Catalog Statement

All statements contained in this catalog reflect the approved policies of Macalester College that were in effect as of April 1, 1984. 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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1984-85 Calendar

**Fall Term 1984**

- Sept. 4-7/Tues.-Fri.  New Student Orientation
- Sept. 7/Fri.  New Student Registration
- Sept. 10/Mon.  Upperclass Validation and Beginning of Classes
- Sept. 21/Fri.  Last Day to Register or Validate
- Sept. 28/Fri.  Last Day to Add a Class, Drop a Class (No Notation), and Designate Grading Options
- Oct. 26/Fri.  Fall Mid-Term Break
- Nov. 2/Fri.  Last Day to Withdraw; Incompletes Due from Spring, Summer 1984
- Nov. 5-9/Mon.-Fri.  Interim 1985 Class Registration
- Nov. 19-Dec. 7/Mon.-Fri.  Spring 1985 Class Registration
- Nov. 22-25/Thurs.-Sun.  Thanksgiving Recess
- Dec. 14/Fri.  Classes End
- Dec. 17-20/Mon.-Thurs.  Final Examinations

**Interim Term 1985**

- Jan. 7/Mon.  Classes Begin
- Jan. 9/Wed.  Last Day to Register, Add a Class, and Drop a Class (No Notation)
- Jan. 18/Fri.  Last Day to Withdraw from a Class
- Jan. 31/Thurs.  Classes End

**Spring Term 1985**

- Feb. 4/Mon.  Validation of Registration and Beginning of Classes
- Feb. 15/Fri.  Last Day to Register or Validate
- Feb. 22/Fri.  Last Day to Add a Class, Drop a Class (No Notation), and Designate Grading Options; Incompletes Due from Interim 1985
- Mar. 29/Fri.  Last Day to Withdraw; Incompletes Due from Fall 1984
- Apr. 1-5/Mon.-Fri.  Spring Mid-Term Break
- Apr. 30-May 10/Tues.-Fri.  Fall 1985 Class Registration
- May 17/Fri.  Classes End
- May 20-23/Mon.-Thurs.  Final Examinations
- May 25/Sat.  Baccalaureate and Commencement
1985-86 Calendar

Fall Term 1985

Sept. 3-6/Tues.-Fri.  New Student Orientation
Sept. 6/Fri.  New Student Registration
Sept. 9/Mon.  Upperclass Validation and Beginning of Classes
Sept. 20/Fri.  Last Day to Register or Validate
Sept. 27/Fri.  Last Day to Add a Class, Drop a Class
              (No Notation), and Designate Grading Options
Oct. 25/Fri.  Fall Mid-Term Break
Nov. 1/Fri.  Last Day to Withdraw; Incompletes Due from
              Spring, Summer 1985
Nov. 4-8/Mon.-Fri.  Interim 1986 Class Registration
Nov. 18-Dec. 6/Mon.-Fri.  Spring 1986 Class Registration
Nov. 28-Dec. 1/Thurs.-Sun.  Thanksgiving Recess
Dec. 13/Fri.  Classes End
Dec. 16-19/Mon.-Thurs.  Final Examinations

Interim Term 1986

Jan. 6/Mon.  Classes Begin
Jan. 8/Wed.  Last Day to Register, Add a Class and Drop a Class
            (No Notation)
Jan. 17/Fri.  Last Day to Withdraw from a Class
Jan. 31/Fri.  Classes End

Spring Term 1986

Feb. 5/Wed.  Validation of Registration and Beginning of Classes
Feb. 18/Tues.  Last Day to Register or Validate
Feb. 25/Tues.  Last Day to Add a Class, Drop a Class
              (No Notation), and Designate Grading Options;
              Incompletes Due from Interim 1986
Mar. 24-28/Mon.-Fri.  Spring Mid-Term Break
Apr. 8/Tues.  Last Day to Withdraw; Incompletes Due from Fall
              1985
Apr. 29-May 9/Tues.-Fri.  Fall 1986 Class Registration
May 16/Fri.  Classes End
May 19-22/Mon.-Thurs.  Final Examinations
May 24/Sat.  Baccalaureate and Commencement
Statement of Purpose and Belief

Macalester College is an academic and 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, and 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.

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 1851 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 St. 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 St. 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. Especially notable were the efforts of Dr. James Wallace, who for 12 years, both as acting president from 1898 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.

During the 1940s, the Scottish heritage of the College's early benefactor, Charles Macalester, became a living force at the College. In 1948, the Chief of the Clan of MacAlister in Scotland, Lt. Colonel Charles Godfrey Summerville McAlister of Loup and Kennox, adopted the College into the Clan. Today, the College's student Pipe Band and Highland Dancers wear the authentic tartan of Clan...
MacAlister. Each May the College celebrates its Scottish heritage with the Scottish Country Fair featuring bagpipe competitions, highland dancing, ancient games of brawn and Scottish foods. The sound of bagpipes is frequently heard on the campus during the warm months, reminding the College community of its links to Scotland.

The decade of the 1960s brought a remarkable period of growth and change for the College. 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, who died in 1981, was 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 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 United States. A new swimming pool and renovated gymnasium facilities opened in 1983, and a powerful new computer doubled the capacity for academic computing on campus. The building program continues with plans for expanded library facilities.

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. from 1975 to 1984, the College pursued high goals and made significant advances in its endowment and scholarship programs as well as in scholastic achievement of its faculty and students. Rhodes scholars, Fulbright scholars and National Science Foundation Fellows, among other honors, attest to that high standard of excellence that is the hallmark of Macalester faculty and students. Robert M. Gavin, Jr. was named president of Macalester in 1984, dedicated to continued pursuit of the college's high ideals. The observance during 1985-86 of Macalester's centennial will be an early highlight of his term. Proud of its accomplishments to date, the College looks forward to the future 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,* Ph.D., LL.D., D.D., 1984-1906
Thomas Morey Hodgman,* LL.D., 1907-1917
Rev. Elmer Allen Bess,* D.D., 1918-1923
John Carey Acheson,* A.M., LL.D., 1924-1937
Robert M. Gavin, Jr., B.A., Ph.D., 1984-

* Deceased

Church Affiliation

Macalester College opened its doors with the support of the Presbyterian Church. The Church-College ties are still strong and meaningful today. From the beginning, Macalester's 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 facilitate 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 College and the Presbyterian Church (USA) through the Synod of Lakes and Prairies signed a Covenant in 1983 which speaks of certain common purposes and concerns of the College and the Church. It details commitments and affirmations made by Macalester College and by the Synod of Lakes and Prairies.

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.
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Earl T. Winget, Jr., Edina, Minnesota

Dr. E.W. Ziebarth, Professor Emeritus, University of Minnesota, St. Paul
Admissions, Expenses and Financial Aid
Admissions Policies

The nature of a college is strongly affected by the people who study there. 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; 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 be a part of an admission process which operates on a national and selective basis, many other factors are 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 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

Macalester expects its applicants to have completed a secondary school curriculum consisting of: four years of English; three years of history or social science; three years of mathematics; three years of laboratory science; and three years of foreign language. In addition, Macalester expects its applicants will have taken at least some of the honors or advanced courses available at their secondary schools.

Macalester uses no minimum grade point average as a threshold for admission, and no applicant will be disqualified for lacking a particular course. Any applicant who has not been able to meet all of the above expectations is encouraged to consult with a Macalester Admissions Counselor.
Admissions Policies

College Entrance Testing

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 recommended. The achievement tests of the College Entrance Examination Board are not required for admission; however, they are used for placement in mathematics, the sciences and languages. Students considering these fields for further study should take the appropriate achievement tests.

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. The Minnesota College Admission Form cannot be used for application to Macalester.

A $20 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 a brief explanation of the factor 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 must file their application and supporting materials by December 1 of the senior year. Early Decision candidates should make sure that their schools submit grades through the first quarter or trimester of senior year. Financial aid forms should be submitted as soon as possible after the first of the year. Each Early Decision applicant will receive one of three responses from the Admissions Office: admission, postponement for later consideration or denial of admission. Candidates admitted under the Early Decision program 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. In cases where additional information will enable the Admissions Office to make a more sensitive evaluation, applications will be postponed and considered with the Regular Application group receiving notification on March 15. Some candidates for Early Decision will also be denied admission in December and not held for reconsideration in the spring.

Regular Application: Macalester offers two choices within its regular application process—notification on February 15 or March 15. Students who choose to be notified by February 15 should file all application materials including financial aid information by January 15. If accepted for admission the student must make a non-refundable deposit by March 15 (or two weeks after receipt of an aid award), to hold a place in the freshman class. Students who chose to be notified on March 15 must submit all application materials by February 15. Under this notification plan, the deadline for deposit to insure a place in the entering class is the national Candidate’s Reply Date of May 1. Applicants should choose their
Macalester notification date carefully, so that it coincides with reply dates from other colleges they are considering. For all Macalester admission plans, candidates are urged to submit their applications as far before the deadline as possible to insure the most careful consideration by the Admissions Office. Students whose credentials are not received by February 15 will be considered if additional places are available in the entering class. Housing and financial aid will also be subject to availability.

Freshmen applying for financial aid should complete the Financial Aid Form (FAF) or Family Financial Statement (FFS) using federal income tax information for the previous year. (Applicants for the academic year 1985-86 should submit the 1984 financial information. Applicants for the academic year 1986-87 should submit 1985 financial information.) Minnesota residents must complete the FFS.

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 considerations for early admission are the judgments of the Admissions committee, the secondary school principal or college adviser, and the school faculty concerning the candidate’s maturity and qualifications to do distinguished work in college. An interview is almost always necessary. The regular admission 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 high potential but whose socio-economic background may have deprived them of an adequate preparation for college. For these students a flexible admissions policy has been established in which 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 test results transmitted to Macalester’s Dean of Admissions. 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 academic department involved 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 high school and college work. Transfer applicants should usually present a record of "B" (or 2.70 average) or better. The application fee for transfer students is $20.

Students considering transferring to Macalester may have their transcripts evaluated prior to applying by sending an official transcript and specifically requesting this service from 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 three 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. 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 evaluations.

Transfer candidates should note that no more than the equivalent of 16 Macalester course credits will be accepted. All candidates for a Macalester College degree must successfully complete at least fifteen credits at Macalester or on an approved Macalester program.

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 and attends a school not located on U.S. territory. All foreign students attending American schools should file a regular U.S. citizen application. However, they will be eligible for all services offered by the Macalester College International Center.

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 the application.

3. Original or certified copies, signed by the proper authority, of 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 the student’s school, a U.S. or international agency, 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, for students who 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 an 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 of the U.S. 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. Students who wish early notification will be informed by the Foreign Student Admissions Committee as soon as all application procedures have been completed. Students wishing on-campus housing should normally complete their applications by June 30.

The Adult Scholar Program

The Adult Scholar Program accepts up to 25 part-time students each year who want either to complete a B.A. degree or to begin college for the first time. To qualify for the program, the student must be at least 25 years old and must not have been enrolled in a baccalaureate 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, 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. There is no application fee.
Special Students

If a course is not fully enrolled by degree-seeking Macalester students, Special Student registration is sometimes possible. Financial aid is not 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 applications process, fees and tuition are different for each program.

Macalester graduates may take courses for credit by completing the Application for Readmission, available in the Registrar's Office. No application fee is required. Permission of the instructor is required to register for each course. Tuition in 1984-85 is $225 per course for one or two courses per term. Macalester graduates are also eligible to audit courses for $150 per course, or audit a physical education course and use the College's facilities a full year for $100.

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 and a letter from their college counselor or appropriate school administrator certifying that the course requested is not available at the school currently attended. An interview is required. The student must also have permission from the instructor to enroll in the desired class. Tuition per course is $225 in 1984-85.

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 $150 in 1984-85.

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 $150 in 1984-85.

Visitors to the Campus

Prospective students and others desiring guided campus tours should contact 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, January 1, Memorial Day, July 4, 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 Macalester 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 at (612) 696-6357.
## Tuition, Fees and Room and Board 1984-85

The tuition rate for full-time students (three or four credit courses per semester) for 1984-85 is $7,520 per year. Information about the 1985-86 tuition and fees will be available in the Admissions Office.

### Fees

<table>
<thead>
<tr>
<th>Fee Description</th>
<th>Amount</th>
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<tbody>
<tr>
<td>Application Fee</td>
<td>$20</td>
</tr>
<tr>
<td>Enrollment Deposit (applied to first semester tuition charge)</td>
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<td>Late Registration Fee</td>
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<td>Late Validation Fee</td>
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<td>Student Activity Fee</td>
<td>$75</td>
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</table>

### Tuition

**Regular:**
- Full-time, per academic year: $7,520
- Part-time, per course: $850
- Fifth course (per semester): $550
- Audit—Fifth course: $25

**Special:**
- Adult Scholar, per course up to 7 per year: $425
- Macalester Graduate, per course, one or two courses per term: $225
- Macalester Graduate, additional courses: $425
- High School Student, per course, one or two courses per term: $225
- High School Student, additional courses: $425
- Senior Citizen, per course, for credit or audit: $150
- Audit—Physical Education, including use of facilities for one year (Macalester graduates $100): $200
- Audit—other courses, all students: $150
- Credit by Examination: $150

**Music Lessons:**
- Private lessons, per term, non-major student: $112
- Class lessons, per term: $56
- Interim Term: Negotiated

### 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): $425
- Interim Term only student: $850

### Summer Session Tuition: See Summer Session Catalog

### Room and Board

<table>
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<td>Deposit (applied to fall semester room charges)</td>
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<td>Per academic year</td>
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<td>(Room — 1,320)</td>
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<tr>
<td>(Board — 1,280)</td>
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<tr>
<td>Language Houses (room only)</td>
<td>$1,520</td>
</tr>
</tbody>
</table>

### Interim Term Room and Board

- Full-time student (both semesters): No additional charge
- Full-time student (one semester): $160
- Interim Term only student: $320
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. Students assigned to College residence halls pay the $50 room deposit each year, it is credited against the following semester’s room charges.

Enrollment Deposit

Newly admitted students pay a one-time, non-refundable enrollment deposit of $150 to reserve places in the entering class. This deposit is applied to first semester tuition charges.

Refund Policy

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. (The $150 deposit is applied as a credit against first semester tuition charges.)

The room deposit made by new students is refundable only if: a) notice of cancellation is received prior to July 1 for the fall term or December 1 for the interim or spring terms, or b) a student is unable to secure a space in the residence halls due to a lack of rooms.

The room deposit made by returning students is non-refundable.

No tuition is refunded or credited after the last day on which courses may be added or dropped without transcript notation (15th class day of the semester). Refunds for withdrawal during the first 15 class days of the semester are as follows: a) 1st - 5th day: 75 percent; b) 6th - 10th day: 50 percent; c) 11th - 15th day: 25 percent.

The same policy and procedure apply when a student officially changes from full-time to part-time status, or officially drops or withdraws from a fifth course. No refunds are granted without first receiving notice of leave of absence from the Dean of Students, or notice of course withdrawal from Academic Records.

Room and board refunds are made on a pro-rata basis only to students who leave the College. One week is added to the official date of room vacancy when computing the pro-rata refund. No room refunds are made after the 15th class day of the semester unless the room contract is transferred. Students who move out of College residences but remain enrolled in the College are not eligible for room and board refund. Students may arrange a transfer of the room and board contract to another student with approval of the Office of Residential Life. Appeals of the room and board section of the refund policy are made to the Director of Residential Life.

Students receiving financial aid who receive tuition and/or room and board refunds will receive a similar reduction in their total financial aid package. (See the Financial Aid section of the Student Handbook for additional refund policy information.)

The student activity fee is non-refundable.
Expenses

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

Students leaving the College any time after registration without being granted a leave of absence, or by reason of being suspended or dropped, will not be eligible for any refund under this policy.

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

The Dean of Students may authorize exceptions to any part of this refund policy. For more information on the refund policy, contact the comptroller.

Payment of Student Accounts

Students are billed for the fall term during mid-July, with charges due and payable on or before August 15. Students are billed for the spring term on December 15, with charges due and payable on or before January 15.

What is owed the College is determined by subtracting actual credits from the charges for the term. For each term, 50 percent of the yearly Macalester scholarship and grant aid 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 Pell Grant 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 or her family.

A budget payment plan makes it possible for students and their families to spread a semester’s payments over a period of months, with 40 percent payable at the beginning of the term and 20 percent in each of the following months. A Parent Loan Program is available, as well as several independently sponsored monthly payment plans with optional insurance and extended payment features. Information and application materials are available from the Bursar’s Office, Macalester College, 1600 Grand Avenue, St. Paul, Minnesota 55105.

Financial Aid

The elements that make possible a high-quality education—excellent faculty members, small classes, individual study opportunities, and fine equipment and facilities—are expensive. Generally speaking, cost is related to quality. The primary responsibility for meeting this cost remains with students and their families. If costs are a concern, we recommend that you apply for financial aid from Macalester and other sources.

The amount of financial aid a student receives is based upon a determination of how much the family can reasonably afford to contribute, compared with the price of attending Macalester. To be considered for financial aid, a student’s parents must submit either a Financial Aid Form (FAF) to the College Scholarship Service, or a Family Financial Statement (FFS) to the American College Testing Program. The contribution expected of the student and family is determined by an analysis of the FAF or FFS data submitted by the processing service and an evaluation provided by the Macalester Financial Aid Office.
Upon determination of the expected contribution, a student’s financial need is derived and an aid package is offered.

Students interested in seeking financial aid should file admission and financial aid applications by March 1. The Macalester Financial Aid Application is included in the Admissions Application Booklet.

Macalester's financial aid program is open to all full-time students attending classes during the academic year from September through May. Financial aid is not available for summer term courses, although the College can help some students secure outside loans for summer school expenses. A student may receive Macalester aid up to eight semesters assuming other criteria are met.

All students applying for Macalester financial aid are required to seek and maintain scholarships offered by organizations in their communities, parents' employers, and fraternal organizations. All students are required to apply for a federal Pell Grant and students from Minnesota are expected to apply for aid through the Minnesota State Scholarship and Grant Program. All financial assistance from outside sources should be reported to the Financial Aid Office so it may be coordinated with Macalester aid.

Only incoming students filing for aid on an independent basis (i.e., financially independent from their families) will be considered for financial aid on an independent student basis for succeeding years. The federal government and State of Minnesota are re-evaluating their definitions of an independent student. Students considering filing for aid as independent students are encouraged to contact the Macalester Admissions Office before completing their applications.

Returning students need to reapply for financial aid each year. Renewal aid forms are distributed to Macalester students in December so students and their families may complete them before March 15. Renewed aid is awarded before the end of the academic year so students with work-study contracts may obtain their jobs for the following year. Macalester financial aid officers are available for consultation throughout the year and encourage students to make appointments to discuss their financial concerns.

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 Pell Grant by completing the appropriate box on either the FFS or FAF so that you will be considered for this type of federal assistance. Pell Student Aid 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 and state requirements and 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.

**Types of Assistance**

Financial aid is generally awarded in the form of a package including scholarship, work, and loan funds. Awards range from $100 to the full cost of attendance. The amount of each type of aid varies according to College funds, the student's need, and College aid policies. During 1983-84 about 65 percent of Macalester's 1,550 full-time students received financial assistance amounting to $5.4 million. Approximately 70 percent of this amount was gift aid.

**Macalester College Scholarships**

*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.

**Macalester College National Merit Scholarships** are awarded to National Merit Finalists who have designated Macalester as their first-choice college. The National Merit Scholarship Corporation awards from $750 to $2,000 annually, depending on financial need. Macalester augments minimum awards with an additional $750 scholarship. Each scholarship also includes, for recipients in their junior year at Macalester, a travel grant to support participation in an off-campus program.

**DeWitt Wallace Distinguished Scholarships** are awarded to students who are National Merit Finalists or Commended Students and who have achieved a strong high school record. The minimum annual award of $1,500 can be increased according to financial need.

**DeWitt Wallace St. Paul Scholarships** are awarded to students who have graduated from secondary schools in Ramsey, Washington, or Dakota Counties, or whose parents live in one of the three counties. These scholarships are awarded competitively to students who have achieved a strong high school record and show potential to do well at Macalester. Our admissions staff selects recipients on the basis of information from the student’s admission application. The minimum scholarship of $1,500 can be increased according to financial need. This program also includes, for recipients in their junior year, a travel grant to support off-campus study.
DeWitt Wallace Scholarships are awarded to middle-income students with good academic records who need special financial help to attend Macalester. The amount of this scholarship will vary depending upon the student’s financial need. The need will be determined from information on the admissions and financial aid applications.

National Presbyterian Scholarships are awarded to members of the United Presbyterian Church in the U.S.A. Recipients are selected by the National Presbyterian Scholarship Committee in the spring. Awards can provide up to $1,400 a year. Applications may be obtained from local church offices and must be submitted to meet the December 1 deadline.

Synod of Lakes and Prairies Scholarships are awarded to students who are members of Presbyterian churches in this synod. The amount of the award will vary with a student’s financial need. Applications are available from individual churches or the Macalester Admissions Office. The application deadline is March 1.

Federal Government Assistance

Pell (Basic) Grants Program. This is the largest federal grant program. Awards to students are based on their enrollment status, their financial need and the cost of education at the school they plan to attend. The 1984-85 maximum award is $1,900. Application is made by simply checking the appropriate box on either the FAF or FFS. Notification of eligibility will be sent to your home in the form of a Pell Grant Student Aid Report (SAR).

Supplemental Educational Opportunity Grants (SEOG). This federal grant program provides colleges with funds to help financially needy students with their educational costs.

Federal College Work-Study Program (CWS). Work-study jobs are offered to students who demonstrate financial need. Under the program, Macalester pays at least 20 percent of the student’s wages and the federal governments pays the remaining 80 percent. Macalester provides nearly 750 on-campus jobs in administrative and service offices, academic departments, the library, grounds crew, etc. Job placement is determined from the student’s interest, abilities, and the pool of available jobs. Upperclass students may participate in internships and work-study employment off-campus.

Loans

National Direct Student Loan Program (NDSL). This federal program provides low interest loans to students as part of their aid package. The exact amount of the loan depends on the financial need, the funds that are available, and the aid policies of Macalester. Students may borrow up to $3,000 for their first two years in college and $6,000 for their undergraduate years. Repayment and the 5 percent interest rate on the loan begins six months after completion of the student’s undergraduate or graduate study, or if he or she is no longer enrolled on at least a half-time basis.

Guaranteed Student Loan (GSL). Guaranteed Student Loans are available to all families with annual income under $30,000 and to many families with incomes exceeding this amount. Families not eligible for grants or federal work-study loans may be considered for this loan by submitting the FFS or FAF, or by completing a one page application which will be processed by Macalester. Students may apply to banks, savings and loan associations, credit unions or state-guarantee agencies that lend under the program. The maximum annual loan
Financial Aid

is $2,500; the exact amount of the loan depends on federal guidelines. The student must pay a 5 percent loan origination fee, but no interest is charged, nor is any repayment required while the student is in college. For all first-time borrowers after September 15, 1983, an eight percent interest charge begins during the repayment period.

Parent Loans for Undergraduate Students (PLUS). Parent Loans for Undergraduate Students is a relatively new federal loan program under which parents may borrow up to $3,000 per year for each student, not to exceed $15,000 for the student's undergraduate study. Macalester offers a 2 percent subsidy for all PLUS loans for Macalester families obtained from First Bank Grand in St. Paul, reducing the loan rate to 10 percent. First installment is due 60 days after the loan is obtained. Applications are available from Macalester's Financial Aid Office.

State of Minnesota Aid

Minnesota State Scholarship/Grant Program. All students who are applying for financial aid must apply for a State Scholarship/Grant. Application is made by submitting the FFS to the Minnesota Higher Educational Coordinating Board (Code 6500). In 1983-84 280 Macalester students received an average grant of $1,510 through this program.

Minnesota State Work-Study Program. Minnesota residents who have demonstrated financial need are eligible to receive state work-study funds.

Minnesota State Student Loan Program (MSSLP). All Macalester students—Minnesota residents and non-residents—who are unable to obtain a Guaranteed Student Loan through a private lender may apply for a low interest loan through the MSSLP. Terms of the loan and borrowing amount are the same as through a private GSL lender.

Satisfactory Academic Progress

According to the Higher Education Amendments of 1976, post-secondary institutions are required to establish standards of Satisfactory Academic Progress for students receiving financial aid from the federal government. The concept of satisfactory progress mandates that both grade point average and the number of credits completed be monitored. In complying with the requirement, Macalester College has developed the standards cited below for Satisfactory Academic Progress.

Each full-time student is allowed 5 years (10 semesters) to complete a Bachelor of Arts degree and receive federal financial aid. Students attending half-time are allowed 20 semesters of federal aid with a GPA equivalent to that required of full-time students. It should be noted that although ten semesters of eligibility are allowed for federal funds, eight semesters is the limit for College funds.
Satisfactory Academic Progress Requirements

At the completion of this full-time semester  A student must have accrued at least this many credits*  With at least this grade point average

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<tr>
<td>10</td>
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*Excludes interim credits

Students who do not meet these standards will be placed on financial aid probation. A student on probation must register for and complete four classes with at least a 2.00 average. Students who fulfill these requirements will continue to receive aid and will remain on probation until satisfactory academic progress as defined by the chart has been achieved.

Students who do not meet the requirements of the probation semester will be placed on strict financial aid probation. If during this semester the student fails to complete four classes with at least a “C” average, federal financial aid will be terminated.

If a student feels mitigating circumstances affected performance, a written appeal with supporting documentation can be submitted to the Financial Aid Office. The financial aid officers will review the appeal and notify the student of their decision. A student whose appeal is not approved may present a final appeal to the Macalester Academic Standing Committee.
in an amount the exact amount of the loan depends on federal guidelines. The student must meet a 6-year payment period requirement for the loan and any interest earned will be capitalized to the principal balance. For complete details, refer to the specific guidelines for the Federal Parent Loan for Undergraduate Students (FPPLF). Parent Loans for Undergraduate Students is a relatively new federal loan program under which parents may borrow up to $4,000 per year for each student, not to exceed $13,000 for the student's undergraduate study. Macaulay offers a 7 percent subsidy for all PDPLF loans for Macaulay Family obtain from First Bank.

Grants for PDPLF, excluding the loan rate (6.5 percent first installment) is due 60 days after enrollment is obtained. Applications are available from Macaulay's Financial Aid Office.

State of Michigan (A) (A)

Michigan State Scholarship/Grant Program. All students who are eligible for financial aid must apply for a State Scholarship/Grant. Applications are available at: (A) (A)

Financial Aid Office (A) (A)

The Michigan State Scholarship Program is designed to assist full-time and part-time undergraduate students. The program provides financial aid to students who are enrolled in an eligible educational institution in the State of Michigan. Macaulay offers the standards for eligibility and the College awards merit-based scholarships to the students.
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.

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. The drop/add deadline for interim term is the third course day of the term.

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 term courses often include research in libraries, studios, laboratories or museums, and involve films, guest lecturers and trips.

The Summer Session

Macalester offers a summer session of two four-week terms. In a typical summer, more than 75 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 or internship as a third course spread over the two terms. The drop/add deadline for the Summer Session is the third course day of the session. Macalester admits students from other colleges and advanced high school students to the summer session. Several institutes are also held on campus, including the Twin City Institute for Talented Youth, which enrolls 350 high school students from St. Paul and Minneapolis, the Taft Institute of Government, and Elderhostel.
Statement from the Faculty

Graduation Requirements

The philosophy of the following statement is an outgrowth of extended faculty discussion and debate during the 1981 academic year. This discussion recognized the personal guidance that faculty can offer Macalester students in developing a course of study for each student that ensures the best preparation for lifelong achievement and leadership.

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 be unduly limited by excessively narrow specializations; and on the other hand, departmental major requirements ensure in-depth study.

Macalester College Faculty
March 10, 1982
Reaffirmed by the Faculty Advisory Council, November 4, 1983.

Graduation Requirements

I. Thirty-one (31) courses successfully completed, including:
   A. Two (2) courses in the social sciences designated as foundation courses.
   B. Two (2) courses in the natural sciences and mathematics designated as foundation courses.
   C. Three (3) courses in the humanities and fine arts designated as foundation courses. At least one of these courses must be in the humanities and one in the fine arts.
   D. No more than twenty-four (24) courses in any one of the four areas: social sciences, natural sciences and mathematics, humanities and fine arts.

II. Four (4) interim term courses or projects successfully completed.

III. Approved major or core concentration plan filed and completed.

IV. Declaration of Intent to be Graduated 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:
Not all courses are designated as foundation courses. To identify such courses see the departmental listings in the curriculum section of this catalog.

Each student must take at least:

A. Two foundation courses in the social sciences: anthropology, economics and business, geography, political science, psychology, sociology, and courses from other departments approved as foundation courses meeting the social science requirement.

B. Two foundation courses in the natural sciences and mathematics: biology, chemistry, geology, mathematics and computer science, physics and astronomy, and courses from other departments approved as foundation courses meeting the natural science and mathematics requirement.

C. Three foundation courses in the humanities and fine arts: At least one in humanities: classics, English, French, German and Russian, history, humanities, linguistics, philosophy, religious studies, Spanish, and courses from other departments approved as foundation courses meeting the humanities requirement and at least one in fine arts: art, music, speech communication and dramatic arts, and courses from other departments approved as foundation courses meeting the fine arts requirement.

Other Courses:
Freshman Seminars and courses in education, English as a second language, environmental studies, journalism, and physical education are regarded as "non-divisional" and do not satisfy any general distribution requirements. In addition, independent study courses numbered 95, 96, 97, and 98 do not satisfy distribution requirements but do count toward the maximum of 24 courses in any one area.

II. Interim: Successful completion of four interim terms is required. Students who do not register for or successfully complete an interim term must make it up in the summer. Make-up projects must be approved by the Interim Term Subcommittee of the Curriculum Committee. An exception to the four interim term requirement is made for students who, through an accelerated program, have met all the requirements for graduation except the fourth interim term. Transfer students must meet reduced interim term requirements based on the number of credits transferred to Macalester. When three or more but fewer than eleven Macalester credits are transferred, three interim term courses or projects are required. When eleven or more but sixteen or fewer Macalester credits are transferred, two interim term courses or projects are required. Interim term courses may not be used to satisfy concentration requirements or distribution requirements.
Graduation 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 concentration; or 4) an individually-designed interdepartmental major concentration. A student may obtain two concentrations by fulfilling the respective requirements in those concentrations. Individual courses, where appropriate and approved by the department chairs involved, may be counted toward both concentrations.

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 sixteen 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 the 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 sixteen, 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.

Regulations Concerning Concentrations

Students must file an approved plan for a pattern of concentration (major or core) no later than the start of the registration period for the first semester of their junior year. Such a plan must be filed before their registration can be completed.

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 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.

Students seeking an individually-designed interdepartmental major (IDIM) must present, no later than the start of the registration period for the first semester of their junior year, a completed signed proposal to the IDIM Subcommittee of the Curriculum Committee 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. An IDIM proposal may be filed as a second concentration no later than the end of the third week of the fall semester of the senior year.

IV. Intent to be Graduated: All degree-seeking students must file with the Registrar’s Office their “Declaration of Intent to be Graduated” 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 sixteen 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. Participation in a Macalester approved off-campus program is considered to be in residence.

Second Degree Program

Students who have completed a bachelor's degree from a recognized institution of higher education can be admitted to the college for the purpose of earning a second bachelor's degree. A bachelor of arts degree is awarded to such students upon the successful completion of fifteen Macalester courses, two interim term courses, and all other graduation requirements as previously listed. The general distribution requirements for graduation may be partially or completely fulfilled as a result of the evaluation of courses taken while earning the initial degree.

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 readmission) or the requirements in effect at the time of graduation if such a change is feasible.

Curricular Recommendations

Basic Competency

Writing. The Macalester faculty recognizes the importance of writing skills for educational work at Macalester and for later career and professional experience. The faculty has set expectations for specific coursework to improve writing skills in response to the results of the writing placement examination administered to
all freshmen students. The faculty has also developed the all-college writing program to insure that writing skills developed in early coursework will be further improved by writing instruction in later coursework. Students are advised to seek counsel from their academic adviser as to how these (and other) expectations may best be met.

Mathematics. The Macalester faculty has concluded that mathematical, computational, and computer skills are of growing importance in the contemporary world and that proficiency in these skills is expected by potential employers, graduate and professional schools. As a result, the faculty has set expectations that these quantitative and computer skills be acquired in various ways that are consistent with students’ needs and inclinations. Students should demonstrate their quantitative and computer competence early in their academic careers in order that these skills be well utilized in their academic program at Macalester. The mathematics placement examination administered to all freshmen is used by academic advisers to assist students in planning for this competence to be acquired and demonstrated.

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

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

Internships. Through the internship program and the Career Development Center, students participate in a variety of field placements throughout the Twin Cities. As interns, students serve, work, and learn in community, government, and business settings which match their interests and goals. Internships enable students to integrate academic theory with its practical application, develop their skills, grow personally and intellectually, and explore career interests. The Internship Program office helps students define their interests and find quality field placements, provides listings of internship possibilities, conducts workshops, and develops educational and procedural materials for the interns, faculty sponsors, and work supervisors.

The following college policies apply 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 in the Special Programs section of this catalog.
Instructional Policies

Grades

1. Grading Options: Regular Terms: For the fall, spring and summer terms the regular grading option is: A, A-, B+, B, B-, C+, C, C-, D+, D, D-, NC (no credit); the alternate grading option is 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 the education department. Music majors, cores, and minors will be graded on the regular grading option 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 regular or 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 option 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) is calculated by the Registrar’s Office. Each grade is assigned a point value, as follows:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4.0</td>
</tr>
<tr>
<td>A-</td>
<td>3.7</td>
</tr>
<tr>
<td>B+</td>
<td>3.3</td>
</tr>
<tr>
<td>B</td>
<td>3.0</td>
</tr>
<tr>
<td>B-</td>
<td>2.7</td>
</tr>
<tr>
<td>C+</td>
<td>2.3</td>
</tr>
<tr>
<td>C</td>
<td>2.0</td>
</tr>
<tr>
<td>C-</td>
<td>1.7</td>
</tr>
<tr>
<td>D+</td>
<td>1.3</td>
</tr>
<tr>
<td>D</td>
<td>1.0</td>
</tr>
<tr>
<td>D-</td>
<td>0.7</td>
</tr>
<tr>
<td>NC</td>
<td>0.0</td>
</tr>
</tbody>
</table>

The GPA is calculated by dividing the total grade points by the number of courses attempted on the regular grading system. Courses taken on the S, D, NC grading 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 fifteen of the thirty-one 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.

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 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, a 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.

Student Course Load
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 application to the Registrar. Approval is normally granted students in good academic standing who have no courses uncompleted.

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:

<table>
<thead>
<tr>
<th>Class standing granted:</th>
<th>Sophomore</th>
<th>Junior</th>
<th>Senior</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of courses successfully completed:</td>
<td>7</td>
<td>15</td>
<td>23</td>
</tr>
</tbody>
</table>

Special student classification is assigned to students not seeking a degree from Macalester.

**Probation and Dismissal**

Academic probation is intended as a warning to a student that he or she is not making the expected progress toward the completion of a Macalester Bachelor of Arts degree. Every effort is made through faculty advisers, the Counseling Office and special academic support counselors and services to provide counseling to students who are placed on academic probation. The academic record of every student is reviewed at the end of each semester by the Academic Standing Committee of the faculty. As a result of action taken by this committee a student may be liable for one of the following:

*Warning.* A warning letter is meant to indicate that although the student is not liable to be placed on academic probation, the Academic Standing Committee is concerned about the level of achievement earned by the student. A warning letter may be sent to a student at any point in his or her academic career but is commonly sent following the student’s first semester.

*Academic Probation.* A student is placed on academic probation if a student’s GPA is less than:

- 1.70 if fewer than 7 courses have been successfully completed;
- 1.85 if 7 or more but fewer than 15 courses have been successfully completed;
- 2.00 if 15 or more but fewer than 31 courses have been successfully completed;

or if a student receives two NC grades in a single semester.

*Strict Academic Probation.* A student liable for academic probation is placed on strict academic probation when the committee determines that specific additional criteria must be met by the student during the probation period (i.e. limited course load, specific courses, etc.) or when the student is liable for academic probation for a second consecutive semester. A student on strict academic probation shall be regarded as not making satisfactory progress toward a Macalester degree.
Suspension. After two consecutive semesters on academic probation (or strict academic probation) students are suspended for one or two semesters unless the Academic Standing Committee finds that this action would not be appropriate. Under exceptional circumstances, the Academic Standing Committee may suspend a student from the College without first placing them on probation. Students who wish to return after a suspension must apply for readmission to the College.

Dismissal. A student is subject to dismissal from the College whenever, in the view of the committee, his or her level of scholarship is so low as to make the completion of a Macalester degree unlikely.

Students should be aware that maintaining good academic standing does not automatically insure continued financial aid eligibility. Refer to the financial aid section of this catalog for information.

Withdrawal from the College. A student may request complete withdrawal from the College at any point in a term. Students should make an appointment with the Associate Dean of Students in the Counseling Office to complete the appropriate withdrawal forms. In order to obtain tuition or room and board refunds, the student must follow the policy described under “Refunds.” Unless requested, 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 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 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 informed 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 readmission.

**Readmission to the College**

Any student not on an official leave of absence, or who was suspended from the College, or who did not complete the prior semester at Macalester, is required to make application for readmission 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 Registrar’s Office 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 in 1984-85 is $150 per course.

*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 of C- or better will be considered for transfer to the Macalester record to be included toward graduation. A grade of S or P must be certified in writing by the instructor of the course to be the equivalent of C- or better.

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. No more than the equivalent of two Macalester credits from an extension or correspondence program may be included among the academic credits transferred to Macalester.

Air Force ROTC is available to Macalester students through the Associated Colleges of the Twin Cities at the College of St. Thomas. Navy ROTC is also available to Macalester students at the University of Minnesota. 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.

**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 Science
- 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
- Interdepartment Major
- International Studies (major only)
- Japan Studies
- Law and Society (major only)
- Linguistics
- Mathematics
- Music
- Philosophy
- Physical Education (major only; through the College of St. Thomas as a second concentration only)
- Physics
- Political Science
- Psychology
- Religious Studies
- Russian (see German and Russian department)
- 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 licensure for pre-kindergarten, 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. A minor concentration consists of four to seven courses within one department. 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:

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<td>Dance</td>
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<td>Dramatic Arts (see speech communication and dramatic arts department)</td>
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<td>East Asian Studies</td>
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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 from the coordinator of the program, Virginia A. Schubert, Faculty Associate, 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.

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

Approval of the supervising instructor is required for registration in an independent study 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.

Foundation Courses
Courses identified by departments as foundation courses are designated by an FC following the course title in the list of courses for each department. In addition, some departments have further identified their foundation courses as one or more of the following categories based upon content and/or methodology; Literary Appreciation (LA), Artistic Appreciation (AA), Literary Expression (LE), Artistic Expression (AE), Natural World-No Laboratory (NW), Natural World-With Laboratory (NW/L), Human Behavior-Individuals (HB/I), Human Behavior-Groups (HB/G), Morals and Ethics (M/E), Historical Perspective (HP), and Other Cultures (OC). Foundation courses categorized by this scheme will be designated as such (e.g. FC-LA) to aid students and faculty in course selection.
Anthropology

Louis Casagrande, David McCurdy (Chair), Anna Meigs, Anne Sutherland, Jack Weatherford

The anthropology department seeks to foster an understanding of human behavior through detailed examination of people's cultural knowledge, their categories and strategies for adapting to the demands of daily life. Courses are taught from a cross-cultural perspective, exposing students to detailed case material from a variety of the world's societies including our own.

Faculty members place special emphasis on doing anthropology. They encourage students to conduct first-hand research in the Twin Cities, other regions of the United States, Central America as part of the department's Belize field program, and in other parts of the world through the College's many international programs. Students study such diverse cultural scenes as the social structure of an urban fire house, rituals in American courtrooms, strategies to manage tourists in Belize, and women's life in a Greek village. The department offers a fieldwork training program and provides an ethnographic laboratory where taped field notes can be transcribed.

The department offers a wide range of courses on topics of current interest, from selections on men and women in society, religion and witchcraft, war and violence, and human morality to museum anthropology, and archaeology and human evolution. We also encourage students to learn how to write effectively, and offer them an explanatory framework in the form of social, symbolic, evolutionary, 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 occupation that requires a knowledge and appreciation for someone else's viewpoint and an understanding of symbolic meaning and 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.

General Distribution Requirement

Courses numbered 11, 12, 30, 32, and 45 are the foundation courses in the anthropology department which will fulfill the college's distribution requirement in the social sciences.

Major Concentration

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

Students who plan to apply for graduate work in anthropology should also include courses that reflect basic approaches in anthropology, such as Anthropology 32, 60, 64, 68, and 89. Planning should start early in consultation with a department adviser and students should consider applying to the department's honors program.
**Core Concentration**

A core in anthropology consists of six courses, together with six additional courses chosen by the student from other departments. Students who take a core must take either Anthropology 11 or 12, and should design their remaining pattern of courses in close consultation with their advisers.

**Honors**

Honors are available in the anthropology department through the college-wide honors program. Students who meet the requirements for honors work are encouraged to apply for the program.

**COURSES**

*Introductory Courses*

Open to Freshmen

**11 CULTURAL ANTHROPOLOGY FC**

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. Every semester.

**12 ARCHAEOLOGY AND HUMAN EVOLUTION FC**

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 films and the use of casts and slides to illustrate concepts. Spring semester.

**20 ETHNOGRAPHIC FILM**

An examination of the history, philosophy and ethics of ethnographic films. An understanding of the approaches film makers have used to represent different cultures and the effect of visual images, commentary, objectivity, aesthetics and truth on filmic representations of people's lives. This course will show a number of ethnographic films. Fall semester.

*Intermediate Courses*

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

**30 ETHNOGRAPHIC INTERVIEWING (Same as Linguistics 30) FC**

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. Every semester.

**32 SYMBOLIC ANTHROPOLOGY FC**

This course treats the basic ideas of symbolic anthropology since 1960. It examines how symbolic forms, such as religious rituals, public ceremonies, body decoration, games, and dramas serve as mirrors of social reality in different societies around the world. Students will learn to identify and decode symbols to gain access to their cultural meaning. Analysis of symbols from such cultures as Papua New Guinea, the United States, Spain, and the USSR. Spring semester.

**35 CHANGING ROLES OF WOMEN**

An examination of the fundamental divisions of society into two genders. An analysis of the nature of female/male relationships expressed in symbolism, structure, economic, and political roles and cultural perceptions of biology and psychology. A comparison of these social relationships in selected non-Western and Western cultures. Fall semester.

**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 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. Spring semester.
45 INTRODUCTION TO MUSEUM ANTHROPOLOGY FC
An introduction to the purposes and functions of museum anthropology. Students become familiar with museum organization, resources, and goals, and assist with museum projects under the supervision of the Curator of Anthropology of the Science Museum of Minnesota. Classes are held at the Science Museum. Fall semester.

50 TOPICS
Examination of selected topics of concern to anthropologists, such as the Peoples and Cultures of Europe, India, or native North and South America. To be announced prior to registration.

54 THE EVOLUTION OF WAR AND VIOLENCE
Examination of the spectrum of social violence from raiding and feuding to atomic warfare. Reviews the role played by violence at each level of human organization from hunting and gathering bands to the industrial nation state, including the way violence is organized and its social impact. Consideration of violence among other primate species as well as our own. Alternate years, spring semester.

56 CULTURE AND HUMAN SEXUALITY
An examination of the evolution and diversity of human sexuality. Comparison of human sexuality and the sexuality of other primates. Exploration of the way in which cultures shape sexuality and the ramifications for sexuality on other parts of society. Alternate years, spring semester.

60 URBAN ANTHROPOLOGY
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. Alternate years, spring semester.

64 POLITICAL ANTHROPOLOGY (Same as Political Science 64)
An analysis of various political structures and activities in diverse world societies. Emphasis is placed on pre-literate cultures, but the societies examined vary from hunting and gathering bands through agricultural tribes to the industrial state. Spring semester.

65 CULTURAL PERSPECTIVES ON EVERYDAY MORALITIES
Obedience to authority, moral reproach, altruism, treatment of animals, lying, and gossip are all cultural phenomena. This course will examine the cultural rules people use to select aspects of moral behavior. Attention will focus on the culturally determined definitions of moral responsibility, and the special problems of obedience and conformity. Students will research and write about one issue associated with their own moral culture. Fall semester.

68 MAGIC, RELIGION, AND WITCHCRAFT
Survey the varieties of magical and religious ritual and belief in Western and non-Western societies. Reviews the symbolic meaning and function of magic, religion, and witchcraft. Students are expected to conduct research, either drawing on cross-cultural library materials or pursuing data first-hand in an ethnographic study of Twin Cities' magical, religious, or witchcraft organizations. Alternate years, fall semester.

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.

70 FEMALE POWER AND MALE DOMINANCE
An exploration of the relative status of females and males in cross-cultural perspective. Comparison of male and female roles in hunter-gatherer, horticultural, agricultural, and industrial societies. Investigation of the relative strengths of economic and ideological factors in determining the position of the two sexes. Includes an examination of women's movements and in-depth reading from several societies. Students will develop an independent research project. To follow Anthropology 35. Spring semester.

72 ADVANCED MUSEUM ANTHROPOLOGY
Students with background in museum anthropology pursue individual or group projects in depth under the supervision of the Curator of Anthropology of the Science Museum of Minnesota. Projects vary depending upon museum programs and student interest, but might include research on a specific collection, preparation of an exhibit or demonstration, development of a school curriculum unit, or study of the behavior and attitudes of museum visitors. Designed to follow Anthropology 45. Spring semester.
82 PSYCHOLOGICAL ANTHROPOLOGY
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. Alternate years, spring semester.

84 CULTURAL LIFE HISTORY
An examination of the life history method 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. Spring semester.

85 COMPARATIVE ETHNOGRAPHY
A hallmark of anthropology is the cross-cultural perspective supported by first-hand ethnographic accounts of hundreds of different cultures. In this course students will read, discuss, and compare ethnographies representing diverse cultures as well as a wide range of ethnographic theories and methods. Alternate years, 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, emphasizing the assumptions made and questions asked by practitioners of various approaches. 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 economic anthropology, physical anthropology, a part of the world, cognitive anthropology, or a host of other topics. Every semester.

96 INDEPENDENT PROJECT
Independent project in anthropology. Projects might include intensive ethnographic research, the analysis of ethnographic data, or a variety of other projects. Every semester.

97 INTERNSHIP
Work that involves the student in practical (usually off campus) experience. Students may intern in any of the variety of internships listed by the college. They are also encouraged to arrange their own internships. Every semester.

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

Art

J. Uve Baltins-Hamilton, Roger Blakely, Anthony Caponi (Chair), Donald Celender, William Donovan, Cherie Doyle, Ron Gallas, Carol Ofsthun, Jerry Rudquist, Stanton Sears

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

1. 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;
2. Students with creative aptitudes pursuing a career in fine arts and related fields of design;
3. Students interested in the historical and philosophical understanding of art;
4. Students wishing to prepare themselves for professional work in architecture by participating in the dual-degree architecture program in cooperation with Washington University.

The first group may pursue an art major, either Art Studio Plan or Art History Plan, the second group should follow the Art Studio Plan, the third group should follow the Art History Plan, the fourth group should follow the Dual-Degree Architecture Program.

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 non-major student is especially welcome to learn in both studio and history courses.

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 Requirement

The foundation courses Drawing 30, Painting 34, Sculpture 35, Principles of Art 49, History of Art I 60, and History of Art II 61 are recommended for non-majors to satisfy the general distribution requirement in the fine arts. Other non-prerequisite courses may fulfill the requirements in special cases as approved by the art department chair.

Major Concentration

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

Art Studio Plan

Requirements consist of 12 courses including Art 30, 34, 35, 49, 60, 61, 66 or 67, 71 or 72 or 73 or 74, and 88; one elective course from the art curriculum, and two from speech (interpretive), music, or literature. A final comprehensive exhibition is also required in the senior year.

Students intending to teach art in elementary and/or secondary schools should complete the Art Studio Plan. In addition, to comply with State of Minnesota specifications, they should take course work in six or more diverse studio areas, course work in aesthetics and advanced work in at least two studio areas. Students should consult with the education department in the fall of their sophomore year about the courses in education required for licensure to teach.
Art

Art History Plan
Requirements consist of 12 courses including: Art 49, 60, 61, and 88 plus five courses selected from 62, 63, 64, 65, 75, 76, and 77; two courses selected from Art 30, 34, or 35; one from anthropology (cultural) or history (beyond the social science requirements). A public lecture or comprehensive project approved by the department faculty is also required in the senior year.

Dual-Degree Architecture Program
Under the agreement with Washington University’s School of Architecture in St. Louis, students may complete three years at Macalester before transferring to Washington University for a senior year of accelerated architectural study, leading to a B.A. from Macalester. Three years of graduate study at Washington University then leads to a Master’s in architecture.

Art majors considering a dual degree option in architecture are required to take 10 courses in the art department: 30, 34, 35, 36, 49, 60, 61, 66, 67, 70. A final comprehensive exhibition is required at the end of the junior year. (Two additional courses in the sciences are required.)

Non-art majors participating in a dual degree option in architecture should take a total of 6 courses in the Art Department: Art 30, 35, 36, 66, 67, plus art history courses 60 and 61. (Two additional courses in the sciences are required.)

Core Concentration
The core concentration is primarily an option for students building an academic major appropriate for licensure to teach at the elementary grade level. It 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. A written final comprehensive or a final comprehensive art exhibition is also required.

Minor Concentration
A minor in art consists of three studio courses and three lecture courses: Art 30, 34, 35, 49, 60, 61. Departmental approval is necessary for any variation of this requirement.

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 the first three semesters, after which time the combined teaching staff will review the student’s 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 the student’s educational and professional objectives. A student declaring a major after the sophomore year is subject to the same procedure at the earliest possible date.
Honors
In the spring of each year the faculty of the art department selects senior recipients of the distinguished Merit Award for comprehensive achievement in art. The award is based on a review of the student's work done over the full period of their study at Macalester.

COURSES

30 DRAWING FC
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. Every semester.

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. Two three-hour periods per week. Every semester.

34 PAINTING FC
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. Two three-hour periods plus one two-hour period per week. Every semester.

35 SCULPTURE FC
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 students may choose their own media for additional projects. Two three-hour periods plus one two-hour period per week. Every semester.

36 GRAPHICS (PRINTMAKING)
Hand and photo-originated imagery created within the possibilities of etching, lithography, and collographs. Students normally explore in some depth one or two media during the course. Two three-hour periods plus one two-hour period per week. Every semester.

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. Every semester.

49 PRINCIPLES OF ART FC
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 aesthetic experiences encompassing numerous activities and attitudes of visual artists. Four hours per week, one of which involves a creative project. Every semester.

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 special period art history courses.

60 HISTORY OF ART I (Same as Classics 60) FC
Western Art through the Renaissance. Four hours per week. Fall semester.

61 HISTORY OF ART II FC
Baroque through Contemporary Art. Four hours per week. Spring semester.
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. Fall semester.

63 CLASSICAL ART (Same as Classics 63)

64 MEDIEVAL ART
A survey of Byzantine and western European architecture, sculpture, and painting from the decline of the Roman Empire to the end of the 14th century. Four hours per week. Every third spring semester. Offered Spring 1985.

65 RENAISSANCE ART
A survey of the architecture, sculpture, and painting in Italy and in northern Europe during the 15th and 16th centuries. Four hours per week. Every third spring semester. Offered Spring 1986.

66 2-D DESIGN
A series of two dimensional projects through which a basic visual language covering line, texture, shape, plane, space, volume and form is explored using different principles of organization. Four two-hour periods per week. Fall semester.

67 3-D DESIGN
A series of three dimensional projects using a basic visual language of line, texture, shape, plane, space, volume, and form is explored with emphasis on how ideas develop when there is real volume, weight and a tactile surface. Critiques and structural testing of the projects lead to an understanding of functional and aesthetic relationships between form and function. The problem solving approach used in this class contributes to a resolution of spatial problems encountered in areas such as sculpture, architecture, industrial design and interior design. Four two-hour periods per week. Spring semester.

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. Spring semester.

71 ADVANCED PAINTING
Continuation of Art 34. Meets simultaneously with Art 34. Projects and work directions initiated by students. Weekly group discussions and critiques. Two three-hour periods plus one two-hour period per week. Every semester.

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. Every semester.

73 ADVANCED GRAPHICS (PRINTMAKING)
Meets simultaneously with Art 36. Opportunity to explore in greater depth media worked with in Art 36 or to work with new media. Two three-hour periods plus one two-hour period per week. Every semester.

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. Every semester.

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. Four hours per week. Spring semester.
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. Spring semester.

77 TRIBAL 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. Fall semester.

88 SENIOR SEMINAR
A synthesis of the knowledge acquired in the art department with that of other areas of study. Aesthetic values are brought into discussions and major paper assignment. Students in art concentrations only. Two two-hour periods per week. Spring semester.

90 ART APPRENTICESHIP
A course for the students who have completed undergraduate degree work at Macalester and who will benefit from working closely with an instructor by dividing their time between developing their own work and assisting the teacher with course instruction. The instructor will initiate the agreement which will be considered a full-time load at the college. The extent and level of work by the student will be expected to be beyond normal undergraduate work. Prerequisite, department chair's approval. Every semester.

95 TUTORIAL
Supervised individual or small group study with a faculty member in studio or art history allowing the student to explore the field beyond regular course offerings. Every semester.

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

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. Every semester.

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

Biology
Mark Davis, Eddie Hill (Chair), Daniel J. Hornbach, Kathleen Parson, Janet Serie, James Smail, Russell Whitehead.

The biology department's goal is to introduce students to major aspects of the biological sciences, from environmental and organismal to molecular and genetic. The major program provides a substantial foundation of content, methods, history and philosophy of biology, which can prepare graduates for further study and careers.

Particular interests and objectives of students can be met with proper selection of biology courses and additional courses chosen from other disciplines. With the adviser's help, a student can use the biology major as the heart of an undergraduate program leading to career fields which include these:

*Professional biologist, with graduate training leading to college or university teaching and research.

*Professional biologist, with graduate training leading to work in forestry, agriculture, fisheries and other fields.
Biology

*Medicine, dentistry, veterinary medicine, nursing, medical technology, physical therapy and other health profession specialties.
*Environmental research and management.
*Medical and scientific illustration.
*Science writing.
*Business careers in drug, instrumentation and other scientific industries.

The department is housed in Rice Hall, which with the connected Olin Hall constitutes a modern and well-equipped science teaching complex. Most of the biology laboratory rooms seat only 20 to 24 students, which makes possible individual instruction in ideal surroundings. The laboratories are fully equipped with facilities and instruments required for the subjects taught.

Learning is not restricted to the teaching laboratories. A laboratory is set aside for student research projects. Departmental microcomputers and a terminal for the VAX mainframe computer are readily available to biology classes and individual students. Specialized equipment which biology students can learn to use include a transmission electron microscope, a scanning electron microscope, a liquid scintillation counter, and a gas chromatograph. Three room-sized environmental control chambers are used for class work and research projects.

Field biology at Macalester benefits from the Ordway Natural History Area, a field station operated by the biology department. This is 280 acres of land and a laboratory building, bounded by the Mississippi River in a suburb only 30 minutes from the campus. It is used for class field trips and individual project work in field biology.

One or more field biology courses are offered every Interim Term. These have included Marine Biology (Hawaii), Desert Biology (Arizona), Tropical Ecology (Costa Rica) and Winter Ecology (Minnesota).

The Associated Colleges of the Midwest (ACM) owns and operates a field station near Ely, Minnesota. Each summer several full credit courses are offered which typically are: animal behavior, vertebrate ecology, aquatic biology, field botany and forestry.

The department presents a weekly seminar throughout the year, for the benefit of biology students and others. Both off-campus speakers and Macalester faculty and students present topics on a wide variety of subjects.

**General Distribution Requirement**

Biology 10 and 11 are the biology department’s foundation courses which will fulfill the college distribution requirement in the natural sciences and mathematics.

**Major Concentration**

The biology major requirements consist of 12 courses: Biology 11, 12 and 13, Chemistry 11 and 12 (or 13), five advanced biology courses, and two elected courses. One course may be Biology 95 or 96. In addition, each senior major is required to prepare a senior presentation. The elected courses may be in biology, other science subjects, or mathematics.
While students are free to propose a program within these guidelines, major work must constitute a reasonable sequence and also be approved by the department chair. There is no restriction on taking additional biology courses outside the major.

**Core Concentration**

The core concentration is a major plan with a greater interdisciplinary component than the departmental major. It consists of 12 courses: Biology 11, 12 and 13, three elected biology courses, and six supporting courses selected from any of several other departments. In addition, each senior core is required to prepare a senior presentation. The core can be adapted to a wide variety of particular interests, such as preparation for teaching various secondary school subjects, meeting requirements for medical or other health profession schools, or meeting requirements for admission to such graduate programs as medical illustration.

The twelve courses must bear a sensible relationship to each other, and are planned with and approved by a faculty adviser. The plan must be approved by the department chair.

**Minor Concentration**

The minor concentration consists of Biology 11, 12 and 13 and any two upper-level biology courses except Biology 96 and 97. It can be used in correlation with a major concentration in another department as an informal interdisciplinary program.

**Additional Requirement: Senior Presentation**

To complete a biology major or core all students are required to prepare a formal presentation of a biology project they have conducted while at Macalester. These projects may include independent laboratory or field research, an in-depth library investigation of a topic, internship projects, or elaborations of papers or projects done for a class. In all cases, students must research the literature on their topic and prepare a paper describing their findings. This should be done in conjunction with consultation with a biology professor. In addition, students will present their findings in a seminar.

Students graduating in May 1985, or before, with a major or core concentration in biology are strongly encouraged to prepare a senior presentation. All students graduating with a major or core concentration in biology after May 1985 are required to prepare a senior presentation.

**Honors**

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

**COURSES**

10 THE BIOLOGY OF THE HUMAN BODY FC

This course, designed for students with limited background in science, considers the various systems of the body from the standpoint of the molecular, cellular and anatomical basis of normal structure and function. In addition, some of the common diseases affecting each system will be discussed. No prerequisites. Four lectures per week. This course may not be counted toward major, core, or minor work in biology. Fall semester.
11 PRINCIPLES OF BIOLOGY FC
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
An introductory course providing a general survey of the biology of the major animal groups. Emphasis is given to the structural and functional differences between animals in the major groups. Taxonomic relationships, developmental patterns, and habitat requirements of representative animals are also stressed. Prerequisite, Biology 11. Three lectures, two two-hour laboratory periods per week. Every semester.

13 INTRODUCTION TO BOTANY
An introduction to biology of the major plant groups. Emphasis is given to the botanical principles exemplified by the structure, metabolism and evolution of the seed plants. Prerequisite, Biology 11. Three lectures and two two-hour laboratory periods per week. Every semester.

40 ANIMAL ECOLOGY
A study of animals in their natural habitats. This course focuses on the behavior, ecology, and taxonomy of Minnesota vertebrates and invertebrates. Through field trips and laboratory sessions, students will become familiar with many of the local birds, mammals, insects, and other animals. The course also introduces students to research methods used by animal ecologists. Prerequisite for biology majors, Biology 11; for others, permission of the instructor. Three lectures, one three-hour laboratory period per week. Spring semester.

41 ECOLOGY
A study of the interactions of plants and animals with their environments. Taking an evolutionary approach, the course introduces students to current theories of life histories, population growth and regulation, community organization, and ecosystem process. The course also examines acid rain, toxic wastes and other environmental issues from an ecological perspective. In addition, the course introduces students to research methods used by ecologists. Prerequisite, Biology 11. Three lectures, one three-hour laboratory per week. Fall semester.

42 LIMNOLOGY
The study of freshwater organisms and their environments. This course introduces students to the ecology of lakes, streams, and ponds, especially those of Minnesota. Through lectures, field trips and laboratory experiments, students will learn to identify aquatic plants and animals and will study their interactions. Additional topics include water chemistry and environmental pollution of freshwater systems. Prerequisite, Biology 11. Three lectures, one three-hour laboratory period per week. Fall semester.

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. Spring semester.

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. Spring semester.

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. Fall semester.

50 TOPICS
Examination of a topic of general interest to faculty and students, the topic to be announced in advance of registration. Every semester.
52 GENETICS
An integrated study of the basic concepts that have been established as principles of genetics including topics from the classical Mendelian to contemporary molecular biology; the materials and modes of inheritance. Prerequisite, Biology 11. Three lectures per week, one three-hour laboratory per week. Fall semester.

53 ADVANCED MICROBIOLOGY
A detailed study of the structure, function, metabolism and ecology of those organisms considered to be microbes. This encompasses the bacteria, yeasts, microscopic algae and fungi and their viruses. Particular attention is given to mechanisms of control and development of these organisms. Prerequisite, Biology 43. Three lectures and one three-hour laboratory per week. Fall semester.

54 HUMAN PHYSIOLOGY
The function of the human body described in terms of physical and chemical laws. This course includes a discussion of general cellular function, the microscopic and macroscopic specializations which determine an organ system's special role in the body and the dynamic living organisms' struggle to maintain a constant internal environment. Special emphasis is placed on mechanisms of coordination and control. Prerequisites, Biology 12 and Chemistry 12 or 13. Three hours of lecture and one three-hour laboratory per week. Spring semester.

58 BIOCHEMISTRY (Same as Chemistry 58)
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 38, 55 and Biology 11 or permission of the instructor. Three lectures per week and one three-hour laboratory per week. Spring semester.

61 HISTOLOGY
A study of the microscopic structure and ultrastructure of animals, with particular attention to structure-function correlations. Prerequisite, Biology 12; Chemistry 12 or 13 recommended. Three lectures per week, and directed independent study laboratory equivalent to six hours per week. Fall semester.

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 situation 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. Spring semester.

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. Prerequisite, Biology 13; Chemistry 37 recommended. Three lectures, one three-hour laboratory period per week. Spring semester.

64 CELL BIOLOGY
An in-depth study of the cell as the fundamental structural and functional unit of living organisms. This course begins with an examination of the biological uniformity of cells and progresses through a study of specific cell types emphasizing structural and functional diversity among cells. Some of the major areas of study include cellular morphology and morphogenesis, cellular movement, cell to cell interaction, cell ultrastructure and related organelle functions, cell reproduction, cellular differentiation and histogenesis. Prerequisites, Biology 12 and 13 and consent of the instructor. Three lectures, one three-hour laboratory period per week. Fall semester.

65 FIELD BOTANY
A study of the evolution, ecology, geography, and taxonomy of vascular plants. Students learn the principles of plant classification and, through first hand experience, the techniques of plant identification, collection, and preservation. Through field trips, students will become familiar with many of the local trees, wildflowers, and ferns. Prerequisite for biology majors, Biology 11; for others, permission of instructor. Fall semester.
**Biology**

**Chemistry**

66 MARINE BIOLOGY

An introduction to the origin, evolution and diversity of the marine biome. Chemical, geological and physical factors that influence the various adaptations and interactions of all major groups of marine organisms are considered. Specific communities such as the salt marsh, mangrove fringe, kelp beds, coral reefs, hydrothermal vents and the various deep sea fish are discussed as well as aspects of marine productivity and the abuse and conservation of marine biological resources. Prerequisites, Biology 12 and 13. Four lectures per week. Spring semester.

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 scientifically-oriented careers in such fields as biochemistry, biology, environmental studies, geology, physics, dentistry, and medicine.

**General Distribution Requirement**

Chemistry 10, 11, 12, or 13 are designated as foundation courses and may be used to fulfill the natural science and mathematics requirement without specific college level prerequisites.

**Major Concentration**

The major concentration in chemistry consists of Chemistry 11 and 12, or 13, plus 23, 37 and 38, 55 and 56, 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. Course work or experience in computer programming is encouraged.

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.

**Suggested Course Sequence for a Chemistry Major**

<table>
<thead>
<tr>
<th>Fall Semester</th>
<th>Spring Semester</th>
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<tbody>
<tr>
<td>Freshman</td>
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<tr>
<td>Chemistry 11 or 13</td>
<td>Chemistry 12 or 23</td>
</tr>
<tr>
<td>Mathematics 11 or 21</td>
<td>Mathematics 21 or 22</td>
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<tr>
<td>Foreign Language</td>
<td>Foreign Language</td>
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</tbody>
</table>
Sophomore
Chemistry 37
Mathematics 22 or 23
Physics 21 or 28

Junior
Chemistry 55
(Physics 30)

Senior
Chemistry 63
(Chemistry 67)

*if not taken earlier

Courses in parentheses are not required for a major, but a selection of one to three courses from this group is recommended, especially for graduate study in chemistry. Chemistry 67 and two other advanced courses are required for an ACS approved major. A course in computer science or related experience is recommended before enrollment in Chemistry 56. Depending upon their interests and career goals, chemistry majors and cores often elect to supplement their required courses with courses in mathematics, physics, biology, geology, and/or economics. However, chemistry majors and cores have also taken second majors or cores in a wide variety of disciplines, including classics, dramatic arts, and music.

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, or 28 and either 29 or 30; and Mathematics 21 and 22. 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.

COURSES
10 CHEMICAL CONCEPTS FC-NW/L
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. Three lectures and one one-hour laboratory per week. Spring semester.

11 GENERAL CHEMISTRY FC-NW/L
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, one three-hour laboratory per week. Fall semester.

12 GENERAL CHEMISTRY FC-NW/L
Continuation of Chemistry 11. Laboratory work in part devoted to qualitative analysis. Prerequisite, Chemistry 11. Three lectures, one three-hour laboratory per week. Spring semester.
13 GENERAL CHEMISTRY FC-NW/L
A one-term combination of 11 and 12. For students who have good preparation in chemistry and an aptitude for mathematics. Three lectures, one three-hour laboratory per week. Prerequisite, permission of instructor. 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 per week. Spring semester.

34 RADIOCHEMISTRY
Nuclear and radio chemistry and their application to chemistry and biology. Prerequisite, Chemistry 23 or permission of the instructor. Three lectures, three hours laboratory per week. Alternate spring semesters.

37 ORGANIC CHEMISTRY
The carbon compounds, their structures, reaction and syntheses. Prerequisite, Chemistry 12 or 13. Three lectures, four hours laboratory per week. Fall semester.

38 ORGANIC CHEMISTRY
Continuation of 37, which is a prerequisite. Three lectures, four hours laboratory per 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 per week. Fall semester.

56 PHYSICAL CHEMISTRY
Continuation of 55, which is a prerequisite. Includes some computer application. Three lectures, three hours laboratory per week. Spring semester.

58 BIOCHEMISTRY (Same as Biology 58)
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 per 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 per week. Fall semester.

67 SENIOR STUDIES
Advanced methods of instrumental analysis (including spectroscopy), a literature study of a current chemical problem, and special topics in chemistry are used to introduce students to research projects, one of which typically forms the basis for a departmental seminar presentation. Required of (but not restricted to) students seeking departmental honors. Fall semester.

68 SENIOR STUDIES
Continuation of 67. Emphasis is on the study of special topics in advanced chemistry plus the literature and laboratory investigation of a current chemical topic or problem (ordinarily a continuation of the problem initiated in 67). The research problem will serve as the basis of a seminar presentation and a term paper or honors thesis. 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

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

The intellectual life of the western world had its origins in ancient Greece and Rome. This department offers a broad introduction to that experience and to the languages, so unlike our own, in which the ancient writers presented their ideas. The curriculum provides for those who wish to study Latin or Greek, for those looking toward graduate work in classical studies, and for those whose interest is in general background. The modern world is in many ways a continuation of the world of Greece and Rome; for every student the study of the achievement of these ancient civilizations can be a source of great pleasure and profit.

**General Distribution Requirement**

All courses offered by the department may be considered foundation courses and used to satisfy the general distribution requirement in the humanities. Students are encouraged to take advantage of opportunities for foreign study, especially the summer programs of the American School of Classical Studies at Athens and the American Academy in Rome.

**Major Concentration**

The classics department offers concentrations in four areas: Latin, Greek, a combination of Latin and Greek, and Classical Civilization. A major concentration in Greek and/or Latin consists of nine courses to include: a) two courses which provide a comprehensive introduction to the Greek and Roman experience (choose either 21 and 22 or 69 and 70); b) seven courses which provide a study of the language and literature of Greece and/or Rome in the original languages.

A major concentration in Classical Civilization consists of nine courses to include: a) two courses which provide a comprehensive introduction to the Greek and Roman experience (choose either 21 and 22 or 69 and 70); b) two courses in either Greek or Latin (choose either Latin 11 and 12, Greek 15 and 16 or, if qualified, two courses numbered 30 or above); c) two courses in ancient literature in which the work of one or more Greek or Roman authors is studied in some detail (recommended are two courses numbered 30 or above in literature in the original language; courses in literature read in translation may be substituted, however. If 21 and 22 are taken to satisfy this requirement the student must also complete 69 and 70 to satisfy (a) above.); d) three electives chosen from the offerings of the department. Courses offered by other departments may, on occasion, be substituted when approved in advance by the classics department.

**Senior Project**

For any major concentration a senior project must also be completed during the senior year which may be the product of an independent study course (96) selected as partial fulfillment of either (c) or (d) above, or the project may be a non-credit study evolving from one of the required courses.

**Core Concentration**

A core concentration in Greek and/or Latin consists of six courses to include: a) two comprehensive courses (choose either 21 and 22 or 69 and 70); b) four courses in the language and literature of Greece and/or Rome in the original languages.
A core concentration in Classical Civilization consists of six courses to include: a) two comprehensive courses (either 21 and 22 or 69 and 70); b) four courses chosen from the languages, literature, and/or history and civilization of ancient Greece and Rome.

Six complementary courses from other departments are also required for the core concentration.

**Minor Concentration**

A minor concentration in Greek and/or Latin consists of five courses to include: a) two comprehensive courses (either 21 and 22 or 69 and 70); b) three courses in Greek and/or Latin.

A minor concentration in Classical Civilization consists of five courses to include: a) two comprehensive courses (either 21 and 22 or 69 and 70); b) three electives from the offerings of the department.

**Honors**

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

**COURSES REGULARLY OFFERED**

**Greek**

15,16 ELEMENTARY GREEK FC

Study of the Greek language with readings from Greek literature. (In alternate years 35 is offered in place of 16.) Two term sequence each year.

35 THE GREEK NEW TESTAMENT FC

Rapid reading in Greek from the Synoptic Gospels. Prerequisite, Classics 15 or permission of the instructor. Spring 1985 and alternate years.

61 PLATO AND HIS WORLD FC

Readings from the Dialogues of Plato to illustrate the philosopher's thought and style. Every year.

62 HOMER AND THE GREEK EPIC FC

The *Iliad* and/or the *Odyssey*, the Homeric Question, Homeric life and society, the Homeric hero and the gods are subjects to be investigated in this course. Fall 1984 and alternate years.

68 GREEK TRAGEDY FC

An examination of the Greek view of tragedy as exemplified in selected plays of Aeschylus, Sophocles or Euripides. Greek critical theory of drama in Aristotle's *Poetics*. Spring 1986 and alternate years.

87 ADVANCED READING IN GREEK FC

Authors chosen after consultation between instructor and student. Every year.

95 TUTORIAL

Prerequisite, permission of the instructor.

96 INDEPENDENT PROJECT

Prerequisite, permission of the instructor.

**Latin**

11,12 ELEMENTARY LATIN FC

A study of the Latin language; reading easy Latin and Caesar. Two term sequence each year.

31 INTERMEDIATE LATIN FC

A thorough review of Latin grammar followed by a study of Vergil and other poets of the Augustan Age. Fall semester.
32 INTERMEDIATE LATIN FC
A study of Roman prose authors, with particular emphasis on the letters and speeches of Cicero. Spring semester.

83 ADVANCED READING IN LATIN FC
Authors chosen after consultation between instructor and student. Every year.

95 TUTORIAL
Prerequisite, permission of the instructor.

96 INDEPENDENT PROJECT
Prerequisite, permission of the instructor.

Classical Civilization (Knowledge of Latin/Greek not required)

21 THE ANCIENT WORLD I: GREECE (Same as Humanities 21) FC
A close reading of selected authors from Homer to Aristotle with attention to the perennial nature of the questions raised. Discussions will be supplemented by lectures on art, history, religion and science. Fall semester.

22 THE ANCIENT WORLD II: ROME (Same as Humanities 22) FC
A study of Roman civilization from its origin to the Empire, with emphasis on the qualities which distinguish Roman literature from its Greek predecessors. The course will examine not only the intellectual life of the Romans, but attempt to describe the everyday experience of men and women in that world. The massive influence of Rome on later cultures and civilizations of the West will also receive attention. Fall semester.

29 CLASSICAL MYTHOLOGY FC
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. Every year.

30 ANCIENT AND MEDIEVAL PHILOSOPHIES (Same as Philosophy 30) FC
Major philosophers of Greece, Rome and the medieval period. Spring semester, alternate years.

43 ARCHAEOLOGY OF GREECE IN THE BRONZE AGE (Same as Anthropology 43) FC
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. Spring semester.

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

63 CLASSICAL ART AND ARCHAEOLOGY (Same as Art 63) FC

69 HISTORY OF GREECE (Same as History 69) FC
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. Fall 1985 and alternate years.

70 HISTORY OF ROME (Same as History 70) FC
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. Spring 1986 and alternate years.
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.

COURSES OFFERED UPON REQUEST

51 CLASSICAL LATIN RHETORIC FC
A survey of the theory and practice of Latin rhetoric. Reading from the Ad Herennium, Cicero’s rhetorical works, Tacitus' Dialogus and Quintilian.

52 LATIN ELEGY FC
A survey of Latin elegiac poetry. Readings from Carullus, Propertius, Tibullus, and Ovid.

64 LUCRETIUS’ DE RERUM NATURA FC
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 FC
Readings from Horace, Persius, Martial, Juvenal, Seneca, Petronius and Apuleius with discussions of the origin, development, and nature of satire.

77 THE GREEK HISTORIANS FC
Readings from the Greek historians, especially Herodotus and Thucydides. The beginning of western historical thought and the development of Greek ideas of history are stressed.

Computer Science
See Mathematics and Computer Science

East Asian Studies

Dorothy Dodge (Political Science), John Knapp (Linguistics), Kathleen M. Staggs (Coordinator, Religious Studies)

East Asian Studies is an area studies program whose majors gain broad knowledge about both China and Japan. They achieve basic competence in one of the East Asian languages and receive irreplaceable first-hand knowledge through participating in one of the college’s approved programs in the People’s Republic of China, Hong Kong or Japan, or through some other academic program in East Asia. Majors combine their area studies focus with disciplinary grounding in a specific academic field. While only a minor or core is required, many East Asian Studies majors of the past have also majored in political science, anthropology, linguistics, economics, music, philosophy, religious studies or history. Finally, they demonstrate their expertise and integrate their learning through writing and orally defending a thesis. Program planning is done in consultation with the coordinator, who is also available to answer questions about study abroad, current course offerings, independent study, etc.
East Asian Studies

Major Concentration
There are five requirements for a major in East Asian Studies.
1. Language
Elementary and Intermediate Chinese or Japanese Language (a total of four semester courses)
2. Area Studies Courses
Four courses distributed as follows:
a. Chinese history
b. Japanese history
c. East Asian religion or philosophy
d. Any other course dealing with East Asia
3. A minor or core concentration in an academic discipline offered in one of the departments of the College.
4. Study abroad in East Asia for at least one academic term in a program approved by the East Asian Studies coordinator.
5. The writing and oral defense of a thesis.

Minor Concentration
There are two requirements for a minor concentration in East Asian Studies, consisting of five courses in all.
1. Language
Elementary Chinese or Japanese language (a total of two semester courses)
2. Area Studies Courses
Three courses on East Asia in any combination that includes at least one history course, one course dealing exclusively or primarily with China, and one course dealing exclusively or primarily with Japan.

COURSES

Language
Linguistics 11 Elementary Japanese I
Linguistics 12 Elementary Japanese II
Linguistics 31 Intermediate Japanese I
Linguistics 32 Intermediate Japanese II
Linguistics 96 Independent Study

Japanese language is also offered through the auspices of the ACTC consortium on various campuses.
Elementary Chinese I and II and Intermediate Chinese I and II are available every year at Hamline.
Through a special arrangement made by ACTC, Macalester students may take courses in Chinese and Japanese language and literature at all levels at the University of Minnesota.

Area Studies Courses at Macalester
Art 76 Far Eastern Art

Geography 11 Human Geography

History 14 Introduction to Modern Japan
History 15 Introduction to Modern China
History 71 Revolutionary China
History 73 Post War Japan
East Asian Studies
Economics and Business

Philosophy 37 Chinese and Japanese Philosophies

Political Science 50 Contemporary Chinese Political Development

Religious Studies 36 Religions of Japan
Religious Studies 37 Religions of China
Religious Studies 40 Japanese Buddhism

History 50 and Religious Studies 50 are topics courses which may offer topics relevant to East Asia. In the past they have included: The History of Tokugawa Japan; The History of Meiji Japan, The Life and Thought of Mao Tse-Tung; and War, Revolution and Reconstruction: China and Japan 1931-1952.

History 91, East Asian Studies Seminar, is a research seminar which has been taught as Cities and Villages in Twentieth Century China and Japan, and as Building a Nation: Japan During the Meiji Era.

Economics and Business

Paul Aslanian, Karl Egge (Chair), Robert Elder, Jeffery Evans, Julia Friedman, Warren Mack, Magdalena Paleczny-Zapp, Michael Rahm, Galen Sevcik, 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 advanced studies in the fields of economics, business and law, and which are necessary for making sound decisions in business or government careers.

Career Paths

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 licensure. 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. Students can obtain from the department a separate pamphlet (Career Paths) in which more detail is provided on the various options.

Program in Agricultural Economics

The department has developed a program in agricultural economics with the help of a grant from Cargill, Inc. The program, which is unique among small private liberal arts colleges, is designed to introduce students 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 academicians, public policy makers, and business persons working in the field of agricultural economics and economic development.
Program in Entrepreneurial Studies

In 1982, Macalester College launched a program in entrepreneurial studies. The program assists students in thinking as entrepreneurs and provides guidance on how to carry an idea from conception to completion.

Each semester at least one topic in entrepreneurial studies will be offered under E&B 50 (Topics). The precise description will be made available before each term. Among the topics offered in the past and/or contemplated for 1984-86 are: Entrepreneurship and New Ventures (case studies of past ventures and research into new ones), Entrepreneurship and Non-Profit Organizations (strategies, including grant proposals), The Entrepreneur (history and personalities of the people behind the ventures).

In addition, the entrepreneurial program will offer freshman seminars and interim courses.

Internship Program

The department actively cooperates with the Career Development Center in setting up a diverse set of off-campus experiences, mostly with Twin Cities business firms. In most internships students 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, 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 actively cooperates with language departments and the International Center in arranging opportunities for study abroad.

Use of the Computer

Students in the department are encouraged to become competent in the use of the campus DEC VAX 11/780 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

E&B 19 has been designated a foundation course and will meet the distribution requirements in the social sciences.

Major Concentration

The major concentration in this department requires a minimum of eight regular semester courses within the department plus Math 14 (Introduction to Statistics) as a required supporting course. Among the eight courses in the department, the following four courses are required: E&B 13, 19, 51, 61. With respect to the remaining four electives within the department, the following three restrictions
apply: a) only one course may have a number lower than 30, b) at least one must have a number in the 40s (applied statistics courses), c) only one course may have a number in the 90s.

Core Concentration

A core concentration is also available in economics and business. The requirements are as follows: six courses in the department and six (supporting) courses outside the department meeting the approval of the department chair. Of the six courses in the department, E&B 19, 51, 61 are required. Among the remaining three electives, only one may have a number lower than 30 and only one may have a number in the 90s.

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); courses in the forties are applied statistics courses which require Math 14 as well as E&B 19 (or consent of the instructor); 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 topics 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. Numbers in the eighties and nineties are reserved for special seminars and programs.

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. Alternate years.

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. Every semester.

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. Spring semester.

19 PRINCIPLES OF ECONOMICS FC
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. Every semester.

21 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, E&B 19. Every year.

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. Prerequisite, E&B 19. Alternate years.

23 WORLD HUNGER (Same as Geography 23 and Religion 23)
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. Prerequisite, E&B 19. Spring semester.

29 U.S. AGRICULTURAL MARKETS AND U.S. AGRICULTURAL POLICY
Descriptions of the developmental transition of the U.S. agricultural sector and the current role of agriculture in the U.S. economy. Application of demand and supply analysis to agricultural markets with emphasis on commodity futures markets as methods for price discovery (speculation) and risk management (hedging). Description and analysis of U.S. agricultural policies including domestic and foreign food assistance programs, U.S. price-support programs, and agricultural trade policies. Prerequisite, E&B 19. Every third semester.

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. Fall semester.

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

33 MANAGERIAL ACCOUNTING
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, E&B 13. Spring semester.

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. Prerequisite, E&B 13 or permission of instructor. Spring semester.

36 CAPITAL MARKETS
There are three inter-related topics studies 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, E&B 13 and 19. Alternate years.

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. Prerequisite, E&B 33. Fall semester.
41 INTERMEDIATE APPLIED STATISTICS

42 TIME SERIES ANALYSIS AND BUSINESS FORECASTING
An overview of structural and time series forecasting models, a review of basic statistical concepts, and an introduction to the use of statistical software packages on MACSHARE. Ordinary least squares estimation of linear single-equation structural models. Time series forecasting methods including exponential smoothing, Winters' Method, multiplicative decomposition, regression analysis with trend and seasonal components, and Box-Jenkins (ARMA) models. Emphasis on business applications of the methods, especially Box-Jenkins, for the short-term forecasting of economic variables such as sales and prices. Prerequisites, E&B 19 and Math 14. Fulfills requirements for both the Economics and Business major as well as the Computer Science major. Every third semester.

47 ECONOMETRICS
A course in (linear) statistical modeling with emphasis on the theoretical and practical aspects of the quantitative estimation of economic relationships. Among the topics treated will be bivariate and multivariate regression, analysis of variance, simultaneous-equation models and simulation. Mathematics majors looking for applications of Math 51 and/or Math 36 are urged to consult with the instructor. Prerequisites, E&B 19 (or consent of the instructor) and Math 14. Alternate years.

50 TOPICS
The department offers occasional topics courses and workshops; e.g. Entrepreneurship, Economics of Public Choice.

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, E&B 19. (Not open to freshmen.) Every semester.

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. Prerequisite, E&B 51. Alternate years.

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. Prerequisites, E&B 19 plus Geography 14 or E&B 51. Alternate years.

55 METHODOLOGY OF PUBLIC POLICY ANALYSIS
The course emphasizes the advanced techniques of cost-benefit analysis including estimating consumer surplus, evaluating life, determining shadow prices for non-market 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. This course draws examples from federal and state legislation and programs in urban and environmental problems. Prerequisite, E&B 51. Alternate years.

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. Prerequisites, E&B 13 and 51. Every year.
59 INTERNATIONAL ECONOMIC DEVELOPMENT

This course will apply the tools of economic analysis to gain an understanding of economic development problems and their solutions. We will examine patterns of economic development in a historical and dynamic context. The central role of agriculture and the problem of technological change in agriculture will be examined. Other topics will include domestic and international economic policies, international trade, foreign aid, external debt, technology transfer, rural-urban income inequalities and income distribution. Prerequisite, E&B 51. Fall semester.

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, E&B 19. (Not open to freshmen.) Every year.

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, E&B 61. Alternate years.

71 PUBLIC FINANCE

Public goods, externalities, and the role of government. Types of government taxes and expenditures and their impacts on resource allocation and income distribution. State and local fiscal systems; intergovernmental fiscal relations. Public sector debt. Prerequisites, E&B 51 and 61. Alternate years.

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, E&B 51 and 61, Math 21. Alternate years.

86 SEMINAR IN APPLIED ECONOMICS

Selected micro- and macroeconomic topics are analyzed in weekly workshops. The roles of theory and empirical methods in economic research are examined by the study and discussion of journal articles relevant to seminar topics as well as research papers written by seminar students, faculty, and invited speakers. The course provides an opportunity for students to combine knowledge of theory and empirical methods by doing guided, but largely independent research on a topic approved by the instructor. Prerequisites, either E&B 51 or 61 and one of the intermediate applied courses offered by the department (41, 42, or 47). Spring semester.

96 INDEPENDENT PROJECT

Further study in fields of special interest. Readings, conferences, field work, reports. Prerequisites, E&B 19, 51, 61, and permission of the instructor.

97 INTERNSHIP

Work that involves the student in practical off-campus experiences with business, government, and non-profit organizations. Prerequisites, E&B 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, E&B 19, 51, 61 and permission of the instructor.

Education

Susan D. Blom, Gregory Borden-Neary, Richard Dierenfield (Chair), Delores Fletcher, Nancy Johansen, Dennis St. Sauver

The importance of intelligent, competent, and caring teachers for American schools is crucial to the well-being of our society. The Macalester College Department of Education provides programs through which teacher candidates develop skills and abilities to become effective teachers in nursery, kindergarten, elementary or secondary schools.
The liberal arts setting of the College encourages the broad perspective of the well-educated person and the professional programs produce individuals who are able to teach children and young people. The combination of sound academic standards, broad liberal education, emphasis on subject preparation and thorough grounding in the understanding of instruction result in graduates of outstanding promise as teachers.

The Macalester teacher education programs are approved by the State of Minnesota, and accredited by the North Central Association of Colleges and Secondary Schools.

Candidates preparing for teaching are 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. Students will be recommended for certification in other states if they have satisfied the State of Minnesota licensure requirements.

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. A major concentration or core concentration in any academic area may be selected by those preparing to teach in the elementary schools, nursery and kindergarten.

**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:

To qualify as an elementary teacher, a college degree that includes at least thirty semester hours in professional education with a minimum of six semester hours in student teaching, and a recommendation for licensure by the College are required.

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 identify with the elementary education program as sophomores or juniors. They are encouraged to make formal application to the teacher education committee for admission to the elementary education program after their first education course.

After admission to the program, students should make application for student teaching.
Each individual is reviewed by a faculty selection subcommittee of the teacher education committee, 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 be in good standing in the College and major department and have satisfactory recommendations by the major department adviser and the education adviser. Students are reviewed a third time before being recommended for licensure.

The following courses in education must be satisfactorily completed in addition to the general graduation requirements and a core or major concentration in any academic area.

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)
82 School and Society or
83 Foundations in Education or
84 Philosophy of Education

Elementary education students must also take Education 125 Drug Education and Human Relations.

Two student teaching experiences, each at a different grade level, are required. 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.

A second experience may be taken during the interim term for one unit.

Elementary education students acquiring kindergarten endorsement must take an additional course, Education 81 Kindergarten Theory, and one of the student teaching experiences must be completed in a kindergarten (Education 66).

Those working toward a nursery school endorsement must take, in addition to the elementary sequence, the following courses: Sociology 20 The Family; Psychology 16 Introduction to Developmental Psychology; Education 68 Pre-Kindergarten Student Teaching; Education 85 Early Childhood Education Theory and Practice; and Education 86 Practicum and Seminar in Early Childhood Education.

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), Spanish, speech-theater arts, and coaching athletics. 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 (a G.P.A. of 3.00 in the major or core plus 2.70 in all college coursework), 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:

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tr>
<td>49</td>
<td>Educational Psychology</td>
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<tr>
<td>51</td>
<td>Secondary Curriculum and Instruction (including both a general and a special methods component)</td>
</tr>
<tr>
<td>64</td>
<td>Student Teaching (two units in either fall or spring semester plus interim term)</td>
</tr>
<tr>
<td>82</td>
<td>School and Society or</td>
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<tr>
<td>83</td>
<td>Foundations in Education or</td>
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<tr>
<td>84</td>
<td>Philosophy of Education</td>
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**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. Secondary student teaching may 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. 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 plus a course in school health). 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 plus a school health course. PE 217 is offered in the fall term of even numbered years.

**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 further 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 completed 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 grades 5, 6, 7, 8, and 9. 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. In addition to this major or core, students must take 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 Concentration

The major concentration in social science is designed to prepare students to teach the social sciences at the secondary school level. It is advisable to discuss the program with the coordinator, who must sign the approved program, no later than the junior year. The following sequence is recommended:

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. As demand dictates. (Currently being offered at Hamline and St. Catherine's and includes PE 217.)

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. Every semester.

51-01 SECONDARY CURRICULUM AND INSTRUCTION
General principles and procedures in instruction and application of these in a specific secondary teaching area. A special methods course must be taken concurrently. (See education department.) Every semester.

51-03 SECONDARY CURRICULUM AND INSTRUCTION
Professional Semester—Under special circumstances 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 plus the interim term. 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. Every semester (depending on when the special methods courses are offered).

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. Every semester.

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. Fall semester.

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. Spring semester.

64 STUDENT TEACHING (SECONDARY)
Student teaching in the public schools at the secondary level. Observations as well as actual student teaching. Two units either fall or spring semester plus interim term are required. (Special requirements exist for art majors—see education department.)

65 STUDENT TEACHING (ELEMENTARY)
Student teaching in the public schools at the elementary level. Observations as well as actual student teaching. Every semester. (See note above on art majors.)

66 STUDENT TEACHING (KINDERGARTEN)
Student teaching at the kindergarten level. Includes observations in other kindergartens. Fulfills a requirement for kindergarten endorsement. Every semester.

68 STUDENT TEACHING (PRE-KINDERGARTEN)
1) Student teaching in pre-kindergarten settings includes observation in several programs. 2) Weekly seminar. 3) Fulfills a requirement for pre-kindergarten teacher licensure endorsement. Every semester.

73 ADOLESCENT READING AND LITERATURE
The study of literature written for and read by junior and senior high school age students as well as attention to reading skills in content areas needed for teaching at this level. Required for students being licensed in secondary English. Every year.

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. Every semester.
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. Fall semester.

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

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

85 EARLY CHILDHOOD EDUCATION THEORY AND PRACTICE
Methods, materials and approaches to learning and teaching in early childhood education programs. Fulfills a pre-kindergarten teacher licensure endorsement. Every year.

86 PRACTICUM AND SEMINAR IN EARLY CHILDHOOD EDUCATION
Field experience working with pre-kindergarten children in an early childhood education program, combined with reading assignments and group discussions about ages and stages in child development. Fulfills a requirement for pre-kindergarten teacher licensure endorsements. Every year.

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
This course is concerned with drug use and abuse, causes, treatment, and teaching about drugs as a problem of the society and the individual. It also deals with the concerns of the teacher in relating to racial and other minorities. Every semester.

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

Creative writing and the study of major works of British 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

The following courses may be counted as foundation courses in Humanities: Studies in Literature (20), Modern Fiction (22), Modern Poetry (23), Poetry (24), Drama (25), Novel (26), and Literature in Critical Perspectives (28). The following course may be counted as a foundation course in Fine Arts: Introduction to Creative Arts (32).

Major Concentration

A minimum of nine courses numbered 20 or above and with the restrictions noted below; the nine courses may be distributed according to either of the following two plans:

Plan A:

One of the following, preferably taken early in the major:

- Poetry 24
- Drama 25
- Novel 26
- Literature in Critical Perspectives 28
- Sophomore Seminar 44

One of the following in British literature before 1660:

- Old & Middle English Literature 51
- Chaucer 52
- Shakespeare 53
- Poetry of the Renaissance 54
- English Drama to 1642 55
- An appropriate Topics 50
- An appropriate Seminar 88

One of the following in British literature 1660-1900:

- Age of Satire 60
- British Novel in 18th Century 61
- Romantic Period 62
- Victorian Period 63
- British Novel in 19th Century 64
- An appropriate Topics 50
- An appropriate Seminar 88

One of the following in American literature before 1900:

- Early American Literature 70
- American Literature of the Gilded Age 71
- An appropriate Topics 50
- An appropriate Seminar 88

One of the following in 20th Century literature:

- Modern Dramatic Literature 80
- 20th Century British Literature 82
- 20th Century American Literature 83
- Contemporary American Literature 84
- An appropriate Topics 50
- An appropriate Seminar 88

Four courses, at least three of which must be numbered 32 or above, chosen in consultation with an English department adviser.

Students choosing a Creative Writing emphasis should include Introduction to Creative Writing 32, Advanced Creative Writing 94, and Intermediate Creative Writing 33 or Independent Project 96.

Students who want to become more knowledgeable readers of the full historical range of American and British literature or who are considering graduate study in literature should take at least one more course in each of the literary periods of American and British literature.
Plan B

Based on their performance in their first two English courses, and supported by a written rationale in consultation with their English department advisers, students may apply to the department for a plan differing from Plan A. Their progress will be evaluated at the end of their junior year to ensure that their performance properly supports their stated academic and post-graduate aims.

Limitations applicable to Plan A or Plan B:

In either Plan A or B only two of the nine courses may be numbered 31 or below; only one of the nine courses may be either a tutorial (95) or an independent project (96); only one of the nine courses may be a preceptorship (98); an internship (97) while recommended as an elective may not be included in the minimum of nine courses for the major.

Recommendations applicable to Plan A and Plan B:

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, specialized, or interdisciplinary nature.

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, administration, journalism, public relations, editing and publishing, library science, and education. With faculty assistance and sponsorship, students can develop career-related internships.

Core Concentration

A core program in English is only available for students obtaining a license in elementary education; the core consists of six education courses required for licensure plus six English courses distributed as follows:

One of the following, preferably taken early in the major:

- Poetry 24
- Drama 25
- Novel 26
- Literature in Critical Perspectives 28
- Sophomore Seminar 44

One of the following in British literature before 1660:

- Old & Middle English Literature 51
- Chaucer 52
- Shakespeare 53
- Poetry of the Renaissance 54
- English Drama to 1642 55
- An appropriate Topics 50
- An appropriate Seminar 88

One of the following in British literature 1660-1900:

- Age of Satire 60
- British Novel in 18th Century 61
- Romantic Period 62
- British Novel in 19th Century 64
- An appropriate Topics 50
- An appropriate Seminar 88
- Victorians 63
One of the following in American literature before 1900:

- Early American Literature 70
- American Literature of the Gilded Age 71

An appropriate Topics 50
An appropriate Seminar 88

One of the following in 20th century literature:

- Modern Dramatic Literature 80
- 20th Century British Literature 82
- 20th Century American Literature 83

Contemporary American Literature 84
An appropriate Topics 50
An appropriate Seminar 88

One additional course, chosen in consultation with an English department adviser.

Minor Concentration

A minor in English consists of six courses supported by a written rationale developed in consultation with a member of the English faculty and approved by the English department chair. The six courses must be numbered 20 or above and no more than two of the six may be numbered below 30. Typical minors might focus, for example, upon creative writing, studies in specific historical periods, genre studies (drama, poetry, fiction), writing and editing, or other concentrated areas of interest to the student.

Licensure

Students seeking major or minor licensure for secondary teaching should consult the appropriate faculty members in both English and Education for advice on current state regulations.

Writing Skills

Most English courses include writing assignments, but the department suggests that new students choose writing courses according to the recommendations their advisers receive from the Coordinator of the All-College Writing Program. College Writing I (10) and College Writing II (11) are courses for acquiring basic writing skills. English courses marked “W” on the class schedule will also include instruction in writing.

Honors

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

COURSES

Prerequisites: Students may register for a course numbered 44 or above only if they have already taken one of the following: English 20, 22, 23, 24, 25, 26, 28 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.)

10 COLLEGE WRITING I

Instruction and practice in writing skills for work in college. Methods of instruction will vary, but in most sections there will be individual conferences and class meetings for instruction, individual work and workshop meetings. 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 10 will be published with registration materials. This course does not count for either the general distribution requirement in humanities or for the English major, minor, or core. See also the paragraph above on Writing Skills. Every semester.
11 COLLEGE WRITING II

May be taken either as a first writing course or subsequent to English 10 for students who want more advanced instruction and practice in writing skills for college. Specific course descriptions will be published with registration materials. This course does not count for either the general distribution requirement in Humanities or for the English major, minor, or core. See also the paragraph above on Writing Skills. Every semester.

20 STUDIES IN LITERATURE FC-Humanities

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. With different topics, it may be taken twice for credit. Every semester.

22 MODERN FICTION FC-Humanities

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 and students should consult posted reading lists. With different reading lists, it may be taken twice for credit. Every semester.

23 MODERN POETRY FC-Humanities

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 analytical reading of individual poems. Alternate years.

24 POETRY FC-Humanities

This course will introduce students to the wide variety of poetry in English and American literary history, but will not necessarily be a chronological survey. Students will become familiar with the characteristics of such kinds of poems as ballads, songs, sonnets, odes, elegies, dramatic lyrics, epics; such "voices" as lyric, didactic, meditative, narrative; and such means as rhymed and unrhymed, measured and unmeasured, symmetrical and asymmetrical verses and stanzas. Every year.

25 DRAMA FC-Humanities

Study of selected plays from ancient to modern times, including Greek drama, Shakespeare and other British dramatists through the eighteenth century, and a variety of British, Continental, and American dramatists from the late nineteenth and the twentieth centuries. The course will emphasize the analysis and interpretation of individual plays, with attention to traditional dramatic forms such as tragedy and comedy and the variety of new forms in modern drama. Every year.

26 NOVEL FC-Humanities

The development of the novel as a particular literary art form. Emphasis may be on aspects of the novelist's art as practiced within a narrow time span, or on the development of prose fiction in America and England from the eighteenth to the twentieth century. Although some attention may be given to the relationship between the novel and culture, primary emphasis will be on its characteristics as a work of art. Every year.

28 LITERATURE IN CRITICAL PERSPECTIVES FC-Humanities

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. Every year.

30 INTERMEDIATE COMPOSITION

This "workshop" course routinely engages writers in the writings of other student writers. Students write daily to strengthen and increase their skills in composing in various modes of discourse—expressive, informative, persuasive. Attention is focused more on the processes of composition than on the products; however, each student will complete at least four 4-6 page papers and one 8-10 page paper. Substantial revising is a normal routine, and class members become co-workers and audience for other writers; that is, writers write for their classmates and also read and helpfully respond to what others have written. Every year.

32 INTRODUCTION TO CREATIVE WRITING FC-Fine Arts

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 33 (Intermediate Creative Writing), English 94 (Advanced Creative Writing) and an independent project in creative writing. Every semester.

33 INTERMEDIATE CREATIVE WRITING
A creative writing course that concentrates on a specific genre, e.g., poetry or short fiction. Prerequisites, English 32 and consent of instructor. Alternate years.

37 LEARNING AND TEACHING WRITING
This course is designed to help students become better writers by rapidly enabling them to become competent tutors for other student writers. When students are freed from the commonly nervewracking tasks of producing their own writings and they turn their attentions to understanding and explaining the characteristics of other people's writings, they often discover that what they then learn about writing substantially improves their own subsequent writings. They often learn powerfully that a good way to help one's self is through striving to help another. Prerequisites, writing samples and permission of instructor. Every year.

40 ETYMOLOGY AND THE ENGLISH LANGUAGE (Same as Linguistics 40)
This course is a study of the development of words and families of words in English, including the relation of classical Greek and Latin to contemporary English, the development of vernacular speech, and the logic behind seeming quirks in word histories. Through the work of the course, students will learn how etymology operates as a branch of historical linguistics; will develop a larger personal vocabulary; and will become aware of the powers and variety of the English language. Every year.

44 SOPHOMORE SEMINAR
A seminar for sophomores considering an English major in which methods of literary study are applied to selected subjects from American and English literature. This seminar will be similar to advanced English courses except that fewer books will be assigned and more time will be spent in writing and discussing papers. Prerequisites, one English course numbered 20-28 and consent of instructor. Every semester.

50 TOPICS
Topics courses offer alternative and exploratory approaches to literary works through, for example, interdisciplinary study, studies of single authors or groups of authors from several periods, or studies of recurrent themes in literature.

51 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. Alternate years.

52 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. Every year.

53 SHAKESPEARE
Study of major plays of all genres—tragedy, history, comedy, and romance—with emphasis on the interpretation of the plays, and their contexts in the Elizabethan world. Films of the plays will supplement the reading of the texts. Every year.

54 POETRY OF THE RENAISSANCE
A study of the birth and development of "modern" English poetry. Concentration on Spenser's Shepheardes Calendar, and on the growth of the sonnet, with emphasis on the sonnets of Spenser and Shakespeare. An introduction to the epic, The Faerie Queene. Extensive study of the poetry of John Donne and Ben Jonson and their "classical" and "metaphysical" followers, e.g., Herbert, Herick, Carew, Suckling, Marvell. Alternate years.

55 ENGLISH DRAMA TO 1642
Major emphasis on such contemporaries of Shakespeare as Christopher Marlowe, Ben Jonson and John Webster, but beginning with the developments of the drama in the Middle Ages from religious ritual into the Mystery Plays and Morality Plays. Then in the Elizabethan drama, study of the fusion and conflicts of the tragic, the romantic, the demonic, and the satiric in the major genres, including such distinctively Elizabethan types as the revenge play, tragic satire, and tragicomedy, and noting the rise of such significant "modern" figures as the romantic rebel, the villain-hero and the alienated idealist. Alternate years.
60 AGE OF SATIRE
A study of the major British writers from 1660-1800: Dryden, Swift, Pope, Dr. Johnson, Sheridan and their contemporaries. Emphasis upon 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 Rape of the Lock, and The School for Scandal, and seek to determine their value as models for critics of today’s society. Alternate years.

61 BRITISH NOVEL IN THE EIGHTEENTH CENTURY
The rise of the novel as illustrated in the works of Defoe, Richardson, Fielding, Sterne, Smollett, Goldsmith, and others. Emphasis on the depiction of English social history and the authors’ criticism of contemporary life as well as on the variety of narrative forms which the early novelists invented to entertain and enlighten their age. Alternate years.

62 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 to these changes and on the development of the romantic meditative lyric as a new and enduring poetic form. Every year.

63 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; in addition Victorian music, painting and architecture are briefly examined. This course is usually taught in conjunction with History 53 for double credit, and when it is, students will be required to register for both courses. Alternate years.

64 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. Alternate years.

70 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. Every year.

71 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 as American literature becomes more “national” in character: includes such writers as Twain, James, Dickinson, Howells, Norris, Dreiser and Adams. Every year.

80 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. Alternate years.

82 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 such authors as Yeats, Joyce, Forster, Lowry, Murdock, Greene, Beckett, Bolt and John Fowles. Alternate years.

83 TWENTIETH CENTURY AMERICAN LITERATURE
Twentieth century literature from the early years of the century through mid-century, including such writers as Frost, Eliot, Stevens, Fitzgerald, Faulkner and O’Connor, studied in their social/historical contexts. Alternate years.

84 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. Alternate years.

88 SEMINAR
Seminars are intended for junior and senior English majors and will be offered each year. Topics will be announced in advance so that majors may plan for them. Every semester.
90 STRUCTURAL ANALYSIS OF MODERN ENGLISH (Same as Linguistics 51)

A systematic study of the grammatical structure of English. The course is organized around a functional view of language, i.e., around an understanding of how different kinds of grammatical forms are used in English to communicate different kinds of meaning. It is also intended to help students understand the nature of grammatical analysis as applied to English and the terminology such analysis usually employs. The course is recommended for linguistics or English majors who intend to teach, for students of foreign languages seeking a better understanding of general grammatical processes in language, and for students who wish to increase the effectiveness of their use of English through a detailed study of its structure. Students who are working for teacher licensure in English will include in their work a paper on the historical development of the language. Recommended, Linguistics 26. Every spring.

93 ADVANCED COMPOSITION

This course is designed for English majors who already write effectively but who wish to improve their writing. Students will compose descriptive, analytical, and evaluative essays about literature. Each student will design a final essay (10-15 pages) for publication in a literary journal. Alternate years.

94 ADVANCED CREATIVE WRITING

A creative writing workshop which will primarily emphasize student writing (both prose and poetry), with a strong secondary emphasis on the development of effective critical skills. Through the presentation of new work, critiquing of work-in-progress, and group discussions, the workshop will focus on the sharing of constructive criticism of the writings of all of its members. Prerequisites, English 32 and consent of the instructor. May be repeated for credit, but may be included only once in the minimum of nine courses for the major. Every year.

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. Only one Tutorial or Independent Project may be included in the minimum of nine courses required for the major or the six required for a minor or core.

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, minors 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. Only one Tutorial or Independent Project may be included in the minimum of nine courses required for the major or the six required for a minor or core.

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. Internships may not be included in the minimum of nine courses required for the major or the six required for the minor or core.

98 PRECEPTORSHIP

Work assisting a faculty member in planning and teaching a course. Prerequisite, invitation by faculty member. No more than one preceptorship may be included in the minimum of nine courses required for the major or the six required for a minor or core.

Environmental Studies

Mark Cavaleri (Geology), Mark Davis (Coordinator, Biology), Julia Friedman (Economics and Business), Howard Mielke (Geography), Wayne Wolsey (Chemistry)

The goal of this interdepartmental major is to provide students with a basic understanding of environmental processes and issues, and to develop the verbal, analytical, and quantitative skills needed to investigate these issues. The major emphasizes the multi-faceted nature of environmental problems and the
interdisciplinary array of skills used in the search for solutions. The objective of this broad-based program is to prepare students for further work in environmental management or a specialized, related field.

The interdepartmental major in environmental studies consists of six components:

1. Four introductory courses,
2. A course in either statistics or computer skills,
3. A core concentration (or major) in an appropriate department in either the natural or social science area,
4. An approved cluster of three courses in an appropriate department for the area not chosen above in C,
5. An internship,
6. ES 88 The Senior Seminar in Environmental Problems.

These components are described in detail below:

1. All majors are required to take the following introductory courses:
   Biology 11 Principles of Biology,
   Economics and Business 19 Principles of Economics,
   Geology 11 Physical Geology,
   Geography 32 People and their Environment (highly recommended to be taken following Biology 11 and Geology 11).

2. Majors must show minimal competency in statistics or computer sciences by completing either
   Math 14 Introduction to Statistics (Math 51 or Psychology 14 are accepted as substitutes), or
   Computer Science 17, Computer Programming I (the Interim course in computer programming is accepted as a substitute).

3. Majors in environmental studies will complete a core or a major concentration in a department listed below:

   **Departments of Natural Sciences**
   Biology
   Chemistry
   Geology
   Physics

   **Departments of Social Sciences**
   Anthropology
   Economics and Business
   Geography
   History
   Political Science

4. Students also will select and complete an approved set of three courses from a single department in the opposite area. Selections made from among the following groups are automatically approved. Other groups of courses chosen from these or other departments require approval of the environmental studies coordinator.

   **Natural Science**
   Biology 11 Principles of Biology
   Biology 40 Animal Ecology
   Biology 41 Ecology
   Biology 42 Limnology
   Biology 65 Field Botany
   Biology 66 Marine Biology
5. Majors are required to complete an internship in environmental studies during junior year or first semester of senior year. Under limited circumstances (such as an appropriate internship not being available) and with approval of the environmental studies coordinator, an off-campus independent research project may be substituted.

6. In the spring term of the senior year, majors must take the following course:

88 SENIOR SEMINAR ON ENVIRONMENTAL PROBLEMS

Through readings, discussions, guest speakers, and field trips, students will explore the difficult and controversial issues surrounding environmental problems. In addition, students will use the knowledge and methods learned in other courses to investigate a particular problem or group of problems. The investigation will involve field, library or laboratory research or other methods of information gathering; analysis of this information; technical writing and an oral presentation. The course will attempt to bring
French:

Marianna Forde, Annick Fritz, 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, government, European law, trade and finance, and are taught by French university professors. The program prerequisites are French 51 and 63 or consent of the program director. Participants need not be French majors. While in France the students attend classes at the Centre d’Etudes Francaises, 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.

Macalester College Program in Rennes (French and Business)

The French department, in cooperation with the department of economics and business, offers a program that includes: a) advanced work in economics and business; b) advanced work in the speaking, comprehension, and writing of the French language; c) the experience of living in a foreign social, cultural and intellectual environment.
The host institution is the Institut de Gestion (Business Administration Institute) of the University of Rennes, France. The program is particularly suited for students of junior standing. Students must be declared majors or cores in economics; they need not be declared majors or cores in French. For brochure and application procedures, please contact the French department.

The French House

Students compete for the privilege of living in the Macalester French House, where daily conversation with a native French speaker and other students of French both improves oral proficiency in French and develops increased understanding of culture and society in France and other French-speaking countries. The French House is also the center of the French department’s social and cultural activities.

Placement Tests

Students who have studied French before and desire to continue it should plan to take the placement tests given during Orientation Week 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

The French department believes that virtually all its courses may, depending upon the student’s previous work in French, be foundation courses in some sense. However, we have formally designated the following as foundation courses which will fulfill the general distribution requirement in the humanities: French 11, 12, 15, 31, 32, 35, 51, 52, 63, and 68. French 52 may be described as FC-LA (foundation course with literary appreciation). All courses in the 70s are also literary appreciation courses and may be taken to satisfy distribution requirements with departmental consent.

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 70s 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 — appropriate 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 60s, one literature course from the 70s 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 Concentration

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

Senior Examination

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 FC
Emphasizing the active use of the language, this course is conducted entirely in French and develops the fundamental skills of listening, speaking, reading, and writing. Every semester.

12 ELEMENTARY FRENCH II FC
Conducted entirely in French, this course continues the development of the skills of listening comprehension, speaking, reading, and writing, with increasing emphasis on the practice of reading and writing. Every semester.
15, 35 FRENCH FOR READING KNOWLEDGE FC
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. Spring semester.

31 INTERMEDIATE FRENCH I FC
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. Every semester.

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

51 ADVANCED CONVERSATION FC
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. Every semester.

52 COMPOSITION AND LITERATURE FC-LA
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. Every semester.

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. Fall semester.

56 METHODS OF TEACHING MODERN FOREIGN LANGUAGES (Same as German 56, Linguistics 56, and Spanish 56)
This course is for majors of French, German, or Spanish who are interested in developing skills and knowledge in teaching as part of their undergraduate major, and counts toward teacher licensure in Minnesota. Fundamental concepts about second language acquisition are introduced in the first half of the course, including some contrastive analysis of English and the target language, the idea of language as communication, and the relationship of language and culture. The second half of the course presents techniques for teaching the skills of listening, speaking, reading, and writing. Students have an opportunity to practice these techniques, to develop a course design, and to write instruments for evaluating language skills. Prerequisite, Linguistics 26 or 51. Spring 1986.

63 FRANCE TODAY FC
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 semester.

68 ART AND IDEAS IN FRENCH CULTURE (Same as Humanities 68) FC
The course will study the idées maîtresses of French society from the medieval period through the 19th century in their cultural and historical settings 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 semester.

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 1985.
74 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 (Stendhal and Hugo). Prerequisite, French 52 or consent of instructor. Spring 1985.

75 NINETEENTH CENTURY LITERATURE
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, Hugo, Baudelaire, Verlaine, Mallarmé, Rimbaud, Balzac, Stendhal, Flaubert and Zola. Prerequisite, French 52 or consent of instructor. Fall 1984.

76 CONTEMPORARY TRENDS IN FRENCH LITERATURE
A study of selected trends in 20th century literature studied with their cultural background; Surrealism and Cubism; from Apollinaire to Aragon; the human condition; man's fate from Malraux to Bernanos; the theatre of the absurd and of violence from Ionesco to Arrabal; the new novel; Alain Robbe-Grillet et al. Prerequisite, French 52 or consent of instructor. Spring 1986.

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

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 1984.

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. As demand dictates.

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 1985.

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, Gerald Pitzl, Michael Plautz, Jock Robertson

The department of geography offers courses that convey knowledge of the ways human activity in space is organized and the impacts of human activities on the physical environment. Geography possesses an integrated approach to human knowledge and has a global viewpoint. Through classroom and laboratory experience, field work, and community involvement, students are provided with the knowledge and skills required to carry out locational analysis, appreciate the diversity of places, the integration of places on the surface of the earth and the spatial processes that affect contemporary society.

Career Orientation

The study of geography prepares students to enter a wide range of planning and analytical careers or to go on to graduate programs in architecture, business, climatology, geography, urban and regional planning, community development, and environmental management. The department also has a preprofessional program in graphic interpretation and communication as well as computer applications.

General Distribution Requirement

Geography 11, 14, 16, and 42 are foundation courses which best serve the general educational needs of students and are required as preparation for most upper division courses. Geography 11, 14 and 42 fulfill the general distribution requirement in social science. Geography 16 fulfills the general distribution requirement in natural science.

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 eight geography courses and must include Geography 11, 16, 25, 78; a supportive advanced course, two electives, and one seminar at the 88 level. In addition, a facility in a foreign language or quantitative methods (whichever is appropriate to a student's interests) is expected.

The department supports four types of programs: urban and regional planning, resource conservation and environmental management, international studies, and graphics.

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

Core Concentration

A core concentration in geography consists of six courses in geography which must include Geography 11 and 16, 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 career-oriented minors. 1) The general geography minor consists of Geography 11, 14, 16, 25, and one elective from the courses offered within the department. This course combination is especially appropriate for students planning to teach social studies. 2) The land
use planning minor consists of Geography 14, 25, 34, 60, 61, 88 (Urban Geography Field Seminar), and an internship in a planning agency. 3) The regional studies minor consists of Geography 11, 16, 25, 46, and one regional geography course on an area of the world other than North America. 4) The graphics minor consists of Geography 11, 16, 25, 46, quantitative methods and an internship in an agency working with cartographic communications. 5) The natural resource conservation minor consists of Geography 16, 25, 34 or 46.

**Interdisciplinary Studies**

Geography is an integrating and synthesizing discipline. The study of the earth's people and their physical surroundings requires combining the subject matter of many fields of study. The courses which best serve the student interested in interdisciplinary studies include: Geography 11 (Human), 14 (Urban), 16 (Physical), 23 (World Hunger), and 34 (Resource Management for the Future).

**Internships**

Over the past several years the department, in cooperation with the Career Development Center, has sponsored preprofessional internships in a variety of planning agencies and consulting firms. In some internships, students receive pay for their work.

**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 catalog description of Urban Studies, East Asian Studies, Japan Studies, International Studies, Environmental Studies, and Computer Science.

**Honors**

Honors are available in the geography department through the college-wide honors program. Outstanding majors, cores and minors in geography are eligible for membership in Epsilon Kappa, the Macalester chapter of Gamma Theta Upsilon, the national honor society in geography. The traditional Golden Shovel award is given to students who distinguish themselves in seminars, class discussions, and on field trips.

**COURSES**

11 HUMAN GEOGRAPHY FC-Social Science-NW, HP, OC
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; laboratory sections devoted to the development of atlas and mapping skills and to the use of prepared application programs on the college computer system (no programming knowledge required). Every semester.

14 URBAN GEOGRAPHY FC-Social Science
This course seeks to explain the evolving pattern of cities across the earth in terms of the distribution and movement of resources and people. In addition, a careful analysis of the internal spatial structure of North American cities will be carried out. Much class time will be spent on discussion of contemporary urban problems and attempts at their solution. Field work required. Every year.
16 PHYSICAL GEOGRAPHY FC-Natural Science
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, and the earth's vegetation; field trips and assignments. No prerequisite. Fall semester.

23 WORLD HUNGER (Same as Economics 23 and Religion 23)
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. No prerequisite. Spring semester.

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.) Prerequisite, Geography 11 or 14 or 16 or a regional course. Every semester.

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. Students will develop ability to make local population and economic forecasts. Prerequisite, Geography 11 or 14 or permission of the instructor. Alternate spring semesters.

32 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 implication of a variety of energy and material resource development options. Prerequisite, Geography 11 or 14 or 16 or Geology 11 or Biology 11. Spring semester.

34 RESOURCE MANAGEMENT FOR THE FUTURE
This course examines and seeks solutions to the problems and conflicts that arise from the interplay of natural physical processes and specific aspects of the twentieth century urban industrial society. Topics to be examined include air sheds, heat islands, pollution domes, acid rain, solid wastes, toxic substances, and the contamination or loss of vital natural resources. 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 16 or 32. Fall semester.

42 THE CULTURAL LANDSCAPE OF NORTH AMERICA FC-Social Science
An exploration of ways in which the natural environment of North America has been transformed by human activity. Special attention will be given to the patterns of human settlement, economic activity and land use. The regional pattern of Canada and the relationships between the United States, Mexico and Caribbean populations will be emphasized. No prerequisite. Alternate spring semesters.

43 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. No prerequisite. Alternate spring semesters.

46 SPACE AGE GEOGRAPHY
A course designed to develop the use of aerial photography and satellites as tools for geographic exploration. Physical, biological, and cultural processes and patterns of the earth will constitute the major emphasis of the course. The course will include several field trips to local remote sensing facilities. An essential skill for geographers, planners, ecologists, climatologists, agriculturalists, social scientists, geologists, civil engineers, environmentalists, artists, or, indeed, anyone interested in the earth. Prerequisite, Geography 11 or 14 or 16 or permission of the instructor. Alternate fall semesters.

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. No prerequisite. As demand dictates.

94
60 INTRODUCTION TO URBAN PLANNING AND REAL ESTATE DEVELOPMENT
This course is taught by a professional planner and examines the basic concepts of community and regional development. The course includes: a) the evolution of planning as a resource management process; b) current issues including real estate development, transportation and environmental constraints; c) plan implementation processes, including zoning and financing alternatives. Special emphasis is placed on planning as a problem-solving and strategy-setting process for both public and private organizations. Real estate, economic, and environmental analysis techniques are explored including site analysis for residential, commercial and industrial development. No prerequisite. Fall semester.

61 INTRODUCTION TO 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. Spring semester.

78 THE DISCIPLINE OF GEOGRAPHY
The history of geographic thought and methodology; geography as an integrating discipline; the position of geography relative to the sciences, the social sciences and the humanities; geographical research; preparation and presentation of oral and written reports; geographical study and vocational choices; discussions of honors projects possibilities. Prerequisite, geography major in the junior year. Interested geography cores should contact the department chair. Fall semester.

88 SEMINARS
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 14, Geography 30 or 60 recommended. Alternate fall semesters.

Historical Geography of Urbanization
The development of urban settlement forms throughout the world. The genesis of contemporary American landscapes with an emphasis on the Middle West. Field trips and individual projects. Prerequisite, Geography 14. Alternate fall semesters.

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. Advanced planning is required through the Career Development Center. Internship credits may not be included toward the major or core concentration.

Geology
Mark Cavaleri, Henry Lepp, Gerald Webers (Chair)
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

Geology 11, 12, 15, and 22 are non-prerequisite foundation courses that may be used to fulfill the general distribution requirement in natural science.

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 Concentration

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 FC
An introduction to the materials and structure of the earth and to the processes acting on and in the earth to produce change. Evolution of land forms and the formation of earth resources. Includes discussions of the important role of geologic processes in environmental planning and in the solution of environmental problems. Required for Environmental Studies and Geology majors and a foundation course fulfilling the natural science requirement. Local field trips. Three hours lecture and two hours lab per week. Every semester.

12 HISTORICAL GEOLOGY FC
The history of the earth for the past 4.5 billion years. Concept of geologic time and general historical principles. Evolution of continents, oceans, ocean basins, atmosphere, and life. Continental drift and plate tectonics. Physical development of North America and the origin of the present physiography of the United States. Evolution of life from simple forms through vertebrates to man. Three hours lecture and two hours lab per week. Fossil collecting on field trip. Every semester.

15 OCEANOGRAPHY FC
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. Spring semester.

22 WATER RESOURCES FC
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. Required for Environmental Studies major. Spring 1985 and alternate years.

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. Fall semester.

32 STRUCTURAL AND FIELD GEOLOGY
An introduction to primary and secondary structures of rocks, the mechanics of rock deformation, and global tectonics. Discussions of the origins and interpretations of major rock features. Problem sets using geographical techniques in solving structural problems and map interpretation. Introduction to mapping techniques. Three hours lecture and four hours lab per week. Prerequisites, Geology 11 and 12. Fall semester.

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 depositionional environments. Three hours lecture and two hours lab per week. Prerequisite, Geology 12 or permission of the instructor. Fall semester.

50 TOPICS
One or more topics are normally offered in alternate years. Depending upon student interest these may be courses designed for geology majors requiring some prerequisites, or they may be non-prerequisite courses on some topic in the earth sciences not covered in regular courses.

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 lab per week. Local field trips and one all-day field trip to southern Minnesota. Prerequisite, Geology 12 or permission of the instructor. Alternate years.

55 GEOLOGICAL EVOLUTION OF NORTH AMERICA
This course is an introduction to the geological evolution of the various physiographic regions of North America. The study of each region considers the history of formation of the major rock series present and the history of deformation that has ultimately yielded the present configuration of the rocks in the region. The course includes a major writing component with instruction in the researching, form and
composition of scientific papers. Prerequisite, Geology 11 and 12 or permission of the instructor. Alternate fall semesters.

61 GEOMORPHOLOGY AND GLACIAL GEOLOGY

65 PETROLOGY
The occurrence, origin, and evolution of igneous and metamorphic rocks. Introduction to experimental phase equilibria with application to natural systems. Discussions of factors controlling the distribution of crystalline rocks in the crust and the relationships between rock types and plate tectonics. Laboratory exercises on hand specimen and microscopic identification of rocks and on textural interpretation. Three hours lecture and four hours lab per week. Prerequisite, Geology 31. Spring semester.

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 lab per week. Prerequisite, Geology 11 and permission of the instructor. Fall semester.

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.

German and Russian
R. Ellis Dye (Chair), Birgitta Hammarberg, Patricia Peterson, David Sanford, Linda Schulte-Sasse, Ivancica Dvorzak Schrunk, Maria Schweikert, Otto Sorenson

German
The German division of the Department of German and Russian offers students the opportunity to learn an important language which is closely related to English and to develop a direct understanding of some of the brightest cultural achievements and decisive social and political events in the history of the Western World. German is the language of the three B's of music (and Mozart, Wagner, and Mendelssohn), of Goethe, Immanuel Kant, Karl Marx, Sigmund Freud, and Albert Einstein. Neither these giants of the mind and spirit nor Bismarck nor Adolf Hitler can be fully understood in translations, and so
German is a staple of any general education. It is also important to contemporary commerce, science, and the arts.

**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 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 32 or the equivalent) may be admitted into the program, which includes a two-month term at the Akademie Klausenhof or a Goethe Institute in Germany and a following three 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 and the Macalester International Center.)

**The Tübingen Exchange**

During the 1980-81 academic year, Macalester initiated a reciprocal exchange program with the University of Tübingen, West Germany. Each year, a Tübingen student enrolls at the College and one Macalester student matriculates 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 the Department of German and Russian or the International Center regarding requirements for participation.

**General Distribution Requirement**

German 11, 12, 31, 32, and 47, as well as Norwegian 19 and 20 count as foundation courses toward fulfillment of the general distribution requirement in the humanities.

**Major Concentration**

The purpose of the major in German is to provide students with the linguistic and critical skills necessary for the use of German in commerce, science, and diplomacy and for further study of German literature, philology, and culture. It also promotes the kind of understanding of important literary and cultural texts that is essential to an educated person. Students who have completed a major in the field of German are prepared to continue their study of German language and literature and related fields (e.g. comparative literature) at the graduate level. When augmented by the required sequence of courses and training in professional education, the major in German qualifies students for licensure to teach German in the schools. Students who are equipped with an appropriate second concentration may go on to work in international business, law, the media, travel and tourism, or government service. Since 1971, 31 Macalester graduates in the field of German have won Fulbright, DAAD, or ITT Fellowships for study in Germany, Austria, and Scandinavia, a record paralleled by few American colleges of comparable size.
A departmental major in German consists of a minimum of ten courses above the elementary level, to include 31 and 32 (or the equivalent), 47, 51, 57, 61, either 63 or 64, and 67 or 70. For majors who plan to become teachers, the department specifically recommends that 52 and 70 be included in the major plan.

The department also requires five supporting courses from outside the department which will enhance the student’s knowledge of language or literature or Western history and culture. (A list of recommended supporting courses may be obtained from the department secretary or any member of the faculty in German.)

Core Concentration

A core concentration gives its possessor a competitive advantage over a student whose professional credentials would otherwise be equivalent. A mark of the student’s humanistic learning and breadth of understanding, it particularly enhances the credentials of teachers with majors in subjects other than German.

A core concentration consists of six German courses above the elementary level, to include German 31 and 32 (or the equivalent), 47 and 51, and six supporting courses outside of the program in German.

Minor Concentration

A minor in German consists of five courses beyond German 32, to include German 47 and 51.

Honors

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

COURSES

11 ELEMENTARY GERMAN I FC-OC
Essentials of grammar, elementary conversation and reading. For beginning students whose goals are competence in reading, writing, speaking and aural comprehension as well as understanding of German culture. Four hours per week plus laboratory periods. Every year.

12 ELEMENTARY GERMAN II FC-OC
Further skill development and introduction to German culture. Every year.

31 INTERMEDIATE GERMAN I FC-OC
While giving attention to aural comprehension and grammar this course will emphasize the development of reading skills, oral fluency, and cultural understanding. Prerequisite, German 12, or placement test, or consent of the instructor. Every year.

32 INTERMEDIATE GERMAN II FC-OC
Further emphasis on reading skills, oral fluency, and cultural understanding. Prerequisite, German 31, or placement test, or consent of the instructor. Every year.

47 INTRODUCTION TO GERMAN LITERATURE FC-LE
An introduction to great examples of the main literary genres and to such matters as figurative language, prosody, and the relationship between literature and its social background. Prerequisite, German 32 or permission of instructor. Every year.

50 TOPICS
The subject matter of this course will vary from term to term, depending on student needs and instructor interest.

Examples of topics courses offered in recent years: “The Dutch—an introduction to the culture, art and history of the Hollanders”; “The Artist in German Literature”; “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.”

100
51 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
estsays. Prerequisite, German 32 or permission of the instructor. Every year.

52 ADVANCED COMPOSITION AND STYLISTICS
Translation of literary texts into German and the writing of critical essays. Prerequisite, German 51 or
permission of instructor. Alternate years.

56 METHODS OF TEACHING MODERN FOREIGN LANGUAGES (Same as French 56, Linguistics
56, and Spanish 56)
This course is for majors of French, German, or Spanish who are interested in developing skills and
knowledge in teaching as part of their undergraduate major, and counts toward teacher licensure in
Minnesota. Fundamental concepts about second language acquisition are introduced in the first half of
the course, including some contrastive analysis of English and the target language, the idea of language
as communication, and the relationship of language and culture. The second half of the course presents
techniques for teaching the skills of listening, speaking, reading, and writing. Students have an
opportunity to practice these techniques, to develop a course design, and to write instruments for
evaluating language skills. Prerequisite, Linguistics 26 or 51. Spring 1986.

57 SURVEY OF GERMAN LITERATURE
Some of the best works in the history of German literature. Examines great writing in the various
genres from medieval love poetry to the modern Novelle. Prerequisite, German 32 or permission of
instructor. Every year.

61 EARLY GERMAN LANGUAGE AND LITERATURE (Same as Linguistics 70)
Significant linguistic and literary events from the Medieval to the Baroque. Prerequisite, German 47 or
permission of instructor. Every year.

63 AGE OF GOETHE I
Selected works from the Enlightenment, Sturm and Drang and Early Classicism. Prerequisite, German
47 or permission of the instructor. Alternate years.

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? Prerequisite, German 47 or permission of the instructor. Alternate years.

66 ART AND IDEAS IN GERMAN CULTURE (Same as Humanities 66) FC
This course will examine the development of German art and ideas from the medieval period through
the 19th century. Emphasis will be placed on representative works of literature, music and the visual
arts from the periods under discussion. Lectures and readings will be in English, with reading in
German for credit in German. Prerequisite for credit in German, German 47 or consent of instructor.
No prerequisite for others. Alternate years.

67 NINETEENTH CENTURY LITERATURE
The chief plays of Büchner, Grillparzer, Hebbel, and the early Hauptmann; selected lyrics of
Droste-Hülshoff, Mörike, Keller, Storm, and Meyer; prose from Gotthelf, Stifter, Keller, Meyer, and
Storm. Prerequisite, German 47 or permission of the instructor. Alternate years.

70 TWENTIETH CENTURY LITERATURE
Selected works of writers from Impressionism to the present, including Mann, Kafka, and Brecht.
Prerequisite, German 47 or permission of the instructor. Alternate years.

73 ANGLO-SAXON (Same as Linguistics 73)
Study of the phonology, morphology, and syntax of Old English. Readings will include the Parker
Chronicle, The Wanderer, The Seafarer, and selections from Beowulf. Prerequisite, permission of the
instructor. Alternate years.

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
Netherlandic and Danish are taught occasionally as 50 Topics courses.

19 ELEMENTARY NORWEGIAN I FC-OC
Essentials of Norwegian grammar, conversation and reading. For beginning students whose goals are elementary competence in the Norwegian language as well as understanding of Norwegian culture. Every year.

20 ELEMENTARY NORWEGIAN II FC-OC
Further skill development and introduction to Norwegian culture. Every year.

Russian
The Russian division of the department of German and Russian offers students the opportunity to learn the most important language of the world's other superpower and to become acquainted with the writings of such literary giants as Pushkin, Tolstoy, Dostoevsky, Turgenev, and Solzhenitsyn. Russian composers such as Tchaikovsky, Rachmaninov, and Prokofiev, and scientific and ethical leaders of the stature of Sakharov, though of worldwide significance, inevitably reflect their linguistic and cultural heritage and are ultimately incomprehensible except through an understanding of that heritage. The same may be said of Lenin, Stalin, and the most recent leaders of the Soviet Union. Indeed effective interaction with the Russians on the part of our own national leaders and governmental agencies will depend for the foreseeable future on increased understanding of the Russian language, history, and culture. There may be no more urgent study for Americans who wish to enter government service or such fields as journalism and international business than the study of Russian.

The Macalester Russian program prepares students for graduate school in the Slavic field and for work as translators, interpreters, and teachers of Russian, and augments their preparation in other departments for work in government or in the growing field of international commerce. It, of course, contributes extensively to the program in Russian area studies and international studies, and can fruitfully complement studies in linguistics and other literatures.

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

Study Abroad for Students of Russian

In the past, Macalester students have taken part in Russian programs in the Soviet Union, in Munich, Germany, and in Zagreb, Yugoslavia. Today the opportunities are better than ever.

Students may apply to the ACM program in Yugoslavia (see Special Programs) and, when equipped with a sufficiently impressive record, to the Pushkin Institute and the University of Leningrad in the Soviet Union. A joint ACM semester program at the Pushkin Institute is currently being developed. In addition, students of Russian may participate in an Interim Term study program in the Soviet Union. The existence of several organizations in St. Paul which help Soviet immigrants to start a new life in the United States, e.g. the Jewish Family Service, and the International Institute, provides an opportunity to Macalester students for volunteer service and a chance to practice their Russian while assisting newcomers in learning English.

General Distribution Requirement

Russian 11, 12, 21, 22, 55, 61, and 62, and Serbo-Croatian 15 and 16 count toward the fulfillment of the general distribution requirement in the humanities.

Major Concentration

The purpose of the major in Russian is to provide students with the linguistic and critical skills necessary for the use of Russian in commerce, science, and diplomacy and for further study of Russian literature, linguistics and area studies. When augmented with the required sequence of courses and training in professional education, the major in Russian qualifies students for licensure to teach Russian in the schools.

A major concentration in Russian consists of nine courses beyond the elementary level, to include 21, 22, 31, 32, 41, 61, and 62. Supporting courses will be determined according to the student’s vocational interest and in consultation with the department. For students who wish to teach Russian, courses in linguistics, a second foreign language, English, the humanities and history are appropriate. Students going into business or government work would choose supporting courses in Russian culture and civilization, 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 would include History of Russia, Geography of Europe and the USSR, and other relevant courses in social science, literature, humanities, fine arts and philosophy.

Minor Concentration

There are two separate minors offered through the German and 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 German and Russian department through the college-wide honors program.
German and Russian

COURSES

The Basic Language Sequence

11 ELEMENTARY RUSSIAN I FC-OC
A humorous but structured introduction to the basics of the Russian sound system and grammar, as well as speaking, reading, writing, and comprehension. Some exposure to Russian culture. For beginning students. No prerequisites. Fall semester. Alternate spring semesters also.

12 ELEMENTARY RUSSIAN II FC-OC
Continuation of Russian 11; further development of the same skills. Prerequisite, Russian 11 or consent of instructor. Spring semester. Alternate fall semesters also.

21 INTERMEDIATE RUSSIAN I FC-OC
Continuation of Russian 12; further development of the same skills. Prerequisite, Russian 12 or consent of instructor. Fall semester. Alternate spring semesters also.

22 INTERMEDIATE RUSSIAN II FC-OC
Continuation of Russian 21; further development of the same skills; added emphasis on reading and discussing simple literary texts. Prerequisite, Russian 21 or consent of instructor. Spring semester.

31 ADVANCED RUSSIAN I
Continuation of Russian 22. Review of basic grammar with further study of specific grammar problems. Reading and discussing more advanced texts and writing compositions. Prerequisite, Russian 22 or consent of instructor. Fall semester.

32 ADVANCED RUSSIAN II
Continuation of Russian 31 with more in-depth study of specific areas of grammar; composition, reading, and conversation. Introduction to stylistics and word-building. Prerequisite, Russian 31 or consent of instructor. Spring semester.

41 ADVANCED RUSSIAN III
Continuation of Russian 32. Emphasis on stylistics; reading and discussing stylistically varied texts: literary, scientific, journalistic, etc. In-depth study of word-building; advanced composition; grammar as needed. Prerequisite, Russian 32 or consent of instructor. Fall semester.

Supplementary Conversation, Literature and Culture Courses

23 RUSSIAN CONVERSATION
Emphasis on everyday practical spoken Russian, communication situations, and topics that the student is more likely to experience. We recommend that this course be taken either after Russian 21 or after Russian 22 concurrently with Russian 31. Prerequisite, Russian 21 or consent of the instructor. Alternate fall semesters.

33 ADVANCED RUSSIAN CONVERSATION
Everyday spoken Russian as well as discussion of more abstract topics. Prerequisite, Russian 31 or consent of instructor. Alternate spring semesters.

50 TOPICS

55 RUSSIAN CULTURE AND CIVILIZATION FC-OC
The most important artistic, socio-economic, intellectual, and ideological areas of Russian culture, both prerevolutionary and Soviet. Areas covered include: geography, religion, education and family life, architecture, painting and sculpture, music, ballet. Less emphasis on politics, history, and literature, since these areas are covered by other existing courses (e.g. History 60 and 62, Russian 61 and 62, etc). Lectures, readings, and discussions in English. No prerequisites. Alternate spring semesters.

61 NINETEENTH CENTURY RUSSIAN LITERATURE IN TRANSLATION FC-LE
An introduction to Russian literature: prose, poetry, drama, literary criticism and methodology. Readings of authors, representative of the Golden Age of Russian poetry (Pushkin, Lermontov), the Age of the Realistic novel (Gogol, Turgenev, Dostoevsky, Tolstoy), as well as the late 19th century masters of the short story (Chekhov, Bunin). Russian drama is represented by Gogol, Ostrovsky, and Chekhov. Lectures, readings, and discussions in English; Russian majors will read some assignments in Russian. No prerequisites. Fall semester.
German and Russian

History

62 TWENTIETH CENTURY RUSSIAN LITERATURE IN TRANSLATION FC-LE
A survey of Russian literature from the beginning of the century to the present. Readings and
discussions of representative authors, such as Gorky, Mayakovsky, Gladkov, Pasternak, Akhmatova,
Zamyatin, Bulgakov, and Solzhenitsyn. Material covered includes prose fiction, poetry, some drama,
and some literary criticism from the early Modernist period, the Stalin period, the "Thaw" period, and
today's Soviet literature. Lectures, readings, and discussions in English; Russian majors will read some
assignments in Russian. No prerequisites, although it is recommended that students take Russian 61
before this course. Spring semester.

88 SENIOR SEMINAR
Seminars on selected topics in 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
Prerequisite, permission of instructor. Limit to be applied toward the major or core will be determined
in consultation with the department.

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

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

Serbo-Croatian

15 ELEMENTARY SERBO-CROATIAN I FC-OC
The basics of Serbo-Croatian grammar, conversation, and reading. For beginning students, interested in
the languages and cultures of Yugoslavia. Every year, depending on student demand.

16 ELEMENTARY SERBO-CROATIAN II FC-OC
Continuation of 15. Every year, depending on student demand.

More advanced levels of Serbo-Croatian may be taken as 96 courses, with consent of instructor.

Greek
See Classics

History

Mahmoud El-Kati, Jerry Fisher, David Itzkowitz, Peter Rachleff, Emily
Rosenberg, Norman Rosenberg, Paul Solon, James Stewart (Chair), 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, business, 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
Introductory history courses 10, 12, 14, 15, and 23 are foundation courses which
fulfill the general distribution requirement in the humanities.
Major Concentration

A history major is planned in consultation with a student's adviser and comprises no fewer than nine and no more than eleven history courses. Except with consent of the department the major will include no more than two introductory level courses. History majors must complete at least one course in which a major research paper is required. (This requirement may also be satisfied through an appropriately designed independent project, an Interim Term project, or off campus program approved by the department.) A history major also normally includes at least one course each in European, American, and non-Western history. Supporting courses can be chosen from any number of social science and humanities fields and will normally indicate at least an intermediate level of competency in a foreign language.

Core Concentration

A core concentration in history consists of six courses in the department and six complementary courses from other departments selected with the assistance of a member of the department with whom the student has studied. The courses selected are expected to complement a student's major or other cores.

Minor Concentration

A minor in history consists of six courses chosen with the assistance of an instructor in the department with whom the student has studied. Not more than three of these may be introductory level courses.

Honors

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

COURSES

Introductory Courses (10-25)

Courses numbered 10-25 are designed principally for freshmen and for beginning history students, especially for those who are largely unfamiliar with the areas of history such courses introduce. In any of these, students have the opportunity to develop skills that are essential for the successful study of history, to prepare them for higher levels of work in social sciences and humanities, and for intermediate courses in history. Students will learn how to interpret a variety of primary material—such as letters, speeches, diaries, fictional works, film, and other data. They will also analyze and evaluate works written by historians. Opportunity is provided to apply these skills in a series of written exercises which are critically evaluated by the instructor. Efficient notetaking and accurate comprehension of group discussion is also stressed.

Although students are expected to absorb and to master essential facts, these courses emphasize critical thinking and writing rather than memorization.

Please note that students may not receive credit for more than three introductory courses (10-25) without written consent from the history department. Furthermore, credit will not be granted for introductory level courses taken in the same field as that of an intermediate or advanced level course which the student has successfully completed without the approval of the history department. Students having questions concerning this policy are encouraged to consult with a member of the history department.

10 INTRODUCTION TO EUROPEAN HISTORY FC

A one semester introduction to the study of European History emphasizing selected major themes designed primarily for underclassmen who have no college level background in this general field. Every semester.

12 THE FUTURE AS HISTORY FC

An introduction to the similarities and relationships between the study of the past and the study of the future. A wide range of scholarly and artistic materials will be considered. Alternate years.
14 INTRODUCTION TO MODERN CHINA FC
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, the rise of Mao Tse-Tung, the Great Proletarian Cultural Revolution. Special attention will be given to U.S.-China relations. Every year.

15 INTRODUCTION TO MODERN JAPAN FC
Japan’s rapid industrialization in the latter part of the 19th century and its phenomenal rise to the number two 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, literature, and religion will be undertaken and American attitudes toward the Japanese and their history will also be examined. Every year.

23 AMERICAN CIVILIZATION FC
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. Every year.

Intermediate Courses (30-79)
Courses numbered 30-79 assume previous college level history experience but not necessarily in the same field. Those not possessing the basic skills emphasized in the introductory level courses (10-25) are expected to acquire them before taking intermediate or advanced level courses. Further specific prerequisites are at the discretion of the individual instructor. Classes are open to freshmen only with the instructor’s permission.

31 THE HISTORY OF EARLIEST AMERICA: 1300-1700
This course addresses the body of scholarship which has, over the past twenty years, enriched the study of early American history. Amerindian societies, the “planting” of English Colonies, Puritanism, slavery, the development of the Atlantic economies, race, ethnic and class relations, and the dynamics of “traditional” social forms are subjects which will receive heavy stress in this course. Alternate years.

33 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. Every year.

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. Every year.

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. Every year.

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. Alternate years.

37 AFRICAN CIVILIZATION
A survey of African civilization from earliest times to the present, followed by in-depth study of selected topics. Every year.
38 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. Alternate years.

40 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. Alternate years.

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. Alternate years.

42 THE ERA OF THE AMERICAN CIVIL WAR

A study of the interplay between ideologies, reform movements, social institutions, political systems and economics 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. Alternate years.

43 ORIGINS OF SUPER SOCIETY, U.S., 1890-1945

This course probes in a thematic fashion the major developments that have given birth to the American society that we are all familiar with and puzzled by. Topics of concentration will include the evolution of political structures, the economy, and foreign policy; mechanization; urbanization; and the transformation of American cultural readings and discussions move back and forth from the micro level of everyday life in the home, the workplace, and the community, to the macro level of the nation state, international relations, and mass culture. The origins of economic, political, social, and educational institutions are probed. Readings vary from more traditional historical analysis, to primary documents, novels, autobiographies, and cultural and literary criticism. Prerequisite, one introductory course in history. Alternate years.

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. Alternate years.

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. Every year.

47 TWENTIETH CENTURY SOCIAL MOVEMENTS

An examination of theory, materials, and activities of social group movements. The course is limited to a focus on social movements in contemporary American life. Critical thinking about social movements will be generated through an examination of primary and secondary source material concerning the movements; lectures by those intimately involved in social movements; and class discussion. Every year.

48 THE FORMATION OF INDUSTRIAL AMERICA: 1840-1890

A topical inquiry into the political, social, and economic impact of the industrial revolution upon American society. Principal topics of concentration include the transformation of American political institutions (from local government to the national state), the reorganization of work (from the shop floor to the industrial system), the transformation of the local community and the emergence of the modern city, and the formation of the American working-class. Readings range from primary documents to provocative secondary sources. Prerequisite, one introductory course in history. Alternate years.
AFRO-AMERICANS AND THE TRANSFORMATION OF THE CITY: 1890-1945

An investigation into two mutually influencing transformations over the first half of the twentieth century: 1) the urbanization of the Afro-American people; and 2) the emergence of the modern American metropolis as the congregation and segregation of distinct racial and ethnic groups. Principal points of focus for this course include the causes and patterns of black migration from the rural South to the urban North; the formation of ghettos in major northern cities; the internal life of those ghettos; the development of new political and social ideas within these communities (Garveyism, the transfer of Afro-American allegiances from the Republican to the Democratic parties, and the rise of pro-unionism among black workers); the transformation of Afro-American culture (e.g., the Harlem Renaissance, the urban blues, jazz). Readings rely heavily on primary documents, novels, contemporary articles, and more recently written secondary sources. Prerequisite, one introductory course in history. Alternate years.

TOPICS

Courses numbered 50 are occasional, often experimental courses, offered by instructors at their own initiative, or in response to student requests. Recent topics courses include: American Legal Culture; Future as History; Marxism.

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. Alternate years.

MODERN BRITAIN

The development of English politics and society from the time of George III to the twentieth 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. Alternate years.

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 63 for double credit, and when it is, students will be required to register for both courses. Alternate years.

THE HISTORY OF FRANCE

A survey of the political, social, and cultural traditions of the peoples who have lived in the territories of modern France from the time of the Gauls to the present. Particular emphasis will be placed on the growth of the idea of nationality and most of our time will be spent on the great era between 1429 and 1815. Alternate years.

HISTORY AND PHILOSOPHY OF SOCIALISM

An analysis of the various ideas of socialism from the eighteenth century to the present. Philosophically, the course will investigate the logic and ethics of the socialist ideas encountered. Historically, the course will explore the social-economic, cultural, and political environments in which the socialist ideas appeared. Radicals of the French Revolution, the Utopian socialists, the Anarchists, Marx, Marxist Revisionists, Bolshevism, Soviet Marxism-Leninism, contemporary Eurocommunism, and the socialism of Mao Tse-Tung will all be studied. Readings will be heavily weighted toward socialist texts themselves. Students will enroll for both History 55 and Philosophy 55. Alternate years.

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. Alternate spring semesters.

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 eighteenth century. Included will be such topics as social structure, family patterns, work and leisure, housing, education and medicine. Alternate years.
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. Alternate fall semesters.

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 twentieth century Europe. Alternate spring semesters.

60 STATE AND SOCIETY IN TSARIST RUSSIA
A survey of the development of Russian social and political institutions from the medieval Kievan state to the reign of Alexander II (1855-1881). The course will explain the growth of the tsar's authority, the origins and outlooks of Russia's major social groups (nobility, peasants, merchants, clergy, minorities, cossacks) and the relations which grew up between the tsar and his society. The course will conclude with an appraisal of the origins of the Russian revolutionary movement. Alternate years.

62 HISTORY OF THE SOVIET UNION
A survey of Russian and Soviet history from the reign of Alexander II (d. 1881) to the present. Topics include the Russian revolutionary movement, the Bolshevik revolution of 1917, Bolshevik rule and its tsarist heritage, Soviet society under Lenin and Stalin, dissent in the USSR, and the Soviet Union and the future of world peace. Alternate years.

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. Alternate years.

66 EUROPE IN THE AGE OF UPHEAVAL 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. Alternate years.

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 facism, 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. Every year.

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. Every year.

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 constitutions, 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. Alternate years.

71 REVOLUTIONARY CHINA
A study of Chinese and Japanese philosophy and intellectual history from Confucius to Mao Tse-Tung. Previous course in East Asian history is preferred. Every year.
73 POST WAR JAPAN
A study of contemporary Japan from the end of the Pacific War in 1945 until the present. This course examines the occupation period and Japan’s rise as a superpower through a study of economic and political organization and development as well as social and cultural movements during that period. The aim of the course is to aid the serious student of history to develop an analytic framework for understanding Japan today. Prerequisite, at least one previous history course. Every year.

Advanced Courses and Independent Studies
Courses numbered 80 or above are designed primarily for advanced students, history majors and majors in fields of related interest. Each normally assumes of students a high level of critical reading skill, a capacity for self-motivation, and a willingness to contribute to analytical discussions. Such courses normally involve extensive original research and writing, and sometimes require foreign language competency.

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

90 SPECIAL ADVANCED STUDIES
Recent 90 courses have included U.S.-Latin relations and American Biography.

91 EAST ASIAN STUDIES SEMINAR
An upper level research seminar primarily for students majoring in East Asian studies or history as well as students in other disciplines who are interested in the topic of the seminar for that given year. Recent seminars include: Meiji Intellectual History; Tokugawa Japan; The City and the Village in 20th Century China and Japan. This course is often taught as an interdisciplinary course and as such is crosslisted with other departments. Every year.

95 TUTORIAL
96 INDEPENDENT PROJECT
97 INTERNSHIP
98 PERCEPTORSHIP

Humanities
Jeremiah Reedy (Coordinator, Classics)
The humanities consist of the study of all that human beings have made and valued. Humanities courses thus confront the fundamental issues and ideas that recur in human history, especially as they relate to deity and the value of human experience. The Macalester humanities program provides for the investigation of these questions in historical context from the Greeks to the present, through the combined study of literature, art, philosophy, architecture, music, and history.

General Distribution Requirement
Humanities 21, 22, 24, 25, 26, 27, 66, and 68 are foundation courses which fulfill the general distribution requirement in the humanities.

Core Concentration
The humanities core shall consist of 12 courses. The inner core in humanities includes one course from antiquity (normally Classics 21 or 22); Humanities 24, 25, 26; one additional humanities course or a literature course (e.g. Humanities 27, French/Humanities 68 or German 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 chosen so as to make a meaningful pattern.

Minor Concentration
A minor in humanities shall consist of five courses, ordinarily as follows:
Humanities 21 or 22, 25, 26, and one additional humanities course (e.g. Humanities 27, 50, 66, 68, 88, etc.), excluding 96 and 97. Minor programs must be approved by the humanities coordinator.

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

COURSES
21 THE ANCIENT WORLD I: GREECE (Same as Classics 21) FC
A close reading of selected authors from Homer to Aristotle with attention to the perennial nature of the questions raised. Discussions will be supplemented by lectures on art, history, religion and science. Fall semester.

22 THE ANCIENT WORLD II: ROME (Same as Classics 22) FC
A study of Roman civilization from its origins to the Empire, with emphasis on the qualities which distinguish Roman literature from its Greek predecessors. The course will examine not only the intellectual life of the Romans, but attempt to describe the everyday experience of men and women in that world. The massive influence of Rome on later cultures and civilizations of the West will also receive attention. Spring semester.

24 THE MEDIEVAL AND RENAISSANCE WORLD FC
Classics of European theology, philosophy, and literature, with some attention to corollary movements in art and architecture. Fall semester.

25 THE MODERN WORLD I FC
Classics of European art, philosophy and literature from the 17th and 18th centuries. Spring semester.

26 THE MODERN WORLD II FC
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. Fall semester.

27 THE MODERN WORLD III FC
Studies in the 20th century literature, arts and philosophy of Europe and the Americas. Fall semester.

50 TOPICS IN THE HUMANITIES
For example: Eros and Thanatos; or Molière, Mozart, and Rembrandt.
66 ART AND IDEAS IN GERMAN CULTURE (Same as German 66) FC
This course will examine the development of German art and ideas from the medieval period through the 19th century. Emphasis will be placed on representative works of literature, music and the visual arts from the periods under discussion. Lectures and readings will be in English, with reading in German for credit in German. Prerequisite for credit in German, German 47 or consent of instructor. No prerequisite for others. Alternate years.

68 ART AND IDEAS IN FRENCH CULTURE (Same as French 68) FC
The course will study the idées maîtresses of French society from the medieval period through the 19th century in their cultural and historical settings 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. Spring semester.

88 SENIOR SEMINAR
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 these 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.

Interdisciplinary Studies
The Macalester faculty firmly believes that students should be involved with them in the study of the relationships of issues in one discipline with larger issues in other disciplines. For this purpose a category of courses called interdisciplinary studies has been formed. Courses included in this category give students the experience of applying concepts and/or methods of two or more disciplines to the study of a theme, topic, or problem.

The courses currently listed in the interdisciplinary studies category are the following:

Classics
29 Classical Mythology
35 The Greek New Testament
43 Archaeology of Greece in the Bronze Age (same as Anthropology 43)
62 Homer and the Greek Epic
69 History of Greece (same as History 69)
70 History of Rome (same as History 70)

Economics and Business
19 Principles of Economics
22 Environmental Economics
23 World Hunger (same as Geography 23, and Religious Studies 23)
41 Intermediate Applied Statistics
42 Time Series Analysis and Business Forecasting
47 Econometrics
53 Natural Resources and the Limits to Growth
Interdisciplinary Studies
International Studies

54 Urban Economics
75 Application of Mathematics to Economics and Business

French
68 Art and Ideas in French Culture (same as Humanities 68)

Geography
11 Human Geography
14 Urban Geography
16 Physical Geography
34 Resource Management for the Future

Humanities
24 Medieval and Renaissance World
25 Modern World I
26 Modern World II
27 Modern World III

Political Science
34 Great Political Thinkers and Ideas (same as Philosophy 34)
49 Science, Technology, and Politics
67 Peace Studies (same as Philosophy 67)

Psychology
28 Comparative Psychology
35 History and Systems of Psychology (same as Philosophy 35)
72 Psychology of Language (same as Linguistics 63)

International Studies
Virginia Schubert (Coordinator, French), David Sanford (Coordinator, German).
Steering Committee: Dorothy Dodge (Political Science), Ellis Dye (German and Russian), Fabiola Franco (Spanish), Cynthia Orbovich (Political Science), Hélène Peters (French), Gerald Pitzl (Geography), Peter Rachleff (History), Karl Sandberg (Linguistics), Kathleen Stagg (Religious Studies), Vasant Sukhatme (Economics and Business), Anne Sutherland (Anthropology), David White (Philosophy).

The International Studies major is an extension and expression of Macalester's traditional commitment to internationalism. It provides an understanding and appreciation of international and intercultural relations through the separate yet cooperating traditional disciplines in the humanities and social sciences.

The International Studies major has curricular, experiential and skills components which together are designed to give students:

1. Familiarity with world systems; physical, social, cultural, political, economic and historical;
2. Competency in a second language, at least equivalent to four semesters of college level work, sufficient for the use of that language in travel and study;
3. Working knowledge of the methodological techniques of the participating social science and humanities departments;

4. An internationally relevant experience through an appropriate off-campus program.

Students will plan their International Studies major in consultation with their International Studies adviser to proceed from introductory to advanced courses and to include the experiential and skills components. The program coordinators in consultation with the International Studies Steering Committee will provide students with a panel of courses recommended by the participating departments in time for registration.

Curricular Component

The International Studies major consists of 14 courses selected in consultation with the student's International Studies adviser. To the extent possible, students are expected to select courses of substantial international content.

1. A departmental concentration consisting of six courses in one of the following departments: anthropology, economics and business, French, geography, German and Russian, history, linguistics, philosophy, political science, religious studies, and Spanish. In general, this concentration should correspond to the requirements of the core concentration in the selected department, and in all cases must be approved by the sponsoring department.

2. Six supporting courses from the departments participating in the International Studies program which complement and broaden the six course departmental concentration. These supporting courses will be chosen in consultation with the student's International Studies adviser. Intercultural Communication (Speech 28) may be used as one of the courses to satisfy this requirement. An alternative plan for the student's six supporting courses may be selected in Peace Studies. (See below)

3. Students will be required to take two interdisciplinary courses with international relevance:
   a. An interdisciplinary course at an introductory or intermediate level to be fulfilled by a regularly offered interdisciplinary course or a course taught by a visiting scholar; and
   b. the International Studies Senior Seminar or equivalent with permission of the International Studies coordinators.

Experiential Component

Each student is required to spend at least one semester on either an approved study abroad program or an internationally relevant internship program.

Skills Component

Each International Studies major is required to demonstrate competence in a second 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.
**Peace Studies**

Peace Studies is an alternate way to satisfy the supporting course requirement. Students who wish, may select their six supporting courses in Peace Studies, an interdisciplinary concentration emphasizing the political, social, economic and philosophical barriers to peace and the potential strategies for their removal. Students choosing a Peace Studies concentration will be required to complete Philosophy 67 or Political Science 67 as well as five courses chosen from a list of courses available from the International Studies coordinators. In addition, students choosing the Peace Studies alternative are strongly encouraged to fulfill their experiential component as an intern for an international agency specializing in peace concerns.

**Japan Studies**

Jerry K. Fisher (Coordinator, History), Aiko Hiraiwa (Linguistics), John Knapp (Linguistics), Ronald Ross (Journalism)

The purpose of the Japan studies major is to help students understand Japanese life, both in the past and the present, through an historical and thematic study of its geography, religion, art, politics, and economics. The major is designed to allow students within a wide range of disciplines the opportunity to apply those disciplines to the study of Japan through course work in Japan studies at Macalester, through living and studying in Japan itself, and through the completion of an undergraduate project focusing on a special area of interest to the student. The Japan studies major helps prepare students to enter a number of fields, most commonly teaching, law, and business.

**Program Planning**

The key to a coherent Japan studies major for each individual is careful planning by the student with the help and assistance of his or her adviser. Students are urged to consult with the Japanese studies coordinator to select an appropriate adviser.

**Programs in Japan**

Macalester has two official overseas studies programs in Japan. One is at Waseda University, a leading private university located in Tokyo and the other is a unique sister school relationship with Miyagi Kyokoku University, a Japanese national university located in Sendai. In addition, from time to time, Macalester students study in Japan at a variety of other Japanese institutions. Students are advised to consult with the Japanese studies coordinator about the programs currently available well before they plan to study in Japan.

**Major Concentration**

A major concentration plan is constructed for each student with the advice and consent of her or his adviser. It consists of ten courses to be distributed as follows: completion of Elementary and Intermediate Japanese Language (Linguistics 11-12, 31-32); Introduction to Modern Japan (History 15); Post War Japan (History 73); either Religions of Japan (Religious Studies 36) or Japanese Buddhism (Religious Studies 40); participation in an overseas program in Japan approved by the coordinator of the Japanese studies program for the duration of at least one academic term; successful completion and defense of a thesis on a topic approved by the student’s adviser. No more than six courses in the Japanese language may be counted toward a major.
The ten courses constituting the major will be selected with the assistance of the student's adviser and with the approval of the program coordinator. Among the courses most likely to be included are the following:

<table>
<thead>
<tr>
<th>Linguistics 11-12</th>
<th>Religious Studies 36</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary Japanese Language</td>
<td>Religions of Japan</td>
</tr>
<tr>
<td>Linguistics 31-32</td>
<td>Religious Studies 40</td>
</tr>
<tr>
<td>Intermediate Japanese Language</td>
<td>Japanese Buddhism</td>
</tr>
<tr>
<td>History 15</td>
<td>Art 76</td>
</tr>
<tr>
<td>Introduction to Modern Japan</td>
<td>Far Eastern Art</td>
</tr>
<tr>
<td>History 71</td>
<td>Philosophy 37</td>
</tr>
<tr>
<td>Intellectual History of East Asia</td>
<td>Chinese and Japanese</td>
</tr>
<tr>
<td>Religious Studies 36</td>
<td>Philosophies</td>
</tr>
<tr>
<td>History 73</td>
<td>History 91</td>
</tr>
<tr>
<td>Post War Japan</td>
<td>East Asian Seminar</td>
</tr>
</tbody>
</table>

Independent and Topics Courses are also likely to be included:

<table>
<thead>
<tr>
<th>Linguistics 96</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independent Study in Japanese Language</td>
</tr>
<tr>
<td>History 50</td>
</tr>
<tr>
<td>Topics in East Asian History</td>
</tr>
<tr>
<td>Religious Studies 50</td>
</tr>
<tr>
<td>Topics in East Asian Religion</td>
</tr>
</tbody>
</table>

In addition to the above courses students may present independent study projects from a number of disciplines in Japan related topics to fulfill major requirements as well as approved courses on other ACTC campuses and from their term or year in Japan.

Furthermore, special arrangements are established with the University of Minnesota which allow Macalester students to take advanced courses in Japanese language and literature at the University as part of their Macalester program. Students wishing to take advantage of this program should contact the Macalester Japan studies coordinator.

**Minor Concentration**

A minor concentration consists of six courses chosen in consultation with the coordinator. Elementary and Intermediate Japanese (Linguistics 11-12; 31-32) will normally be included among these six courses.

**Journalism**

Ronald Ross (Chair)

The journalism department offers a liberal arts based, career-oriented approach to journalism education, coupled with a strong emphasis on the writing of good English. The chair will advise about courses in other departments and disciplines of particular value to students interested in careers in mass communications. Journalism 18, Introduction to Mass Communications, is the prerequisite for all other courses in the department. Courses in journalism are regarded as non-divisional and do not satisfy divisional requirements.

**Minor Concentration**

A minor in journalism consists of six courses in the department, to include one independent, internship or preceptorship.
COURSES

18 INTRODUCTION TO MASS COMMUNICATIONS
A survey of the historical development, nature, functions and roles of the mass media—newspapers, magazines, radio, television, film—and other forms of communication. Fall semester.

57 NEWS REPORTING AND WRITING
Instruction and practice in the basic techniques of news gathering and news writing. Basics of copy editing. Prerequisite, Journalism 18. Fall semester.

59 MASS COMMUNICATIONS AND THE LAW
A study of the press and the First Amendment and other laws and regulations affecting the mass media. Prerequisite, Journalism 18. Fall semester.

60 ADVANCED NEWS WRITING
In-depth reporting and writing of the interpretive news and feature articles for newspapers and magazines. Prerequisite, Journalism 57. Spring semester.

64 MASS COMMUNICATIONS AND SOCIETY
Exploration of the roles of the mass media in national and international affairs. Topics include the media and politics, the media and the marketplace, the Western media and the Third World, and the new information technologies. Prerequisite, Journalism 18. Spring semester.

96 INDEPENDENT PROJECT

97 INTERNSHIP

98 PRECEPTORSHIP

Latin
See Classics

Law and Society
Duncan Baird (Political Science), Julia Friedman (Economics and Business), Martin Gunderson (Philosophy), Michal McCall (Sociology), Scott Nobles (Coordinator, Speech Communication and Dramatic Arts), Brian Porto (Political Science), Ronald Ross (Journalism)

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 ten 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, English 30. 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 Number</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economics &amp; Business</td>
<td>15</td>
<td>Business Law</td>
</tr>
<tr>
<td>Economics &amp; Business</td>
<td>19</td>
<td>Principles of Economics</td>
</tr>
<tr>
<td>History</td>
<td>35</td>
<td>American Legal Culture</td>
</tr>
<tr>
<td>History</td>
<td>58</td>
<td>Origins of Modern Constitutional Systems</td>
</tr>
<tr>
<td>Journalism</td>
<td>59</td>
<td>Mass Communications and the Law</td>
</tr>
<tr>
<td>Philosophy</td>
<td>25</td>
<td>Ethics</td>
</tr>
<tr>
<td>Philosophy</td>
<td>73</td>
<td>Philosophy of Law</td>
</tr>
<tr>
<td>Political Science</td>
<td>55</td>
<td>Contemporary Legal Problems</td>
</tr>
<tr>
<td>Political Science</td>
<td>62</td>
<td>International Law and Organization</td>
</tr>
<tr>
<td>Political Science</td>
<td>85</td>
<td>American Constitutional Law and Thought</td>
</tr>
<tr>
<td>Political Science</td>
<td>86</td>
<td>Civil Liberties</td>
</tr>
<tr>
<td>Sociology</td>
<td>76</td>
<td>Social Deviance</td>
</tr>
<tr>
<td>Speech Communication</td>
<td>25</td>
<td>Argumentation</td>
</tr>
<tr>
<td>Speech Communication</td>
<td>56</td>
<td>Legal Communication</td>
</tr>
</tbody>
</table>

In addition, one course in writing, approved by the student’s adviser, is required.

Recommended:

<table>
<thead>
<tr>
<th>Department</th>
<th>Course Number</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer Science</td>
<td>17</td>
<td>Computer Programming I</td>
</tr>
<tr>
<td>Economics &amp; Business</td>
<td>13</td>
<td>Basic Financial Accounting</td>
</tr>
<tr>
<td>English</td>
<td>10 or 11</td>
<td>College Writing</td>
</tr>
<tr>
<td>Philosophy</td>
<td>40</td>
<td>Introduction to Logic</td>
</tr>
<tr>
<td>Political Science</td>
<td>38</td>
<td>Legal Systems</td>
</tr>
<tr>
<td>Political Science</td>
<td>47</td>
<td>Intergovernmental Relations</td>
</tr>
<tr>
<td>Psychology</td>
<td>24</td>
<td>Behavior Disorders</td>
</tr>
<tr>
<td>Speech Communication</td>
<td>38</td>
<td>Persuasion</td>
</tr>
</tbody>
</table>

Linguistics

Lynne Ackerberg, Kimberley Brown, Ellen Comer, Aiko Hiraiwa, Marita Hopmann (Psychology), Charles Johnson (French), John Knapp, David McCurdy (Anthropology), Roger Mosvick (Speech Communication and Dramatic Arts), Jeffrey Nash (Sociology), Scott Nobles (Speech Communication and Dramatic Arts), Patricia Peterson, Jeremiah Reedy (Classics), Thomas Rowland, Karl Sandberg (Chair)
Since the time of ancient Greece, the study of language has had a central place in liberal education. In a contemporary setting many of the traditional aspects of language study are examined under the rubric of linguistics.

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.

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 Requirement**

The following are foundation courses in linguistics which fulfill the general distribution requirement in the social sciences division: 24, 26, 30, 33.

**Major Concentration**

A major concentration in linguistics consists of:

1. Eight courses in linguistics, to include Linguistics 24, 26, 51; at least two courses from among 28, 61, 63, 68; and at least two courses from among 29, 30, 33, 35, 37. No courses in English as a Second Language may be counted among the eight courses for the major.

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

3. Proficiency in a language not one's own at a level sufficient to participate effectively in most formal and informal conversations on practical, social, and schoolwork-related topics. This may be demonstrated by a passing grade in a foreign language course at the appropriate level or by an equivalency exam. Details are available in the departmental offices.

4. Familiarity with the structure of two other languages which are not one's own, as demonstrated by performance on a departmental test. It is strongly recommended that one of the languages be either a non-Indo-European language or a classical language like Latin. Specific information is available in the departmental offices.

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

Note: Students wishing to combine a linguistics major with training in Teaching English as a Second Language should include Linguistics 28, 53, and 55 in their program of study.

Core Concentration

The linguistics department offers two cores:

Core Concentration in Linguistics

A core concentration in linguistics consists of:

1. Six linguistics courses, to include Linguistics 24, 26, and four courses from among 28, 30, 33, 35, 40, 51, 61, 63, 68.

2. Six supporting courses from one or, at the most, two related departments.

3. Proficiency in a language not one's own at a level sufficient to participate effectively in most formal and informal conversations on a practical, social and schoolwork-related topic. This may be demonstrated by a passing grade in a foreign language course at the appropriate level or by an equivalency exam. Details are available in the departmental office.

4. Familiarity with the structure of two other languages which are not one's own, possibly including a computer language, as demonstrated by performance on a departmental test. Specific information is available in the departmental offices.

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

Core concentration in Applied Linguistics and TESL (Teaching English as a Second Language)

A core concentration in applied linguistics and TESL consists of:

1. Six linguistics courses, to include Linguistics 24, 26, 28, 51, 53, 55.

2. Six supporting courses from one or, at the most, two related departments.

3. Proficiency in a language not one's own at a level sufficient to participate effectively in most formal and informal conversations on practical, social, and schoolwork-related topics. This may be demonstrated by a passing grade in a foreign language course at the appropriate level or by an equivalency exam. Details are available in the departmental offices.

4. Familiarity with the structure of two other languages not one's own, possibly including a computer language, as demonstrated by performance on a departmental test. Specific information is available in the departmental offices.

5. A senior project drawing together the student's work in linguistics and supporting courses or combining it with work in other disciplines (e.g. a paper on the English language learning problems of foreign students, a contrastive analysis of English and some other language, or a project developing computer applications to foreign language instruction).
Minor Concentration

The linguistics department offers two minors:

Minor in Linguistics

1. Six linguistics courses, to include Linguistics 24, 26, and at least two courses from among 28, 29, 30, 33, 35, 51, 63.

2. Proficiency in a language not one’s own at a level sufficient to satisfy routine social demands and limited work requirements. This may be demonstrated by a passing grade in a foreign language course at the appropriate level or by an equivalency exam. Details are available in the departmental offices.

3. Familiarity with the structure of one additional language not one’s own, as demonstrated by performance on a departmental test. Specific information is available in the departmental offices.

Minor in Linguistics/TESL (Teaching English as a Second Language)

1. Six linguistics courses, to include Linguistics 24, 26, 28, 51, 53, 55.

2. Proficiency in a language not one’s own at a level sufficient to satisfy routine social demands and limited work requirements. This may be demonstrated by a passing grade in a foreign language course at the appropriate level or by an equivalency exam. Details are available in the departmental offices.

Note: Internships and preceptorships are available in TESL, and teaching assistantships can be arranged for students who have finished the TESL course sequence.

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 is available in the indicated departments, either in a class or on an individual basis: Japanese (Linguistics), Korean (Linguistics), Norwegian (German and Russian), Portuguese (Spanish), Serbo-Croatian (German and Russian), English as a Second Language (Linguistics).

Honors

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

COURSES

24 LANGUAGE AND LINGUISTICS FC

This course introduces students to the range and issues linguists address as they study the phenomenon of human language. These include questions about the distinctiveness of human language, the relation of language to thought, the biological foundations of language, first and second language acquisition, and the relationship of language to culture. The course is an introduction to the concepts and terminology of the discipline of linguistics as well as to the anthropological, biological, psychological, sociological, and structural characteristics of human language as linguists view them. Spring semester.

26 INTRODUCTION TO LINGUISTIC ANALYSIS FC

This course teaches students the methods and techniques linguists use in analyzing languages. It includes study of the general principles of phonology (sound systems), morphology (word forms), and syntax (sentence structure), and introduces students to much of the specialized vocabulary that is commonly used in the analysis and description of language structure. A more general goal of the course is to develop in students a carefully analytical approach to thinking about language, an understanding of the things all languages have in common, and an understanding of the many ways languages can differ from each other. Prerequisite, Linguistics 24. Fall semester.
28 PHONETICS/PHONOLOGY
This course emphasizes the study of speech production and perception from a practical as well as a
theoretical viewpoint. It includes an introduction to the physiological processes underlying the encoding
and perceptual decoding of human speech, an introduction to the nature of phonological theories that
attempt to explain the relationships among sounds in a language, and an examination of the
relationship between phonetic and phonological studies. It also provides instruction and practice in the
definition, recognition, production, and transcription of the wide range of sounds used in human
speech. This course will be useful not only to linguistics majors but also to students and teachers of

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.
The course examines the many functions and levels of human discourse in analyzing the
communication competencies of various language communities. Topics include the origin of speech, the
role of language in categorizing and thinking, general semantics, inferences in verbal and non-verbal
codes and in male-female communication, role sets and patterns of communication control, intercultural
and subcultural code variants, disturbed and therapeutic communication. Fall semester.

30 LANGUAGE AND CULTURE: FIELD TECHNIQUES (Same as Anthropology 30) FC
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. Every semester.

33 LANGUAGE CHANGE FC
This is a course in the principles of language change: why languages change, how they change, and how
linguists go about studying, documenting, and explaining such changes. It includes study of the
following topics: sources and mechanisms of change, types of change, the social motivations for change,
internal and external language histories, language families and proto-languages, “standard” languages,
and dialects. Students are also introduced to the study of pidgin and creole languages and to the basic
principles of comparative linguistics and internal reconstruction. Recommended, Linguistics 26.
Alternate fall semesters.

36 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. Every
year.

37 LANGUAGE AND CULTURE OF DEAF PEOPLE (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 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. Alternate years.

40 ETYMOLOGY AND THE ENGLISH LANGUAGE (Same as English 40)
This course is a study of the development of words and families of words in English, including the
relation of classical Greek and Latin to contemporary English, the development of vernacular speech,
and the logic behind seeming quirks in word histories. Through the work of the course, students will
learn how etymology operates as a branch of historical linguistics; will develop a larger personal
vocabulary; and will become more aware of the powers and variety of the English language. Every
semester.
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 Burke. 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. Alternate spring semesters.

51 STRUCTURAL ANALYSIS OF MODERN ENGLISH (Same as English 90)
A systematic study of the grammatical structure of English. The course is organized around a functional view of language, i.e., around an understanding of how different kinds of grammatical forms are used in English to communicate different kinds of meaning. It is also intended to help students understand the nature of grammatical analysis as applied to English and the terminology such analysis usually employs. This course is recommended for linguistics or English majors who intend to teach, for students of foreign languages seeking a better understanding of general grammatical processes in language, and for students who wish to increase the effectiveness of their use of English through a detailed study of its structure. Students who are working for teacher licensure in English will include in their work a paper on the historical development of the language. Recommended, Linguistics 26. Every spring.

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 models of bilingual education. Alternate fall semesters.

55 LINGUISTICS AND TEACHING ENGLISH AS A SECOND LANGUAGE
Based on theory from structural linguistics, psycholinguistics and sociolinguistics, this course teaches students strategies and techniques for teaching English to non-native learners, including approaches to teaching pronunciation, conversation, grammatical structure, reading, and composition. Prerequisite, Linguistics 26 or permission of the instructor. Linguistics 51 and 53 are recommended. Spring semesters.

56 METHODS OF TEACHING MODERN FOREIGN LANGUAGES (Same as French 56, German 56, and Spanish 56)
This course is for majors of French, German, or Spanish who are interested in developing skills and knowledge in teaching as part of their undergraduate major, and counts toward teacher licensure in Minnesota. Fundamental concepts about second language acquisition are introduced in the first half of the course, including some contrastive analysis of English and the target language, the idea of language as communication, and the relationship of language and culture. The second half of the course presents techniques for teaching the skills of listening, speaking, reading, and writing. Students have an opportunity to practice these techniques, to develop a course design, and to write instruments for evaluating language skills. Prerequisite, Linguistics 26 or 51. Spring 1986.

61 THEORIES OF LINGUISTICS
An in-depth study of major models of linguistic analysis, including the work of Noam Chomsky. Students will study several important models during the semester and examine their relationship to current as well as historical trends in the development of linguistic theory. Prerequisite, at least one linguistics course from among 26, 28, 33, 63, or 68. Alternate fall semesters.

63 PSYCHOLOGY OF LANGUAGE (Same as Psychology 72)
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. Prerequisite, two psychology courses or two linguistics courses or one of each. This course may be counted toward a major or core concentration in psychology. Every year.

68 PHILOSOPHY OF LANGUAGE (Same as Philosophy 68)
An examination of classical philosophical questions about the nature of meaning; how words, phrases, and sentences relate to the meanings they express; and how linguists and philosophers go about making sense of all of the things a word like “meaning” can mean. Topics investigated include: the nature of names and definite descriptions; word meanings, sentence meanings, and utterance meanings;
grammatical meanings and social meanings; literal meanings and figurative meanings; presupposition, implication and metaphor. Some time is also spent on basic concepts of truth conditional semantics, componential analysis, lexical fields, and pragmatics. Prerequisite, Philosophy 40 or Linguistics 26 or permission of instructor. Alternate years.

70 EARLY GERMAN LANGUAGE AND LITERATURE
Significant linguistic and literary events from the Medieval to the Baroque. Every year.

73 ANGLO-SAXON (Same as German 73)
Study of the phonology, morphology, and syntax of Old English. Readings will include the Parker Chronicle, The Wanderer, The Seafarer, and selections from Beowulf. Prerequisite, permission of the instructor. Alternate years.

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 or by completing with a grade of C- or better each of the ESL courses that may be required on the basis of these scores.

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 (five 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
14 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. Every semester.

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. Every semester.

16 INTERMEDIATE COMPOSITION
This course deals with writing on the sentence and paragraph levels, including a study of the structures of English for the purpose of writing. Students will receive practice in generating sentences, combining sentences and arranging them in appropriate sequences. 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 the advanced ESL program. Every semester.
Advanced English Program

18 ADVANCED COMPOSITION

This course presupposes an ability to write grammatical, appropriate sentences as well as a certain proficiency in reading and aural comprehension. The focus of this course will be almost exclusively on organizational strategies for writing papers, essays, examinations, etc. At the end of this course students should be ready to do any of the kinds of writing involved in regular academic courses. Every semester.

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 requires extensive outside reading. Every semester.

22 SEMINAR TECHNIQUES

This course is designed for students who have successfully completed the intermediate conversation and comprehension class, or who desire further help with their speaking/listening skills. Fluency will be increased through extensive discussions, oral reports, panel participation, etc. The content of the course will be centered around modern issues of global concern. The course works extensively with videotape equipment. Students view their discussions together and evaluate their performances in an attempt to develop an individual profile of language strengths and weaknesses. Every semester.

Japanese

11 ELEMENTARY JAPANESE I

Introduction to Japanese language and culture. Practice in basic sentence patterns and conversational expressions to enable students to speak and write Japanese. The Japanese syllabary and Chinese characters are learned gradually from the first lesson. Fall semester.

12 ELEMENTARY JAPANESE II

Continuation of 11. Simple composition practice. Prerequisite, 11 or its equivalent. Spring semester.

31 INTERMEDIATE JAPANESE I

Continuation of 12. Prerequisite, Japanese 12 or its equivalent. Fall semester.

32 INTERMEDIATE JAPANESE II

Continuation of 31. Prerequisite, Japanese 31 or its equivalent. Spring semester.

Mathematics and Computer Science

Farhad X. Anklesaria, Daniel Balik, George H. Bridgman, Allan Kirch, Joseph Konhauser, Richard Molnar, Jean Probst, Wayne Roberts, G. Michael Schneider (Coordinator for Computer Science), John Schue (Chair), Steven M. Schweda

Mathematics

The mathematics department offers courses in pure and applied mathematics to meet the needs of students in a wide range of areas of interest such as:

—graduate work in mathematics or computer science

—careers involving applied mathematics in the natural sciences, social sciences, business or industry

—elementary and secondary school teaching

The department's students and faculty cooperate in sponsoring a series of programs including guest speakers, films, student presentations, and social and recreational occasions. Macalester's chapter of Pi Mu Epsilon, the national honorary society for mathematics undergraduates, plays a major role in this.
Placement Tests

Before being officially registered at Macalester, all students are required to take a diagnostic test in mathematical proficiency. This is administered during orientation, and on an individual basis for students who enter at times other than the beginning of the fall semester. Entering students who have studied calculus in high school and who wish to enroll in a course more advanced than MA 21 should consult the department of mathematics. When available, scores on 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 MA 109, Essentials of Mathematics for College. MA 109 is a non-credit course designed to develop the student’s background in those areas of mathematics which are required for success in MA 11, 14, and 16, Economics and Business 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 Requirement

MA 14, 16, and 21 are considered foundation courses in mathematics and can be applied toward the fulfillment of the college distribution requirement in the natural sciences and mathematics. MA 16 is especially appropriate for those students not needing specialized skills or training in mathematics.

Major Concentration

Requirements for a major in mathematics are:

1. MA 21, 22, 23, 35, 36, 88 and four additional courses numbered 41 or higher with at least one of these four chosen from MA 54, 57, or 62.

2. CS 17 or an equivalent course.

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

Students preparing to work in an area of applied mathematics should take at least one, and preferably both, of the courses 51, 52.

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

Core Concentration

Requirements for a core in mathematics are:

1. MA 21, 22, 35, 36 and two courses selected from MA 23, 41, 51, 52, 54, 57, 58, 62, 74, 81, 88.

2. CS 17 or an equivalent course.

3. Six relevant courses in a related field or fields.
Minor Requirements
Requirements for a minor in mathematics are:
1. MA 21, 22, 35, 36 and two courses selected from MA 23, 41, 51, 52, 54, 57, 58, 62, 74, 81, 88.
2. CS 17 or an equivalent course.

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
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. Fall semester.

11 Algebra and Trigonometry
Polynomials and rational functions, equations and inequalities, systems of linear equations, trigonometric functions, identities, inverse functions, complex numbers. MA 11 provides a thorough preparation in algebra and enables the student to take both MA 21 and MA 22, which includes trigonometry, MA 11 does not fulfill the graduation requirement in natural science and mathematics and may not be taken by examination. Every semester.

14 Introduction to Statistics FC
An introduction to probability and basic statistical methods, stressing applications in many areas. Suitable for students in the physical, biological, and social sciences, and for liberal arts students in general. Topics include descriptive statistics, probability, probability distributions, estimation, hypothesis testing, correlation and regression, and non-parametric methods. Prerequisite, satisfactory score on part I of the mathematical proficiency test. Every semester.

16 Mathematics—Its Content and Spirit FC
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 elementary algebraic operations. Alternate years.

21 Calculus I FC
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 proficiency test. No trigonometry is required. 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, MA 21 and proficiency in trigonometry. Every semester.

23 Calculus III
Solid analytical geometry, partial derivatives, multiple integrals. Prerequisite, MA 22. Every semester.
35 DISCRETE MATHEMATICS
An introduction to the basic techniques and methods used in combinatorial problem-solving. Includes basic counting principles and introduction to graph theory, stressing design of algorithms and applications. Prerequisite, MA 21. Every semester.

36 LINEAR ALGEBRA
A basic course in linear techniques including systems of equations, linear independence, determinants, linear transformations, and matrices. Some time spent on numerical methods and applications such as linear programming. Prerequisite, MA 21. Every semester.

41 DIFFERENTIAL EQUATIONS
After some initial work on first order equations much of the course will deal with linear equations and systems using both linear algebra and power series. Applications, some numerical work, and non-linear techniques. Prerequisites, MA 23, 36. Spring semester.

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. Alternate years.

51 PROBABILITY AND MATHEMATICAL STATISTICS
An introduction to the mathematical theory of probability and statistics: random variables, conditional probability, independence, discrete and continuous distributions, moment-generating functions, mathematical expectation, law of large numbers, the central limit theorem, sampling distributions, theory of estimation and hypothesis testing. Prerequisite, MA 22 or permission of the instructor. Alternate years.

52 APPLIED MATHEMATICAL STATISTICS
Hypothesis testing, chi-square tests, regression and correlation, analysis of variance, non-parametric statistics, simulation, and computer applications. Prerequisite, MA 51. Alternate years.

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. 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, MA 23. As demand dictates.

57 BASIC ANALYSIS
Theorems for continuous functions, infinite series, power series, uniform convergence, Riemann integral. Prerequisites, MA 23 and permission of the instructor. Spring semester.

58 APPLIED ANALYSIS
Ordinary and partial differential equations. Fourier series and integrals, boundary-value problems, special functions, coordinate transformations, vector analysis. Prerequisites, MA 41 and permission of the instructor. Alternate years.

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. Alternate years.

74 NUMERICAL ANALYSIS (Same as Computer Science 74)

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, MA 23. Alternate years.
88 TOPICS IN MATHEMATICS SEMINAR

Required of all majors. Students and instructor share the lectures. Subject matter is determined by the special interest of the instructor. Subject to departmental approval, students may include MA 88 in their program more than one time. Prerequisites, junior standing and permission of the instructor. Fall semester.

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.

Computer Science

Coordinator: G. Michael Schneider

There are three basic principles underlying the planning and development of the Computer Science program at Macalester. They are that the program should be interdisciplinary; that it should be applied in nature, providing first hand experience to students; and that it should adhere to the principles and ideals of a liberal arts education. Graduates of the program should possess both the necessary technical training and the breadth of experience to utilize computer technology for the good of the community.

General Distribution Requirement

Courses CS 15 and CS 17 are designated as foundation courses in computer science which may be applied toward fulfillment of the College's distribution requirement in the natural sciences and mathematics.

Major Concentration

Requirements for a major in computer science are:

1. CS 17, 24, 30, 40, 42, 45

2. Three courses from the following list, including at least one CS course:

   CS 50 Topics in Computer Science
   CS 74 Numerical Analysis
   CS 88 Senior Seminar in Computer Science
   CS 96 Independent Project in Computer Science
   CS 97 Internship in Computer Science
   (only one 90's course may be applied toward a CS major)
   PHI 70 Advanced Logic
   PHY 42 Electronics
   PHY 54 Introduction to Laboratory Computing
   REL 67 Technology and Ethics
   E&B 41 Intermediate Applied Statistics
   E&B 42 Time Series Analysis and Business Forecasting
   E&B 47 Econometrics
   (only one E&B course may be applied toward a CS major)

3. MA 21, 22, 35 as supporting courses.

In addition students are strongly encouraged to include one or more statistics courses, chosen from MA 14, 51, 52, and linear algebra MA 36.
Core Concentration

Requirements for a core concentration in computer science are:
1. CS 17, 24, 30, 40
2. Two courses, at least one with a CS designation, chosen from either CS 42, 45 or those listed as options for the CS major.
3. Six relevant courses in a related field or fields.

Minor Concentration

Requirements for a minor concentration in computer science are:
1. CS 17, 24, 30, 40
2. Two courses, at least one with a CS designation, chosen from either CS 42, 45 or those listed as options for the CS major.

Honors

See paragraph headed Honors under Mathematics.

COURSES

15 INTRODUCTION TO COMPUTER SCIENCE FC
This is an introductory course for non-majors and non-minors in computer science. It is designed to provide a student with basic knowledge of the fields of computer science and information processing. Students will learn how to program in the BASIC programming language. They will also be introduced to the topics of computer organization, the use of software packages, the application of computers to other fields of study, and the social and ethical implications of computer technology. Prerequisite, two years of high school mathematics. Every semester.

17 COMPUTER PROGRAMMING I FC
This is an introductory course for majors and minors. It is designed to provide a more formal and in-depth introduction to the field of computer science for those who may take additional courses. Topics will include: problem solving techniques, the concept of an algorithm, techniques for designing and representing algorithms and an introduction to program design methods. Students will learn the modern, block-structured programming language Pascal. Prerequisite, two years of high school mathematics. Every semester.

24 COMPUTER PROGRAMMING II
Advanced programming techniques. Programming style and expression. Program design methods, including structured programming, stepwise refinement, and modularity. How to write a specification and design document. Advanced concepts in data structures, including the use of the Pascal record, set, file, and pointer types. Program implementation concerns, including debugging, testing, and program verification. Programming environments and software tools. Students will work in teams to design and implement a large software project. Prerequisite, CS 17. Every semester.

30 COMPUTER SYSTEMS ORGANIZATION
Designed to familiarize the student with the organization and design of digital computers. Topics include computer structures, internal data representations, number systems, the principal functional units of a computer system, addressing techniques, assembly language, and systems software. Students will be required to write and run a number of assembly language programs. Prerequisite, CS 17. Every semester.

40 DATA STRUCTURES AND FILE ORGANIZATION
Techniques for representing and organizing data. Efficient storage of data on a computer system. An introduction to various data structures, including strings, tags, linked lists, stacks, queues, graphs, and trees. Definition of abstract data types. Sorting and searching algorithms for common data structures. Introduction to complexity analysis. File structures, including sequential, index sequential, random. Prerequisites, CS 24, MA 35. Fall semester.
42 PROGRAMMING LANGUAGE DESIGN
Basic computer linguistics. Techniques for representing the syntax and semantics of programming languages. Dominant features of programming languages: Control structures, data structures, subprogram facilities, scope and extent rules, parallelism, data abstraction, and exception handling. Concepts will be illustrated using a wide range of existing programming languages, such as Ada, MODULA, LISP, C, Pascal, LOGO, and FORTH. Prerequisite, CS 40. Spring semester.

45 OPERATING SYSTEMS AND COMPUTER ARCHITECTURE
The basic principles of designing and building operating systems. The concept of a process. Sequential vs. concurrent processes, synchronization and mutual exclusion. Processor scheduling, time-sharing, multiprogramming, multiprocessing. Memory management techniques. Design of a file system. Security and protection systems. Performance evaluation. Prerequisites, CS 30, CS 40. Fall semester.

50 TOPICS IN COMPUTER SCIENCE
Topics of broad, general interest to students in the field of computer science. This course will be offered every year, and the topic will be announced prior to registration. Topics in past years have been: "Computers and Society," and "Introduction to Computer Graphics." Fall semester.

74 NUMERICAL ANALYSIS (Same as MA 74)

88 SENIOR SEMINAR IN COMPUTER SCIENCE
Advanced topics in specialized area of computer science. This course will be offered every year, and the topic will be announced prior to registration. Topics in past years have been "Advanced Operating Systems Design," and "Data Communications and Computer Networks." Prerequisite, senior standing or consent of the instructor. Spring semester.

96 INDEPENDENT PROJECT IN COMPUTER SCIENCE
An individual project planned with and under supervision of instructor. Arrangements must be approved by department prior to registration.

97 INTERNSHIP IN COMPUTER SCIENCE
Available to junior and senior students with declared cores or majors in computer science. Arrangements must be made prior to registration. Departmental approval and supervision required.

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

For the music major, minor or core, a careful balance between theory, history-literature, performance and composition is maintained. Many majors go on to graduate work in music; many teach in public schools, privately, or in college. Others go into arts management or related jobs. Many, while at Macalester, double major, and find the music experience highly stimulating and sensitizing. Thus the department offers the following programs of study: 1) performance, musicology or composition as a major; 2) licensure in secondary or elementary music education.

The music department also services the general student, and as such offers performance study in voice or on virtually any instrument at any level to all students in the College. Unless one is a music major, minor or core there is a fee (presently $112.00 per semester for twelve half-hour lessons. The fee is subject to change). All students are also invited to audition for the Concert Band, the Jazz Band, the orchestra, the Concert Choir, the Festival Chorale, Highland Dance, and the Pipe Band.
The general student is also invited to consider courses in Music Appreciation, Electronic Music and Fundamental Piano. Theory I is also designed for the near beginner and is a prerequisite to other courses in music history-literature and theory-composition.

**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, Appreciation; Music 12, Fundamental Piano; Music 13, Theory I; Music 14, Theory II and Music 93, Electronic Music are all designated as foundation courses (FC) and fulfill the general distribution requirement for the fine arts. Other music courses may be used with the permission of the instructor.

**Major Concentration**

A major will consist of eleven courses.

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 as soon as possible in the sophomore and junior year.

1. **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.

2. **Major Concentration in Music for Teacher Preparation:** Music 13, 14, 23, 24, 41, 42, 53, 54, 71, 72 and 74 are required for education students. Music 76 or Music 90 are strongly recommended. 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 required for elementary licensure.

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 licensure include: Education 49, 51, 64, 65; and one course from 82 or 83 or 84 (students should check with the Education department). Also to satisfy state requirements the student must take Physical Education 101, Education 125 and a course in school health.

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).

**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.
Music

Piano Proficiency
All music majors should be proficient in piano and pass a proficiency examination administered by the department in their junior or at the latest in their senior year.

Core Concentration
A core will consist of six music courses.

Music 13 should be taken no later than the fall of the junior year. Core concentration includes: 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 Concentration
A minor will consist of seven courses: Music 13 and 14; any two literature courses including Music 10; and three electives, or more theory or literature instead of, or combined with, electives, music lessons and ensembles.

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

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

12 FUNDAMENTAL PIANO FC
Assumes no knowledge of music or piano. Course will teach students to play the piano while emphasizing essential points of theory and an historical overview of piano literature. Every semester.

13 THEORY I—ELEMENTARY THEORY FC
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. Fall semester.

14 THEORY II—ADVANCED THEORY FC
Continuation of ear-training, sight-training, written and keyboard harmony through extended alteration of tertian harmony. Prerequisite, Music 13 or permission of the instructor. Spring semester.

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. Fall semester.

24 THEORY IV
Theoretical analysis of musical forms with accompanying exercises in composition with emphasis on contrapuntal techniques. Continuation of ear training and keyboard. Prerequisite, Music 23 or permission of the instructor. Spring semester.

41 MUSIC LITERATURE I
A synopsis and general history of music's early development through 1600. Prerequisite, Theory II or permission of the instructor. Fall semester.

42 MUSIC LITERATURE II
The study and analysis of music written from 1600 to 1770. Prerequisites, Music 14 and 41 or the permission of the instructor. Spring semester.
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 14 and 42 or permission of the instructor. Fall semester.

54 MUSIC LITERATURE IV
The study and analysis of music written in the 20th century. Prerequisites, Music 23 and 53 or permission of the instructor. Spring semester.

71 INSTRUMENTAL METHODS I
Playing woodwinds and percussion instruments, survey of publishers and methods. Class and laboratory sessions and conducting. Fall semester.

72 INSTRUMENTAL METHODS II
Playing string and brass instruments, survey of publishers and methods. Class and laboratory sessions and conducting. Spring semester.

74 BASIC CONDUCTING
This course will emphasize basic techniques, including beat patterns, baton techniques, score preparation and rehearsal techniques. Prerequisite, Music 14 or permission of the instructor. Spring semester.

76 CHORAL CONDUCTING
A continuation of Music 74, specializing in problems of choral conducting. Organization and development of choral ensembles, repertoire, programming and rehearsal techniques. Prerequisite, Music 74 or permission of the instructor. Fall 1984 and alternate years.

88 SEMINAR
90 INSTRUMENTAL CONDUCTING
A continuation of Music 74, specializing in problems of instrumental conducting. Baton technique, score preparation and reading, transposition, rehearsal and performance practice. Moderate piano proficiency is suggested. Prerequisite, Music 74, or permission of the instructor. Fall 1985 and alternate years.

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. Fall 1984 and alternate years.

93 ELECTRONIC MUSIC FC
History and development, techniques of tape manipulation, sound synthesis and recording. Students will work in the synthesizer studio. Prerequisite, permission of the instructor. Spring semester.

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.

The grades a student receives for performance studies which earn academic credit are computed in the student's cumulative GPA as they are earned.

**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.

All students with a major concentration in music are expected to participate in ensembles for their full Macalester tenure (generally 8 semesters). Four of these semesters of ensemble participation should be in *major ensembles*. All students with major concentration in music are also expected to take private lessons for their Macalester tenure.

All students coring or minoring in music should participate in *major ensembles* for four semesters. They are also expected to take private lessons for a minimum of four semesters.

The major ensembles are: Festival Chorale, Concert Choir, Macalester Symphony Orchestra, Macalester Symphonic Band and the Mac Jazz Band (for music majors the Jazz Band will fulfill two of the necessary four semesters of participation in major ensembles). Only the above listed major ensembles yield credit (1/4 credit per semester; see above paragraph *Performance Studies*).

Smaller ensembles are made up of the general Macalester students as well as students minoring, coring or majoring in music (see *Macalester Chamber Music Ensembles*). However, to participate in a small ensemble the student is expected to be either taking lessons and/or participating in a major ensemble. Small ensembles are not a substitute for either lessons or major ensemble participation, but are an enhancement of the student's work in the music department.

**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**

A string trio or string quartet made up of members from the Orchestra. The members will be selected through auditioning. A woodwind quintet, a flute quartet and a guitar ensemble. Students participating will be expected to be taking lessons and/or performing in a major ensemble and will be selected through auditions.

**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, krummhmorns, capped reeds, rebecc, 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 LESSON IN RECORDER
Open to students with less than one year of recorder study.

125,126 CLASS VOCAL PERFORMANCE METHODS

Philosophy

Gregory Blaz, Nancy Gerth, Martin Gunderson, Henry West (Chair), David White

The principal endeavor of the philosophy department is to develop in students the ability to analyze and evaluate basic concepts of human knowledge and moral action, as well as concepts from the humanities, social and natural sciences. To realize this goal, the department offers courses and seminars exploring both Western and Asian modes of philosophical analysis. In recognition of the special interests and requirements of students interested in non-Western philosophy, the department offers a major in this area 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

The foundation courses in the department, Philosophy 15, 25, 30, 31, 32, 34, 36, 40, satisfy the general distribution requirement in the humanities.

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 one seminar in philosophy. In addition, majors in philosophy will write a senior paper. It is expected that the senior paper will be a revised version of a previous term paper. The senior paper may be given to any member of the Philosophy Department.

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 11, Cultural Anthropology; Religious Studies 24 Introduction to Non-Western Religion; 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 concentration
A minor in philosophy consists of four courses in the department. 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 FC
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. Every semester.

25 ETHICS FC-M/E
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. Every semester.

30 ANCIENT AND MEDIAEVAL PHILOSOPHIES (Same as Classics 30) FC-HP
Major philosophers of Greece, Rome and the mediaeval periods. Alternate years.

31 MODERN PHILOSOPHY FC-HP
A study of the empirical 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. Every year.
32 CONTEMPORARY PHILOSOPHY FC
A consideration of major movements of post-World War I analytic philosophy. Wittgenstein, Austin, Strawson, and Quine will be among those studied. Prerequisite, Philosophy 31 or the permission of the instructor. Every year.

34 GREAT POLITICAL THINKERS AND IDEAS (Same as Political Science 34) FC-HP
Western political thought. Every year.

35 PHILOSOPHY OF PSYCHOLOGY (Same as Psychology 35)
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. Every year.

36 INDIAN PHILOSOPHIES FC-OC
Introductory study of selected Hindu and Buddhist texts and philosophies. Fall semester.

37 CHINESE AND JAPANESE PHILOSOPHIES
A study of selected Buddhist, Confucian and Taoist texts, including Japanese Buddhist works. Prerequisite, sophomore standing or Philosophy 36. Alternate years.

40 INTRODUCTION TO LOGIC
Logic is primarily concerned with the evaluation of arguments. Topics include informal fallacies, syllogisms, propositional logic, and predicate logic. No prerequisites. Every year.

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

54 EXISTENTIALISM, ATHEISTIC AND THEISTIC (Same as Religious Studies 54)
A study of the writings of major representative figures in the modern existentialist point of view. Writings of Camus, Sartre, Kierkegaard, Buber, Marxist critics, Bultmann will be read and discussed. Fall semester.

55 HISTORY AND PHILOSOPHY OF SOCIALISM
An analysis of the various ideas of socialism from the eighteenth century to the present. Philosophically, the course will investigate the logic and ethics of the socialist ideas encountered. Historically, the course will explore the social-economic, cultural and political environments in which the socialist ideas appeared. Radicals of the French Revolution, the Utopian Socialists, the Anarchists, Marx, Marxian Revisionists, Bolshevikism, Soviet Marxism-Leninism, contemporary Eurocommunism and the socialism of Mao Tse-Tung will all be studied. Readings will be heavily weighted toward socialist texts themselves. Students will enroll for both History 55 and Philosophy 55. Alternate years.

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. Alternate years.

61 PHILOSOPHY OF THE SOCIAL SCIENCES
An examination of the philosophical and methodological foundations of the social sciences. Included will be examinations of the assumptions underlying different schools of social science, e.g., positivism, critical theory, functionalism, structuralism. Other topics include an examination of the purported "value-freedom" of social science, the notion of objectivity in social science, and how theories are constructed. Alternate years.

67 PEACE STUDIES (Same as Political Science 67)
An interdisciplinary approach to the problems of international conflict and social violence. Topics will vary from year to year but will include: ethical appraisal of war and violence; pacifism and nonviolence; conflict resolution; psychological and anthropological views on aggression; causation of war and violence; peace movements; war and foreign policy; and the relationship of violence to other social problems. Alternate years.

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. Alternate years.
70 ADVANCED LOGIC
An approach to such results as the completeness theorem and Godel's theorems using concepts of computability and Turing machines. A good background in abstract mathematics or logic is required. Alternate years.

71 AESTHETICS
The nature of aesthetic experience and the basis of aesthetic evaluation. Alternate years.

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. Every year.

84 PHILOSOPHY OF EDUCATION (Same as Education 84)
System approaches and philosophical analysis approach to education and educational language, respectively. Alternate years.

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

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. Alternate years.

88 SEMINAR: TOPICS
Study of some movement, philosopher or a problem in the tradition of Western Philosophy. Primarily for juniors or seniors doing a core or major in philosophy. Prerequisite, permission of the instructor. Every year.

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 and Dance
John C. Bachman, Douglas Bolstorff, Sheila Brewer (Chair), Becky Heist, Tom Hosier
The department of physical education and dance provides students the opportunity to major or minor in physical education, minor in dance, certify in coaching, develop or improve skills in activity classes and/or compete in a wide range of recreational, intramural, club and intercollegiate sports.

The varsity athletic teams are members of the Minnesota Intercollegiate Athletic Conference (MIAC) and the National Collegiate Athletic Association, Division III (NCAA III). Varsity sports for men are baseball, basketball, cross country, football, golf, soccer, swimming, tennis and track and field. Varsity sports for women are basketball, cross country, soccer, softball, swimming, tennis, track and field and volleyball.

Club sports include fencing, karate, men's volleyball, ice hockey, Tae-Kwan-Do, ultimate frisbee and men's rugby.
Intramural competition is available in basketball, badminton, broomball, handball, floor hockey, racquetball, mini-soccer, softball, swimming, tennis, touch football, volleyball, tube water polo and wrestling. The majority of these sports have men's, women's and co-ed schedules.

Major Concentration
The requirements for a major in physical education are:
1. Physical Education 60, 61 (or Biology 54), 62, 72
2. Physical Education Activity 101, 102, 104, 150, 217, 232, 333 and one course each from the areas of team sports, aquatics, dance and lifetime sports.
3. Physical Education 200, 350, 351, 360, 402, 430 at the College of St. Thomas.*
4. Licensure to teach physical education in Minnesota adds the following requirements. Education 49, 51, 64, 65, 125. Biology 11 and one of Education 82, 83, 84.

*Other ACTC College courses may be substituted with the permission of the chair of physical education at both Macalester and St. Thomas.

Minor Concentration
Minor in physical education
The requirements for a minor in physical education are:
1. Physical Education 60, 61 (or Biology 54), 62.
2. Physical Education Activity 101, 102, 104, 217, one team sports, one aquatic, one dance, one lifetime sport.
3. Supporting courses Education 51, Biology 11.

Minor in Dance
The requirements for a minor in dance are:
1. Eight techniques and/or ensemble courses (2 credits). Students should contact the dance instructor for advice concerning choice of technique classes.
3. Supporting courses recommended are Music 12, Dramatic Arts 22, 30, 31, Humanities 27.

Coaching Certification *
The requirements for coaching certification are:
1. Physical Education 61 (or Biology 54), 62, 72.
2. Coaching practicum (40 hours) taken in conjunction with PE 72.

*COURSES
50 TOPICS
Examination of subject matter of special interest to students and/or faculty. Variable material each 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. Alternate spring semesters. Spring 1986.
61 ANATOMY AND PHYSIOLOGY
Study of the structure and function of human body systems as they relate to physical activity. Particular attention is given to the structure of the skeletal and muscular systems and the function of the cardiovascular, muscular, and respiratory systems. Alternate fall semesters. Fall 1985.

62 KINESIOLOGY AND EXERCISE PHYSIOLOGY
Study of the kinesiological and biomechanical principles as they apply to human movement and the physiological changes which result from exercise and/or training programs. (PE 61 recommended). Alternate spring semesters. Spring 1985.

70 INTRODUCTION TO DANCE
A survey of the history of dance from the Renaissance and the beginnings of ballet to the early modern choreographers. A look at dance in America today involving the various styles being performed, current stars of the dance world and dance company structures. Examination of the value of art/dance to modern peoples. Spring semester.

71 DANCE COMPOSITION
A study of choreography—the craft and art of making dances. Each student is actively involved in the creative process as choreographer and viewer. Fall semester.

72 CPR, CARE AND PREVENTION OF ATHLETIC INJURIES, PSYCHOLOGY OF SPORTS COACHING, AND COACHING PRACTICUM
Acquisition of techniques of basic life support (CPR Card). A study of prevention and care of athletic injury including awareness of available modalities and experience in strapping. An examination of the theory and technique of coaching. Students considering coaching certification will also complete a coaching practicum of 40 hours in a supervised field experience. Fall semester.

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

Activity Courses
Courses may be taken for credit or no credit. Regardless of your status (credit or no credit) each student will meet the same requirements, be graded in the same manner with the grade appearing on your transcript. The one credit opportunity requires taking and successfully completing four different courses, one of which is PE 101 Physical Fitness. Grading of all activity courses is on a S-NC basis. Text materials may be used. Evaluation can include both written and performance criteria. In sequence activity classes, students can be placed at the appropriate level.

Full time students may take activity classes at no additional charge. Locks are issued by the equipment room attendant. The annual fee is $7.50 payable at the Cashier's office. $5.00 is refunded upon return of the lock.

Team Sports
104 Officiating
108 Soccer
110 Touch Football
111 Softball
114 Volleyball I
115 Walleyball

Water Activities
131 Swimming I
231 Swimming II
232 Water Safety Instruction
233 Swim for Fitness
234 Water Polo
235 Synchronized Swimming
331 Swimming & Diving III
333 Life Saving

Dance
102 Fundamentals of Rhythm
105 Aerobic Dance
112 Jazz I
143 Ballroom Dance
144 Modern Dance I
150 Ballet I
151 Dance Ensemble*
212 Jazz II
242 Folk & Square Dance
243 Waltz, Foxtrot and Old Tyme Dance
244 Modern Dance II
250 Ballet II
312 Jazz III
344 Modern Dance III
350 Ballet III

*Dance ensemble is an organization committed to increasing student performance and choreographic skills. Selected by auditions, the Ensemble will present a formal concert in the spring.
Lifetime Sports

101 Physical Fitness
103 Running
107 Individual Fitness Program
116 Racquetball I
123 Badminton I
124 Tennis I
125 Weight Training
126 Golf
140 Downhill Skiing
145 Bowling
146 Karate
147 Fencing I
214 Volleyball II
223 Badminton II
224 Tennis II
246 Karate II
247 Fencing II
314 Volleyball III

Miscellaneous
106 First Aid
208 Relaxation
217 Physical Education for Elementary School

Physics and Astronomy

Sung Kyu Kim, Raymond Mikkelson, Sherman Schultz, Edward Strait (Chair)

The department of physics and astronomy offers courses which treat experimental, theoretical, philosophical and historical developments in humankind's search to understand the physical universe. Conscious attempts are made to help students improve mathematical, logical and analytical skills which are important in many career choices.

The Oak Ridge Program

This program is jointly sponsored at Oak Ridge National Laboratory by the Associated Colleges of the Midwest and the Great Lakes Colleges Association. It affords students a 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.

Introductory Courses

Physics 21-22 constitutes a two-term sequence in introductory physics and does not assume a working knowledge of calculus.

For students wishing coverage of general physics at greater depth, the department offers a four-term sequence: Physics 28, Introduction to Mechanics; Physics 29, Waves, Optics, and Thermodynamics; Physics 30, Electricity and Magnetism; and Physics 31, Modern Physics. This sequence uses calculus; at a minimum Physics 28 requires concurrent registration in Mathematics 21.

General Distribution Requirement

The general distribution requirements in the natural sciences and mathematics may be satisfied by any of the following foundation courses: Physics 11, 13, 21, 22, 28, 29, 30.

Major Concentration

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

Students who are contemplating graduate study in physics should have completed mathematics at least through multivariable calculus and differential equations. They should also be able to program and utilize a computer in obtaining solutions to meaningful problems. A reading knowledge of French, German or Russian is desirable.

A typical schedule for the first two years follows:

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<thead>
<tr>
<th>Freshman Year</th>
<th>Sophomore Year</th>
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<tr>
<td><strong>Fall Term</strong></td>
<td><strong>Spring Term</strong></td>
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<tr>
<td>Physics 28</td>
<td>Physics 29</td>
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<tr>
<td>Math 21</td>
<td>Math 22</td>
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**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. For the core concentration in physics the student should complete mathematics through calculus and be able to program and utilize a computer in obtaining solutions to meaningful problems.

**Minor Concentration**

The minor in physics consists of Physics 28, 29, 30, and 31.

**Honors**

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

**COURSES**

*11 CONTEMPORARY CONCEPTS FC*

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. Every semester.
13 ELEMENTARY ASTRONOMY FC
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. Every semester.

21 INTRODUCTORY PHYSICS I FC
Mechanics, heat and sound, including laboratory experiments and extensive demonstrations. Three lectures, one two-hour laboratory per week. Fall semester.

22 INTRODUCTORY PHYSICS II FC
Electricity and magnetism, light and optics, modern physics, including laboratory experiments and extensive demonstrations. Three lectures, one two-hour laboratory per week. Spring semester.

28 INTRODUCTION TO MECHANICS FC
A study of motion, including Newton’s Law 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. Fall semester.

29 WAVES, OPTICS AND THERMODYNAMICS FC
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. Spring semester.

30 ELECTRICITY AND MAGNETISM FC
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. Fall semester.

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 Math 23. Three lectures, one two-hour laboratory per week. Spring semester.

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. Alternate years. Offered as demand dictates.

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. Spring semester.

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 plane electro-magnetic waves in free space. Prerequisite, Physics 30 and Math 23. Fall semester.

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. Spring semester.

50 TOPICS
These temporary courses are offered by instructors at their own initiative or in response to student requests. The following are examples of recent offerings: Cosmology; Quantum Physics and Consciousness (offered jointly with the philosophy department) and Introductory Electronics.
52 EXPERIMENTAL NUCLEAR PHYSICS
This course is based in the 150-keV accelerator laboratory where students undertake guided projects in a research environment. It uses the unifying theme of nuclear physics to instruct students in laboratory techniques that are useful in many areas of experimental physics. Areas treated include high voltage systems, vacuum systems, electronic instrumentation, and data acquisition and analysis techniques. Prerequisites, Physics 30 and 31. Two three-hour laboratories a week. Alternate years. Offered 1984-85.

54 LABORATORY COMPUTING
This course will introduce students to real-time laboratory computers and the techniques necessary for them to control experimental conditions and to record, display, and analyze data. Parallel and serial data transfer, analog-to-digital and digital-to-analog conversions, computer interrupters, micro-computer architecture, signal averaging, and Fast Fourier Transform are among the topics discussed and applied to problems in many disciplines. Prerequisites, junior standing, some background in elementary electronics and an ability to program in a high level language. Six hours of class and laboratory per week. Every year.

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

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 Math 23. Four lectures per week. Alternate years. Offered 1985-86.

81 QUANTUM MECHANICS
The concepts and techniques of quantum mechanics, developed and applied to atomic and molecular systems. Prerequisites, Physics 31 and Math 33. Four lectures a week. Every year.

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. Offered as demand dictates.

96 INDEPENDENT PROJECT
Independent reading and experimentations 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
Duncan Baird (Chair), Dorothy Dodge, Charles R. Green, James Matsoukas, Cindy Orbovich, Theresa Smith

Political Science offers a problem analysis/problem-solving orientation to political life. The problems range from perennial value issues such as justice and equality to issues involving conflict resolution to alternative governmental forms to the specific content of public policies. The analyses include formal-empirical
(e.g. quantitative), interpretative (e.g. personal value assessment), and dialectical (e.g. legal reasoning) techniques.

**General Distribution Requirement**

Political Science 10 Introduction to Political Analysis, and Political Science 20 American Politics, are the foundation courses which fulfill the general distribution requirement in the social sciences.

**Major Concentration**

A major concentration normally consists of eight courses including: 1) PS 10 Introduction to Political Analysis; 2) any number of intermediate courses selected in terms of the student’s interests and goals in consultation with faculty adviser; two intermediate courses are normally required before taking advanced courses; 3) a minimum of two advanced courses (not including courses listed in the 90s); 4) a strong recommendation that majors take statistics and PS 30 Empirical Research Methods; 5) a strong recommendation to complete an internship or an independent study project (available to juniors and seniors with appropriate preparation).

Political science majors should plan their programs of study with their advisers to distribute their work to include courses or significant experience with:

A. *Political Theory and Methodology* (Political Thought and Logic of Political Inquiry)
B. *American Politics* (Political Institutions and Political Behavior)
C. *International Politics*
D. *Public Policy Analysis*

**Core Concentration**

A core concentration consists of six political science courses including PS 10 Introduction to Political Analysis as well as six related courses from other departments. Consult the department chair for individual program descriptions. Interdepartmental concentrations are available in political science and other departments such as economics, history, geography, journalism, sociology, and psychology and with interdisciplinary programs including international studies, urban studies, environmental studies, and law and society.

**Minor Concentration**

A minor concentration is normally four or five courses arranged in consultation with and approval of 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.)
Political Science

COURSES

10 INTRODUCTION TO POLITICAL ANALYSIS FC
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. Every semester.

Intermediate Courses

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

20 AMERICAN POLITICS FC
An examination of the major institutions and processes which shape the formulation and execution of public policy in the United States. Alternate spring semesters. Spring 1985.

26 INTRODUCTION TO INTERNATIONAL POLITICS
Examination of 1) problems in the international environment and 2) theoretical frameworks of international relations. Topics include foreign policy decision making, theories of war and conflict resolution, political economy, and interdependence. Fall semester.

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

30 EMPIRICAL RESEARCH METHODS
Techniques of design, observation, description and measurement in contemporary political research including survey research, aggregate analysis and experimental/quasi experimental research. Prerequisite, Mathematics 14 or equivalent recommended. Spring semester.

32 THIRD WORLD DEVELOPMENTAL POLITICS
Explanation of the developmental patterns and policies of the Third World. The North South debate and the proposals for the United Nations Developmental Decade will be included in topics covered. Fall 1984.

33 CONTEMPORARY CHINA
China since the Communist revolution and the Chinese shifts of political policies from 1950 to the present in the attempt to achieve modernization. Alternate years.

34 GREAT POLITICAL THINKERS AND IDEAS (Same as Philosophy 34)
Western political thought from Plato to the present, including major contributions by American political thinkers. Every year.

35 AMERICAN POLITICAL THOUGHT
An historical analytical treatment of the main currents of American political thought from colonial times to the present, including post-liberal thought. Fall semester.

36 MODERN POLITICAL THOUGHT
Study of a wide spectrum of Western political thought occurring since World War II. Alternate spring semesters. Spring 1986.

38 LEGAL SYSTEMS
This course seeks to get at the interchange between laws and the socio-political environment in order to understand the role, functions and limitations of law in various forms of society. Through such an analysis, a search is made for the axial principles of our own society in order to form some notion of the direction of change in legal institutions in our own time. Alternate fall semesters. Fall 1985.

41 POLITICAL PARTIES AND ELECTIONS
An examination of the roles played by political parties in political systems around the world, with emphasis on the function of parties within the American context. Special attention is accorded to the impact of electoral rules and procedures upon the behavior of parties and their candidates. Alternate fall semesters. Fall 1984.

42 INTEREST GROUP POLITICS
An exploration of the roles played by voluntary associations in the formulation of public policy within the legislative, executive, and judicial arenas. Although the American context is the principal frame of reference, some attention is given to interest groups in non-American settings. Prerequisite, PS 20 or permission of the instructor. Alternate fall semesters.
43 NATIVE AMERICAN POLITICS
An analysis of the legal and political relations between the United States government and Indian tribes, with emphasis upon the contemporary dilemma arising out of that historical relationship. Although the course focuses primarily upon federal-tribal relations, some attention will be devoted to issues and programs concerning urban Indians. Prerequisite, PS 20 or permission of the instructor. Alternate fall semesters.

47 INTERGOVERNMENTAL RELATIONS
An examination of federalism as a constitutional principle and as an ongoing process, with emphasis given to the interaction of national, state, and local governments in formulating and executing public policy. Prerequisite, PS 20 or permission of the instructor. Spring semester.

49 SCIENCE, TECHNOLOGY, AND POLITICS
Analysis of relationships between science, technology, and politics including such issues as technology transfers, science-technology policy, science, technology and human rights and the politics of information technologies. Alternate fall semesters. Fall 1984.

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.

53 LEGISLATIVE BEHAVIOR
The processes by which public policy is formulated within legislative bodies. Although the primary focus will be upon legislative processes in the United States, some attention will be given to non-American legislatures. Prerequisite, PS 20 or permission of the instructor. Alternate fall semesters.

55 CONTEMPORARY LEGAL PROBLEMS

58 ADMINISTRATIVE LAW
Legal problems inherent in the administrative process, which grow out of the rule-making and judicial activities of governmental agencies. Alternate fall semesters. Fall 1984.

61 POST INDUSTRIAL POLITICS AND URBAN ISSUES
Examination of the politics of the post-developmental world including the United States, European Economic Community, Japan and the Soviet Union. New growth strategies, resource management and distribution, and the expanding role of the multinational corporations will be explored along with urban policy planning of land use and quality of life. Alternate years.

62 INTERNATIONAL LAW AND ORGANIZATION
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. Fall semester.

64 POLITICAL ANTHROPOLOGY (Same as Anthropology 64)
An analysis of various political structures and activities in diverse world societies. Emphasis is placed on pre-literate cultures, but the societies examined vary from hunting and gathering bands through agricultural tribes to the industrial state. Spring semester.

65 AMERICAN FOREIGN POLICY
Exploration of 1) the participants and processes which influence the conduct of U.S. foreign policy and 2) issues on the foreign policy agenda, past and present. Topics include the Cold War, Vietnam, the role of force, and North-South issues. Prerequisite, PS 10 or 26 or consent of the instructor. Spring 1985.

67 PEACE STUDIES (Same as Philosophy 67)
An interdisciplinary approach to the problems of international conflict and social violence. Topics will vary year to year but will include: ethical appraisal of war and violence; pacifism and nonviolence; conflict resolution; psychological and anthropological views on aggression; causation of war and violence; peace movements; war and foreign policy; and the relationship of violence to other social problems. Alternate spring semesters.
69 INTERNATIONAL CONFLICT BEHAVIOR AND RESOLUTION
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. Fall 1984.

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
Critical examination of the concepts, approaches, and methods important in the design and evaluation of public policy. Topics include evaluation strategies, focused use of models, forecasting, indicator systems, and the political context of policy analysis. Prerequisite, PS 30 or consent of the instructor. Fall semester.

77 POLITICAL BEHAVIOR
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, PS 30 or consent of the instructor. Alternate spring semesters.

79 POLITICAL CHANGE
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, PS 30 or consent of instructor. Alternate spring semesters.

81 JUDICIAL BEHAVIOR
An examination of the judicial process, primarily in the United States, and an introduction to the principal analytical models used in contemporary studies of judicial decision making. In examining current approaches to the study of judicial behavior, some attention is devoted to non-American judicial systems. Prerequisite, PS 30 or consent of the instructor. Fall semester.

83 ADMINISTRATIVE BEHAVIOR
Theories and analysis of public bureaucracies, their environments and their problems, emphasis on human behavior and the design of effective organizational change. Prerequisite, PS 30 or consent of the instructor. Spring semester.

85 AMERICAN CONSTITUTIONAL LAW AND THOUGHT
This course deals with the history and present state of the distribution of powers to the Federal Government and relation of those powers to powers reserved to the States. The course covers the powers of each branch of the Federal Government—legislative, executive and judicial, and includes such topics as the present controversy over revived states' rights and over the President's power to commit troops abroad and the like. The course is in fact half of the entire study of Constitutional law, the other half being Political Science 86 Civil Liberties, q.v. The courses may be taken in any sequence or separately. Fall semester.

86 CIVIL LIBERTIES
An examination of the development of U.S. Supreme Court policies in the field of individual rights. The course will be divided into five sections, namely, due process, freedom of expression, freedom of religion, equal protection, and privacy. Each section will be examined via the reading and discussion of relevant Supreme Court decisions.

87 ENVIRONMENTAL POLITICS
Analysis of the contemporary environmental crisis facing the planet and the issues arising from the politics of scarcity. Resource management and distribution, the impact of modern technology on the ecological system and possible political channels for processing of interests will be explored. Prerequisite, intermediate level course work. Alternate fall semesters.

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
Psychology 10, 16, 18, and 35 are foundation courses which fulfill the general distribution requirement in the social sciences.

Major Concentration
The major in psychology consists of ten courses. The distribution of courses presented for a major should conform to the following pattern:
- One introductory course;
- One intermediate course;
- One introductory statistics course, such as Mathematics 14 or Psychology 14 (this course may be taken under the S/D/NC option);
- The four courses of the Junior Majors Program, Psychology 61-64, also referred to as the 'Pivot Program';
- One senior seminar;
- Two courses from the categories of Advanced Courses, Senior Seminars, or Special Courses (only one of which may be a special course).
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 psychology courses shall include no more than one introductory course and must include at least one advanced course or senior seminar. The core concentration courses will follow this pattern:

- Psychology (six courses): one introductory course, one advanced course plus four courses which are intermediate courses, advanced courses or senior seminars;
- Statistics: Math 14 or equivalent;
- Outside Psychology (five courses): selections which complement the psychology courses to form a coherent concentration.

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 Math 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.

Here are four examples of possible core concentrations:

**Psychobiology**
- Psychology: 10 General Psychology, 22 Introduction to Neuroscience, 28 Comparative Psychology, 32 Methods in Neuroscience, 75 Behavior Genetics, and one other course
- Statistics
- Biology: 11 Principles, 12 Zoology, and three other courses, such as 41 Ecology, 44 Vertebrate Anatomy and Evolution, 49 Embryology, 52 Genetics, 54 Human Physiology, 61 Histology, 64 Cell Physiology, or 58 Biochemistry

**Human Services**
- Psychology: an introductory course, 21 Behavior Modification, 24 Behavior Disorders, 33 Individual Differences, 74 Clinical Psychology, and an internship
- Statistics
- Sociology: 10 Introduction, 20 The Family, 54 Human Services, an internship and one other course such as 76 Social Deviance, 40 Racial and Ethnic Minorities, 66 Urban Sociology

**Elementary Education**
- Psychology: 16 Developmental Psychology, 21 Behavior Modification, 24 Behavior Disorders, 33 Individual Differences, 37 Cognition: A Study of Human Thought and Intelligence, and one advanced course
- Statistics
- Education: 49 Educational Psychology, 52, 53, or 63 Elementary Curriculum, 83 Foundations of Education, 86 Practicum and Seminar in Early Childhood Education; Sociology: 20 The Family

**Organizational Psychology**
- Psychology: 10 General Psychology, 21 Behavior Modification, 23 Industrial/ Organizational, 33 Individual Differences, 39 Social Psychology, and one advanced course
- Statistics
- And five courses from among the following:
  - Economics and Business: 10 Introduction to Business;
  - Speech Communication and Dramatic Arts: 24 Interpersonal Communication, 32 Small Group Communication and Decision Making, 40 Organizational Communication;
Psychology

— Political Science: 40 Urban Decision Making, 42 Interest Group Politics, 74 Policy Analysis and Evaluation, 83 Administrative Behavior;
— Sociology: 11 Structure and Process

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, computer science, 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 FC
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. Every semester.

14 INTRODUCTORY STATISTICS FOR PSYCHOLOGY
An introduction to statistical reasoning, with particular emphasis on applications to problems in psychological research. Designed for students who, though possessing a minimal skill level (see prerequisites), nevertheless lack confidence in dealing with mathematical concepts. Covers descriptive statistics, probability, sampling error, hypothesis testing, correlation, prediction and some non-parametric methods. Some use will be made of one or more data analysis programs available through the college computing services. Satisfactory completion of this course will fulfill the psychology department's major requirement in statistics. Prerequisites, at least one psychology course. Satisfactory score on math placement test (see mathematics listing in catalog), or successful completion of Math 109. Students may not receive credit for both Math 14 and Psychology 14. This course does not meet the distribution requirement for mathematics and general sciences. Spring semester.

16 INTRODUCTION TO DEVELOPMENTAL PSYCHOLOGY FC
Provides an introduction to psychology by focusing on child development. The course covers physical, language, cognitive, social and emotional development from conception through adolescence. The influence of both maturation and experience are emphasized. Every semester.

18 INTRODUCTION TO PERSONALITY THEORIES FC
An overview of selected and influential statements, such as the theories of Freud, Jung, Adler, Horney, Fromm, and 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. Every year.

Intermediate Courses

Except for the neuroscience courses, an introductory course is required for admission to each intermediate course. Other prerequisites may be listed.

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. Every semester.

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. Every year.
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. Every year.

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. Every year.

27 SENSORY PROCESSES
An introduction to the basic facts and methods of sensory research, and their relation to classical problems in the psychology of sensation and perception. Laboratory work in visual, auditory, and tactile sensitivity is included. Every year.

28 COMPARATIVE PSYCHOLOGY
An introduction to the comparative study of behavior from within the framework of evolutionary biology. Observational and experimental studies of all kinds of animals, including humans, will be considered. Some laboratory and field work is included in the course. A biology course is recommended. Alternate years.

32 METHODS IN NEUROSCIENCE
Surgical, electrophysiological and pharmacological methods applied to the investigation of selected areas of research. Prerequisite, Psychology 22. Alternate years.

33 INDIVIDUAL DIFFERENCES
Examination of the sources of uniqueness and individuality. Topics include individual differences in intelligence, achievement, personality, and interests, as well as group differences related to demographic variables such as age and social class. Emphasis will be on measurement of psychological characteristics and on the genetic and environmental bases of human variation. Prerequisite, one course in statistics. Every year.

35 HISTORY AND SYSTEMS OF PSYCHOLOGY (Same as Philosophy 35) FC
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. Every year.

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. Alternate years.

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. Every year.

Topics and Cross-listed Courses
Unless otherwise indicated, or unless departmental permission is granted to student, courses numbered in the 50s do not count toward a major in psychology.

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 recently 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.

54 INTRODUCTION TO HUMAN SERVICES (Same as Sociology 54)
This course explores theories of psychotherapy, including Adlerian, Freudian, Gestalt, Psychodrama, Reality Therapy, Behaviorism, Rational-Emotive, and Client-Centered. Other topics include violence and abuse, chemical dependency and short and long-term counseling relationships. Guest presentations by professionals from agencies, hospitals, residential treatment programs, schools, and private practice are coupled with films, student presentations, role-playing and counseling skill development. Every year.
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 Math 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.

Advanced Courses

Admission to any advanced course requires upperclass (junior or senior) status in addition to meeting the prerequisites listed for that course.

71 ADVANCED BEHAVIOR ANALYSIS

Theory and research on the basic phenomena of conditioning and learning, dealing in large measure with the animal level. Laboratory participation. Prerequisite, Math 14 and Psychology 62 or permission of instructor. Alternate years.

72 PSYCHOLOGY OF LANGUAGE (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. Prerequisite, two psychology courses or two linguistic courses or one of each. Every year.

73 MOTIVATION AND EMOTION

Motivational or emotional states such as anxiety, aggression, love, hunger, achievement, power, and sex are examined in developmental, social, cognitive, physiological, and phenomenological contexts. Concepts such as need, drive, arousal, and instinct are analyzed from observational, experimental, clinical, theoretical, and speculative perspectives. Prerequisite, two intermediate courses; introductory statistics is recommended. Alternate years.

74 CLINICAL PSYCHOLOGY

An introduction to the clinical application of psychological principles in human service settings. The topics include assessment of persons, interventions primarily of a social and community nature, primary prevention, program evaluation, organization of social service agencies together with relationships among them. Prerequisites, one intermediate course, preferably 21 Behavior Modification or 24 Behavior Disorders. Recommended, 54 Introduction to Human Services, a statistics course, prior or concurrent internship. Every year.

75 BEHAVIOR GENETICS

Investigation of the degree and nature of genetic determination of variations in human and animal behavior. Prerequisites, any introductory course; Biology 11 and Math 14. Alternate years.

77 PERCEPTION

A critical study of the ecological information available in stimulus arrays, of the processes whereby such information is detected, and of its functions in controlling action. Emphasis on current theory and research. Prerequisites, two intermediate courses. Alternate years.
Senior Seminars

Open to junior and senior major and core concentration students who wish to explore topics which are not examined in depth in other courses.

88 SEMINAR

Senior seminars examine a variety of topics. In recent years the subjects have included: memory, schizophrenia, depression, children with problems, achievement motivation, ecological psychology. Prerequisite, permission of the instructor.

Special Courses

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

David Hopper (Chair), Calvin Roetzel, Kathleen Staggs

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 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 theological seminary after college would certainly profit from an exposure to the theological discipline at the college level, though some other disciplines will also provide a suitable area of concentration for the pre-theological 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

Religion 20, 24, 44, 46, and 48 are the foundation courses which fulfill the general distribution requirement in the humanities.
Religious Studies

Major Concentration
The major concentration in religious studies consists of eight courses in religion, two courses in history, philosophy or English. Reading proficiency in at least one foreign language is advised for students contemplating graduate study in theology. A “senior dialogue” with the members of the department is required for all majors. The “senior dialogue” represents a sharing of views on questions of mutual interest rather than an oral examination. Three foundation courses are required for a major in religious studies except in unusual circumstances.

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. 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
20 INTRODUCTION TO THE OLD TESTAMENT FC
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. Every year.

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. Alternate spring semesters.

23 WORLD HUNGER (Same as Economics 23 and Geography 23)
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. Spring semester.

24 INTRODUCTION TO NON-WESTERN RELIGIONS FC
This is a course that deals with basic components of religion: myth, ritual, symbol, conceptions of the divine, ways of salvation, etc. We will investigate them in connection with four very different types of religion: Islam, Janism, Native American religion, and Taoism. Open to everyone but especially appropriate for first and second year students. Fall semester.

30 RELIGIONS OF INDIA
A study of Indian religious world views and practices as seen in Hinduism, Janism, and Early Buddhism. Spring semester.

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. Alternate years.

36 RELIGIONS OF JAPAN
This course deals with the wide variety of religious expressions found in Japan: Shinto, fold religion, popular religious movements, and some forms of Buddhism including Pure Land and Zen. Fall semester.
37 RELIGIONS OF CHINA
A study of Confucianism and Taoism (including Neo-Confucianism and Neo-Taoism), Mencius, the
Legalists and the Logicians, as well as Chinese Mahayana Buddhism, including Fa-hsiang, T’ien-t’ai,
Hua-yen, and Ch’an (Zen). Spring semester.

40 JAPANESE BUDDHISM
The forms of Mahayana Buddhism found in Japan: the “Six Schools of Nara”, Tendai, Shingon, Pure
Land, Nichiren, and Zen. We will examine both theory and practice in the context of Japanese history.
Alternate fall semesters.

44 A HISTORY OF APOCALYPTICISM FC
This study will trace the emergence of apocalyptic thought from its source in the Hebrew Scriptures and
non-biblical writings (the Pseudepigrapha and Apocrypha) through the new testament including the
book of Revelation. The course will deal with the nature and function of apocalyptic literature, the
mythic and metaphorical character of the apocalyptic idiom, and the influence of the apocalyptic idiom
on modern religious movements. No prerequisite. Meets major requirements.

46 THE THOUGHT OF THE REFORMATION FC
A study of the reformation as a revolution in Christian thought. The course will concentrate on an
understanding of key writings of Luther, Simgli, Calvin and representative Anabaptist figures. Ties and
discontinuities with both the Renaissance and Medieval Christian thought will be explored. The course
will conclude with an assessment of the reformation’s contribution to the outlook of modernity.
Alternate fall semesters.

48 TWENTIETH CENTURY CHRISTIAN THOUGHT FC
A survey and assessment of the interaction of Christian thought with the mood and outlook of the
modern world. The following figures and movements will be discussed: Barth, Tillich, Bultmann,
Niebuhr, Bonhoeffer, liberation theology, feminist theology, Vatican II, and process theology. Alternate
fall semesters.

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: Jewish Mysticism, The Thought of Paul Tillich, Modern
Catholic Thought, Christian Mysticism, New Religious Movements, Religion and Society, Jewish
Religion and Culture.

54 EXISTENTIALISM, ATHEISTIC AND THEISTIC (Same as Philosophy 54)
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. Fall semester.

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 questions of the role of religion in
the rise of science, differences in methods of knowledge, and a discussion of current issues and
problems. Alternate years.

64 THE SYNOPTIC GOSPELS
A close reading of Matthew, Mark, and Luke using the critical skills developed in New Testament
scholarship. The course will explore the literary aspects of the gospels (character development, plot,
etc.), the theological interests of the author as shown by the use and alteration of tradition, the function
of oral tradition behind the written work, and the historical context of the gospels. Seminar format.
Prerequisite, Religion 20, 21 or permission of the instructor. Enrollment limited. Alternate fall
semesters.

65 THE LETTERS OF PAUL
A study of the literary composition, form, function, context and theological concerns of one of the
letters of Paul announced in advance. The course will deal with the world of Paul and his readers, as
well as the major emphases of Pauline scholarship in this century. Prerequisite, Religion 20 or 21 or
permission of the instructor. Enrollment limited. Alternate fall semesters.
67 TECHNOLOGY AND ETHICS
A consideration of the history of technology, its impact and role in contemporary society. The course will devote time to analysis and discussion of some of the problems posed by technological developments in a variety of fields such as medicine, genetic research, nuclear energy, information processing, and will conclude with a review of ethical values and some specific Judeo-Christian ethical concerns. Every year.

68 THE GOSPEL OF JOHN
Written near the end of the first century when a rupture between the synagogue and the church seemed imminent, and a new religious idiom was developing, the fourth Gospel has long been recognized as a distinctive interpretation of the Jesus story. The class will discuss various background possibilities for the Gospel and the literary composition of the text. Prerequisite, Religion 20 or 21 or permission of the instructor. Enrollment limited. Alternate spring semesters.

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
See German and Russian

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 course for the major.

For more information contact Peter Weisensel, department of history.
Sociology

Michal McCall-Meshejian, Sharon S. Mayes, Jeffrey Nash (Chair), Michael Obsatz

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 courses offered by the sociology department are of three types. First the introductory course surveys the discipline’s content and methodologies. Second, the foundation courses (Sociology 11, 12, 13) are designed to provide the knowledge and skills necessary to appreciate and exercise the sociological imagination. Sociology 11 teaches the elements of societal phenomena such as processes, structure, change and interaction; Sociology 12 imparts basic skills in observing and analyzing a variety of types of social phenomena; Sociology 13 aims toward a mastery of grand concepts that characterize society.

Unless otherwise identified all other courses in the department are conducted as seminars. Here the student will find a wide variety as members of the department regularly teach seminars in their areas of expertise. There are two types of seminars: those with a course listing indicating that they will be offered at least once every two years, and the topics and senior seminar courses. The content, style and prerequisites of these latter seminars will vary depending upon the mutual interests of students and faculty. The department believes the seminar format enhances the speech and writing skills of students. Students take an active participatory role in research, presentation, and analysis of course material.

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 correction. 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 a pre-professional social work course (54) which builds upon knowledge gained from all of the behavioral and social sciences. Ordinarily, this course 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**

The foundation courses in the department, Sociology 10, 11, 12, and 13, satisfy the general distribution requirement for the social sciences.

**Major Concentration**

A major in sociology consists of eight courses including Sociology 10, 11, 12, and 13. Students planning to major should take Mathematics 14 (Introduction to Statistics).

Topics (50) and Independent Study (96) may not be counted among the eight courses for the major without departmental approval.

**Core Concentration**

Six courses 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: 11, 12, 13 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.

To prepare for a core in sociology with a human services emphasis in the area of social work or counseling, the department recommends the following courses:

<table>
<thead>
<tr>
<th>Inner Core: Sociology</th>
<th>We recommend two of the following for the inner core:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Suggested Courses:</td>
<td>Sociology 20 The Family</td>
</tr>
<tr>
<td>Sociology 10 Introduction to Sociology</td>
<td>Sociology 48 Sociolinguistics</td>
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<tr>
<td>Sociology 11 Structure and Process</td>
<td>Sociology 63 Small Groups</td>
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<tr>
<td>Sociology 12 Observing Social Life</td>
<td>Sociology 66 Urban Sociology</td>
</tr>
<tr>
<td>Sociology 13 Conceptualizing Society</td>
<td>Sociology 75 Death, Dying and Bereavement</td>
</tr>
<tr>
<td>Sociology 54 Introduction to Human Services</td>
<td>Sociology 76 Social Deviance</td>
</tr>
</tbody>
</table>
Outer Core
Suggested Courses:
Psychology 10 Introduction to Psychology
Psychology 16 Developmental Psychology
Psychology 24 Behavior Disorders
Sociology or Psychology 97 Internship

An additional course in political science, anthropology, or religion as suggested by the student's academic adviser is required.
Psychology 21 Behavior Modification
Psychology 42 Motivation, Emotion and Conflict
could also serve as additional courses.

Minor Concentration
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
Sociology 10 is normally a prerequisite to all courses.

10 INTRODUCTION TO SOCIOLOGY FC
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. Every semester.

11 STRUCTURE AND PROCESS FC
Sociology is often defined as the study of both social structure and the processes of structural change. Elements of social structure, including social stratification and social organization, and social processes like interaction, innovation, and social control, constitute the focus of this course. The course includes a survey of prevailing views of structures and process and explores the power of these concepts at both the macro and micro levels. Every year.

12 OBSERVING SOCIAL LIFE: DOCUMENTATION AND ANALYSIS FC
Basic to all sociological inquiry and acute skills of observing other people and interpreting what they are doing. This course examines the full range of data gathering methods, sampling, error control, measurement decisions and research designs. It includes treatment of the problems and the efficacy of various ways of gathering information. Since the supposition of the course is that the research act is essentially one of people studying people, questions of the relationships between researchers and subjects, and the actual interpretive procedures followed to arrive at conclusions are scrutinized. Every year.

13 CONCEPTUALIZING SOCIETY FC
Sociology draws from and contributes to a rich heritage of ways of thinking about society. This course provides a comprehensive view of theories and the fundamental questions and controversies pertaining to the understanding of the character of society. It deals with perspectives on historical trends, methodological issues that derive from various theories. It imparts to the student a grasp of sociology as a generalizing, abstract science. Every year.

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. Every year.

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. Every year.
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 to be given to the social context of the 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. Every year.

49 LANGUAGE AND CULTURE OF DEAF PEOPLE (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. Alternate years.

50 TOPICS
Examination of some selected topic of concern to sociologists to be announced prior to registration on a yearly basis. Examples of recent topics are The Sociology of Knowledge, Social Change, Sociology of Art.

54 INTRODUCTION TO HUMAN SERVICES (Same as Psychology 54)
This course explores theories of psychotherapy, including Adlerian, Freudian, Gestalt, Psychodrama, Reality Therapy, Behaviorism, Rational-Emotive, and Client-Centered. Other topics include violence and abuse, chemical dependency and short and long-term counseling relationships. Guest presentations by professionals from agencies, hospitals, residential treatment programs, schools, and private practice are coupled with films, student presentations, role-playing and counseling skill development. Every year.

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 studies 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. Alternate years.

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. Every year.

75 DEATH, DYING, AND BEREAVEMENT
An examination of the social and psychological aspects surrounding death. Topics to be discussed include the grief process, funeralization, the denial of death, awareness of death, hospital care of the aging, the hospice movement, abortion, suicide, capital punishment, euthanasia, nuclear death, and explaining death to children. Films and videotapes will be used. Guest speakers will also be invited. Students will present papers during class time and will have opportunities to visit funeral homes. They will also explore their own attitudes and feelings toward death and dying. Alternate years.

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. Every year.
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. Alternate years.

88 SENIOR SEMINAR

Recommended for majors; required for higher honors. Every year.

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; Career Development Center available for consultation. Fall and spring terms. Prerequisite, Sociology 10.

Spanish

María E. Doleman, Fabiola Franco, Leland Guyer, Karl Sandberg (Acting Chair), David L. Sunderland

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.

The Spanish House

The Spanish House is a place for students who are interested in speaking Spanish and discussing cultural differences. A native speaker and the students who live in the house provide the atmosphere for such an exchange. Various activities and opportunities are scheduled throughout the year so that the College community can benefit from this experience.

Study Abroad

The Spanish department sponsors study programs in Costa Rica and Spain. 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 Spain program provides for study in Madrid. The program has fall, spring, and
year programs. Two courses per term from either program may be counted toward the Spanish major. All additional courses necessary to meet departmental graduation requirement 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 other study abroad programs 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**

The faculty has voted that, in connection with distribution requirements, each department should designate a small number of its courses as foundation courses. The Spanish department believes that virtually all its courses may, depending on the student's previous work in Spanish, be foundation courses in some sense. However, we have formally designated the following as foundation courses which fulfill the general distribution requirement in the humanities: Spanish 11, 12, 31, 32, 51, 54, and Portuguese 21. Spanish 54 may be described as FC-LA. All courses numbered above 54 are also literary appreciation courses.

**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 students desiring Latin-American emphasis, it is possible to substitute Intensive Portuguese (Spanish 21) 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 six courses numbered 31 or above.

**Honors**

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

**COURSES**

11, 12 ELEMENTARY SPANISH FC

Pronunciation, grammar essentials, conversation and reading. Four class hours a week plus one hour of laboratory. Each course offered every semester.
15 ELEMENTARY CONVERSATIONAL SPANISH
Concentrated aural-oral practice in the most necessary forms of the spoken language for use in traveling, living, or working in the Spanish-speaking countries. Very little attention will be given to reading and writing. Students with a basic oral facility in Spanish should register for Spanish 31, 32, or 51. Not offered during the regular year, but occasionally in the summer term.
Note: Spanish 11, 12, 31, and 32 constitute the basic sequence in Spanish for further study in conversation and literature.

31 INTERMEDIATE SPANISH FC
Intensive oral and written grammar review, reading and conversation. Every semester.

32 INTERMEDIATE SPANISH FC
This course follows Spanish 31 and serves as a bridge to upper level conversation or literature courses. A variety of materials 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. Spring semester.

50 TOPICS
In recent years these have included courses on selected Spanish and Spanish-American writers. Courses that have been given include Latin American Literature and Society, Garcia Lorca, and Unamuno. Fall semester.

51 CONVERSATION FC
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 FC-LA
Nineteenth and 20th centuries. Prerequisite, Spanish 32 or equivalent. Fall semester.

56 METHODS OF TEACHING MODERN FOREIGN LANGUAGES (Same as French 56, German 56, and Linguistics 56)
This course is for majors of French, German, or Spanish who are interested in developing skills and knowledge in teaching as part of their undergraduate major, and counts toward teacher licensure in Minnesota. Fundamental concepts about second language acquisition are introduced in the first half of the course, including some contrastive analysis of English and the target language, the idea of language as communication, and the relationship of language and culture. The second half of the course presents techniques for teaching the skills of listening, speaking, reading, and writing. Students have an opportunity to practice these techniques, to develop a course design, and to write instruments for evaluating language skills. Prerequisite, Linguistics 26 or 51. Spring 1986.

62 MASTERWORKS OF SPANISH LITERATURE
Medieval period through the Golden Age. Spring semester.

65 READING IN SPANISH-AMERICAN LITERATURE I
Novels, short stories and poetry of the Spanish-American nations. Borges, Cortazar and Neruda, and other contemporary writers are included. Alternate spring semesters.

66 READING IN SPANISH-AMERICAN LITERATURE II
Novels, short stories and poetry not covered in 65. Alternate spring semesters.

67 THE NOVEL
Spanish and Spanish-American fiction. Alternate spring semesters.

68 19TH AND 20TH CENTURY SPANISH LITERATURE
Works by Galdos, Baroja, Cela, etc. Alternate spring semesters.

88 SENIOR SEMINAR
Spanish and Spanish-American Civilization. Required of all majors and cores. Fall semester.
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 would 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.

Note: Spanish 11, 12, 31, and 32 constitute the basic sequence in Spanish for further study in conversation and literature.

Portuguese

21 INTENSIVE PORTUGUESE FC
Intensive instruction in speaking and understanding the language, writing, and reading. Brazilian usage emphasized. Prerequisite, advanced standing in Spanish or permission of the instructor. Spring semester.

Speech Communication and Dramatic Arts

Douglas P. Hatfield, Daniel Keyser, Richard A. Lesicko, Roger K. Mosvick, Scott Nobles (Chair), 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, Personnel Licensing Section 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 Licensure 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 Theatre Arts, or Speech 23 Oral Interpretation.
General Distribution Requirement
Speech Communication and Dramatic Arts foundation courses 11, 24, 25, 28, 32, 37, 38, 40, 48, 56, and 60 fulfill the general distribution requirement in the social sciences; foundation courses 33, 34, 35, and 49 fulfill the general distribution requirement in the humanities; and foundation courses 18, 22, and 23 fulfill the general distribution requirement in the fine arts.

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 licensure major or minor area in general speech, speech communication or dramatic arts in compliance with recently revised state licensure requirements for students who intend to teach high school.

Each major requires from nine to ten courses specified by course or area from within the department; each minor requires five to six courses similarly specified. In addition, all majors and minors are required to participate in co-curricular speech activities appropriate to the field of study and the needs of each student. Students in each major field have the option of substituting for one of the required courses any other departmental course, seminar or independent project which meets the approval of the appropriate area committee and which will, in the case of licensure majors, insure that the student meets state requirements in specified area 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.

Licensure Majors
1. General speech major: ten courses. Required courses: 18, 21, 23, 25, 29, 32, 37 or 60, 38 or 49, 64.

2. Speech communication major: ten courses. Required courses: 21, or 23, 35, 32, 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, 23, 25 or 32, 38 or 49 or 60.

5. Theatre minor: required courses: 18, 22, 23, 29, 33, 64.
An additional course in the area of mass communication must also be taken in order to complete the requirements for Minnesota licensure in the major areas listed above. This course may be taken at any ACTC institution or at any other institution approved by the Education Department.

**Core Concentration**

All core programs require six department courses individually programmed by students and their advisers. For speech communication cores, no more than four courses may be taken from the same professor. The following courses are specified for the theatre core: 18, 33, two courses from 21, 22 or 23, plus two other electives from within the theatre area. The six other courses elected from outside the department must be appropriately related to the student’s core field of study and subject to faculty adviser’s approval.

**Minor Concentration**

*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*

<table>
<thead>
<tr>
<th>Freshman Year</th>
<th>Fall: 18, 21 or 23</th>
<th>Spring: 22, 23, or 29</th>
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</thead>
<tbody>
<tr>
<td>Sophomore Year</td>
<td>Fall: 26, 33</td>
<td>Spring: 29, 34</td>
</tr>
<tr>
<td>Junior Year</td>
<td>Fall: 26, 33, 65</td>
<td>Spring: 34 or 35</td>
</tr>
<tr>
<td>Senior Year</td>
<td>Fall: 35, 64, 96 if available</td>
<td>Spring: 34 or 35, 96-97</td>
</tr>
</tbody>
</table>

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 FC-Social Science
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. Every semester.

18 THEATRE ARTS FC-Fine Arts
An introductory study of the art of theatre. Major emphasis is given to dramatic theory, appreciation criticism, and play analysis; secondary emphasis on the principles of acting, directing and design. Attendance at theatre performances and laboratory crew experiences are integral to the course. Every 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 FC-Fine Arts
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 FC-Fine Arts
Development and use of fundamental techniques for analysis and reading aloud of prose and poetry. Every semester.

24 INTERPERSONAL COMMUNICATION FC-Social Science
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 FC-Social Science
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. Prerequisite, Speech 22. Fall semester.

28 INTERCULTURAL COMMUNICATION FC-Social Science
Topics include basic communication models and international communication models, cultural assumptions and communication rules, comparative language structure and world view, intercultural values, beliefs and values, basic differences in non-verbal and verbal strategies between cultures, and problems and opportunities in intercultural communication research. A variety of guest speakers from Asian, African, Middle Eastern, Hispanic, and other non-American western cultures are utilized. Students will be expected to conduct a study of communication modes and strategies of one non-English speaking culture. Alternate spring semesters.

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 grasps 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 fall semesters.
32 SMALL GROUP COMMUNICATION AND DECISION MAKING FC-Social Science
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 FC-Humanities
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 fall semester.

34 HISTORY OF THEATRE II FC-Humanities
The study of western theatrical movements, influences and practices from the Baroque to the beginning of Modern Theatre. Not available to freshmen. Alternate spring semesters.

35 HISTORY OF THEATRE III FC-Humanities
An examination of European and American theatre arts since the advent of Modern Realism. Reading of representative plays and attendance at relevant productions in the community. Not available to freshmen. Alternate spring semesters.

37 SPEECH AND LANGUAGE (Same as Linguistics 29) FC-Social Science
A behavioral and interdisciplinary study of the impact of speech and language upon human behavior. Course examines the many functions and levels of human discourse in analyzing the communication competencies of various language communities. Topics include the origin of speech, the role of language in categorizing and thinking, general semantics, differences in verbal and non-verbal codes and in male-female communication, role sets and patterns of communication control, intercultural and subcultural code variants, disturbed and therapeutic communication. Fall semester.

38 PERSUASION FC-Social Science
A study of motivation in decision making. Treats persuasive discourse from viewpoints of advocate, responder and society. Spring semester.

40 ORGANIZATIONAL COMMUNICATION FC-Social Science
A study of communication processes, structures and modes in organizational context. Organization-communication interface is examined with reference to various theories of management and appropriate communication systems and techniques. Processes and problems in 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 spring semesters.

48 COMMUNICATION THEORY FC-Social Science
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.

49 THEORY AND CRITICISM OF RHETORIC (Same as Linguistics 49) FC-Humanities
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 spring semesters.

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, Creative Dramatics, History of Costuming and Design, Nonverbal Communication, Advanced Acting, Political Persuasion and Campaign Rhetoric.

56 LEGAL COMMUNICATION FC-Social Science
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 fall semesters.
60 HISTORY AND CRITICISM OF AMERICAN PUBLIC ADDRESS FC-Social Science

64 DIRECTION
History, theory and techniques of play direction, culminating in the production of an edited three-act play. Laboratory crew experience. Prerequisites, Speech 18, 22 or permission of the instructor. Fall 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 and 33, or 34 or permission of the instructor. Alternate fall semesters.

88 SEMINARS
88—A Seminar in Theatre: Advanced study of such topics as acting, lighting, children's theatre.
88—B Seminar in Rhetoric: Advanced study of such topics as classical rhetoric, speech criticism, experimental methodology, listening.
88—C 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), Michal McCall-Meshejian (Sociology), Jeff Nash (Sociology), Cindy Orbovich (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 experimental 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.

Curriculum

A. Each urban studies major will complete a core in either economics and business, geography, political science or sociology (six courses).

B. This core will be supplemented by at least six courses from the following list excluding courses taken as part of the core. Students will be encouraged to take other courses on the list. Consult the departmental listings for information on course frequency. Topics courses with an urban emphasis may be included with consent of the coordinator.

Anthropology
30 Ethnographic Interviewing
60 Urban Anthropology

Economics and Business
36 Capital Markets
51 Intermediate Microeconomic Analysis
54 Urban Economics
55 Methodology of Public Policy Analysis

Geography
14 Urban Geography
60 Introduction to Urban Planning and Real Estate Development
61 Introduction to Urban Design
88 Urban Geography Field Seminar
88 Historical Geography of Urbanization

Political Science
47 Intergovernmental Relations
55 Contemporary Legal Problems
58 Administrative Law
61 Post Industrial Politics and Urban Issues
74 Policy Analysis and Evaluation
83 Administrative Behavior
All urban studies students will be required to serve a one credit internship in government, a social agency or private business firm. Participation in the Chicago Urban Studies affairs program sponsored by the Associated Colleges of the Midwest may be substituted for the internship. Students will be encouraged to complete this as part of the program during their junior year. Other off-campus urban studies programs may be substituted for this requirement with consent of the coordinator.

Technical Competency

Urban studies majors should attempt to master several of the following communication and technical skills. With their advisers they will develop goal attainment schedules for each of the required skills. All students will not be equally proficient in all skills.

A. 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.

B. Written Communication—All students will be expected to write concise, jargon-free technical reports and should have some exposure to creative writing.

C. 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. A quantitative methods course should be taken in the department in which the students cores.

Special Programs

Freshman Seminars

Virginia A. Schubert (Director; Faculty Associate, Office of Vice President for Academic Affairs)

Freshman seminars introduce first year students to the nature and possibility of the liberal arts curriculum and offer students an opportunity to work closely with a faculty member and a small group of other students on a topic of mutual interest. Freshman seminar professors also serve as academic advisers for seminar students.

Freshman seminars aim to establish a sense of academic community among the members. They foster methods of analysis and creativity that enhance student academic development. Seminars also provide an opportunity for students to improve their writing skills. Freshman seminars are not department courses; rather, they involve topics that are interdisciplinary.

Seminar titles are announced each year and often include the following: Essay in Word and Picture, Origins and Options, Life of the Mind, Ways of Knowing, and Humans and their Language. Freshman seminars have the same academic emphasis, involve comparable work and carry the same academic credit as other courses. Some Freshman Seminars are graded S/D/NC only.
Special Programs

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. Macalester has approved any liberal arts course offered by the other ACTC institutions as being appropriate for cross-registration. 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 are not eligible for the ACTC bus transportation. 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

Scott Nobles (Adviser, Speech Communication and Dramatic Arts)

For many years, Macalester’s pre-law students have achieved a record of success at excellent law schools. The college assists students through informed counseling about their curriculum at Macalester and their later choices of law schools. Students find available a large number of courses in various departments which teach the knowledge and skills most relevant to legal scholarship and practice. These courses may be pursued through the law and society interdepartmental major, through majors or cores in any of a wide variety of departments, or through a combination of these approaches; all emphasize a broad liberal arts perspective. Opportunities are available for a few students each year to secure internships in a legal setting.

The Pre-Medical Program

Kathleen Parson, James R. Smail (Advisers, Biology)

The Macalester Health Professions Advisory Committee (HPAC) oversees all aspects of student preparation for and application to medical, dental, and veterinary schools and also to other graduate and professional training programs related to the biomedical sciences. Undergraduate preparation is similar for all these career objectives.

The Committee (HPAC) is composed of faculty members from the departments of biology, chemistry, English, mathematics, and physics. It is co-chaired by Professors Parson and Smail. Very early in their freshman year interested students should consult one of these advisers and obtain a copy of the Macalester College Pre-Medical Handbook.

Pre-medical students at Macalester may major or core in any discipline and concurrently complete all pre-medical requirements. Most medical schools require the following courses: Chemistry 11 and 12 or Chemistry 13, Chemistry 37 and 38, Biology 11 and 12, Mathematics 21 and 22, two courses in English, and a total of five courses in the social sciences, humanities, and foreign languages.
HPAC advisers work carefully with students throughout their preparation, both individually and in group sessions, to assist in program planning that will best meet the needs of individual interests and requirements. In addition, the Committee sponsors regular forums and seminars on appropriate topics in research, ethics, admission test preparation, application procedures and interview skills. Each summer the Ruth and Vernon Taylor Foundation endowment provides stipends for approximately ten students to participate in pre-medical internships. Following their junior year students may arrange to work in a clinic, hospital, research laboratory or other medical facility under the direct supervision of medical personnel.

While most Macalester pre-medical graduates attend state medical schools in the states of their official residence, Macalester graduates are also currently attending such private medical schools as Harvard, Johns Hopkins, Stanford, Mayo and Case-Western Reserve.

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 may also apply for the Alexander Scholarship for study abroad and for the Mark Johnson Memorial Scholarship for summer travel abroad. 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 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 sciences, 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. Business Studies in France. Through special arrangements with the Université de Rennes, Macalester students who have completed two courses beyond intermediate French and who have a declared economics major or core have the opportunity to spend a semester or full academic year pursuing their business studies at the Institut de Gestion. Selection is made by a College committee.

3. The Associated Colleges of the Twin Cities (ACTC) German Program. This program begins in January with two months of intensive language training at the Akademie Klausenhof in Dingden, Germany. From March 1 until the end of May, participants study with professors from the University of Vienna and with the ACTC professor who directs the program. Students must have three semesters of college German study or its equivalent. The two phases of the program are separable, but only those attending the March-May session are eligible for the International Study Scholarship grants. One of the Akademie Klausenhof courses will be designated for Interim credit.

4. The Spanish Program in Madrid, Spain. Macalester College has an arrangement with the Institute of European Studies allowing students to participate in the Madrid, Spain program on a semester or year basis. IES offers unique opportunities for serious undergraduate study in Spain in both the social sciences and the humanities. Courses are held at the University's Instituto de Cooperacion Iberoamericana, and instruction is exclusively in Spanish. Well qualified full year students may also elect to take some of their course work directly at the University of Madrid. Two years of college level Spanish or the equivalent is necessary for admission. Housing is generally provided in private homes with families, although full year students may elect to live in a residence hall. Applicants should consult with the Spanish department or the study abroad adviser regarding admission requirements.

5. The University of Stirling. The College has an agreement with Stirling University in Scotland whereby Macalester students spend one semester or 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 or senior year. The program is open to students from all Macalester departments in which Stirling University offers a major.

6. The Sendai Exchange. Macalester students with a background in Japanese language, history and culture are invited to contact Jerry Fisher and the International Center 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.
7. The Cairo Program. Macalester students may spend a semester or a full year studying at the American University in Cairo, Egypt. The program is open to sophomores, juniors and seniors and is designed to provide the participants with intensive experience in the Arabic language and the culture of the Middle East. It is recommended that students spend the entire academic year in Cairo.

8. Hebrew University. Macalester students may spend an academic year studying (in English and Hebrew) at the Rothberg School for Overseas Students at Hebrew University in Jerusalem. Students without prior knowledge of Hebrew must attend a summer language Ulpan. Students may choose from a wide variety of classes and are required to take one course per term in Jewish or Israeli studies.

9. The Cambridge Program. Macalester students have the opportunity to study at Cambridge University in the fields of English, history, political science, philosophy 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 or senior 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.

10. The Tübingen Exchange. In the interest of internationalizing the academic experiences of their students and their respective institutions, Macalester College and the University of Tübingen in West Germany have arranged a reciprocal exchange. The student representing Macalester is selected on the basis of academic excellence and language competency by the German department. 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.

11. London School of Economics. Each year one Macalester economics major will be chosen by a College committee to spend a full academic year enrolled as a regular student at the London School of Economics. This student will concentrate in economics and related coursework but will have the opportunity to take political and social science classes as well.

12. University of Lancaster. Junior and senior students from the departments of biology, chemistry, physics, mathematics and psychology have the opportunity to spend a full academic year at the University of Lancaster in Lancaster, England. Macalester students will be expected to concentrate in the sciences while in Lancaster but may register for courses in the humanities and social sciences also. It is possible to take the MCAT exam at Lancaster and all sciences courses completed there will cover major requirements at Macalester.

13. Intercollegiate Center for Classical Studies in Rome. This center was founded in 1965 by representatives from 10 American college and universities and is managed by Stanford University. The courses offered include Greek and Latin literature, ancient history, archaeology and ancient art. There are two 15-week semesters each year (September—December and February—May) and students take four courses as at Macalester. Courses involve site visits, museums, tours and trips to various parts of Italy. This program is open to students majoring in classics and related fields with a B average or above.
14. **College Year in Athens.** This program is especially for undergraduates and includes courses dealing with history, literature, art and archaeology, philosophy, anthropology, Latin, Classical Greek and modern Greek. All courses are taught in English. Students take four courses per 15-week semester.

15. **Russian Language Study at Leningrad State University.** This program, run by the Council of International Education Exchange (CIEE), has been in operation for nearly 20 years. It is conducted at one of the major Soviet universities by Soviet specialists, under U.S. supervision. Students spend a semester in Leningrad, experiencing Soviet university life as well as the rich cultural offerings of Leningrad and educational field trips to other major cities.

16. 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. The 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 project begun during orientation.

   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. (Spring term)

   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. (Fall term)

   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. (Fall term)
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. (Spring term)

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 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 experience, and home stays with local families. Open to juniors and seniors, the program is designed for students in the social sciences and humanities.

17. 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 the International Center 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 culture. (Fall term)

b. **South American Urban Semester (SAUS).** Issues of third world development are studied in Bogotá, Colombia. Students live with Colombian families, giving them the opportunity to fully experience Colombian life and the customs and traditions of the culture. Students participate in language and culture courses and in field trips to Ecuador, Panama, and Peru. (Fall term)

c. **Literature, Ideology and Society in Latin America (LISLA).** Students examine social change and development issues from the perspectives of Latin American writers and artists. Through field study and travel to Bogotá, Colombia, Nicaragua and Puerto Rico, students analyze and contrast these differing societies. Students are housed with families for a majority of the program. Two years of college level Spanish is required for participation in this program. (Spring term)

**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 students 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 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, China, 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 lectures, panel discussions and films as well as various nationality weeks and an international student talent show. The International Student Organization (ISO) and the International Center co-sponsor many of these events.

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, and internships should contact the Center. Travel information is also available.

The World Press Institute (WPI) provides an opportunity for a group of professional foreign journalists to study, work, and travel in the United States. The Institute's seven month program is designed to give its participants the knowledge needed for accurate interpretation and reporting of U.S. affairs. It is a private, non-government, non-profit organization sponsored by U.S. corporations, foundations, and Macalester College.

The WPI fellows are in residence at Macalester during the U.S. studies segment of the program— from the middle of May to early August. The U.S. studies program is intended to prepare the fellows for their subsequent interviews and inquiries. Lectures in history, political science, economics, culture, and communications are given primarily by Macalester faculty. Related interviews with local resource people are conducted. Select Macalester juniors are invited to participate.

The journalists are encouraged to become involved in the academic and social life of the college during the summer sessions. Upon their return to campus in the first week of December they are invited to share their experiences and observations with students through classroom involvement and all campus events.

Associated Colleges of the Midwest (ACM) Programs

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 directions 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 the International Center.

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.

Latin American Studies Program

Karl Sandberg, Spanish and Emily Rosenberg, History (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 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 (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 Architecture

Stanton Sears (Adviser, Art)

Under the agreement with Washington University’s School of Architecture in St. Louis, students may complete three years at Macalester before transferring to Washington University for a senior year of accelerated architectural study, leading to a B.A. from Macalester. Three years of graduate study at Washington University then leads to a Master’s in architecture.

For further information on coursework required, see the Art department section of this catalog.
The Cooperative Program in Liberal Arts and Engineering
Wayne Roberts (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 areas of social science and humanities. Students are to complete 23 courses and three interims at Macalester, as well as all other graduation requirements.

An entirely similar program has been worked out with the University of Minnesota, there being only one exception. Students completing the required courses at Macalester with grades of B are guaranteed acceptance at Washington University, but acceptance is not guaranteed at the University of Minnesota where participants must apply as transfer students.

Interested persons may obtain more information about this program from the Engineering School at Washington University.

The Cooperative Program in Liberal Arts and Nursing
Kathleen Parson (Adviser, Chemistry)

An arrangement between Macalester and Rush-Presbyterian-St. Luke’s Medical Center in Chicago makes it possible for Macalester-Rush students to begin their training on the Macalester campus and finish at Rush. It is important to stress that this is one program; the student does not transfer schools or formally apply to Rush. When the requirements on the Macalester campus have successfully been completed, the student continues the program at Rush University.

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. degree by Rush University. A second possibility is to take this program as a 3-2 option that allows more flexibility in the pre-professional phase of the program. 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 the following requirements:

Biology 11 Principles of Biology
Biology 12 Zoology
Biology 43 Microbiology
Biology 54 Human Physiology
Chemistry 13 or 11, 12 General Chemistry
Chemistry 37, 38 Organic Chemistry

Social Science (three courses, one of them must be Psychology 16 Developmental Psychology. Though not required, it is recommended that these courses be selected from the departments of psychology, sociology or anthropology.)
Special Programs

Mathematics (one course)
Recommended:
Mathematics 14 Statistics
Mathematics 16 Mathematics-Its Content and Spirit
Mathematics 35 Discrete Mathematics

Distribution Requirements at Macalester

The Macalester-Rush student is required to complete Macalester's distribution requirements as described in the Graduation Requirements of this catalog.

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.

The Cooperative Program in Liberal Arts and Occupational Therapy

James R. Smail (Adviser, Biology)

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 occupational therapy from Washington University in five years—the first three spent at Macalester and the final two years at Washington University in their program in occupational therapy. Additionally, a six month internship is required for eligibility to sit for the national registration examination for occupational therapists.

Students undertaking the three-two plan of study in occupational therapy must transfer at least 24 courses from Macalester in order to obtain both a B.A. and B.S. degree from Macalester and Washington University respectively.

Students who maintain a B average in their undergraduate courses and satisfactorily complete the prerequisite courses will be guaranteed admission into the Washington program.

Details of the program at Washington are given in that school’s catalog. While at Macalester the student must satisfy the following requirements:

- English Composition (one course)
- Biology 11 Principles of Biology
- Biology Zoology
- Chemistry 13 or 11, 12 General Chemistry
- Chemistry 37, 38 Organic Chemistry
- Psychology 16 Developmental Psychology
- Psychology 24 Behavior Disorders
- Statistics (one course)
- Physics (one course)
Anatomy and Physiology with laboratory are highly recommended. Fieldwork in an occupational therapy clinic is also desirable.

Distribution Requirements at Macalester

The Macalester-Washington student is required to complete Macalester’s distribution requirements as described in the Graduation Requirements of this catalog.

General Requirements

Macalester-Washington students must obtain credit for three interim term courses, corresponding to the three years spent on the Macalester campus, and must complete a major or core at Macalester as well as satisfy other appropriate graduation requirements.

As an alternative, highly qualified students may apply for early entry into the master of science program in occupational therapy after completing three years at Macalester.

Honors

Honors Program

Virginia A. Schubert (Director; Faculty Associate, Office of Vice President for Academic Affairs)

The honors program is designed to enable students with demonstrated ability to do independent, creative work in a field of their choosing. Students interested in entering the honors program should apply to the honors director no later than the second semester of their junior year. To be eligible for the program students must have a minimum GPA of 3.00 and a faculty adviser who endorses the proposal and agrees to supervise it.

Participation in the honors program involves completion of an honors project by the scheduled date. This project shall be pursued over several semesters and shall involve the production of original work. An oral examination is conducted by the adviser and two other examiners who may recognize the work by designating that students be graduated with honors or highest honors.

Students in the honors program are invited to occasional special events and colloquia where honors work being done by students is reported. Bound copies of honors theses are added to the library collection.

Official Calendar Dates for Honors Projects

December 14, 1984—Final date for filing honors application for those graduating in December, 1985.

May 17, 1985—Final date for filing honors application for those graduating in May, 1986.

December 13, 1985—Final date for filing honors application for those graduating in December, 1986.

Phi Beta Kappa
The Macalester chapter of Phi Beta Kappa, Epsilon of Minnesota, was established in 1968. This oldest national honor society recognizes outstanding scholarship and broad cultural interests in liberal studies. To be nominated, students ordinarily must have a GPA which places them in the upper 12 percent of their class, but not below 3.50. Junior nominees must be in the upper 3 percent of the class. Other requirements are good character, sufficient breadth of liberal studies, and a knowledge of mathematics and a foreign language at least minimally appropriate for a liberal education. Consideration also is given to other evidence of intellectual achievement in liberal studies, such as outstanding honors work.

National Honor Societies
National honor societies for students of chemistry, classics, dramatics, economics and business, French, geography, German, history, mathematics, political science, sociology, and speech are present at Macalester.
Honors

Honors Program

Virginia A. Montana, Director, Faculty Associate, Office of Vice President for Academic Affairs

The Honors program is intended to enable students with demonstrated ability to do independent research work, to field of their choice. Students interested in entering the program should apply to the Honors Office no later than the second semester of their second year. To be eligible for the program, students must have a minimum GPA of 3.60 and a letter of application from the professor and agency to the Honors Office.

Participants in the Honors program in accordance with the standards set by the Graduate School shall be enrolled in a special section and shall involve the production of Honors work. No examination is required. The advisor and other concern will be appointed to recognize that students are qualified with Honors Program.

Students in the Honors Program are expected to be selected and follow a 10 semester hour program of Honors course. The study will be within the field of Honors and other courses required by the University.

Official Calendar Date for Honors Program:
December 15, 1986 - Completion of Honors Program applications or had been accepted by December 1986.
May 17, 1987 - Due date for filing Honors applications for those accepted by May 1986.
December 12, 1986 - Acceptance for Honors Program as determined by the University Honors Committee.
May 19, 1987 - Final date for filing Honors applications for those accepted by May 1987.
Student Support Services
Student Services

Student Services at Macalester College are an important part of a student's educational experience. While a student spends many hours each day in the classroom, studying, and in the library, many more hours are spent just living. The goal of Student Services at Macalester is to offer students a variety of programs and services to enhance and supplement their academic experience. That goal is well illustrated by the College's Year 1-2-3-4 program. Through this program, students are offered a variety of educational, social, and developmental activities directed to their own needs. The theories underlying the Year 1-2-3-4 program include Arthur Chickering's developmental tasks and William Perry's scheme of cognitive and ethical development. Many departments of the College contribute to the content of these programs as they provide a framework for meeting student needs.

Dean of Students

The Dean of Students is the chief student affairs officer of the College. The Dean coordinates the services and activities of the Alcohol Education Program, Campus Programs, Career Development Center, Commencement, Counseling and Psychological Services, Health Services, International Student Services, the Mediation Project, Minority Programs, Orientation, Residential Life, Student Government and Organizations, and the Year 1-2-3-4 program. The Dean is responsible for student discipline. 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 for eight years after graduation.

Campus Programs

The Campus Programs staff works with members of the College community to provide a varied program of co- and extra-curricular activities. Recognizing that most of a student's day is spent outside of the classroom, the Campus Programs staff and others in the College community work to insure that social, cultural, and educational programming are available to supplement the classroom experience. The Student Union, located at the center of the campus, is one of the busiest and most frequented buildings. Most students stop in at least once a day to check their post office box, grab a snack at the Grille or Union Store, or meet informally with friends in one of several lounges. Student organizations at Macalester, with advice from Campus Programs staff, provide a variety of social, educational, cultural, recreational, and volunteer activities. The list of organizations includes:

Academic Clubs — Anthropology, Biology, Economics and Business, Education, English, Entrepreneurs, Geology, Philosophy, Physics, Psychology, Russian, and Sociology.

Sports and Recreation — Cheerleaders, Fencing, Japanese Karate, Tae Kwon Do, Ultimate Frisbee, Volleyball, Outing, and Rugby, and an extensive Intramural Club, and Intercollegiate sports program.

Communications and Publications — The Chanter (literary magazine), Focal Point (opinion journal), WMCN (campus radio), Macalester International Journal, Mac Weekly (newspaper), and the Student Publications Dynasty (typesetting service).
Student Services

Special Interest—Amnesty International; Black Liberation Affairs Committee (BLAC); Coalition of American Indian Students; Hispanic Students Organization; International Folk Dancers; International Student Organization (ISO); Mac Cinema; Mac College Republicans; Mac DFL (Democratic-Farmer-Labor Party); Mac Feminists; Mac Lesbian-Gay Community (MLGC); Mac Rail Society (MACRAIL); Mac Recycling Organization (MACRO); Mac Video; Malaysian Student Association; Minnesota Public Interest Research Group (MPIRG); and World Hunger Organization.

Music—Chamber Ensembles, Concert Choir, Festival Chorale, Highland Dancers, Pipe Band, Symphonic Band, and Symphony Orchestra.

Religious Groups—Bahai Club, Hebrew House, Macalester Christian Fellowship (MCF), and Muslim Student Association.

Speech and Theatre Arts—Drama Club, Macalester Debate Union, Macalester Forum, Mac Masquers, and National Collegiate Players.

The Macalester College Student Government provides official representation for students in College governance and coordinates student action and the allocation of student activity funds. The Community Council (CC), the legislative body, meets regularly through the academic year, providing a forum for the expression of student opinions.

Career Development Center

The Career Development Center provides career counseling and related services to all students and alumni. At the Center, students receive help in assessing their interests and skills, exploring career possibilities and developing decision-making and job hunting skills.

Off-campus experiences contribute to the process of making career choices. The Volunteer and Internship Programs, housed in the Center, place one fourth of the student body in businesses, non-profit organizations and government agencies.

The Volunteer Program encourages students to serve their community. Volunteers choose settings which allow them to provide direct service or to work for social or political change. A Volunteer Fair is held each semester to bring agency representatives to campus to talk to prospective volunteers.

The Internship Program allows students to earn academic credit for work done in a non-classroom setting. Internships enable students to integrate academic theory with its practical applications, develop their skills, grow personally and intellectually and explore career interests. The program helps students design and locate quality field placement, provides listings of internship possibilities, conducts workshops, and develops materials to aid interns, faculty sponsors, and site supervisors.

Programs offered each semester include a three session career planning workshop and sessions on resume writing, interviewing and job hunting strategies.

Alumni serve as resources in several ways. Some participate in on-campus career exploration panels offered throughout the year. Others meet with students individually. Over 500 Twin Cities alumni have volunteered to meet with students to discuss careers.
Students interested in pursuing graduate study have access to hundreds of graduate catalogs and the major directories which list or compare programs. Admissions test applications and graduate school financial aid information are also available in the Center’s Career Library. Credential files, containing letters of recommendation are maintained and sent out by the Center. Graduate program representatives visit the Center to talk to interested students about their programs.

Other resources in the Career Library include files on corporations, government agencies and non-profit organizations; information on specific career fields; directories of career and internship opportunities and general career planning and job hunting books. In addition, the Center maintains a set of job listings notebooks for full-time, summer, and part-time off-campus jobs. Recruiters also visit campus to interview seniors for full-time positions.

Counseling and Psychological Services

The Office of Counseling provides professional counseling services to students who are experiencing social, psychological or interpersonal problems. Counseling is also provided 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. Psychological testing is available, including personality and interests tests, and the Counseling Office also sponsors a noontime series of presentations on various psychological topics of interest to students. The staff includes two licensed psychologists.

Food Service

Macalester’s Food Services, operated under contract, provide the College community with a variety of dining options. Kagin Commons provides board meals for all students living on campus and for others desiring full meal service. The Grille, located in the Student Union, provides snacks and full meals throughout the day. An extensive vegetarian menu is available, as are special meals for those with special dietary concerns. The food service director and college nurse work with students having special diet needs.

Health Service

Winton Health Service provides health care and referral for students. A nurse is on duty during regular hours daily, and consultative services of a multiple specialty medical group are available. Emergency care is always available through arrangements with local hospitals.

Minority Program

The Minority Program for Black Americans, Hispanic Americans and American 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.

Some Minority Program students are from socio-economic backgrounds which may have deprived them of adequate high school preparation for college. Participants are selected on the basis of an assessment of their academic 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.
Privacy Rights of Students

Information, other than public information and a student’s area of concentration, is released to others only upon the written request of the student or former student. Public information is determined by the College in compliance with the Family Educational Rights and Privacy Acts of 1974, as amended, and the Macalester College Student Rights, Freedom, and Responsibilities Document (see the current Student Handbook for specific policy statement).

Religious Life

Believing that the religious dimension is an essential part of education, Macalester College offer credit courses in the department of religious studies and a variety of other opportunities for growth in religious understanding and expression of the religious spirit. The Office of the Chaplain seeks to stimulate religious inquiry and commitment, enlisting students and faculty member in various programs and providing pastoral counseling. The full-time college Chaplain is an ordained Presbyterian minister.

The Weyerhaeuser Memorial Chapel serves as a campus center for worship each Sunday of the school year. The All-College Christmas Candelight service is a highlight of the year. The Chapel is also used extensively by other groups. The Macalester Jewish Cultural Organization/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 the Career Development Center.

Residential Life

The residence halls serve as communities which provide an opportunity for students to receive some of their most effective education in communications and human relations. The housing program is based upon the concepts of personal responsibility, respect for others’ rights, and the recognition of each individual’s need for personal and social development. The Residential Life program is committed to provide students with opportunities to be involved in a broad range of experiences to enhance and augment their academic programs.

Macalester College houses approximately 65 percent of its students in campus residence halls. Each residence hall develops its unique environment based on the staff and students who live there. The physical advantages of the buildings differ, but residents in every hall have access to laundry facilities, storage space, lounges and recreational areas. Four houses adjacent to the campus and owned by the college are offered as language houses to students studying French, German, Russian or Spanish. There is a Hebrew Cultural House on campus with a private kitchen, library, and meeting area.

Each student assigned to a residence hall is furnished with a single bed, mattress, desk, chair, a wardrobe or closet and a chest of drawers. The resident furnishes sheets, pillowcase, towel, blankets, an alarm clock, a desk lamp and other personal necessities. Most rooms are double occupancy although there are single and triple rooms on campus. Students living in residence halls must take their meals in the dining commons.
Academic Services

Computing Services

This department supplies and coordinates the College’s primary computing resources for both academic and administrative uses. The mathematics and computer science department offers a major in computer science, and special topics courses are available through several other departments. Student independent courses also make extensive use of the computing facilities and each year more courses routinely use the computer in course work. No charge is made to students for the use of the computing facilities.

The central academic computer system is a Digital Equipment Corporation (DEC) VAX-11/780. Students and faculty make use of its timesharing facilities around the clock, every day. The system can support 40 to 50 concurrent users. The equipment includes standard printing and video display terminals, graphic display terminals, a plotter, and several printers. The available programming languages include Pascal, Ada, BASIC, FORTRAN, COBOL, BLISS, LISP, C, and assembler. Three major statistics packages, a very complete mathematical subroutine library, a simulation modeling language, and a courseware authoring system similar to PLATO are among the many programs available to students and faculty.

The College has several sophisticated laboratory computer systems for real-time data acquisition and analysis, including three DEC MINC-11 systems, a digitizing and graphics system, and several smaller microcomputers.

Learning Skills Center

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

The College’s library services support and extend its academic programs, help meet the teaching and research needs of the faculty, and provide study facilities, research materials and recreational reading for the College community. Housed in the Weyerhaeuser Library and Olin Science Library, the collection numbers about 292,000 volumes. The library receives nearly 1,000 current periodicals, journals and newspapers.

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 Stella Louise 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 cassette tapes. The library continues to rely on gifts and special purchases to strengthen subject collections in particular areas.
Library services at Macalester are backed up by major research collections accessible from the campus. These include: the James Jerome Hill Reference Library, the St. Paul Public Library, the library and manuscript collection of the Minnesota Historical Society, the Minnesota State Law Library, the University of Minnesota Libraries, the Minneapolis Public Library and special libraries in the metropolitan area. In addition, through Cooperating Libraries in Consortium (CLIC), Macalester students may obtain virtually anything they need through inter-library loan.

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 videotape 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.

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 licensure applications; evaluates transfer credits; acts upon 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.
Academic Services

The College's library services support and extend its academic programs, help meet the teaching and research needs of the faculty, and provide study facilities; research materials and recreational reading for the College community. Libraries in the Brinckerhoff Library and Ohio State University Libraries contain about 230,000 volumes. The library reserves nearly 1,000 current periodicals, journals and newspapers.

Special collections of the library include Roman (Greek Works of the Period) and New Book Collections; the memorial library of Samuel Hoitfield Noll, Alpine in early American and European history; the Noll Library World collection of juvenile literature; the T. Harold Wilber collection of Special Print material, and smaller collections of 19th century American authors; the Madame Stowe collection of American literature; the Charles W. Ferguson World Library collections of special interest materials of American and English, and college archival materials in a number of fields including history and musicology. The library continues to expand its general and special book and periodical collections in particular areas.
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 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

Aanice T. Abbott (1962). Established by the national Wood's School Alumnae Association for an elementary education major. Principal, $5,010.


Barclay Acheson (1959). Established by members of his family in memory of Dr. Acheson, who was director of Near East Relief and, later, of the International Editions of the Reader's Digest. A 1910 graduate of Macalester, he served on the Board of Trustees (1937-57). 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, $3,685.


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 Thomes, 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.


Yahya Armajani (1974). Established by colleagues, friends and former students of James Wallace Professor Emeritus Yahya Armajani (1946-74), to honor him on his retirement. Awarded to an international student. Principal, $12,986.


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 Encyclopaedia 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.
Kenneth and Jane McMillin Breckner Endowed Scholarship (1983). Established by Mr. Breckner, Class of 1938, in honor of his wife, Jane McMillin, founder of the Wilson School in St. Louis. Awarded to a student of good moral character from a middle income family, who without financial assistance could not afford a private, liberal arts education. Principal, $10,050.

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.


John S. Campbell (1959). Established by Mr. Campbell, Macalester Class of 1913 and former president of Malt-O-Meal Company of Minneapolis. Principal, $5,000.


George E. Carlson (1964). Established by Robert W. Carlson, president of the Minnesota Rubber Company, in honor of his father. For a 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 a student from Merriam Lexington Presbyterian Church, St. 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, St. 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, $8,094.

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, $6,787.

Class of 1932 (1982). Established by members of the Macalester Class of 1932 at their 50th reunion. Principal, $20,397.


Endowed Scholarships

Homer P. Cochran (1963). Established by the senior vice president of the Morgan Guaranty Trust Co., New York City. Principal, $10,000.


H.W. Coffin (1926). Established by Mrs. Mary E. Coffin, Duluth, Minnesota. For a student who is a relative of the H.W. Coffin family, or 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 (1971). 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, $30,000.

Victoria David Memorial (1960). Established by Dr. Solomon D. David, Class of 1913, in memory of his wife, Victoria. 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, $33,626.

Paul and Helen Davis Endowed Scholarship (1981). Established by Paul H. Davis, who served on the Macalester Board of Trustees 1968-1971. To be awarded to a male student interested in either business or college administration as a career. Principal, $31,479.

Walter H. and Lydia Juennemann Deubener (1964). Established by the Deubener-Juennemann 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.

The Dorothy and Marjorie Dornberg Endowed Scholarship (1981). Established by Dorothy Dornberg, Class of 1918, through life income gifts in memory of her sister, Marjorie, Class of 1920, and in honor of their long years of close contact with Macalester College. Principal, $11,585.


Margaret M. Doty (1960). Established by Miss Ann Elizabeth Taylor, Macalester Class of 1910, Austin Minnesota. Principal, $15,918.


Margaret Weyerhaeuser Driscoll (1960). Established by Mrs. Walter B. Driscoll, member of the Macalester Board of Trustees since 1946. Principal, $7,025.

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, $12,841.


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 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.


Nels O. and John E. Fahlgren Endowed Scholarship (1982). Established by James W. Fahlgren, Class of 1961, in memory of his father, Nels, and brother, John; to be awarded to international students from Sweden, Denmark, or Norway with a record of academic excellence and financial need. Principal, $10,431.


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.

Raoul H. Fleischmann (1959). Established by the president and chairman of The New Yorker. Principal, $10,000.

Arthur S. Flemmimg (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, $13,616.

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.
Endowed Scholarships

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 P. Leonard of California. Principal, $2,850.

Grace Presbyterian Church, Winona, Minnesota (1931). Established by the First Presbyterian Church of Winona to be awarded to a candidate nominated by Grace Presbyterian Church. Principal, $1,000.

Theodore Granik (1962). Established by the founder and director of “American Forum of the Air.” Principal, $14,000.

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, 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.

Edith A. Haigh Endowed Scholarship (1982). The Edith A. Haigh Endowed Scholarship was established through a deferred gift by Miss Haigh, Class of 1915, and by gifts from her sister, Marion E. Haigh, Class of 1921. Principal, $9,235.

John P. Hall (1961). Established by Dr. L. Margaret Johnson, Class of 1921, 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, $26,829.


Mell and Lydia Hobart (1964). Established by Mell W. Hobart, 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, $11,000.


Endowed Scholarships


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, Class of 1942, St. 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. Principal, $5,957.


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 student 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 clergymen from Florissant, Missouri, 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.

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, $11,228.


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, $1,629.

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 (1963). 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.

Catharine Deaver Lealtad Endowed Scholarship (1983). Established for needy students by Dr. Lealtad, Class of 1915, the first black woman graduate of the College. Principal, $10,000.


George P. Leonard (1960). Established by Mrs. George P. Leonard, 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, 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 91961). Established by his bequest and supplemented by the members of his family and friends. To be awarded to student majoring in music. Principal, $9,485.

Ina E. Lindsley (1980). Established by Ina E. Lindsley, Class of 1911, to be awarded annually to a junior or senior who will contribute to world betterment. Principal. $5,214.


Henry R. Luce (1962). Established by the founder of Time, Life and Fortune magazines. Principal, $54,600.
Endowed Scholarships


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. Established by friends of Macalester College in memory of Minnie C. Hoffman by her sister, Mrs. Edwin C. Johnson and in memory of Mr. and Mrs. Howard F. Ware from the estate of Clara M. Ware. Principal, $2,000.


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, $14,750.


William H. and Helen Hoye Mahle (1964). Established by Mr. and Mrs. William H. Mahle, 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, 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, $309,733.

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., St. Paul, manufacturers of floor and building maintenance equipment. Principal, $10,271.

Mead Corporation (1965). Established by the Mead Corporation, Dayton, Ohio. Principal, $10,000.

Merriam Lexington Presbyterian Church (1926). Established by members of the St. Paul church. For two students, nominated by the church, who aspire to careers in religious work. Principal, $3,871.

Charles E. Merrill Trust (1980). Established by The Charles E. Merrill Trust. To be awarded to qualified, but needy, community-college graduates. Principal, $25,000.


Jeremiah Milbank (1962). Established by Mr. Milbank, a New York City corporation executive. Principal, $26,000.


Minnesota Rubber Company (1968). Established by the Minneapolis corporation for students majoring in the natural and behavioral sciences with first consideration given to children of their employees. Principal, $100,000.

Mobil (1967). Established by Mobil Oil Corporation to be awarded to promising upperclass students interested in pursuing chemistry, physics or business as a career. Principal, $25,000.

Lois and James Monahan (1958). Roving editors of the Reader's Digest. Mrs. Monahan writes under the name Lois Mattoox Miller. Principal, $8,500.
Endowed Scholarships

Moore-Middle East (1963). Established by Mrs. Allan Q. Moore and the directors of the American Friends of the Middle East, for a student attending Macalester from a Middle Eastern country. Principal, $16,666.

Malcolm Muir (1962). Established by Mr. Muir, a director of Newsweek magazine. Principal, $5,000.

James Mulvey Memorial (1922). Established by the Misses Jessie and Edna Mulvey in memory of their father, James Mulvey, a lumberman. For a student committed to a full-time church service. Principal, $12,500.


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.


Elmer E. Nyberg (1961). Established by Stanley Home Products, Inc., Easthampton, Massachusetts, and its employees to honor Mr. Nyberg, Class of 1923, educational director of the company for thirty years. Principal, $10,966.


Ella M. Osborne (1942). Established through a bequest in the will of Mrs. Edwin W. Osborne of St. 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, $2,815.

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.


Edward J. Peterson, Jr. (1959). Established in memory of Edward J. Peterson, Jr., Class of 1961, by his family and friends to supply scholarship assistance to a student athlete. Principal, $10,045.

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, 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, $8,750.

Samuel F. Pryor (1965). Established by the vice president of Pan American Airways. Principal, $5,000.


Samuel Wesley Raudenbush Memorial (1956). Established 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 St. 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, $14,200.


The St. Paul Companies, Inc. (1976). For students with scholastic promise who without financial assistance could not afford a private, liberal arts education. Principal, $50,000.

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, 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, $23,072.

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.
Endowed Scholarships

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 St. 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.


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, $5,178.

Ann Elizabeth Taylor (1967). Established by Miss Taylor, 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, $4,071.

Tobin-Smith (1962). Established by Chester M. Tobin, Class of 1923, and Edward M. Smith, St. 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, $29,185.


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 (1939-58), and his family in memory of Mrs. Turck. Principal, $7,500.

Robert A. Uppgren Memorial (1967). Established by the family and friends of Robert A. Uppgren, Class of 1946, to be awarded with preference to a student of the biology of natural resources. Principal, $4,373.


**DeWitt Wallace Distinguished Scholarships.** Established through a gift from DeWitt Wallace, founder of the *Reader's Digest* and Macalester benefactor. Awarded to National Merit Finalists or Commended Students who have maintained a B+ or better high school grade average.

**DeWitt Wallace-Lila Acheson Wallace Honor 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.

**DeWitt Wallace St. Paul Scholarships (1981).** Established by DeWitt Wallace and the St. Paul Foundation. Awarded to students who have graduated from secondary schools in Minnesota's Ramsey, Washington, or Dakota Counties, or whose parents or guardians live in one of these counties. These scholarships are awarded on a competitive basis that takes into account academic achievement and potential, test scores and personal qualities such as ambition, motivation, and involvement in school and community activities.

**DeWitt Wallace Scholarships.** Established by DeWitt Wallace. Awarded to middle-income students with good academic records who need special financial help to attend Macalester.

**James Wallace (1916).** Established by the family of Dr. Wallace, Macalester professor (1887-1939) and president (1894-1906). Principal, $36,395.

**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.

**James Wallace (1916).** Established by the family of Dr. Wallace, Macalester professor (1887-1939) and president (1894-1906). Principal, $36,395.

**James Wallace (1916).** Established by the family of Dr. Wallace, Macalester professor (1887-1939) and president (1894-1906). Principal, $36,395.

**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, $22,417.


**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, $17,615.

**Fred A. Waterous (1962).** Established by the president of the board of the Waterous Company, St. Paul. Principal, $5,000.

**Ridley Watts (1965).** Established by the retired New York textile manufacturer. Principal, $10,000.

**E. A. Webb (1915).** Established through a bequest in the will of Mr. Webb, founder of the Webb Publishing Company, St. Paul and of *The Farmer*. For a student from the Central Presbyterian Church of St. Paul. Principal, $3,044.

**Sidney J. Weinberg (1963).** Established by the New York City investment broker. Principal, $10,000.

**O. J. Weldon (1958).** Established by Mr. Weldon, partner in the New York City accounting firm of Hunter and Weldon. Principal, $7,700.

**Louis F. Weyand (1963).** Established by an executive of Minnesota Mining company and a trustee of Macalester College (1958-64). Principal, $6,841.

**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, $13,338.

**Mabel Wicker (1970).** Established through a bequest in the will of Miss Wicker, Class of 1904, a public school teacher. Principal, $17,757.

**James S. Will (1961).** Established by classmates and friends as a memorial to Mr. Will, Class of 1954. Principal, $5,965.

**Williams Brothers (1931).** Established by Louis H. and Charles R. Williams of Minneapolis. Principal, $1,000.

David J. Winton Memorial Endowed Scholarship (1981). Established by his wife, Katherine D. Winton, in loving memory of David J. Winton, who served on the Macalester College Board of Trustees (1937-81) and as its chairman (1947-49). Principal, $250,000.


Stella Louise Wood (1964). Established by the alumnae of Miss Wood's School of Macalester, for students interested in elementary education. Principal, $13,020.

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, Class of 1934, to honor Dr. Young, economics department chairman (1929-65), who was his professor and major advisor. It is awarded to students majoring in economics. Principal, $35,650.

Mary S. and Thomas E. Young (1961). Established by Mr. and Mrs. Young, financiers, Portland, Oregon. Principal, $21,000.

Robert R. Young (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 undergraduate students, preferably Minnesota residents in the upper 40 percent of their class.

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.

Mark Greenleaf Johnson Memorial Travel Scholarship Fund. Established by Mrs. Dorothy L. Johnson in memory of her son, Mark Greenleaf Johnson, Class of 1978. To be awarded to a deserving student with financial need who has worthy educational travel plans.

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. 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 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.
The Presser Foundation Scholarship Fund for Music Students. Intended for a music major in his senior year awarded on the basis of merit.

**3M Undergraduate Liberal Arts Scholarship.** Established by 3M to be given to undergraduate students, with preference to be given to American citizens.

**3M Undergraduate Chemistry Scholarship.** Established by 3M to be given to undergraduate students majoring in chemistry, with preference to be given to American citizens.

**Westminster Presbyterian Church.** Established by the Board of Deacons of the Westminster Presbyterian Church of Minneapolis.

### Prizes

**ANTHROPOLOGY**

*Malinowski Award for Excellence in Ethnographic Research.* Cash award given to a student who demonstrates special excellence in ethnographic research.

*Margaret Mead Distinguished Service Award.* Cash award given to an anthropology major who has contributed most to the formal and informal programs of the anthropology department.

*James P. Spradley Research Award for Outstanding Scholarship.* Cash award established by colleagues, family and friends of the late professor and given to a senior major in anthropology who has demonstrated outstanding scholarship in anthropological course work and/or research.

**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.

*William R. Angell Foundation Prize (1957).* Named for the president of Continental Motors Corporation.

*David R. Coddon Pre-Medical Prize.* Established by Dr. David R. Coddon '45. A cash award for a junior pre-medical student with potential for success in the medical profession and one capable of conducting research.

*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. and Kathryn 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.

*Board of Friends of the Wild Flower Garden, Inc.* Established by the Board of Friends of the Wild Flower Garden, Inc. in 1979. A cash award to a junior or senior student in biology who has shown exceptional interest and promise in environmental sciences or a related nature field.

**CHEMISTRY**

*Twin Cities Chapter of the America Institute of Chemists.* Medallion awarded to an outstanding senior planning a career in 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.
CLASSICS

*Virginia McKnight Binger Prize.* Cash award to a student who shows the greatest proficiency in Greek, Latin, or ancient history.

EAST ASIAN STUDIES

*Japanese Language Prize.* A cash award provided by alumni for the student who has shown the most progress in the study of Japanese during the academic year.

*Japanese Studies Prize.* A cash award established by alumni to recognize a student who has completed a project of exceptional quality focusing on Japan.

*Japan Ministry of Education Fellowship.* Approximately 50 fellowships are awarded by the Japanese government to undergraduate students from throughout the world to study at a Japanese national university for a 12-month period. Macalester recipients study at Miyagi Kyoiku University in Sendai.

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 Prize.* 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.

*3M Scholar Awards.* A subscription to the *Journal of Accounting* awarded to three seniors who have demonstrated outstanding academic achievement in their accounting courses at Macalester College.

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.


*Harry 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.

ENVIRONMENTAL STUDIES

*Environmental Studies Faculty Award.* A book award for academic excellence in multi-disciplinary studies of the environment.

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

Evelyn Albinson Award for Academic Excellence in the Study of German. An annual cash award given on the basis of grade point average provided it qualified 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.

HISPANIC

Hispanic Award for Excellence. A cash award to a Hispanic senior woman who has demonstrated outstanding academic achievement.

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.

Yahya Armajani Prize in Non-Western History. Cash award to a distinguished senior major, established by the history department to honor a former distinguished colleague.

Mary Alice Trierweller Burmeister Prize. Established by Stephen and Julie Burmeister in memory of his mother, Mary Burmeister. A cash award to an undergraduate woman who has distinguished herself in the study of American 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.

J. Huntley Dupre Prize in European History. Cash award to a distinguished senior major, established by the history department to honor a former distinguished colleague.

Kenneth L. Holmes Prize in American History. Cash award to a distinguished senior major, established by the history department to honor a former distinguished colleague.

Ernest R. Sandeen Memorial Prize. Established by colleagues, family and friends. A cash award to a student who has completed an original project reflecting exceptional skill, imagination, and effort, all hallmarks of the scholar for whom the prize is named.

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.

INTERNATIONAL CENTER

The Eugene Craven Endowed Prize for International Travel and Study. Established by Sharon Ellies Craven '66 in memory of her husband, '63. To be awarded to a meritorious student who has not previously traveled abroad and who wishes to pursue study outside the United States.

INTERNATIONAL STUDIES

International Studies Prize. A cash prize for a distinguished senior major in International Studies.

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.

Hollis L. Johnson Prize. A cash award for an outstanding music major planning a career in teaching.
Prizes

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 Miss 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.

Zenas Taylor Endowed Prize in Music. Established by Hazel in memory of her husband Zenas, Class of 1920, for his love of music and for Macalester where his heart found joy. To be awarded to a student majoring in voice.

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.

The Macalester College Women's Varsity Soccer Prize. To the member of the women's varsity soccer team whose personal conduct, soccer skills, cooperation and leadership ability have made the greatest contribution to the success of her team, as a Macalester College activity.

Dorothy Michel Award. Established by family, alumni and friends in memory of Dorothy Michel, chairman of women's physical education department (1946-68). Awarded to an outstanding junior woman for use during her senior year.

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. Stuessy Endowed Prize. Established by alumni, friends, and members of the ‘M’ Club in memory of Dwight D. Stuessy, athletic director (1946-57). An award of $100 to an outstanding athlete.

Pat Wiesner Honor Athlete Award. Established by family, alumni and friends in memory of Pat Wiesner, chair of physical education, athletics, recreation and dance and women's cross country coach 1950-1983. A silver bowl awarded to a female senior athlete who has established a leadership role and better than average academic standing.

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. 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.

Peter R. Weisman Endowed Prize. Awarded annually to a political science student who has demonstrated concern for and has worked with the underprivileged and is planning a career dedicated to helping others.

Brent Williams Prize. 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 a Political Science major with departmental honors or distinguished work in the department, who also has had debate and speech experience and has been active in the college and community political concerns.
PSYCHOLOGY

Macalester Psychology Award. Departmental prize for outstanding student majoring in psychology.

RELIGION

Robert A. Caine Memorial Prize. 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.

SOCIOMETRY

Irwin and Marion Rinder Prize. Cash award to match an award for a winning paper in the Sociologists of Minnesota annual competition.

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.

SPANISH

The Spanish Department Faculty Award. The faculty of the Spanish department awards a prize (book) annually to a Spanish senior major for distinguished work in his/her Spanish major.

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 contribution while representing the College in intercollegiate debate and forensic competitions.

Carol A. Wurtzebach 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. Repayment starts four months after the student leaves the College. Principal, $227,557.

Carrie E. Alvord Student Loan Fund (1965). Established by the Alvord Foundation, this fund is available to any needy Macalester student interest-free until the borrower leaves the College. Principal, $16,853.

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, $1,808.


Jennie Hodgman (1942). Administered by the Macalester Women’s Club, this fund is used for loans to junior and senior women. Principal, $4,295.

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, $701.
Loan Funds

Macalester College Loan Fund (1967). Provides for low-interest (2.5 percent), deferred-payment loans up to $1,000 per student per year. Interest is waived and payment of principal is deferred while the student is enrolled at Macalester, is attending 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, $281,902.

Memorial Loan Fund. Established through gifts to the College, it is used specifically for loans to students for college expenses. Principal, $30,933.

National Direct Student Loans. Macalester College participates in the National Direct Student Loan program created under the National Defense Educational 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.

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, $4,000.


Senior Loan Fund (1961). This fund has been created by Messrs. DeWitt Wallace, Charles B. Thomas, and George P. Leonard to provide needy senior students with low interest, easy payment loans: interest at 4 percent begins October 1 following graduation. Principal, $107,775.

Henry Strong Education 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, $47,663.

James Wallace Alumni Loan Fund (1939). This fund was established by the Alumni Association as a memorial to Dr. James Wallace. The principal 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, $39,228.

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, $9,749.

William A. Grey Memorial Endowment. Established through life income trusts by Dr. William A. Grey. Principal, $15,800.

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, $51,562.

The Tom Leonard Fund. Established by George P. and Wilma Fox Leonard, Macalester Class of 1927, in memory of their son, to be used to enhance close faculty/student relations. Expenditures are to be approved by academic department heads and the vice president for academic affairs. Principal $133,530.

Marbrook Endowment Fund. Established by the Marbrook Foundation to enhance the stature of sabbatical leave replacements. While classical studies and the humanities are its primary focus of interest, the fund may, on occasion, support a replacement in another division of the College. Principal, $95,000.

Endowed Professorships

F. R. Bigelow Professorship in Economics. Established by the F. R. Bigelow Foundation through gifts and a bequest from Frederick R. Bigelow, Macalester College trustee (1938-47).

Cargill Professorship in Agricultural Economics. Established through gifts from Cargill, Inc.

Hubert H. Humphrey Professorship in International Affairs (1968). Established by the Andreas Foundation, Crowdsus 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.

Arnold Lowe Professorship in Ecumenical Studies. Established by members of the Dayton family of Minneapolis.

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).

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.

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.

James Wallace Professorships. Established by DeWitt Wallace in memory of his father for the departments of history, political science, and religion.

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.
Administration

Officers of the College

President

Robert M. Gavin, Jr., B.A., Ph.D.

Vice President for Academic Affairs

Jack E. Rossmann, B.S., M.S., Ph.D.

Vice President for Financial Affairs


Vice President for Development and Alumni Affairs

Alexander G. (Sandy) Hill, B.A. ('57)

Dean of Students

Mary A. Ackerman, B.A. ('70)

Dean of Admissions

William M. Shain, A.B., J.D.

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; B.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 the 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.

C. Murray Braden. Professor of Mathematics (1956-83); B.S., Northwestern University, 1939; M.S., University of Minnesota, 1950; Ph.D., University of Minnesota, 1957.

Robert Logan Bunting. F.R. Bigelow Professor of Economics (1969-84); M.A., University of Chicago, 1948; Ph.D., University of Chicago, 1958.

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.
Richard Coleman Clark. Professor of German (1968-84); B.A., Temple University, 1942; M.A., University of Pennsylvania, 1949; Ph.D., University of Pennsylvania, 1954.

Robert Jay Dassett, Jr. Professor of Spanish (1947-1983); B.A., University of Minnesota, 1939; B.S., University of Minnesota, 1942; M.A., University of Minnesota, 1953.

Lincoln G. Ekman. Associate Professor of Education (1962-82); 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 (1965-84); B.A., University of Chicago, 1941; M.A., University of Chicago, 1941; Ph.D., University of Chicago, 1950.

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.

Alexander Guss. Associate Professor of Russian (1963-83); B.S., Sophia University, 1956; M.S., Georgetown University, 1960.

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.

H. Arnold Holtz. Professor of Education (1946-84); B.S., Wisconsin State, 1940; M.A., University of Minnesota, 1944; Ph.D., University of Minnesota, 1959.

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.

James Albert Jones. Professor of Biology (1948-82); B.E., St. Cloud Teachers College, 1939; M.S., University of Minnesota, 1948; Ph.D., Iowa State University, 1973.

A. Elizabeth Leinbach. Associate Professor of Religious Education (1948-66); B.S., University of Minnesota, 1926; M.A., Columbia University, 1928.

Ralph J. Lundeen. Professor of Physical Education, Director of Athletics (1954-83); B.S., University of Minnesota, 1946; M.Ed., University of Minnesota, 1947.


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.

Irwin Daniel Rinder. Professor of Sociology (1968-84); B.A., University of Idaho, 1947; M.A., University of Chicago, 1950; Ph.D., University of Chicago, 1953.

James H. Roberts. Professor of Physics (1963-82); B.S., University of Arizona, 1937; M.S., University of Arizona, 1938; Ph.D., University of Chicago, 1946.
Emeriti Faculty
Faculty

Edwin James Robinson, Jr. Professor of Biology (1963-84); A.B., Dartmouth College, 1939; M.S., New York University, 1941; Ph.D., New York University, 1948.

William Saltzman. Professor of Art (1966-83); B.S., University of Minnesota, 1940.

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.

Claude A. Welch. O.T. Walter Professor of Biology (1969-83); B.S., Michigan State University, 1948; Ph.D., Michigan State University, 1957.

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.

Faculty

(Date in parentheses indicates year of first appointment at Macalester College.)


R. Perry Anderson. Lecturer in Mathematics and Computer Science (1981); B.S., Nebraska State College, 1940; M.A., University of Nebraska, 1951.


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. 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.
Faculty


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.

Gregory Bordon-Neary. Lecturer in Education (1983); B.A., Old Dominion University, 1972; M.A., University of Colorado, 1978; Ph.D., University of Colorado, 1981.

Sheila L. Brewer. Assistant Professor of Physical Education (1967); B.S., Wisconsin State University, 1960; M.S., University of Oregon, 1966.


Edward Brooks, Jr. Professor of Classics (1964); A.B., Harvard University, 1944; M.A., University of Minnesota, 1962; Ph.D., University of Minnesota, 1967.


Anthony Caponi. Professor of Art (1949); B.S., University of Minnesota, 1948; M.Ed., University of Minnesota, 1949.

Anne E. Carayon. Lecturer in French (1981); B.A., SUNY at Buffalo, 1974; M.A., University of Arizona, 1976.

Janet L. Carlson. Assistant Professor of Chemistry (1978); B.A., Hamline University, 1974; Ph.D., Stanford University, 1978.

Louis Casagrande. Adjunct Assistant Professor of Anthropology (1977).

Mark Cavalieri. Instructor in Geology (1983); B.S., University of Minnesota, 1975.


Mark A. Davis. Assistant Professor of Biology (1981); A.M., Harvard College, 1972; Ed.M., Harvard University, 1974; Ph.D., Dartmouth College, 1981.

Dorothy Dodge. *James Wallace Professor of Political Science* (1955); B.A., University of Minnesota, 1949; M.A., University of Minnesota, 1950; Ph.D., University of Minnesota, 1955.


R. Ellis Dye. *Professor of German* (1966); B.A., University of Utah, 1960; M.A., Rutgers University, 1963; Ph.D., Rutgers University, 1966.

J. Michele Edwards. *Assistant Professor of Music* (1974); B.M., University of Iowa, 1967; M.A., University of Iowa, 1971; D.M.A., University of Iowa, 1983.

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.

Robert Elder. *Instructor in Economics and Business* (1984); B.S., Georgia Tech., 1979; M.A., Yale University, 1980; M. Phil., Yale University, 1982.


Fabiola Franco. *Assistant Professor of Spanish* (1981); B.A., Teachers Training College (Colombia), 1963; M.A., University of Minnesota, 1970; Ph.D., University of Minnesota, 1979.


Giles Y. Gamble. *Associate Professor of English* (1967); A.B., Earlham College, 1956; Ph.D., Stanford University, 1969.

Nancy Gerth. *Assistant Professor of Philosophy* (1982); B.A., University of Pennsylvania, 1972; M.A., Cornell University, 1975; Ph.D., Cornell University, 1979.
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.

Leland R. Guyer. Assistant Professor of Spanish (1983); A.B., San Diego State University, 1968; M.A., San Diego State University, 1972; Ph.D., University of California, Santa Barbara, 1979.

G. Birgitta Hammarberg. Assistant Professor of Russian (1983); Diplom, Handelshogskolan vid Abo Akademi, Finland, 1964; A.M., Purdue University, 1977; Ph.D., University of Michigan, 1982.

Douglas P. Hatfield. Professor of 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.

Aiko (Fisher) Hiraiwa. Lecturer in Linguistics (1975); B.A., Tokyo Joshi Daigaku, 1957.


Michael A. Hopp. Visiting Assistant Professor of Psychology (1977); B.A., University of Minnesota, 1970; Ph.D., University of Minnesota, Morris, 1976.

David Henry Hopper. James Wallace Professor of Religious Studies (1959); B.A., Yale University, 1950; B.D., Princeton Theological Seminar, 1953; Th.D., Princeton Theological Seminary, 1959.

Daniel J. Hornbach. Assistant Professor of Biology (1984); B.S., University of Dayton, 1974; M.S., University of Dayton, 1976; Ph.D., Miami University, 1980.

Howard F. Huelster. Associate Professor of History (1949); B.A., Macalester College, 1949; M.A., University of Minnesota, 1958.


Raymond Gustaf Johnson. Professor of Psychology (1961); B.A., Augustana College, 1950; M.A., Syracuse University, 1952; Ph.D., University of Minnesota, 1967.

Patricia L. Kane. DeWitt Wallace Professor of English (1947); B.A., Macalester College, 1947; M.A., University of Minnesota, 1950; Ph.D., University of Minnesota, 1961.


Alvin J. King. Professor of Music (1967); B.A., Ohio State University, 1941; B.Mus., Yale University, 1948; M.Mus., University of Colorado, 1950; D.Mus.A., University of Colorado, 1966.


Philip A. Lee, Jr. Associate Professor of French (1966); A.B., Bowdoin College, 1956; M.A., University of North Carolina, 1961; Ph.D., University of North Carolina, 1967.

Henry Lepp. Professor of Geology (1964); B.S., University of Saskatchewan, Canada, 1944; Ph.D., University of Minnesota, 1954.


Warren E. Mack. Adjunct Associate Professor of Economics (1975); A.B., Cornell College, 1966; J.D., University of Chicago, 1969.

Carleton Macy. Assistant Professor of Music (1978); B.A., Redlands University, 1966; M.A., California State University, Fullerton, 1972; D.M.A., University of Washington, 1978.


Sharon S. Mayes. Assistant Professor of Sociology (1984); B.A., Michigan State University, 1970; M.Phil., Yale University, 1972; Ph.D., Yale University, 1974; M.A., Wright Institute, 1983.
Michal McCall-Meshejian. Assistant Professor of Sociology (1980); B.A., University of Iowa, 1964; M.A., University of Illinois, 1966; Ph.D., University of Illinois, 1975.

David W. McCurdy. Professor of Anthropology (1966); B.A., Cornell University, 1957; M.A., Stanford University, 1959; Ph.D., Cornell University, 1964.


Howard Mielke. Assistant Professor of Geography (1979); B.A., Macalester College, 1963; M.S., University of Michigan, 1967; Ph.D., University of Michigan, 1972.

Raymond Charles Mikkelson. Professor of Physics (1965); B.A., St. Olaf College, 1959; M.S., University of Illinois, 1961; Ph.D., University of Illinois, 1965.

Walter D. Mink. Professor of Psychology (1958); A.B., Hiram College, 1950; Ph.D., University of Minnesota, 1957.


Roger K. Mosvick. Professor of Speech Communication (1956); B.A., Macalester College, 1952; M.A., University of Minnesota, 1959; Ph.D., University of Minnesota, 1966.


Jeffrey E. Nash. Associate Professor of Sociology (1974); B.A., Baylor University, 1964; M.A., Louisiana State University, 1965; Ph.D., Washington State University, 1971.


Charles M. Norman. Lecturer in English (1965); A.B., University of Louisville, 1958.

Michael Obsatz. Associate Professor of Sociology (1967); B.A., Brandeis University, 1963; M.A., University of Chicago, 1964; Ph.D., University of Chicago, 1967.

Carol Emanuelson Ofsthun. Lecturer in Art (1970); A.B., University of Louisville, 1958.

Cynthia B. Orbovich. Instructor in Political Science (1981); B.A., Denison University, 1975.


Kathleen K. Parson. Assistant Professor of Biology and Chemistry (1974); B.A., Macalester College, 1967; Ph.D., University of Minnesota, 1973.


Gerald R. Pitzl. Associate Professor of Geography (1972); B.S. University of Minnesota, 1964; M.A., University of Minnesota, 1971; Ph.D., University of Minnesota, 1974.

Brian Porto. Assistant Professor of Political Science (1980); B.A., University of Rhode Island, 1974; M.A., Miami University, 1975; Ph.D., Miami University, 1979.


Peter Rachleff. Assistant Professor of History (1982); B.A., Amherst College, 1973; M.A., University of Pittsburgh, 1976; Ph.D., University of Pittsburgh, 1981.

Michael Rahm. Assistant Professor of Economics and Business (1979); B.A., Loras College, 1975; M.S., Iowa State University, 1978; Ph.D., Iowa State University, 1980.

Jeremiah Reedy. Professor of Classics (1968); S.T.B., Gregorian University, 1958; M.A., University of South Dakota, 1960; M.A., University of Michigan, 1966; Ph.D., University of Michigan, 1968.


Norman L. Rosenberg. Professor of History (1975); B.A., University of Nebraska, 1964; M.A., University of Nebraska, 1967; Ph.D., State University of New York at Stony Brook, 1972.

Ronald M. Ross. Associate Professor of Journalism (1980); B.A., George Washington University, 1950.

Jack Eugene Rossmann. Professor of Psychology (1964); B.S., Iowa State University; 1958; M.S., Iowa State University, 1960; Ph.D., University of Minnesota, 1963.


Karl C. Sandberg. DeWitt Wallace Professor of Linguistics and French (1968); B.A., Brigham Young University, 1954; M.A., Brigham Young University, 1957; Ph.D., University of Wisconsin, 1960.

David B. Sanford. Associate Professor of German (1966); B.A., University of Minnesota, 1959; Ph.D., University of Minnesota, 1966.

G. Michael Schneider. Associate Professor of Mathematics and Computer Science (1982); B.S., University of Michigan, 1966; M.S., University of Wisconsin, 1968; Ph.D., University of Wisconsin, 1974.


John R. Schue. Professor of Mathematics and Computer Science (1962); B.A., Macalester College, 1953; Ph.D., Massachusetts Institute of Technology, 1959.


Sherman W. Schultz, Jr. Lecturer in Astronomy (1958); O.D., Illinois College of Optometry, 1945.

Albert Truman Schwartz. DeWitt Wallace Professor of Chemistry (1966); A.B., University of South Dakota, 1956; B.A., Oxford University, 1958; M.A., Oxford University, 1960; Ph.D., Massachusetts Institute of Technology, 1963.


Maria S. Schweikert. Lecturer in Russian (1979); Eotvos Lorand, University of Budapest, 1968; M.A., University of Pittsburgh, 1974.


Janet R. Serie. Assistant Professor of Biology (1983); B.S., College of St. Benedict, 1975; Ph.D., University of Minnesota, 1981.


Surender Singh. Adjunct Professor of Political Science (1982); B.A., Macalester College, 1956; M.A., University of Minnesota, 1957; Ph.D., University of Minnesota, 1960.

Emil John Slowinski. DeWitt Wallace Professor of Chemistry (1964); B.S., Massachusetts State College, 1946; Ph.D., Massachusetts Institute of Technology, 1949.

James Richard Smail. Professor of Biology (1963); A.B., Oberlin College, 1957; Ph.D., University of Illinois, 1965.


Otto M. Sorensen. Professor of German (1967); A.B., Stanford University, 1950; M.A., Stanford University, 1952; Ph.D., University of Washington, 1966.


Myriam Steinback. Lecturer in Mathematics and Computer Science (1981); B.Sc., Universidad de Los Andes, Colombia, 1974; M.A., Columbia University, 1975; M.Phil., Columbia University, 1979; Ph.D., Columbia University, 1980.

James B. Stewart. James Wallace Professor of History (1969); B.A., Dartmouth College, 1962; M.A., Case Western Reserve University, 1966; Ph.D., Case Western Reserve University, 1968.

Fred B. Stocker. Professor of Chemistry (1958); B.S., Hamline University, 1953; M.S., University of Minnesota, 1955; Ph.D., University of Colorado, 1958.

Edward N. Strait. Professor of Physics (1965); B.A., University of Wisconsin, 1941; Ph.D., Massachusetts Institute of Technology, 1948.

Vasant A. Sukhatme. Assistant Professor of Economics (1978); B.A., University of Calcutta, 1965; M.A., Delhi School of Economics, 1967; M.A., University of Southern California, 1971; Ph.D., University of Chicago, 1977.


Anne Sutherland. Assistant Professor of Anthropology (1981); B.A., University of Texas, 1965; Diploma, Oxford University, 1967; B. Litt., Oxford University, 1968; Ph.D., Oxford University, 1972.

Charles C. Torrey. Associate Professor of Psychology (1966); B.A., Swarthmore College, 1955; Ph.D., Cornell University, 1963.


Adolf L. Vandendorpe. Associate Professor of Economics (1971); Ingenieur Commercial, Louvain University, Belgium 1961; Ph.D., Massachusetts Institute of Technology, 1970.


Jack M. Weatherford. Assistant Professor of Anthropology (1983); B.A., University of South Carolina, 1967; M.A., University of South Carolina, 1972; M.A., University of California, San Diego, 1973; Ph.D., University of California, San Diego, 1977.

Gerald F. Webers. Professor of Geology (1965); B.S., Lawrence College, 1954; M.S., University of Minnesota, 1961; Ph.D., University of Minnesota, 1964.

Peter Weisensel. Associate Professor of Psychology (1973); B.S., University of Wisconsin, 1963; M.S., University of Wisconsin, 1965; Ph.D., University of Minnesota, 1973.
Gerald Weiss. Associate Professor of Psychology (1965); B.A., Brooklyn College, 1953; M.A., University of Iowa, 1954; Ph.D., University of Iowa, 1965.

Hans W. Wendt. Professor of Psychology (1968); B.A., University of Hamburg, Germany, 1949; Ph.D., University of Marburg, Germany, 1952; Honorary Professor, University of Marburg, Germany, 1971.

Henry R. West. Professor of Philosophy (1965); A.B., Emory University, 1954; M.A., Duke University, 1958; B.D., Union Theological Seminary, 1959; Ph.D., Harvard University, 1965.

David B. White. Elizabeth Sarah Bloedel Professor of Philosophy (1948); B.A., Northeastern Oklahoma State, 1937; M.A., Oklahoma State University, 1939; Ph.D., University of the Pacific, 1959.

Russell A. Whitehead. Associate Professor of Biology (1969); B.S., Northland College, 1954; M.S., Oregon State University, 1962; Ph.D., Oregon State University, 1966.

M. Glen Wilson. Professor of Speech and Dramatic Arts (1968); B.S., West Virginia University, 1948; M.A., West Virginia University, 1949; Ph.D., Ohio State University, 1957.

Wayne C. Wolsey. Professor of Chemistry (1965); B.S., Michigan State University, 1958; Ph.D., University of Kansas, 1962.

Technical Assistants


Studio Instructors

Lawrence Barnhart. French Horn (1981)

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.

John Einweck. Jazz Piano (1979)

Beatrice Giere. Piano (1979)


Rachel Green. Oboe (1974); B.S.

Florence Hart. Highland Dance (1965)

David Hawley. Saxophone (1980)

Susan Hedling. Flute (1983)

Camilla Heller. Cello (1976)


Andrew Hoag. Pipe Band (1983)


William Jones. Bassoon (1977)
Winston Kaehler. Organ and Harpsichord (1978)
Kathy Kienzle. Harp (1983)
Leonard Klun. Trumpet (1979)
Paul Maybery. Tuba (1979)
Celeste O’Brien. Piano (1969); B.A.
James Riccardo. Violin (1979)
Sarita Roche. Voice (1980)
John Roth. Classical Guitar and Acoustical Bass (1978)
Emma Small. Voice (1975); B.M.
David Weller. Trombone (1980)
Beverly White. Recorder and Viol (1972); B.A., M.A.
Cloyde Williams. Clarinet (1971)
Lawrence Wilson. Piano (1974); B.A., M.M.

Artists-in-Residence
Joseph Roche, Violin, Macalester Trio (1971)
Camilla Heller, Cello, Macalester Trio (1971)

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 Accreditation of Teacher Education.

Approved by: American Chemical Society; The National Association of Schools of Music.

Memberships: American Council on Education; Association of American Colleges; The Presbyterian College Union; Minnesota Private College Council; The American Association of Colleges for Teacher Education.
# Enrollment Statistics 1983-84

**Enrollment, Fall Term 1983**

<table>
<thead>
<tr>
<th></th>
<th>Men</th>
<th>Women</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree-Seeking Students</td>
<td>809</td>
<td>789</td>
<td>1598</td>
</tr>
<tr>
<td>Special Students</td>
<td>39</td>
<td>45</td>
<td>84</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>848</td>
<td>834</td>
<td>1682</td>
</tr>
</tbody>
</table>

**Geographical Distribution, Fall Term 1983**

<table>
<thead>
<tr>
<th>Location</th>
<th>Number of Students</th>
<th>Percentage of Student Body</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ramsey County (Minnesota)</td>
<td>233</td>
<td>13.8</td>
</tr>
<tr>
<td>Hennepin County (Minnesota)</td>
<td>197</td>
<td>11.7</td>
</tr>
<tr>
<td>Minnesota (outside Twin Cities)</td>
<td>238</td>
<td>14.1</td>
</tr>
<tr>
<td>U.S. (excluding Minnesota)</td>
<td>791</td>
<td>47.0</td>
</tr>
<tr>
<td>Foreign Countries</td>
<td>213</td>
<td>12.7</td>
</tr>
<tr>
<td>U.S. Students Residing Abroad</td>
<td>10</td>
<td>.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1682</td>
<td>100.0</td>
</tr>
</tbody>
</table>

**Home States of Students — Fall 1983**

Alabama, 2                      Louisana, 2                      Ohio, 31
Alaska, 1                       Maine, 3                        Oklahoma, 7
Arizona, 5                      Maryland, 17                    Oregon, 16
Arkansas, 1                     Massachusetts, 30                Pennsylvania, 19
California, 39                  Michigan, 20                     Puerto Rico, 29
Colorado, 12                    Minnesota, 668                   Rhode Island, 4
Connecticut, 24                 Mississippi, 3                    South Carolina, 2
Delaware, 1                     Missouri, 29                     South Dakota, 12
Florida, 10                     Montana, 16                      Tennessee, 4
Georgia, 13                     Nebraska, 6                      Texas, 8
Hawaii, 5                       Nevada, 1                        Utah, 4
Idaho, 5                        New Hampshire, 5                   Vermont, 3
Illinois, 127                   New Jersey, 24                    Virginia, 8
Indiana, 8                      New Mexico, 3                     Washington, 14
Iowa, 43                        New York, 41                      West Virginia, 1
Kansas, 9                       North Carolina, 4                 Wisconsin, 86
Kentucky, 4                     North Dakota, 16                 Wyoming, 3
                                    District of Columbia, 11     

**Home Countries of Foreign Students by Citizenship — Fall 1983**

Australia, 1                     Cyprus, 5                        Jamaica, 1
Bahamas, 1                       Denmark, 2                        Japan, 17
Bangladesh, 2                    El Salvador, 1                     Jordan, 4
Barbados, 2                      Ethiopia, 1                        Kenya, 5
Bolivia, 2                       France, 2                         Laos, 1
Brazil, 2                        Greece, 1                         Liberia, 1
Canada, 6                        Guatemala, 1                      Malaysia, 47
Chile, 2                         Guinea, 1                          Mauritius, 2
China, 2                         Iceland, 1                        Mexico, 3
Columbia, 3                      India, 4                          Netherlands, 3
Costa Rica, 3                    Indonesia, 2                       Nigeria, 1
Cuba, 1                          Iran, 13                           Norway, 1
Enrollment Statistics

Pakistan, 5  Spain, 1  United Arab Emirates, 4
Peru, 1  Sudan, 1  United Kingdom, 8
Philippines, 1  Surinam, 1  USSR, 2
Portugal, 1  Sweden, 2  Venezuela, 6
Rwanda, 1  Switzerland, 1  Vietnam, 3
Saudi Arabia, 5  Taiwan, 1  West Germany, 3
Somalia, 2  Tanzania, 2  Yemen, 1
South Africa, 4  Turkey, 2  Yugoslavia, 1
South Korea, 6  Uganda, 1

Racial/Ethnic Background – Fall Term 1983

<table>
<thead>
<tr>
<th></th>
<th>Number of Students</th>
<th>Percentage of Student Body</th>
</tr>
</thead>
<tbody>
<tr>
<td>White American</td>
<td>1306</td>
<td>77.6</td>
</tr>
<tr>
<td>Foreign</td>
<td>213</td>
<td>12.7</td>
</tr>
<tr>
<td>Black American</td>
<td>70</td>
<td>4.2</td>
</tr>
<tr>
<td>Hispanic American</td>
<td>54</td>
<td>3.2</td>
</tr>
<tr>
<td>American Indian</td>
<td>15</td>
<td>.9</td>
</tr>
<tr>
<td>Asian American</td>
<td>24</td>
<td>1.1</td>
</tr>
<tr>
<td>Total</td>
<td>1682</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Class of 1983 B.A. Degrees by Department/Program (includes double majors)

Anthropology, 15
Art, 11
Biology, 26
Chemistry, 13
Computer Studies, 10
Dramatic Arts, 4
East Asian Studies, 2
Economics, 51
English, 28
Environmental Studies, 6
French, 13
Geography, 17
Geology, 10
German, 8
History, 35
Humanities, 2

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International Studies, 20
Law & Society, 8
Linguistics, 6
Mathematics, 31
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Philosophy, 7
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Additional Information/Useful Telephone Numbers

Information about Macalester College is available by contacting one of the appropriate offices listed below.

Admissions Office ................................................................. (612) 696-6357
(Admissions forms, College publications, and information about specific academic programs.)

Financial Aid Office ............................................................... (612) 696-6214
(Financial aid requirements, application forms, and special financial aid opportunities.)

Bursar's Office ................................................................. (612) 696-6161
(Payment of college fees, repayment of student loans, and other business matters.)

Office of Student Academic Records and the Registrar ..................... (612) 696-6200
(Registration information, transfer credit policy, and requests for transcripts.)

Office of the Dean of Students ................................................ (612) 696-6220
(General information about student life, housing, health, special programs, and counseling services.)

International Center ........................................................... (612) 696-6310
(Foreign student admissions, off-campus programs, and study abroad programs.)

College Operator ............................................................... (612) 696-6000
(Additional phone numbers.)

Address written correspondence to the appropriate office or department at Macalester College, 1600 Grand Ave., Saint Paul, Minnesota 55105.