Honor Society**

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

**Study Abroad**

The department of economics and business cooperates with the departments of Germanic Languages and Literatures, Slavic Languages and Literatures, French, and Spanish in arranging semesters abroad.
Use of the Computer
Students in the department are encouraged to become competent in the use of the campus PDP 11/70 computer. Courses in statistics and econometrics explicitly use the computer, while in other electives students are encouraged to perform statistical analysis with the aid of the computer.

General Distribution Requirement
Any course in the department, with the exception of courses in accounting (13, 31, 32, 33, 35, 38), business law (15), and statistics (14, 37), will satisfy the general distribution requirement in the division of social sciences.

Major Concentration
The major concentration in this department consists of a minimum of eight courses, of which the following five are required: Principles of Economics, Intermediate Microeconomic Analysis, Intermediate Macroeconomic 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, three of which shall be the first three courses listed above, and six courses outside the department meeting the approval of the department chair.

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

Course Listings
The logic behind the departmental numbering of the courses listed below is as follows: courses in the teens have no prerequisite; courses in the twenties have E&B 19 as the sole prerequisite; courses in the thirties require one course in the teens other than E&B 19 (E&B 19 may or may not be a prerequisite); the fifties category contains Intermediate Microeconomic Analysis (E&B 51) and applied courses which have this course as a prerequisite (the number 50 itself is a special number reserved for topic courses); the sixties category contains Intermediate Macroeconomic Analysis (E&B 61) and applied courses which have this course as a prerequisite; courses in the seventies require both E&B 51 and 61.

Students who will have neither a major nor core in economics and business are encouraged to take at least one course in the twenties after completion of E&B 19. This will give them an opportunity to see the tools of introductory economic analysis applied to an area of their choice and thereby provide them with a more rounded view of the field of economics and business.

COURSES
10 INTRODUCTION TO BUSINESS
This course is designed to serve those students who do not intend to major in economics and business but would like to become familiar with the rudiments of the language and reasoning applicable in the everyday world of business. This course will not count towards a major or core in Economics and Business. No prerequisite.

13 BASIC FINANCIAL ACCOUNTING
Methodology of accounting with emphasis on theoretical foundations; introduction to the language of accounting and bookkeeping techniques; analysis and interpretation of financial statements including the income statement, balance sheet, and fund statements. Designed both for students who desire an
understanding of the nature of business firms as a component of a liberal arts education as well as for those who would like to study further in accounting or business. No prerequisite.

14 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; tests of hypotheses and interval estimates. Study of the computer runs throughout the course. No prerequisite. Students may not receive credit for both Economics and Business 14 and Mathematics 14.

15 BUSINESS LAW
A study of the legal aspects of business associations and transactions with some attention given to the sources and development of law and the legal system and its processes. By way of introduction, the course will study the development of law and its sources, the judicial system, the law of torts, and criminal law. In somewhat more detail, the course will cover contracts at common law and under the Uniform Commercial Code, corporations, partnerships, the choice of the forms of business organization, personal and real property, and the law of creditors and debtors. The emphasis throughout will be on the more interesting practical legal questions faced by business. No prerequisite.

19 PRINCIPLES OF ECONOMICS
An introduction to the basic tools of elementary micro- and macroeconomic analysis. Microeconomics deals with consumers, firms, markets and income distribution. Macroeconomics deals with national income, employment, inflation and money. No prerequisite.

21 INTRODUCTION TO INTERNATIONAL ECONOMICS
Balance of payments and foreign exchange markets; international monetary systems and institutions; free trade, tariffs and quotas; alternative economic systems; problems of developing countries. Recommended to students majoring in International Studies. Prerequisite, Economics and Business 19.

22 ENVIRONMENTAL ECONOMICS
This course examines the problems caused by the use of three common-property resources (air, water and land) as disposal sites for residuals from production and consumption. This course will develop a materials-balance model for these residuals and will use introductory economic theory to determine the "right" amount of pollution from an economic perspective. Offered in alternate years. Prerequisite, E&B 19.

23 WORLD HUNGER
An interdepartmental course designed to explore the problem of world hunger. Elaboration of the problem has ramifications in the fields of geography, economics, anthropology, political science, ethics, biology and religion. Coordinated guest lectures and discussions. (Same as Religion 23 and Geography 23.) Offered in alternate years. Prerequisite, E&B 19.

27 ECONOMICS OF ENERGY
An overview of the sources and uses of energy in the U.S. is provided, concentrating on oil, natural gas, uranium, coal, solar and electricity. The role of the government in pricing and other controls is critically evaluated within the context of microeconomic supply and demand models and within the context of macroeconomic models of the U.S. Prerequisite, Economics 19.

29 AGRICULTURAL MARKETS AND U.S. AGRICULTURAL POLICY
The course is an introduction to the supply and demand analysis of agricultural markets. The special nature of agricultural production and the determinants of demand for agricultural products are examined. The developmental transition of the U.S. agricultural sector, modern agricultural production, and agricultural marketing methods including commodity futures markets are analyzed. U.S. agricultural policy goals; the description, analysis, and evaluation of specific U.S. agricultural programs; and the implications of such programs on national and international agricultural markets are analyzed. Prerequisite, E&B 19.

31 INTERMEDIATE ACCOUNTING I
Accounting principles and theory as pertaining to the income statement, balance sheet and funds statement. Analysis and interpretation of financial statements; problems of terminology, evaluation and analysis. Prerequisite, E&B 13.

32 INTERMEDIATE ACCOUNTING II
Continuation of E&B 31, Intermediate Accounting I. Prerequisite, E&B 31.

33 MANAGERIAL ACCOUNTING
Continuation of financial accounting analysis of the balance sheet, with emphasis on equities and accounting for mergers. Other topics include: methodology of managerial accounting and the uses of information within a company; the budgeting of revenues and expenses and planning the use of resources; responsibility reporting and control techniques. Prerequisite, Economics and Business 13.
34 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. This course will alternate with Economics and Business 37, Introduction to Econometrics. Prerequisite, Economics and Business 14.

35 INCOME TAXES
The fundamentals of preparing tax returns for individuals, partnerships and corporations. The emphasis will be on federal taxes. Tax planning and tax research techniques are also discussed. Offered every fall. Prerequisites, E&B 13, 33, or permission of instructor.

36 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). Prerequisites, Economics and Business 13 and 19.

37 INTRODUCTION TO ECONOMETRICS
The course will deal with the practical as well as the theoretical aspects of the quantitative estimation of economic relationships. The principal statistical tool developed and applied will be regression analysis. This course will alternate with Economics 34. Prerequisites, Economics and Business 14 and 19.

38 COST ACCOUNTING AND AUDITING
The first half of the course covers the principles of cost accounting in manufacturing enterprises. Standard job order and process cost systems are reviewed as well as cost analysis, flexible budgeting and inventory pricing techniques.

The second half of the course deals with the professional standards, ethics and legal responsibilities of the independent auditor. Offered every spring. Prerequisites, E&B 14 and 33.

50 TOPICS
The department offers occasional topic courses and workshops; e.g., Workshop in Agricultural Economics.

51 INTERMEDIATE MICROECONOMIC ANALYSIS
Methodology of economic science; theory of consumer behavior; theory of the firm; market structure and price determination; income distribution; general equilibrium analysis. Prerequisite, Economics and Business 19. (Not open to freshmen.)

53 NATURAL RESOURCES AND THE LIMITS TO GROWTH
The course presents the separate theories of exhaustible resources (with emphasis on the optimal time path of depletion of fossil fuels), renewable resources (with emphasis on the optimal harvest patterns from forests and fisheries, and including analysis drawn from mathematical bioeconomics), intergenerational efficiency and equity, and use of previously undeveloped land. Offered in alternate years. Prerequisite, E&B 51.

54 URBAN ECONOMICS
This course emphasizes the microeconomic theory of urban development (density and rent gradients, agglomerative economies of scale, residential-industrial location, nodal concentrations, and transportation ties) and provides topical analysis of employment, municipal public services, municipal finance, housing, urban environments, poverty, and crime. Offered in alternate years. Prerequisite, Geog 41 or E&B 51.

55 ECONOMICS OF PUBLIC POLICY
The course emphasizes the advanced techniques of cost-benefit analysis including estimating consumer surplus, evaluating life, determining shadow prices for non-marketed goods, risk analysis, option demand, and the choice of discount rates. Mathematical-economic optimizing techniques are introduced to analyze shadow-prices and saddle-point solutions. Program evaluation is used to identify public goals, objectives, target variables, and goal achievement. The course draws examples from federal and state legislation and programs in urban and environmental problems. Offered in alternate years. Prerequisite, E&B 51.

56 ECONOMICS OF HUMAN CAPITAL
The course describes the nature and special characteristics of human capital. Economic determinants of human capital accumulation, including formal and informal education, general and firm-specific job training, information, health, and migration are evaluated. Effects of human capital on economic growth and productivity, time allocation, household and firm production efficiency, and differential rates of adoption and innovation are
analyzed for different sectors of the economy. A number of applications are drawn from the agricultural sector of the U.S. economy. Offered in alternate years. Prerequisite, E&B 51.

57 FINANCE
This course concentrates on developing and applying economic principles to the decision making process of the firm. Typically the course is taught from the viewpoint of the financial manager of a firm (profit or non-profit). Traditional corporate finance topics will be covered, including: cash flow management, sources of capital, capital budgeting, cost of capital, and financial structure. Recent theoretical developments in the capital asset pricing model and portfolio theory also will be examined. Actual case studies of financial decision making will be included in the course: cases involving valuation of a business, analysis of leveraged leases, and others. Prerequisite, Economics and Business 13 and 51.

59 AGRICULTURE AND ECONOMIC DEVELOPMENT
This course will examine agriculture in a historical and dynamic context to show its role in the development process of the economy as a whole. The course will begin with a discussion of traditional development theories to set the background for modern theories of development that have as their basis change in the agricultural sector. This leads to the problem of technological change in agriculture and resource allocation in a dynamic economy. The key element here will be the examination of labor and capital, and movement of these factors between rural and urban markets. International comparisons across developed and developing economies provides the empirical setting for these theories. Finally, there will be an examination of the human development of the rural population. Here topics will include the importance of education, experience, migration, etc. to the growth of the agricultural sector, and the economy as a whole. Prerequisite, E&B 51.

61 INTERMEDIATE MACROECONOMIC ANALYSIS
This course develops in detail theories of income, employment and the price level. The foundations and mechanics of Keynesian and neoclassical models of the aggregate economy are explained and more modern syntheses of the two approaches are explored. Considerable attention will be paid to current behavior of the national economy. Prerequisite, Economics and Business 19. (Not open to freshmen.)

66 MONEY AND BANKING
Money and monetary standards; the role of commercial banks within the financial system; commercial banks and the Federal Reserve as creators of money; monetary theory; aggregative models; unemployment and inflation. Prerequisite, Economics and Business 61.

75 APPLICATIONS OF MATHEMATICS TO ECONOMICS AND BUSINESS
Mathematical treatment of diverse topics in business and economics; e.g., capital and interest, business decision making, selections from micro- and macroeconomics. Readings of professional articles of an intermediate to advanced level of difficulty. The aim of the course is not to develop any particular area in depth, but to develop student familiarity with mathematical problem solving in a variety of areas in economics and business. Prerequisites, Economics and Business 51 and 61, Mathematics 21. Offered in alternate years.

88 HONORS
96 INDEPENDENT PROJECT
Further study in fields of special interest. Readings, conferences, field work, reports. Prerequisites, Economics and Business 19, 51, 61 and permission of the department.

97 INTERNSHIP
Work that involves the student in practical off-campus experiences with business, government, and non-profit organization. Prerequisites, Economics and Business 19, 51, 61 and permission of the instructor.

98 PRECEPTORSHIP
Work in assisting faculty in the planning and teaching of a course and/or tutoring individual students. Prerequisites, Economics and Business 19, 51, 61 and permission of the instructor.

Education

Richard Dierenfield (Chair), Lincoln Ekman, Betty Hills, Arnold Holtz, Nancy Johansen, Michael Obsatz

The Macalester teacher education programs are approved by the State of Minnesota, and accredited by 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 licensure.

All candidates should familiarize themselves with the current demands in the different teaching fields, e.g. social studies, English, sciences, languages. It is generally recommended that students preparing themselves for secondary school teaching select major concentrations, though some core concentrations are acceptable. The differences between the social science major and core concentrations should be noted.

A major concentration or core concentration in any academic 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.

Students will be recommended for certification in other states if they have satisfied the Minnesota State licensure requirements.

**Minnesota State Licensure**

The State of Minnesota requires that all who are engaged in public school teaching from nursery school and kindergarten through twelfth grade be licensed 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 thirty semester hours in professional education with a minimum of six semester hours in student teaching, and must be recommended for licensure 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 eighteen semester hours of professional education with a minimum of four semester hours of student teaching, must have a teaching major, and must be recommended for licensure 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.

**Elementary Teacher Licensure Program**

Ordinarily, students should identify with the elementary education program as sophomores. However, they are encouraged to make formal application to the teacher education committee for admission to the elementary education program no later than the first term of their junior year.

After admission to the program, and by the end of February of the junior year, students should make application for permission to student teach.

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 and satisfactory recommendations by the major department adviser and the education adviser. The individual is reviewed a third time.
prior to being recommended for licensure.

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:

- 82 School and Society or
- 83 Educational Foundations 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 Physical Education 217, Physical Education in the Elementary School, and Education 125, Drug Education and Human Relations.

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 must take an additional course, Education 81, Kindergarten Theory. One of the student teaching experiences will be completed in a public school kindergarten (Education 66).

Those wishing a nursery school endorsement must take, in addition to the elementary sequence, Sociology 20, The Family; Psychology 16, Introduction to Developmental Psychology; Education 85, Nursery School Theory; Education 86, Practicum and Seminar in Early Childhood Education; and an experience of student teaching at the nursery school level (Education 68).

Students who wish a junior high school endorsement added to their elementary school teacher license must take an additional course, Education 87, The Junior High School. The student teaching assignment will include one unit in a junior high school (Education 67).

**Secondary Teacher Licensure Program**

Macalester College provides programs for licensure as a secondary teacher in twelve disciplines. It also has two interdisciplinary licensure programs. The twelve disciplines in which licensure programs exist are: art (K-12), earth science (geology), English, French, German, life science (biology), mathematics, music (K-12), physical science (chemistry and physics), Russian, Spanish, and speech-theater arts. The two interdisciplinary programs are: general science and social science. Additional information on these two programs is included below. Students wishing to license in any of these areas should consult with the education department secondary staff to be sure their course program meets the requirements for licensure.
Candidates for secondary school licensure 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 and satisfactory recommendations by the major department adviser and the education adviser. After admission to the program and by the end of February of the junior year, the student should 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:

- 82 School and Society or
- 83 Educational Foundations or
- 84 Philosophy of Education
- 49 Educational Psychology
- 51 Secondary Curriculum and Instruction (including both a general and a special methods component)
- 64 Student Teaching (two units)

**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, St. Paul and the surrounding metropolitan area. One of the two experiences of elementary student teaching may be taken in Chicago under the Urban Education Program. Secondary student teaching may also be taken under the Urban Education Program provided the student also has a student teaching experience supervised by a member of Macalester's education department. For further information contact Lincoln Ekman in the education department. Students at both the elementary and secondary level may take one student teaching experience in England. See Richard Dierenfield for details.

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.

**Additional Requirements for Teacher Licensure**

All education students must satisfactorily complete work in these additional areas for licensure by the State of Minnesota (detailed information is available in the education department): a) 125 Drug Education and Human Relations, b) Health and Physical Education (for students in the elementary program, PE 217, and for students in the secondary program, PE 101). In addition, all education students must pass a proficiency test in the use of audio-visual materials. One Macalester course credit will be earned by those students who satisfactorily complete Education 125 and Physical Education 217 or 101. For students in the secondary program who are working toward a credit in Physical Education activity units (see physical education department listing), an additional semester of a different PE activity must be completed.
**Licensure After Graduation**

Individuals with a baccalaureate degree from Macalester or another college fully accredited by a regional association of colleges and schools may apply for admission into the teacher education program to work toward licensure. The candidate for elementary or secondary licensure will be screened by the appropriate selection subcommittee of the teacher education committee. If the elementary candidate lacks preparation in certain areas, 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 the 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 the Registrar and Student Academic Records.

**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 graduate are: (1) paying a placement fee and the compiling of credentials; (2) initiating contacts with prospective employers; and (3) 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.

**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 or major 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 Concentrations**

The major 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, no later than the junior year. The following sequences are recommended:

1. Preparation to Teach Social Studies in Elementary Education

Students who have been accepted in the elementary education program may elect a major concentration in social science which consists of:
Education

a. Six courses in any one of the following five departments: economics, geography, history, political science, or sociology/anthropology (considered as one department for state requirements).
b. Four additional courses from the above listed departments (excluding the core department), and psychology (no more than two courses from any one department).

The requirements may be stated in formula form as follows: 6-1-1-1-1; 6-2-2; 6-2-1-1.

2. Preparation for certification to teach Social Studies in Secondary Education
Students who have been accepted in the secondary education program may elect a major concentration in social science which consists of:

a. Six courses in any one of the following six departments: economics, geography, history, political science, psychology, or sociology/anthropology (considered as one department for state requirements).
b. Two additional courses from each of the five remaining disciplines listed above in "a". Two courses must be taken in each of the five non-core departments.

See Richard Dierenfield in the education department for further information.

COURSES

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
Values, communication skills, human growth and development in childhood and adolescence as they relate to education learning theories. Assessment, goal-setting, teaching-learning strategies, evaluation, testing and statistics.

51-01 SECONDARY CURRICULUM AND INSTRUCTION
General principles and procedures in instruction and application of these in a specific secondary teaching area.

51-03 SECONDARY CURRICULUM AND INSTRUCTION
Professional Semester—A student can combine Secondary Curriculum and Instruction with Student Teaching, and the Drug Education and Human Relations Seminar in a 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 fulltime 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 to learning in language arts and in social studies. Developing needed competencies and abilities for elementary school teachers.

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. Includes observations in other kindergartens. Fulfills a requirement for kindergarten endorsement.

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 includes observations in other nursery school. Fulfills a requirement for nursery school endorsement.

81 KINDERGARTEN THEORY
Methods, materials and approaches to learning in kindergarten needed to develop competencies and abilities for kindergarten teaching. Fulfills a requirement for kindergarten endorsement.

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 is made to assess the place and function of the school.

83 FOUNDATIONS IN EDUCATION
A study of the basic sociological, psychological and philosophical concepts that undergird the process of education.

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

85 NURSERY SCHOOL THEORY
Methods, materials and approaches to learning and teaching in a nursery school or day care center. Fulfills a requirement for nursery school endorsement.

86 PRACTICUM AND SEMINAR IN EARLY CHILDHOOD EDUCATION
Field experience working with pre-school age children in a day care center combined with reading assignments and group discussions about ages and stages in child development. Fulfills a requirement for nursery school endorsement.

87 PHILOSOPHY OF THE JUNIOR HIGH SCHOOL
An examination of the function, aims, historical background, curriculum, teaching-learning patterns, relationship with other educational units and trends and developments at the junior high school level.

95 TUTORIAL
Since this requires a good deal of initiative and responsibility on the part of the students, they should be already admitted to the program, elementary or secondary, and at least juniors. Prerequisite, permission of the instructor.

96 INDEPENDENT PROJECT
Intended to enable a student to study a particular facet of education in detail. Open to any student. Prerequisite, permission of the instructor.

97 INTERNSHIP
Requires some background and expertise. Primarily for juniors and seniors. Prerequisite, permission of the instructor.

98 PRECEPTORSHIP
Since this involves teaching under supervision, the student should have demonstrated knowledge in the area, preferably by already having taken the course and receiving an A. Primarily for seniors. Prerequisite, permission of the instructor.

125 DRUG EDUCATION AND HUMAN RELATIONS SEMINAR
Concerned with drug use and abuse, reasons for, treatment, teaching about drugs and with relating to racial and other minorities. Looks at it as a problem of the majority rather than of the minority.
East Asian Studies

Jerry K. Fisher (Macalester Coordinator; History)

The purpose of this inter-college, interdepartmental major concentration is to enable interested students to acquire a broad knowledge of China and Japan as major cultures and to provide a basic understanding 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 the adviser. Students are urged to consult with the Macalester East Asian studies coordinator to select 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 as follows:

1. Elementary and Intermediate Japanese and Chinese
2. Two Introductory History Courses
3. Two Courses in Cultural Specialization and/or Comparative Studies
4. Two Independent Study and/or Seminar Courses

Minor Concentration

A minor in East Asian studies consists of six courses chosen in consultation with the coordinator. The Japanese minor consists of Linguistics 11, 12, Elementary Japanese; 31, 32, Intermediate Japanese; History 15, Modern Japan; and one other course approved by the coordinator. The Chinese minor consists of four course credits in Chinese language; History 14, Modern China; and one other course approved by the coordinator.

COURSES

LANGUAGES. The following courses are open to students from any of the five colleges without prior approval by the host institution. The location of these courses will vary from year to year.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Location</th>
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<tbody>
<tr>
<td>History 23</td>
<td>Introduction to Chinese Civilization</td>
<td>HAM</td>
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<tr>
<td>History 24</td>
<td>Introduction to Japanese Civilization</td>
<td>HAM</td>
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<tr>
<td>History 116C</td>
<td>East Asian Civilization</td>
<td>CSC</td>
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<tr>
<td>History 14</td>
<td>Introduction to Modern China</td>
<td>MAC</td>
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<tr>
<td>History 15</td>
<td>Introduction to Modern Japan</td>
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CULTURAL SPECIALIZATION AND COMPARATIVE STUDIES

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<tr>
<th>Course</th>
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<tr>
<td>History 56104</td>
<td>Modern Non-Western World</td>
<td>AUG</td>
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<tr>
<td>History 76</td>
<td>Far Eastern Art</td>
<td>MAC</td>
</tr>
<tr>
<td>History 71</td>
<td>Intellectual History of East Asia</td>
<td>MAC</td>
</tr>
<tr>
<td>History 51</td>
<td>Nationalism in Japan and China</td>
<td>HAM</td>
</tr>
<tr>
<td>History 52</td>
<td>Imperialism in East Asia</td>
<td>HAM</td>
</tr>
<tr>
<td>History Interim</td>
<td>Japan-Selected Topics</td>
<td>AUG</td>
</tr>
<tr>
<td>History 56464</td>
<td>Modern China</td>
<td>AUG</td>
</tr>
<tr>
<td>History 354</td>
<td>Early China</td>
<td>CSC</td>
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<tr>
<td>History 355</td>
<td>Modern China</td>
<td>CSC</td>
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<tr>
<td>Philosophy 37</td>
<td>Chinese &amp; Japanese Philosophies</td>
<td>MAC</td>
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<tr>
<td>Political Science 60</td>
<td>Government &amp; Politics of East Asia</td>
<td>HAM</td>
</tr>
<tr>
<td>Religion 87356</td>
<td>History of Religions</td>
<td>AUG</td>
</tr>
</tbody>
</table>
COURSES INCLUDING COMPONENTS OF EAST ASIAN AREA MATERIAL:

Anthropology 52 Cultural Ecology & Colonialism in the Pacific MAC
Economics 348 T International Economics CST
Freshman Seminar 13 Japan & China: Toward the Asian Century MAC
History 13-01 Historical Evidence and Analysis HAM
Political Science 363 Communist Foreign Policy AUG
Political Science 25 Developmental Politics MAC
Political Science 62 International Law and Organization MAC
Religious Studies 24 Survey of World Religions MAC

(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' advisers 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
Macalester has two official programs in Japan and one in Hong Kong. In addition, from year to year many other study opportunities are available in East Asia. Interested students are advised to consult the Macalester East Asian Studies Coordinator about these possibilities.

English

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

Creative writing and the study of major works of English and American literature are the primary concerns of Macalester's English Department. Through the study of literary texts students learn analytical and interpretive skills in addition to a more educated appreciation of literary art. Creative writing emphasizes the writer's craft and disciplined imagination.

The department's goal for English majors is that they be mature and perceptive readers who have a respect for good writing based on their own practice and their acquaintance with the best models.

General Distribution Requirement
Any English course numbered 19 or above may be counted toward the fulfillment of the general distribution requirement in the humanities. Note: English 15 and English 17 do not satisfy the general distribution requirement, nor may they be used as part of any major, core or minor in English.

Major Concentration
Eleven courses in English to include: two or three courses in British literature before 1660, two or three courses in British literature 1660-1900 (to a combined total of five, which can include English 80 as an option 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 numbered 19 or above offered by the department may count as an elective for the major.

Students must develop a major plan with their adviser. As an introduction to the English major the department recommends English 21, Literature in Critical Perspectives. This course is designed to give instruction in theories and methods of the interpretation of literature, and in the writing of essays about literature. Students preparing major or core plans 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 courses, seminars, tutorials, and independent study projects.

The work of English courses includes writing assignments, but the department recommends English 17, College Writing, for basic writing skills, and English 21, Literature in Critical Perspectives, for students who plan to take a substantial number of English courses. Sections of some English courses marked with a “W” in the class schedule will provide practice in writing, and the teacher will advise students whether they need to take College Writing.

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 to explore career interests through combined work in English and related fields. English alone, or in combination with undergraduate work in such fields as other languages, linguistics, the other disciplines in the humanities, the arts and the social sciences, can lead to careers in research and teaching upon completion of further work at the graduate level. The study of English may also be a part of the preparation for careers in the law, the ministry, medicine, and administration, as well as for the more traditional fields of journalism, public relations, editing and publishing, library science, and education. With faculty assistance and sponsorship, students can develop career-related internships (see English 97 and 98 below). Notices of internship opportunities are regularly posted in the department.

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 80 may not be used as one of the courses in British literature.

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

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 tutorials and individual projects 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 be in foreign literature, either in translation or in the original language. (The major plan of students 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 also seriously consider 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.

Individually Designed English Major

Students first prepare, with their advisers, a plan of study including the eleven courses taken and to be taken, and a written description and rationale, then present it to the department for consideration well in advance of registration for the junior year.

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 for the major. Beyond these courses they must also take Speech-Dramatic Arts 11, Principles and Practice of Public Speaking and either Speech-Dramatic Arts 18, Introduction to Theater, or 23, Oral Interpretation of Literature, and the required courses in education. (See education department for full requirements for certification.)

Students in the secondary education program, and those in the elementary program who are majors or cores in English, are urged to take a course or an independent study project on the teaching of writing.

Core Concentrations

Six courses in English and six from one or, at the most, two related departments. The six courses in English may not include English 15 or 17 and must 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 English 80 as one of their courses.

Minor Concentrations

A minor in English consists of six courses chosen in consultation with a member of the English faculty. A minor plan must be submitted prior to a student's registration for the first semester of the senior year and may not be entered on the transcript until it has received the appropriate department approval. There are three possible minor concentrations in English.

Minor in English

Six English courses chosen in consultation with a member of the English faculty. Usually no more than two of these courses may be numbered lower than 49. The proposed minor must be accompanied by a written rationale describing the coherence of the six courses as an approach to the study of English. The minor plan must be supported by a member of the English faculty and approved by the department's curriculum committee.

Minor for Secondary Certification

The same as the Minor in English, except that the program must include English 80 or its equivalent, to conform with state guidelines. Either Speech 11 Public Speaking or Speech 23 Oral Interpretation of Literature may be substituted for one of the remaining five courses. It is assumed that the student will also be seeking a major certification in another department.
Minor in Creative Writing

Six courses, including English 34 and 94, and a tutorial or independent project in creative writing, together with three literature courses chosen in consultation with the director of the department's creative writing program. A minor plan in creative writing must be supported by a member of the English faculty and approved by the department's creative writing committee.

Honors

Students with appropriate projects in English may participate in the college-wide Honors Program.

COURSES

Prerequisites: Students may register for a course numbered 49 or above only if they have already taken one of the following: English 19, 21, 23, 25, 26 or 31, or if they have permission of the instructor.

(Note: More detailed descriptions of most courses, and descriptions of specific topics courses and seminars are posted prior to registration for each term on the department bulletin board at the south end of the second floor of the Humanities Building.)

15 EFFICIENT READING AND STUDY SKILLS

Practical assistance in developing reading speed, comprehension and vocabulary. The course is also designed to help students develop efficient study habits such as listening and note taking, textbook mastery, exam preparation, and time management. This course does not count for either the general distribution requirement in humanities or for the English major, minor or core.

17 COLLEGE WRITING

Instruction and practice in writing skills for work in college. Methods of instruction will vary, but in most sections there will be class meetings for instruction, workshop meetings, and individual conferences. Readings may be assigned to provide subject matter, or students may be asked to write on topics from other courses they are taking. Specific course descriptions for individual sections of English 17 will be published with registration materials. (See English 33 for more advanced instruction in writing, English 21 for instruction in writing about literature, and English 19 through 31 for introductory literature courses offering some practice in writing. English 34 is the introductory course in creative writing.) This course does not count for either the general distribution requirement in humanities or for the English major or core. It may, however, be taken twice for credit.

19 STUDIES IN LITERATURE

Each section of this course will have its own topic and course description, to be published in advance of registration. Topics may include introductory offerings in the study of poetry, drama, or fiction, in the study of major themes of literature, or in the study of major authors or groups of authors. Course may be counted for the general distribution requirement in humanities. It may be taken twice, with different topics, for credit and as electives for the English major. Sections of this course marked with a “W” in the class schedule will provide practice in writing, and the teacher will advise students whether they need to take English 17.

21 LITERATURE IN CRITICAL PERSPECTIVES

A course in the theory and practice of literary study designed to prepare students for the more advanced courses in English and for a lifetime of mature reading. The course develops skills for the close reading and interpretation of literature through the discussion of poetry, fiction and drama, study of the theoretical concepts and technical terms used in the study of literature, and discussion of major critical or interpretive approaches to literature. This is not a course in basic writing skills, but there will be instruction in writing about literature. Each student will write at least five essays.

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. Periodically offered as part of a “double course” (with History 24) in the Freshman Seminar Program. Sections of this course marked with a “W” will provide practice in writing, and the teacher will advise students whether they need to take English 17.

25 SURVEY OF BRITISH LITERATURE TO 1660

The historical development of British literature from its beginnings in the Old English period, through the Middle Ages and the Renaissance, including the folk tradition and tracing the development of prose, drama and verse forms. Sections of this course marked with a “W” in the class schedule will provide practice in writing, and the teacher will advise students whether they need to take English 17.
26 SURVEY OF MODERN BRITISH LITERATURE
The development of British literature from the 18th century through the early 20th century. Readings in major writers including Pope, Blake, Wordsworth, Keats, Tennyson, Browning, Eliot and Yeats. Sections of this course marked with a "W" in the class schedule will provide practice in writing, and the teacher will advise students whether they need to take English 17. (1981-82 only)

31 MODERN FICTION
Examination of 20th century fiction, chiefly British and American, with varying emphasis on particular themes, techniques or writers. This course differs from section to section. Students should see posted reading lists. With different reading lists, English 31 may be taken twice for credit. Sections of this course marked with a "W" in the class schedule will provide practice in writing, and the teacher will advise students whether they need to take English 17.

33 ADVANCED COMPOSITION
With increasing maturity as a writer comes the ability to write at greater length and with greater subtlety. The student will be asked to write in three areas of discourse; the expressive, the informative, and the persuasive. In each area the student will be asked to produce substantial papers, as well as writing many shorter pieces inside and outside of class. The final major paper will be of the student's own choosing. The class will be its own audience: writers will be expected to write for their fellow students and will be asked to read what others have written. Intermediate competency in non-fiction prose writing is assumed for entry to the class.

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.

49 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 and Pinter. (1981-82 only)

50 TOPICS
Topics courses offer alternative and exploratory approaches to literary works through interdisciplinary study, studies of single authors or groups of authors from several periods, or studies of recurrent themes in literature. Topics courses will be offered in 1981-82 only. Probable subjects are geography and literature and psychology and literature.

51 EARLY AMERICAN LITERATURE
Nineteenth century literature from Cooper through Whitman, and including writers whose career began before the Civil War, such as Poe, Emerson, Stowe, Hawthorne and Melville. Course assumes some background in literature. (1980-81 only)

52 AMERICAN LITERATURE OF THE GILDED AGE
Nineteenth century writers whose careers flourished between the end of the Civil War and the end of the century, including Twain, Howells, James, Dickinson, Crane, Frederic, and Chopin. Course assumes some knowledge in literature. (1980-81 only)

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.

57 NINETEENTH CENTURY AMERICAN FICTION
A study of American fiction from Cooper to Dreiser with emphasis on the development of the art of the American novelist in works by Hawthorne, Melville, Twain and James. Some attention will be given to the contrasting aspects of romance and realism in American fictions of the century. (1981-82 only)

58 CONTEMPORARY AMERICAN LITERATURE
A study of selected major contemporary writers who illustrate different trends in fiction, poetry, and drama. May
include Norman Mailer, James Baldwin, Joyce Carol Oates, Tom Wolfe, John Barth, Saul Bellow, Edward Albee, Joan Didion, Anne Sexton, Adrienne Rich, and others who have published major works in the past decade. (1980-81 only)

59 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, and James Dickey. This course will also stress close analytic study of individual poems.

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. (1981-82 only)

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. (1981-82 only)

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. Study continues with Herrick, Herbert, Carew, Waller, Suckling, Lovelace, Crashaw, Denham, and Cowley. Focus on the poetry of Andrew Marvell and short readings in the prose works of Bacon, Burton, Browne, Earle, Overbury, and Walton. (1980-81 only)

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 BRITISH 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. (1981-82)

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.

69 TWENTIETH CENTURY BRITISH LITERATURE
A study of major works of fiction, poetry, drama and non-fiction of Britain and Ireland from 1900 to the present, including works by Yeats, Joyce, Forster, Lowry, Murdock, Greene, Beckett, Bolt, and John Fowles. (1980-81 only)

71 CHAUCER
Study and discussion primarily of The Canterbury Tales (read 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
Study of major plays of all genre—tragedy, history, comedy and romance—with emphasis on the interpretation of the plays, and on their contexts in the Elizabethan world. Films of selected plays will be used to supplement the reading of the texts.

75 ENGLISH DRAMA TO 1642
Major emphasis on such contemporaries of Shakespeare as Christopher Marlowe, Ben Johnson 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 genre, including such distinctively Elizabethan types
as the revenge play, tragic satire, and tragi-comedy, and noting the rise of such significant "modern" figures as
the romantic rebel, the villain-hero and the alienated idealist. (1980-81 only)

80 THE ENGLISH LANGUAGE
For the first half of the course students will study certain topics in common: 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. (1981-82 only)

88 SEMINAR
At least four seminars will be offered each year, and their topics will be announced a year in advance so that
majors may plan for them. Subjects for 1980-81 are Jane Austen, William Faulkner, Literary History, and Tragedy.
Professors Bernstein, Blakely, Toth and Warde will announce subjects for 1981-82. Enrollment is limited to 12 to
15 students and in most cases is restricted to Macalester juniors and seniors. Enrollment is open to majors in
other departments who are sufficiently prepared to work at this advanced level.

94 ADVANCED CREATIVE WRITING
A writing workshop centering its attention upon group discussions and the sharing of constructive criticism of
the writings of all of its members. There will be no texts and "formal" assignments will be limited to requests to
experiment in various forms and styles in order to discover more about our language, its shapes, and our
meanings. Prerequisites: English 34 and permission of the creative writing committee.

95 TUTORIAL
Closely supervised individual (or very small group) study in which a student explores a selection of texts that is
not the same as that of a regular course. Prerequisites: sufficient preparation in English courses to provide the
necessary context for study and permission of the instructor. Application must be made through the chair of the
English department on a form available from the department office.

96 INDEPENDENT PROJECT
Production of original work of substantial length, usually an Honors Project, which may grow out of work done
in English 95. Limited to English majors and cores. Prerequisites: sufficient preparation, demonstrated ability,
and permission of the instructor. Application must be made through the chair of the English department on a
form available from the department office.

97 INTERNSHIP
Work in practical (usually off-campus) experiences that explore potential careers, apply an English major's
skills, or add substantive knowledge to the student's knowledge of literary study. Prerequisites: sufficient
preparation in courses to provide the necessary background, and consent of the instructor which may involve
an internship contract. (See Community Involvement Programs for assistance.) No more than two internships
may be counted toward the major.

98 PRECEPTORSHIP
Work assisting a faculty member in planning and teaching a course. Prerequisite: invitation by faculty member.
No more than two preceptorships may be counted toward the major, and no more than one for any individual
course.

Environmental Studies

Julia Friedman (Coordinator; Economics and Business)
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
students 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 students 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) 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
   b. Required of students with a natural science focus: Chemistry 11 or 13, General;
      Geography 26, Physical; or Geography 42, People and their Environment; or Geography
      55, Climatology

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
Environmental Studies

Biology
40 Field Zoology
41 Ecology
65 Advanced Botany

Chemistry
11 or 13 General
23 Analytical
37 Organic

Economics and Business
19 Principles
22 Environmental Economics
27 Economics of Energy
51 Intermediate Microeconomic Analysis
53 Economics of Natural Resources and the Limits to Growth
55 Economics of Public Policy
One elective course upon recommendation of the economics department

Geography
11 Human
26 Physical
42 People and Their Environment
55 Climatology
62 Soil and Civilization
63 Biogeography (Principles of Global Ecology)
88 Seminar in Urban Environmental Problems
One elective course upon recommendation of the geography department

Geology
22 Water Resources
61 Geomorphology
67 Economic

History
33 The American Environment

Physics
10 Physics of Sound
25 Introductory Modern
21 or 26 Introductory I/Principles I
22 or 27 Introductory II/Principles II

Political Science
10 Introduction to Political Analysis
47 Intergovernmental Relations

Sociology
10 Analysis of Society
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, Radio-chemistry; 38, Organic
b. Geography: 25, Cartography
   21, Calculus I; 22, Calculus II
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: 19, Principles
b. Geography: 25, Cartography
c. Mathematics: 14, Introduction to Statistics (or other statistics course); 15,
   Introduction to Computing; 21, Calculus I
d. Political Science: 40, Urban Decision-Making; 56, Policy Making; 57, Public
   Administration; 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.
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.

French

Charles Johnson, Philip Lee, Hélène Peters (Chair), Karl Sandberg, Virginia Schubert

The French department has a triple objective: a) to prepare competent majors and cores in French language, culture and literature; b) to provide language training to non-French majors for study in their own fields, for travel or for future professional needs; c) to provide to all students the opportunity to acquire the knowledge of a new language and culture, which traditionally has 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, education and special education. 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.

Study Abroad Program in Paris-Avignon-Aix-Toulon

This program lasts five months, with a January orientation/interim term in Paris, and a spring term in Avignon, Aix, or Toulon. Direction is by Macalester faculty jointly with the Institute for American Universities, the University of Avignon, and the University of Toulon. Course offerings are in French language and literature and other fields, e.g. linguistics, geography, art, history, philosophy and government, European law, trade and finance, and are taught by French university professors. The program is open to students having taken French 51 and 63. Participants need not be French majors. While in France the students attend classes at the Centre d'Etudes Françaises, at the University of Avignon, and at the Centre D'Etudes Européennes, and the Faculté of Toulon with French students. They live with local residents.

The spring term courses in France are on the semester credit system (four semester credits equals one Macalester course). Fifteen semester credits will transfer to the Macalester record as 3.75 courses and the .25 course will automatically be waived for graduation. Not more than two courses are normally counted toward the French major. French majors will have to take, on campus, any additional courses necessary to meet the departmental graduation standards by the end of their senior year.

Placement Tests

Students who have studied French before and desire to continue it should plan to take the placement tests given during Orientation Week and at the start of Spring term so that they may begin at the appropriate level. Upon successful completion of a beginning or intermediate French course, students will move to the following courses according to the normal sequence: 11, 12, 31, 32, 51, 52, 63.
However, students also have the option, after conferring with their instructors, to take competency tests which could allow them to test out of the next immediate course. French 11, 12, 31, 32, 51, 52 are offered each term.

**General Distribution Requirement**

All French courses satisfy the requirements in the humanities division.

**Major Concentration**

A major concentration in French consists of eight courses beyond the intermediate level to include: a) two advanced language courses (51-52); b) two courses in civilization and culture (63, 68); c) two literature courses from the 70's listings and d) a senior project completed during the senior year which may be the product of an independent study course (96), or a non-credit study evolving from an existing course which may be one of the 8/6 courses required for the Major/Core.

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 above).

**Core Concentration**

The core plan consists of six courses beyond the intermediate level among which are included two advanced language courses (51-52), one civilization and culture course from the 60's, one literature course from the 70's and a senior project which may be the product of an independent study course (96), or a non-credit study evolving from an existing course which may be one of the 8/6 courses required for the Major/Core.

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.

**Minor**

The French department will grant a minor. The requirements are six courses beyond the 30's, to include 51, 52, one course in the 60's, one course in the 70's.

**Senior Examinations**

Majors, cores and minors are advised to take the Graduate Record Examination and are required to obtain a score of good or excellent on the four-skill MLA French language proficiency test.

A departmental reading list is available on request in the departmental office and is
recommended for a basic knowledge of the masterpieces in French literature. This reading list can serve as a basis for independent studies beyond the two required courses in literature.

**Honors**

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

**COURSES**

**11 ELEMENTARY FRENCH I**
A rapid and comprehensive introduction to the structures of French essential for speaking, reading, mastery of the sound-phonics system, development of aural comprehension.

**12 ELEMENTARY FRENCH II**
Continuation of the development of the skills of reading, aural comprehension, speaking and writing with increasing emphasis on the practice of speaking and writing.

**15, 35 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 15 presupposes no previous acquaintance with French. French 35 is intended for students who have some background in French.

**31 INTERMEDIATE FRENCH I: READING AND SPEAKING**
While giving some attention to aural comprehension and writing, this course will place primary emphasis on the consolidation and development of conversation and reading. Prerequisite, French 12 or placement test or permission of the instructor.

**32 INTERMEDIATE FRENCH II**
Aural comprehension and writing of contemporary French (grammar, composition). Speaking and reading included. A four-skills course. Prerequisite, French 31 or competency test or consent of instructor.

**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 32 or competency test, or consent of instructor.

**52 INTRODUCTION TO LITERATURE**
This course trains students in the skills necessary for interpreting and writing about literature in French. It includes techniques of analyzing novels, plays and poetry, acquisition of literary vocabulary, a review of French grammar, and practice in developing an essay style in French. Prerequisite, French 32 or competency test or consent of instructor.

**55 ADVANCED ORAL AND WRITTEN USAGE**
Special problems of grammar and stylistics. Four hours a week. Problems of translation (theme and version). Prerequisite, advanced standing and consent of instructor.

**63 FRANCE TODAY**
Change and tradition in the societal, cultural, aesthetic, and intellectual structures of post-1945 France. Students may pursue independent research projects in areas of special interest. Heavy use is made of audio-visual materials. Prerequisite, French 32, or competency test, or consent of instructor. Fall term.

**68 ART AND IDEAS IN FRENCH CULTURE (Same as Humanities 68)**
The course will study the ideas 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 credit in French. Prerequisites for credit in French, French 52 or consent of instructor. No prerequisites for others. Spring term.

**73 HUMANISM, BAROQUE AND CLASSICISM**
This course will study the concepts of "humanism," "baroque," and "classicism" and relate them to the reading of Rabelais, Ronsard, Montaigne, Descartes, Corneille, Pascal, La Rochefoucauld, La Bruyère, La Fontaine, Molière, and Racine. Prerequisite, French 52 or consent of instructor. Fall '81.
74 THE ENLIGHTENMENT AND THE COUNTER-ENLIGHTENMENT
This course studies critical rationalism in Bayle, Fontenelle, and Voltaire; creative rationalism in Montesquieu; philosophical materialism in Diderot and the Encyclopedists: political militancy and the rejection of authority (Beaumarchais), the revolt against atheism (Rousseau and Chateaubriand), and the rejection of rationalism (Stendahl and Hugo). Prerequisite, French 52 or consent of instructor. Spring '81.

75 NINETEENTH CENTURY "ISMS"
This course will concentrate on the two great literary genres of the century, poetry and the novel, as they are shaped by the artistic currents of romanticism, realism, naturalism and symbolism. Authors studied will include Musset, Vigny, Lamartine, Baudelaire, Verlaine, Mallarmé, Rimbaud, Balzac, Flaubert and Zola. Prerequisite, French 52 or consent of instructor. Fall '80

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 Arrabel; the new novel: Alain Robbe-Grillet et al. Prerequisite, French 52 or consent of instructor. Spring '82.

General Studies in French Culture and Literature
For students with no previous knowledge in French. Lectures and readings in English. For credit in French see separate entries.

41 ART AND CULTURE IN CONTEMPORARY FRENCH CINEMA
A study of modern French cinema as exemplified in the works of major contemporary directors. Analysis of themes treated in the films. Assessment of films as artistic expression of cultural values treated. Readings, lectures, discussions and papers in English. For credit in French: reading of film texts and criticism in French, listening to sound tracks in French. Prerequisite, French 52 or consent of instructor. For others, no prerequisite. Fall '81.

45 FRENCH LITERATURE: THEMES, WRITERS, AND MOVEMENTS
A study of selected master works on themes and figures in the realm of letters and art. Lectures in English. Reading and discussion in French for credit in French. Prerequisite, for credit in French: French 52 or consent of instructor; for others: no prerequisite. A specific course description will be circulated when this course is offered.

47 GENERAL STUDIES IN TWENTIETH CENTURY FRENCH LITERATURE
Studies on themes, writers, movements chosen among the representative segments of the 20th century. Among these:
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.). Prerequisite, for credit in French, French 52 or consent of instructor; for others, no prerequisite. Spring '81

95 TUTORIAL
Prerequisite, permission of the instructor.

96 INDEPENDENT PROJECT
Prerequisite, permission of the instructor.

97 INTERNSHIP
The French department grants internships. Prerequisites are: four courses in French among those designated for completion of a major or core concentration. Study abroad is strongly recommended. No more than one internship per student will be granted by the department. It will not be counted toward the major but may be counted as a supporting course.

98 PRECEPTORSHIP
Prerequisite, permission of the instructor.

Geography
David Lanegran (Chair), Howard Mielke, Michael Plautz, Gerald Pitzl, John Robertson
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 Distribution Requirement**
All courses but Geography 25, 26 and 55 may be used to fulfill the general distribution requirement in social science. However, Geography 11 best serves the general educational needs of students and is required as preparation for most upper division courses. 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, a supportive advanced course, an elective, and two seminars. 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, resource conservation and 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 department chair, and six complementary courses selected by the student in consultation with the adviser and in consideration of his or her vocational goals.

**Minor Concentration**
The geography department offers five separate minors. (1) The general geography minor consists of Geography 11, 25, 26, 41, and one elective from the courses offered within the department. (2) The land use planning minor consists of Geography 25, 41, 60, 61, 88 (Urban Geography Field Seminar), and an internship in a planning agency. (3) The regional studies minor consists of Geography 11, 25, 26, 30, and either 62 or one regional geography course on an area of the world other than North America. (4) The graphics minor consists of Geography 11, 25, 26, 57, quantitative methods and an internship in an agency working with cartographic communications. (5) The natural resource conservation minor consists of Geography 11, 42, 62 or 63, and 88 (Urban Environmental Problems).

**Honors**
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.

For other opportunities in related areas of study, see the Urban Studies major.

COURSES

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.

23 WORLD HUNGER
An interdepartmental course designed to explore the problem of world hunger. Elaboration of the problem has ramifications in the fields of geography, economics, anthropology, political science, ethics, biology and religion. Coordinated guest lectures and discussions. (Same as Religion 23 and Economics 23) Offered in alternate years.

25 CARTOGRAPHY
Designed to develop basic skills and logic in preparation of maps. Assignments center on the representation of qualitative and quantitative data. ($5.00 materials fee.)

26 PHYSICAL GEOGRAPHY
Introduction to the earth's physical systems and their patterns of interaction on the earth to support life. Topics covered include radiation balance, weather, climate, soils, water-balance, rivers, erosion and land forms.

30 PROBLEMS IN THE LOCATION OF ECONOMIC ACTIVITY
Focused on techniques of market analysis and transportation planning, this course develops models for determining advantageous locations for a wide range of economic activities (retail stores, industrial plants, recreational and cultural facilities). Problems of urban economic development and disinvestment will be emphasized. Each class will work on a special case study as a research team. Student will develop ability to make local population and economic forecasts. Prerequisite, Geography 11 or permission of the instructor.

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.

42 PEOPLE AND THEIR ENVIRONMENT
This course examines humans in their role as an agent of physical and biological change on the earth's surface. Particular emphasis is given to an examination of the environmental and human implications of a variety of energy and material resource development options. Prerequisite, Geography 26.

50 TOPICS
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.

55 CLIMATOLOGY (formerly Advanced Physical)
Principles of climate and their global distribution. Topics include evolution of the optical qualities of the atmosphere, solar cycles, energy budget, atmospheric and oceanic circulation, fronts, classification
schemes, microclimatology, climatic change, and the question of human modification of climate. Prerequisite, Geography 26.

57 ADVANCED CARTOGRAPHY (automated)
Automated approaches to the production of graphic displays. General introduction to computer graphics and specific emphasis on computer-generated maps to portray patterns and areal relationships. Prerequisite, Geography 25.

60 INTRODUCTORY LAND USE PLANNING
This course will be taught by a professional planner and will examine the history of planning, planning law, the zoning process, environmental planning and planning process in the next decade. No prerequisite.

61 INTRODUCTORY URBAN DESIGN: THE ARCHITECTURAL VIEWPOINT
This course is taught by a practicing architect and will cover elements of design, analysis of space and criticism of buildings. Students will do both individual and group projects. Field work to be arranged. No prerequisite.

62 SOILS AND CIVILIZATION
The chemical, physical and biological nature of soils and their distribution on the earth’s surface. A major focus of the course will be on the role that various cultures have played in the fate of regional soil resources. Prerequisite, Geography 26.

63 BIOGEOGRAPHY (principles of Global Ecology)
This course systematically examines several geological, biological and cultural themes to explain the present distribution of plants and animals on the earth’s surface. Topics include: soil-plant-animal coevolution, distribution of natural vegetation, migration, ecology of invasions and plant and animal introductions.

88 SEMINARS
Urban Environmental Problems
This course examines the problems and conflicts that arise from the interplay of natural physical processes and specific aspects of the modern urban environment. Topics to be examined may include heat islands, air sheds, pollution domes, dustfall, soil pollution, flooding, solid waste, contamination of fresh water, etc. Special emphasis will be placed on field projects which work through environmental research steps of design, data collection and analysis using the Twin Cities Metropolitan area as a laboratory for study. Prerequisite, Geography 42.

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.

Development of Geographic Thought
For geography majors only. The history of geographic thought and methods is studied through individual reports and papers.

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

96 INDEPENDENT PROJECT
A limit of one independent project may be applied toward the major. Independent projects may not be included in the core concentration.

97 INTERNSHIP
Students work full-time with a Twin Cities community organization, agency or business, learning particular skills, factual knowledge about “real world” operations and interpersonal communications. Internships are individually designed around students’ interests, college studies and career goals. Periodic seminars provide discussion-sharing of topics related to interns’ experiences and the relationship of academic theories to practical application. Advance planning necessary through the CIP office. Internship credits may not be included toward the major or core concentration.
Geology

Robert Bauer, Henry Lepp (Chair), Gerald Webers

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.

General Distribution Requirement

Any course in the department may be used to fulfill the general distribution requirement in natural science and mathematics. Geology 11 through 22 may be taken without prerequisites.

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 concentrators 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.

Minor

A minor in geology consists of Geology 11 and 12 and three electives.

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.
Honors

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

COURSES

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 sea water, 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
One or more topics courses are normally offered each year. Oceanography, Water Resources, and Mineral and Energy Resources are examples of past topics courses without prerequisites. Geochemistry, Geotectonics, and Tectonics of the Americas are examples of past topics courses that required 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.

61 GEOMORPHOLOGY AND GLACIAL GEOLOGY

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. Three hours lecture and two hours laboratory per week. Prerequisite, Geology 11 and permission of the instructor.

88 SENIOR SEMINAR
Offered on demand. For seniors and juniors with the consent of the instructor.

95 TUTORIAL
Closely supervised individual or small group study with a faculty member in which a student may explore, by way of readings, short writings, etc. in an area of knowledge not available through the regular catalog offerings. Prerequisite, permission of the instructor. The department chair will determine if this course may be applied toward the major or core.

96 INDEPENDENT PROJECT
Independent study of geologic problems or preparation of senior research thesis. Prerequisite, junior standing and permission of the instructor. The department chair will determine if this course may be applied toward the major or core.

97 INTERNSHIP
Work that involves the student in practical off campus experience. Consent of the department is required. It will be determined by the department chair if this course may be applied toward the major or core.

98 PRECEPTORSHIP
Work in assisting a faculty member in the planning and teaching of a course. Prerequisite, permission of the instructor. The department chair will determine if this course may be applied toward the major or core.

Germanic Languages and Literatures

Richard Clark (Chair), R. Ellis Dye, Ilze Mueller, David Sanford, Otto Sorensen

The Germanics department offers students the opportunity to learn important languages which are closely related to English and to develop a direct understanding of some of the brightest cultural achievements and some of the decisive social and political events of the Western World. German, the department's premium offering, is the language of Mozart, the three B's of music, of Goethe, Immanuel Kant, Karl Marx, Sigmund Freud and Albert Einstein as well. Neither they nor Bismarck nor Adolf Hitler can be fully understood in translation, and so German is a staple of any general education. It is also important to contemporary commerce, science, and the arts. If Danish, Netherlandic and Norwegian are less fundamental to the liberal arts curriculum, they too are keys to great human events of the past and present and are intrinsically rewarding to any student who would fathom the fascinating phenomenon of human language.

The German House
Students compete for the privilege of living in the Macalester German House, where daily conversation with a native German speaker and other students of German both improves oral proficiency in German and develops increased understanding of German, Austrian and Swiss culture and society. The German House is also the center of the Germanics department's social activities.

The German Study Abroad Program
Since 1969, between 12 and 27 students have participated each year in Macalester's German Study Abroad Program, open to non-majors as well as majors and now expanded to include both students and, as resident directors, faculty from the Associated Colleges of the Twin Cities. Students with the requisite language skills (completion of German 21, 31, or the equivalent) may be admitted into the program,
which includes a two-month term at a Goethe Institute in Germany and a following four-month semester of study at the University of Vienna, Austria. (A separate pamphlet on the Macalester German Study Abroad Program is provided by the department.)

The Tübingen Exchange
During the 1980-81 academic year, Macalester will initiate a reciprocal exchange program with the University of Tübingen, West Germany. Each year, a Tübingen student will study at the College and one Macalester student will matriculate at Tübingen. The exchange is open to students from all departments, but candidates must possess a good knowledge of the German language. Applicants should consult with the German Department or the International Center about requirements for admission.

General Distribution Requirement
All courses offered by the department count toward fulfillment of the general distribution requirement in humanities.

German Major and Core Concentrations
The purpose of the major in German is to provide students with the linguistic and critical skills necessary for the study of German literature, philology, and culture and to give them a good understanding of the most important literary and cultural texts. Students completing a major are prepared both to teach German in the schools, to continue their study of German language and literature at the graduate level, and, when equipped with an appropriate second major, to work in international business, research, or diplomacy. Since 1971, 17 Macalester graduates in the field of German have received Fulbright, DAAD, or ITT Fellowships for study in Germany, Austria, and Scandinavia.

A core concentration gives its possessor a competitive advantage over students whose professional credentials would otherwise be equivalent. In particular, it enhances the credentials of prospective teachers in other disciplines and provides them with a versatility that is highly desirable in these times of educational retrenchment.

A departmental major in German consists of a minimum of nine German courses above the elementary level, to include 22 or 32 (or their equivalent), 47, either 60 or 62, 63 or 64, and 67 or 70. For majors who plan to become teachers, the department strongly recommends that German 49, 51, and 70 be included in the major plan.

The department also requires five supporting courses from outside the department. A list of recommended supporting courses may be obtained from the department secretary or any member of the Germanics faculty.

A core concentration consists of six courses above the elementary level, to include 22 or 32 (or their equivalent), 47 and 51.

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

COURSES
11, 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.

21 INTERMEDIATE
Grammar review, conversation and selected readings in classical and modern German texts. Students with two or three years of high school German may be placed in this course. Otherwise, the prerequisite is
Germanic Languages and Literatures

German 12 or its equivalent. Four hours per week plus laboratory periods.

22 INTERMEDIATE
Prerequisite, German 21 or the equivalent. Four hours per week plus laboratory periods.

31 CONVERSATION AND COMPOSITION I
Special emphasis on pronunciation, oral fluency, and improved writing. An alternative, emphasizing the practical use of the language, to German 21, in which more attention is paid to the reading of literature. Prerequisite, German 12 or the equivalent. Four hours per week.

32 CONVERSATION AND COMPOSITION II
Further emphasis on oral and writing fluency. Prerequisite, German 21 or 31.

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 22 or 32 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 22 or 32 or the equivalent. 1980-81 only.

50 TOPICS
The subject matter of this course will vary from term to term, depending upon instructor interest and student desire. Prerequisite, 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"; "The Faust Tradition in Literature"; "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 CONVERSATION, COMPOSITION, AND STYLISTICS
This course attempts to improve and polish the student's proficiency in German through carefully structured oral activities, translation into German of challenging literary texts and the writing of critical essays. Prerequisite, German 32 or permission of the instructor.

52 ADVANCED COMPOSITION AND STYLISTICS
Translation of literary texts into German and the writing of critical essays.

60 INTRODUCTION TO GERMAN PHILOLOGY (Same as Linguistics 70)
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 above 32 or permission of the instructor. 1981-82 only.

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. 1980-81 only.

63 AGE OF GOETHE I
Selected works from the Enlightenment, Sturm and Drang and early Classicism. Prerequisite, German 47 or permission of the instructor. 1981-82 only.

64 AGE OF GOETHE II
German Romanticism (especially Tieck, Novalis, Brentano, and Eichendorff) plus Hölderlin, Kleist, and the later works of Goethe and Schiller. A particular aim of this course is to answer the question: was Goethe a Romantic poet? Prerequisite, German 47 or permission of the instructor. 1980-81 only.

67 NINETEENTH CENTURY LITERATURE
The chief plays of Büchner, Grillparzer, Hebbel, and the early Hauptmann; selected lyrics of Droste-Hülshoff, Mörike, Keller, Storm, and Nietzsche; prose from Goethe, Adler, Meyer, Storm, and Nietzsche. A good sampling of the works of the most illustrious nineteenth century writers. Prerequisite, German 47 or permission of the instructor. 1980-81 only.
70 TWENTIETH CENTURY LITERATURE
Selected readings of writers from Impressionism to the present. Prerequisite, German 47 or permission of the instructor.

95 TUTORIAL
Prerequisite, permission of the instructor. Limit to be applied toward the major or core will be determined in consultation with the department.

96 INDEPENDENT PROJECT
Prerequisite, permission of the instructor. Limit to be applied toward the major or core will be determined in consultation with the department.

97 INTERNSHIP
Prerequisite, permission of the instructor. Limit to be applied toward the major or core will be determined in consultation with the department.

98 PRECEPTORSHIP
Prerequisite, permission of the instructor. Limit to be applied toward the major or core will be determined in consultation with the department.

Netherlandic and Scandinavian Courses
The following courses, while they do not count toward a major or core in German, strongly support it and prepare students for study in Denmark, Norway and the Netherlands.

13, 14 ELEMENTARY DANISH
The fundamentals of Danish grammar, basic conversation and, as the year progresses, readings in Danish literature of gradually increasing difficulty. Four hours per week.

17, 18 NETHERLANDIC
Introduction to spoken Netherlandic (ABN), its grammar, structure and idiom. In the second semester, readings in modern Netherlandic, both from the literature and the newspapers, will be discussed. Four hours per week.

19, 20 ELEMENTARY NORWEGIAN
Essentials of Norwegian grammar, conversation and graded readings. Four hours per week plus assignments in the language laboratory.

41 DANISH COMPOSITION AND CONVERSATION
Concentration on pronunciation, aural-oral proficiency and written exercises of gradually increasing difficulty. Prerequisite, one year of college-level Danish or its equivalent. Four hours per week.

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

The department of history offers courses in the development of ideas and institutions in different eras and 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 in the understanding of an individual's place in society.

General Distribution Requirement
Any course in the history department will satisfy the general distribution requirement in the social sciences.

Major Concentration
A history major will be planned in consultation with a student's history department faculty adviser and will be comprised of no fewer than nine and no more than eleven
history courses. The major will include no more than two introductory level courses and at least one course in which a major research paper is required. (This requirement may also be satisfied through an appropriately designed independent project, interim term project, or off-campus program.) A history major will normally include at least one course in European, American, and non-western history.

American Studies
A major concentration in American Studies may be arranged with the consultation of members of the staff especially concerned with American history. For further information consult Professors Stewart and Sandeen in the history department, and Professor Henry in the English department.

Core Concentration
Members of the department will be happy to discuss a core in history with students already majoring or coring in another department.

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

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

Introductory Courses (10-29)
These courses are designed to meet the needs of students who have no previous collegiate experience with the study of history.

10 EUROPE SINCE 476
A one-semester introduction to the study of European history emphasizing selected major themes such as the rise of modern states and economies, the French Revolution, the Industrial Revolution, "isms" of the nineteenth century, and Europe in the era of the two world wars. This course is taught collectively by the faculty members in European history and includes reading primary sources and literature.

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

14 INTRODUCTION TO MODERN CHINA
A study of leading institutions and movements of 19th and 20th century China. Major emphases include the impact of Western imperialism, and 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.

15 INTRODUCTION TO 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 by 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.

23 AMERICAN CIVILIZATION
A topical analysis of United States history stressing the historical antecedents of selected contemporary issues, designed primarily for underclassmen who have no previous college-level background in this general field.

24 INTRODUCTION TO AMERICAN STUDIES
A thematic introduction to American history which utilizes art, architecture and novels as well as traditionally conceived historical sources.

Intermediate Courses (30-79)
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. Classes are open to freshmen only with the instructor’s permission.

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 THE AMERICAN ENVIRONMENT
A survey of American history concentrating first, on Americans’ discovery of their landscape and their reaction to it and, second, on the use of natural resources. Topics covered include the unspoiled American landscape in art and fiction; Transcendentalism and nature; the American Indian; mining, logging, and water resources; history of the conservation movement.

34 U.S. FOREIGN RELATIONS IN THE TWENTIETH CENTURY
This course covers American foreign relations from the 1890’s to the present. It traces the evolution of government policy as well as the expansion of American foreign trade, investment, and mass communications.

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

36 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.

37 THE HISTORY OF AMERICAN POPULAR CULTURE
Beginning with an analysis of the origins of mass culture in the late 19th century, this course traces the evolution of the major institutions of American popular culture and the role of the popular arts in American life. Special emphasis is given to the development and the impact of the mass media: popular journalism, motion pictures, radio, and television. In addition, the course will explore other forms of popular culture including music, religion, architecture, and sports.

38 AMERICAN RELIGION
A survey of American history devoted to coherent narration of the history of Protestant, Catholic, and Jewish religious movements, institutions, and attitudes.

41 ERA OF THE AMERICAN REVOLUTION
A topical and chronological inquiry into the origins of American political culture, the social and economic structure of colonial America, and the transformations of colonial life caused by the Revolution. The legacy of the Revolution, as embodied in the Constitution and the rise of the first American political party system will also be considered.

42 THE ERA OF THE AMERICAN CIVIL WAR
A study of the interplay between ideologies, reform movements, social institutions, political systems and economies which finally caused the collapse of American government in 1861. This course will also consider the military history of the Civil War, its impact on life in North and South, and the processes of slave emancipation and Reconstruction.

43 THE ORIGINS OF SUPER SOCIETY: U.S. 1900 to 1940
This course examines major social, economic and technological changes; the dislocation accompanying such changes; and the various efforts to change, reform and stabilize American institutions. Reading material will include a wide variety of primary historical sources as well as secondary works drawn from disciplines other than history. Major topics include the rise and fall of social radicalism, the growth of a consumer economy, the culture of professionalism, feminism and family life, and the impact of Progressivism and the New Deal in American politics and society.
44 U.S. SINCE 1945
This course examines major themes in recent U.S. history: the social impact of advanced technology, the problems of a mature capitalist economy, the phenomenon of "youth", the emergence of poor people's movements, the turbulence of the late 1960's, the Watergate era, and the "me decade" of the 1970's. Students will read a wide variety of sources and sample some of the first attempts to write the history of our own time.

45 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.

46 LATIN AMERICAN HISTORY
This course surveys Latin American history from pre-colonial times to the present, emphasizing the nineteenth and twentieth centuries. Major themes include the impact of the world economic system on Latin America's economic evolution; changing social structure and attitudes toward race; the role of the church; the role of the military; and changing political culture.

50 TOPICS
Courses numbered 50 are occasional, often experimental courses, offered by instructors at their own initiative, or in response to student requests.

51 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.

52 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.

53 THE VICTORIANS
A study of the culture, politics, social conditions, and artistic developments of Victorian England (1837-1901) through an examination of a number of documents (novels, plays, memoirs, government reports, etc.) of the period. This course is usually taught in conjunction with English 66 for double credit, and when it is, students will be required to register for both courses.

56 PRE-INDUSTRIAL EUROPE: CULTURAL TRADITION AND SOCIAL REALITY
A survey of the evolving relationship between European material conditions and cultural traditions from the fall of Rome to the beginnings of industrialization. This study will be conducted by inquiring into the sources and implications of such themes 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 CONSTITUTIONAL SYSTEMS
A survey of the origins of the European nation-state 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 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.

60 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.

62 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.

64 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.

66 EUROPE IN THE AGE OF UPEHAVAL AND REVOLUTION
A study of European politics, culture and society during the years (1780-1870) in which Europe experienced the most profound social and political transformations in its history. Among the topics to be considered are the French Revolution, urbanization, industrialization, new concepts of the family, Darwin, the growth of new ideologies, and the growth of democracy.

68 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.

69 GREECE (Same as Classics 69)
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.

70 ROME (Same as Classics 70)
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 developments 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.

71 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. Previous course in East Asian history is preferred.

77 HISTORY OF THE MODERN MIDDLE EAST
A survey of the history of the modern Middle East from Muhammad to the present with special attention to the nineteenth and twentieth centuries. The course will discuss social, economic, religious and political institutions and their changes and interactions over time in Egypt, the Arabian Peninsula, Iran and Turkey. The spread of Islam, the Abbasid “Golden” Age, the rise and fall of the Ottoman Empire, modern nationalism and international oil politics and the formation of Israel will be among the topics discussed.

Advanced Courses and Independent Studies
These courses are intended to be small seminars or independent study projects for students well prepared for special work on selected topics. Prerequisite, permission of the instructor. The number of independent studies to be applied toward the major or core will be determined in consultation with the adviser and the department chair.

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

90 SPECIAL ADVANCED STUDIES
95 TUTORIAL
96 INDEPENDENT PROJECT
97 INTERNSHIP
98 PRECEPTORSHIP
Humanities

Jeremiah Reedy (Coordinator, Classics)

The aim of the humanities program is to present for study and discussion certain classic and seminal statements in letters and the arts that express characteristic views of deity, mankind, and the world, especially in Western civilization.

General Distribution Requirement

Any of the courses in humanities can satisfy general distribution requirements in the humanities and fine arts division.

Core Concentration

The humanities core shall consist of 12 courses. The inner core in humanities includes one course from antiquity (normally Classics 18, 21 or 22); Humanities 25, 26, 56; one additional Humanities course or a literature course (e.g. Humanities 27, French/Humanities 68, or Germanics 63, etc.); and a Humanities course numbered above 90. Supporting the concentration will be six courses, chosen in close consultation with the adviser, from one of the following options.

Option A:

Intellectual and Cultural History. Six courses with at least one from each of the first three disciplines:

- Art History
- Music (Music 10 or advanced courses in history of music or music literature)
- Philosophy
- Speech (Selected courses in rhetoric and theater)
- Religious Studies (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 15 and 17) chosen so as to make a meaningful pattern.

Minor Concentration

A minor in Humanities shall consist of five courses, ordinarily as follows: Humanities 18, 25, 26, 56 and one additional Humanities course (e.g. Humanities 27, 50, 68, 88, etc.), excluding 96 and 97. Minor programs must be approved by the Humanities coordinator.

Senior Comprehensive Examination

Those concentrating in Humanities are required to take a final written/oral comprehensive examination at the end of their senior year.

COURSES

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 – 1

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 and 20th century to World War I, 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.

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 PROJECT
An interdisciplinary project building on the core and supporting courses and culminating in a paper or presentation. Prerequisites, senior standing and permission.

97 INTERNSHIP
No more than two, and may not be used as part of the inner core.

Individually Designed Interdepartmental Major
See the section on graduation requirements for the description and requirements of this major concentration.

International Studies
Peter Weisensel (Coordinator; History) Advisory Committee: Dorothy Dodge (Political Science), Hélène Peters (French), Michael Rynkiewich (Anthropology), Otto Sorensen (Germanics), David White (Philosophy)
The 14-credit international studies program is divided into three major components: 1) a curricular portion providing the student 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 have a core in one or more of the following departments: anthropology, economics, French, geography, Germanic languages and literatures, history, philosophy, political science, religious studies, 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 which appropriately reflect and support the student's primary interest. These courses will be among the regular curricular offerings of the participating departments. To ensure a broad sampling, the student will select courses from at least two different participating departments, neither of which can be the student's "core" department.
In addition, each student is encouraged to include at least two interdisciplinary topical seminars within their program. Interdisciplinary seminars are taught jointly by faculty from at least two participating departments. These seminars bring the perspectives of individual disciplines to bear on specific problems of global or inter-cultural concern. Whenever possible, the participation of Fellows of the World Press Institute and international students within these seminars will be encouraged.

**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: 1) 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. 2) Oral Communication in English. Each student is expected to be articulate and should have some experience with creative oral communication. 3) Written Communication in English. Each student is expected to write concise, jargon-free technical reports and should have some exposure to creative writing. 4) 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: 1) Data Analysis. Each student should be able to analyze and present numerical information. Some students may want to acquire statistical and/or computer programming skills. 2) Accounting. Each student should be able to prepare and criticize budgets. 3) Administrative. Each student should be familiar with the workings of administrative organizations. 4) Visual Communication. Each student should be competent in the use of photography and video means of communication and research. 5) 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.

**Journalism**

Ronald Ross (Chair)

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 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 chair counsels students about courses in other departments of particular value to journalists. Journalism 57 and 60 are not open to freshmen.
Minor
A minor in journalism consists of six courses in the department, to include one advanced independent, internship, or preceptorship.

COURSES
18 THE INFORMATION MACHINES — AN INTRODUCTION TO OUR NEWS CHANNELS
Students will examine newspapers of all kinds, the news departments of radio and television stations, and news magazines, as if they were first-time readers, listeners or viewers.

57 NEWS REPORTING AND WRITING
This course emphasizes learning by doing and covers basic techniques in straight news, feature and interpretive stories. Basics of copy editing and headline writing will also be studied.

59 HISTORY OF NEWS MEDIA AND MEDIA LAW
Development of the communications industry in U.S. and of laws and regulations governing it.

60 MAGAZINE WRITING AND PUBLICATION
In this course we learn how to write and sell non-fiction magazine articles. Prerequisite: at least one course in reporting or permission of instructor.

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
Prerequisite, permission of the instructor.

97 INTERNSHIP
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.

98 PRECEPTORSHIP
Prerequisite, permission of the instructor.

Law and Society
Marc Anderberg (Political Science), Duncan Baird (Political Science), W. Scott Nobles (Speech), Norman Rosenberg (History), Michael Rynkiewich (Coordinator, Anthropology)

Although attractive to pre-law students, this major is explicitly a broad interdisciplinary study of the relationship of law to culture, society, and personality. The object is for students to be introduced to a variety of approaches to the study of law. When the sequence has been completed, students will be familiar with historical and current research on the philosophical, psychological, sociological and communicational aspects of legal systems and legal behavior. The course of study should prove especially helpful as preparation for lawyers, para-legal personnel, public administrators, social workers and other professionals.

The benefits to students are as follows. First, the teachers who are involved will constitute a knowledgeable and interested group from whom advisers may be chosen. A formal committee, consisting of one representative from each of the required departments, will review the program and the progress of its majors each year. It will also make changes in the program and hear requests for changes in particular major plans as needed.

Second, for those students interested in pursuing a career in law, and for those with a less career-oriented interest, a clear set of courses will be described. This will help
students to decide early whether such a major is desirable.

Third, the sequence of study insures that students will have a broad base in the study of law and society. One course is required in each of six departments.

**Requirements**

Students will be granted a B.A. in law and society when they successfully fulfill all college requirements and the following major requirements.

1. Take 10 courses dealing with the relationship of law to culture, society and personality. One course must be taken from at least six of the seven departments listed below under “Required” courses, and one other course in writing. This will satisfy seven of the ten courses. Another course must be an interdisciplinary topics course in law and society. The committee will insure that one such course is given at least every other year. The additional courses may be chosen from the lists of “required” and “recommended” courses noted below.

2. Choose an adviser for this interdisciplinary major from one of the professors offering required courses.

3. Complete a major or core plan in some department. The department may be inside or outside the program.

**Required:** (one each from at least six of the following seven departments)

<table>
<thead>
<tr>
<th>Department</th>
<th>Course No.</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>Anthropology</td>
<td>65</td>
<td>Law and Dispute Settlement</td>
</tr>
<tr>
<td>Economics</td>
<td>15</td>
<td>Business Law</td>
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<td></td>
<td>19</td>
<td>Principles of Economics</td>
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<tr>
<td>History</td>
<td>35</td>
<td>American Legal Culture</td>
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<td></td>
<td>58</td>
<td>Origins of Modern Constitutional Systems</td>
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<tr>
<td>Journalism</td>
<td>59</td>
<td>History of the Media and Media Law</td>
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<tr>
<td>Philosophy</td>
<td>25</td>
<td>Ethics</td>
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<td></td>
<td>73</td>
<td>Philosophy of Law</td>
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<tr>
<td>Political Science</td>
<td>55</td>
<td>Contemporary Legal Programs</td>
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<td></td>
<td>62</td>
<td>International Law and Organization</td>
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<td></td>
<td>85</td>
<td>American Constitutional Law and Thought</td>
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<tr>
<td>Speech</td>
<td>25</td>
<td>Argumentation</td>
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<td></td>
<td>56</td>
<td>Legal Communication</td>
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In addition, one course in writing, approved by the student's adviser, is required.

**Recommended:**

<table>
<thead>
<tr>
<th>Department</th>
<th>Course No.</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anthropology</td>
<td>64</td>
<td>Political Anthropology</td>
</tr>
<tr>
<td>Economics</td>
<td>13</td>
<td>Basic Financial Accounting</td>
</tr>
<tr>
<td>English</td>
<td>17</td>
<td>College Writing</td>
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<tr>
<td>Philosophy</td>
<td>40</td>
<td>Introduction to Logic and the Philosophy of Science</td>
</tr>
<tr>
<td>Political Science</td>
<td>38</td>
<td>Legal Systems</td>
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<td></td>
<td>47</td>
<td>Intergovernmental Relations</td>
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<tr>
<td>Psychology</td>
<td>24</td>
<td>Behavior Disorders</td>
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<tr>
<td>Sociology</td>
<td>76</td>
<td>Social Deviancy</td>
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<tr>
<td></td>
<td>86</td>
<td>Sociology of Behavior Disorders</td>
</tr>
<tr>
<td>Speech</td>
<td>38</td>
<td>Persuasion</td>
</tr>
</tbody>
</table>
Library Science

Joel Baer (Adviser; English)

Students who will complete a major or core in one of Macalester's academic departments or in an approved interdepartmental program may apply to complete a second major in library science offered in conjunction with the College of St. Catherine. The library science department at St. Catherine's prepares students for professional service in public, college, special and school libraries. The requirements for this second major can be found in St. Catherine's catalog. Interested persons should contact the Department of Library Science at the College of St. Catherine or Professor Joel Baer of Macalester's English department.

COURSES

20 BIBLIOGRAPHY
A systematic study of the methods of doing library research. Students gain practical experience in solving bibliographical problems through the use of catalogues, bibliographies, abstracts, indexes, subject heading thesauruses, classification systems, etc. A survey of the history of writing, printing, and bookmaking is included.

21 METHODS OF RESEARCH IN GOVERNMENT DOCUMENTS
A survey of U.S. government publications from 1774 to date with detailed study and practice to develop skills in using the most important research tools. Intensive study of the publications of specific departments of the government will be arranged for each student in line with his or her major. United Nations, foreign government, and state documents will also be studied. Invaluable for political science, sociology, history, geography, economics and business majors.

Linguistics

Richard Clark (Germanics), Russell Clark, Ellen Comer, Charles Johnson (French), John Knapp, Philip Lee (French), David McCurdy (Anthropology), Roger Mosvick (Speech), Jeffrey Nash (Sociology), Scott Nobles (Speech), Jeremiah Reedy (Classics), Karl Sandberg (Chair, French), James Spradley (Anthropology), Glen Wilson (Speech)

In linguistics one studies languages not in order to read, write, or speak them, but to understand how they work, how they change, how they are acquired or learned, and what they reveal about mental and social processes. Linguistics, therefore, has an important relation to each discipline dealing with human behavior, culture, and values, e.g. sociology, psychology, anthropology, speech and communication, philosophy, literature, and foreign languages. It is, moreover, a crossroads discipline where both empirical and rational methodologies are used and where differing analyses of human nature and culture are examined and compared in light of evidence furnished by the study of language.

The general purpose of linguistics in a liberal arts curriculum is, therefore, to introduce students to the questions, issues and claims which arise from the study of the function and nature of language.

More specific goals of the linguistics department are to provide specialized students of linguistics with the scholarly tools used in studying language in different disciplines and to give them familiarity with the problems, questions, and issues of different disciplines which involve language. The program of the department also provides training and experience based on linguistic theory and research for students contemplating a career related to language teaching, such as teaching English as a second language, teaching foreign students, or teaching reading and composition to
native speakers of English. A final function of the department is to provide English language instruction for the numerous international students attending Macalester and language instruction for American students in languages in which no major is offered, e.g. Japanese.

**General Distribution Requirements**

The following linguistics courses will fulfill the general distribution requirement in the humanities and fine arts division: 24, 26, 28, 29, 49, 51, 53, 61, 70, 71.

The following linguistics courses will fulfill the general distribution requirement in the social sciences: 30, 35, 37, 63.

The following courses count toward the 31 course total for graduation but do not fulfill divisional requirements: Linguistics 55 and all courses in English as a Second Language.

**Major Concentration**

1. A major concentration in linguistics consists of eight courses in linguistics, to include Linguistics 24 and 26 and at least one course from each of the following categories:

   - **Organizational Principles of Language**
   - 28 Phonology
   - 61 Theories of Grammar
   - 63 Psycholinguistics
   - 68 Philosophy of Language

   - **Social Function of Language**
   - 29 Speech and Language in Human Behavior
   - 30 Language and Culture
   - 35 Sociolinguistics
   - 37 Language and Culture of the Deaf

   - **Applied Linguistics**
   - 49 Theory and Criticism of Rhetoric
   - 51 Structural Analysis of Modern English
   - 53 Linguistics and Language Problems in Education
   - 55 Linguistics and Teaching English as a Second Language

2. Five supporting courses, which may include introductory language courses.

3. A familiarity with the structure of three languages which are not one's own. Latin is strongly recommended. This requirement will be satisfied by a departmental test given each semester. Specific information is available at the departmental offices.

4. A senior project drawing together the student's work in linguistics, or combining it with work in other disciplines (e.g. a paper on political communication, or language and humor, or linguistics and literary style.)

**Core Concentration**

The core concentration consists of:

1. Six linguistics courses, to be drawn from at least two of the three categories (above).
2. Six supporting courses. At least two courses in foreign languages are recommended.
3. A familiarity with the structure of two languages not one's own, to be demonstrated on a departmental examination.
4. A senior project drawing together the work in linguistics, or combining it with work
in other disciplines (e.g. a paper on political communication, or language and humor, or linguistics and literary style).

**Minor Concentration**

The minor concentration consists of:

1. Six linguistics courses, to include 24, Humans and Their Language, and 26, Introduction to Linguistic Analysis.

2. A familiarity with the structure of two languages not one’s own, to be demonstrated on a departmental examination.

Students who wish to have a linguistics minor in the teaching of English as a second language should include the courses indicated in the TESL program (below).

**Teaching English as a Second Language**

The linguistics department sponsors an undergraduate training program for linguistics majors or for non-linguistics majors who take the specified courses in the Teaching of English as a Second Language. Students planning on participating in the TESL program should take: 26, Introduction to Linguistic Analysis; 51, Structural Analysis of English; 53, Linguistics and Language Problems in Education; 55, Linguistics and Teaching English as a Second Language.

Internships and preceptorships are also available in TESL, and teaching assistantships are available for students who have finished the program. Students in this sequence should also plan on developing a working knowledge of at least one language not their own.

**Language Competency Courses**

In addition to the six languages in which Macalester offers majors (French, German, Greek, Latin, Russian and Spanish), instruction in the following languages may be had in the indicated departments, either in a class or on an individual basis: Danish (Germanics), Netherlandic (Germanics), Portuguese (Spanish), Japanese (Linguistics), Norwegian (Germanics), and English as a Second Language (Linguistics).

**Honors**

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

**COURSES**

24 HUMANS AND THEIR LANGUAGE

This course introduces students to the range of questions implicit in the phenomenon of human language: the distinctiveness of human language, the relation of language and thought, the biological foundations of language, first and second language acquisition, and the relation of language and culture. The course also gives an overview of the development of the field of linguistics. It thus serves as an introduction to the field of linguistics per se as well as to the linguistic aspects of anthropology, biology, psychology, sociology, speech and communication, and foreign languages.

26 INTRODUCTION TO LINGUISTIC ANALYSIS

This course is organized around the question “What does one have to know about language in order to learn a new language on one’s own?” The course includes study of general principles of phonology (sound systems), morphology (word forms), syntax (sentence structure), and discourse. It emphasizes the acquisition of the methods and techniques linguists use in studying language. Prerequisite, Linguistics 24 or consent of instructor.
29 SPEECH AND LANGUAGE IN HUMAN BEHAVIOR (Same as Speech 37)
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.

30 LANGUAGE AND CULTURE: FIELD TECHNIQUES (Same as Anthropology 30)
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 discovery of cultural knowledge through participant observation and ethnosemantic techniques.

35 SOCIOLINGUISTICS (Same as Sociology 48)
This course examines the interrelationships among societal and linguistic phenomena. It surveys three distinctive methodologies for understanding the interrelationships and introduces literature representative of each methodology. The three views are the indexical, the indicator and the discovery procedure. The indexical view requires attention be given to the social context of discourse and that the functions and rules embodied within social context be examined. The indicator view conceptualizes language as a variable in relationship with social variables. The extent and nature of these relationships are generally explained within terms of some theory. The discovery procedure view offers a linguistically grounded set of techniques for the investigation of the social organization of cultural phenomena.

37 LANGUAGE AND CULTURE OF THE DEAF (Same as Sociology 49)
This course is organized around the thesis that the meanings of everyday life for the deaf are embodied in the sign language. To understand deafness as a social and linguistic experience, it is necessary to gain an appreciation of the nature of the native language of the deaf in America. Therefore, this course describes the language of signs in its linguistic characteristics and explores the implications of these characteristics for the social organization of the deaf community. The interrelationships between the deaf subculture and the hearing culture for institutional areas such as the family and education are examined.

49 THEORY AND CRITICISM OF RHETORIC (Same as Speech 49)
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 Burk. They will apply principles of critical evaluation to historical and contemporary speeches, essays, novels and plays. Critical methods for studying leaders, movements and historical periods will be analyzed.

51 STRUCTURAL ANALYSIS OF MODERN ENGLISH
A study of the nature of grammatical analysis and of the system of English grammar. The course is organized by a communicative view of language, i.e. by the question of what it is necessary to know about the structure of English in order to teach it or to use it effectively and correctly. The course deals with the language on the sentence and discourse levels and gives an introduction into discourse analysis. It is recommended for linguistics or English majors who intend to teach and for students who wish to increase the effectiveness of their use of English through the study of the structure of the language.

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 or bilingual minorities in the United States. Study of the questions of language and cultural identity, language and pedagogical problems, and specific programs of bilingual education.

55 LINGUISTICS AND TEACHING ENGLISH AS A SECOND LANGUAGE
Based on theory from structural linguistics, psycholinguistics and sociolinguistics, this course describes the strategies and techniques for teaching English to non-native learners, including pronunciation, conversation, structure, reading and composition. It includes a practicum of a minimum of 20 hours of supervised teaching or tutoring. Prerequisite, Linguistics 26 or permission of the instructor; Linguistics 51 and 53 are recommended.

61 LINGUISTICS—THEORIES OF GRAMMAR
This course begins with a survey of the different ways people have gone about analyzing and organizing language: the Greeks (e.g. Plato): the rationalists (Descartes, et al); the 18th century prescriptive grammarians; the descriptive linguistics (Bloomfield, et al). It ends with a detailed study of and practice in the modes of generative grammar and case grammar, with a consideration of current questions and writings in the field.

63 PSYCHOLINGUISTICS (Same as Psychology 53)
Inquiry into the psychological foundations of the acquisition and use of language and the contributions of modern linguistics to the study of psychology. Relevant findings of recent linguistic research are examined for
their implications for such topics as the differences between machine language, animal language and human language; the significance of generative grammar for the study of human language; language structure and memory; the acquisition of first and second languages; innate ideas and linguistic or psychological universals. A significant portion of the course will be devoted to the formulation and performance of psycholinguistic experiments.

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.

70 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.

95 TUTORIAL
Prerequisite, permission of the instructor. Limit of one may be applied toward the major.

96 INDEPENDENT PROJECT
Prerequisite, permission of the instructor. Limit of one may be applied toward the major.

97 INTERNSHIP
Prerequisite, permission of the instructor. Limit of one may be applied toward the major.

98 PRECEPTORSHIP
Prerequisite, permission of the instructor. Limit of one may be applied toward the major.

English as a Second Language
The College requires all entering students whose native language is not English to demonstrate competency in English sufficient for successful academic work before registering for academic courses. This requirement is met by making appropriate scores on the battery of tests administered by the linguistics department at the beginning of each term.

The purpose of the program in English as a Second Language is to prepare students as quickly as possible to carry full academic loads in American colleges and universities.

Placement in ESL courses is made on the basis of the diagnostic tests that students take when they arrive. Students whose scores so indicate will be placed in the full-time English language program (six hours per day). Students on the advanced level may take up to three academic courses, depending on what English courses are necessary. This question will be decided in conference with the adviser(s) in the International Center.

Intermediate English Program

12 DEVELOPMENT OF READING SKILLS IN ENGLISH
This course is intended for students who score under the sixth grade level on standardized reading tests. It emphasizes the acquisition of vocabulary, the increasing of reading speed and the development of analytical skills as a preparation for doing academic reading, and will include a review of the structures of English for the purpose of reading. At the end of the course students should be reading materials on the 7th grade level at 400 words per minute with good comprehension and should be capable of beginning the work in the advanced critical reading course.

15 CONVERSATION AND COMPREHENSION
This course emphasizes the development of listening comprehension and oral fluency. The first part of the course concentrates on acquiring clear and accurate pronunciation in English while reviewing structures which are mostly familiar to students at this level. It then moves to more advanced and complex structures and emphasizes the development of ease and accuracy in speaking. An essential part of the course is work in aural comprehension which is done principally in the language laboratory. The homework for the course consists of two hours of work outside of class: one hour per day in the language laboratory and one hour in the small conversation section.

16 INTERMEDIATE COMPOSITION
This course deals with writing on the sentence and the paragraph levels, including a review of the structures of English. It may also include attention to penmanship for those students unfamiliar with the Roman alphabet. The course will also include exercises in notetaking (from reading and listening) and the writing of precis and summaries. At the end of this course students should be writing correctly and fluently enough to turn their attention to the kind of academic writing which is taught in ESL 18.
Advanced English Program

18 ADVANCED COMPOSITION
This course presupposes a familiarity with the structures of English as well as an advanced proficiency in reading and aural comprehension. Its purpose is to develop the ability to do college writing (papers, essays, examinations, book reports, etc.). It is the same kind of course offered for native speakers in English 17, but with attention given to the special problems of non-native speakers. At the end of this course students should be ready to do any of the kinds of writing involved in regular academic courses.

20 CRITICAL READING
The course begins by teaching students how to read for a purpose and how to develop reading speed. It gives training in approaches to reading college textbooks and scientific/technical writings, and then develops techniques of testing reading passages for logic and validity. Some attention is given to techniques of reading for the interpretation of literary texts. The course consists of four hours of class per week, and also requires extensive reading and study outside of class.

21 ADVANCED ACADEMIC ENGLISH
This course consists of reading and lectures in American civilization and institutions, and of practice in note taking, composition, aural comprehension, classroom discussion, and the full range of English language skills necessary for regular academic courses. The intent of the course is (1) to familiarize students with the new culture in which they are living, (2) to provide an historical and cultural framework which often serves as a source of examples and allusions in other courses (e.g., economics and political science), and (3) to bring their classroom language skills to the point where they can compete with native speakers on most academic tasks.

Japanese

11 ELEMENTARY JAPANESE I.
Introduction to Japanese language and culture. Practice in the basic sentence pattern and conversational expressions to enable students to speak and write Japanese. Japanese syllabary and Chinese characters are learned gradually from the first lesson.

12 ELEMENTARY JAPANESE II.
Continuation of 11. Simple composition practice. Prerequisite, 11 or its equivalent.

31 INTERMEDIATE JAPANESE I.
Continuation of 12. Prerequisite, Japanese 12 or its equivalent.

32 INTERMEDIATE JAPANESE II.
Continuation of 31. Prerequisite, Japanese 31 or its equivalent.

Mathematics

Murray Braden, Allan Kirch, Joseph Konhauser (Chair), Justin Lam, 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.

Placement Tests
Entering students who anticipate taking a course in mathematics at any point in their college career must take the placement test which is administered during Orientation. Entering students who have studied calculus in high school and who wish to enroll in a course more advanced than Mathematics 21 should consult the department of mathematics. When available, scores of the College Entrance Examination Board achievement test in mathematics (Level II) will also be used in determining placement.
Students with weak high school preparation in mathematics, as determined by their grades in high school mathematics and by their scores on the departmental placement tests, are encouraged to take Mathematics 109, Essentials of Mathematics for College. Mathematics 109 is a non-credit course designed to develop the student's background in those areas of mathematics which are required for success in Mathematics 11, 14 and 16, Economics 14 and 19, Chemistry 10 and 11, and any other introductory course in which elementary mathematics is used. The course is taught each fall semester by the Mathematics Skills Specialist in the Learning Skills Center.

**General Distribution Requirements**

Mathematics 14, 15, 16, 17, 21 or any higher numbered course may be used toward the fulfillment of the graduation requirement in the natural sciences and mathematics. Course 11 may not be used for this purpose. Courses 14, 15, 16 and 17 are designed to meet special needs as stated in the course descriptions. Mathematics 21 is a first course in calculus.

**Major Concentration**

Requirements for a major in mathematics are:

1. Mathematics 21, 22 and 23, or their equivalent.
2. Five additional courses in mathematics numbered 33 through 88, including at least one of the two courses 33 or 35, at least one of the two courses 57 or 58, and at least one of the two courses 61 or 62.
4. Computer competency, which may be established by successfully completing a. Mathematics 15, 17 or 25, or b. a programming course during Interim, or c. a special project assigned by members of the department of mathematics.

Students preparing for graduate work in mathematics should include courses 57, 61, 62, 81 in their program, and obtain a reading knowledge of French, German or Russian. 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.

**Core Concentration**

Requirements for a core in mathematics are:

1. Mathematics 21, 22 and 23, or their equivalent.
2. Three additional courses in mathematics numbered 33 through 88.
3. Six relevant courses in a related field or fields.
4. Computer competency, as defined above.

The core concentration should be elected only in those instances where the student's total program does not allow time for a major.

Students electing either a 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.
Minor
Requirements for a minor in mathematics are:
1. Mathematics 21, 22, 23, or their equivalent.
2. Three additional courses in mathematics numbered 33 through 88.
3. Computer competency, as defined above.

Honors
Qualified students are encouraged to enter the college-wide honors program. Honors students are required to prepare a paper, or project, which must be successfully defended before an examining committee consisting of the student’s honors adviser, another Macalester faculty member, and an outside examiner. In advance of the preparation of the paper, or project, the student and adviser will mutually agree upon its topic, nature and extent. Applications for admission to the Honors Program must be completed in the spring semester of the junior year.

COURSES

11 ALGEBRA AND TRIGONOMETRY
Polynomials and rational functions, equations and inequalities, systems of linear equations, trigonometric functions, identities, inverse functions, complex numbers. Mathematics 11 provides a thorough preparation in algebra and enables the student to take both Mathematics 21 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. Offered every semester.

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. Students may not receive credit for both Economics 14 and Mathematics 14. Offered every semester.

15 COMPUTER PROGRAMMING I
Designed to provide the student with the basic knowledge and experience necessary to make effective use of modern interactive digital computers. Students will study the BASIC language and two higher-powered extensions of it, BASIC-PLUS and BASIC-PLUS-2. The solving of problems, both numerical and non-numerical, will be emphasized, with attention to the concept of an algorithm. Also discussed will be the creation and management of data files. Prerequisite, three years of high school mathematics. Offered every semester.

16 MATHEMATICS—ITS CONTENT AND SPIRIT
Topics in modular arithmetic, 2 x 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. Offered as demand dictates.

17 COMPUTER PROGRAMMING II
Problem-solving by computer using FORTRAN and COBOL, the most widely used scientific and business-oriented computing languages. Two additional languages, PASCAL and APL are accorded brief treatment. Numerical and non-numerical problems are considered, with emphasis on array- and file-management procedures. Prerequisite, Mathematics 15 or working knowledge of BASIC. Offered every year.

21 CALCULUS I
An intuitive treatment of the differential and integral calculus of one variable. Applications in the social, behavioral and physical sciences. Prerequisite, proficiency in algebra or satisfactory score on placement test. No trigonometry is required. Offered every semester.

22 CALCULUS II
Further study of the differentiation and the integration of functions of a real variable. Infinite series.
Applications in geometry and the sciences. Prerequisite, Mathematics 21 and proficiency in trigonometry. Offered every semester.

23 CALCULUS III
Solid analytical geometry, partial derivatives, multiple integrals. Prerequisite, Mathematics 22. Offered every semester.

25 COMPUTER SYSTEMS AND ORGANIZATION
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. Offered every year.

33 DIFFERENTIAL EQUATIONS
First order differential equations, higher order linear equations, series solutions and the method of Frobenius, the Laplace transform, systems of linear equations. Applications. Prerequisite, Mathematics 23. Offered every year.

35 FINITE MATHEMATICS
Topics in set theory and combinatorics, graph theory, linear algebra and probability, with emphasis on Markov chains, game theory and linear programming, including the simplex method. Applications. Prerequisite, good background in high school mathematics and permission of the instructor. Offered every year.

40 DATA STRUCTURES AND FILE ORGANIZATION
Techniques for representing and organizing data. Efficient storage and usage of data by a computing system. Advantages and disadvantages of various structures, including strings, tags, link lists, stacks, graphs and trees. Sorting and searching, file structures and memory management. Prerequisite, Mathematics 15 or 17, or equivalent; Mathematics 21 is recommended. Offered in alternate years.

42 PROGRAM LANGUAGE ORGANIZATION
Basic computer linguistics, BNF constructs, illustrated by ALGOL or PASCAL, control structure and data flow, introduction to interpreting and compiling. Prerequisite, Mathematics 15 or 17, or equivalent; Mathematics 21 is recommended. Offered in alternate years.

50 TOPICS
Topics of interest to faculty and students such as optimization techniques and applications, linear programming, number theory, convexity in geometry, point set topology, modern applied algebra. Prerequisite, permission of the instructor. Offered every year.

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 23 or permission of the instructor. Offered every year.

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. Offered in alternate years.

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 23. Offered as demand dictates.

57 BASIC ANALYSIS
Theorems for continuous functions, infinite series, power series, uniform convergence, Riemann integral. Prerequisite, Mathematics 23 and permission of the instructor. Offered every year.

58 APPLIED ANALYSIS
Ordinary and partial differential equations. Fourier series and integrals, boundary-value problems, special functions, coordinate transformations, vector analysis. Prerequisites, Mathematics 33 and permission of the instructor. Offered every year.
61 LINEAR ALGEBRA
Vectors and vector spaces, systems of linear equations, linear transformations and matrices, Euclidean and unitary spaces. Prerequisite, Mathematics 23. Offered every year.

62 ALGEBRAIC STRUCTURES
Introduction to abstract algebraic theory with emphasis on finite groups, rings, fields, constructibility, introduction to Galois theory. Prerequisite, permission of the instructor. Offered every year.

70 ADVANCED LOGIC (Same as Philosophy 70)
Procedures and findings of symbolic or mathematical logic. Prerequisites, Philosophy 40 and permission of the instructor. Offered in alternate years.

74 NUMERICAL ANALYSIS
General theory of iteration, approximation, error estimation, interpolation, solution of nonlinear equations, numerical integration and differentiation, solution of ordinary differential equations. Prerequisite, Mathematics 15 or 17, or equivalent, and Mathematics 23. Offered in alternate years.

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 23. Offered in alternate years.

88 TOPICS IN MATHEMATICS SEMINAR
Required of all majors. Students and instructor share the lectures. Subject matter varies from term to term and is determined by the special interest 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. Offered every year.

96 INDEPENDENT PROJECT
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.

97 MATHEMATICS INTERNSHIP
Mathematics credit is available to junior and senior students with declared cores or majors in mathematics. Special arrangements must be made well in advance of the regular registration period. Departmental approval and supervision are required.

109 ESSENTIALS OF MATHEMATICS FOR COLLEGE
A non-credit course, covering basic algebraic techniques. Manipulation of signed numbers, fractions, exponents, radicals, linear equations, quadratic equations, inequalities, word-problem solving and logarithmic functions. Offered every fall semester.

Music

Donald Betts (Chair), Michele Edwards, Edouard Forner, Alvin King, Carleton Macy, Dale Warland

The music department offers the following programs of study: (1) performance, musicology or composition as a music major; (2) certification in secondary or elementary music education; (3) the opportunity to increase general musical knowledge and appreciation as non-majors, cores or minors.

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

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

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, 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 in the "Expense" section. 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.

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).

General Distribution Requirement
Music 10 will normally be used to satisfy the humanities and fine arts general distribution requirement. Other music courses, particularly Music 13, 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 junior year.

A. Major Concentration in Music: Music 13, 14, 23, 24, 41, 42, 53, 54 plus three electives for a total of 11 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. In addition, basic proficiency on the guitar, piano and a minor instrument; music lessons on a primary instrument along with ensemble performance each semester. The course, Music in Elementary Schools, offered through the Consortium, is highly recommended and required for elementary certification.

In compliance with State of Minnesota specifications, all prospective teachers will produce a public event in which they perform on a major and a minor instrument, and demonstrate competency in rehearsing and coaching a music ensemble(s). Those courses taken in the Education department necessary for certification include: one course from Education 82, or 83, or 84; 49; 51; and two from either 65, 66, or 67 (students should check with the Education department). Also to satisfy state requirements the student must take Physical Education 101 and Education 125.

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 by the junior year; (3) practice teaching should be taken the senior year; (4) Student should confer with the Music department for further details (see Professor Carleton Macy).

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 department chair; a minimum of four semesters of music lessons and two semesters of ensemble; six supporting courses outside the department approved by the department chair.
Minor
A minor will consist of seven courses: Theory I and II; any two literature courses including Music Appreciation; and three electives, or more theory or literature instead of, or combined with, electives, music lessons and ensembles.

Senior Projects
The music department will recommend to its outstanding majors that they undertake projects involving performance, composition or music research sometime during their four years.

Honors
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, if possible, the following should be taken as electives: Music 92 and 93.

COURSES
10 MUSIC APPRECIATION
The study of masterpieces of music in context of their cultural surroundings and in relation to other world cultures.

13 THEORY I—ELEMENTARY THEORY
Key and time signatures, scales, modes, intervals, primary chords, ear-training, sightsinging, elementary keyboard harmony. Each section of this course will carry with it a keyboard lab for those students deemed non-proficient in keyboard skills, as determined by a test given on the first day of class. Labs will be held three times a week. Classes meeting at 8:30 will have 9:30 labs, and classes meeting at 9:30 will have 8:30 labs.

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 1600. Prerequisite, Theory II or permission of the instructor.

42 MUSIC LITERATURE II
The study and analysis of music written from 1600 to 1770. Prerequisites, Music Literature I and Theory II or permission of the instructor.

50 TOPICS
Examination of special topics of interest to faculty and students. Subject matter will vary from term to term.

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.
71 INSTRUMENTAL METHODS I
Playing string and brass instruments, survey of publishers and methods. Class and laboratory sessions and conducting.

72 INSTRUMENTAL METHODS II
Playing woodwinds and percussion instruments, survey of publishers and methods. Class and laboratory sessions and conducting.

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

76 ADVANCED CHORAL CONDUCTING
Extension and development of the basic skills of choral conducting with emphasis on score preparation, choral repertoire, rehearsal and performance techniques. Prerequisite, Music 74 or permission of the instructor.

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.

The following independent studies are available to music majors, cores, or minors and very occasionally to a non-music major. All need the permission of the instructor and the department chair.

95 TUTORIAL

96 INDEPENDENT PROJECT

97 INTERNSHIP

98 PRECEPTORSHIP

Performance Studies
Course credits may be earned as follows: (1) A course unit will consist of four successful terms of performance studies either in one subject or two subjects. If in one subject, each block of two terms must be consecutive (consecutive terms may be fall-spring, or spring-fall). (2) Performance studies (lessons and ensembles) will be graded A/B/C/D/NC. All students except music majors, cores or minors, may opt for a grade of S/NC instead. A student must earn a grade of A, B, C, D or S for each term to receive credit for the course. (3) A student may receive no more than two course units of credit for performance studies toward graduation, but no limit is placed on continued participation without credit. Such participation will, however, appear on a student's transcript. (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. (5) Fractional credit is not awarded.

At the end of the student's senior year, the Registrar's office will average the various semester grades earned in performance studies during the student's four years at Macalester. No more than 2 courses (8 semesters of performance studies grades) will then be computed into the student's GPA.

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.

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

211, 212 MACALESTER JAZZ BAND
Preparation and performance of classical and contemporary big band jazz.

215, 216 MACALESTER CHAMBER MUSIC ENSEMBLES
Preparation of various kinds of trios, quartets, and small ensemble for public presentation. This includes the Macalester Chamber Players, a select string orchestra in 17th century style, chosen from members of the Macalester symphony.

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.

221, 222 EARLY MUSIC ENSEMBLE
Instruction and experience in Medieval, Renaissance and Baroque performance, practice in playing the recorder, krummhorn, capped reeds, rebeck, psaltery, viol and percussion. Several public performances during the year.

Music Lessons (Private and Class)
Private 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, with departmental approval. 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.

125, 126 CLASS VOCAL PERFORMANCE METHODS

127, 128 CLASS VOCAL COACHING ENSEMBLE

Philosophy

Tom Moody, Martin Gunderson, Russell Trenholme, Henry West, David White (Chair)
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.

**General Distribution Requirement**

All courses in the philosophy department satisfy the general distribution requirement in the humanities division, except Philosophy 70, 84, and courses offered periodically which are cross-listed in non-humanities departments.

**Major Concentration**

A major in philosophy consists of eight departmental courses including: Philosophy 25, Ethics; Philosophy 31, Modern Philosophy; Philosophy 32, Contemporary Philosophy; Philosophy 40, Logic; and two seminars in Philosophy.

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; Philosophy 40; Philosophy 60, Philosophy of Science; an independent project or tutorial in the philosophy of the particular science for which the science core (or major) is offered; and a further appropriate course or seminar in philosophy.

A major in Asian philosophy consists of seven departmental courses including: either Philosophy 30, Ancient and Mediaeval Philosophy, or Philosophy 31, Modern Philosophy; Philosophy 25, Ethics, or Philosophy 32, Contemporary Philosophy, or Philosophy 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 four supporting courses such as Anthropology 68, Magic, Religion, and Witchcraft, 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 the ACM semester or year in India or Japan.

**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 Modern Philosophy; Philosophy 32 Contemporary Philosophy; Philosophy 40 Logic; Philosophy 88 Seminar.

**Minor**

A minor in philosophy consists of four courses in the department including three numbered 30 or above. A student planning a minor in philosophy should work out a reasonable selection of courses with the assistance of a member of the philosophy faculty.

**Honors**

Students with a deep interest in philosophy are urged to accept the challenge of a senior honors program, consisting of an honors paper and an 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 the interim term. Generally, honors papers will be read to a philosophy discussion group.

**COURSES**

15 PROBLEMS OF PHILOSOPHY
An introduction to philosophy through topics found in classical philosophical writings, such as the nature of truth and knowledge, mind and body, freedom and determinism, right and wrong, and the existence of God. Course content varies from instructor to instructor. Specific course descriptions will be available in the department prior to registration.

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 MEDIAEVAL PHILOSOPHIES (Same as Classics 30)
Major philosophers of Greece, Rome and the mediaeval periods.

31 MODERN PHILOSOPHY
A study of the empiricist tradition from the 17th century to the present. Typical philosophers studied are Berkeley, Hume, Mill, Russell, and Ayer. A good deal of attention will be given to student writing.

32 CONTEMPORARY PHILOSOPHY
A consideration of major movements of post-World War analytic philosophy. Wittgenstein, Austin, Strawson, and Quine will be among those studied. Requires Philosophy 31 or the permission of the instructor.

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 INTRODUCTION TO LOGIC AND THE PHILOSOPHY OF SCIENCE
An introduction to the techniques of formal logic with applications to the methodology of science. Concepts discussed will be logical truth, validity, probability, verification, confirmation, and scientific explanation. No prerequisites.

50 TOPICS
Recent offerings have been: Marxism; Aristotel; Philosophy, Psychology, and Myth; Modern Physics and Asian Metaphysics; Philosophy of Socialism; Free Will and Human Action.

60 PHILOSOPHY OF SCIENCE
An historical approach to philosophical problems of modern science. Theories of Kuhn and others will be tested through a consideration of cases drawn from the history of physics, chemistry, biology, and geology.

61 PHILOSOPHY OF HISTORY AND THE 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. The course will also deal with the foundations of psychology including behaviorism and supposed parapsychological phenomena.

68 PHILOSOPHY OF LANGUAGE (Same as Linguistics 68)
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
An approach to such results as the completeness theorem and Gödel's theorems using concepts of computability and Turing machines. A good background in abstract mathematics or logic is required.

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)
System approaches and philosophical analysis approach to education and educational language, respectively.

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.

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.

Independent Studies
All independent study courses require the permission of the instructor. The number of independent studies to be applied toward the major or core will be determined in consultation with the department.

95 TUTORIAL
96 INDEPENDENT PROJECT
97 INTERNSHIP
98 PRECEPTORSHIP

Physical Education, Athletics and Recreation

John Bachman, Douglas Bolstorff, Sheila Brewer, Joan Hallock, Tom Hosier, Dennis Keihn (Chair), Sherri Mattson, Ralph Lundeen, Patricia Wiesner

The department of physical education, athletics and recreation, fulfills a multiple role in Macalester's educational program. It offers a minor in physical education, coaching certification, activity programs, intramural and recreational sports, club sports and intercollegiate athletics. The coaching certification meets present and pending requirements to coach male and female interscholastic sports. 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. Intramural, club and recreational sports 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 in nine varsity sports for men, and seven varsity sports for women. The men's varsity athletic teams are members of the Minnesota Intercollegiate Athletic Conference (MIAC), NAIA and NCAA division III. The women's varsity athletic teams are members of the MAIAW, Region 6 and AIAC division III.

**Minor**

A physical education minor consists of eight activity courses (one credit), three academic courses in physical education (one credit each), and two supporting academic courses. Four activity courses are required; 101, 102, 104 and 217. One activity course will be chosen in each of the following areas: team sports, water activities, dance and lifetime sports, in cooperation with a physical education adviser. The physical education academic courses required are 60, 61 and 62. Supporting courses consist of Education 51 and Biology 10.

**Coaching Certification**

A coaching certification requires four academic courses in physical education and a coaching practicum (minimum 40 class hours). The courses required are 60, 61, 62 and 72. It is recommended that the coaching practicum be taken simultaneously with course 61 or 62. The coaching practicum is not a separate course.

**COURSES**

50 TOPICS
Examination of special topics of interest to faculty and students. Subject matter will vary from term to term.

60 FOUNDATIONS OF PHYSICAL EDUCATION
Introduction to the history and philosophy of physical education, evaluation of curriculum and materials, study of organizational and administrative techniques and test and measurement.

61 PSYCHOLOGICAL PRINCIPLES OF PERFORMANCE
A study of the psychology and sociology of sports, including the effects of motivation, aspiration, leadership, individual differences and cultural differences. Physical growth and development is studied with emphasis on motor learning. A lecture-laboratory course with three lectures and a two hour laboratory each week.

62 SCIENTIFIC PRINCIPLES OF PERFORMANCE
An introduction to the principles of anatomy and basic anatomical and mechanical interpretation of Kinesiology, as well as a study of applied physiology associated with human movement, physiological effects of conditioning and influence of exercise on health and fitness. A lecture-laboratory course with three lectures and a two-hour laboratory each week.

72 FIRST AID/CARE AND PREVENTION OF ATHLETIC INJURIES
American Red Cross standard and instructor's certification. Practical application of skills required. A study of prevention and care of athletic injuries; demonstration and practice in training techniques and familiarity with use of instruments for athletic rehabilitation.

96 INDEPENDENT PROJECT
Junior and Senior students may undertake individual projects involving library and laboratory research. Prerequisite, faculty sponsorship and departmental approval.

**Activity Program**

Students may elect to enroll in the activity program for credit or no credit. A course credit counting toward the 31 courses required for graduation may be acquired by successfully completing four units (not necessarily consecutive) of physical education activity classes. One of the four successfully completed offerings in the credit series must be P.E. 101, Physical Fitness. A particular activity unit successfully completed may not be repeated for credit. Grading of all activity classes will be on an S-NC basis. The S grade in each of the four activity units in the credit series is necessary if these units are to be counted together as one course credit. Text materials may be used. Evaluation will include both written and performance examination when appropriate. In cases of sequences of activity classes of the same kind, such
as the three classes in beginning, intermediate and advanced tennis, a student will be placed by the department at the appropriate level. Fractional credit is not awarded.

Full-time students may take activity class(es) at no additional charge. Students who are working toward both an education credit (Ed 125-06 + PE 101) and a physical education credit (PE 101 + 3 different semester activities), must complete an additional semester of a different PE activity for the PE credit.

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. Students furnish their own towels.

### ACTIVITY COURSES

#### Team Sports
- 104 Officiating
- 108 Beginning Soccer
- 110 Touch Football
- 111 Softball
- 114 Volleyball
- 214 Intermediate Volleyball

#### Water Activities
- 131 Beginning Swimming
- 231 Intermediate Swimming
- 232 Water Safety Instruction

#### Dance
- 102 Fundamentals of Rhythm
- 112 Beginning Jazz
- 143 Latin, Ballroom Dance and Disco
- 144 Beginning Modern Dance
- 150 Beginning Ballet
- 243 Waltz, Foxtrot, and Old Tyme Dance
- 244 Intermediate Modern Dance
- 250 Intermediate Ballet
- 344 Advanced Modern Dance

#### Lifetime Sports
- 101 Physical Fitness
- 103 Running I
- 116 Racquetball/Handball
- 117 Yoga
- 120 Gymnastics
- 124 Beginning Tennis
- 125 Weight Training
- 126 Beginning Golf

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<tr>
<td>104</td>
<td>Officiating</td>
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<tr>
<td>108</td>
<td>Beginning Soccer</td>
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<tr>
<td>110</td>
<td>Touch Football</td>
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<td>111</td>
<td>Softball</td>
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<td>114</td>
<td>Volleyball</td>
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<td>214</td>
<td>Intermediate Volleyball</td>
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<td>131</td>
<td>Beginning Swimming</td>
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<td>231</td>
<td>Intermediate Swimming</td>
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<td>Waltz, Foxtrot, and Old Tyme Dance</td>
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<td>Intermediate Modern Dance</td>
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<td>Racquetball/Handball</td>
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<td>Yoga</td>
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<td>125</td>
<td>Weight Training</td>
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<td>126</td>
<td>Beginning Golf</td>
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<td>Water Polo</td>
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<td>331</td>
<td>Advanced Swimming &amp; Diving</td>
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<td>333</td>
<td>Life Saving</td>
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<td>139</td>
<td>Sports Conditioning</td>
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<td>140</td>
<td>Downhill Skiing/Cross Country Skiing</td>
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<td>145</td>
<td>Bowling</td>
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<td>Fencing</td>
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<td>Running II</td>
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<td>208</td>
<td>Relaxation</td>
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<td>217</td>
<td>Physical Education Elementary School</td>
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<td>224</td>
<td>Intermediate Tennis</td>
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one-term period of study and research participation at Oak Ridge. The department makes every effort to support applications by qualified students for participation in this program. Four course credits in physics are granted to physics majors who complete the program.

**General Distribution Requirement**
The general distribution requirement in the natural sciences and mathematics may be satisfied by any course offered by the department, with the exception of some special topics courses. Courses numbered below 20 and some special Topics (Physics 50) give special emphasis to the needs of non-science majors.

**Introductory Courses**
The department offers a four-term sequence in general physics: Physics 28, Introduction to Mechanics; Physics 29, Waves, Optics, and Thermodynamics; Physics 30, Electricity and Magnetism; and Physics 31, Modern Physics. Prospective physics students are advised to begin Physics 28 in the fall term of their freshman year with concurrent registration in Mathematics 21, Introductory Calculus. Physics 21-22 constitutes a two-term sequence in introductory physics and does not assume a working knowledge of calculus.

Students expecting to complete either a major or core concentration in physics are urged to make early contact with the department for assistance in planning course selections.

**Major Concentration**
The major concentration in physics provides a rigorous study of many topics in the field of physics. It is particularly appropriate for students desiring an in-depth understanding of fundamental physical processes, including those preparing for positions in technologically-oriented business and industry or for those wishing to qualify for graduate study in physics, astronomy, engineering, medicine and related areas. The minimum requirements for a physics major are courses 28, 29, 30, 31, 43, 44, 61, and an advanced laboratory course (50, 52, 93, 96 or 97). Physics 34, 42, 68 and 81 are 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 other courses numbered above 31 for Physics 43, 44 and 61.

**Core Concentration**
The core concentration offers students a wide breadth of choice in course selection, such as might be desired by students preparing to teach physics in secondary schools or planning interdisciplinary work in geophysics, physiology, psychophysics or similar fields. The requirements for a physics core consist 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 departmental approval.

**Honors**
Honors are available in the physics and astronomy department through the college-wide honors program.

**Further Preparation**
Students with a major concentration in physics who are contemplating graduate study in physics should have completed mathematics at least through multi-variable calculus and differential equations. A reading knowledge of French, German or Russian is desirable.
For the core concentration in physics the student should complete mathematics through calculus.

Students earning either a major or core concentration in physics should be able to program and utilize a computer in obtaining solutions to meaningful problems.

COURSES

11 CONTEMPORARY CONCEPTS
This course is specifically designed for the nonscientist who desires a completely nonmathematical, 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 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.

28 INTRODUCTION TO MECHANICS
A study of motion, including Newton's Laws of Motion, conservation of energy and momentum, and rotational kinematics and dynamics. Prerequisite: Concurrent registration in Math 21 or equivalent. Three lectures, and one two-hour laboratory per week.

29 WAVES, OPTICS AND THERMODYNAMICS
A study of oscillations, waves in elastic media, geometrical optics, and thermal properties of matter. Prerequisite: Physics 28 and a working knowledge of differential calculus, Math 21. Three lectures and one two-hour laboratory per week.

30 ELECTRICITY AND MAGNETISM
A study of electric charge and currents, electric and magnetic fields, electromagnetic waves and physical optics. Prerequisite: Physics 28 or 22 and a working knowledge of integral calculus or concurrent registration in Math 23. Three lectures and one two-hour laboratory per week.

31 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 30 or 22 and Mathematics 23. Three lectures, one two-hour laboratory per week.

34 OPTICS
Principles of optics and wave phenomena, including laboratory experience in basic optical experiments. Prerequisites: Physics 30 and a working knowledge of calculus. Three lectures and one two-hour laboratory per week. (Offered in 1980-81 and in alternate years)

42 ELECTRONICS
An introduction to the fundamentals of electric circuits, diodes, transistors and integrated circuits, with emphasis placed on their uses in power supplies, amplifiers, oscillators and digital circuits. Laboratory topics may include special projects. Prerequisite: Physics 30. Three lectures and two three-hour laboratories per week.
43 ELECTROMAGNETIC THEORY I: VACUUM
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 plan electromagnetic waves in free space. Prerequisite: Physics 30 and Mathematics 23.

44 ELECTROMAGNETIC THEORY II: MATERIAL MEDIA
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. Four lectures per week.

50 TOPICS
These courses are often experimental courses, offered by instructors at their own initiative or in response to student requests. The following are examples of past offerings: The Philosophical Implications of Modern Physics (taught jointly with the philosophy department), Building Science in the Third World, and Laboratory Computing. Introductory Electronics and Laboratory Computing are planned for 1980-81.

52 EXPERIMENTAL NUCLEAR PHYSICS
A course in nuclear techniques of interest to students in the natural sciences. Radioactivity, nuclear reactions, interaction of charged particles with matter, energies of alpha, beta and gamma rays, neutron activation, and half-lives. Extensive use of nuclear instrumentation: geiger counters, scintillation and semiconductor detectors, pulse amplifiers, coincidence and scaling circuits, single channel and multichannel analyzers, 150-keV particle accelerator. Students learn through laboratory experience how experimental knowledge of nuclear matter is obtained. Prerequisites: Physics 31 and 42. Two three-hour laboratories a week.

61 MECHANICS
Particle dynamics, the central force problem, conservative motion, moving coordinate systems and Lagrange's equations of motion. Prerequisites: Physics 30 and Mathematics 33. Four lectures and problem discussions per week.

68 THERMAL PROPERTIES OF MATTER
The laws of thermodynamics, conditions for thermodynamic equilibrium and statistical mechanics are developed and applied to examples which illustrate thermal, electro-magnetic and physical properties of gasses, liquids, and solids. Prerequisites: Physics 30 and Mathematics 23. Four lectures per week. (Offered in 1981-82)

81 QUANTUM MECHANICS
The concepts and techniques of quantum mechanics, developed and applied to atomic and molecular systems. Prerequisites: Physics 31 and Mathematics 33. 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 per week.

96 INDEPENDENT PROJECT
Independent reading and experimentation by arrangement. Prerequisite: Approval by a faculty sponsor and the department prior to registration.

97 PHYSICS INTERNSHIP
Physics and astronomy internship credit is available to junior and senior students with declared majors in physics. Special arrangements must be made well in advance of the normal registration period. Departmental approval and supervision is required.

Political Science

Marc Anderberg, Duncan Baird (Chair), Dorothy Dodge, Charles R. Green, Linda O'Leary, Brian Porto
The department of political science provides a varied curriculum for students who wish pre-professional training for legal, urban, communications, international, or administrative careers, or for advanced graduate degrees; as well as for students who seek a general background of knowledge about government and politics as part of their liberal arts education.

**General Distribution Requirement**

Any course in the department may be taken to satisfy the general distribution requirement in the social sciences.

**Major Concentration**

A major concentration consists of eight courses and must normally include: (1) *Introduction to Political Analysis*, (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 following three curricular divisions:

I. Political Analysis; II. Political Processes; III. International Politics. (Division number is indicated after each course title.)

The department recommends that majors take statistics and the political science research methods course (P.S. 30).

*Independent study* may be arranged with the consent of the instructor and 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 students take a relevant course in preparation for the internship; e.g., an urban planning internship should be preceded by Urban Decision-Making, or a legislative internship should follow Policy Making. 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 and public administration. Descriptive literature on these programs is available in the department office.

**Core Concentration**

A core concentration consists of six courses. Please see the department chair 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 in political science, three courses in American history and three courses in American literature and philosophy.

**Minor Concentration**

A minor concentration is available upon consultation with the department chair.
Honors
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.)

COURSES
(Roman numerals refer to curricular divisions. See major concentration.)

10 INTRODUCTION TO POLITICAL ANALYSIS
An introduction to political science, to central political questions, issues and problems and to modes of political analysis. Prerequisite for most intermediate and advanced courses.

Intermediate Courses
Open to students with an introductory course in political science or second semester freshman standing.

20 AMERICAN POLITICS (II)
Study of American national government institutions and processes.

25 INTRODUCTION TO DEVELOPMENTAL POLITICS (III)
Exploration of the problems, interests and policies of developing third world states and the interaction and conflict with post-development states.

29 EMPIRICAL POLITICAL THEORY (I)
Introduction to modern political explanation, theory building and analysis of major empirical theories, models and concepts.

30 EMPIRICAL RESEARCH METHODS (I)
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 (I) (Same as Philosophy 34)
Western political thought from Plato to the present, including major contributions by American political thinkers.

35 AMERICAN POLITICAL THOUGHT (I)
A historical-analytical treatment of the main currents of American political thought from colonial times to the present, including post-liberal thought.

36 MODERN POLITICAL THOUGHT (I)
Study of a wide spectrum of Western political thought occurring since World War II.

38 LEGAL SYSTEMS (II)
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.

40 URBAN DECISION MAKING (II)
An exploration of U.S. urban political styles and urban policy and planning in relation to demographic patterns, land use, quality of life issues, and environmental concerns.

41 POLITICAL PARTIES AND ELECTIONS (II)
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.

47 INTERGOVERNMENTAL RELATIONS (II)
Analysis of the way the federal system works in the United States with emphasis on the interaction of national, state and local governments in developing and implementing policy.
50 TOPICS
Analysis of selected political issues of general interest, specific issue to be announced in advance of registration. Courses offered may include such topics as Campaigns and Elections, Computer Applications in Political Analysis, Third World Political Ideologies, and the Quality of Urban Life.

55 CONTEMPORARY LEGAL PROBLEMS (II)
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.

56 POLICY MAKING (II)
Investigation of the national policy-making process. Emphasis on the internal operations and functions of Congress and the independent regulatory agencies to which policy-making powers have been delegated. Exploration of theories and methodological approaches utilized by students of Congress. An examination of their applicability to the policy-making organs of other nations.

57 PUBLIC ADMINISTRATION (II)
Analysis of policy implementation and public administrative organization; public bureaucratic theories, process, and problems. Recommended, Political Science 56.

58 ADMINISTRATIVE LAW (II)
Legal problems inherent in the administrative process, which grow out of the rule-making and judicial activities of governmental agencies.

62 INTERNATIONAL LAW AND ORGANIZATION III
An exploration 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.

66 FOREIGN POLICY BEHAVIOR (III)
Cross-national study of foreign policy behavior focusing upon a variety of international actors and their interaction. Included are individual decision-makers, the nation-state, the multi-national corporations, non-governmental agencies, and international agencies.

69 INTERNATIONAL CONFLICT BEHAVIOR AND RESOLUTION III
Exploration of the role of conflict, violence, terrorism, and war in international politics and research into the theories of approaches to conflict resolution and violence.

Advanced Courses
Open to juniors and seniors. The student must have at least two semesters of political science or permission of the instructor.

74 POLICY ANALYSIS AND EVALUATION (I)
Research seminar in public policy analysis and evaluation emphasizing issues, methods, problems and applications. Prerequisite, Political Science 30 (or consent of instructor). Recommended, Political Science 56 and 57.

77 POLITICAL BEHAVIOR (I)
Theory and research on social-psychological variables in political behavior. Topics include socialization, personality, language, attitudes, beliefs, values and motivation as correlates of individual behavior. Prerequisite, Political Science 30 or consent of instructor.

79 POLITICAL CHANGE (III)
Assessment of theories and research on political change at all levels including study of international systems transformations; regional and national social, economic and political development, reform and revolution, and group and individual political change. Prerequisite, Political Science 30 or consent of instructor.

81 JUDICIAL BEHAVIOR (II)
Introduction to and investigation of the judicial policy-making processes. Primary emphasis on analysis of the supreme courts of a variety of nations, yet with some attention to judges of subordinate courts. Introduction to quantitative techniques useful in the study of the judicial process. Prerequisite, Political Science 30 or consent of instructor.

82 INTERNATIONAL ECOLOGICAL POLICY (III)
An advanced seminar examining international ecological issues, policy and planning. Focus will be on energy, minerals, wild life and food resources of the planet and planning for resource distribution and equality by nation-states, multinational corporations, the United Nations, and international agencies.
83 ADMINISTRATIVE BEHAVIOR (II)
Theories and analysis of public bureaucracies, their environments and their problems; emphasis on human behavior and performance in several national settings. Prerequisite, Political Science 30 or consent of instructor. Recommended, Political Science 57.

84 POLITICAL CONCEPTS (I)
An advanced seminar considering issues both from the philosophical and the empirical analytic traditions of political science, including such concepts as "power," "legitimacy," "ideology," "rationality," and "equality." Prerequisite, previous courses in the political analysis group.

85 AMERICAN CONSTITUTIONAL LAW AND THOUGHT (II)
Survey and analysis of leading national and state constitutional decisions and their contributions to this country's governmental and political development and thought.

88 SENIOR RESEARCH SEMINAR
Topics in advanced political research. Consent of instructor required.

95 TUTORIAL

96 INDEPENDENT PROJECT

97 INTERNSHIP
(limit of 2 toward major or core)

98 PRECEPTORSHIP

Psychology

Marita Hopmann, Raymond Johnson (Co-chair), Lynda LaBounty, Walter Mink (Co-chair), Jack Rossmann, Charles Torrey, 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 intend to terminate their formal education with the bachelor's degree. Students who plan to continue their study are prepared for graduate degree 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 mental health clinics and hospitals for the mentally ill. The student who does not continue his or her formal education in psychology receives a broad course of study in which stress is placed upon the application of scientific method to the complex problems of human behavior.

The psychology curriculum is designed to provide access to a broad array of psychological information for students with general interests in the field and also to provide for majors an intensive common experience with the methods of investigation and conceptual analysis as well as the areas of application which are most characteristic of contemporary psychology. Laboratory activity, observation in non-laboratory environments and independent projects supplement the curriculum and students are encouraged to use these opportunities wherever possible in their educational program.

General Distribution Requirement
Any course in the department satisfies the general distribution requirements in the social sciences, with the exception of Psychology 22, Introduction to Neuroscience.

Major Concentration
The major in psychology consists of nine courses. The distribution of courses
presented for a major should conform to the following pattern: one course selected from the category of introductory courses; one course selected from the category of intermediate courses; Mathematics 14, Introduction to Statistics, which may be taken under the S/D/NC grading option, or its equivalent; the Junior Majors Program (see below); and two courses following the Junior Majors Program, of which one should be a Senior Seminar (Psychology 88), and the other should be selected from the categories of Advanced Courses, Senior Seminars, or Special Courses.

**Junior Majors Program**

Four courses are required of all majors in their junior year, and are to be taken two each semester (61 and 62 in the fall, 63 and 64 in the spring). Prerequisites are one introductory course, one intermediate course and Mathematics 14 or its equivalent.

**Core Concentration**

The core concentration in psychology consists of twelve courses, six in psychology and six supporting courses from other departments selected in consultation with the departmental adviser. The six courses in psychology must include one course selected from the category of introductory courses and five courses from the categories of intermediate and advanced courses of which at least one must be from the category of advanced courses. Topics courses and courses numbered in the 90s may not be included in the core except with departmental permission. One of the supporting courses must be Mathematics 14, which may be taken under the S/D/NC grading option, or its equivalent. Senior seminars may be open to core concentration students with permission of the instructor.

**Honors**

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 anthropology, biology, mathematics, linguistics, and sociology. Individual programs to meet special needs or interests may be discussed with members of the department.

**COURSES**

**Introductory Courses**

10 **INTRODUCTION TO GENERAL PSYCHOLOGY**

An introduction to psychological thinking about problems and processes of behavior, surveying such topics as motivation, learning, intelligence, perception, emotion, thought and language. Recommended for students with no previous exposure to academic psychology who seek a general overview of the field.

11 **INDIVIDUAL BEHAVIOR**

An introduction to psychology which surveys the sources of individuality in people and scientific ways of conceptualizing and studying personality. Topics to be considered include: heredity and temperament, culture and socialization, the primary role of learning selected personality theories, deviant behavior and psychological assessment. Laboratory activities are a component of the course.

16 **INTRODUCTION TO DEVELOPMENTAL PSYCHOLOGY**

Provides an introduction to psychology by focusing on child development. The course covers physical, cognitive, social and emotional development from conception through adolescence. The influence of both maturation and experience are emphasized.

18 **INTRODUCTION TO PERSONALITY THEORIES**

An overview of selected and influential statements, such as the theories of Freud, Jung, Horney, Fromm, Eysenck, or others of contemporary interest. There is minor emphasis on applications. Text coverage is
supplemented by assigned readings and exercises designed to put theoretical models into individually relevant perspective.

**Intermediate Courses**

Admission to any course in this category requires an introductory course as a prerequisite unless other prerequisites are indicated.

**21 BEHAVIOR MODIFICATION**

An overview of the major concepts, methods and uses of behavior modification and behavior therapy. Treatment approaches to specific clinical and applied areas dealing with children and adults such as autism, classroom control, sexual dysfunction and alcoholism will be covered. In addition, experience in self-behavior analysis and self-control technology is a continuing part of the course.

**22 INTRODUCTION TO NEUROSCIENCE**

An introduction to the nervous system and the neural correlates of behavior. Participation in laboratory activities is a component of the course. Prerequisite, Biology 11.

**23 INDUSTRIAL/ORGANIZATIONAL PSYCHOLOGY**

Theory and research on personnel processes (selection, motivation, evaluation, supervision, development) and the psychology of individual and small group behavior in organizations. Prerequisite, any entry-level course in psychology.

**24 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. Discussion of case studies and field visits to diagnostic and treatment facilities are supplementary components of the course.

**26 PSYCHOLOGY OF ADULT DEVELOPMENT AND AGING**

Theory and research on the nature and development of behavioral processes such as learning, cognition, emotion and personality during adulthood and old age.

**32 METHODS IN NEUROSCIENCE**

Surgical, electrophysiological and pharmacological methods applied to the investigation of selected areas of research. Prerequisite, Psychology 22. Offered alternate years.

**35 HISTORY AND SYSTEMS OF PSYCHOLOGY**

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.

**37 COGNITION: A STUDY OF HUMAN THOUGHT AND INTELLIGENCE**

An introduction to the study of processes by which humans acquire and utilize knowledge. Attention, processing of information, memory, language and decision form the major topics of the course. Developmental and neurophysiological approaches to the understanding of cognitive processes will also be covered. Laboratory activities are a component of the course.

**39 INTRODUCTION TO SOCIAL PSYCHOLOGY**

An overview of such phenomena as affiliation, aggression, compliance, attraction, achievement, attitudes, and others of contemporary interest. Text coverage is supplemented by exercises designed to put theoretical models into individually relevant perspective. Offered alternate years.

**Advanced Courses**

Psychology majors may be admitted to any of the courses in this category after completing the junior major program or by meeting the course prerequisites; prerequisites for cores, majors, and other students are indicated.

**41 LEARNING**

Theory and research on the basic phenomena of conditioning and learning, dealing in large measure with the animal level. Laboratory participation. Prerequisite, any introductory course, Mathematics 14 and Psychology 21, 22, or 35.

**43 MOTIVATION, EMOTION AND CONFLICT**

Theory and research in motivational and affectional processes. Prerequisite, any introductory course, and two intermediate courses.
45 BEHAVIOR GENETICS
Investigation of the degree and nature of genetic determination of variations in human and animal behavior. Prerequisite, any introductory course, Biology 11 and Mathematics 14. Alternate years.

46 DEVELOPMENTAL PSYCHOLOGY: THEORETICAL ISSUES AND RESEARCH
An advanced theoretical and experimental analysis of the behavior of children from zygote to adolescence. Prerequisite, any introductory course except Psychology 16, and two intermediate courses. Not open to students who have taken Psychology 16.

47 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. Prerequisite, any introductory course and two intermediate courses. Alternate years.

48 PERSONALITY: THEORETICAL ISSUES AND RESEARCH
Selected topics of theoretical relevance which have been studied empirically. Students will design projects of their own choice in the area of normal personality functioning involving systematic observation or experiment. Prerequisite, any introductory course except Psychology 18, and two intermediate courses. Not open to students who have taken Psychology 18. Alternate years.

Topics and Cross-listed Courses
50 TOPICS
Examination of a topic of general interest from the point of view of the science of behavior. The topics and special prerequisites are announced in advance of registration. Representative topics courses offered in the past two years include: The Psychology of Reading, Masks or Faces, Sleep and Dreams, Computer Applications, The Psychology of Women, Psychology and Mathematics, and Topics in Rhythm Research.

53 PSYCHOLINGUISTICS (Same as Linguistics 63)
Inquiry into the psychological foundations of the acquisition and use of language and the contributions of modern linguistics to the study of psychology. Relevant findings of recent linguistic research are examined for their implications for such topics as the differences between machine language, animal language and human language; the significance of generative grammar for the study of human language; language structure and memory; the acquisition of first and second languages; innate ideas and linguistic or psychological universals. A significant portion of the course will be devoted to the formulation and performance of psycholinguistic experiments.

Junior Majors Program
The following four courses are required of all majors in their junior year, and are to be taken two each semester (61 and 62 in the fall, 63 and 64 in the spring). Prerequisites are one introductory course, one intermediate course, and Mathematics 14 or its equivalent.

61 Fall; 63 Spring. PSYCHOLOGICAL METHODS
This sequence of courses will provide broad but integrated exposure to characteristic methods used by psychologists as they seek answers to questions about behavior. Examination of the logical foundations of research and theory, and familiarization with available bibliographic techniques will be included. Exercises in the reading, analysis and interpretation of published empirical studies will be combined with direct experience in such research methods as measurement and scaling, systematic observation, questionnaire construction, and controlled experiment. Practice in the application of relevant statistical techniques is included.

62 Fall; 64 Spring. PSYCHOLOGICAL STUDIES
This sequence of courses will provide in-depth examination of representative topics in psychology coordinated with the skills being acquired in Psychological Methods. Sensory processes, conditioning, memory, motivation, social interaction, and the nature of human abilities are among the topics to be studied.

Special Courses
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, completion of the junior majors program or permission of instructor.
The following course listings provide opportunities for the design of special individual educational activities. Prior consultation with a member of the department is a necessary prerequisite for registration in courses at this level:

95 TUTORIAL
Prerequisite, permission of the instructor.

96 INDEPENDENT PROJECT
Prerequisite, permission of the instructor.

97 INTERNSHIP
Prerequisite, permission of the instructor.

98 PRECEPTORSHIP
Prerequisite, permission of the instructor.

Religious Studies

John Butt, David Hopper, Calvin Roetzel (Chair)

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 the 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 students 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.

General Distribution Requirement

Any courses offered within the department will satisfy distribution requirements in the humanities and fine arts.

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 chair of the department of religious studies. An oral comprehensive (a "senior dialogue" with the members of the department) is required of all cores.

**Minor Concentration**

The minor concentration in religious studies consists of a minimum of five courses in religious studies taken in consultation with the department.

**Honors**

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

**COURSES**

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 THE OLD TESTAMENT

A study of the Hebrew Scriptures in translation in their literary, historical, and religious dimensions. Special attention will be given to the historical and cultural forces that provide the context in which Israel and her literature developed. Offered annually.

21 INTRODUCTION TO THE NEW TESTAMENT

The historical critical study of the rise of Christianity and the literature of the movement viewed against its Jewish and Greek background and its expression in the Hellenistic world. Spring, 1981.

23 WORLD HUNGER

An inter-departmental course designed to explore the problem of world hunger. Elaboration of the problem has ramifications in the fields of geography, economics, anthropology, political science, ethics, biology and religion. Coordinated guest lectures and discussions. (Same as Economics 23 and Geography 23.) Offered alternate years.

24 A SURVEY OF WORLD RELIGIONS: 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 others. Attention will be given to the following religious communities: Hindu, Muslim, 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 ANCIENT NEAR EASTERN MYTHOLOGY

Using insights from various methodologies for studying myth, (History of Religions, Anthropology, Psychology, etc.), the course will critically examine selected mythic materials from several Ancient Near Eastern cultures (Sumerian-Babylonian, Egyptian, Canaanite, and Hebraic). Attention will be given to a wide
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variety of cultural and religious expressions found in the myths, rites and symbols from the Ancient Near East (2500 B.C. to 600 B.C.E.) as well as objects of art viewed on field trips to local museums.

50 TOPICS
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, ATHEISTIC AND THEISTIC
A study of the writings of major representative figures in the modern existentialist movement. An effort is made to identify major themes distinctive of the existentialist point of view. Writings of Camus, Sartre, Kierkegaard, Buber, Marxist critics, Bultmann, will be read and discussed. Offered annually.

58 SCIENCE AND RELIGION
An inquiry into the historical points of conflict between science and the Western religious tradition since the Middle Ages. The study will include an examination of the question of the role of religion in the rise of science, differences in methods of knowledge, and a discussion of current issues and problems. Offered alternate years.

66 TWENTIETH CENTURY CHRISTIAN THOUGHT
A survey of major figures in the reappraisal of the Christian theological tradition in the context of the modern world. The following figures and movements will be discussed: Barth, Tillich, Bultmann, Niebuhr, Bonhoeffer, political theology, Vatican II, and process theology.

67 TECHNOLOGY AND ETHICS
A consideration of the history of technology, its impact and role in contemporary society. The course will be devoted to analysis and discussion of some of the ethical problems posed by the technological developments in a variety of fields such as medicine, genetic research, nuclear energy. Offered annually.

68 SEMINAR ON BIBLICAL INTERPRETATION
An intensive study of one New Testament writing or group of writings (e.g., Romans, 1 and 2 Corinthians, the Synoptic Gospels, the Johannine literature, etc.). The particular subject of study will be announced prior to registration. Prerequisite, Religious Studies 20, 21, or consent of instructor. Offered annually.

95 TUTORIAL
Prerequisite, permission of the instructor.

96 INDEPENDENT STUDY
Prerequisite, permission of the instructor.

97 INTERNSHIP
Prerequisite, permission of the instructor. A maximum of one internship may be applied toward the major or core concentration.

98 PRECEPTORSHIP
Prerequisite, permission of the instructor.

Russian

Richard Clark (Chair), Alexander Guss, Nina Perlina, Maria Schweikert

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 their 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.

There are several organizations in St. Paul which help recent Soviet emigrants to start
their new lives in the United States, e.g., the Jewish Family Service, the International Institute, et al. The primary aim is to help newcomers learn basic English and something about American culture. Since many Russians who come to the United States do not know any English, Macalester students are encouraged to tutor them in English, thus providing a mutually beneficial relationship for the students. For interim, the student of Russian is encouraged to spend ten hours a week with the Russian immigrant, five hours in Russian and five hours in English.

Interim Term in the Soviet Union
This interim course is a five-week study program in the Soviet Union under the auspices of UMAIE (Upper Midwest Association for Intercultural Education), of which Macalester College is one of the participating institutions.

A number of on-campus courses and seminars are available during the interim term.

Major Concentration
A major concentration in Russian shall consist of nine courses beyond the elementary level (Russian 11, 12); required courses are: 31, 32, 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 Russian, Geography of Europe and USSR, and other relevant courses in social science, literature, humanities, fine arts and philosophy.

Minor Concentration
There are two separate minors offered through the Russian department. The minor in Russian language consists of four language courses beyond the elementary level. The minor in Russian language and literature consists of any two language courses beyond the elementary level and any two Russian literature courses.

Honors
Honors are available in the Russian Department through the college-wide honors program.

COURSES
11, 12 ELEMENTARY RUSSIAN I AND II
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 chair.

41 ELEMENTARY CONVERSATION
Speaking based on contemporary materials. Prerequisite, Russian 12 or permission of the instructor. Students with high school Russian may be admitted on approval of the instructor. Not offered 1980-82.

55 RUSSIAN CULTURE AND CIVILIZATION
The most important socio-economic, intellectual and ideological factors in the evolution of Russian culture, both prerevolutionary and Soviet. Not offered 1980-82.
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. Not offered in 1980-82.

76 TWENTIETH CENTURY 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 chair.

95 TUTORIAL: ADVANCED READINGS IN RUSSIAN LITERATURE
Prerequisite, permission of the instructor.

96 INDEPENDENT PROJECT
Arranged in consultation with department chair. Advanced students may undertake individual projects involving library or laboratory research.

97 INTERNSHIP
Prerequisite, permission of the instructor.

98 PRECEPTORSHIP
Prerequisite, permission of the instructor.

Russian Area Studies

(Peter Weisensel, Coordinator; History)

Since Macalester is a member of the Associated Colleges of the Twin Cities (ACTC), Macalester students may enroll in the ACTC Russian area studies major program.

The program in Russian area studies seeks to give the broadest possible exposure to Russian and Soviet history, politics, literature, tradition and philosophy. The major is broadly based and interdisciplinary, offering the student an opportunity to become well-acquainted at the undergraduate level with the Russian heritage and present day Soviet society. This program is designed to meet student interest and demand for area studies by an in depth study of Russian from a cross-disciplinary perspective.

Eleven courses are required for a major in the Russian area studies program, one course in Marxist theory, one course in Russian or Soviet literature, one course in Soviet politics and two courses in Russian or Soviet history. Two years of basic college Russian language or equivalent competencies are also required. In addition to the above requirements students may choose electives, as necessary to total eleven courses, from a list of approved courses for the major.

For more information contact Peter Weisensel, department of history.
Sociology

Michal McCall-Meshejian, Jeffrey Nash, Michael Obsatz, Irwin Rinder

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. The department also believes that “doing” sociology is an important part of the learning process. Students are encouraged 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 to choose supporting 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.

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. Students may propose an IDIM in human services.

The department of sociology offers two pre-professional social work courses (number 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. 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.

Students may, in consultation with an adviser, select courses from among the following departments for pre-professional preparation for work in human services fields: sociology, anthropology, economics and business, geography, mathematics, and psychology.

Credit by Examination

It is possible to test out of Sociology 10, as well as receive credit by examination for that and some other courses.

General Distribution Requirement

All courses in the sociology department, except 26, 74 and 84, will satisfy the general distribution requirement in the social sciences.
Major Concentration
A major in sociology consists of eight courses including Sociology 10. Students planning to major should take Mathematics 14 (Introduction to Statistics). Required of majors are: Sociology 10, Sociology 12, and one of the following: Sociology 64, 78, 82 or 95. Topics (50) and independent study (96) may not be counted among the eight courses for the major without departmental approval.

Core Concentration
Six courses (exclusive of Sociology 74 and 84) together with six additional courses chosen by the student from outside the department 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 10 and two of the following: 12, 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.

Minor
A minor in sociology consists of five courses selected in consultation with an adviser.

Honors
Honors are available in the sociology department through the college-wide honors program; interested sophomores and juniors should consult their advisers.

COURSES
Prerequisite Sociology 10 is normally prerequisite to all courses.

10 INTRODUCTION TO SOCIOLOGY
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.

12 METHODS OF RESEARCH
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.

20 THE 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.

26 VISUAL SOCIOLOGY
An examination of the ways in which still photographs enhance the investigation and understanding of social settings and processes. Class projects will consist of photographing social objects in a variety of contexts, social interaction patterns and institutions. Additionally, each student will choose a theme and develop it visually into a photo-essay of 10 to 20 black and white pictures. Although photographic technique will be an important part of the course, this is more than a photography course. Students will do outside reading relevant to class and individual projects. Students must also supply their own camera (adjustable 35 mm or larger format), film, photographic paper, and mounting materials. Admission by consent of instructor. (Does not satisfy divisional requirements.)

40 RACIAL AND ETHNIC MINORITIES
The nature of racial, ethnic and religious minority groups. Social and economic adjustments in the United States of Black, Native American, Asiatic and various nationality groups. Intergroup relations and the problems of conflict and tensions.

48 SOCIOLINGUISTICS (Same as Linguistics 35)
This course examines the interrelationships among societal and linguistic phenomena. It surveys three distinctive methodologies for understanding and interrelationships and introduces literature representative of each methodology. The three views are the indexical, the indicator and the discovery procedure. The indexical view requires attention be given to the social context of discourse and that the functions and rules embodied
within social context be examined. The indicator view conceptualizes language as a variable in relationship with social variables.

The extent and nature of these relationships are generally explained within terms of some theory. The discovery procedure view offers a linguistically grounded set of techniques for the investigation of the social organization of cultural phenomena.

49 LANGUAGE AND CULTURE OF THE DEAF (Same as Linguistics 37)
This course is organized around the thesis that the meanings of everyday life for the deaf are embodied in the sign language. To understand deafness as a social and linguistic experience, it is necessary to gain an appreciation of the nature of the native language of the deaf in America. Therefore, this course describes the language of signs in its linguistic characteristics and explores the implications of these characteristics for the social organization of the deaf community. The interrelationships between the deaf subculture and the hearing culture for institutional areas such as the family and education are examined.

50 TOPICS
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.

63 SMALL GROUPS
The study of small informal groups, including major sociological theory and empirical research. Concepts examined include social control, solidarity, sociometric choice, interaction, norms, status structure, cohesiveness, leadership styles, specialization, anomie, and stages in group development. Major theorists and researchers studied include: Bales, Allport, Moreno, Homans, Whyte, Thibaut, Kelly, Festinger, Blau and Redl. Students will write research papers and participate in an informal self-analytic group experience. Prerequisite, permission of instructor.

64 THEORIES OF SOCIETY
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 SOCIOLOGY
Focuses on the emergence and historical growth of cities, leading to 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. Sociology 12 or equivalent recommended.

72 SOCIAL ORGANIZATION
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.

74 AN INTRODUCTION TO THE SOCIAL WELFARE SYSTEM
A survey of public and private (voluntary) social welfare programs and institutions; to provide sufficient knowledge and awareness of social welfare programs and activities; to help students think (and act) critically about problems, issues, and approaches relative to the planning and implementation of human services. Field placement, under supervision, after consultation with instructor. (Does not satisfy divisional requirements.) Sociology 10 prerequisite; one additional Sociology course strongly recommended.

76 SOCIAL DEVIANCE
Deviation from social norms examined from the theoretical perspective of labeling, anomie and conflict theory. Examines the origins of deviant definitions, the societal response to deviance, deviant identity and deviation as a normal response to social structural inconsistencies, social change and the breakdown of social control.

78 SOCIAL STRATIFICATION
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. Sociology 12 or equivalent recommended.
80 MAN AND WOMAN IN THE SOCIAL STRUCTURE
Historical overview of the demography of gender; the changing roles of males and females in the American social structure. An examination of infancy, childhood, adolescence, young adulthood, adulthood and old-age as stages in the life cycle experienced differently by males and females. Will examine norms, relationships to institutions with an emphasis on changing family and work roles. Prerequisites, Sociology 10 and 12, or consent of instructor.

82 SOCIAL PSYCHOLOGY
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.

84 AN INTRODUCTION TO SOCIAL WORK PRACTICE
Problem-centered social work principles relevant to social work and related human services workers. To help students attain a deeper understanding of certain basic value concepts (and skills) that underlie a worker's approach to individuals and/or groups seeking help. Field placement under supervision, after consultation with instructor. Sociology 74 prerequisite. (Does not satisfy divisional requirements.)

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. (Offered alternate years.)

86 THE SOCIOLOGY OF BEHAVIOR DISORDERS
Mental illness as residual deviance; a case study of extrusion, labeling and isolation as the management of deviance. The social psychology of personality disorganization; the self-system; differential distribution of rates and types of mental illness in the United States and cross-culturally. (Offered alternate years.)

88 SENIOR SEMINAR
Recommended for majors; required for higher honors. (Fall semester.)

95 SENIOR TUTORIAL
Prerequisite, permission of the instructor.

96 INDEPENDENT PROJECT
Prerequisite, permission of the instructor.

97 INTERNSHIP
Students work with a community organization, agency or business, learning particular skills, factual knowledge about "real world" operations and interpersonal communication. Internships individually designed around students' interests, college studies and career goals. Seminar provides discussion-sharing of topics related to interns' experiences and the relationship of academic theories to practical application. Limited enrollment. Advance planning necessary; Community Involvement Program available for consultation. Fall and spring terms. Prerequisite Sociology 10.

Spanish

Stephen Burmeister, Robert Dassett, Donald Fabian (Chair)
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; and (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, 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, Latin-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 Spanish and history.

**Study Abroad**
The Spanish department sponsors study programs in Costa Rica and Colombia. The Associated Colleges of the Midwest (ACM) Costa Rican program consists of a fall Latin American studies program and a spring field study program in natural and social sciences. Students may study in either term or for the entire year. The Bogotá program provides for study at the Centro de Estudios Universitarios Colombo-Americano and other participating institutions in Colombia, including the Universidad de los Andes. The program has fall, spring and summer programs. Two courses per term from either program may be counted toward the Spanish major. All additional courses necessary to meet departmental graduation requirements must be taken on campus.

It is also possible to participate in the Higher Education Consortium for Urban Affairs (HECUA) Latin American urban studies program in the fall term. Students may also participate in study abroad programs in Spain and credit is accepted for the major with departmental approval. Participation in a study abroad program in Latin America or Spain is strongly recommended for Spanish majors.

**General Distribution Requirement**
All courses in the department satisfy distribution requirements in humanities.

**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 54, the total, including the Senior Seminar, may be eight.)

Required courses: 32 (unless excused by placement), 52, 54, 62, 65 or 66, 88. For those specializing in Latin-American Studies, see coordinator of Latin-American studies. For students desiring Latin-American emphasis, it is possible to substitute the two term sequence in Portuguese (Portuguese 11 and 12) for one of the major elective credits.

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.

**Core Concentration**
The core concentration consists of five Spanish courses numbered 32 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.

**Minor Concentration**
The minor consists of 6 courses numbered Spanish 31 or above.

**Honors**
Honors are available in the Spanish department through the college-wide honors program.
COURSES

All courses are offered annually except where indicated.

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

15 ELEMENTARY CONVERSATIONAL SPANISH—Not offered during the regular year, but occasionally in the summer term.
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 INTERMEDIATE SPANISH
This course follows Spanish 31 and serves as a bridge to upper level conversation or literature courses. A variety of materials including slides, music, short stories and a play will be used to provide some insight into the Spanish speaking world. Conversation, some writing, development of vocabulary, and a minimum of grammar review. Prerequisite, Spanish 31.

50 TOPICS
In recent years these have included courses on selected Spanish and Spanish-American writers. In the fall of the academic year 1980-81 the department will offer a course on García Lorca. Other courses that have been given include Latin American Literature and Society and Unamuno, et al.

51 CONVERSATION
Conversational practice with special emphasis on aural-oral skills. Prerequisite, permission of the instructor. Fall semester.

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. Spring semester.

54 SURVEY OF MODERN SPANISH LITERATURE
19th and 20th centuries. Prerequisite, Spanish 32 or equivalent. Fall semester.

62 MASTERWORKS OF SPANISH LITERATURE
Medieval period through the Golden Age. Prerequisite, Spanish 51 or equivalent. Spring semester.

65 READING IN SPANISH-AMERICAN LITERATURE I
Novels, short stories and poetry of the Spanish-American nations. Borges, Cortázar and Neruda, and other contemporary writers are included. Prerequisite, Spanish 51 or 54 or equivalent. Spring semester, alternate years.

66 READING IN SPANISH-AMERICAN LITERATURE II
Novels, short stories and poetry not covered in 65. Prerequisite, Spanish 51 or 54 or equivalent. Spring semester, alternate years.

67 THE NOVEL
Spanish and Spanish-American fiction. Prerequisite, Spanish 51 or 54 or equivalent. Spring semester, alternate years.

68 19TH AND 20TH CENTURY SPANISH LITERATURE
Works by Galdós, Alarcón, Cela etc. Prerequisite, Spanish 54 or equivalent. Spring semester, alternate years.

88 SENIOR SEMINAR
Spanish and Spanish-American Civilization. Required of all majors and cores.

95 TUTORIAL
Prerequisite, permission of the instructor.
96 INDEPENDENT PROJECT
Prerequisite, permission of the instructor.

97 INTERNSHIP
Available under special circumstances. Prerequisites: (1) four courses in Spanish numbered 31 or above; (2) a project which could not be carried out except through almost exclusive use of Spanish; and (3) success in a previous independent project.

98 PRECEPTORSHIP
Prerequisite, permission of the instructor.

Portuguese

11, 12 ELEMENTARY PORTUGUESE—Given every year
Basic instruction in speaking and understanding the language. Elementary reading. Brazilian usage emphasized. Two term sequence.

Speech Communication and Dramatic Arts

Douglas P. Hatfield, Daniel Keyser, Roger K. Mosvick (Chair), W. Scott Nobles, A. Tennyson Williams, M. Glen Wilson

The department of speech communication and dramatic arts is committed to 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 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.

General Distribution Requirement
All theatre and oral interpretation courses meet the fine arts distribution requirements with the exception of Speech 21, Voice and Diction.

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 course any other
departmental course, seminar or independent project 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.

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, 49, 88 or 96.
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, 40 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. Speech communication minor: required courses—11 or 37, 21 or 36, 23, 25 or 32, 38
or 49 or 60.
5. Theatre minor: required courses—18, 23, 26, 33, 64.

Core Concentration
All core programs require six department courses individually programmed by students
and their 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 students' core field of study and subject to their
faculty adviser's approval.

Speech Communication Minor Requirements
1. A minor in speech communication will consist of five or more courses in the speech
communication area.
2. No more than three of these courses may be taken from the same professor.
3. At least three of the five courses must be taken from the following: 11, Public Speaking; 12, Communication Theory; 24, Interpersonal Communication; 25, Argumentation; 32, Small Group Communication and Decision Making; 37, Speech and Language; 38, Persuasion.

**Dramatic Arts Minor Requirements**

1. A minor in dramatic arts will consist of five or more courses in the dramatic arts area.
2. Three courses (18, 22, and 33) are required, plus any two electives in the dramatic arts area.

**Recommended Program Sequence—Dramatic Arts**

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<thead>
<tr>
<th>Year</th>
<th>Semester 1</th>
<th>Semester 2</th>
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<tbody>
<tr>
<td>Freshman</td>
<td>18, 21 or 23</td>
<td>22, 23, or 29</td>
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<tr>
<td>Sophomore</td>
<td>26, 33</td>
<td>34 or 35, 65</td>
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<tr>
<td>Junior</td>
<td>26, 33, 25</td>
<td>64, 31, 34</td>
</tr>
<tr>
<td>Senior</td>
<td>35, 96 if available</td>
<td>64, 31, 65, 96-97</td>
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It is department policy that theatre majors may not take more than two theatre courses concurrently. Exceptions are made for transfers and late declaring majors who obtain departmental approval.

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 the beginning of the semester to the end of the second week of the semester.

**Honors**

Honors are available in the speech communication and dramatic arts department through the College-wide honors program.

**COURSES**

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. Fall and spring semesters.

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. Fall semester

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 on the principles of acting, directing and design. Attendance at theatre performances and laboratory crew experiences are integral to the course. Fall semester.

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. Fall semester. (Linguistics-oriented version of this course, "Phonology," offered as Linguistics 28 spring semester.)

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. Spring semester.
23 ORAL INTERPRETATION OF LITERATURE
Development and use of fundamental techniques for analysis and reading aloud of prose and poetry. Fall and spring semesters.

24 INTERPERSONAL COMMUNICATION
A study of communication in interpersonal relationships. A group laboratory experience in which students experiment with their own communication behavior. The primary focus of the course is on the development of communication concepts and skills which are useful in improving interpersonal relationships. Study and practice in presentation of self, expression of feelings, empathic listening, confrontation, and conflict resolution are integral elements of the course. Spring semester.

25 ARGUMENTATION
Principles and practice of argument; study of adaptation of logic and evidence to rational decision making and to effective advocacy. Fall semester.

26 ACTING
Basic theories and techniques of acting are studied and applied. Permission of the instructor. Fall semester.

27 CREATIVE DRAMATICS
The history and theories supporting creative dramatics. Through participation in classroom exercises and by designing and leading 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. Alternate years, fall semester.

29 TECHNICAL THEATRE
Study in the arts and crafts of the theatre. Emphasis on construction and mounting of the production. Laboratory crew experience. Spring semester.

30 LIGHTING DESIGN
This course is an introduction to basic lighting design and the history of lighting. While emphasis is on theatre, it also teaches the lighting design of film, television, dance, opera, and environmental settings. This course is primarily an approach to lighting design, but the student will be expected to have basic grasp of lighting hardware as well. The first aim of the course is to make the student more aware of color and light around him/her every day. Demonstrations are an integral part of the lectures. Two lectures and two labs per week. Prerequisite, sophomore standing. Alternate years, fall semester.

31 HISTORY OF COSTUMING AND DESIGN
This course deals with the history/evolution of period costuming from the ancient Egyptians to present day. The course includes the study of basic techniques, materials, and design theories in the construction of costumes. Prerequisite, sophomore standing. Alternate years, spring semester.

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. Spring semester.

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. Not available to freshmen. Alternate years, fall semester.

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. Not available to freshmen. Alternate years, spring semester.

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. Not available to freshmen. Alternate years, fall semester.

37 SPEECH AND LANGUAGE (Same as Linguistics 29)
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. Fall semester.
38 PERSUASION
A study of motivation in decision making. Treats persuasive discourse from viewpoints of advocate, responder and society. Spring semester.

40 ORGANIZATIONAL COMMUNICATION
A study of communication processes, structures and modes in organizational contexts. Organization-communication interface is examined with reference to various theories of management and appropriate communication systems and techniques. Processes and problems of organizational communication are examined via film and simulation games as well as through "real life" presentations from speakers representing business, governmental and educational organizations. The completion of an exploratory study in some aspect of organization communication is an integral part of the course. Alternate years, spring semester.

49 THEORY AND CRITICISM OF RHETORIC (Same as Linguistics 49)
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 leaders, movements and historical periods will be analyzed. Alternate years, spring semester.

50 TOPICS
The following are some of the topics courses which have been offered in the past few years: Dramatic Criticism and Play Analysis, Children's Theatre, Nonverbal Communication, Intercultural Communication, Advanced Acting, Political Persuasion and Campaign Rhetoric.

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. Alternate years, fall semester.

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. Alternate years, spring semester.

64 DIRECTION
History, theory and techniques of play direction, culminating in the production of an edited three-act play. Laboratory crew experience. Prerequisite, Speech 18 or Speech 22. Spring semester.

65 SCENE DESIGN
Study of the concepts, principles, and techniques of scene design in the modern theatre. The emphasis is on developing an understanding of what a design concept involves and how to put ideas into colors, spaces, and forms. Much of the class lectures will concern how to handle theatre space and how other designers and periods in history have solved these problems. The lectures and exercises analyze the diverse materials available to the design and the skills involved in mastering them. Prerequisites, Speech 29 & 33, or 34, or permission of the instructor. Alternate years, fall semester.

88 SEMINARS
88A Seminar in Theatre: Advanced study of such topics as acting, lighting, children's theatre.
88B Seminar in Rhetoric: Advanced study of such topics as classical rhetoric, speech criticism, experimental methodology, listening.
88C Seminar in Oral Interpretation: Critical analysis of selected topics, persons and works related to oral interpretation theory. Prerequisite, Speech 23.

95 TUTORIAL
Prerequisite, 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 INTERNSHIP
The department offers a variety of internships in educational, business, governmental and human service institutions. The department allows up to two credits for approved internship experiences, which may be applicable to major plans in Speech Communication or Dramatic Arts. Only one credit for approved internship experience may be applied to a core program and no credit may be applied to a minor program in Speech Communication or Dramatic Arts. Department policy is in conformance with approved college guidelines on
internships which emphasize that internships will be granted only in areas in which the student has sufficient academic background and to students who are making normal progress; i.e. students not in scholastic difficulty.

98 PRECEPTORSHIP
Work in assisting faculty in the planning and teaching of a course precepting or tutoring. Normally available to juniors and seniors with permission of the instructor.

PRACTICUM CREDIT IN SPEECH AND DRAMATIC ARTS
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 chair.

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.

Urban Studies

Dorothy Dodge (Political Science), Julia Friedman (Economics and Business), David Lanegran (Coordinator, Geography), Jeffrey Nash (Sociology), Linda O'Leary (Political Science)

The urban studies major is directed toward students who are 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 students with a theoretical and methodological base from which to study or to manage urban phenomena; and an experiential portion which will give students first-hand contact with aspects of the city new to them. A third, additional skills portion will provide students with tools which will enable them to make an effective contribution to research or management.

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 complete a 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.

   Anthropology
   60 Urban Anthropology
   62 Urban Research

   Economics and Business
   36 Capital Markets
   51 Intermediate Microeconomic Analysis
   54 Urban Economics
55 Economics of Public Policy

Geography
41 Urban Geography*
88 Urban Field Geography
88 Historical Geography of Urbanization

Political Science
40 Urban Decision Making
47 Intergovernmental Relations
55 Contemporary Legal Problems
58 Administrative Law
83 Administrative Behavior*

Sociology
44 Racial and Ethnic Minorities
66 Urban Social Structure*
72 Social Organization
78 Social Stratification

2. Experiential Aspect
(A maximum of three course credits to be applied to the major; these courses 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 Chicago urban affairs program sponsored by the Associated Colleges of the Midwest, or the Minneapolis urban studies term sponsored by the Higher Education Consortium of Urban Affairs, 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
(A maximum of three course credits can be applied toward major.) 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.

(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.
Special Programs

Freshman Seminars
Patricia Kane
(Coordinator; Faculty Associate, Office of Vice President for Academic Affairs)

The purpose of the freshman seminar is to introduce first year students to the nature and the possibilities of the liberal arts curriculum. These seminars thus offer the opportunity for first year students to work closely with a faculty member who also serves as their academic adviser. The effect of the seminar should, in addition, be to create a sense of intellectual and social community at the beginning of a student's academic career. A freshman seminar is interdisciplinary and counts as an elective course. Some freshman seminars are graded S/D/NC only.

Freshman seminars include such topics as the following: Essay in Word and Picture; Life of the Mind; Humans and their Language; Human Sexuality; Paradigms of Consciousness; Origins and Options.

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 at Macalester), computer science, library science, nutrition, quantitative methods, Scandinavian studies and social work. A student may complete the library science major at the College of St. Catherine provided that he or she is also completing a major or core concentration at Macalester. ROTC courses offered at the College of St. Thomas are available to Macalester students, however no credit will be awarded toward the Macalester degree. The five colleges publish a joint schedule of fall and spring semester classes. Macalester students should contact the Registrar's Office for information on registration procedures and transferability of credits.

Minneapolis College of Art and Design

Macalester also has an agreement with the Minneapolis College of Art and Design (MCAD) whereby students may take one course per term at that college, provided that the home institution has approved the course. Macalester students should contact the Registrar's Office for information on registration procedures and transferability of credit.

The Pre-Law Program
W. Scott Nobles (Adviser; Speech)

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 inter-disciplinary major concentration in legal studies by utilizing the appropriate course offerings in the several departments.

Also available, but not required, for the pre-law student is inter-disciplinary law and
society major.

*The Pre-Medical Program*

Emil Slowinski (Adviser; Chemistry), Claude Welch (Adviser; Biology)

In each of the past several years, Macalester has had approximately 20 to 25 of its graduates admitted to medical school. Most of these students go to state medical schools, particularly those in Minnesota and Wisconsin, but Macalester graduates are currently attending such private medical schools as Harvard, Duke and Case-Western Reserve.

Pre-medical students at Macalester complete a major or core 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 21 and 22; Physics 21 and 22.

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 or take a core 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.

*International and Off-Campus Programs*

Macalester has a long tradition of international involvement. Recent enrollments of foreign students have amounted to approximately ten percent of the total student body. 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, handicap 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 Registrar’s Office. Students enrolled in approved study abroad programs retain their financial aid. All participants are eligible for supplemental travel grants from the International Study Scholarship (ISS) Fund awarded on the basis of demonstrated need. Students who 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 Registrar’s Office. 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. Students should be aware that some application deadlines are a year prior to intended participation in the program. Programs offered for credit are described below.

*Approved Macalester Study Abroad Programs*

The following programs are approved for semester and year study abroad. Students need not be language majors to apply, but it is recommended that they have studied
Special Programs

the language of the host country or countries. Students should consult with the Registrar concerning credit to be awarded for each program.

1. The French Program. The French department offers three possibilities for students to study in France through an affiliation with the Institute for American Universities. Students with minimal knowledge of French may study in Aix-en-Provence. Students going to Avignon and Toulon should have completed two courses above the intermediate level. (Advanced Conversation and the Culture of Contemporary France are recommended.) The Avignon program is designed for students in the Social Science and Language and Literature. The Toulon program offers courses of special interest to students in International Studies, Political Science, Business and Trade. Students selected for the French program during the spring semester spend the interim term in Paris with the Macalester director.

2. The Associated Colleges of the Twin Cities (ACTC) German Program begins in January with two months of intensive language training at a Goethe Institut in Germany. From March 1 until the end of June, participants study with professors from the University of Vienna and with the ACTC 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 International Study Scholarship grants. One of the Goethe Institut courses will be designated for interim credit.

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

4. The University of Stirling. The College has an agreement with Stirling University in Scotland whereby four Macalester students spend a full year as regular students at that institution. Selection is made by a College committee; financial and travel arrangements are made by the International Center. Participants apply for their junior year. The program is open to students from all Macalester departments in which Stirling University offers a major.

5. 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 is available including intensive work in the Japanese language. Students are housed in dormitories and may apply for one semester or an entire year.

6. The Cairo Exchange. During the 1976-77 academic year, Macalester initiated 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.

7. The Cambridge Program. Macalester students have the opportunity to study at Cambridge University in the fields of English, History, Political Science and Religious Studies. The students are able to experience the British tutorial system, as well as having access to university lectures, Faculty Libraries, and all the social facilities of the Cambridge Union Society. Students of junior standing may participate in the program for a minimum of two terms or for the academic year. Housing is primarily with
families. The administration of this program is handled by the International Center.

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 supplemented 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 Tropical Field Research. 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 language and
Special Programs

Chinese studies, and electives ranging from political ideology to calligraphy.

h. Yugoslavia Program. Based in Zagreb, this fall semester program includes intensive language study and course work at the University of Zagreb, field experiences, and home stays with local families. Open to juniors and seniors, the program is designed for students in the social sciences, although students of the humanities may also apply. Language is not a prerequisite for participation.

9. Macalester College is a member of the Higher Education Consortium for Urban Affairs (HECUA). The following overseas HECUA programs are available to Macalester students. Interested students should contact David Sanford, and should register for these programs in the Registrar's Office.

a. Scandinavian Urban Studies Term (SUST). Scandinavian approaches to modern urban development and community building are studied through a variety of courses and field trips. Students live and study at the University of Oslo, Norway, with additional field work in Denmark, Finland and Sweden. Participants study the Norwegian language and also select either an urban planning focus (the semester program) or an urban studies focus (the year program).

b. South American Urban Semester (SAUS). Urban development problems are studied in Bogota, Colombia. Students live with Colombian families, giving them the opportunity to fully experience Colombian life and the customs and traditions of the culture. Besides Urban Studies and Spanish language instruction, students participate in field trips to Venezuela, Ecuador, Panama and Peru.

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 the 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 ten 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, Augustana College and the College of St. Thomas. Recent UMAIE student participants have studied and traveled in Russia, Germany, Sweden, Great Britain, France, Austria, Denmark, Hawaii, Japan and Egypt.

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 are various nationality weeks and an organizational students' talent show. The International Student Organization is responsible for most of the programming.

The International Center collects and maintains a library of material on 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.

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:

1. Oak Ridge Science Semester. The Division of Nuclear Education and Training of the U.S. Energy Research and Development Administration sponsors a research semester for ACM and GLCA (Great Lakes Colleges Association) students in the biological, engineering, mathematical, physical and social sciences. The program is held at the Oak Ridge National Laboratory (ORNL) in Oak Ridge, Tennessee. An outstanding scientific facility, ORNL is recognized as one of the world's major research centers. Of particular importance to ACM students should be the new role of the laboratory as a designated energy research center. Designed to allow students to study and do research at the frontier of current knowledge, the program places students with ORNL research scientists engaged in long-range intensive investigations. In addition to the students' activities at the National Laboratory, ACM/GLCA resident faculty present advanced courses in research methodology in the social sciences, biology, chemistry and physics.

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 discussion. 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 one 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 bilingual 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 participate 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.

**Higher Education Consortium for Urban Affairs (HECUA)**

The following HECUA programs offered within the United States are available to Macalester students. Interested students should contact David Sanford.

1. **Metro Urban Studies Term (MUST).** In this program, the Twin Cities Metropolitan Area is the classroom. Through seminars, internships and independent projects students study some of the following topics: geography, government, economics, historic preservation, populations, ethnic communities, transportation, planning and social services.

2. **San Francisco Summer Term (SFST).** This summer term program studies the urban area of San Francisco through a seminar, internship and independent project. Special topics covered are history, the arts, economic development, corporations and the city, urban planning, housing and mass transit.

3. **American Indian Semester.** This semester program is based at Mount Senario College, Ladysmith, Wisconsin. Students explore the American Indian tradition and culture. The course components include field experience on Ojibwa reservations, and the study of the heritage and contemporary issues of the American Indian, and the Indian in American literature.

**Berea College Exchange**

By special agreement between the two institutions, Macalester students may spend a semester at Berea College in Berea, Kentucky. The exchange offers students a social and cultural experience different from Macalester and an opportunity to take liberal arts courses taught in a setting which reflects Appalachian life and culture. Berea is a work-study institution, and Macalester exchange students will be expected to participate in the work program.

**Latin American Studies Program**

Donald Fabian and Emily Rosenberg (Coordinators)

The Latin American program is designed for students with regional interests in Central and South America who plan graduate work in Latin American fields of various disciplines, or a career in Latin American affairs with governmental agencies, education abroad, journalism or services to Latin Americans under the auspices of private groups.

The student majoring in Latin American studies develops an Individually Designed
Interdepartmental Major (IDIM) with major advisers in both the history and Spanish departments. The major program generally consists of Latin American content courses in the Spanish department, History 46: Latin American history, and three to four courses of Latin American content in geography, history, anthropology, sociology or political science, to be chosen in consultation with the major advisers. The advisers will assist students in the selection of courses offered throughout the five college consortium. Students frequently include the study abroad programs in Bogotá, Colombia (Spanish Department or HECUA) or Costa Rica (ACM) in their plan of study. For further details see either of the program coordinators.

The Cooperative Program in Liberal Arts and Engineering

Murray Braden (Adviser; Mathematics)

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. Students are to complete 23 courses and three interims at Macalester, as well as all other graduation requirements. Interested persons may obtain more information about this program from Professor Murray Braden at Macalester, or Dean A. Franklin Johnson at the Engineering School at Washington University.

The Cooperative Program in Liberal Arts and Nursing

Kathleen Parson (Adviser; Chemistry)

Macalester-Rush students begin their training on the Macalester campus and finish at Rush-Presbyterian-St. Luke’s Medical Center 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 on the Macalester campus have been successfully completed, the student simply moves on to the other location.

Two options are available. It is possible, for the student with good scientific preparation and aptitude, to complete the minimal requirements of the pre-professional phase at Macalester in two years. A student electing this option then finishes training on the Rush campus and is awarded a B.S. by Rush University. A second possibility is to take this program as a 3-2 option that allows a little more flexibility in the pre-professional phase of the experience. Students completing this program are awarded a B.A. by Macalester and a B.S. by Rush University when work at Rush and Macalester has been completed.

Details of the program at Rush are given in that school’s catalog. While 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 Psychology 16, Introduction to Developmental Psychology.

Mathematics (1 course)
Recommended:
Mathematics 14—Introduction to Statistics
Mathematics 16—Mathematics—Its Content and Spirit
Mathematics 35—Finite Mathematics

Distribution Requirements (2 courses in humanities and fine arts)
Students who meet the requirements above will have fulfilled college distribution 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 or three interim term courses, corresponding to the two or three years spent on the Macalester campus. Also, credit must be earned in 15 courses for those electing the two year option, 23 courses for those choosing the three year program leading to the Macalester degree. Those students in the 3-2 program must complete a major or core at Macalester, as well as all other graduation requirements.
STUDENT SERVICES

Dean of Students
The Dean of Students is the chief student affairs officer of the College. The Dean coordinates the services and activities of Campus Programs, Career Planning and Placement, Community Involvement Programs, Commencement, Counseling, Learning Skills Center, Health Services, International Student Services, Minority Programs and Special Services, Orientation, Residential Life, Student Emergency Loans, and Student Government and organizations. The Dean assists in resolving any student or parent question relating to College policies or procedures and provides ombudsman services to students who are experiencing difficulty in finding the appropriate office to handle a specific problem or inquiry. The office maintains personal records of all current students and alumni up to eight years after graduation.

Campus Programs
The student run Program Board, and other student-faculty-staff groups work with the Campus Programs Coordinator to initiate a wide variety of out-of-class activities for members of the Macalester community. Students are encouraged to take an active part in planning activities, as well as simply participating in those activities planned by others.

Career Planning and Placement
The Office of Career Planning and Placement provides vocational and career counseling for all students, freshmen through seniors, as well as alumni. A professional counselor is always available. Extensive files, pamphlets and information sheets on careers are maintained for all students' use in the Career Library adjacent to the office. Students interested in graduate study have available to them several hundred university and college catalogs—both general and by specific discipline. Graduate test applications are in this office. Those looking for information about businesses and corporations can find many of these in the files. All part-time off-campus jobs for pay are listed in the Career Library. An Alumni/Student Counselor file of several hundred Twin Cities Mac alums is available to learn from someone "on the job" what it is like.

Community Involvement Programs (CIP)
CIP is the service/learning center which places one fourth of the student body in Twin Cities community organizations, government and business: as volunteers; for course-related field placements; to utilize their work-study contracts; or, as interns. These involvements enable students to increase their skills or knowledge, test career interests, and enhance their personal growth throughout their Macalester career.

Computing Services
This department is the primary source of computing resources for the College, including both academic and administrative uses. The central computer system is a Digital Equipment Corporation PDP-11/70. Students, faculty and staff make use of timesharing capabilities, on essentially a continuous basis. The system can support 30 to 40 users concurrently. Programming languages available include BASIC-PLUS, BASIC-PLUS-2, FORTRAN IV, COBOL, PASCAL, and assembler. Equipment includes standard hard-copy and video-display terminals, graphic display terminals, a plotter and two printers. The College has available two major statistical packages, as well as a variety of user-written programs. With assistance from the National Science Foundation, the College has begun a three-year program which will introduce real-time, computerized data acquisition and analysis techniques throughout the science curriculum. New
equipment additions include three Digital Equipment Corporation MINC-11 data acquisition systems, additional microcomputers, and a computer-controlled digitizer and graphics system.

Formal courses in computing are offered by the mathematics department and special topics courses are available through several other departments. Student independent projects also make extensive use of the computing facilities, while several courses routinely use the computer in course work. No charge is made to students for the use of the facilities.

Counseling
The Office of Counseling provides professional counseling services for students who are experiencing social, psychological or interpersonal problems. It also provides counseling for students on probation, students who are experiencing academic difficulty, and students who need help in clarifying or attaining their educational, vocational and personal objectives. The staff includes two licensed psychologists. The office also offers a program of special tests, including personality and interest tests.

Health Service
The Winton Health Service is located on the northwest corner of Grand and Snelling. A registered nurse is on duty from 8 a.m. to 4:30 p.m. and a physician is on duty for consultative services 8 a.m. to 9:45 a.m., Monday through Friday. Students requiring a physician at other times can be seen at the Physicians Clinic, 451 N. Dunlap, or at Midway Hospital Emergency Room.

Learning Skills Center
Located in the basement of Old Main, the Learning Skills Center provides individual and group assistance for students interested in developing reading, writing and mathematics skills, comprehension and vocabulary development and general time management/study skills. A Reading Skills Specialist, Writing Skills Specialist and Mathematics Specialist are available daily to assist students. Tutorial assistance is available to all Macalester students.

Library Services
Special collections of the library include Greats (Great Books of the World) and New Book Collection; the memorial library of Edward Duffield Neill, strong in early American and Minnesota history; the Arthur Billings Hunt books on American hymnology; the Stella Louis Wood collection of juvenile literature; the J. Harold Kittleson collection of Sinclair Lewis materials, and smaller collections of 20th century American authors; the Norman H. Strouse collection of Mosher imprints; the Charles W. Ferguson Word Library; 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.

The Audio-Visual 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. 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.
Minority/Special Services Program

The Minority Program for Black Americans, Hispanic Americans and Indian students provides financial aid to students who could not otherwise afford to attend a private college such as Macalester. The Program provides basic skills assessment, basic skills developmental courses, academic advising, cultural programming and financial aid/personal counseling to insure that minority students function successfully in the Macalester College community.

Minority Program students are usually 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 potential. Recommendations by counselors and others who know the student and his/her capabilities, as well as past performance, are given primary consideration for admission.

The Special Services Program is designed to assist any student from low income families who might also have inadequate secondary school preparation. Students who come from bilingual backgrounds and experience difficulties with English, students with physical handicaps or those who are disadvantaged culturally (extreme rural isolation) are eligible for this program. For those qualifying, the federal government has provided resources for counselors to assist with academic advising, financial aid counseling and personal counseling. In addition, a Learning Skills Center has been established to assist those with diagnosed deficiencies in reading, writing, math and study skills.

Office of the Registrar and Student Academic Records

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; processes changes of course registration and grading options; publishes, in advance, fall and spring term final examination schedules; endorses teacher certification applications; evaluates transfer credits; acts upon readmission and special student applications; issues transcripts and statements certifying full-time attendance and/or good standing; and certifies to the faculty those students eligible for graduation.

Privacy Rights of Students

Release of information other than public information and the student's area(s) of concentration is made only upon written request of the student or former student. Public information consists of the student’s name, local and home addresses and phone numbers, student classification and date of graduation. This is in compliance with the Family Educational Rights and Privacy Acts of 1974, as amended, and the Macalester College Student Rights, Freedoms and Responsibilities Document (see current Student Handbook).

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. There are churches, synagogues, mosques and temples for worship and study near the campus.

The Weyerhaeuser Memorial Chapel serves as a campus center for worship, for lectures and concerts, and for student groups that engage in religious 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. The Muslim Student Center sponsors services and programs. Many opportunities for Christian service in the community beyond the campus are offered through Community Involvement Programs.

Residential Life
The residence halls serve as miniature communities which provide 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 by the Residence Hall Policy Council, which the faculty has empowered to establish social policy in College housing. Under RHPC policy, College housing is coeducational; although some residence halls house men and women on alternate floors.

Macalester College accommodates approximately 60 percent of its students in campus residence halls. Four houses, adjacent to the campus and owned by the college, are offered as residences to students of French, German, Russian, Spanish, and the Hebrew culture.

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.

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

Academic Clubs—Classics, French, Geology, German, Russian and Spanish Clubs; the Society of Physics Students; in addition to academic honorary societies.

Athletics Activities—Cheerleaders; Dance Co-op; Fencing Club; Field Hockey Club; Flying Scots; Mac Japanese Karate Club; Scots Club; and an extensive intramurals program.

Citizenship and Community Action—Advocates for Human Liberation; Black Liberation Affairs Committee (BLAC); Bridge Club; Coalition of American Indian Students; Hispanic Students; International Student Organization (ISO); Mac Democratic Alliance; Mac Feminists; Macalester Lesbian-Gay Community (MLGC); Macalester Recycling Organization; Macalester Republican Club; Malaysian Students Association; Minnesota Public Research Group (MPRIG); Outing Club; Private Housing Council; Spring Fest; Third World Studies Group; World Hunger Organization.

Communications and Publications—The Chanter (literary magazine); Focal Point (periodical); WMCN (campus radio station); Macalester International (journal); Mac Weekly (newspaper); Spotlight (directory)

Music—Concert Choir; Festival Chorale; Highland Dancers; International Folk Dancers; Pipe Band; Symphonic Band; and Symphony Orchestra.
Religious Organizations—Bahai Club; Hebrew House; Macalester Christian Fellowship; and Muslim Student Association.

Speech and Theatre Arts—Drama Club; Macalester College Debate Union; Macalester Forum; and 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 students in the governing of the College and coordinates student action and the allocation of funds for student activities. The Council, which meets regularly throughout the academic year, serves as a forum for the expression of student viewpoints.
Scholarships and Special Endowed Funds
Special Endowment Funds

Endowed Scholarships

Scholarships and Special Endowed Funds

The scholarships, loan funds, prizes, special endowment funds and endowed professorships listed on these pages have been created at Macalester College by the generous gifts of endowed funds or annual contributions. Some of these funds have been contributed to allow the establishment of endowed professorships that further Macalester's commitment to the highest academic standards among the faculty. Income from funds contributed for prizes is awarded annually in recognition of a student's scholastic achievements, accomplishments and proficiency.

The income from other funds is awarded annually by the Macalester Financial Aid Office. The funds are awarded to outstanding students—usually upperclassmen—who have applied for financial assistance and who demonstrate the need for this assistance in order to avail themselves of a Macalester education. (For information on financial assistance, consult the Admission, Expenses and Financial Aid section.)

The name of the award appears in italics 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 making the award. Most of the endowed scholarship funds were established in consideration of matching gifts made by DeWitt Wallace '11, who contributed a substantial majority of the funds.

Endowed Scholarships

Arstice 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 (1957-57). 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, $3,475.


Horace M. Albright (1961). Established by Horace M. Albright, nationally known conservationist and former director of the National Park Service. Principal, $5,000.


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 Thames, 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.
Endowed Scholarships


American Cyanamid Company (1962). Established by the American Cyanamid Company. For upperclassmen who are taking a premedical 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 Company 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 and women of the highest overall promise. Principal, $250,000.


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 Encyclopedia Britannica and former United States Senator and Assistant Secretary of State. For students of unusual ability who plan 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.

Boise Cascade Mando (1959). Established by Minnesota and Ontario Paper Company, predecessor of Boise Cascade. To be awarded with preference to students from International Falls, Minnesota, and Fort Frances and Kenora, Ontario. Principal, $6,000.


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.
Endowed Scholarships

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.


John S. Campbell (1959). Established by Mr. Campbell, Macalester class of 1913 and former president of Malt-O-Meal Company of Minneapolis. Principal, $2,500.


George E. Carlson (1964). Established by Robert W. Carlson, president of the Minnesota Rubber Company, in honor of his father. For a student majoring in one of the natural or physical sciences, with preference given to children of employees of the Minnesota Rubber Company. 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 to 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 vocation. 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 (1912-44). Principal, $8,024.

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.

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.

Endowed Scholarships

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 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.


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 Juenemann 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, $15,818.


Car! and Margaret Dreves (1963). Established by Mr. Dreves, a retired Saint Paul businessman. Principal, $27,711.

Margaret Weyerhaeuser Driscoll (1960). Established by Mrs. Walter B. Driscoll, member of the 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 (1946-64) and dean of the College (1951-61), and his wife. Principal, $11,491.

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.


Harvey S. Firestone, Jr. (1960). Established by the former chairman of the Firestone Tire and Rubber Company. Principal, $20,400.

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, $3,150.

Roал H. Freischmann (1959). Established by the president and chairman of The New Yorker. Principal, $10,000.

Arthur S. Flemming (1971). Established by students, trustees, faculty, staff, alumni, and friends to honor Macalester's eleventh president (1968-71). To be awarded to a Minnesota freshman from a minority group. Principal, $13,146.

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, 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 selecting and training astronauts for Project Mercury. To assist a student majoring in the physical sciences or one 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 B. 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.

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.) (1959). From an anonymous donor in 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.


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.

Oveta Culp Hobby (1964). Established by the president and editor of the Houston (Texas) Post. Principal, $10,000.

Richard F. and Sylvia S. Hockel (1977). Established by Mr. and Mrs. Richard F. Hockel of Champlin, Minnesota, as a fiftieth anniversary gift to Mr. Hockel's Class of 1927. Principal, $15,319.


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.


Hollis L. Johnson Endowed Music Scholarship (1977). Established by alumni, faculty, and friends, with the assistance of the Macalester Festival Chorale, in memory of Hollis L. Johnson, Class of 1932, and director of the Macalester College Choir 1932-51. Preference given to returning music majors with emphasis in choral conducting and interested in a teaching career.

Howard Johnson (1958). Established by the chain restaurant executive of New York City. Principal, $65,000.

Endowed Scholarships


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.

Edwin Kagin Scholarship (1960). Established by Dr. and Mrs. William H. A. Watson and other former students and friends of Dr. Kagin, professor of religion (1926-52). 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 sophomore planning 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 premedical 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 premedical student. Principal, $4,000.

Mildred Phillips Kindy (1967). Established by Miss Ann Elizabeth Taylor, Macalester Class of 1910, 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 (1906-38). 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.

Walter 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.

Thomas S. Lamont (1965). Established by Mr. Lamont, a director of the Morgan Guaranty Trust Company. Principal, $10,000.

Den E. Lane and Elsie J. Lane (1977). Established by Elsie J. Lane. For upperclass students majoring in religion, economics and business, education, and all areas of the liberal arts. Principal, $720,313.


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, $6,100.

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, $9,485.


Macalester Club of New York (1967). Established by alumni with priority use for students from the East Coast. Principal, $9,674.

Macalester Endowed Scholarship Fund:

1. Minnie C. Hoffmann (1967). Established by Mrs. Edwin C. Johnson, Alexandria, Virginia, in memory of her sister, who was formerly a teacher at Humboldt High School, Saint Paul. Principal, $2,000.

2. Mr. and Mrs. Howard F. Ware (1953). Established by the estate of Clara M. Ware. Principal, $1,175.


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, $12,000.


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.

The McKnight Foundation Minority Scholarship (1975). Established by the foundation for Black, Spanish-speaking, or Native American students. Principal, $251,733.

Norman H. McRae (1957). Established by alumni and friends in memory of Norman H. McRae, who was superintendent of buildings and grounds at Macalester (1924-43), 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


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.

Mooré –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 a 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.


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 thirty-seven years professor of classical languages and Russian at Macalester College. Preference is given to students majoring in these languages. Principal, $2,765.

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.

Presbyterian Church Endowed Scholarship Fund: Synod (1931). Established by Presbyterian churches in the Synod of Minnesota. Principal, $2,300.

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 (1926-54). For a junior man who participates in intercollegiate activities and who has leadership ability and satisfactory academic standing. Principal, $8,693.

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 the vice president of J. Walter Thompson Company, advertising agency, New York City. Principal, $7,800.

Bryan McDonald Rice (1961). Established by Macalester president (1958-68) 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 and 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.


The St. Paul Companies, Inc. (1976). For students with scholastic promise who without financial assistance could not afford a private, liberal arts education. Principal, $30,000.

St. Paul Presbytery (1931). Established by the Presbytery. For a student nominated by the Presbytery. Principal, $2,500.

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.


George E. Scotton (1963). Established anonymously by an alumnus of the College to honor a fellow member of the Class of 1921. Mr. Scotton directed Macalester's admissions office for thirty 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.

Harold B. Shapira (1967). Established by Mr. and Mrs. Harold B. Shapira of St. Paul to assist an Israeli student in attending Macalester or to assist a qualified Jewish student at Macalester. Principal, $25,000.

Thomas Shaw (1931). Established by Professor Shaw, who was a member of the Board of Trustees (1891-1918) and president of the Board (1901-19). 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 (1929-66). To be awarded to a student majoring in chemistry. Principal, $26,231.


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.

Dwight D. Sturessy (1957). Established by alumni, friends, and members of the "M" Club in memory of Dwight D. Stuessy, Macalester athletic director (1946-57). Principal, $8,842.

Borghild K. Sundheim (1968). Established by alumni, colleagues, and friends in memory of Dr. Sundheim, professor and chairman of French (1927-67), the recipient to be an upperclass French major nominated each year by the French department. Principal, $4,348.

Ann Elizabeth Taylor (1967). Established by Miss Taylor, Macalester College graduate, Class of 1910, Austin, Minnesota, for students majoring in history. Principal, $1,595.

Henry J. Taylor (1957). Established by the United States Ambassador to Switzerland. For an unusually promising young man. Principal, $6,000.


Lowell Thomas (1957). Established by the author, editor, explorer and motion picture producer. Principal, $18,000.

Hugo W. Thompson (1968). Established upon his retirement by colleagues, former students, and friends in honor of Hugo W. Thompson, professor of philosophy (1943-68), for students from minority backgrounds. Principal, $1,551.

Tobin-Smith (1962). Established by Chester M. Tobin, Class of 1923, 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, $11,000.


Gene Tunney (1967). Established by the former boxing champion. Principal, $5,000.


Emma Fuller Turck (1979). Established by Dr. Charles J. Turck, President of Macalester College from 1939-58, and his family in memory of Mrs. Turck. Principal, $7,500.

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, $3,333.


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 (1922-63) and in memory of Mrs. Walter. For a senior premedical 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, $22,207.


F. Earl and Ruth H. Ward (1965). Established by students, friends, and colleagues of Professor F. Earl Ward, chairman of the College's English department. To be awarded to an upperclass English major nominated each year by the English department. Principal, $6,540.

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, $16,264.

Grace B. Whitridge (1956). Established by former students of Miss Whitridge, professor of drama and speech at Macalester (1900-41). Preference is given to a student in speech. Principal, $12,338.

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.


Endowed Scholarships

Annually Contributed Scholarships

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 (1929-65), who was his professor and major adviser. It is awarded to students majoring in economics. Principal, $32,795.

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.

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.

The Virginia McKnight Binger Scholarship Awards (1975-79). Awarded to students of proven academic ability without regard to race, religion, or creed, based on financial need and record of performance at Macalester during the previous year.

Otto Bremer Foundation. Scholarships awarded to qualified students from North Dakota, Wisconsin or Minnesota.

The Continental Can Company Scholarship. Awarded to a junior or senior Black student with financial need, with a preference for a woman in business or a related field.

Farmers Insurance Group. Scholarships for second, third, and fourth year students in the fields of insurance, mathematics, business administration, personnel and industrial relations and other areas related to the insurance industry.

The Archie and Phebe Mae Givens Foundation. Given by the foundation which was established by the late Archie Givens, Sr., to be used as scholarship aid for two or more qualifying junior or senior Black students, majoring in business or hospital administration, economics, or a related field.

William B. and Dorothy A. Korstad Scholarship. Established by Mr. and Mrs. Korstad, Class of 1938, to be given to a student, preferably from out-state Minnesota.

Macalester College National Merit and Achievement Scholarships. Macalester sponsors forty scholarships in each entering class for finalists in the National Merit competition, and one scholarship in each entering class for a finalist in the Merit Corporation's National Achievement competition for minority students. For many years, the Reader's Digest Association, Inc., sponsored Merit Scholarships for finalists attending Macalester.

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 Program Agency to students attending Presbyterian-related colleges to recognize and encourage scholastic ability and qualities of character and learning.

Mr. and Mrs. Richardson B. Okie Scholarship Fund. Contribution to the Black scholarship fund in memory of their son, Francis Gurney Okie III.

The Presser Foundation Scholarship Fund for Music Students. Intended for a music major in his senior year awarded on the basis of merit.
Annually Contributed Scholarships

Prizes

Tokichi Torii Scholarship Fund (1976). Established by Mrs. George Suzuki to help Asian students with special needs.

Westminster Presbyterian Church (1976). Established by the Board of Deacons of the Westminster Presbyterian Church of Minneapolis.

ART

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.

BIOLOGY

AMAX Foundation Award. An award of $500 to Macalester College, through the Biology Department.


American Cyanamid Endowed Prize. Established for upperclassmen who are preparing for entrance into medical school.

Ruth and Vernon Taylor Summer Opportunities Fund (1967). To provide meaningful summer experiences for premedical students studying at Macalester.

O. T. Walter Award. Established by former students of Dr. O. T. Walter, chairman of the department of biology for forty-one years. Designated for premedical students who show promise of success in the field of medicine.

CHEMISTRY

Twin Cities Chapter of the American Institute of Chemists. Medallion awarded to an outstanding senior planning a career in chemistry.

The Chemical Rubber Company Award. Handbook awarded for outstanding achievement in freshman chemistry.

American Chemical Society Award. One year's subscription to the journal Analytical Chemistry to a junior student with the greatest interest in and aptitude for a career in analytical chemistry.

General Electric Foundation Endowed Prize. Established for students majoring in chemistry.

Violet Olson Beltmann Endowed Prize. Established by Albert A. Beltmann, Class of 1923, in memory of Mrs. Beltmann, Class of 1920. To be awarded to students majoring in chemistry.

Chester H. Shiflett Endowed Prize. Established by former students and colleagues to honor Dr. Shiflett, professor of chemistry at Macalester (1929-66). To be awarded to students majoring in Chemistry.

ECONOMICS

Elaine Gartner Pilon Award. Established by Elaine Gartner Pilon, Class of 1945. One year's subscription to Fortune magazine for a senior majoring in economics and business; criteria of choice are scholarly achievement and contribution to the department.

Wall Street Journal Prize. A medal of merit and one year's subscription to The Wall Street Journal awarded by the publishers to the outstanding senior in the field of economics and business.

John M. Dozier Prizes. Established by members of the Macalester Board of Trustees in recognition of the contributions of John M. Dozier, vice president (1966-74). Awarded by the faculty of the department of economics and business to students majoring in that department on the basis of merit, demonstrated competence, and interest in a career in financial administration.

EDUCATION

Stella Louise Wood Award. Established by the alumnae of Miss Wood's School of Macalester for students interested in elementary education licensure.

Anstice Abbott Award. Established by the national Wood's School Alumnae Association for students interested in elementary education licensure.

ENGLISH

Bennett Cerf Endowed Prize. Established by the chairman of Random House for students majoring in English literature.


Scherman Foundation Writing Prize. Established by Harry Scherman. An endowed fund provides annually up to three prizes of $100 each awarded by the English Department for literary essays and creative writing.
Lowell Thomas Endowed Prize. Established by the author, editor, explorer and motion picture producer. Awarded to students majoring in English.

F. Earl Ward Endowed Prize. Established by students, friends, and colleagues of Professor Ward, chairman of the department of English (1926-63). Awarded to an upperclass English major.

FRENCH

Borghild K. Sundheim Endowed Prize. Established by alumni, colleagues, and friends in memory of Dr. Sundheim, professor and chairman of the department of French (1927-67). Awarded to a French major.

GEOGRAPHY

National Council for Geographic Education Award. Established by the association to be awarded to a graduating senior who has demonstrated ability for teaching geography.

GEOLOGY

Hugh S. Alexander Endowed Prize. Established to honor Hugh S. Alexander, professor of geology at Macalester (1906-48). A prize of $50 awarded annually to the outstanding senior majoring in geology.

GERMAN

Eceylon Albinsion Award for Academic Excellence in the Study of German. An annual cash award given on the basis of grade-point average, provided it qualifies the student for acceptance into Phi Beta Kappa and includes a distinguished record in German studies.

German Book Prizes. An annual book award, provided by the German Embassy, to members of the graduating class with a major or core in German.

HISTORY

Case Prize in Western 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.

Kathleen Rock Hauser Prize in Women's History. Established by the Women Historians of the Midwest in memory of Kathleen Rock Hauser, Macalester Class of 1962. An award of $100 to a student who has made a significant undergraduate contribution to women's history.

Yahya Armajani Endowed Prize. Established by colleagues, friends and former students of James Wallace Professor Emeritus Yahya Armajani to honor him on his retirement. To be awarded to an international student.

HUMANITIES

Virginia McKnight Binger Prize in the Humanities. An award of $100 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.

MATHEMATICS

Ezra J. Camp Endowed Prize. Established by colleagues and friends in memory of Dr. Camp, professor and chairman of the department of mathematics.

MUSIC

Lila Bell Acheson Wallace Endowed Prize. Established by Mrs. DeWitt Wallace, co-founder of the Reader's Digest. A cash award of $100 to the outstanding student majoring in music.

Walter A. Lienke Endowed Prize. Established by testamentary bequest. An award of $100 to the outstanding student majoring in music.

Mildred Phillips Kindy Endowed Prize. Established by Ann Elizabeth Taylor, Class of 1910, in memory of her classmate. An award of $100 to a student specializing in piano or voice.

Samuel W. Raudenbush Memorial Endowed Prize. Created by Mrs. Alma M. Raudenbush in memory of her husband. An award of $100 to a junior woman majoring in music.

Tobin-Smith Endowed Prize. Established by Chester M. Tobin, Class of 1923, and Edward M. Smith. An award of $100 to a student accomplished in the Scottish arts of piping and drumming.

Friends of Music Award. Awarded to a senior student for excellence and music achievement.

PHILOSOPHY

Thomas E. Hill Prize. Established by the faculty of the department of philosophy. Awarded for outstanding work in philosophy.

PHYSICAL EDUCATION

Thomas L. Gammell Endowed Prize. Established by alumni and friends in memory of Thomas L. Gammell, Class of 1966. Prize of $50 awarded annually at the discretion of the physical education department to an outstanding athlete, with preference given to swimmers.
**Prizes**

**David C. Primrose Endowed Prize.** Established by family, friends, and former students in memory of David C. Primrose, director of physical education and track coach (1926-54). An award of $100 for a junior man who participates in intercollegiate activities and has leadership ability and satisfactory academic standing.

**George E. Scotton Endowed Prize.** Established anonymously by an alumnus of the College to honor a fellow member of the Class of 1921. George Scotton directed Macalester's Admissions Office for thirty years. An award of $100 to an outstanding scholar and athlete.

**Dwight D. Stuevy Endowed Prize.** Established by alumni, friends, and members of the "M" Club in memory of Dwight D. Stuevy, athletic director (1946-57). An award of $100 to an outstanding athlete.

**Dorothy Michael Award.** Established by family, alumni, and friends in memory of Dorothy Michael, chairman of women's physical education department (1946-68). Awarded to an outstanding junior woman for use during her senior year.

**PHYSICS**

**Physics/Astronomy Faculty Award.** Book awards for outstanding service to departmental activities instructional program.

**POLITICAL SCIENCE**

**Hubert H. Humphrey and Walter F. Mondale Endowed Award in Political Science (1977).** Established to honor, respectively, a former member of the faculty and an alumnus whose careers exemplify the highest standards of scholarship and education for service to society. To be awarded annually to the outstanding student or students majoring in political science.

**PSYCHOLOGY**

**Macalester Psychology Award.** Departmental prize for outstanding student majoring in psychology.

**RELIGION**

**Robert A. Caine Memorial Prize.** (1976). Established for a student planning to go to seminary for further training.

**George W. Davis Memorial Prize in Religion.** Established by Ethel Mary Davis in memory of her husband. The prize 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.

**Mary Frances Johnstone Kagin Memorial Endowed Scholarship.** Established by her husband, Dr. Edwin Kagin, relatives and friends. To be awarded to a student planning a full-time church vocation for use during the sophomore year.

**Edwin Kagin Endowed Scholarship.** Established by Dr. and Mrs. William H. A. Watson and other former students and friends of Dr. Kagin, professor of religion (1926-52). Awarded to a junior who is preparing for a church vocation.

**SOCIOLOGY**

**Paul M. Berry and William Alva Swain Award.** Established by the Sociology faculty to honor two emeriti faculty. Up to two awards may be awarded to graduating seniors who in the opinion of the faculty have demonstrated excellence in either quantitative or qualitative sociology. The award consists of a year's Student Membership in the Midwest Sociological Society and a year's subscription to the Sociological Quarterly.

**SPEECH AND DRAMA**

**The Collins Endowed Prize in Extemporaneous Speaking.** Established by Dr. G. Rowland Collins, Class of 1916.

**The Collins Prize in Rhetorical Criticism.** Established by Mrs. G. Rowland Collins, Associate Professor of Psychology and Assistant Director of Student Services at Macalester, 1947-55.

**Charles W. Ferguson Endowed Prizes in Public Speaking.** Established by a senior editor of the Reader's Digest. Awarded to students on the basis of demonstrated ability in public speaking during the entire forensic year.

**Stringer Endowed Prize.** Established in memory of E. C. Stringer. Awarded to the students who place first and second in an original oratorical contest.

**Lowell Thomas Endowed Prizes in Public Speaking.** Established by the author, editor, explorer and motion picture producer. Awarded to students who have made significant contributions while representing the College in intercollegiate debate and forensic competition.

**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.

**Carol A. Wurtzbach Endowed Prize in Oral Interpretation.** Established by James Pratt, Class of 1966, and friends in memory of a fellow classmate. Awarded to a student or students for excellence in oral interpretation.
Loan Funds

Alliss Student Loan Fund (1968). Established by the Alliss Foundation. The principal is available to needy Macalester students. Payments start four months after leaving the College. Principal, $288,238.

Carrie E. Alvord Student Loan Fund (1965). Established by the Alvord Foundation and available to any needy Macalester student and is interest-free until the borrower leaves the College. Principal, $17,326.

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, $1,600.

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 Parcy (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, $3,827.

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, $622.

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 per cent), 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 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, $257,058.

Memorial Loan Fund. Established through gifts to the College, it is used specifically for loans to students for college expenses. Principal, $26,872.

National Direct Student Loans. Macalester College participates in the National Direct 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 (3 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.

C. Oscar Schmidt, Jr., Loan Fund (1976). Contributed in memory of his wife, Eugenia Schmidt, this fund is to be used for short-term needs and repaid as soon as students are able. Principal, $3,000.


Senior Loan Fund (1961). This fund has been created by Messrs. DeWitt Wallace, Charles B. Thomas, and George P. Leonard for the specific purpose of providing needy senior students with low interest, easy payment loans: interest at 4 percent begins October 1 following graduation. Principal, $95,900.

Henry Strong Educational Foundation (1959). This fund was created under the will of General Strong for loans to juniors in the upper third of their class. Interest at 4 percent begins to accrue at graduation. Repayment may be made over a four-year period beginning at graduation. Principal, $44,204.

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, $34,764.
Special Endowment Funds

John Maxwell Adams Endowment. Established by family and friends of chaplain emeritus John Maxwell Adams to support the Community Involvement Program, which had its origin in a volunteer service project under his direction when he served as college chaplain (1947-67). Principal, $7,752.

Den E. Lane and Elsie J. Lane Endowment. Established from the estate of Elsie J. Lane, the income to be used at the discretion of the College's Board of Trustees. Principal, $720,313.

George P. and Wilma Fox Leonard Athletic Department Endowed Fund. Established by George P. and Wilma Fox Leonard, Class of 1927, to be used at the discretion of the Director of Athletics with the approval of the President of the College, to enhance the athletic program. Principal, $50,000.

The Tom Leonard Fund. Established by George and Wilma Fox Leonard, Macalester Class of 1927, in memory of their son, to be used to enhance closer faculty/student relations. Expenditures are to be approved by academic department heads and the vice president for academic affairs. Principal, $133,530.

Endowed Professorships

Edward John Noble Professorship in Economics. Established by a gift from the estate of Edward John Noble and supplementary gifts from the IBM Corporation and DeWitt Wallace.

Arnold Lowe Professorship in Ecumenical Studies. Established by members of the Dayton Family of Minneapolis.

O. T. Walter Professorship in Biology. Established through the gifts from colleagues, friends, and former students of Dr. Walter, chairman of the biology department (1922-63), and DeWitt Wallace.

Hubert H. Humphrey Professorship in International Affairs (1968). Established by the Andreas Foundation, Crowe Baker, Mr. and Mrs. Curtis L. Carlson, Henry Crown, Kenneth Dahlberg, Charles Eglehard, B. C. Gamble, Joseph Foundation, Mr. and Mrs. Norman B. Mears, the Paulucci family, Mr. and Mrs. Jay Phillips, and DeWitt Wallace. The professorship is designed to strengthen international education at Macalester by bringing to the campus distinguished individuals in fields relating to international affairs.

F. R. Bigelow Professorship in Economics. Established by the Bigelow Foundation through a bequest from Frederick R. Bigelow, Macalester College trustee (1938-47).

James Wallace Professorships. Established by DeWitt Wallace in memory of his father for the departments of history, political science, and religion.

G. Theodore Mitau Endowed Lectureship in Public Policy. Established through the gifts of family, colleagues, friends, and former students of Dr. Mitau, Class of 1940, professor in the political science department (1940-79).

DeWitt Wallace Endowed Professorships. Established through a gift from Mr. Wallace, Class of 1911, which provides supplementary stipends for the enrichment of teaching ability. First appointments made to faculty members from the fields of Anthropology, Chemistry, English, French, Linguistics, and Speech Communications.
Statement of Purpose and Belief

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.

Considered by the Macalester community and approved by the Board of Trustees, Spring 1971.

A History

Macalester College was opened on September 15, 1885. But long before that, the College's founder, The Rev. Dr. Edward Duffield Neill, had been carefully laying the groundwork to ensure its success. Neill was a remarkable man who believed strongly in the value of private education. A pioneer clergyman and educator in Minnesota from 1850 until his death in 1893, Dr. Neill was also instrumental in the development of public education in Minnesota, serving as the first Superintendent of Schools for the Territory and as Chancellor for the University of Minnesota. He was also the founding pastor of two Saint Paul Presbyterian churches, House of Hope and First Presbyterian.

Macalester is the outgrowth of two academies also founded by Neill. One of these schools was founded in Saint Paul in 1853; the other was established in Minneapolis in 1873, after Dr. Neill returned to Minnesota having served as secretary under President Abraham Lincoln. Both academies were named after M. W. Baldwin, a famous locomotive builder, who was a close friend of Dr. Neill and a financial supporter of his first educational undertaking. In 1873, Dr. Neill sought aid from Charles Macalester, a prominent businessman and philanthropist from Philadelphia, for the purpose of developing the Baldwin School into a college. (Ironically, Macalester, who was greatly
impressed with the zeal, determination and vision of Dr. Neill for private education in Minnesota, never actually set foot in the state nor saw the college which bears his name.) Macalester donated a noted summer hotel at St. Anthony Falls in Minneapolis, known as the Winslow House. With that, the new institution was named Macalester College, and chartered by the Minnesota Legislature in March 1874. Yet it would take a decade for the new college to enroll its first class.

In order to secure adequate endowment, Dr. Neill asked the Synod of the Presbyterian Church of Minnesota to adopt Macalester as a denominational institution. On October 15, 1880, by action of the Synod, it came under Presbyterian control. The trustees of the College, in 1883, donated forty acres of land to the institution; they then sold the Winslow House and with the proceeds erected the East Wing of the present Old Main building in 1884. The same year the Synod completed an endowment of $25,000 for the president's chair, and in 1885 the College was opened to students. When it opened, Macalester had five professors, six freshmen, and 52 preparatory students from Baldwin School. The College first admitted women in 1893. Between the years 1889 and 1898, the College graduated 100 students.

The first few decades of the College were marked by the dedicated scholarship of its leaders. But especially notable were the efforts of Dr. James Wallace, who for 12 years, both as acting president from 1894 to 1900 and as president from 1900 to 1906, secured the College's lasting reputation for scholastic excellence in its programs, and among the faculty and students. Moreover, Dr. Wallace as president made almost superhuman efforts to raise the money and secure the support necessary to keep the College alive during a period when financial hardships plagued it.

Dr. Wallace joined the Macalester College faculty in 1887. Until shortly before his death in 1939, he taught religion, Greek and political science. As a scholar, teacher and friend to students, Wallace was without peer. His students left his classes with a sense of aspiration, a sense of dedication to serving humanity, and a sense of striving for the best. Throughout his years at Macalester, he epitomized the highest ideals of human service—a tradition the College has clung to ever since.

The College struggled with the nation through the Depression years. The post World War II period found the College academically sound, sufficiently supported, 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 teachers, nurses, scientists, civil servants and statesmen. Dr. Turck also developed the College's focus on internationalism—another significant part of Macalester's make-up today—through programs for foreign students and overseas study opportunities. Under Turck's leadership, the College was also distinguished by its interest in civic and national affairs, a characteristic that continues today.

It was the decade of the 1960s that brought the most remarkable period of growth and change for the College in its history. Because of the generous gifts of many friends, especially those gifts of Mr. and Mrs. DeWitt Wallace, co-founders of the Reader's Digest, and the College's major benefactors, the College was enabled to make marked advances. (Mr. Wallace, '11, is the son of Dr. James Wallace.) During the presidency of Harvey M. Rice (1958-68), the College engaged in a concerted effort to strengthen its faculty, improve the quality of its student body, and enhance its instructional program. In 1963, Macalester became the third college in the nation to adopt the 4-1-4 curricular program. Later in the decade, the College started a program to extend the opportunity of a liberal arts education to students from low income, minority backgrounds—a program that was acknowledged as one of the most
innovative of its kind in the nation. Throughout the decade, and into the 1970s, the College embarked on a major building campaign. The Janet Wallace Fine Arts Center—named after the wife of Dr. Wallace and the mother of Mr. DeWitt Wallace—was completed in 1965, and still stands today as one of the finest facilities of its kind for small colleges in the country, as well as a focus for cultural events in the Twin Cities. Two new science buildings, equipped with the latest in scientific instruments and technology, are also among the best of their kind for small colleges in the U.S.

As on many campuses in the country, the early 1970s produced a period of change and fluctuation at Macalester. In 1975, the College conducted a self-study to review many of these changes. In 1976-77, the College issued a Long Range Report that recommitted the College to its liberal arts curriculum and reasserted five traditional and distinguishing strengths: involvement of students with faculty in the pursuit of learning; involvement with a diversity of people; involvement in international issues; involvement in the life of the metropolitan area; and involvement in service.

Under the leadership of President John B. Davis, Jr. since 1975, the College has pursued its goals and has made significant advances in scholastic achievement among faculty and students, in enrollment, in strengthening and enhancing existing programs and developing new ones, and in financial security. Macalester enters the decade of the 1980s with confidence in its commitment to the liberal arts, scholarship and service.

**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,* PhD., 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., LL.D., 1975-  
*Deceased

**Church Affiliation**

Macalester College opened its doors with the support of the United Presbyterian Church in the USA; the Church-College ties are still strong, still meaningful today. But from the beginning, Macalester's early leaders decided that the College should be non-sectarian in its instruction and attitudes. Their belief that the campus is a place to foster spiritual growth among people of many religions takes shape in the variety of religious offerings at the College.

The Board of Trustees adopted the following policy on the College and the Church on May 20, 1971:

"It is the policy of Macalester College to develop a relationship between the College
and the United Presbyterian Church in the USA and the rest of the ecumenical family that is responsive to the demanding problems of our age. This relationship will include certain tangible aspects such as trust monies, scholarships, and other Church-related contributions to the College. It will consist primarily, however, of efforts to sustain the kind of pluralism in the academic community that fosters a mature academic and existential encounter of members of the Macalester community with the Christian faith and that facilitates dialogue between those persons holding that faith and those persons committed to other beliefs and ideologies. It will also involve both the College and the Church with the rest of the ecumenical family in ministry to individuals through opportunities for worship, the development of Christian communities, and the facilitating of action born of Christian conviction. The relationship will give encouragement and support to the service and community involvement roles of the College.”

Macalester’s full-time Chaplain, the Rev. Russell Wigfield, is an ordained Presbyterian minister. Ecumenical worship services are held regularly in the beautiful Weyerhaeuser Memorial Chapel on the campus.

Scottish Heritage

Macalester College’s Scottish heritage goes back to its founders and early leaders, who were of Scottish descent, and to its first benefactor, Charles Macalester. In 1948, the Chief of the Clan MacAlister in Scotland, Lt. Colonel Charles Godrey Summerville MacAlister of Loup and Kennox, adopted the College into the Clan. The College’s student Pipe Band and Highland Dancers wear the authentic tartan of Clan MacAlister. Each May, the College celebrates its Scottish heritage when it holds the Scottish Country Fair. The event features bagpipe competitions, highland dancing, ancient games of brawn and Scottish foods.

The sound of bagpipes is frequently heard on the campus in the warm months, reminding the campus community of its links to Scotland.

Consortium Memberships

Associated Colleges of the Midwest (ACM): A consortium of 13 small, private liberal arts colleges that develop a variety of cooperative off-campus programs.

Upper Midwest Association for Inter-Cultural Education (UMAIE): A consortium of 10 colleges which cooperate to provide depth and resources for an international curriculum.

Associated Colleges of the Twin Cities (ACTC): A consortium of five liberal arts colleges in St. Paul and Minneapolis, formed to develop cooperative programs and offer cross-registration to their students.

Macalester also takes part in an exchange with the Minneapolis College of Art and Design, in which students from each institution can cross-register for classes.

Accreditations, Approvals and Memberships

Accredited by: North Central Association of Colleges and Secondary Schools; The National Council for Teacher Education.
Approved by: American Chemical Society; The National Association of Schools of Music.

Memberships: Association of American Colleges; The Presbyterian College Union; The Minnesota Association of Colleges; The American Association of Colleges for Teacher Education.

National honor societies: Phi Beta Kappa as well as national honor societies for students of chemistry, classics, dramatics, economics and business, French, geography, German, history, mathematics, political science, sociology and speech.

## Enrollment Statistics 1979-80

### Enrollment, Fall Term 1979

<table>
<thead>
<tr>
<th></th>
<th>Men</th>
<th>Women</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree-Seeking Students</td>
<td>859</td>
<td>837</td>
<td>1696</td>
</tr>
<tr>
<td>Special Students</td>
<td>28</td>
<td>59</td>
<td>87</td>
</tr>
<tr>
<td>Total</td>
<td>887</td>
<td>896</td>
<td>1783</td>
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### Geographical Distribution, Fall Term, 1979

<table>
<thead>
<tr>
<th></th>
<th>Number of Students</th>
<th>Percentage of Student Body</th>
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</thead>
<tbody>
<tr>
<td>Ramsey County</td>
<td>285</td>
<td>16.0</td>
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<tr>
<td>Hennepin County</td>
<td>254</td>
<td>14.2</td>
</tr>
<tr>
<td>Minnesota (outside Twin Cities)</td>
<td>312</td>
<td>17.5</td>
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<tr>
<td>U.S. (excluding Minnesota)</td>
<td>768</td>
<td>43.1</td>
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<tr>
<td>Foreign Countries</td>
<td>152</td>
<td>8.5</td>
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<tr>
<td>U.S. Students Residing Abroad</td>
<td>12</td>
<td>.7</td>
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<tr>
<td>Total</td>
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### Home States

- Arizona, 4
- Arkansas, 2
- California, 26
- Colorado, 16
- Connecticut, 17
- Delaware, 2
- Florida, 6
- Georgia, 3
- Hawaii, 5
- Idaho, 1
- Illinois, 167
- Indiana, 12
- Iowa, 44
- Kansas, 8
- Kentucky, 2
- Louisiana, 2
- Maine, 4
- Maryland, 23
- Massachusetts, 32
- Michigan, 17
- Minnesota, 851
- Mississippi, 1
- Missouri, 42
- Montana, 6
- Nebraska, 11
- Nevada, 1
- New Hampshire, 4
- New Jersey, 16
- New Mexico, 3
- New York, 41
- North Carolina, 2
- North Dakota, 10
- Ohio, 52
- Oklahoma, 3
- Oregon, 13
- Pennsylvania, 13
- Puerto Rico, 15
- Rhode Island, 5
- South Carolina, 1
- South Dakota, 12
- Tennessee, 4
- Texas, 6
- Utah, 2
- Vermont, 1
- Virginia, 8
- Washington, 12
- West Virginia, 1
- Wisconsin, 86
- Wyoming, 2
- District of Columbia, 2

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Enrollment Statistics

Home Countries

Austria, 2  Hong Kong, 2  Norway, 1
Cameroon, 2  Iceland, 2  Panama, 1
Canada, 7  India, 1  Peru, 1
Colombia, 2  Iran, 12  Saudi Arabia, 35
Costa Rica, 1  Israel, 1  South Korea, 3
Denmark, 1  Japan, 7  South Vietnam, 1
Egypt, 1  Kuwait, 11  Sudan, 1
El Salvador, 5  Libya, 1  Sweden, 3
Ethiopia, 1  Malaysia, 25  Taiwan, 1
Finland, 2  Mexico, 3  Thailand, 2
France, 1  Morocco, 1  Turkey, 1
Ghana, 1  Netherlands, 1  United Arab Emirates, 2
Greece, 2  Nigeria, 1  Venezuela, 4

Racial/Ethnic Background, Fall Term 1979

<table>
<thead>
<tr>
<th></th>
<th>Number of Students</th>
<th>Percent</th>
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<tr>
<td>White American</td>
<td>1505</td>
<td>84.4</td>
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<tr>
<td>Foreign</td>
<td>152</td>
<td>8.5</td>
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<tr>
<td>Black American</td>
<td>56</td>
<td>3.1</td>
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<tr>
<td>Hispanic American</td>
<td>35</td>
<td>2.0</td>
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<tr>
<td>Native American</td>
<td>21</td>
<td>1.2</td>
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<tr>
<td>Asian American</td>
<td>14</td>
<td>0.8</td>
</tr>
<tr>
<td>Total</td>
<td>1783</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Class of 1979 B.A. Degree by Department/Program (includes double majors)

Anthropology, 13
Art, 21
Biology, 24
Chemistry, 13
Dramatic Arts, 7
East Asian Studies, 3
Economics, 47
English, 28
Environmental Studies, 6
French, 9
Geography, 11
Geology, 9
German, 10
History, 35
Interdepartmental, 7
International Studies, 7

Law & Society, 1
Linguistics, 3
Mathematics, 20
Music, 13
Philosophy, 10
Physics, 4
Political Science, 33
Psychology, 48
Religious Studies, 8
Russian, 1
Russian Area Studies, 3
Social Science, 2
Sociology, 17
Spanish, 10
Speech, 14
Urban Studies, 3
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John M. Warder, President, First Plymouth National Bank, Minneapolis
F. T. Weyerhaeuser, President, Conwed Corporation, St. Paul
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George A. Mairs, Jr., Mairs & Power, St. Paul
Harvey M. Rice, President Emeritus, Macalester College, St. Petersburg, Florida
The Reverend Irving A. West, Pastor Emeritus, House of Hope Presbyterian Church, St. Paul
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E.W. Ziebarth, Professor, University of Minnesota, Minneapolis
Officers of the College
Emeriti Faculty

Administration

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Vice President for Academic Affairs
Vice President for Financial Affairs
Vice President for Development and Alumni Affairs
Dean of Students
Dean of Admissions

Emeriti Faculty

Professors Emeriti
(Dates in parentheses indicate years of first appointment at and official retirement from Macalester.)

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.

Evelyn Antonsen Albinson. Professor of German (1947-77); B.A., University of Minnesota, 1941; M.A., University of Minnesota, 1944; Ph.D., University of Minnesota, 1967.

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.

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.

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.
Emeriti Faculty

Faculty

Hildegard Binder Johnson. Professor of Geography (1947-75); M.A., University of Berlin, 1933; Ph.D., University of Berlin, 1934; D.H.L., Macalester College, 1975.

A. Elizabeth Leinbach. Associate Professor of Religious Education (1948-66); B.S., University of Minnesota, 1926; M.A., Columbia University, 1928.


Mary Gwen Owen. Professor of Speech and Drama (1928-68); B.A., Macalester College, 1923; M.A., University of Minnesota, 1936; D.H.L., 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.

Arthur R. Upgren. F. R. Bigelow Professor of Economics (1957-65); B.A., University of Wisconsin, 1920; Ph.D., University of Minnesota, 1937.

Franz Xavier Westermeier. Associate Professor of German (1947-77); B.A., College of St. Thomas, 1941; M.A., University of Minnesota, 1955.

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.


Faculty

(Date in parentheses indicates year of first appointment at Macalester College.)

Marc R. Anderberg. Assistant Professor of Political Science (1976); B.A., University of Missouri, 1971; M.A., University of Iowa, 1973; Ph.D., University of Iowa, 1978.

Jean K. Archibald. Adjunct Associate Professor (1966); B.S., Simmons College, 1939.


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. Associate 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; M.A., University of Minnesota, 1960; Ph.D., University of Minnesota, 1962.
Daniel J. Balik. Lecturer in Mathematics (1976); B.A., Coe College, 1968; M.S., University of Iowa, 1971.

Robert Bruce Banks. Visiting Assistant Professor of Chemistry (1980); B.A., Vanderbilt University, 1970; M.S., Florida State University, 1976; Ph.D., Florida State University, 1976.


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.

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.

Robert Logan Bunting. FR. Bigelow Professor of Economics (1969); M.A., University of Chicago, 1948; Ph.D., University of Chicago, 1958.


Anthony Caponi. Professor of Art (1949); B.S., University of Minnesota, 1948; M.Ed., University of Minnesota, 1949.

Janet L. Carlson. Assistant Professor of Chemistry (1978); B.A., Hamline University, 1974; Ph.D., Stanford University, 1978.


Richard Coleman Clark. Professor of German (1968); B.A., Temple University, 1942; M.A., University of Pennsylvania, 1949; Ph.D., University of Pennsylvania, 1954.


Robert Jay Dassett, Jr. Professor of Spanish (1947); B.A., University of Minnesota, 1939; B.S., University of Minnesota, 1942; M.A., University of Minnesota, 1953.


Dorothy Dodge. James Wallace Professor of Political Science (1955); B.A., University of
Faculty


Cherie Doyle. Lecturer and Curator in Art (1975); B.A., Macalester College, 1972; M.F.A., Cranbrook Academy, 1974.

R. Ellis Dye. 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.


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.


Jerry K. Fisher. Associate Professor of History (1969); B.A., Macalester College, 1959; M.Div., Union Theological Seminary, 1964; Ph.D., University of Virginia, 1974.


Julia Friedman. Assistant Professor of Economics (1979); B.A., University of Missouri, 1965; M.A., University of Oregon, 1970; Ph.D., University of Oregon, 1973.

Giles Y. Gamble. Associate Professor of English (1967); A.B., Earlham College, 1956; Ph.D., Stanford University, 1969.

Charles Raymond Green. Professor of Political Science (1965); B.A., Augustana College, 1957; M.A., University of Illinois, 1959; Ph.D., University of Illinois, 1960.


Martin Gunderson. Assistant Professor of Philosophy (1973); B.A., Macalester College, 1968; M.A., Cornell University, 1971; Ph.D., Cornell University, 1972.

Alexander Guss. Associate Professor of Russian (1963); B.S., Sophia University, 1956; M.S., Georgetown University, 1960.

Douglas P. Hatfield. Professor of Speech Communication and Dramatic Arts (1955); B.S., University of Minnesota, 1951; M.A., University of Minnesota, 1961; Ph.D., University of Minnesota, 1969.

William Harley Henry. Associate Professor of English (1966); B.A., Kenyon College, 1959; B.A., Oxford University, 1961; M.A., Johns Hopkins University, 1963; M.A., Oxford University, 1967; Ph.D., Johns Hopkins University, 1970.

Eddie P. Hill. Professor of Biology (1964); B.A., Nebraska State Teachers College, 1952;
M.A., Colorado State College, 1957; Ph.D., University of Nebraska, 1962.

Elizabeth J. Hills. Lecturer in Education (1979); B.S., University of Minnesota, 1949; M.A., University of Minnesota, 1954.

H. Arnold Holtz. Professor of Education (1946); B.S., Wisconsin State, 1940; M.A., University of Minnesota, 1944; Ph.D., University of Minnesota, 1959.


Michael A. Hopp. Visiting Assistant Professor of Psychology (1977); B.A., University of Minnesota, 1970; Ph.D., University of Minnesota, 1976.

David Henry Hopper. James Wallace Professor of Religious Studies (1959); B.A., Yale University, 1950; B.D., Princeton Theological Seminary, 1953; Th.D., Princeton Theological Seminary, 1959.

Howard F. Huelster. Associate Professor of English (1949); B.A., Macalester College, 1949; M.A., University of Minnesota, 1958.


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Technical Assistants


Studio Instructors

Lynne Aspnes. Harp (1978)
Edward D. Berryman. Organ (1963); B.A., M.A., S.M.D.
Barbara Brooks. Lab Class Piano (1980)
Christine Dahl. Piano (1975); B.A., M.M.
Marvin Dahlgren. Percussion (1975)
John Einweck. Jazz Piano (1979)
Adyline Felsted. Voice (1967)
Rachel Green. Oboe (1974); B.S.
Florence Hart. Highland Dance (1965)
Michael Hauser. Flamenco Guitar (1972)
Camilla Heller. Cello (1976)
Gladys Hubner. Harp (1971)
William Jones. Bassoon (1977)
Winston Kaehler. Organ and Harpsichord (1978)
Leonard Klun. Trumpet (1979)
Paul Maybery. Tuba (1979)
Celeste O’Brien. Piano (1969); B.A.
James Riccardo. Violin (1979)
Allan Roberts. Voice (1978)
John Roth. Classical Guitar and Acoustical Bass (1978)
Kathryn Sandquist. Piano (1978)
Emma Small. Voice (1975); B.M.
Tamas Strasser. Viola (1978)
Madeleine Titus. Class Piano (1952); B.M.
Beverly White. Recorder and Viol (1972); B.A., M.A.
Cloyde Williams. Clarinet (1971)
Lawrence Wilson. Piano (1974); B.A., M.M.
Mary Wilson. Flute (1954); B.A., B.M.
Susan Woodruff. Vocal Coach (1979)

Artists-in-Residence

Joseph Roche, Violin, Macalester Trio (1971)
Camilla Heller, Cello, Macalester Trio (1971)
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9. Doty Hall  
10. Dupre Hall  
11. Kagin Dining Commons  
12. Winton Health Service  
13. Student Union  
14. Dayton Hall  
15. Kirk Hall  
16. Gymnasium and Pool  
17. Field House  
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19. Stadium/Stadium Dormitory  
20. Athletic Field and Tartan Track  
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24. Black House (205 Macalester)  
25. Hispanic House (1662 Princeton)  
26. German House (190 Vernon)  
27. Hugh S. Alexander Alumni House (1685 Lincoln)  
28. Mac Market  
29. Hebrew and Russian House (37 Macalester)  
30. Spanish House (34 Cambridge)  
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32. International Center (1635 Summit)  
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(Admissions forms, College publications, and information about specific academic programs.)

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Bursar's Office ................................................................. (612) 647-6161
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(Registration information, transfer credit policy, and requests for transcripts.)

Office of the Dean of Students ................................................. (612) 647-6220
(General information about student life, housing, health, special programs, and counseling services.)

International Center ............................................................ (612) 647-6310
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