Macalester College 1999–2000 Catalog

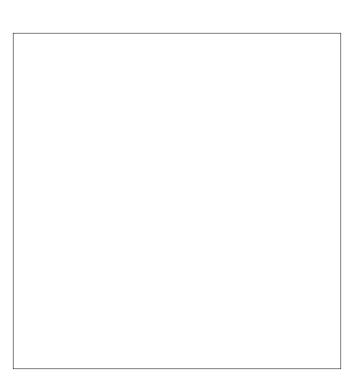


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1999-2000 Calendar

Fall Semester 1999

Sept. 2-5/Thurs.-Sun. New Student Orientation Sept. 8/Wed. Upperclass Validation Sept. 8/Wed. Beginning of Classes

Sept. 8/Wed. Incompletes Due from Spring, Summer 1999

Sept. 17/Fri. Last Day to Register or Validate Sept. 24/Fri. Last Day to Add a Class, Drop a Class (No Notation), and Designate Grading

Options

Oct. 28-Oct. 31/Thurs.-Sun. Fall Mid-Term Break Nov. 5/Fri. Last Day to Withdraw Nov. 15-Dec. 3/Mon.-Fri. Spring 2000 Class Registration

Nov. 25 – 28/Thurs. – Sun. Thanksgiving Recess

Dec. 3/Fri. January Independent/Internship Registrations

Due

Classes End Dec. 14/Tues. Dec. 15/Wed. Study Day

Dec. 16-20/Thurs.-Mon. Final Examinations

Spring Semester 2000

Jan. 31/Mon. Validation of Registration Jan. 31/Mon. Beginning of Classes

Incompletes Due from Fall 1999 Jan. 31/Mon. Feb. 11/Fri. Last Day to Register or Validate Feb. 18/Fri. Last Day to Add a Class, Drop a Class (No Notation), and Designate

Grading Options

Mar. 18- 26/Sat.-Sun. Spring Mid-Term Break

Apr. 7/Fri. Last Day to Withdraw from a Class Apr. 21/Fri. Good Friday (Classes Canceled) Apr. 24- May 5/Mon.-Fri. Fall 2000 Class Registration

May 9/Tues. Classes End May 10/Wed. Study Day

May 11–16/Thurs.—Tues. May 21/Sun. Final Examinations Baccalaureate May 21/Sun. Commencement

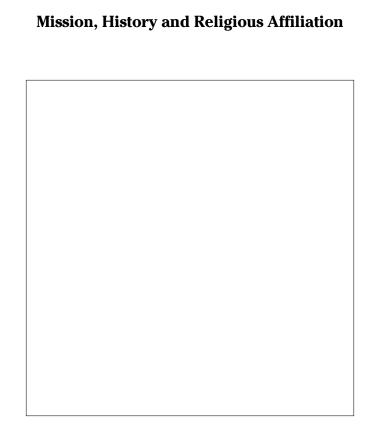
Catalog Statement

All statements contained in this catalog reflect the approved policies of Macalester College that were in effect as of May 1, 1999. 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 unlawfully discriminate in its policies, procedures or practices on the basis of race, sex, color, national origin, sexual orientation, religion, disability, marital status, age, or status as disabled veterans or veterans of the Vietnam era. Further, Macalester College complies with all applicable laws which include, but are not limited to, Titles VI and VII of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, Sections 503 and 504 of the Rehabilitation Act of 1973, the Age Discrimination in Employment Act of 1967, and the Minnesota Human Rights Act. Macalester College also complies with all applicable regulations under the Americans With Disabilities Act which prohibit unlawful discrimination on the basis of disability in the full and comparable enjoyment of College admission, goods, services, facilities, privileges, advantages, and accommodations.



Mission

Macalester is committed to being a preeminent liberal arts college with an educational program known for its high standards for scholarship and its special emphasis on internationalism, multiculturalism, and service to society.

[approved by the Board of Trustees, May 1992]

Statement of Purpose and Belief

At Macalester College we believe that education is a fundamentally transforming experience. As a community of learners, the possibilities for this personal, social, and intellectual transformation extend to us all. We affirm the importance of the intellectual growth of the students, staff and faculty through individual and collaborative endeavor. We believe that this can best be achieved through an environment that values the diverse cultures of our world and recognizes our responsibility to provide a supportive and respectful environment for students, staff and faculty of all cultures and backgrounds.

We expect students to develop a broad understanding of the liberal arts while they are at Macalester. Students should follow a primary course of study in order to acquire an understanding of disciplinary theory and methodology; they should be able to apply their understanding of theories to address problems in the larger community. Students should develop the ability to use information and communication resources effectively, be adept at critical, analytical and logical thinking, and express themselves well in both oral and written forms. Finally, students should be prepared to take responsibility for their personal, social and intellectual choices.

We believe that the benefit of the educational experience at Macalester is the development of individuals who make informed judgments and interpretations of the broader world around them and choose actions or beliefs for which they are willing to be held accountable. We expect them to develop the ability to seek and use knowledge and experience in contexts that challenge and inform their suppositions about the world. We are committed to helping students grow intellectually and personally within an environment that models and promotes academic excellence and ethical behavior. The education a student begins at Macalester provides the basis for continuous transformation through learning and service.

History

Introduction. Macalester College's commitment to academic excellence, internationalism, a multicultural perspective, and community involvement is firmly rooted in its history.

Its founder intended Macalester to be one of the finest colleges in the country. His commitment to academic excellence has been reaffirmed in each decade since.

A strong international tradition, begun a century ago, flourishes today through the presence of international students and faculty, the incorporation of global perspectives and issues into courses and campus events, and the deeply significant experience of study abroad.

Macalester also has a long history of deliberately seeking students and faculty from a variety of cultural, ethnic and socioeconomic backgrounds, and students who will contribute actively to the college community.

The College's location in the heart of a lively and progressive metropolitan area provides a rich cultural and educational resource. Faculty members have become known for their use of Saint Paul and Minneapolis neighborhoods, businesses, cultural offerings and government leaders to augment classroom instruction. Likewise, students involve themselves in a variety of internship and volunteer experiences, and draw on the cities for wide-ranging social, cultural and recreational activities.

The Founding. Macalester College was chartered by the Minnesota legislature in 1874 and opened at its present site 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. 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 on March 5, 1874. Yet it would take a decade for the new college to establish an endowment, build a new campus, and 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 original Old Main building in 1884 (the current Old Main was a larger wing added two years later). 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.

Dedicated Scholarship. 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 1894 to 1900 and as president from 1900 to 1906, secured the College's lasting reputation for scholastic excellence in its programs and among the faculty and students. Moreover, Dr. Wallace as president made almost superhuman efforts to raise the money and secure the support necessary to keep the College alive during a period when financial hardships plagued it.

Dr. Wallace joined the Macalester College faculty in 1887. Until shortly before his death in 1939, he taught religion, Greek and political science. As a scholar, teacher and friend to students, Wallace was without peer. His students left his classes with a sense of aspiration, a sense of dedication to serving humanity on a global basis, and a sense of striving for the best. Throughout his years at Macalester, he epitomized the highest ideals of human service—a tradition to which the College has clung ever since.

Emerging Internationalism. The College struggled with the rest of 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 broadening 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 gave new focus to the College's internationalism—another significant part of Macalester's make-up today—through programs for foreign students, creation of overseas study opportunities, and the hiring of faculty from diverse backgrounds. Under Turck's leadership, the College also intensified its continuing interest in civic and national affairs.

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.

Growth and Change. The decade of the 1960s brought a remarkable period of growth and change for the College. The generous gifts of many friends, especially of Mr. and Mrs. DeWitt Wallace, co-founders of the *Reader's Digest* and major benefactors of Macalester, enabled the College to advance

markedly. Mr. Wallace, who died in 1981, was the son of President James Wallace and a member of the College's class of 1911.

During the presidency of Harvey M. Rice (1958–68), the College engaged in a concerted effort to strengthen its faculty, attract the best and brightest students, and enhance its instructional program.

To support those efforts, the College embarked on a major building campaign throughout the decade and into the 1970s. The Janet Wallace Fine Arts Center—named after the wife of Dr. Wallace and the mother of DeWitt Wallace—was completed in 1965. It remains a fine small-college facility 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, were also among the best in the United States.

Late in the decade, the College began a program to extend the opportunity of a liberal arts education to students from low income and culturally diverse backgrounds—a program that in its time was acknowledged as one of the most ambitious and innovative in the nation.

Renewed Commitment. As on many campuses in the country, the early 1970s produced a period of change at Macalester. A self-study in 1975 led the College to recommit itself to its liberal arts curriculum and to reassert five traditional and distinguishing strengths: involvement of students with faculty in the pursuit of learning; creation of a diverse campus community; incorporation of a global perspective in the curriculum and college life; involvement of the College in the life of the metropolitan area; and espousal of service as a way of life.

Under the leadership of President John B. Davis, Jr., from 1975 to 1984, the College made significant advances in its endowment and scholarship programs as well as in scholastic achievement of its faculty and students. A powerful new computer doubled the capacity for academic computing on campus, and a new swimming pool and renovated gymnasium facilities opened in 1983.

Unprecedented Strength. Like the 1960s, the 1990s became a turning point in Macalester's history. In 1991, the College's endowment became significantly stronger than it had been, offering the potential for financial stability that enables Macalester to pursue its high ideals with renewed vision and confidence.

Under the leadership of President Robert M. Gavin, Jr., the College pledged in 1985 and again in 1992 to assert its long-standing leadership in providing a liberal arts education of uncompromising academic quality—an education which is characterized by international and multicultural perspectives and which seeks application to a life of service.

During the middle and late 1990s, the College added a significant number of faculty positions while holding steady the size of the student body. This step has not only brought a new group of bright and dedicated teacher-scholars to the faculty, but also has made it possible to add new depth and more broadly diverse perspectives to Macalester's educational program. The improved student-faculty ratio also makes possible more flexible, creative and

personalized teaching approaches, including significant enhancement of Macalester's already strong emphasis on faculty-student collaborative research and writing.

In addition, the College has taken steps to increase international study opportunities for both students and faculty, and to strengthen co-curricular programs from athletics to residential life to community service.

The College's DeWitt Wallace Library, opened in September 1988, was the first step in a multi-year comprehensive campus improvement program that has involved renovating virtually every academic and residential building on campus as well as the athletic facilities. Extensive renovation of the College's science facilities was completed in 1997, and a new campus center is scheduled for completion in 2001.

These initiatives and others represent the College's commitment to be an educational leader. Its students and graduates are leaders, too. The evidence is in the academic distinctions they earn—Rhodes, Truman, Fulbright, Mellon and other fellowships, National Science Foundation grants, and the like—as well as in their significant contributions to their communities and their world.

Looking to the Future. Macalester President Michael S. McPherson has worked to enhance the College's considerable strengths and to extend its role as an educational leader. In addition, he has initiated a planning process intended to reaffirm the college's core values and key strengths, and to seek new ways to apply them to the challenges of the 21st century.

To help realize this vision, the College is engaged in a \$50 million comprehensive fund-raising campaign called Touch the Future, The Campaign for Macalester College. Among the priorities of the campaign, scheduled for completion in May 2000, are to increase annual support for the College and to increase endowed support for student scholarships, student-faculty research stipends, faculty development and academic programs.

In supporting these priorities, the alumni and friends of Macalester College are continuing the traditions begun by Macalester's founders and carried forward throughout its history: providing an education of outstanding academic quality to capable students from a wide range of social and cultural backgrounds, who will go on to make an enormously positive difference in the world.

Church Affiliation

Macalester College opened its doors with the support of the Presbyterian Church. From the beginning, Macalester's leaders decided that the College should be nonsectarian 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. Macalester's full-time chaplain is an ordained Presbyterian minister. In addition, associate chaplains currently represent the Catholic and Jewish faiths. Ecumenical

worship services are held regularly in the beautiful Weyerhaeuser Memorial Chapel on the campus.

Macalester College and the Presbyterian Church (USA) through the Synod of Lakes and Prairies signed a Covenant in 1983 which speaks of the historic relationship between the Church and the College. During the 1960s as its student body became increasingly diverse, the College "broadened its relationship beyond the state of Minnesota and beyond the Presbyterian Church into the entire nation, the world, and the larger religious community," the statement says.

A new Covenant, developed and ratified in 1996, reaffirms the creative and intentional relationship between the Church and the College, expresses a spirit of respect and mutual cooperation, looks at ways in which the values of each institution intersect, and establishes a framework for working together to address significant social and faith issues in ways that result in growth and benefit for the Synod, the College, and the wider community.

College Seal

The official seal of Macalester College was devised by Macalester's founder, the Rev. Edward Duffield Neill. In a sermon preached before the Presbyterian Synod of Minnesota in September 1873, he explained its significance:

"On the corporate seal of the institution are engraved two female figures, one in classic drapery, telescope in hand and compass at the feet, representing Science investigating the laws of Nature; the other in sitting posture and modern dress holding open the word of God, representing Revelation. They are in friendly converse, twin sisters of heaven as the motto suggests: *Natura et revelatio coeli gemini*."

Presidents

The Rev. Edward Duffield Neill,* D.D., 1874–1884
The Rev. Thomas A. McCurdy,* D.D., 1884–1890
The Rev. David James Burrell,* D.D., 1890–1891
The Rev. Adam Weir Ringland,* D.D., 1892–1894
James Wallace,* Ph.D., LL.D., D.D., 1894–1906
Thomas Morey Hodgman,* LL.D., 1907–1917
The Rev. Elmer Allen Bess,* D.D., 1918–1923
John Carey Acheson,* A.M., LL.D., 1924–1937
Charles Joseph Turck,* A.M., LL.B., LL.D., 1939–1958
Harvey Mitchell Rice,* A.M., Ph.D., L.H.D., LL.D., 1958–1968
Arthur S. Flemming,* A.B., M.A., J.D., 1968–1971
James A. Robinson, A.A., A.B., M.A., Ph.D., 1971–1975
John B. Davis, Jr., B.A., M.Ed., E.Ed., LL.D., 1975–1984
Robert M. Gavin, Jr., B.A., Ph.D., 1984–1996
Michael S. McPherson, B.A., M.A., Ph.D., 1996
* Deceased

The Board of Trustees

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Shelley Carthen Watson '82, Deputy Commissioner of Human Rights, Minnesota Department of Human Rights, St. Paul, Minnesota

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Gulum Ozustun Williams '92, Consultant, Boston Consulting Group, New York, New York

Leah Wortham '70, Associate Professor of Law, Columbus School of Law, The Catholic University of America, Washington, D.C.

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 a tradition of academic excellence which is enriched by international and multicultural awareness and service to others.

Because Macalester prides itself on academic excellence, a primary goal of the admission process is to select from among applicants those students who show particular promise to profit from and contribute to the intellectual life of the college. Our evaluation of this potential is a humanistic one. While standard statistical measures such as test scores are part of a highly selective admission process, many other factors are considered in our estimation of a candidate's intellectual promise. Among these are recommendations from secondary school personnel, the student's application essays and admissions interviews.

Macalester maintains a strong belief that learning transcends the classroom, and that students learn a great deal from each other, receiving insights into people and events that their own backgrounds did not provide. Macalester's vigorous classroom experience was thus enriched by a student body which represented 48 states and included citizens of 78 other countries in 1998–99, as well as varied economic, cultural and religious backgrounds.

In addition, we believe that a fulfilling college experience includes a dynamic campus life. Macalester students have long made significant achievements in nonacademic areas—in the arts, in athletics, 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 both comprehensive and complex, because there are many ways in which a student can show promise for contributing to Macalester. We seek a student body which is committed to academic challenge, and will contribute to campus life beyond the classroom. Living on campus is an important part of a Macalester education. For this reason, the College expects all entering students to live on campus for two consecutive years. Macalester's residence halls provide students with opportunities to meet and interact with people very different from themselves, participate in new activities and learn how to manage the College environment.

Secondary School Preparation

Macalester expects applicants to have completed (at a minimum) 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.

College Entrance Testing

Freshman candidates are required to take either the SAT I of the College Entrance Examination Board or the ACT of the American College Testing program. Macalester accepts scores from non-standardized administrations of the SAT I and the ACT, as approved and administered by these agencies. The SAT II examinations 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 consider taking the appropriate achievement tests.

Methods of Application for First-Year Students

Application materials may be obtained by writing to the Admissions Office, Macalester College, 1600 Grand Avenue, St. Paul, Minnesota 55105. Macalester also accepts the "Common Application" which is available in most secondary school counseling offices. Students using this form, however, must submit a one-page supplement available from the Macalester Admissions Office upon request.

There are a number of ways in which students may fill out Macalester's application using a computer. For detailed information please contact the Admissions Office or visit the college web site at www.macalester.edu to download the application. The Minnesota College Admission Form *cannot* be used for application to Macalester.

A \$40 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 financial circumstances necessitating the waiver.

Macalester offers three application process options for first-year students. The procedures are nearly identical for each option; however, notification dates and deposit deadlines vary. While criteria for the awarding of financial aid and special scholarships remain the same for all three decision dates, some preference for admission is given to candidates applying under the two Early Decision plans. For all application deadlines, materials should be postmarked by the requested date.

Permanent residents of the United States should follow the procedure used by the U.S. citizens. All U.S. permanent residents must supply a photocopy of their green card with the application form.

Students who wish to receive credit towards graduation for more than the equivalent of twenty Macalester credit hours must apply to Macalester as transfer students, under the transfer admissions program deadlines and applications procedures. In addition, students who have completed a semester at a college or university as full-time or degree-seeking students, after graduating from high school, must apply under the transfer admissions program.

	Application	Decision	Candidate's
	Deadline	From Macalester	Reply Date
First Year Students			1 3
Early Decision I	November 15	December 15	January 15
Early Decision II	January 15	February 7	March 7
Regular Decision	January 15	March 30	May 1
Transfer Students Fall Term	March 15	May 15	2 weeks after

Early Decision: For the convenience of candidates for whom Macalester is their first choice institution, Macalester offers two Early Decision application plans.

Early Decision I candidates must file their applications and supporting materials by November 15 of their senior year. Secondary schools must include grades through the first quarter or trimester of the senior year in the credentials they submit. Each Early Decision I applicant will receive one of three responses from the Admissions Office in mid-December: an offer of admission, postponement for consideration with the Regular Application candidate group, or denial of admission. Candidates admitted under this application plan must make a non-refundable \$300 tuition deposit by January 15. Instructions on applying for financial aid will be mailed when the application for admission is received or sooner upon request.

Early Decision II candidates must file their applications and supporting materials by January 15, and will receive one of the three admissions responses in early February: an offer of admission, postponement for consideration with the Regular Application group, or denial of admission. Students offered admission under this plan must make a non-refundable \$300 tuition deposit by March 7. It is thus important that candidates requesting financial aid file the appropriate forms at the earliest possible time. Instructions on applying for financial aid will be mailed when the application for admission is received or sooner upon request.

In choosing either of the Early Decision plans, candidates are indicating that Macalester is their first-choice college and that they would like early notification. **Under both plans, a candidate must apply to no other college or university under an early decision plan.** While early decision candidates may file regular applications to other institutions, the election of a Macalester Early Decision plan constitutes a pledge that these applications will be withdrawn and no new applications will be initiated when the candidate is offered admission to Macalester. If applying for financial aid, candidates may wait for the preliminary Macalester aid package before withdrawing other applications.

Regular Application: Under this application program candidates must submit application materials by January 15. Admissions decisions will be mailed during the last week of March. Students offered admission must make a non-refundable \$300 tuition deposit by the national Candidate's Reply Date of May 1. The non-refundable deposit is due regardless of whether a financial aid award

has been received, so candidates should be sure that financial aid materials have been submitted at the earliest possible date, and before March 1 at the latest

For all Macalester admission plans, candidates must submit their applications before the deadline to ensure thorough consideration by the Admissions Committee. Regular Decision applicants whose credentials are not received by January 15 will be considered only if additional places are available in the entering class. Also, housing and financial aid will be subject to availability for all late applicants.

Financial Aid: Macalester remains committed to meeting the full demonstrated financial need of every student offered admission to the College. First-year students applying for financial aid should complete the Free Application for Federal Student Aid (FAFSA), which is required for federal aid, and the Financial Aid PROFILE of the College Scholarship Service, which is required for Macalester gift-aid consideration. Both forms may be obtained from a high school or college counseling office and must be submitted to the respective agency directly. (Applicants for the academic year 2000–2001 should submit 1999 financial information.)

Early Admission: Occasionally 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 advisor, 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 Application process should be used by students seeking early admission to Macalester.

Advanced Standing: For students admitted to Macalester through the first-year admissions program, Macalester will accept for credit no more than the equivalent of twenty Macalester credit hours from courses earned at a college or university prior to matriculation at Macalester. Summer session college credits, Minnesota Post-Secondary Education Options Program credits, International Baccalaureate credits, and Advanced Placement Program credits are included under this limitation. (The only exception to this limitation applies to students who have achieved the equivalent of twenty-four Macalester credit hours solely through College Board Advanced Placement Examination.) Credits earned through Advanced Placement, International Baccalaureate or GCE A-Level examinations cannot be used to meet the college's general distribution requirement.

Macalester will not award credit for courses taken at a college or university which are used to satisfy any of the requirements for graduation at the student's secondary school.

Deferral: Each year, some students who have been offered first-year admission to Macalester request the deferral of their admission. Deferrals may be granted for a variety of reasons, most commonly to allow a student to spend time overseas. Deferral requests which are approved, at the discretion of the Dean of

Admissions, are granted for a period of one academic year. There are no semester deferrals. Candidates should be aware, however, that Macalester will accept no more than the equivalent of 20 credit hours for academic work completed prior to matriculation at Macalester, whether earned during secondary school or during the deferral period. Decisions regarding credit are made by the Registrar. Deferral requests or questions about the deferral process should be directed to the Admissions Office. For more information, phone the Admissions Office at (800)231-7974 or (651) 696-6357.

Methods of Application for Transfer Students

A transfer student is anyone who has been enrolled in a college or university as a degree-seeking student after graduating from high school.

Transfer students should follow the regular application procedures and submit a Dean of Students' Recommendation from the college at which they were most recently a degree-seeking student, plus transcripts of all high school and college work. Transfer applicants should usually present a cumulative grade point average of "B+" (or 3.33 average) or better. The application fee for transfer students is \$40.

Students considering transferring to Macalester may have their transcripts evaluated for the transfer of course credits prior to applying by sending an official transcript and specifically requesting this service from the Admissions Office. This evaluation is only preliminary, but is complete enough to be helpful in planning for transfer. The deadline for fall term transfer application is March 15. Notification of admissions decisions will be completed by May 15 for applications received by the deadline, and continues on a "rolling" basis after that date.

There is no spring term admission at Macalester for either transfer or first-year students.

Credits from accredited colleges will be evaluated according to the nature and quality of the work presented, as determined 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. Six "quarter credits" equal four semester hour credits; 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 one-half of the number of credits required for graduation will be accepted. All candidates for a Macalester College degree must successfully complete at least one-half of the number of credits required for graduation at Macalester or on an approved Macalester off-campus program.

International Student Admission

International students should direct inquiries and make application to Macalester through the Office of Admissions, Macalester College, 1600 Grand Avenue, St. Paul, Minnesota 55105.

An international student applicant is any candidate who is neither a citizen of the United States nor a U.S. permanent resident.

International candidates must submit the following materials:

- 1. The Macalester College International Student Candidate Application Form.
- 2. Three Candidate Recommendation forms from teachers or school officials.
- 3. Original or certified copies of high school and postsecondary transcripts signed by the proper authority and indicating courses taken and grades earned.
- 4. Original or certified copies, signed by the proper authority, of final high school examinations (leaving certificates) and standardized national examinations (GCE, WAEC or others). If the results of these examinations are not available at the time of application, they may be submitted separately.
- 5. Proof of English language proficiency as documented by results of the Test of English as a Foreign Language (TOEFL) or the SAT II English Language Proficiency Test (ELPT). Arrangements to take the SAT II or TOEFL test should be made well in advance through the student's school; the nearest U.S. Consulate; by writing to SAT, Box 589, Princeton, New Jersey 08541, U.S.A.; or by writing to TOEFL, Box 899, Princeton, NJ, 08541, U.S.A.
- 6. The results of the Scholastic Assessment Test (SAT I). Arrangements to take the examination should be made well in advance through the student's school, the nearest U.S. Consulate or by writing to SAT, Box 589, Princeton, New Jersey 08541, U.S.A.
- 7. Certified proof of financial support from parents and/or other sponsors.
- 8. For applicants requesting financial aid and who are not permanent residents of the United States, a completed Macalester International Student Financial Aid form.

Students Not Seeking a Degree

If a course is not fully enrolled by degree-seeking Macalester students, registration is sometimes possible for students not seeking a degree. Financial aid is not normally available; however, outside funds may become available and students not seeking a degree may inquire about this possibility if they need financial aid. An application for admission must be submitted to the Registrar's Office at least one month before the semester's first day of classes. Initial application for non-degree seeking status may be made only for the fall semester.

Macalester graduates may register for courses for credit during the registration period at the beginning of each term. Permission of the instructor is required to

register for each course. Registration information and class schedules are available through the Registrar's Office.

High school students. Macalester accepts a small number of high school students to take a course at the College through the Post-Secondary Enrollment Options program. To be eligible for the program students must have exhausted the programs and curriculum available at their high school in the subject they wish to study at Macalester and be in high academic standing. Interested students should contact the Admissions Office for application information.

Visits to the Campus

Prospective students and others desiring guided tours should contact the Admissions Office at least one week in advance of the intended visit. Appointments can be made for tours and interviews by phoning the Admissions Office at (651) 696-6357 or toll-free (800) 231-7974 between 8:00 a.m. and 5:00 p.m. weekdays throughout the year. The Admissions Office is also open for interviews and tours until noon on Saturdays from September through the second week of December and during the month of April. The office is closed on holidays, such as Thanksgiving, January 1, Martin Luther King, Jr. Day, Memorial Day, July 4, and Good Friday. The best time to visit the campus is during the academic year when classes are in session. Class visits may be arranged by contacting the Admissions Office at least one week in advance.

Prospective students may wish to stay overnight on campus. Arrangements to stay overnight on the campus must be made at least two full weeks in advance. Prospective students are housed with volunteer Macalester students; therefore, overnight visits are limited to one night only. Three meals are provided by the Admissions Office; visiting students may pay for any additional meals desired. More detailed information on overnight visits is available by writing or calling the Admissions Office at (651) 696-6357 or (800) 231-7974.

To Learn More Office Of Admissions Macalester College 1600 Grand Avenue

St. Paul, Minnesota 55105-1899

Phone: 651-696-6357 Toll free: 800-231-7974 FAX: 651-696-6724 TDD: 651-696-6833

Web: www.macalester.edu/ E-mail: admissions@macalester.edu

Tuition, Fees, and Room and Board 1999-2000

The tuition rate for full time students (12–18 hours per semester) for 1999–2000 is \$20,560 per year.

Fees

Application Fee	0
Enrollment Deposit (applied to first semester tuition charges)	0
Late Registration Fee	0
Late Validation Fee	5
Late Payment 40	0
Student Activity Fee	8
Newly admitted students pay a one time, non-refundable deposit of \$300 to	
reserve a place in the entering class. This deposit is applied to first semester	
tuition charges.	

Tuition

Regular	
Full-time, per academic year (12–18 hours per semester)	20,560
Part-time, less than 12 hours per semester (per semester hour)	645
Hours in excess of 18 (per semester hour to a maximum of 20)	1,290

Charges for hours in excess of 18 per semester are waived if students enroll for 12–14 hours in the other semester of the same academic year. They are not waived if students enroll in fewer than 12 hours or withdraw from a fourth course.

Special

Macalester Graduate, maximum of 5 hours per semester	645
(Graduates taking more than the stated credit limit are billed the regular pa	art-
time or full-time tuition rate for all credits.)	
Credit by Examination	2,580
Summer Independent Study (Summer 2000, per semester hour)	645
January Independent Study	harge

Music Lessons

(Music major/core/minor students: rates vary, see Performance Instruction under Music section of this catalog.)

Study Away

January or summer program: actual program cost plus \$35

Semester program: actual program cost plus \$375

Year-long program: actual program costs plus \$500

Except for a number of direct exchange arrangements with foreign universities, Macalester does not charge its own tuition for the credit it awards for study away. Instead, it adds a nominal study away charge to the actual tuition charges of a student's program, as billed by program sponsors, and substitutes

this for Macalester tuition during the period the student is away. In order to receive credit for study away, program tuition charges must be handled through Macalester.

Room and Board

Per academic year	5,760
(Room—2,990)	
(Board—2,770)	
Language Houses (room only)	3,190

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 should be returned immediately to the Admissions Office. Housing is assigned to new students in order of receipt of the residence hall application.

Refund Policy

The deposit made by an applicant is non-refundable. Therefore, if new students have difficulty with deposit deadlines they should contact the Admissions Office. (The \$300 deposit is applied as a credit against first semester charges.)

No tuition is refunded or credited after the 33rd class day of the semester.

Tuition refunds for official withdrawal from the College during the first 33 class days of the semester are as follows for returning students: a) 1st–7th day: 90 percent; b) 8th–17th day: 50 percent; c) 18th–33rd day: 25 percent.

Room and board refunds for both new and returning students are made on the same pro-rata basis as the tuition refunds outlined above. One week is added to the official date of room vacancy when computing the pro-rata refund. 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.

Students receiving financial aid who receive tuition and/or room and board refunds will receive a similar reduction in their total financial aid package. First semester students receiving Federal financial aid through Title IV programs will receive a pro-rata tuition refund consistent with Federal requirements. (See the Financial Aid section of the Student Handbook for additional refund policy information.)

No refunds are granted without first receiving official permission or withdrawal from the College from the Dean of Student's Office.

The student activity fee is non-refundable.

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

The Dean of Students may authorize exceptions to any part of this refund policy. For more information on the refund policy, contact the Bursar/Director of Student Accounts.

Payment of Student Accounts

Students are billed for the fall semester in mid-July, with charges due and payable on or before August 13. Students are billed for the spring semester on December 15, with charges due and payable on or before January 14. If full payment is not made by this date, an annual finance change of 8% is incurred on the balance due.

The amount billed each semester is determined by subtracting from the charges for the semester 50 percent of the yearly Macalester scholarship and grant aid awarded, along with any other money that has been paid from an outside source. To the extent that work study money has not been earned, or loan proceeds not applied to the account, this "anticipated" money will not appear as a credit on the account. To the extent that work study earnings or loan proceeds are needed to cover the balance due, students must make payment arrangements with the Student Accounts Office.

A Parent Loan Program is available, as well as an independent monthly payment plan with optional insurance and extended payment features. Information and application materials are available from the Student Accounts Office, Macalester College, 1600 Grand Avenue, St. Paul, Minnesota 55105.

Prior Indebtedness

Students who are not current on their payment plan will not be allowed to validate for a current or successive semester and will not be permitted to receive transcripts.

Other Policies:

A. NSF CHARGES: A non-refundable fifteen dollar (\$15.00) service charge is assessed to a student's account each time a check is returned for nonsufficient or uncollected funds. After 3 NSF checks, the student will be required to make further payments with cash, cashier's check or money order. All NSF checks include those returned to the Hungry Mind Bookstore.

B. GRADUATION: Outstanding balances must be paid in full 3 weeks prior to graduation. Graduates who have a balance owing may participate in commencement ceremonies but will not be allowed to receive their diploma or copies of transcripts. All students with loans must complete an exit interview before graduation.

C. TRANSCRIPTS: Transcript requests should be directed to the Registrar's Office. Requests are denied if a balance remains on a student's account. If a personal check is used to pay the balance, a five-working-day period is required before the transcript is released.

D. FINES: Fines should be paid as soon as they appear on the Student Account Statement.

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 students complete the financial aid process to determine eligibility of federal, state, and institutional assistance.

The amount of financial aid a student receives is based on how much the family can reasonably afford to contribute compared with the price of attending Macalester. To be considered for financial aid, a student must first submit a Free Application for Federal Student Aid (FAFSA) to the federal processor and a Financial Aid Profile to the College Scholarship Service. Second, the contribution expected of the student and family is determined by an analysis of the FAFSA and Profile. Third, the Macalester Financial Aid Office evaluates the family's financial data, reviews the computations made by the processing services, and determines the student's financial need. Finally, a financial aid package is awarded to the student and is based on the difference between what the family can reasonably afford and the cost of attending Macalester.

Prospective students interested in seeking financial aid should file admissions and financial aid applications by January 15. Macalester financial aid officers are available for consultation throughout the year and encourage students to make appointments to discuss their financial concerns.

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 study. 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 other organizations. All financial assistance from outside sources must be reported to the Financial Aid Office so it may be coordinated with Macalester aid.

In most cases a student must be 24 years old to file as an independent student. Students considering filing for aid as independent students are encouraged to contact the Macalester Financial Aid Office before completing their applications. Students entering Macalester as dependent students will remain so for institutional financial aid purposes to the completion of the bachelor's degree.

Returning students need to reapply for financial aid each year. Renewal aid forms are distributed to Macalester students by the Financial Aid Office. Renewed aid award notices are mailed to students in late May or early June. Students with work-study contracts are encouraged to find their jobs for the next academic year in late April.

How to Apply for Financial Aid

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

- 1. File a formal application for admission with the Admissions Office.
- 2. Complete the FAFSA and Financial Aid Profile and submit them to the appropriate processing services and request that a copy be sent to Macalester College. These aid application forms are normally available from high school guidance offices. If necessary, aid applications may be obtained from the Macalester Financial Aid Office.
- 3. All students receiving financial aid from the College are required to submit their parents' and their own federal tax returns and W-2 forms to support the financial information on the FAFSA and Financial Aid Profile.

NOTE: Students who are not U.S. citizens or U.S. permanent residents apply for financial aid to the Director of International Admissions.

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. 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 grant, work, and loan funds. Awards range from \$1,000 to the full cost of attendance. The amount of each type of aid varies according the student's financial need, College funds, and College aid policies. During 1998–99, more than 70 percent of Macalester's 1,700 full time students received financial assistance amounting to \$19 million. Approximately 75 percent of this amount was gift aid.

Macalester College Scholarships

General Scholarships. General scholarships, provided from the College budget, are awarded to freshmen, transfer students, and 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 through the financial aid process.

Endowed Scholarships. A large number of endowed scholarships are available as a result of generous gifts from friends and alumni of the College. Endowed scholarships are an integral part of financial aid at Macalester and contribute significantly to the policy of meeting full demonstrated need. The income from these funds is generally awarded to sophomores, juniors and seniors who have shown good academic performance and have financial need. These scholarships are listed elsewhere in 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 a minimum annual award of \$750. Macalester augments the minimum award with an additional \$4,250 scholarship for a total of \$5,000 for each of the four years. This award may be increased according to financial need.

DeWitt Wallace Distinguished Scholarships are awarded to students who are National Merit Semifinalists, Commended Students, and Finalists, who are not awarded a National Merit Scholarship. Recipients typically rank in the top five percent of their high school graduating class. The minimum annual award of \$3,000 can be increased according to financial need.

DeWitt Wallace Scholarships are awarded to middle income students who need assistance in order to attend Macalester and whose academic records have shown them to be worthy of recognition.

Catharine Lealtad Scholarships are awarded to African American, Hispanic, and Native American students who have achieved a strong high school record and who have been recognized by the National Achievement Scholarship Program or the National Hispanic Scholarship Program. The minimum annual award of \$3,000 can be increased according to financial need. This scholarship is named for Dr. Catharine Lealtad, Class of 1915, the first African American woman graduate of the College.

National Presbyterian Scholarships are awarded to members of the Presbyterian Church. Recipients selected by the National Presbyterian Scholarship Committee receive annual awards up to \$1,400 per year, depending upon financial need. Applications may be obtained from local church offices in the fall of the student's senior year of high school. The December 1 deadline is strictly enforced.

Macalester Student Employment is a significant part of the College's financial aid program. More than half of our students are employed part time on campus. In addition to federal and state funding, almost 75% of the employment program is funded by Macalester dollars. Macalester provides more than 1,100 on-campus jobs in administrative and service offices, academic departments, the library, grounds crew, etc. Job placement is determined by the student's interest and abilities, as well as the pool of available jobs. Upperclass students may participate in internships and work-study employment off-campus.

Federal Government Assistance

Federal Pell Grant 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. For the 1999–2000 academic year, the maximum award is \$3,125. Application is made by completing the FAFSA and designating Macalester College; school code 002358.

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

Federal Work-Study Program (FWS). Jobs are offered to students who demonstrate financial need. Under the program, Macalester pays at least 30% of the student's wages and the federal government pays the remaining 70%.

Loans

Federal Perkins Loan Program. 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 per year. Repayment and the 5 percent interest rate begins nine months after graduation or after a student drops below half-time enrollment.

Federal Stafford Student Loan (Subsidized and Unsubsidized). Stafford Student Loans are available to students enrolled at least half time and who complete the FAFSA. Students may apply to banks, savings and loan associations, credit unions or state-guarantee agencies that lend under the program. The maximum annual loan is \$2,625 for freshmen, \$3,500 for sophomores, and \$5,500 for juniors and seniors. The exact amount of the loan and type, Subsidized or Unsubsidized, depends upon federal guidelines. The student must pay a loan origination fee. Under the Subsidized Federal Stafford Loan program, no interest is charged, nor is repayment required while the student is in college. Under the Unsubsidized Federal Stafford Loan, the student is charged interest while in school, but may defer this interest during the school period.

Federal Parent Loan for Undergraduate Students (PLUS) is a federal loan program under which parents may borrow up to the cost of attendance less other financial aid. Borrowers pay a variable interest rate based on the 52 week T-bill rate + 3.10 percent, and is capped at 9 percent. Applications are available from the Macalester Financial Aid Office and from major financial institutions.

Minnesota Student Educational Loan Fund (SELF) is a student loan program available to Minnesota residents and students attending participating colleges in the state. Students may borrow a maximum of \$4,500 per year during the freshman and sophomore years and \$6,000 per year for the junior and senior years. This loan requires a co-signer and is a variable interest rate loan with interest starting at the time of the loan disbursement; repayment of the principal begins 13 months after the student leaves college.

State of Minnesota Aid

Minnesota State Grant Program. All Minnesota residents who are applying for financial aid apply for a state grant. Application is made by completing the FAFSA. In 1998–1999, 180 Macalester students received an average grant of \$3,300 through this program.

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

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 compliance 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 an undergraduate degree and receive federal financial aid. 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	A student must have	With at least this
of this full time	accrued at least	grade point average
semester	this many credits	
1	13	1.70
2	26	1.70
3	39	1.85
4	52	1.85
5	65	2.00
6	78	2.00
7	91	2.00
8	104	2.00
9	117	2.00
10	130*	2.00

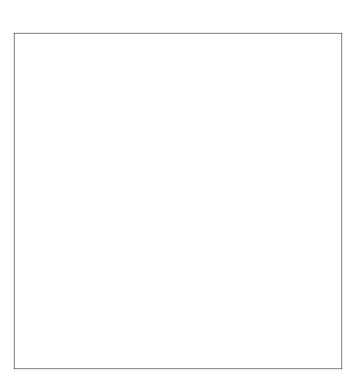
The number of hours required for graduation for the graduating class of 2000 will be 130, and for each subsequent graduating class, 128 hours will be required.

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, 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.

The Academic Program



The Academic Year

Calendar and Credit

The academic calendar at Macalester is divided into a 14 week fall semester (September to December) and a 14 week spring semester (February to May).

The Macalester credit system is based on the semester hour. Most courses are offered for four semester hours of credit, but the amount of credit may vary. Each course description in this catalog indicates the amount of credit assigned to the course. Credit policies for physical education activities, forensic and dramatic arts practica, music ensembles and lessons, and dance activities and ensembles are described in the departmental sections of this catalog, under curriculum.

January Offerings

Macalester students may earn up to two semester hours in independent projects, internships, or Macalester-sponsored off campus courses. Further information about January study options is available in the Registrar's Office.

Summer Offerings

Macalester students may earn up to eight semester hours in independent study during the summer through independent projects or internships. A learning contract must accompany each registration. Summer independents and internships are available only to current Macalester students.

In addition to independent study options there are occasionally credit-bearing institutes offered by Macalester faculty. These institutes are open to non-Macalester students.

Further information about summer independent study options or summer institutes is available in the Summer Study Office.

As a general rule, there is no financial assistance available for summer study. In addition, no special tuition rates are offered.

Graduation Requirements

- I. The number of hours required for graduation for the graduating class of 2000 will be 130, and for each subsequent graduating class 128 hours will be required. For all graduating classes, these credit hours must include:
 - A. Eight (8) semester hours in courses in the social sciences.
 - B. Eight (8) semester hours in courses in the natural sciences and mathematics.
 - C. Twelve (12) semester hours in courses in the humanities and fine arts; at least four (4) semester hours must be in courses in the humanities and four (4) semester hours in the fine arts.

- D. No more than ninety-six (96) semester hours in courses in any one of the four areas: social sciences, natural sciences and mathematics, humanities, and fine arts.
- E. No more than sixty (60) semester hours in courses in a single academic discipline.
- II. Four (4) semester hours earned in a course designated as meeting the International Diversity requirement and four (4) semester hours earned in a course designated as meeting the Domestic Diversity requirement.
- III. Approved major concentration plan filed and completed.
- IV. A cumulative grade point average (GPA) of at least 2.00.
- V. The number of semesters spent in residency must be at least four (4). At least one of these must be in the senior year. Participation in off-campus study programs does not count toward satisfaction of this requirement.
- VI. One (1) First Year Course completed in the first semester.
- VII. Proficiency in a second language equivalent to four (4) semesters of college study.
- VIII. 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 graduation requirements. Course credits may also be earned through successful completion of combinations of activity courses in communication studies, dance, dramatic arts, music, and physical education. (See departmental listings in the curriculum section of this catalog.)

General Distribution Requirement:

Not all courses fulfill this requirement. For courses which meet this requirement see the General Distribution Requirement section of each academic department.

Each student must take at least:

- A. Eight semester hours in courses in the social sciences: anthropology, communication studies, economics, geography, linguistics, political science, psychology, sociology, as well as some courses in other departments, meet this requirement.
- *B. Eight* semester hours in courses in the natural sciences and mathematics: biology, chemistry, geology, mathematics and computer science, physics and astronomy, as well as some courses in other departments, meet this requirement.
- *C. Twelve* semester hours in courses in the humanities and fine arts at least four hours of which are in the humanities and at least four in the fine arts. Humanities courses include most courses in classics, English, French, German

studies and Russian, history, humanities, Japanese, philosophy, religious studies, Spanish, as well as some courses in other departments. Fine Arts courses include most courses in art, dramatic arts, and music, as well as some courses in other departments.

Other Courses:

Courses in education and physical education, in addition to interdepartmental and non-departmental courses are regarded as "non-divisional" and do not satisfy any general distribution requirement.

Diversity Requirement:

Courses designated as satisfying the International Diversity requirement address the literary, cultural, political, historical, artistic, or religious heritage of a country, region, or culture outside of the United States. This requirement can be met either by courses offered at Macalester or by an approved study abroad program. Macalester courses which satisfy this requirement are listed in each department's program description found in this catalog, under curriculum. Departments listing such courses are: anthropology, art, biology, classics, communication studies, dramatic arts, English, French, geography, German studies and Russian, history, humanities and cultural studies, international studies, Japanese, music, philosophy, political science, religious studies, Spanish, and women's and gender studies.

Courses designated as satisfying the Domestic Diversity requirement concentrate specifically upon the literary, cultural, political, historical, artistic, or religious heritage of the diverse cultural groups living within the United States. Macalester courses which satisfy this requirement are listed in each department's program description found in this catalog, under curriculum. Departments listing such courses are: African American studies, anthropology, communication studies, comparative North American studies, dramatic arts, East Asian studies, English, history, music, political science, psychology, religious studies, sociology, and women's and gender studies.

II. 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) an established interdepartmental concentration; or 3) an individually designed interdepartmental major concentration. Within each of these types of concentrations the student is required to complete a capstone experience. The purpose of this capstone requirement is to give students experience with reading original research literature, doing original work, or presenting a performance. This requirement may be met in many ways, e.g., senior seminar, independent project, honors project. The means of completing this experience are designated by the major department, interdepartmental programs, and IDIM committees and so indicated in the catalog in the cases of departments and interdepartmental programs.

A student may obtain more than one concentration 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. A student may not graduate with only one or more cores or one or more minors.

- 1. A *departmental major concentration* consists of not less than thirty-two nor more than forty-four semester hours in courses within one department. Supporting courses included, a major must not require fewer than thirty-six semester hours nor more than sixty-eight semester hours. Departments will determine those courses, and sequences of courses, which constitute the various patterns for the major in that field. Departments will also designate the appropriate means for completion of the senior capstone requirement within each major. 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. An *interdepartmental major concentration* established by the faculty shall consist of not less than forty-eight semester hours nor more than sixty-eight semester hours in courses, including supporting courses. The sponsoring departments will determine those courses, and sequences of courses, which constitute the various patterns for the major in the field. No more than twenty-eight semester hours may be included from any one department. The interdepartmental program will also designate the appropriate means for completion of the senior capstone requirement within each major. The departments may also recommend additional electives as indicated by the student's educational and career objectives.
- 3. An individually designed interdepartmental major concentration (IDIM), reflecting a disciplined area of inquiry crossing departmental lines, may be designed and submitted for approval to the Curriculum Committee acting on behalf of the faculty. The provision for an IDIM—as one of the ways in which a student may satisfy the graduation requirement of a concentration—is to accommodate students with special educational goals which may be achieved within the College's overall curriculum but not through any of the existing major or interdepartmental major concentrations (see 1 and 2 immediately above) set forth in detail elsewhere in this catalog. To take advantage of this provision, students are expected to design their program of study in advance of doing the bulk of the course work for it.

Students seeking an individually-designed interdepartmental major (IDIM) must present, not later than the beginning of the registration period for the first semester of their junior year, a completed proposal, signed by the student and three faculty members, to the IDIM Subcommittee of the Curriculum Committee for consideration. In consultation with three faculty members of the student's choosing, the student must design a program of courses of study which crosses departmental lines and, in doing so, represents a disciplined area of inquiry not conveniently possible within the provisions of any of the existing major concentrations in the College's curriculum. The proposal must include the following: 1) A list of courses to be taken to complete the IDIM. This list must include a minimum of forty-four semester hours in courses from a maximum of three departments, and may include up to twenty-four additional semester hours in courses (for a maximum of sixty-eight semester hours) from any

relevant department. There must be evidence of progression in the proposed courses. One way to show progression is to use courses that have one or more prerequisites. 2) Letters of support from the three faculty who comprise the student's IDIM committee (a coordinator and two sponsors). These committee members must be from departments that offer courses listed on the student's proposal. Two letters of recommendation must be from faculty members who have had the student in class, who may or may not be members of the student's IDIM committee. 3) A carefully prepared written rationale. In this rationale the student is expected to describe the focus and cohesiveness of all the courses of study included in the IDIM and to indicate how this program of study meets the student's particular educational goals. The IDIM committee will also designate the appropriate means for the completion of the senior capstone requirement within the IDIM. The committee will meet with the student at least once every semester to discuss the student's progress towards completion of the IDIM.

No proposal for an IDIM will be accepted by the Subcommittee after a student has validated his or her registration for the first semester of the junior year.

Regulations Concerning Concentrations

Students must file an approved plan for a pattern of concentration (a major is required) 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.

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

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. Courses with a grade of D, D+, or D- may not be included on a concentration plan, except with the specific permission of the department chair.

III. First Year Courses: All first year students will be required to take, in their first semester of attendance, one course with the following characteristics: 1) enrollment of no more than 16 students with registration reserved for entering first year students, 2) the instructor will normally be assigned as the students' adviser, 3) special instruction in writing will normally be offered, and 4) the

course is offered for regular departmental credit. The specific courses available to meet this requirement vary from year to year, but typically each department sets aside one section of an introductory course and tailors it to fit the characteristics listed previously. For example, the Economics Department typically offers a section of Principles of Economics as a First Year Course, the Anthropology Department frequently lists a section of Cultural Anthropology, and the English Department usually offers a section or two of American Voices. In addition, some departments will offer courses specifically developed to be part of the offerings for this requirement. For example, in Fall 1997, the German Studies Department offered a course called The Dangerous Pursuit of Knowledge.

IV. Language Proficiency: Each student shall be required to demonstrate a level of proficiency in a second language—other than the student's native tongue—through a proficiency examination or by successfully completing the equivalent of four (4) semesters of college level study in a single language.

V. 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.

Core and Minor Concentrations

A *core concentration* in a given department consists of two sets of six courses (24 semester hours), 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.

A *minor concentration* in a given department consists of not less than sixteen nor more than twenty-eight semester hours in courses within one department. Departments will determine those courses, and sequences of courses, which constitute the various patterns for the minor in that field.

Latin Honors

Latin honors are awarded upon graduation. To be eligible for Latin honors a candidate must have earned at least half of the number of semester hours required for graduation in courses at Macalester, and may have no more than the equivalent of one course per semester graded on the S,D,NC grading option.

The designation *cum laude* is based solely on achieving a minimum cumulative GPA of 3.50. The designation *magna cum laude* will be based on achieving both a minimum cumulative GPA of 3.70 and successful completion of a Senior Honors Project. The designation of *summa cum laude* will be based on three criteria: 1) achieving a minimum cumulative GPA of 3.90, 2) the successful completion of a Senior Honors Project, and 3) a nomination letter from a

faculty member to the Academic Standing Committee which addresses the student's academic achievements. Note: Effective with the 2001 graduating class, a Senior Honors Project will no longer be required for *magna cum laude* or *summa cum laude* honors.

Honors

The Honors Program is designed to enable students with demonstrated ability to do independent, original research or creative work in a field of their choosing during their senior year. Students interested in entering the Honors Program should apply to the Honors Program director in the second term of their junior year. To be eligible for the program, students must have a minimum GPA of 3.00 and a faculty advisor who endorses the proposal and agrees to supervise it.

Participation in the Honors Program involves completion of an honors project by the scheduled date at the end of the student's senior year. Honors students usually spend the first term of their senior year engaged in research and the second term writing and revising their papers. The final step in the process is an oral examination conducted by the advisor and two other examiners. Successful completion of an honors project is noted on the student's transcript following graduation. In order to be awarded the Latin honors of *magna cum laude* and *summa cum laude* students must complete an honors project as well as satisfy other criteria (see section on Latin honors).

Students in the Honors Program are invited to occasional special events and colloquia where honors work being done by students is discussed. Bound copies of the completed honors theses are added to the library collection.

Beginning with the graduating class of 2001, the Honors Program will be distinct from the awarding of Latin honors. This means that students do not need to complete an honors project in order to graduate with Latin honors at any level—cum laude, magna cum laude, summa cum laude.

Furthermore, beginning with the class of 2001, the Honors Program will be departmentally based, with criteria and procedures for graduating with honors developed by individual departments and programs that offer a major. The minimum GPA for completion of honors in any department will be 3.30; however, some departments may require a higher GPA.

All departments and programs approved to grant honors will make available for distribution to students a description of the criteria and procedures for completing an honors project in that department. Students expecting to complete their degree in 2001 should consult their major department or IDIM committee for further information.

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 sixty-four Macalester semester

hours, and all other graduation requirements as previously listed. The general distribution requirement 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 matriculation at 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 matriculation (or readmission) or the requirements in effect at the time of graduation if such a change is feasible. This provision does not apply to the requirements for completing a major, core or minor concentration. Contact the appropriate department chair or program director for specific policies.

Curricular Recommendations

Basic Competency

Writing. The Macalester faculty promotes the development of advanced writing skills for college course work and for later career work. In response to students' scores on a variety of tests (SAT, ACT), the faculty sets expectations for first year students to attend specified courses to improve their writing skills. The faculty has also developed an all-college writing program so that writing skills developed in early courses will be sustained and further developed by writing exercise and instruction in advanced courses. Students should seek counsel from their academic advisor about how they may best meet these (and other) expectations.

Mathematics and Computing. The Macalester faculty recognizes the growing importance of mathematical, computational, and computer skills in the contemporary world and that proficiency in these skills is expected by potential employers and graduate or professional schools. Therefore, the faculty works with students to acquire and use the skills needed to meet these expectations. Students are encouraged to demonstrate their quantitative and computer skills early in their academic careers so that these skills can be developed and utilized during their course work at Macalester.

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. Students matriculating after September 1, 1993 must meet a foreign language graduation requirement of proficiency in a second language equivalent to two semesters of college study (or two years of high school study). Beginning with the class entering in the fall of 1997, proficiency in a second language equivalent to four semesters of college study is required.

Individualized Learning

Independent Study. Students are encouraged to complete an exceptional piece of independent work of intellectual or artistic merit. However, students may not pursue as an independent study a topic that is covered in a regular course or a learning opportunity that meets the criteria of the definition of an internship. A maximum of twenty-four credits in courses numbered 95, 96, 97, 98 may be counted toward graduation. Macalester students may not register in a single term for more than 6 semester hours of independent study credit which takes place outside of the Twin Cities area.

Internships. Macalester recognizes internships as an integral part of its curriculum, enabling students to participate in structured, supervised learning experiences off campus. The Internship Program strives to provide out-of-classroom opportunities which help students build on and enhance previous course work completed in a discipline by integrating distinctive work-learning experience off the campus with related curricular choices to reinforce learning on the campus. The Internship Program is an academic unit designed to serve students who undertake an internship for course credit. Students may engage in internships in a variety of settings which match their academic goals, including nonprofit organizations, government and business.

The objectives for the Internship Program are:

- 1. To provide opportunities for students to examine first-hand knowledge and theories learned in the classroom for their wider impact on society and the world at large.
- 2. To provide opportunities for students to evaluate and apply a body of knowledge and methods of inquiry from an academic discipline.
- 3. To provide students access to a larger or different "laboratory" of equipment and/or situations not easily obtained or available on campus.
- 4. To provide students expanded opportunities for self-directed learning.
- 5. To enable students to develop work competencies for specific professions and to explore career interests and form networks.
- To provide opportunities for students to develop intellectual and professional partnerships.

Students are advised to refer to the departmental sections for Course 97 and to consult individually with faculty members regarding departmental policies governing internships, including grading. 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. Students are required to complete a learning contract for each separate internship experience and have it reviewed and signed before they can register for an internship.

- c. A maximum of twenty-four credits in courses numbered 95, 96, 97, 98 may be counted toward graduation. Internship credits are included among these courses
- d. Students with first year status are not permitted to undertake an internship for credit during their first year at Macalester, including January.
- e. Students may not take an internship if they have any incompletes, unless they have the permission of the instructor who assigned the incomplete.
- f. Students on academic probation may not undertake internships.
- g. Students may not register in a single term for more than six semester hours of internship credit which takes place outside of the Twin Cities area, or for more than four semester hours of credit for a single internship in the Twin Cities.

Internationalism

Macalester's internationalism is defined by this challenge: to create an ambience that demands of our students and faculty to bring together the eternal quest for self-knowledge so constitutive of liberal education and the growing transnationalization of human life. This means, among others, the provision of numerous opportunities to reflect on self as, simultaneously, one develops more knowledge about specific cultures, ecologies, races, nations, and languages in a time of unprecedented globalization. Internationalism at Macalester, then, aspires to produce students confident in who they are, cognizant of the preciousness of creative intelligence, skillful in analyzing and understanding complex problems, and willing to assume leadership in a multicivilizational yet transnationalizing world.

The following programs and activities are the key elements of Macalester's internationalism:

- *Major in international studies.
- *Major in specific area studies (East Asia/Japan, Latin America, and Russia, Central and Eastern Europe).
- *Majors in French, German, Spanish, and Russian. French, German, Japanese, Russian, and Spanish language houses.
- *Special courses offered by visiting international faculty, including those under the auspices of the Hubert H. Humphrey Professorship and the Fulbright Scholar in Residence program.
- *Select but excellent study abroad offerings, including foreign language programs (see Special Programs section of this catalog).
- *The Macalester International Roundtable. This is a yearly intellectual event that focuses on one critical theme of global importance. A prominent world figure and seasoned scholars are invited to campus to deliver commissioned papers that are, in turn, discussed by Macalester faculty and students, and members of that year's fellows of the World Press Institute. The papers and responses are published the following spring in *Macalester International*, a publication that records the College's major activities in internationalism.

- *An International Center responsible for both international students and study abroad programs. The Center serves as a focal point of many international activities on campus.
- *A principle that ten to twelve percent of the student body should be international students and from as broad a representation of cultures and regions as possible.

Instructional Policies

Grades

1. *Grading Options*: For the fall and spring semesters 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. The grade of S is equivalent to a C- or better. For January or summer independent study, registered at Macalester, the options are the same.

Activity Courses: S and NC will be the only grades in any of the physical education activity courses, dance technique courses and practicum courses in communication studies. Music majors, cores, and minors will be graded on the regular grading option for ensembles and performance courses; non-music majors, cores, and minors should refer to the music department section of this catalog. Dramatic arts and dance majors and minors will be graded on the regular grading option for practicum courses; non-majors will receive S or 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, 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 course taken under the S, D, NC option without written evaluation, in the fall and spring semesters. 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 semesters. 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 taken under this grading option may not be included on concentration plans without specific departmental approval.
- 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 semester or by the published deadline for summer term.

- 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 beyond the first class day of the next semester, for completion of the course. In any such case, the instructor's submission of the "I" grade must be accompanied by a course completion agreement form specifying the work yet to be completed. This form is signed by both the student and the instructor.
- 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:

The GPA is calculated by dividing the total grade points by the number of semester hours attempted on the regular grading system. Grades for courses taken on the S, D, NC grading option, or courses with a grade of W, will not figure in the GPA. Grades for courses transferred to Macalester are not included in the GPA.

- 7. 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 counted toward the degree; grades for both courses will be included in the GPA.
- 8. *Reporting of Grades*: Instructors report grades to the Registrar's Office. Written evaluations will be reported on standardized forms provided along with the grade report forms. Copies of standard 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: To audit a course, a student must register in the Registrar's Office with the approval of the instructor. Refer to the section on Tuition and Fees in this catalog for information on additional charges (if any) for auditing an additional course. No entry will be made on the student's transcript for auditing a course.

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. 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.

Academic Advising

Through a strong faculty advising system, the College assists students in making informed curricular decisions. Students begin with advisors who usually are their instructors in first year courses. After students select a major, they may change to an advisor in that department or program. Information about faculty advising is available from the Academic Programs Office.

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 for registering or validating after the announced times of registration/validation. The fee for late registration is \$100; for late validation it is \$35. Late registration/validation will be accepted during the first two weeks of classes with the payment of the late fee. Students may not register or validate after that time except with special permission from the Registrar.

Student Course Load

A student normally enrolls in courses earning 16 hours of credit during each of the fall and spring semesters. A student may not register for more than 20 credit hours in a single semester.

Adding Courses

A student may add a course during the first three weeks of the fall or spring semester by obtaining the signature of the instructor of the course on the proper 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 semester by obtaining the signature of the instructor of the course on the

proper 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. Part time students and students whose course load changes from full time to part time as a result of officially dropping a course are subject to the tuition refund policy described elsewhere in this catalog.

A student may withdraw from a course between the end of the third and ninth weeks of classes by obtaining the signature of the instructor of the course on the proper 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 ninth week of classes, one of the grades described under Grading Options must be recorded.

Classification of Students

Normal progress toward graduation is as follows:

Class standing granted: Sophomore Junior Senior Number of semester hours earned: 32 64 96

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

Probation and Dismissal

The College monitors the academic performance of every student in order to offer support and services to those students who are not making satisfactory academic progress. Students are expected to earn their degree within a four year period. The academic record of every student is reviewed at the end of each semester by the Academic Standing Committee of the faculty. Academic status is calculated at the end of a term only. After the Academic Standing Committee has reached its decisions at the end of a term, a student's status will be reconsidered by the Committee only in cases where an action has been taken which prevents a student from re-enrolling in the College and the student has new information about his/her academic record to provide the Committee. Probationary status is never a part of a student's public record unless the student gives authorization to release this information.

Academic probation is intended as an indication 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 advisors, the Counseling Office and the Learning Center to provide counseling to students who are placed on academic probation.

As a result of the Academic Standing Committee's review of student records, a student may be placed on one of the categories of probation listed below. In addition to the specific term performance indicated below, the Committee also takes into consideration a student's cumulative grade point average as well as

any prior probationary status in determining the appropriate category of probation.

Academic Warning. Students with a term grade point average between 2.00 and 2.50 and/or at least one NC grade in a course carrying two or more credit hours may be placed on Academic Warning if the Academic Standing Committee sees reason to be concerned about their level of achievement.

Academic Probation. Students with a term grade point average below 2.0 and/or two or more NC grades in a course carrying two or more credit hours will be placed on Academic Probation.

Strict Academic Probation. Students will be placed on Strict Academic Probation when they are liable for academic probation for a second consecutive semester or when the Committee considers their record to indicate serious academic difficulties which warrant the addition of specific criteria to be met during the next semester in order to be removed from this probationary status. These criteria usually are that they must earn a term grade point average of a least 2.00 while earning a grade of at least C- in each course they take. They must be registered as a full-time student taking twelve or more credit hours and they may not receive the grade of Incomplete in any of the courses in which they are enrolled. A student on strict academic probation shall be regarded as not making satisfactory academic progress toward a Macalester degree and as such is ineligible to compete in intercollegiate athletics or to hold an elected office.

Suspension. A student will be suspended from the College for failure to meet the criteria established for removal from Strict Academic Probation. Additionally, students are suspended for one or two semesters after two consecutive semesters on academic probation (or strict academic probation) unless the Academic Standing Committee finds that this action would not be appropriate. Under exceptional circumstances, the Academic Standing Committee may suspend students from the College without first placing them on probation.

Students who wish to return after a suspension must apply for readmission to the College. In order for a student to be admitted, the Academic Standing Committee expects to see evidence that the student is ready to return and have a successful experience. Shortly after receiving a suspension letter, students are expected to work out a plan with either the Dean of Students or the Dean of Academic Programs for how they will provide this evidence of readiness to return. In most cases students will attend another institution of higher education during their suspension period and earn grades which demonstrate their ability to perform successfully in an academic environment.

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.

Appeals of decisions of the Academic Standing Committee must be made in writing no later than one month after the date of the letter stating the committee action. Appeals should be made to the Curriculum Committee as a whole through the Dean of Academic Programs. The Committee may or may not choose to hear the appeal. The Chair of the Curriculum Committee will inform the petitioner and all concerned College officials of the results of the Committee's determination.

Academic Integrity

Macalester College expects academic honesty from all students and faculty. Academic honesty encompasses accurate portrayal of contributions and appropriate use of resources.

For more specific information about Macalester's Academic Integrity Policy please refer to the *Faculty Handbook* or *Student Handbook*, or contact the Dean of Academic Programs.

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 Dean of Students to complete the appropriate withdrawal form. In order to obtain tuition or room and board refunds, the student must follow the policy described under "Refunds."

Leave of Absence

The Dean of Students may grant a leave of absence for a duration of one semester up to one year to any student requesting to leave Macalester for personal reasons or for the purpose of attending another institution (see section on non-Macalester Study Away Programs).

In order to request a leave, a student must have completed the first term as a new student and be in good academic standing. First year students leaving in their first term at Macalester are not eligible to return before the following Fall.

A form requesting a leave of absence must be completed in the Dean of Students Office no later than the 10th day of the current term. (Deadlines are for Fall Term 1999–00, September 21st and Spring Term 1999–00, February 11th.) Any student who wishes to leave Macalester for the purpose of entering military service or fulfilling mandatory religious obligations shall be granted a leave of absence upon notification of the Dean of Students.

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 makeup of incomplete courses.

Questions about a leave of absence should be addressed to the Dean of Students Office.

Involuntary Leave of Absence

A student may be placed on involuntary leave when she or he demonstrates developing and/or continuing behavior which threatens the life or health of themselves or another member of the Macalester community. The Dean of Students is responsible for placing a student on involuntary leave. A panel of community members reviews the Dean's decision.

A student placed on involuntary leave must request readmission to the College. The complete involuntary leave policy may be found in the Student Handbook. Questions should be addressed to the Dean of Students Office.

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. When a student is readmitted to the College, he or she must then satisfy the graduation requirements in effect at the time of readmission in order to complete their degree.

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 semester in which the student is registered for at least twelve semester hours, or a summer term in which the student is registered for at least four semester hours. The grade received will be included in the student's GPA.

A student is limited to earning eight semester hours of credit 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.

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

Advanced Standing

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. 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 before that course can be transferred.

The Macalester credit system is based on the semester hour. For conversion purposes, six quarter hours are equivalent to four semester hours. No more than the equivalent of one half of the semester hours required for graduation may be transferred from another institution to Macalester. No more than the equivalent of eight (8) semester hours earned through a correspondence program or through distance learning 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 University 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.

Advanced Placement Program

Students who have taken the College Board Advanced Placement Examinations may be eligible for advanced placement and appropriate credit. Freshmen who wish to have their scores considered should have them sent to Macalester College. Scores of 3, 4, or 5 *may* result in credit or exemption. Academic departments determine which scores result in credit or exemption for their subject. Some departments require the student to discuss their scores with the department chair before a credit determination is made. A score of two will receive no credit, but the academic department involved may recommend some exemption. A score of one will receive neither credit nor exemption. A maximum of twenty-four semester hours of credit through advanced placement may be counted toward a bachelor of arts degree.

Macalester will not accept credit for courses taken by students in their high school, outside of those from the Advanced Placement Program. Advanced Placement credit is only granted on the basis of the examination scores. In addition, Macalester does not recognize the College Level Examination Program (CLEP) tests for advanced standing.

Macalester will accept for credit no more than the equivalent of twenty semester hours from courses earned at a college or university prior to graduation from high school. Such credit will be accepted only with verification from a high school official that the credits were not used to meet high school graduation requirements. Summer session college credits, Minnesota Post-Secondary Education Options Program credits, and International Baccalaureate credits are included under this limitation. Credits earned through the Advanced Placement Program are subject to the limitation described above. Credits earned through Advanced Placement, International Baccalaureate, or GCE A level examination can not be used to meet the College's general distribution requirement. Please refer also to the Advanced Standing section of the Admissions Policies.

Other Credit Opportunities

Students whose scores on Higher Level Examinations of the International Baccalaureate Program are 5, 6, or 7 receive the equivalent of four or eight semester hours of credit for each such examination. Credit is determined by the appropriate academic department on an individual basis and is subject to the limitation described in the preceding paragraph.

International students who have not earned university level academic credit will have their advanced standing limited to no more than twenty semester hours. Those who have completed A Level Examinations in order to earn a General Certificate of Education (GCE) receive the equivalent of eight semester hours of credit for each A Level Examination with a score of A, B, C, or D. No more than the equivalent of twenty semester hours can be earned in this manner.

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 Provost.

The Curriculum

Departmental Concentrations

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

Anthropology
Art (major and minor only)
Biology
Chemistry (major and core only)
Classics
Communication Studies (major and minor only)
Computer Science
Dance (minor only)

Dramatic Arts (major and minor only)

Dramatic Arts & Dance (major only)

Economics (major and core only)

English (major and minor only)

French

Geography

Geology

German Studies

History (major and minor only)

Linguistics

Mathematics

Music

Philosophy

Physics

Political Science (major and minor only)

Psychology (major and minor only)

Religious Studies

Russian

Sociology

Spanish

Interdepartmental Concentrations

African American Studies (minor only)

Comparative North American Studies (minor only)

East Asian Studies (major and minor)

Environmental Studies (major only)

General Science (core only; see education department)

Humanities and Cultural Studies (major only)

Individually Designed Interdepartmental Major

International Studies (major only)

Japan Studies (major and minor)

Latin American Studies (major only)

Legal Studies (minor only)

Neuroscience (major only)

Russian, Central and East European Studies (major only)

Social Science (major only; see education department)

Urban Studies (major only)

Women's and Gender Studies (major and minor only)

Interdepartmental Programs

Pre-Law Program

Pre-Med Program

Cooperative Programs

Liberal Arts and Architecture Liberal Arts and Engineering

Liberal Arts and Nursing

The College offers courses, but not degree programs, in the departments of education, Japanese language, 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.

Independent Study

One aspect of the individualized learning fostered by Macalester's curriculum is the opportunity for independent study. This makes it possible for the student to complete a long term 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. No more than twenty-four semester hours earned in independent study courses numbered 95, 96, 97, 98, may be applied toward the number of semester hours required for graduation. Macalester students may not register in a single term for more than 6 semester hours of independent study credit which takes place outside of the Twin Cities area. An independent project or tutorial which takes place within the Twin Cities area may earn from one to eight semester hour credits (curriculum committee approval is required for credit of five or more semester hours). A Twin Cities area internship or a preceptorship may earn no more than four semester hour credits. The 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 off-campus learning experience in which students apply and acquire knowledge and skills, while working in a responsible role within a community, business or government organization 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. Policies pertaining to preceptorship course credit are:

1. Credit may not be earned for precepting the same course more than once.

- 2. To precept a course, a student must previously have earned credit in that course with a grade of B or higher or have earned credit with a grade of B or higher in a course having the course to be precepted as a prerequisite. Certain departments may have additional prerequisites for registering for preceptorship credit. Students should consult the departmental sections of the current catalog for this information.
- 3. Students may earn no more than four credits for precepting a single course.
- 4. Students on academic probation may not serve as a preceptor.

A student wishing to register for preceptorship course credit should meet with his/her faculty sponsor to discuss and complete a Preceptorship Learning Contract. Prior to completing registration for this preceptorship, the student should bring the completed Learning Contract to the Academic Programs Office for final approval by the Dean of Academic Programs.

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 and descriptions of the work are 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.

Privacy Rights of Students

Student information, other than public information and a student's area of concentration, is released only upon the written authorization of the student or former student. Public information is determined by the College in compliance with the Family Educational Rights and Privacy Act of 1974, as amended, and the Macalester College Student Rights, Freedoms, and Responsibilities Document (see the current Student Handbook).

African American Studies

Faculty: Anthony Pinn (Program Coordinator, Religious Studies), Peter Rachleff (History), Daphne Foreman (Biology), Roy Kay (English), Kendrick Brown (Psychology), Duchess Harris (Political Science)

Part Time Faculty: Mahmoud El-Kati (History)

The African American Studies minor gives students the opportunity to analyze the intellectual and cultural contributions and the experiences of African Americans from a variety of disciplinary and interdisciplinary perspectives. Students develop a faculty-directed, systematic, and multi-disciplinary approach to the subject matter and are encouraged to integrate their interests in this subject matter with their work in other disciplines and programs. Students also have the opportunity to place the African American experience within the context of race and diversity in America through the relationship between African American Studies and the Comparative North American Studies program.

General Distribution Requirements

Courses approved for the African American Studies minor but offered through other departments satisfy the general distribution requirements as specified by those departments.

Diversity Requirement

The course in African American Studies which satisfies the domestic diversity requirement is number 50, Introduction to African American Studies.

Minor Concentration

The minor will consist of seven courses. Three courses are required: "Introduction to African American Studies" (African American Studies 50-01), a Senior Seminar (African American Studies 88), and "Introduction to Comparative North American Studies" (Comparative North American Studies 50). Students must also successfully complete at least four courses from at least two departments from the approved list below. The list of courses is periodically updated by the Steering Committee.

COURSES

50 TOPICS Introduction to African American Studies

This class will explore what it has meant to be African American in the United States and how this identity shaped Black community, thought, and life. This course, using a variety of disciplinary approaches, exposes students to issues and problems in the development of African-American identity, and provides students with theoretical tools and contextual sensibilities necessary for advanced courses and independent projects in African American Studies. Every year. (4 credits) 88 SENIOR SEMINAR

Within this course minors undertake in-depth study of select topics. Students gain and apply advanced theoretical knowledge to central issues in African American Studies. Every year. (4 credits)

96 INDEPENDENT PROJECT (4 credits)

97 INTERNSHIP (4 credits)

98 PRECEPTORSHIP (4 credits)

COURSES APPROVED FOR AFRICAN AMERICAN STUDIES MINORS

Anthropology

41 Race, Race Privilege, Whiteness

Communication Studies

50 Blackness and the Media

50 Racial Formation, Culture, and U.S. History

Comparative North American Studies

50 Racial Formation, Culture, and U.S. History

Dramatic Arts and Dance

53 Black Theatre

Economics

50 African Americans and Economics

English

- 21 American Voices (when appropriate)
- 50 Images of African Americans in Contemporary Hollywood Films 50 African-American Internationalist Writing
- 52 African American Writers of the U.S.

History

- 24 Afro-American History: Slavery, Emancipation & Reconstruction
- 31 Black, White and Red in American History
- 45 The Black Experience since World War II
- 47 Sports in the Afro-American Community
- 49 Afro-Americans and the Transformation of the City, 1890-1945
- 50 Peoples and Cultures of Africa
- 50 Frederick Douglass and His Times
- 50 Racial Formation, Culture, US History

Music

57 Jazz and Social Issues

Political Science

- 42 Race, Ethnicity, and Politics 50 Modern African-American Political Movements
- 50 Black Public Intellectuals
- 88 Critical Race Feminism

Psychology

- 50 Psychology of Prejudice
- 88 African American Psychology

Religious Studies

- 28 African American Religions
- 29 Black Christian Churches in the United States
- 36 Black Religious Thought I, 1829–1915
- 37 Black Religious Thought II, 1915–1993
- $50\,\mbox{The}$ Religious Thought of Martin Luther King, Jr. and Malcolm X

Sociology 50 The Black Family`

Women's and Gender Studies

- 50 African American Women's History
- 89 Contemporary Black Feminist Theory

Anthropology

Full Time Faculty: Arjun Guneratne, David McCurdy (Chair), Anna Meigs, Anne Sutherland, Jack Weatherford

Part Time Faculty: Sonia Patten, Orrin Shane

The anthropology department emphasizes the study of world cultures, globalization, ethnicity, race, identity, ethnography and the practice of anthropology.

Students with an anthropology degree will have knowledge of the culture areas of the world, will explore how identity is formed within cultural frameworks, will develop skills in doing firsthand research including observation and interviewing, and will understand global systems. Students will learn both traditional (structural-functional; evolutionary) and contemporary (post-modern; feminist) theory.

Department offerings are organized into four broad areas. The first consists of key theoretical areas such as globalization, ethnicity, race, gender, colonialism, world systems, development and nationalism. Second are courses on world areas. These include Latin America, Africa, South Asia and North America including American Indians. Third are offerings on institutions such as political systems, religion and medicine. Fourth are courses on method and theory in anthropology. The department also offers courses on museum anthropology in conjunction with the Science Museum of Minnesota.

The anthropology department is committed to participation in a number of Macalester interdisciplinary programs but is in particular interested in the International Studies, Latin American Studies and Women's and Gender Studies Programs.

Students may design a program in preparation for graduate studies in anthropology. An anthropology major, however, will also prepare students for careers in law, business, government, museum administration, 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 advisors.

General Distribution Requirement

All courses in the anthropology department satisfy the general distribution requirements in the social sciences except for courses numbered 95, 96, 97, 98.

Diversity Requirement

The courses in the Anthropology Department which satisfy the domestic diversity requirement are those numbered 30,41 and 54. The courses which satisfy the international diversity requirement are those numbered 11,20,39,52,56,58,60,62,64,66 and 85.

Major Concentration

A major in anthropology consists of nine courses, to include: Anthropology 11, a senior level course (85, 89, or 88) and other anthropology courses chosen in consultation with a department advisor. It is strongly urged that majors take ethnographic interviewing (30) and the theory course (89).

The senior capstone requirement in anthropology may be satisfied by taking the Senior Seminar or an alternative course or project with the approval of the department chair.

Students who plan to apply for graduate work in anthropology should take Ethnographic Interviewing, Contemporary Anthropological Theory and also include courses that reflect basic approaches in anthropology, such as Anthropology 45, 49, 64, and 67. Planning should start early in consultation with a department advisor 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 Anthropology 11, and should design their remaining pattern of courses in close consultation with their advisor.

Minor Concentration

A minor in anthropology consists of five courses chosen with the assistance of the student's departmental advisor. One of the courses must be Anthropology 11.

COURSES

Introductory Courses

Open to first year students

11 CULTURAL ANTHROPOLOGY

The cultural perspective on human behavior including case studies, often illustrated by ethnographic films and slides, of non-Western and American cultures. May include some field interviewing. Includes the cross cultural treatment of economic, legal, political, social and religious institutions and a survey of major approaches to the explanation of cultural variety and human social organization. Every semester. (4 credits)

12 ARCHAEOLOGY AND HUMAN EVOLUTION

The origin and development of prehistoric peoples and cultures. The concepts, methods, and theories of prehistoric archaeology, human paleontology, and human biology as a framework for examining the fossils and artifacts left by humans. Course includes films and the use of casts and slides to illustrate concepts. Alternate years. (4 credits)

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. Alternate years. (4 credits)

Intermediate Courses

Open only to students who have taken Anthropology 11, including first year students.

30 ETHNOGRAPHIC INTERVIEWING

An introduction to ethnographic field interviewing learned in the context of individually run student field projects. Focuses on the anthropologist-informant field relationship and the discovery of cultural knowledge through participant observation and ethnosemantic interviewing techniques. Every semester. (4 credits)

39 MEDICAL ANTHROPOLOGY

This course focuses on an ecological approach to health, disease and therapies. It examines relationships among environmental factors, historical events, and sociocultural definitions of health and illness. Case studies will be used to illustrate the complexity of these relationships in different cultural settings. Every year, spring semester. (4 credits)

41 RACE, RACE PRIVILEGE, WHITENESS

In this course we explore the notion of race as an important construct in the experience of all Americans. Our particular though not exclusive focus will be on whiteness, a topic of developing interest among scholars interested in race. We will study race as it is constructed in particular moments of interaction, in films and literature, and as it has been constructed over time. Ethnographic literature will be examined for its implicit racial meanings. Readings will be drawn from anthropology, cultural studies, and critical race theory. Every year. (4 credits)

43 ARCHAEOLOGY OF THE ROMAN WORLD

A survey of the physical remains of the culture which flourished from 63 B.C.E.–410 C.E. Evidence for social and political institutions, the development of cities and towns and the physical remains of the Roman period are examined. Special attention is given to the use of archaeological method and the reconstruction of the history of the civilization of the Roman world. Alternate years. (4 credits)

45 INTRODUCTION TO MUSEUM ANTHROPOLOGY

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, every year. (4 credits)

48 THE ANTHROPOLOGY OF RELIGION

An introduction to the basic concepts through student participant observation over an extended period at a local congregation. Some interviewing also required. Post modernist issues in ethnographic practice explored in detail. Alternate years. (4 credits)

49 FEMINIST PERSPECTIVES IN ANTHROPOLOGY

Study of the central feminist works in anthropology from 1970s through 1990s. Exploration of the status of women cross-culturally, gender as a category of analysis, third world feminism and critiques of first world feminists, and the new feminist and post-modern ethnography. Every year. (4 credits)

50 TOPICS

Examination of selected topics of concern to anthropology, such as Ecology, Anthropology and the Natural Environment, Economic Development, Issues of World Culture, and The Culture of Food. To be announced at registration. (4 credits)

52 CONTEMPORARY CULTURES OF LATIN AMERICA

A survey course of the region from Mexico and the Caribbean to South America. This course will explore Latin American historical processes, ideologies, economic and social structures, and interest groups, with a focus on the interaction between the state and indigenous peoples. Alternate years. (4 credits)

54 PEOPLES AND CULTURES OF NATIVE AMERICA

A survey of the traditional cultural areas of the Americas and of selected topics related to American Indians. The course introduces the peoples, languages, subsistence patterns, and social organizations in America at the time of European contact, and traces selected patterns of change that have come to these areas. Alternate years. (4 credits)

56 PEOPLES AND CULTURES OF SOUTH ASIA

This course focuses on the culture, origin, nature, variation, and dynamics of South Asian peoples. Topics include South Asian prehistory, language, regional variation, family, caste, religion, economy, politics, change, development, separatist movements, and industrialization, with emphasis on the local level. Alternate years. (4 credits)

58 PEOPLES AND CULTURES OF AFRICA

This course will present an overview of African cultures and societies as documented in the anthropological literature. Classic and contemporary ethnographies will be used to illustrate the social transformations which are occurring in Africa. Alternate years. (4 credits)

60 THE ANTHROPOLOGY OF TOURISM

Tourism has become the new meeting ground between the "Third World" and the "West." It represents the largest movement of people outside of wartime and one of the greatest sources of foreign exchange. This course is a study of the impact of different kinds of tourism (mass tourism, ecotourism, sand-sea-sun-sex tourism, ethnic tourism) on local peoples, environments and economies. Looks at the historical development of tourism and its links to both travel as a leisure pursuit in the colonial period and to economic developments in industrializing Europe. Also looks at the creation of tourism landscapes, both "natural" landscapes and those of "cultural heritage." Examines the tourist encounter and the models used to analyze it. Issues discussed include cultural mediation, the politics of cultural representation, and the problems of commoditization of culture. Alternate years. (4 credits)

62 CULTURE AND GLOBALIZATION

The world is far more interconnected today than ever before, but what does this mean in terms of culture? This course looks at the impact of globalization on cultures and at examples of global cultures such as tourists and immigrants, media and popular cultures, world cities, and transnational intellectuals, ethnicities and ideologies. It also looks at the way cultures interact at geographic borders and in the margins of society. Every year. (4 credits)

63 ANTHROPOLOGY OF DEVELOPMENT

The goal of this course is to develop an anthropological understanding and critique of "Third World" development during the last fifty years. The aim is to examine both the discourse of development and its practice. The course focuses on the construction of the Third World as an "underdeveloped" area, and discusses the dominant theoretical paradigms of development and modernization. It assesses the reasons for the general failure of development programs based on these models to bring about meaningful and substantive change in societies in Asia, Africa and Latin America, and discusses possible alternatives to "development" as it is currently practiced. Alternate years. (4 credits)

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. Alternate years. (4 credits)

65 ENVIRONMENTAL ANTHROPOLOGY

It is a truism that human beings have always transformed their natural environment, but the scale and long-term consequences of the contemporary environmental crisis far exceed the localized ecological degradation that has taken place in the past. One important reason for this transformation — and the point of departure for this seminar — is the globalization of economic life and the subjection of local economies and their resource bases to the relentless logic of world capitalist production and the consumer-oriented culture of capitalism. This seminar is an inquiry into the nature of the political, cultural, and social structures that have combined to generate contemporary environmental problems. The aim is to understand the way the "environmental crisis" of resource scarcity and ecological degradation is the outcome of particular configurations of power and economic inequity, both at the global level and within states. Every year. (4 credits)

66 NATIONALISM AND THE MODERN WORLD (Same as Political Science 66)

Nationalism is a culturally-based political phenomenon that has, in recent years, taken on a renewed lease of life. Course will focus on a theoretical understanding of nationalism, drawing on the perspectives of anthropology, history and political science, which students will use to develop seminar

papers. Cases to be considered include Zionism/Israeli nationalism, the disintegration of Yugoslavia, the rise of militant Hindu nationalism in India and the vicissitudes of the nationalist project on the African Continent. Students will be expected to present preliminary drafts of their own papers on various aspects of nationalism at the end of the seminar. This seminar is not open to first year students. Alternate years. (4 credits)

67 SYMBOLIC ANTHROPOLOGY

Exploration of the central ideas about culture and symbol in the works of the 1960s through the 1990s. Deals with literature traditionally identified with "symbolic anthropology" as well as the more recent post-modern and cultural studies approaches. Focus is on student application of concepts in multiple papers. Alternate years. (4 credits)

68 CULTURE AND SELF

An examination of the self as a cultural construction with exploration of specific cross-cultural differences. Will explore ideas of multiple and fluid selves (the post-modern perspective) as compared with the common Western understanding of self as fixed and findable. Students will do some writing of own life histories. This class will also study notions of individuality versus communality, and racial aspects in the construction of self. Alternate years. (4 credits)

Advanced Courses

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

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, every year. (4 credits)

85 SEMINAR IN WORLD 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. (4 credits)

87 DEVELOPMENT OF ANTHROPOLOGICAL THEORY

This course introduces students to the development of social and cultural theory in anthropology from its origins in the 19th century to the period of decolonization following World War II. The course focuses on the development of three broad theoretical approaches: the American school of cultural anthropology shaped by Franz Boas, British social anthropology, and the French school that emerged from the work of Durkheim and his followers. The course will examine in some detail theoretical approaches such as functionalism, structural functionalism, cultural materialism, symbolic analyses and interpretive approaches to the study of culture. Every year. (4 credits)

88 SENIOR SEMINAR

The senior seminar is for anthropology majors who are working on their senior project and is designed to help students develop that project for presentation. The seminar will also include reading of anthropological works, guest speakers and discussion of current controversies in the discipline. Students are urged to take the Theory course as preparation for the senior seminar. Spring semester, every year. (4 credits)

89 CONTEMPORARY ANTHROPOLOGICAL THEORY

This course is designed for majors and cores who are interested in recent developments in cultural anthropology. The course is organized around the major schools of thought since the 1980s, 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. Every year. (4 credits)

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. Every semester. (4 credits)

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 or arrange their own internships. Students will be expected to produce an ethnographic paper for the instructor in addition to approximately 10 hours per week at the internship site. Only one internship may count towards an anthropology major. The department views internships as a valuable experience in which the student has an opportunity to "study" a job. Every semester. (4 credits)

98 PRECEPTORSHIP

Work in assisting faculty in the planning and teaching of a course, precepting or tutoring. Every semester. (4 credits)

Art

Full Time Faculty: Donald Celender (Chair), Ruthann Godollei, Mayra Rodriguez, Jerry Rudquist, Stanton Sears

Part Time Faculty: Gabriele Ellertson, Gary Erickson, Mary Hark, Clarence Sheffield

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

- 1. Students wishing to gain familiarity with the practice and history of art, and/or to increase their appreciation, utilization, and creative application of art principles in daily living;
- 2. Students pursuing a career as a professional artist or in arts-related fields. These students should consider graduate work in a specialized media;
- 3. Students interested in the historical and philosophical understanding of art and in pursuing a career in art history, museum or gallery work. These students should consider graduate work in art history;
- 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 be non-majors or may pursue an art major (either an art studio emphasis plan or an art history emphasis plan). The second group should follow the art studio emphasis plan. The third group should follow the art history emphasis plan. The fourth group should follow the dual degree architecture program.

The non-major student is especially welcome to enroll in both art history and studio courses. Learning in studio courses for the less experienced is enhanced by the courses comprising a mix of major and non-major students. The art building and its facilities are especially designed to encourage the coordination and synthesis of the practice, theory, and appreciation of art. Students not taking art courses are encouraged to visit the art building to see ongoing, informal exhibitions of work being done in the studios.

Another feature of the art department is its exhibition program, housed in the Macalester Galleries. The galleries are centrally located in the garden setting of the Janet Wallace Fine Arts Complex. The galleries host 6–8 exhibitions each year bringing art students in contact with the arts of many cultures from both contemporary and historical periods. The exhibition program is an integral part of classroom instruction, and our faculty routinely tour the gallery with students to further illustrate what is taught in class. Art students exhibit their work each spring and art majors prepare and mount comprehensive exhibitions during the spring of their senior year.

Art Alliance

An organization for students authorized by the Community Council, the Art Alliance plans special activities related to art beyond the Art Department's formal program. It administers the Drawing Co-op, an informal opportunity to draw from the figure model. Art Alliance members serve as student representatives at weekly Art Department meetings.

General Distribution Requirement

All Art Department courses satisfy the general distribution requirement in the fine arts. Drawing (Art 30) is recommended as an introduction to the studio courses in the department and Principles of Art (Art 49) is recommended as an introduction to the art history courses. However, these are not required prerequisites to other art courses.

Diversity Requirement

The courses which satisfy the international diversity requirement are those numbered 76 and 77.

Major Concentration

A major in art may be earned through either: 1) *art studio emphasis plan* 2) *art history emphasis plan* or 3) *dual degree architecture program.*

Art Studio Emphasis Plan

Requirements consist of 12 courses: Art 30, 49, 60, 61, 88; one from 34, or 36; one from 32, 35, 37 or 38; one from 66 or 67; one from 70, 71, 72, 73 or 74; one elective course from the art curriculum, and two from dramatic arts and dance, music, or literature. A final comprehensive exhibition is also required in the senior year.

The senior capstone requirement for the art studio emphasis plan is satisfied by Senior Seminar (Art 88) and the final comprehensive exhibition.

Students intending to teach art in elementary and/or secondary schools should complete the art studio plan and Macalester's program for K-12 licensure in art. 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 History Emphasis Plan

Requirements consist of 12 courses including: Art 49, 60, 61, and 87 plus five courses selected from 52, 59, 62, 64, 65, 76, and 77; one course selected from Art 30, 34, 36 or 66; one course selected from Art 32, 35, 37, 38 or 67; one from anthropology (cultural) or history (beyond the humanities requirements). An oral presentation of a paper on an art history topic approved by the department faculty is also required in the senior year.

The senior capstone requirement for the art history emphasis plan is satisfied by The Art History Methodology Seminar (Art 87) and the oral art history presentation.

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 nine courses in the art department: 30, 34, 35, 49, 60, 61, 66, 67 and 70. A final comprehensive exhibition or project is required at the end of the junior year. Two additional courses in the sciences are also required.

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

Minor Concentration

A minor in art includes two areas of emphasis, studio or art history, each requiring six courses distributed as follows:

Studio Emphasis

Four courses in studio: 30; one from 34, 36 or 66; one from 32, 35, 37, 38 or 67; one elective studio course; two lecture courses, 49 plus any art history course, are required.

History Emphasis

Art 49 plus three art history courses: 60, 61, and one elective art history course; two studio courses, one from 30, 34, 36 or 66, and one from 32, 35, 37, 38 or 67 are required.

Additional Requirements

Sophomore Informational Meeting

The art department will conduct a group meeting in the spring of each year for all sophomore students who wish to consider a major or minor in art. This will be a general orientation meeting for all interested students after which they will select an advisor for their program. The meeting will be publicized and students should verify to the department their intention to attend. At the meeting the studio emphasis and art history emphasis programs will be discussed, faculty of the department will be introduced and there will be opportunity to answer any questions regarding the art department program. Students will submit a 200–300 word statement explaining their reasons for wanting to major or minor in art before the art department chair signs their concentration form.

Junior Critique

In the spring of their junior year, all art majors will participate in a faculty review of their work. Studio emphasis majors will bring 3–4 pieces of their best work to the review and a 200–300 word statement regarding the concepts and goals of their work. Art history emphasis majors will make a brief oral presentation (10–15 minutes) on any art history topic of their choice. This presentation will be based on a written paper of 4–5 pages double spaced with bibliography, also due at the critique. The art department faculty will comment on the work presented in the context of the career objectives of the student.

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

Although not strictly required, it is recommended that students complete either Art 60 or Art 61 before registering for advanced courses in Art History (i.e. Art 64, Art 65 and selected topic courses).

30 DRAWING

This studio course is an introduction to a variety of drawing media and techniques. Three basic approaches are pursued: drawing as observation and analysis, drawing as problem solving and invention, and drawing as independent expressive statement. Students explore a variety of themes and subject matter, including the human figure. Theoretical components include group critiques and slide lectures. Two three-hour periods per week. Every semester. (4 credits)

32 FIBERS

This course is an introduction to fibers as an expressive medium. The techniques of on- and off-loom weaving, surface design, dyeing, paper making, felt making, stitching and container forms will be explored. The course emphasizes creative, imaginative, and original applications of traditional techniques. Two three-hour periods per week. Every semester. (4 credits)

34 PAINTING

An introduction to painting using acrylic paint on a variety of supports ranging from paper to stretched canvas. Exploration of basic visual characteristics and possibilities of painting through a series of visual problems of increasing complexity. Slide lectures, discussions and critiques supplement studio

work by relating student work to the history of painting. Three two-hour periods per week. Every semester. (4 credits)

35 SCULPTURE

An introduction to a basic visual language of sculpture and an exploration of the creative process and the nature of materials. The course includes training in the safe use of a range of hand and power tools, in support of a series of projects in wood, clay, and other sculptural media. Every semester. (4 credits)

36 PRINTMAKING

A hands-on introduction to original printmaking in the media of relief, etching, lithography and handset type. Included are discussions of aesthetics, the impact of printed imagery on our society, printmaking practices from around the world and field trips to local exhibits. Emphasis is on individual expression and appropriate techniques for the content. Two three-hour periods per week. Every semester. (4 credits)

37 CERAMIC ART

This course serves as an introductory study of the techniques and aesthetics of clay as an art medium. Class emphasis is on the basic processes for handbuilt forms: pinching, coiling, slabs and molds. Students are challenged with progressively more difficult projects requiring creative problem solving skills that also allow opportunities for personal expression. Through demonstrations, slide lectures and critiques, students learn to create and evaluate, as well as appreciate art's relationship to our lives. Two three-hour periods per week. Every semester. (4 credits)

38 CERAMIC ART — WHEEL THROWING

This course serves as an introductory study of the techniques and aesthetics of clay as an art medium. Class emphasis is on the basic processes for wheel-thrown forms. Through the semester students are challenged with progressively more difficult projects that explore possibilities for wheel-thrown forms, as well as basic decorating, glazing and firing techniques. Through demonstrations, slide lectures and critiques, students are exposed to ideas and attitudes for understanding ceramic aesthetics in a contemporary, social and historical context. Fall semester. (4 credits)

49 PRINCIPLES OF ART

A philosophical approach to the creative arts, relating art to humanity, the creator to the consumer, and to the social and psychological. The major thrust of the course is a series of aesthetic experiences encompassing numerous activities and attitudes of visual artists. Three hours per week. Every semester. (4 credits)

50 TOPICS

Recent topics offered by the Art Department are: *Illuminated Manuscripts of the Middle Ages*, *The Head*, and *Medieval Architecture*. (4 credits)

52 WOMEN IN ART

Changes in women's societal roles necessarily affect their status as makers, consumers and subject matter. This course will make use of recent feminist scholarship regarding these changes as they apply to women in art. Lectures, discussion, assigned readings, field trips and guest artists will explore a historical overview of the topic, question causes of traditional biases, and explore alternatives that promote and celebrate women's contributions in the field. Major focus will be on contemporary issues: challenges to present-day discrimination, non-western systems of use and production, "women's voice," egalitarianism and post-modern questions of theory and practice. Three hours per week. Fall semester. (4 credits)

59 ROMANTICISM, REALISM, AND IMPRESSIONISM

A study of European and British painting and sculpture from the French revolution to 1900. Through consideration of the principal artists of the period, emphasis is placed on the multiple ways in which one may talk about a work of art. Three hours per week. Fall semester 1999. (4 credits)

60 HISTORY OF ART I (Same as Classics 60)

This course offers an introduction to major monuments and periods of art from Ancient Antiquity through the Middle Ages. Its purpose is not only to acquaint students with key works of Prehistoric,

Egyptian, Mesopotamian, Aegean, Greek, Etruscan, Roman, Early Christian, Byzantine, Hiberno-Saxon, Carolingian, Ottonian, Romanesque and Gothic art, but also to help them develop a vocabulary for the description and analysis of works of art. The course also provides a basic understanding of the methods and aims of art historical study while examining a broad range of issues such as patronage and the art maker, the changing roles of artists in society, and the changing functions of art. Three hours per week. Fall semester. (4 credits)

61 HISTORY OF ART II

This course is a survey of topics in European art from the late 14th century to the second decade of the 20th century. Stylistic periods covered include Italian and Northern Renaissance; Mannerism; Baroque art in Italy, Spain and Northern Europe; Rococo; Neoclassicism; Romanticism, Realism; Impressionism; Post-Impressionism; Expressionism; and Cubism. In addition to questions of style, the course addresses other issues such as the identification of subject-matter, the function of art and its relation to the culture that produced it. Three hours per week. Spring semester. (4 credits)

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. Three hours per week. Fall semester. (4 credits)

63 20TH CENTURY ART

This course explores the major topics in 20th century art. It will be a comparative analysis of modern international movements with emphasis on art since the turn-of-the-century in cultural, political and social contexts. Relevant discussion of contemporary art movements will be included. The course will make use of resources available in area museums and art collections. Three hours per week. Prerequisites: Art 61 or permission of the instructor. Fall semester. (4 credits)

64 MEDIEVAL ART

This course explores the art and religion of Western Europe from the end of the Roman Empire to the middle of the fifteenth century. It examines how specific concerns and conditions of Christianity in the Middle Ages shaped the artistic production of the period. Religious issues to be examined include variations in religious practices and services, the work of missionaries, the beginnings of monasticism, the Cistercian reform, pilgrimage and the cult of relics, the Crusades, and the emergence of private devotion. The study of artistic production centers on stylistic and iconographic issues and ranges from the examination of minute ivory carvings to monumental stone sculpture, from catacomb painting to exquisite illuminated manuscripts, from Byzantine mosaic decorations to Gothic stained-glass windows. Other topics to be discussed include technical aspects of artistic production such as the illumination of manuscripts and the construction of Gothic cathedrals. Three hours per week. Prerequisites: Art 60, Art 61, or permission of the instructor. Fall semester. (4 credits)

65 RENAISSANCE ART

This course offers a broad view of the painting, sculpture and architecture produced in Italy in the years between 1250 and 1500. It will study a wide range of commissions in the various Italian city-states, as well as in papal Rome, in an effort to understand the many ways in which art played a political role in this period. Works by artists such as Giotto, Cimabue, Duccio, the Lorenzetti brothers, Brunelleschi, Ghiberti, Donatello, Masaccio, Fra Angelico, Filippo Lippi, Alberti, Piero della Francesca, and Botticelli, among many others, will be thoroughly discussed. In order to address the most important historical developments of this period, issues such as the Black Death, the French invasion of Italy, and the fall of the Medici in Florence, will also be explored. Three hours per week. Prerequisites: Art 60, Art 61, or permission of the instructor. Fall semester 1999. (4 credits)

66 2-D DESIGN

A series of two dimensional projects through which the components of design are introduced and applied. Discussion includes the aesthetics and history of modern design, propaganda and commercial advertising and a review of contemporary design via the graphic novel, posters, etc. Hands-on work includes concepts, layout, paste-up and production both manually and computer generated. Three two-hour periods per week. Spring semester. (4 credits)

67 3-D DESIGN

A series of three dimensional projects using a basic visual language of line, texture, shape, plane, space, volume, and form will be explored. Critiques and structural testing of the projects lead to an understanding of functional and aesthetic relationships. The problem solving approach used in this class contributes to a resolution of spatial problems in a series of projects with references to sculpture, architecture, industrial design and interior design. Three two-hour periods per week. Fall semester. (4 credits)

68 COLOR

Studio work investigating the intrinsic and interactive properties of color in the context of art, but applicable to other fields. The color theories of Goethe and Itten and the discoveries of Albers are explored and individually interpreted in projects using acrylic paint or the broad spectrum color-aid paper packet. Particularly appropriate for students interested in painting and design. Three two-hour periods per week. Fall semester. (4 credits)

70 ADVANCED DRAWING

Building on Art 30 this studio course seeks to enlarge the student's visual vocabulary and inventive capacities. Projects are more complex and require a sustained effort. Students have an opportunity to find content and styles most suited to their individual needs. Weekly group discussions and critiques, slide lectures, and field trips are included. Three two-hour periods per week. Spring semester. (4 credits)

71 ADVANCED PAINTING

Continuation of Art 34. Meets simultaneously with Art 34. Projects and work directions initiated by students. Weekly group discussions and critiques. Three two-hour periods per week. Every semester. (4 credits)

72 ADVANCED SCULPTURE

This course is the continuation of Art 35 so it extends the information about basic sculptural processes like mold making, stone carving, and welding, as well as a series of more complex and sustained assignments. Three two hour periods per week. Every semester. (4 credits)

73 ADVANCED PRINTMAKING

Continuation of Art 36. Individually generated projects. Introduction of new techniques appropriate for content such as monoprint, collograph, screenprint and photo-printmaking. Field trips. Arranged meetings. Every semester. (4 credits)

74 ADVANCED CERAMIC ART

A continuation of Ceramic Art 37 taken in the fall or spring semester with emphasis on furthering skills and developing individual expression. Two three-hour periods per week. Every semester. (4 credits)

76 FAR EASTERN ART

The art and architecture of India, China, Japan, Korea and Cambodia 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. Spring semester. (4 credits)

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. Alternate years, next offered spring 2000. (4 credits)

87 ART HISTORY METHODOLOGY SEMINAR

Students wishing to do advanced work in Art History will discuss readings on the writing of Art History and methodological approaches and will also work on an extended research project of their choice culminating in a formal paper and oral presentation. One three-hour period per week. Spring semester. (4 credits)

88 SENIOR SEMINAR

This course provides a setting in which art studio majors can sum up their preceding experience in art and aesthetics. It is also to provide a look ahead to the post Macalester opportunities and challenges in art of graduate school, jobs, and other career opportunities. A series of arts professionals make presentations to the class and a major paper is required. Two three-hour sessions per week. Spring semester. (4 credits)

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. (4 credits)

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. Tutorials for more than 4 credits are subject to prior approval by the Curriculum Committee. Every semester. (1–8 credits by prior arrangement)

96 INDEPENDENT PROJECT

Independent work in any art medium or in the history of art. Every semester. Independent projects for more than 4 credits are subject to prior approval by the Curriculum Committee. (1–8 credits by prior arrangement)

97 INTERNSHIP

May be used in the art concentration only with approval of the department chair. Every semester. (1-4 credits by prior arrangement)

98 PRECEPTORSHIP

Available to advanced students in art concentrations. May be used in the art concentrations only with approval of the department chair. Every semester. Preceptorships for more than 4 credits are subject to prior approval by the Curriculum Committee. (1–8 credits by prior arrangement)

All studio courses in the art department involve the use of materials and equipment that may be hazardous if used improperly.

Biology

Full Time Faculty: Lin Aanonsen, Mark Davis, Daphne Foreman, Daniel Hornbach, Mary Montgomery, Kathleen Parson, Aldemaro Romero (Environmental Studies), Jan Serie (Chair), James Straka, Peter Vaughan

Part Time Faculty: Maureen Basha, Elizabeth Jansen, Laurence Savett, Russell Whitehead

Laboratory Supervisors: Steven Sundby

The faculty of Macalester's biology department seeks to introduce students to the major theories and methods of the biological sciences. The foundation of the biology major is embodied in four required courses: Cell Biology, Genetics, Physiology and Ecology which provide the basis for further study and specialization at the intermediate and advanced levels. Because the faculty is committed to teaching biology as a process of investigation, the laboratory components of these foundational courses provide an introduction to both the methods and process of scientific research.

After introductory and intermediate level study, biology majors often participate in a research experience at the advanced level which is empirical in nature (i.e. based on the testing of an hypothesis through observation or experimentation.) Ordinarily, students complete this research during their junior or senior year after significant coursework in biology and supporting disciplines has been completed.

Students may either choose a major concentration in biology or may select to strengthen their background by majoring in biology with one of several emphases: biochemistry, genetics/cell and developmental biology, ecology, immunology/microbiology, international issues, or neurobiology. These added emphases lay out a series of required intermediate biology and supporting courses to enhance the student's depth in a particular area of the biological sciences.

A concentration in the biological sciences is excellent preparation for such careers as:

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, biological oceanography, conservation, environmental education, public health, and other fields;

Biology teacher at the secondary level;

Medical practitioner with graduate training in medicine, dentistry, veterinary medicine, nursing, medical technology, physical or occupational therapy, sports medicine, and other health related professions;

Medical and scientific illustration; writing, editing and journalism;

Academic, industrial and government sector, careers in health administration, technical support, instrumentation, biotechnology, and pharmaceuticals.

The diversity and quality of the course offerings in the department are enriched by the specialties of the eight full-time faculty members. Owing to their diverse backgrounds and interests the department is able to offer students courses and training in a wide variety of biological subdisciplines, including neurobiology, immunology, cell biology, aquatic ecology, animal ecology, plant ecology, animal behavior, genetics and molecular biology, electron microscopy, plant physiology, animal physiology, microbiology, biochemistry, and systematics. In addition, research of both students and faculty is supported by funding from the grants obtained by the college, department and individual faculty members.

The biology department, located in Olin-Rice Hall, has both teaching and biology research laboratories that are well equipped to support the diverse scientific activities of both faculty and students. In recent years, grants from the National Science Foundation and the Howard Hughes Medical Institutes have enabled the department to purchase several hundred thousand dollars worth of new scientific equipment including electron microscopes, tissue culture

equipment, a departmental computer laboratory and a wide assortment of other electronic and technical equipment associated with course work, research and project activities.

The college's 280-acre Ordway Natural History Study Area at Inver Grove Heights, just 25 minutes from the campus, provides for the study of natural habitats such as ponds, a river lake, birch and oak forests, and prairie. A prairie restoration project is on-going. A building for teaching and research work also accommodates a resident naturalist.

The department sponsors a seminar program for all students. Visitors from academic institutions, industry, and government present their work and are available to students for questions, advice, and guidance not only in their specialty, but also in career choice and development.

The month of January is a time for intense on-campus research involvement or in-depth study through supervised independent study opportunities. There are also opportunities for off-campus individual work or internships. Students may use the summer months to become involved in research with faculty, off-campus internships, and independent projects.

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

The ACM also offers a semester study abroad program in Costa Rica in which students conduct independent field biological research on such topics as primate ecology, tropical deforestation, and conservation biology. Students interested in participating in the Costa Rica program may want to consider a Biology major with an international issues emphasis. See the description below.

General Distribution Requirement

All courses in the biology department satisfy the general distribution requirements in the natural sciences except for courses numbered 18, and 70 and above.

Diversity Requirement

Biology 15 satisfies the international diversity requirement.

Major Concentration

Effective catalog—Students are normally expected to satisfy the major, core or minor requirements in effect at the time of their initial declaration in their sophomore year. The requirements for a major in biology are: 36 credits in biology and five supporting courses. The 36 credits in biology must include:

The Introductory Biology Series: Biology 21(Cell Biology); Biology 22 (Physiology); Biology 23 (Genetics); Biology 24 (Ecology)

Four upper level courses (four 4-5 credit upper level courses, *at least two with laboratory*), and two terms of the Senior Seminar as the capstone experience.

Courses numbered below 20 do not count toward the biology major. Students may count only one course from Biology 70–78, 96 and 97 toward their biology major.

The supporting courses must include
Chemistry 13 General Chemistry II
Chemistry 37 Organic Chemistry I
Math 27 Elementary Statistics (or equivalent)
An additional semester of math (e.g. Calculus, Discrete Mathematics, additional statistics) or chemistry (Chemistry 38, Biochemistry)
One approved elective course from the science division other than biology

Note: Students planning to attend graduate school should discuss their plans with a faculty member and consider a biology major with Added Emphasis in their area of interest (see below).

The Senior Presentation is required of all seniors as their capstone experience and consists of:

- 1) participation in the one credit course, Senior Seminar (Biology 89), for two terms
- 2) the production of a major analytical paper which includes a thorough review of the literature 3) the delivery of an oral presentation, written through multiple drafts, to the department or at an approved undergraduate or professional research conference.

While a research experience conducted in the department through research courses (Biology 70–78) may form the basis of the Senior Presentation, students may choose to present work they have done in other contexts such as internships, independent study or study-away opportunities.

Students who received a score of 5 on the Advanced Placement (AP) biology exam are exempted without credit from taking one of the four introductory courses required for the major. Students with a score of 5 or higher on the International Baccalaureate (IB) biology exam are exempted without credit from taking two of the introductory courses. Students exempted from taking one or more of 21, 22, 23, and 24 must take a laboratory course in the area of the exempted course, i.e., in the area of ecology, organismal biology, genetics or cellular/molecular biology. The specific courses for which exemptions are given are determined in consultation with the department chair and course instructors. While exemptions are given, credit is not given for AP or IB test results

Major Concentration with added emphases

Students seeking to strengthen their biology background may choose to major in biology with one of several added emphases. These emphases include biochemistry, genetics/cell and developmental biology, ecology, immunology/microbiology, international study, and neurobiology. In each area of emphasis, the student completes the general biology major and then has additional requirements in biology, including a research experience in the area of emphasis. In addition, the supporting courses associated with the area of emphasis are more specifically designated than those for the general biology major. Those students choosing a major concentration with Added Emphasis will have this noted on their transcripts (e.g. Biology Major with Added Emphasis in Neurobiology).

Major Concentration in Biology with an Added Emphasis in Biochemistry/Molecular Biology

Students whose primary interests in biology are in biochemistry or molecular biology may wish to pursue a Biology major with an Added Emphasis in Biochemistry/Molecular Biology. To complete this major, the student must complete a minimum of 40 credits (four introductory plus five upper level courses) as described below and six supporting courses in related disciplines.

A Senior Presentation is required of all students as their Capstone experience, and for students selecting this emphasis the Presentation must be in the area of biochemistry or molecular biology. In addition, the student is required to complete an approved research experience. The research requirement may be completed on campus by enrolling in a Research course, an Independent Study or an Internship. For some students, research conducted on campus during summer research programs, in laboratories at other institutions, or research conducted during study away, may meet the requirement for a research experience in Biochemistry/Molecular Biology. For most students, the research experience will be an attractive option for the topic of the Senior Presentation. For a Major with Added Emphasis in Biochemistry/Molecular Biology, the course plan must include:

Introductory Biology Sequence (4 courses): Biology 21, 22, 23 24

The following upper level courses:

Biology 53 Advanced Genetics (cross listed with chemistry)

Biology 58 Biochemistry (cross listed with chemistry)

Plus at least three courses from the following (at least two must be Biology):

Biology 51 Immunology

Biology 52 Microbiology

Biology 62 Cellular and Molecular Neuroscience

Biology 69 Developmental Biology

Chemistry 62 Advanced Organic Chemistry

Chemistry 56 Physical Chemistry II

Biology 50* Topics (Biochemistry related, with approval of Department Chair; may be cross listed

between Biology and Chemistry)

Biochemistry Research

Senior Seminar: Biology 89 Senior Seminar (taken twice)

Supporting courses (required):

Chemistry 13 General Chemistry II

Chemistry 38 Organic Chemistry II

Chemistry 55 Physical Chemistry I

Math 22 Calculus II

Physics 26 Principles of Physics I

Physics 27 Principles of Physics II

Major Concentration with an Added Emphasis in Ecology

Students whose primary biological interests include ecology and evolution may wish to complete a biology major with an Added Emphasis in Ecology. To complete this major the student must complete 40 credits in Biology in addition to six supporting courses. Also, the student must complete an approved research experience. A Senior Presentation is required of all students as their capstone experience and for students majoring in Biology with an Added Emphasis in Ecology, the presentation must be conducted in the area of Ecology. The presentation may be based on the research experience required in the emphasis or students may choose to present work they have done in other contexts such as internships. For some students, research conducted during study away may meet the requirement for a research experience in Ecology and may be an attractive option for the Senior Presentation. For a Major with an Added Emphasis in Ecology the 40 Biology credits must include:

The Introductory Biology Sequence: Biology 21, 22, 23, 24

Five upper level courses (at least three with lab/field components) from:

Biology 42 Animal Behavior and Ecology

Biology 43 Aquatic Ecology

Biology 45 Field Botany

Biology 46 Marine Biology

Biology 47 Evolution

Biology 50 Marine Mammalogy

Biology 64 Comparative Physiology

Biology 82 Advanced Ecology

Topics in Ecology (including study away courses. Note: no more than 8 credits from study away courses can count towards these 5 courses)

Senior Seminar: Biol 89 Senior Seminar (taken twice)

The 6 supporting courses must include:

Chemistry 13 General Chemistry

Chemistry 37 Organic Chemistry

Math 27 Elementary Statistics

Math 34 Applied Multivariate Statistics

Math 21 Calculus I, or Math 22 Calculus II, or Math 26 Discrete Math

Geology 11 Physical Geology, or Geology 12 Historical Geology, or Geography 16 Physical Geography, or other approved Geology or Geography courses

Major Concentration with an Added Emphasis in Genetics, Cell & Developmental Biology

Students whose primary interests in biology are in genetics, cell biology, or developmental biology may wish to pursue a Biology major with an Added Emphasis in Genetics, Cell & Developmental Biology (GCDB). To complete this major, the student must take a minimum of 41 credits in Biology in addition to six supporting courses in related disciplines. A Senior Presentation is required of all students as their Capstone experience, and for students selecting this emphasis the Presentation must be in the area of genetics, cell or developmental biology. In addition, the student is required to complete an approved research experience. The research requirement may be completed on campus by enrolling in Research in Developmental Biology or related "Research in" course, an Independent Study or an Internship. For some students, research conducted on campus during summer research programs, in laboratories at other institutions, or research conducted during study away, may meet the requirement for a research experience in GCDB. For most students, the research experience will be an attractive option for the topic of the Senior Presentation. For a Major with Added Emphasis in Genetics, Cellular and Developmental Biology, the course plan must include:

Introductory Biology Sequence: Biology 21, 22, 23, 24

The following upper level courses:

Biology 69 Developmental Biology

Biology 53 Advanced Genetics

Biology 58 Biochemistry

Plus at least two courses from the following:

Biology 47 Evolution

Biology 51 Immunology

Biology 52 Microbiology

Biology 62 Cellular and Molecular Neuroscience

Biology 68 Plant Physiology

Biology 50 Topics in Genetics, Cellular and Developmental Biology

Senior Seminar: Biology 89 Senior Seminar (taken twice)

Supporting courses (required):

Chemistry 13 General Chemistry II

Chemistry 38 Organic Chemistry II

Chemistry 55 Physical Chemistry I

Math 21 Calculus I or Math 22 Calculus II or Math 27 Elementary Statistics

Physics 21 Introductory Physics I or Physics 26 Principles of Physics I

Physics 22 Introductory Physics II or Physics 27 Principles of Physics II

Major Concentration with Added Emphasis in Immunology and Microbiology

Students whose interests lie in the field of Immunology and/or Microbiology may complete a major in biology with an Added Emphasis in these disciplines. To complete this major, students must complete

40 credits in Biology and six supporting courses. In addition, students must complete an approved research experience through a formal research course, independent study or a summer research program. A Senior Presentation is required of all students as their capstone experience, and for students majoring in Biology with Added Emphasis in Immunology and Microbiology, the presentation must be conducted in the area of Immunology or Microbiology. This presentation may be based on the research experience required for the Emphasis or on other work done in the area. For a Major Concentration with Added Emphasis in Immunology and Microbiology, the 40 credits in Biology must include:

The Introductory Biology Sequence: Biology 21, 22, 23, 24

Two upper level courses: Biology 51 Immunology Biology 52 Microbiology

Three upper level courses (at least two with lab components) from:

Biology 47 Evolution

Biology 53 Advanced Genetics

Biology 58 Biochemistry

Biology 50 Topics in Immunology or Microbiology

Senior Seminar: Biology 89 Senior Seminar (taken twice)

The six supporting courses must include:

Chemistry 13 General Chemistry II

Chemistry 37 Organic Chemistry I

Chemistry 38 Organic Chemistry II

Math 21 Calculus I

Physics 21 Introductory Physics I or Physics 26 Principles of Physics I

Physics 22 Introductory Physics II or Physics 27 Principles of Physics II

Math 27 Elementary Statistics

While not required, for students intending to do graduate study in Immunology or Microbiology, the following course is highly recommended: Chemistry 55 Physical Chemistry I

Major Concentration with an Added Emphasis in International Issues

Students whose biological interests include an international aspect may complete a biology major with an Added Emphasis International Issues. For example, this would be an option for students with interests in tropical ecology, global biodiversity, tropical diseases, and public health care in developing countries. To complete this major, a student must complete all the requirements normally required of a biology major. In addition, the student must complete the following requirements: 1) study or demonstrate competency in a foreign language through at least the intermediate level; 2) study abroad for a semester on a biology program in a country in which the student's foreign language skills are relevant, and in which the student examines biological issues particular to that region of the world; 3) take seven supporting courses including two designated courses in International Studies; 4) complete an approved biology research experience with an international component. A senior presentation is required of all students as their capstone experience and for students majoring in biology with an Added Emphasis in International Issues, the presentation must include a significant international component. This presentation may be based on work completed in the study abroad program required in this emphasis or students may choose to present work they have done in other contexts such as internships. For a Major with an Added Emphasis in International Issues the 36 Biology credits must include:

The Introductory Biology Sequence: Biology 21, 22, 23, 24

Four upper level courses (at least two with lab/field components) from the Upper Level or Seminar and Research courses. At least two courses (8 credits) must be taken on a foreign study away biology program

Senior Seminar: Biology 89 Senior Seminar (taken twice)

The seven supporting courses must include: Chemistry 13 General Chemistry II Chemistry 37 Organic Chemistry I Math 27 Elementary Statistics Another approved Math or Chemistry course An additional approved science course International Studies 50 Globalization and the Environment International Studies 50 Sustainable Development

Also students are expected to take other courses that support a commitment to internationalism. Highly recommended are Comparative Economic Systems (International Studies 25) and Culture and Revolution (International Studies 64). Other international courses that may be particularly appropriate for students pursuing this Added Emphasis include Anthropology 11, 39, 52, 56, 58, 60, 62, Biology 15 (which may not be counted for one of the Biology courses), Economics 21, 22, 25, Geography 11, 32, 45, and Political Science 26, 33.

Major Concentration with Added Emphasis in Neurobiology

Students whose interests lie in the field of neuroscience may complete a biology major with an Added Emphasis in Neurobiology. To complete this major students must take 39 credits in biology and seven supporting courses. In addition, students must complete an approved research experience through a formal research course, independent study or a summer research program. A Senior Presentation is required of all students as their capstone experience. For students majoring in Biology with Added Emphasis in Neurobiology, the Senior Presentation must be conducted in the area of Neurobiology. This presentation may be based on the research experience required for the Emphasis or on other work done in the area. For a Major Concentration with Added Emphasis in Neurobiology, the 39 credits in Biology must include:

The Introductory Biology Sequence: Biology 21, 22, 23, and Biology 24 or 47

Three upper level courses:

Biology 62 Cellular and Molecular Neuroscience

Biology 67 Neuroanatomy

Biology 86 or equivalent: Advanced Seminar in Neuropharmacology

Two upper level courses from:

Biology 51 Immunology

Biology 53 Advanced Genetics

Biology 58 Biochemistry

Biology 64 Comparative Physiology

Biology 69 Developmental Biology

Senior Seminar: Biology 89 Senior Seminar (taken twice)

One supporting course from:

Psychology 24 Psychological Disorders

Psychology 31 Perception and the Senses

Psychology 36 Principles of Learning and Behavior

Six supporting courses:

Psychology 63 Physiological Psychology

Chemistry 37 Organic Chemistry I

Chemistry 38 Organic Chemistry II

Physics 21 Introductory Physics I or Physics 26 Principles of Physics I

Physics 22 Introductory Physics II or Physics 27 Principles of Physics II

Math 27 Elementary Statistics

While not required, students may wish to take courses that relate to neuroscience in other divisions such as:

Chemistry 55 Physical Chemistry I

Computer Science 65 Introduction to Artificial Intelligence

Philosophy 62 Philosophy of Mind

Philosophy 65 Bioethics

Philosophy 64 Philosophy of Language

Linguistics 24 Introduction to Linguistics

Psychology 28 Developmental Psychology

Psychology 37 Cognition

Core Concentration

The core concentration is an attractive option for students interested in interdisciplinary study and can be combined with such majors as environmental studies, geology, mathematics, neuroscience, chemistry or physics.

The requirements for a core in biology are 26 credits in biology and six supporting courses. The 26 biology credits must include three of 21, 22, 23, and 24, and three upper level courses (at least two with laboratory). The six supporting courses can be selected from any of several departments after consultation and approval by the student's advisor, but must include Chemistry 13. Courses numbered below 20 do not count toward the biology core.

Minor Concentration

The requirements for a minor in biology are five biology courses which must include two of 21, 22, 23 and 24. Students minoring in Biology may include one course numbered below 18 among their five courses.

Honors Program

Biology students wishing to participate in the college-wide honors program must have a GPA of 3.4 in their biology courses. Students are also required to register for a special section of Independent Research (Biology 96B-97B) during January of their senior year. Students wishing to participate in this program are encouraged to discuss this option with their advisor early in their junior year.

COURSES

Introductory Courses

Courses 21-24 are required for a Biology Major

10 THE BIOLOGY OF THE HUMAN BODY

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 are discussed. No prerequisites. Three lectures per week. This course may not be counted toward a major or core in biology. Spring semester. (4 credits)

12 THE ENCHANTED CORTEX: A JOURNEY INSIDE THE BRAIN

This course will provide a basic introduction to the structure and function of the brain. Readings and discussion will focus on a number of topics that may include how chemicals produced in the brain affect emotions, mood and memory; the effect of drugs on brain function; the use of neuroactive drugs in the treatment of "mental illness"; left brain/right brain theory and *much more*. Three hours per week. This course will not count toward a major or core in Biology or Neuroscience. First semester Macalester students only. Three lecture hours per week. Alternate fall semesters, next offered fall 2001. (4 credits)

15 GLOBAL DIVERSITY AND THE BIOLOGY OF CONSERVATION

This is a non-majors course designed for the liberal arts student. This course explores the reasons behind the alarming loss of biodiversity occurring throughout the world today. The implications of this loss and the efforts underway to reduce the rate of loss will be main topics of the course. Students will be introduced to the different types of biodiversity, including genetic diversity, species diversity, and habitat diversity. The process and implications of species extinctions occurring world wide will be examined in detail. The underlying biological and evolutionary processes involved in extinctions will

be considered along with the role of human values and economic development in the loss of biodiversity. Principles will be illustrated through case studies of both extinctions and recovery efforts in different parts of the world. This course cannot be counted toward a major or core in biology. This course does satisfy international diversity requirements, and the biology requirement for an environmental studies major. Three lecture hours per week. Offered spring 2000. (4 credits)

16 BIOTECHNOLOGY AND SOCIETY

This course will discuss the development and application of biotechnologies, and the impact these technologies have on society. The discussions will include genetic manipulation of organisms (ranging from agricultural plants and animals to gene therapy in humans), DNA fingerprinting and the polymerase chain reaction (with special attention to prenatal diagnosis and forensic applications), in vitro fertilization and pre-implantation diagnosis, organ transplantation, and the human genome project. Strong emphasis will be placed on societal and bioethical considerations. This course fulfills 4 credits in the science distribution requirement and counts toward the biology minor, but not toward the major or core. No prerequisites. Fall semester, occasional offering. (4 credits)

17 WOMEN, HEALTH AND REPRODUCTION

This course will deal with those aspects of human anatomy and physiology which are of special interest to women, especially those relating to sexuality and reproduction. Biological topics covered will include menstruation and menopause, female sexuality, fertility and infertility, abortion, pregnancy, cancer and AIDS. Biological technologies such as in vitro fertilization, conception technology, hormone therapies and genetic engineering technologies will be discussed. Not open to Biology majors or cores. No prerequisite. Three lecture hours per week. Fall semester. (4 credits)

18 SEMINAR IN THE HUMANISM OF MEDICINE

This course is taught by an experienced primary care physician specializing in internal medicine, and concentrates on learning how patients, their families, and professionals who care for them experience illness; how stories patients tell become the basis for diagnosis and therapeutic action; the doctorpatient relationship; and what it's like to be a physician. Didactic presentations, interactive discussions using stories from patients', students' and the instructor's experience, and related literature provide the content of the course. From time to time other physicians, other clinical professionals, and patients participate in the discussions. Prerequisite: junior or senior standing and an interest in medicine or a related health care field. this course does not count toward the biology major, minor or core. Fall semester. (2 credits)

21 CELL BIOLOGY

An introduction to the molecular and cellular processes of living organisms. Special attention is paid to problems faced by living cells in the acquisition of energy, growth and repair, reproduction and communication with other cells. Recent advances in biotechnology are also discussed. Prerequisites, Chemistry 11 or very strong high school preparation in chemistry. Three lecture hours and one three-hour lab per week. Every semester. (4 credits)

22 PHYSIOLOGY

An introduction to plant and animal physiology. A comparison of various plant and animal functions will be discussed. Comparative topics include transport systems, nutrient acquisition and processing, support/locomotion and control systems. Prerequisite, Biology 21. Three hours of lecture and one three-hour lab each week. Every semester. (4 credits)

23 GENETICS

An introduction of the principles of genetics, including topics from classical Mendelian concepts to the contemporary molecular biology of the gene. Three lecture hours and one three-hour laboratory per week. Prerequisites: Chemistry 11, or concurrent enrollment in Chemistry 11 or 13, or very strong high school preparation in chemistry. Every semester. (4 credits)

24 ECOLOGY

An introduction to the study of ecological and evolutionary theory and processes. The subject of this course is the natural world and the current and past processes that have shaped it. Major ecological and evolutionary patterns are described and proposed underlying mechanisms are investigated through field and laboratory studies. The impact of humans on natural systems is also examined. Three hours lecture and one three-hour lab each week. Every semester. (4 credits)

Upper Level Ecology Courses

42 ANIMAL BEHAVIOR AND ECOLOGY

A study of animals in their natural habitats. This course takes an evolutionary approach to the study of animal behavior. Through lectures, field trips, readings and discussions, students are introduced to current ideas and research methods in the field of behavioral ecology. In addition, students will become familiar with many of Minnesota's birds and mammals. Prerequisite, Biology 24. Three lecture hours, one three-hour laboratory per week. Next offered Spring 2001. (5 credits)

43 AQUATIC ECOLOGY

The study of freshwater organisms and their environments. Students are introduced 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 24, Chemistry 13. Three lecture hours, one four-hour laboratory per week. Fall semester. (5 credits)

45 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 and cores, Biology 24; for others, permission of instructor. Three lecture hours, one three-hour laboratory per week. Alternate fall semesters, next offered 1999. (5 credits)

46 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 reef, 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. Prerequisite, Biology 24 or permission of instructor. Next offered spring 2000. Three lecture hours per week. (4 credits)

47 EVOLUTION

We will explore one of the central organizing ideas of modern biology—the theory of evolution. Topics that will be covered include speciation, extinction, population genetics, molecular evolution, the origin of life, the punctuated equilibrium theory of evolution, group selection, and others. The course will consist of lectures based on readings from secondary sources and class discussion based on the recent literature. Three lecture/discussion hours per week. Prerequisites, Biology 21, 23, 24 or permission of the instructor. Fall semester. (4 credits)

50 TOPICS

Examination of a topic of general interest to faculty and students, the topic to be announced in advance of registration. Recent topics courses in biology include: Toxicology, Comparative Biochemistry, and Plant Development. We plan to have at least two topics courses during 1999–2000. (4 credits)

Upper Level Molecular and Cellular Biology Courses

51 IMMUNOLOGY

An introduction to the mammalian immune system. The genetic and cellular basis of the immune response is explored through lectures, readings from primary and secondary literature, and discussions. Current methods in immunological research are introduced in the laboratory. Prerequisites, Biology 21, 22, and 23 or permission of the instructor. Three hours of lecture/discussion and four hours of laboratory per week. Fall semester. (5 credits)

52 MICROBIOLOGY

This course will focus on the basic, applied and clinical use of microorganisms and viruses as models for the study of the chemical and physical principles underlying living processes. These include the microbial gene and its regulation, disease processes and host-parasite relations. The laboratory emphasizes determinative microbiology. Prerequisites: Biology 21 and 23, or permission of instructor. Chemistry 37 recommended. Spring semester. (5 credits)

53 ADVANCED GENETICS

An in-depth study of the principle of modern genetics, this course will examine topics which range from Mendelian and non-Mendelian inheritance patterns to the concepts and practices of molecular biology. Among other topics, there will be discussions on human genetics, the human genome project, and the application of genetic principles in genetic counseling. Prerequisites: Biology 21 and 23, and Chemistry 37. Three lecture hours and one three-hour lab per week. Fall semester. (5 credits)

57 ELECTRON MICROSCOPY

Scanning and transmission electron microscopy and their application in biology. An intense laboratory effort during which students learn basic techniques of specimen preparation for both SEM and TEM. Students will be provided ample instrument time and individual instruction to complete a small biology research project using one or both of the electron microscopes. Prerequisites, Biology 21 and permission of the instructor. Two hours discussion and four hours laboratory per week. Occasional offering. (5 credits)

58 BIOCHEMISTRY (Same as Chemistry 58)

A study of biological processes at the molecular level with an emphasis on the metabolism of carbohydrates, lipids, amino acids, and nucleotides; the mechanisms and kinetics of enzyme catalyzed reactions; the regulation of biochemical pathways; and on the structure, function and biosynthesis of proteins and nucleic acids. Prerequisites, Chemistry 38, Biology 21 and 23 or permission of the instructor. Three lecture hours and one three-hour laboratory per week. Spring semester. (5 credits)

62 CELLULAR AND MOLECULAR NEUROSCIENCE (Same as Psychology 62)

An introduction to the nervous system. While particular emphasis is placed on the molecular and cellular components of the nervous system, these components are the foundation for the analysis of various sensory systems. Discussion topics include neurotransmitters and neuromodulators, the physiology and molecular biology of receptors, and the synapse. The laboratory will be used to introduce major research techniques in neurobiology. These techniques will be used in independently designed research projects which will be performed during the last third of the semester. Prerequisites, Biology 21 and 22 or permission of instructor. Three lecture hours and one four-hour laboratory per week. Spring semester. (5 credits)

Upper Level Organismal Biology Courses

64 COMPARATIVE PHYSIOLOGY

A comparative study of physiological adaptations of organisms to the environment. Topics include thermoregulation, water balance, energetics, sensory systems, reproduction, morphology, locomotion, and behavior. The laboratory will demonstrate research techniques in live animal physiological studies. Prerequisites: Biology 22. Three lecture hours, one three-hour laboratory period per week. Fall semester. (5 credits)

65 PLANT BIOLOGY

A study of the major groups of plants from the view point of evolutionary diversity. This survey of the plant kingdom will include the algae, bryophytes, ferns, conifers, and flowering plants. The role of plants in society will also be examined. Three lectures and one laboratory per week. Prerequisites; Biology 21 and 22. Fall semester, alternate years. Next offered fall 1999. (4 credits)

66 INVERTEBRATE ZOOLOGY

In this course the diversity of organisms without backbones is examined. Evolutionary relationships that link the invertebrates together are discussed and typical representatives of the major invertebrate phyla are examined in the laboratory. Prerequisites, Biology 21, 22 and 24 or permission of the instructor. Three lecture hours and one three-hour lab period per week. Spring semester. Occasional offering. (5 credits)

67 NEUROANATOMY

The anatomical structure of the mammalian nervous system will be explored through analysis of artistic photographic and computer graphic representations of nervous system structures at the microscopic level. This course is designed to provide an understanding of the neuroanatomical landmarks and features required for further study in neurobiology. Designed for neuroscience majors

or students with strong interest in neurobiology. Prerequisites: At least concurrent enrollment in Biology 62 or 64, or completion of Biology 12 or Psychology 13. Fall semester. (2 credits)

68 PLANT PHYSIOLOGY

A study of plant functions emphasizing the physiology of photosynthesis, respiration, translocation, and control of growth. Emphasis will be placed on how these processes can be adapted to fine tune plant function in different environments. Three lectures and one three-hour laboratory period per week. Prerequisites, Biology 21 and 23, Chemistry 13 recommended. Alternate years, next offered Fall, 1999. (5 credits)

69 DEVELOPMENTAL BIOLOGY

This course aims to integrate organismal, cellular, genetic and molecular approaches to the study of animal development. We will analyze a diversity of mechanisms, ranging from ones that set up pattern formation in the unfertilized egg to those governing morphogenesis of organ systems. Evolution of developmental mechanisms will also be discussed. The lab component will incorporate both descriptive and experimental embryological techniques. Prerequisites: Biology 21 and 23. Three lecture hours and 3 1/2 hour lab per week. Fall semester. (5 credits)

Seminar and Research Courses

72 RESEARCH IN DEVELOPMENTAL BIOLOGY

Collaborative research with a faculty member in the area of developmental biology with an emphasis on molecular genetic approaches. Extensive laboratory research, readings and discussion of the scientific literature related to the research area are undertaken. A research project will be selected in consultation with the instructor. Prerequisites: Biology 21, 22, 23, 24 and either 69 or 53, and permission of the instructor. Spring semester. (4 credits)

73 RESEARCH IN IMMUNOLOGY

Collaborative research with a faculty member on a current problem in the field of immunology. Prerequisites, junior or senior standing, Biology 21, 22, 23 and 51, Chemistry 38 and permission of the instructor. Spring semester. (4 credits)

75 RESEARCH IN NEUROSCIENCE

This course offers an opportunity to work with a faculty member on current research in neuroscience. Extensive laboratory research, readings and discussion of the scientific literature related to the research area are undertaken. A research project is selected in consultation with the instructor. Prerequisites, junior or senior standing, Biology 21, 22, 23 and 62, and Chemistry 37 and permission of the instructor. Spring semester. (4 credits)

77 RESEARCH IN PHYSIOLOGY

In this course, students will design a research project to investigate physiological/behavioral responses of various organisms to the environment. Both field and laboratory techniques will be used to examine topics such as thermoregulation, biological rhythms, energetics, and endocrinology. Prerequisites: Biology 21, 22, 23, 24 and 64, Chemistry 37 and permission of the instructor. Spring semester. (4 credits)

78 RESEARCH IN PLANT BIOLOGY

Collaborative research with a faculty member in the area of plant biology including plant physiology and plant molecular biology. Prerequisites, Biology 21, 22, 23, 24, Chemistry 37 and permission of the instructor. Spring semester. (4 credits)

82 SEMINAR IN ADVANCED ECOLOGY

This seminar will examine many of the ideas and theories that are currently defining the field of ecology. Often controversial, these ideas are the basis for much of the cutting edge research currently being conducted by ecologists around the world. Using books and ecological journals as the primary source material, students will explore in depth ideas, theory, and empirical data involving topics such as: extinction processes and conservation biology, competition and facilitation among organisms, food webs, the role of scale in ecological studies, the impact of possible climate change on communities and ecosystems, introduced species, and the evolution of sex and mating systems. Classes will consist of lectures, discussions, student presentations, and an occasional field trip.

Students will also participate in a class field project in which they will be introduced to multivariate analysis. During the class, students will gain experience writing ecological research proposals. Prerequisite: Biology 24; at least one of 42, 43, 45, 46, 47; junior or senior standing; and permission of the instructor. Spring semester. (4 credits)

83 SEMINAR IN ENDOCRINOLOGY

This seminar will begin with an introduction to methods of endocrinology research and to the general principles involved in hormone production, function, and regulation in both invertebrates and vertebrates. Students will investigate and discuss topics from current literature such as hormonal regulation of homeostasis, reproduction, growth and development, physiological color change, biological rhythms, behavior, and pheromones. Also included will be the study of endocrinological disorders and treatments. Prerequisites, Biology 21, 22, 23, 24, Chemistry 37, and junior or senior standing in biology or permission of the instructor. Occasional offering. (4 credits)

86 SEMINAR IN NEUROPHARMACOLOGY (Same as Psychology 86)

This is an advanced course that will focus on the study of drugs used to alter the central nervous system. The course will begin with basic pharmacological principles and then concentrate on the various uses of drugs to alter brain neurochemistry. Topics for discussion will include the pharmacological treatment of schizophrenia, depression, pain, anxiety and generally, the neurochemical basis of behavior. In addition to discussion of the use of drugs for clinical purposes, a significant amount of time will be spent on the use of "drugs of abuse" (eg. cocaine, marijuana, LSD). While the focus of the course will be on the biochemical mechanisms of these drugs, an effort will be made to investigate and discuss the sociological ramifications of drug use. Prerequisite: Biology 62 (same as Psychology 62) or Psychology 63, junior or senior standing or permission of the instructor. Three discussion/lecture hours per week. Occasional offering. Next offered in Spring 2001. (4 credits)

89 SENIOR SEMINAR

Building on previous research, course work, or experience gained in an internship or study away program, seniors will prepare a presentation of their findings and perspectives on a particular biological topic. Working closely with an individual faculty member, and with other senior biology majors, students will prepare a multiple draft and well referenced research or review paper on their topic. Students will also prepare an oral presentation, which may be given at a variety of forums, including professional biology meetings, special statewide student research symposia, and an end of the year department symposium. Fall and Spring semester. Can be taken no more than twice for credit. (1 credit)

96 INDEPENDENT PROJECT

This is an opportunity for students to do independent study or research on a biological topic. This may be done in the department under the direct supervision of a faculty member; it may be done at another college or university or similar institution under direct supervision; or in certain circumstances it may be done off campus with minimal direct supervision. Given the nature of independent projects, students need to demonstrate they have the necessary academic background, including appropriate coursework, in the area they are interested in pursuing before an independent will be approved. A special section (Biology 96B-97B) will be offered for students conducting research during January of their senior year for 2 credits. This section is required for all students conducting an Honor's project in the department but may also be taken by students working on their senior presentation. Prerequisite, sponsorship by a biology faculty member. (2–4 credits)

97 INTERNSHIP

This is an opportunity for students to work with professionals in the biological field outside of academia. Students will work with a faculty sponsor and their site supervisor to develop a set of learning goals, strategies to meet these goals, and methods of evaluation for the internship, including the nature of the final product. An internship is an excellent way for students to apply knowledge learned in the classroom and laboratory, to learn more biology, and to explore career options. The internship may be undertaken during a semester, during January, or during the summer and must encompass at least 140 hours of work by the student. Prerequisite: sponsorship by a biology faculty member. (4 credits)

Chemistry

Full Time Faculty: Janet Carlson, Rebecca Hoye, Masao Maruyama, Kathleen Parson, A. Truman Schwartz, James Straka, Thomas Varberg, Wayne Wolsey (Chair)

Part Time Faculty: Charles Taylor, Amy Rice

Laboratory Supervisor: Susan Sharpe

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 and biochemistry 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 biology, environmental studies, geology, physics, dentistry, and medicine.

General Distribution Requirement

All courses in the chemistry department satisfy the general distribution requirement in the natural sciences except courses numbered $50,\,88,\,96,\,97$ and 98

Major Concentration

The major concentration in chemistry consists of Chemistry 11 and 13 (or 13 alone), 23, 37 and 38, 55 and 56, 63 and 88 (4 semesters); Physics 26 and 27; Mathematics 22 and 37; course work or experience in a scientifically useful programming language is expected. Students contemplating graduate study in chemistry or seeking ACS certification (see below) are expected to have the equivalent of one year of college level study in German, Russian, French, or Japanese.

The senior capstone requirement in chemistry may be satisfied by the following: participation in Chemistry 88 (Chemistry Seminar) and oral presentations during the junior and/or senior year.

The chemistry department is on the approved list of the American Chemical Society (ACS). To earn the ACS approved degree, students must have a Macalester chemistry major plus Chemistry 61 and two advanced chemistry courses. In certain cases, advanced courses from other science areas or mathematics may be substituted for the advanced chemistry courses. Students interested in ACS certification should confer with the department chair.

Suggested Course Sequence for a Chemistry Major

	Fall Semester	Spring Semester
Freshman	Chemistry 11 or 13 Mathematics 21or 22 [foreign language]	Chemistry 13 or 23 Mathematics 21 or 22 [foreign language]
Sophomore	Chemistry 37 Mathematics 22 or 37 Physics 26	Chemistry 38 Mathematics 37* Physics 27
Junior**	Chemistry 55 [computer course]	Chemistry 56 (Chemistry 46) (Chemistry 62) Chemistry 23*
Senior**	Chemistry 63 (Chemistry 61)	Chemistry 23* (Chemistry 46) (Chemistry 58) (Chemistry 62) (Chemistry 96)

^{*} 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 highly recommended, especially for graduate study in chemistry. Courses in brackets are expectations. Chemistry 61 and two other advanced courses are required for an ACS approved major. A course in computer science or related experience is expected 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 13, or 13 and 23, 37 and 38, 55, either 56 or 58, and 88 (two semesters). Required supporting courses are Physics 26 and 27; and Mathematics 21 and 22. Two additional science courses are required and may be chosen from the fields of biology, geology, physics, or mathematics.

Chemistry Seminar

All interested students are encouraged to participate in the chemistry seminar program which regularly brings speakers to campus from industry, government and research universities. As a part of this program, all students with a major or core in chemistry are required to make oral presentations to the department on

^{**}Enrollment in Chemistry Seminar (88) required during junior and senior year.

an independent topic based on a laboratory research project or a literature review.

COURSES

10 CHEMISTRY IN CONTEXT

A course, designed primarily for students not majoring in the sciences, which explores the applications and implications of chemistry in a societal context. The chemical concepts are introduced as needed to explain such contemporary issues as ozone depletion, global warming, acid precipitation, alternate energy sources, drug design, and nutrition. The political, social, and ethical dimensions of these topics are also considered. There is minimal use of mathematics and greater emphasis on discussion, writing, decision-making, and role-playing than is characteristic of most science courses. Also includes a laboratory component. Every year. (4 credits)

11 GENERAL CHEMISTRY I: PROPERTIES AND STRUCTURE

An introduction to the fundamental principles of chemistry, including such topics as elements, compounds, and mixtures; chemical notation and nomenclature; mass and molar relations; properties and periodicity; atomic theory and structure; molecular structure and chemical bonding; gases, liquids, solids, and solutions. Prerequisite, none. High school credit in chemistry is common, but not required. Three lectures and one three-hour laboratory per week. Fall and spring semesters. (4 credits)

13 GENERAL CHEMISTRY II: REACTIVITY, ENERGETICS, EQUILIBRIUM

Chemical principles applied to dynamical systems, including such topics as thermochemistry and elementary thermodynamics; spontaneity and chemical equilibrium; rates of reaction; solubility equilibria and precipitation reactions; acids, bases, and acid-base reactions; complex ions and coordination compounds; oxidation, reduction, and electrochemistry; qualitative analysis. Prerequisite, Chemistry 11 or satisfactory performance on the chemistry placement examination. Chemistry 13 is an appropriate entry level course for students with strong high school preparation in chemistry and mathematics. Three lectures and one three-hour laboratory per week. Fall and spring semesters. (4 credits)

23 ANALYTICAL CHEMISTRY

Application of chemical principles to problems in chemical analysis. Laboratory work includes volumetric, gravimetric, and instrumental methods for quantitative analysis. Prerequisite, Chemistry 13. Three lectures, six hours laboratory per week. Spring semester. (5 credits)

37 ORGANIC CHEMISTRY I

The chemistry of monofunctional carbon compounds including structure-reactivity relationships, reaction mechanisms, and stereochemistry. Laboratory work includes purification methods, synthesis, and identification of compounds. Prerequisite, Chemistry 13. Three lectures, four hours laboratory per week. Fall semester. (5 credits)

38 ORGANIC CHEMISTRY II

Continuation of Chemistry 37, which is a prerequisite. Spectroscopy and multifunctional compounds found in nature are also discussed. Three lectures, four hours laboratory per week. Spring semester. (5 credits)

46 RESEARCH METHODS IN ORGANIC CHEMISTRY

Planning and execution of a research project (chosen with the aid of the instructor) from an original idea. Discussion of theories of synthesis design and of classical syntheses. A paper describing progress in the laboratory is required. Prerequisites, Chemistry 38 and permission of the instructor. Three hours of lecture and eight hours of laboratory per week. Alternate years. (5 credits)

49 RADIOCHEMISTRY

Nuclear and radiochemistry and their application to chemistry and biology. Prerequisite, Chemistry 23 or permission of the instructor. Three lectures, three hours laboratory per week. Alternate years. (4 credits)

50 TOPICS

Examination of a topic of general interest in chemistry, the topic to be announced in advance of registration. Recent titles have been Mass Spectroscopy, NMR Spectroscopy, and Organometallic Chemistry. Prerequisite, permission of the instructor. (4 credits)

55 PHYSICAL CHEMISTRY I

Topics in macroscopic, classical physical chemistry: properties of gases, thermodynamics and its applications to physical and chemical systems; phase, chemical, and electrochemical equilibrium; rates of reactions and chemical kinetics. Prerequisites, Chemistry 13, Physics 27, Mathematics 22. Three lectures, three hours laboratory per week. Fall semester. (4 credits)

56 PHYSICAL CHEMISTRY II

Continuation of Chemistry 55. Topics in microscopic, modern physical chemistry: quantum mechanics and atomic and molecular structure; spectroscopy and diffractometry; statistical mechanics and thermodynamics. Includes some computer applications. Prerequisite, Chemistry 55; course work or experience in computer programming recommended. Three lectures, three hours laboratory per week. Spring semester. (4 credits)

58 BIOCHEMISTRY (Same as Biology 58)

A study of biological processes at the molecular level with an emphasis on the metabolism of carbohydrates, lipids, amino acids, and nucleotides; the mechanisms and kinetics of enzyme catalyzed reactions; the regulation of biochemical pathways; and the structure, function and biosynthesis of proteins and nucleic acids. Prerequisites, Chemistry 38 and 55, Biology 21 or permission of the instructor. Three lecture hours and one three-hour laboratory per week. Spring semester. (5 credits)

61 INSTRUMENTAL ANALYSIS

Advanced methods of instrumental analysis including spectroscopy, chromatography, and electrochemistry. Prerequisite, Chemistry 23 and 56 or permission of instructor. Three lectures, three hours laboratory per week. Fall semester. (4 credits)

62 ADVANCED ORGANIC CHEMISTRY

Selected topics in organic chemistry, including stereochemistry, reaction mechanisms, modern methods of organic synthesis and spectral methods of identifying organic compounds. Laboratory emphasis on spectral, chromatographic and synthetic methods. Prerequisites, Chemistry 38 and 56 (or coregistration). Three lectures, six hours of laboratory per week. Alternate years. (4 credits)

63 ADVANCED INORGANIC CHEMISTRY

Structures and bonding in inorganic chemistry. Chemical periodicity and reactions of inorganic elements and compounds; transition metals and coordination compounds. Prerequisite, Chemistry 56 or permission of the instructor. Three lectures, three hours of laboratory per week. Fall semester. (4 credits)

88 CHEMISTRY SEMINAR

Presentations on current topics in the chemical sciences by campus visitors, Macalester faculty, and Macalester students. Students will be expected to prepare for the presentations by reading, and, in some cases, discussing the papers of the speakers. Chemistry majors will make two presentations over four semesters, cores will make one presentation over two or four semesters. Prerequisite, junior or senior standing. One hour per week. S/NC Grading. Fall and spring semesters. (1 credit)

96 INDEPENDENT PROJECT

Laboratory and library research on an original problem, usually with a thesis. Prerequisite, permission of the department. $(1-4\ credits)$

97 INTERNSHIP

Ordinarily restricted to seniors. Prerequisite, permission of the instructor. (1-4 credits)

98 PRECEPTORSHIP

Prerequisite, permission of the department. (4 credits)

Classics

Full Time Faculty: Andrew Overman (Chair), Jeremiah Reedy, Beth Severy

Classics is the study of the cultures of the ancient Mediterranean Basin. Many of our Western traditions rest upon the societies of ancient Greece, Rome and the Middle East. Thus, by studying the languages, literatures, history, religions, philosophy, architecture, art and archaeology of these peoples, we critically examine a variety of foreign cultures, as well as our own. Classics provides a useful training ground for thinking about and working in a diverse society.

The department prepares students for graduate work in Classics and Classical Archaeology, as well as a wide range of related disciplines, such as History, English, Philosophy and Religious Studies. Classics majors also enjoy success in applying to professional programs in law, architecture and political science, among other things. Above all, Classics provides a place to examine many aspects of life and engage a new and foreign world view. Classics focuses on writing, critical reading, language skills and argumentation.

Students are encouraged to take advantage of foreign study programs. Programs directed by the Classics department include the Black Sea Project, summer archaeological excavations on the Black Sea at the ancient Greek city of Chersonesus and the January program studying and exploring the ancient city of Rome. The department also sends students on the affiliated programs of the American School of Classical Studies at Athens, the College Year in Athens, and the Intercollegiate Center for Classical Studies in Rome.

General Distribution Requirement

All courses offered by the department may be used to satisfy the general distribution requirement in the humanities.

Diversity Requirement

The international diversity requirement may be met through department courses 21 and 22 (Ancient World I and II), 27 (Women in Classical Antiquity), and 69 and 70 (Greek and Roman History).

Major Concentration

Students earn a major in Classics by choosing among five programs in three general areas: Classical Civilization, Classical Archaeology and Classical Languages. In addition to the following course work, each concentration requires a capstone experience (see below).

Classical Civilization

A major in Classics with an emphasis in Classical Civilization consists of nine courses to include: a) two courses which provide a comprehensive introduction to the ancient Mediterranean world (either 21 and 22 or 69 and 70); b) two courses in a classical language (Greek, Latin or Hebrew); c) two courses in ancient literature beyond the elementary level (language courses

numbered 30 and above or literature courses in translation. If 21 and 22 are used to satisfy this requirement, then 69 and 70 must be taken to satisfy requirement (a) above.); d) three electives chosen from the offerings of the department. Select courses from other departments may be substituted on occasion when approved in advance by the Classics department.

Classical Archaeology

A major in Classics with an emphasis in Classical Archaeology consists of eleven courses to include: a) two courses which provide a comprehensive introduction to the ancient Mediterranean world (either 21 and 22 or 69 and 70); b) two courses in a classical language (Greek, Latin or Hebrew); c) four foundation courses: Classics 23 (Introduction to Archaeology), Geology 36 (Stratigraphy and Sedimentation), Geography 25 (Cartography), and an advanced archaeology course from the Classics department, such as 63 (Archaeology and Architecture of the Greco-Roman World); d) three electives chosen from the following, or as approved in advance by the Classics department: Classics 60, Anthropology 12 and/or 45, Art 37 (Ceramic Art), Geography 16, 32 and/or 64, Geology 12, 15.

Archaeology majors must also gain some form of field experience, such as participating in an excavation or interning at a museum. For most majors, this will become part of their capstone experience (see below).

Classical Languages

A major in Classics with an emphasis in Greek, Latin or Classical Languages consists of nine courses to include: a) two courses which provide a comprehensive introduction to the ancient Mediterranean world (either 21 and 22 or 69 and 70); b) seven courses involving classical languages and literatures in the original language. These may include any courses in Greek, Latin, and/or Hebrew as offered or approved by the Classics department, but each student's particular combination of courses must be approved by the department.

Capstone Experience

Classics majors in all emphases must also complete a capstone requirement. This may be fulfilled through an independent study course (96), which can be used to fulfill electives within the major, or through participation in a majors' seminar (88).

Core Concentration

A Classics core concentration with an emphasis in Classical Civilization consists of six courses to include: a) two comprehensive surveys (either 21 and 22 or 69 and 70) and b) four other courses chosen from the language, literature, philosophy, history, archaeology and other courses offered by the department.

A Classics core concentration with an emphasis in Classical Archaeology consists of six courses to include: a) two comprehensive surveys (either 21 and 22 or 69 and 70); b) Introduction to Archaeology (23); and c) three other archaeology courses offered or approved by the Classics department.

A Classics core concentration with an emphasis in Classical Languages consists of six courses to include: a) two comprehensive surveys (either 21 and 22 or 69 and 70) and b) four courses in classical language and literature (Greek, Latin and/or Hebrew) in the original languages.

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

Minor Concentration

A Classics minor concentration with an emphasis in Classical Civilization consists of five courses to include: a) two comprehensive surveys (either 21 and 22 or 69 and 70) and b) three other courses chosen from the language, literature, philosophy, history, archaeology and other courses offered by the department.

A Classics minor concentration with an emphasis in Classical Archaeology consists of five courses to include: a) two comprehensive surveys (either 21 and 22 or 69 and 70); b) Introduction to Archaeology (23); and c) two other archaeology courses offered or approved by the Classics department.

A Classics minor concentration with an emphasis in Classical Languages consists of five courses to include: a) two comprehensive surveys (either 21 and 22 or 69 and 70) and b) three courses in classical language and literature (Greek, Latin and/or Hebrew) in the original languages.

COURSES

Classical Civilization

(Knowledge of Latin, Greek and/or Hebrew not required)

21 THE ANCIENT WORLD I: GREECE (Same as Humanities and Cultural Studies 21)

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. Alternate years. (4 credits)

22 THE ANCIENT WORLD II: ROME (Same as Humanities and Cultural Studies 22)

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. Alternate years. (4 credits)

23 INTRODUCTION TO ARCHAEOLOGY

This course introduces students to the discipline and profession of archaeology. The history, methodologies, theories and impact of archaeology are studied. Specific sites are analyzed, along with contemporary finds and the political dimensions of archaeology. Assessment includes weekly papers, site presentations, and an archaeological research paper. Offered every fall. (4 credits)

27 WOMEN IN CLASSICAL ANTIQUITY

An investigation of contemporary approaches to studying women and gender in antiquity. The course explores how ancient Mediterranean societies understood and employed the categories of male and female, and how this affected the actions and representations of women in literature, myth, art, law, philosophy, politics and medicine. Offered every spring. (4 credits)

29 CLASSICAL MYTHOLOGY

A survey of the major myths of classical antiquity with emphasis on the content and treatment of myth in such classical authors as Homer, Hesiod, Vergil and Ovid. Some attention will be paid to the psychology of myth-making and to modern theories of mythology. Offered every year. (4 credits)

30 ANCIENT AND MEDIEVAL PHILOSOPHIES (Same as Philosophy 30)

Major philosophers of Greece, Rome and the medieval period. Offered every fall. (4 credits)

45 PAGANS, CHRISTIANS & JEWS IN CLASSICAL ANTIQUITY: CULTURES IN CONFLICT (Same as Religious Studies 45)

This course studies the interaction of Jewish, Christian, and pagan cultures, and the protracted struggle for self-definition and multi-cultural exchange this encounter provoked. The course draws attention to how *the other* and cultural and religious difference are construed, resisted, and apprehended. Readings include Acts, Philo, Revelation, I Clement, pagan charges against Christianity, *Adversus loudaios* writers, the *Goyim* in the Mishna, and apologetic literature. Alternate years. (4 credits)

47 HELLENISTIC AND JEWISH CULTURES: GREEK AND JEWISH CONVERSATIONS IN THE GRECOROMAN PERIOD

This course studies the influence of Greek culture and thought on significant Jewish writers and centers from the second century B.C.E. to the second century C.E. Conversely, the course studies the influence and attraction of Jewish culture and religion in various parts of the Roman world. Readings include Flavius Josephus, Philo of Alexandria, epigraphical evidence from the Greek east, Juvenal, the Bible, the Letter of Aristeas, Joseph and Aseneth, and recently excavated synagogues and public buildings from Asia Minor and Roman Palestine. Alternate years, next offered 2000–01. (4 credits)

50 TOPICS

Occasional and often experimental courses focusing on special topics of interest to faculty and students. Recent courses include India and Rome: The Rise of Religion in the Empires of Late Antiquity, The Idea of a College: Classical and Contemporary Perspectives on Higher Education, Methods in Field Archaeology, and Plato and Postmodernism. (4 credits)

Additionally, the department has been regularly offering Elementary and Intermediate Hebrew as topics courses.

55 JANUARY IN ROME: THE ART, ARCHAEOLOGY, AND TOPOGRAPHY OF ANCIENT ROME

A survey and tour of the major spaces, surviving monuments and artifacts of the city of Rome from the earliest occupation of the Palatine hill around 1000 BCE to the construction of the first major Christian buildings by the emperor Constantine in the 4th century CE. Students also learn architectural building techniques, systems of dating based on types of stone and brickwork, problems in properly identifying surviving buildings, the iconography of Roman political sculpture and other dating techniques, and techniques of Roman copying and reuse of original Greek art. We consider the incorporation of Roman monuments into subsequent architecture, including Fascist political (re)use of archaeology, as well as problems of conservation in the context of the modern city. Finally, visits to the excavated cities of Pompeii and Ostia make visible the lives and activities of those lost in the literary record, including women and slaves. Student evaluation is based on participation in group events, a presentation, two on-site projects, two quizzes, completion of a set of self-guided site visits, and a final project. Offered alternate years, next offered January 2000. (2 credits, with 2 additional credits available through completion of an independent study project the following spring term).

60 INTRODUCTION TO CLASSICAL ART (Same as Art 60)

This course offers an introduction to major monuments and periods of art from Ancient Antiquity through the Middle Ages. Its purpose is not only to acquaint students with key works of prehistoric, Egyptian, Mesopotamian, Aegean, Greek, Etruscan, Roman, Early Christian, Byzantine, Hiberno-Saxon, Carolingian, Ottonian, Romanesque and Gothic art, but also to help them develop a vocabulary for the description and analysis of works of art. The course also provides a basic understanding of the methods and aims of art historical study while examining a broad range of issues such as patronage and the art maker, the changing roles of artists in society and the changing functions of art. Three hours per week. Offered every fall. (4 credits)

63 ARCHAEOLOGY AND ARCHITECTURE IN THE GRECO-ROMAN WORLD

This course examines the development and the architecture of ancient cities and the archaeological methods used to uncover them. The course focuses on the political and ideological importance of urban art and architecture and the various interpretations of architectural statements. The political use of space, the city as an institution and the interpretation of material culture are prominent issues in the course. Alternate years, next offered 1999–2000. (4 credits)

69 HISTORY OF GREECE (Same as History 69)

A study of the political, constitutional and cultural history of Greece from the earliest times to Alexander the Great. Special attention is given to the origins of Greek institutions in the Minoan-Mycenaean civilization (late Bronze Age), the development of the city-state as a political unit and the height of democracy under Pericles, the Greek world of the fourth century, the rise of Macedonia and the expansion of the Hellenic world through the conquests of Alexander. Alternate years, next offered Fall 1999. (4 credits)

70 HISTORY OF ROME (Same as History 70)

A study of the political, constitutional and social history of Rome from its beginnings to the disintegration of ancient civilization, following its climax in the second century A.D. There will be emphasis on such large aspects of Roman history as the development of the Roman constitution, Rome's conquest of the Mediterranean from the time of the Punic Wars to 133 B.C., the last century of the Roman Republic and the causes of its fall, the establishment of the principate, and the reasons for the decline of the Empire. Alternate years, next offered Spring 2000. (4 credits)

95 TUTORIAL

Prerequisite, permission of the instructor. (4 credits)

96 INDEPENDENT PROJECT

Prerequisite, permission of the instructor. (4 credits)

97 INTERNSHIP

Previous course work in department required, as well as permission of the instructor. (4 credits)

98 PRECEPTORSHIP

Prerequisite, permission of the instructor. (4 credits)

Greek

15 ELEMENTARY GREEK

A one semester introduction to koine Greek, this course prepares students to read the New Testament and other documents of the Hellenistic Age. Every Fall. (4 credits)

35 GREEK NEW TESTAMENT

Reading the Greek New Testament and other Jewish documents from the Hellenistic period. Prerequisite: Classics 15. Every Spring. (4 credits)

61 PLATO AND HIS WORLD

Readings from the dialogues of Plato to illustrate the philosopher's thought and style. Part of the Greek language sequence. Every Fall. (4 credits)

62 HOMER AND THE GREEK EPIC

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. Part of the Greek language sequence. Every Spring. (4 credits)

87 ADVANCED READING IN GREEK

Authors chosen after consultation between instructor and student. Examples: Herodotus, Thucydides, Aristotle. Independent. Every year. (4 credits)

95 TUTORIAL

Prerequisite, permission of the instructor. (4 credits)

96 INDEPENDENT PROJECT

Prerequisite, permission of the instructor. (4 credits)

Latin

11,12 ELEMENTARY LATIN

A study of the vocabulary, morphology and syntax of the Latin language; reading easy Latin such as the Bible, Pliny and Caesar. Two-term sequence. Every year. (4 credits each semester)

31 INTERMEDIATE I ATIN

A thorough review of Latin grammar followed by a study of Roman prose authors, with particular emphasis on the letters and speeches of Cicero. Every Fall. (4 credits)

32 INTERMEDIATE LATIN

A study of Vergil and other poets of the Augustan Age. Every Spring. (4 credits)

83 ADVANCED READING IN LATIN

Authors chosen after consultation between instructor and student. Examples: Lucretius, Seneca, Petronius, Apuleius, Juvenal, Martial. Every year. By arrangement with instructor. (4 credits)

Prerequisite, permission of the instructor. (4 credits)

96 INDEPENDENT PROJECT

Prerequisite, permission of the instructor. (4 credits)

Communication Studies

Full Time Faculty: Sally Caudill, Adrienne Christiansen, Leola Johnson, Roger Mosvick, Clay Steinman (Chair), Dick Lesicko (Director of Forensics)

Part Time Faculty: Jerry Fisher, Michael Griffin, Bruce Jenkins, Howard Sinker, Doug Stone

Communication is symbolically mediated human activity. Individuals, groups, and institutions define themselves and learn to function effectively through communication. They also can misunderstand each other, especially when they attempt to communicate across cultural divides without appreciation of differences. Communication can be a tool for establishing, maintaining, or changing interpersonal and social relations. Communication Studies examines how human beings, individually or institutionally, make sense of the world or act in the face of meanings others seek to impose on them. As communication becomes more technological, it becomes important to understand individual efforts to persuade as well as the cultural and political-economic structures and media forms that affect how meanings are made.

The department's origins were in a major program emphasizing rhetoric, public address, and organizational communication and a separate minor program in journalism. The department has expanded to include not only the traditional study of rhetoric, interpersonal, organizational, and intercultural communication, but also communication's relation to gender and multiculturalism; communication and new technologies, including computers; cultural studies; film studies; media analysis; and a wide range of theories that inform the study of communication. These approaches include both

humanities and social-science perspectives. Overall, the courses seek to develop six faculties central to the mission of the liberal arts:

- 1. Oral and written communication skills vital for personal, political, social, and vocational effectiveness. Classes stress speaking and writing.
- 2. Reasoning and critical thinking abilities that enable one to create and evaluate arguments in interpersonal and organizational discourse and images and narratives in media.
- 3. Knowledge of small group and interpersonal communication to understand and practice effective group functioning in personal and organizational contexts.
- 4. Understanding of theories of communication and modes of criticism that provide classical and contemporary perspectives useful in framing and analyzing communication acts. This includes understanding the philosophical and cultural assumptions of theories and modes of criticism and their relation to social critique.
- 5. Historical and critical understanding of how media representations are produced and understood.
- 6. Sensitivity to ways historically constructed differences of class, culture, education, ethnicity, gender, geographical origin, race, and sexuality affect freedom of speech, access to the media, and the pursuit of social justice.
- 7. An understanding of the strengths and critiques of empirical research for creating and evaluating knowledge about communication.

Department faculty regularly offer first-year seminars, participate in the Honors Program, sponsor independent projects and tutorials, and work closely with students who serve as research assistants and teaching preceptors. The department's Communication Laboratory offers students facilities for preparation (including videotaping) of oral presentations and group projects. Audio and video production facilities and a substantial video collection are accessible to students in Media Services.

Career Orientation

Many Communication Studies majors and minors go on to do graduate work in business or public administration, communication, education, film, journalism, law, media production, and other academic fields. Most graduates find careers in business, education, government, the media, or with nonprofit institutions.

Faculty encourage students to take internships to gain valuable pre-professional experience and to learn to apply their academic work to institutions of different sizes and goals. The department's part-time faculty includes several leaders in local media and cultural institutions who assist students in finding internships, working closely with the director of the college Internship Program. Internships sponsored by this department are available only to juniors and seniors who have completed a communication studies minor or the equivalent. Normally, internships are graded pass/fail. Exceptions to this policy permitting a letter

grade may be made at the discretion of the individual faculty member sponsoring the internship. Up to four internship credits may be applied to the major plan.

General Distribution Requirement

All courses in Communication Studies satisfy the general distribution requirement in the social sciences but five. Film Analysis: Formalist and Feminist (Communication Studies 28) meets the general distribution requirement in the fine arts. Rhetoric and Social Change (Communication Studies 36), Computer Mediated Communication (Communication Studies 47), History of Film, 1894–1941 (Communication Studies 48), and History of Film Since 1941 (Communication Studies 49) meet the general distribution requirement for the humanities.

Diversity Requirement

The courses in Communication Studies that satisfy the domestic diversity requirement are Gender and Communication (Communication Studies 44) and Multicultural Communication (Communication Studies 32). The course that satisfies the international diversity requirement is Intercultural Communication (Communication Studies 38).

Major Concentration

A major will require a minimum of ten courses under the following requirements:

- 1. Communication Studies 10 (Foundations of Communication Studies) plus one other foundation course (numbered 10–28). Completion of or enrollment in Communication Studies 10 is required for entrance into the program.
- 2. At least three courses at the intermediate level—courses numbered 30–60.
- 3. One methods course: Science and Social Inquiry (Sociology 41), Empirical Research Methods (Political Science 30), Experimentation and Statistics (Psychology 49), or Data Analysis and Statistics (Mathematics 14).
- 4. One advanced course (numbered 72–76).
- 5. One course at the capstone level, Communication Studies 88 (Advanced Topics Seminar).
- 6. Two additional electives in Communication Studies.

Minor Concentration

A minor concentration in Communication Studies will consist of Communication Studies 10 (Foundations of Communication Studies) plus any four courses in Communication Studies.

Special Programs

Communication Studies faculty participate in the interdisciplinary programs in Comparative North American Studies, Humanities and Cultural Studies,

International Studies, and Women's and Gender Studies. Cultural Studies and the Media (Communication Studies 34) counts toward the major in Humanities and Cultural Studies. Film Analysis: Formalist and Feminist (Communication Studies 28) and Gender and Communication (Communication Studies 44) have been approved for the Women's and Gender Studies major and minor programs. Intercultural Communication (Communication Studies 38) is a supporting course option in the International Studies major. In addition, the Department offers Topics courses every year (Communication Studies 50) that are approved for other programs. Currently these include Blackness and the Media (African American Studies, Comparative North American Studies, and Humanities and Cultural Studies); Feminism, Representation, and Film (Women's & Gender Studies).

Forensics

The department provides extensive opportunities to participate in a nationally recognized program of debate and forensics. These programs are open to any student without prerequisites or previous forensic experience and include options in campus parliamentary debate as well as intercollegiate competition in Lincoln-Douglas, cross-examination debate, mock trial competition, and a variety of individual forensic events.

COURSES

10 FOUNDATIONS OF COMMUNICATION STUDIES

Communication Studies examines how meanings are generated, articulated, re-articulated, and exchanged in specific cultural and historical contexts. Each of these processes can be studied in multiple ways (e.g., rhetorically, social-scientifically, or in terms of its relation to democracy, power, and inequality). This course introduces students to the theoretical bases of different approaches to communication and to examples of significant research in the field. It includes readings in rhetorical and critical social theory, from Aristotle and Plato through Karl Marx and Max Weber, and from W.E.B. DuBois through Michel Foucault and Judith Butler. The course also introduces different approaches to writing about communication, including issues of argument and documentation. Spring semester. (4 credits)

14 NEWS REPORTING AND WRITING

This class introduces students to the methods of newspaper reporting and writing. Students work individually and in small groups to tackle an assortment of writing assignments, using events on the Macalester campus as a primary resource. In addition, the class provides an overview of journalism ethics and media law. It is taught by a working journalist with 15 years of writing and editing experience. Fall semester. (4 credits)

16 PUBLIC SPEAKING

A practical and theoretical investigation of public discourse, combining lecture, discussion, and student presentation. The course's main focus will be on practical application of sound principles relating to research, development, and support of ideas, organization, style, audience adaptation, and delivery. Student exercises will cover both informative and persuasive speaking, with extensive verbal and video feedback. Fall semester. (4 credits)

21 INTERPERSONAL COMMUNICATION

This course is a study of communication in interpersonal relationships. The primary focus is to introduce students to the study and application of theories, principles, and practices of interpersonal communication. Fundamental to the course is the idea that communication, an understanding of relational phenomena, and the role of the individual are a means of empowerment. The course prepares students to participate in a democratic, humanistic society and to understand theoretical approaches to personal relationships. The course encourages the development of critical thinking

skills required in a society that constantly demands that people make and sustain personal relationships in a variety of contexts. This involves being able to evolve praxis by understanding one's own as well as others' communication behaviors. In addition, the course seeks to encourage students to articulate the values that are implied in relational discourse and the ethical consequences of that discourse. Fall semester. (4 credits)

22 SMALL GROUP COMMUNICATION

An introduction to basic forms of small group discussion, group dynamics processes, and small group decision making. The course emphasizes video analysis of group discussion, simulation of decision-making approaches, and small group theory. Students engage in three discussions of current controversial topics then analyze the video playbacks of their behavior while preparing a critical evaluation of their own behavior. Ongoing research and guest speakers from outside organizations are used to discuss real-life applications of small group theory and decision making. Fall semester. (4 credits)

24 ARGUMENTATION

A study of the principles and practices of argument; reasoning in communication. This course examines the adaptation of logic and evidence to rational decision making and effective advocacy. Topics include argument theories, types and uses of evidence, modes of inductive and deductive reasoning, critical thinking and fallacious reasoning, and oral presentation of arguments. Students also receive instruction in computer-assisted research and argumentation. Fall only. (4 credits)

26 MEDIA INSTITUTIONS

An analysis of the major forces that determine media production and distribution. Topics include the political economy of media, ownership and government regulation, systems of power within media organizations, and the influence of advertisers on news and programming practices as well as on media access and diversity. Students will examine contemporary commercial media practices and structures in light of comparative, historical, and potential alternatives. Spring semester. (4 credits)

28 FILM ANALYSIS: FORMALIST AND FEMINIST

This course introduces and develops skills in formalist and feminist film analysis. The course concentrates on the basic features of film form: narrative and non-narrative structure, the shot, editing, and sound. Building on this aesthetic approach, the course also introduces the method of film analysis that has been most influential within film studies for two decades: feminist film theory and criticism, including its psychoanalytic critique of the "realism" of conventional cinema, its advocacy of alternative forms of gendered production and spectatorship, and its engagement with postmodern understandings of culture, gender, race, and sexuality. Several papers and a short video project emphasizing abstract form are required. Fall semester. (4 credits)

30 PERSUASION

A study of the basic process of persuasion used in a variety of communication settings. Topics include persuasion theory, persuasive vs. informative discourse, arguments, appeals, language, and formats of persuasion, the process of motive analysis, behavioral studies or persuasion in interpersonal, small group, public, organizational and mass media settings. Students compose, present, and evaluate their own persuasive presentations with video analysis. Spring semester. (4 credits)

31 ADVANCED MEDIA WRITING

In-depth reporting and writing of news articles for newspapers, radio, and television. The course will stress effective writing and editing and development of a strong sense of journalistic ethics. Emphasis will be placed on field reporting, on-site visits to newsrooms and frequent discussions with practicing journalists. Students will also be asked to examine the changing role of media and the role of journalists in American society, including the media's relationship with politics, government, education, the legal system, and the community. The course will also examine the role of public relations strategies and how they affect the media. Prerequisite: Communication Studies 14 or consent of instructor. Spring semester. (4 credits)

32 MULTICULTURAL COMMUNICATION

An examination of the ways that culture, ethnicity, and difference impact communication interactions in U.S. society. Theories and practices of culture related communication are examined along with a variety of communication contexts including interpersonal interactions, group dynamics, and public

discourse. The impact of several topics on communication practices are examined including the interrogation of constructs of race including whiteness, verbal and nonverbal communication strategies, criteria for satisfying intercultural interactions, intercultural relationships, conflict, identity development, power, privilege, inequality, education, stereotypes, and prejudice. Alternate spring semesters. (4 credits)

34 CULTURAL STUDIES AND THE MEDIA

An overview of contemporary approaches to media as culture, a determining as well as determined sphere in which people make sense of the world, particularly in terms of ethnicity, gender, identity, and social inequality. Students develop tools for analyzing media texts and accounts of audience responses derived from the international field of cultural studies and from the social theory on which it draws. Analysis emphasizes specificity of media texts, including advertisements, films, news reports, and television shows. Experience in cooperative discussion, research, and publication. Spring semester. (4 credits)

36 RHETORIC AND SOCIAL CHANGE

A study of human efforts to develop social influence and affect social change. The course illuminates rhetorical processes by focusing on the creative and strategic symbols individuals use to express dissatisfaction and win others' assent. A study of discursive and non-discursive acts generated in American protest movements, including: the New Right, anti-abortion, anti-feminist, anti-lynching, anti-war, Civil Rights, Gray Panthers, gay/lesbian rights, feminist, environmentalist, Red Power, migrant farm worker and white supremacist. Students will use rationalistic, psychological, dramatistic, and narrative critical approaches in evaluating these rhetorical acts. Alternate fall semesters, next offered fall 2000. (4 credits)

38 INTERCLICTURAL COMMUNICATION

A study of theories, models, and cases of intercultural communication specifically focusing on issues and problems involved in border crossings. Theories of post-colonialism, diaspora, orientalism, and critical pedagogy are used to examine issues of immigration, assimilation and acculturation, culture shock, cultural assumptions and communication rules, basic verbal and non-verbal strategies between cultures, and problems and opportunities in intercultural communication research. Guest speakers from Asian, African, Middle Eastern, and other non-American western cultures are supplemented by video case studies of intercultural communication. Alternate spring semesters, next offered spring 2001. (4 credits)

40 ORGANIZATIONAL COMMUNICATION

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 of organizational communication are examined via film and simulation games as well as through "real life" presentations from speakers representing business, governmental, and educational organizations. An exploratory study in some aspect of organization communication is an integral part of the course. Normally taught alternate spring semesters, next offered spring 2000. (4 credits)

44 GENDER AND COMMUNICATION

A study of the theory and practice of gender related communication in society. Topics include gender marked or gender biased oral discourse, the relationship between oral language and patriarchal social structure, patterns of men's and women's speech in specific social contexts, the influence of race, class and sexual/affectional orientations on standards of "appropriate" communication, and obstacles and strategies for female public speakers. Students engage in one group research project and two individual critical analysis projects. Prerequisite: sophomore standing. Alternate fall semesters, next offered fall 1999.

46 THE ELECTRONIC MEDIA IN AN INTERNATIONAL AGE (Same as History 46)

This course examines the structures, politics, economics, and program content of AM and FM radio, over-the-air television, cable television, and satellite television from a historical and international/multinational/multicultural perspective. The editorial practices and programming goals of news gathering and distribution receive special attention. Ethical questions, such as the rights of minorities and less developed countries to resist the dominance of powerful media interests as opposed to the rights of individuals to see and hear what they choose, are examined. Prerequisites:

Sophomore status; sufficient knowledge of a language, other than English, to comprehend radio and television broadcast in that language; analytic and writing skills necessary to do focused research and analysis. Fall semester. (4 credits)

47 COMPUTER MEDIATED COMMUNICATION

This course highlights the new and modified forms of human communication that occur through the computer medium. Students will analyze synchronous and asynchronous communication; the development of personal identity in a computer mediated context; implications for privacy, free speech, access, social justice, civic participation, and political power. The course emphasizes visual rhetoric and human persuasibility in a Digital Age. Students will analyze and create rhetorical discourse in a computer mediated context. Prerequisite: One of the following courses: Foundations of Communication Studies (Communication Studies 10), Public Speaking (Communication Studies 16), Argumentation (Communication Studies 24), Media Institutions (Communication Studies 26), Persuasion (Communication Studies 30), Rhetoric and Social Change (Communication Studies 36), or permission of the instructor. Alternate Fall semesters, next offered 1999. (4 credits)

48 HISTORY OF FILM, 1894-1941

This course provides an overview of the history of film up through the release of *Citizen Kane*, examining aesthetic, industrial, social, and theoretical topics in a variety of national and cultural contexts. Discussions, lectures, and screenings emphasize commercial and avant-garde styles and their determinants. What is the style now referred to as the "classical Hollywood cinema"? Why did it materialize? What alternatives were there? The course explores issues of racism and gender as well as connections between the history of film and the modernization of European and U.S. culture. Several papers are required. Prerequisite, sophomore status or permission of instructor. Alternate fall semesters, next offered fall 2000. (4 credits)

49 HISTORY OF FILM SINCE 1941

This course provides an overview of the history of film from the early 1940s, examining aesthetic, industrial, social, and theoretical topics in a variety of national and cultural contexts. Discussions, lectures, and screenings emphasize international commercial and alternative styles and their determinants. Why and how did alternative styles develop against and within the Hollywood system? The course explores issues of racism and gender as well as connections between the history of film and postwar transformations, with particular attention to the effects on filmmaking of the Cold War in the United States and of post-colonial struggles in Africa, Asia, and Latin America. Several papers are required. Prerequisite, sophomore status or permission of instructor. Communication Studies 48, Film History, 1894–1941, is not a prerequisite, but students who have completed that course will be encouraged to engage in independent research. Alternate spring semesters, next offered spring 2001. (4 credits)

50 TOPICS

The following are some of the topics courses that we have offered in the past or hope to offer in the future: Conversation Analysis, Critical Issues and Public Advocacy, Cuban Cinema, Hitchcock and Gender, Negotiation, Blackness and the Media, Political Communication, and Rhetoric of Ethnic Minority Social Movements. In 1999–00 the department intends to offer the following Topics courses: Blackness and the Media; Global Media and the Production of Culture; Feminism, Representation, and Film; Media and Popular Culture in Postwar Japan; Lesbian and Gay Communication; and Video Art 1965–1995. On an occasional basis. (4 credits)

72 INTERPERSONAL/MULTICULTURAL COMMUNICATION THEORY

A study of contemporary theories and perspectives used to interpret or frame communication acts in a variety of settings including dyadic communication, interpersonal, multicultural, and small group communication, organizational and intercultural communication. Class discussion evaluates the social use of theories and probes assumptions and values embedded within them. Prerequisite: Interpersonal Communication (Communication Studies 21), Multicultural Communication (Communication Studies 32), or consent of instructor. Spring 2000. (4 credits)

74 THEORIES OF RHETORIC

A study of classical and modern theories of rhetoric, with major focus on theories and structures applicable to critical appraisals of spoken and written persuasion. Students will critically analyze theories of selected writers from the Pre-Socratics to contemporary French theorists. The course

analyzes how each author characterizes the relationship between rhetoric and art, truth, ethics, and emotion. Alternate spring semesters, next offered spring 2001. (4 credits)

76 CRITICAL SOCIAL THEORY AND THE MEDIA

Study of traditional and contemporary media theory, grounded in the humanities as well as in the social sciences. Emphasis on the "public sphere," as theorized by Jürgen Habermas, Nancy Fraser, and others. Class discussion evaluates the social uses of theories and probes assumptions and values embedded within them. A research paper allows each student to examine one theory or theoretical issue in detail. Prerequisite: Media Institutions (Communication Studies 26), Cultural Studies and the Media (Communication Studies 34), The Electronic Media in an International Age (Communication Studies 46), or consent of instructor. Alternate spring semesters. Next offered spring 2000. (4 credits)

88 ADVANCED TOPICS SEMINAR

Advanced examination of an area of communication research related to the scholarship of the seminar leader. Topics will vary, but every two years at least one seminar will be offered in interpersonal/multicultural communication, rhetoric, and media or film studies. Recent seminar topics have included: The Future of Organizations; Communication, Multiculturalism, and Education; and Postmodernism, Identity and the Media. Planned for 1999–2000 are: Women and Rhetoric; Advanced Textual Analysis (Film and Advertising); and Multiculturalism, Communication, Higher Education. Students will review exemplary work and complete an independent research project for oral and written presentation. Enrollment limited to 12 students. Prerequisites: junior or senior standing, and at least one intermediate or advanced course in the area of the topic. Every semester. (4 credits)

95 TUTORIAL

Prerequisite, permission of the instructor. (4 credits)

96 INDEPENDENT PROJECT

For the advanced student capable of independent study requiring library research or experimental work. Prerequisite, normally junior standing and permission of the instructor. Every semester. (4 credits)

97 INTERNSHIP

The department offers a variety of internships in educational, business, and governmental institutions. Internships sponsored by this department are available only to juniors and seniors who have completed a communication studies minor or the equivalent. Normally, internships are graded pass/fail. Exceptions to this policy permitting a letter grade may be made at the discretion of the individual faculty member sponsoring the internship. Internships may be of variable credit as determined by the department, and up to four credits may be applied to the department major. (1–4 credits)

98 PRECEPTORSHIP

Work in assisting a faculty member on a varied range of activities involved in the planning and teaching of a course. Duties usually include course attendance, some library research, test correction, conducting group study sessions, and tutoring individual students. Normally available only to juniors and seniors who have taken the course they will precept and permission of the instructor. (4 credits)

Practicum Credit in Debate and Forensics

All debate and forensics activities are open to all Macalester students. One semester credit is earned upon satisfactory completion of one semester of practicum experience. A maximum of four semester credits may be earned through debate and forensic activities. For majors, no portion of these credits may substitute for one of the ten required courses.

205 PRACTICUM IN FORENSICS

Credit may be earned by participating in several forensic tournaments or by extensive participation in the public audience symposium program or mock trial competitions. (1 credit)

Comparative North American Studies

Full Time Faculty: Karin Aguilar-San Juan#, Kendrick Brown, Janet Carlson# (Director), Diane Glancy#, Galo González#, Duchess Harris, Leola Johnson, Mahnaz Kousha#, Anna Meigs#, David Chioni Moore, Anthony Pinn, Peter Rachleff#, Clay Steinman#, James Stewart#, Jack Weatherford

Part Time Faculty: Mahmoud El-Kati, Roxane Gudeman, Sowah Mensah, David Sunderland

Members of the Steering Committee

Comparative North American Studies is designed to provide well-structured opportunities for students to gain insights into the histories and cultures of specific American racial and ethnic minorities set in the context of shifting cultural boundaries across the North American landmass. It also requires students to balance such investigations with comparative studies that offer systematic analyses of race and ethnicity as academic questions in and of themselves. The program defines itself around three closely related areas of study:

(1) the historical, sociological, religious, anthropological, political, cultural literary and artistic study of specific ethnic and racial groupings in the United States; (2) the comparative study of such groupings and (3) the constructions of race and racism and their roles in shaping identity, politics and commercial and non-commercial culture.

Courses approved for program credit are listed below. A list of any additional courses may be obtained from the Registrar or from the Director. To qualify for inclusion in the program, sixty percent of the content of a course must be devoted to the study of the histories and cultures of specific American racial and ethnic minorities or of systematic analyses of race and ethnicity.

General Distribution Requirement

Courses approved for the minor in Comparative North American Studies but offered through other departments meet the general distribution requirement of that department. Courses offered by Comparative North American Studies do not satisfy the general distribution requirement.

Diversity Requirement

The courses offered by Comparative North American Studies which satisfy the domestic diversity requirement are 45 Living on the Edge: The Asian American Experience, 50 Introduction to Comparative North American Studies and 88 Senior Seminar.

Minor Concentration

The minor concentration in Comparative North American Studies consists of at least seven courses including Comparative North American Studies 50: Introduction to Comparative North American Studies, Comparative North

American Studies 88: Senior Seminar and five courses drawn from a list of the approved courses (see below). At least one course must be drawn from Group A and at least one course must be drawn from Group B. A maximum of three courses from any one department may be listed on a minor plan.

Each interested student must present an application for acceptance into the program to a member of the Steering Committee. If the Steering Committee member agrees to take the student as an advisee in the program, the proposal will be forwarded to the Steering Committee as a whole for consideration. The application must include a structured sequence of courses (introductory, intermediate and advanced) organized around a specific intellectual theme. Courses listed on the student's other concentration plan(s) may not be listed on this minor plan. When possible, the minor will complement and enrich each student's major area of study. Initial application should be made a month before the student registers as a first semester junior. Approval must be secured no later than drop/add deadline for the student's first semester as a junior. No *ex post facto* minors will be permitted.

COURSES

45 LIVING ON THE EDGE: THE ASIAN AMERICAN EXPERIENCE

The Asian American experience will be used to examine the role of cultural heritage in how one views oneself, one's own ethnic group and the dominant culture. This interdisciplinary course consists of experiencing the art, reading the literature and history, discussing the current issues of several Asian American communities. Topics include the role of women, stereotype, racism and assimilation. Spring semester. (4 credits)

50 TOPICS

Introduction to Comparative North American Studies

As an entry into the Comparative North American Studies Program, this course introduces four themes as key features of contemporary U.S. culture: race, racial difference, racial inequality and racial justice. Comparing the experiences of various U.S. racial groups, we will tackle several important questions. When does focusing on race make someone racist? What are the historical and sociological foundations of race and racial difference? Under what conditions does racial difference translate into racial inequality? Course materials emphasize race while illustrating that race competes with other social categories—particularly ethnicity, class, gender and sexuality—to define everyday life. Both semesters. (4 credits)

88 SENIOR SEMINAR

This interdisciplinary course is required of all Comparative North American Studies minors. The various disciplinary methodologies will be used for (1) the historical, sociological, religious, anthropological, political, cultural, literary and artistic study of specific ethnic and racial groupings in the United States—(2) the comparative study of such groupings—(3) the study of constructions of race and racism and their roles in shaping identity, politics, and commercial and non-commercial culture. Members of the Comparative North American Studies Steering Committee will participate in the weekly meetings, make presentations and assign readings. Students will present readings and lead discussions of topics related to their studies in Comparative North American Studies. Prerequisite, successful completion of Introduction to Comparative North American Studies. Offered every year. (4 credits)

96 INDEPENDENT STUDY

Closely supervised independent study with a faculty member. Students may explore, through reading and writing or independent research, an area of knowledge not available through regular course offerings. Prerequisite, successful completion of Introduction to Comparative North American Studies and permission of a faculty member on the Comparative North American Studies Steering Committee. (4 credits)

97 INTERNSHIP

Prerequisite, successful completion of Introduction to Comparative North American Studies and permission of the faculty sponsor (who must be a member of the Comparative North American Studies Steering Committee). (4 credits)

98 PRECEPTORSHIP

Preceptors assist CNAS faculty in planning, organizing and teaching courses. A preceptorship may not be counted toward a Comparative North American Studies minor. Prerequisite, permission of the faculty member and previous completion of the course. (4 credits)

COURSES APPROVED FOR THE COMPARATIVE NORTH AMERICAN STUDIES MINOR

Group A

Anthropology

54 Peoples and Cultures of Native America

Communication Studies

50 Blackness and the Media

Comparative North American Studies

- 50 Community and Identity in Asian America
- 50 Asian American Social Movements
- 50 Racial Formation, Culture and U.S. History
- 50 The Family as History: The Stories of Latinos in the U.S.

Dramatic Arts and Dance

53 Black Theatre

Economics

50 African Americans and Economics

English

- 21 American Voices (when appropriate)
- 50 African American Men Writers-20th Century
- 50 Asian American Writers
- 50 African American Internationalist Writing
- 52 African American Writers of the United States
- 53 Native American Literature

History

- 24 Afro-American History: Slavery, Emancipation & Reconstruction
- 45 The Black Experience since World War II
- 47 Sports in the Afro-American Community
- $49\ \text{Afro-Americans}\ \&\ \text{the Transformation of the City},\ 1890-1945$
- 50 Frederick Douglass and His Times
- 90 Advanced Study: African American Labor

Music

- 55 Music of Black Americans
- 57 Jazz and Social Issues

Political Science

- 50 Black Public Intellectuals
- 88 Critical Race Feminism

Psychology

88 African American Psychology

Religious Studies

- 28 African American Religions
- 29 Black Christian Churches in the United States
- 36 Black Religious Thought I: 1829-1915
- 37 Black Religious Thought II: 1915–1993
- 43 Native American Religious Traditions

50 Asian American Religions

50 Religious Thought of Martin Luther King, Jr. and Malcolm X

Sociology

50 The Black Family

Spanish

50 The Family as History: The Stories of Latinos in the U.S.

Women's and Gender Studies

50 African American Women's History

89 Contemporary Black Feminist Theory

Group B

Anthropology

41 Race, Race Privilege, Whiteness

Communication Studies

50 Racial Formation, Culture, and U.S. History

50 Racism and the Media

History

31 Black, White and Red in American History

50 Racial Formation, Culture, and U.S. History

Political Science

42 Race, Ethnicity, and Politics

Psychology

38 The Psychology of Pluralism

50 Psychology of Prejudice

Computer Science

See Mathematics and Computer Science

Dramatic Arts & Dance

Full Time Faculty: Beth Cleary, Sears Eldredge (Chair), Becky Heist, Daniel Keyser

Part Time Faculty: Djola Branner, Eric Holmgren, Judith Howard, Trudy Monette, Becky Stanchfield, Sharon Varosh

Dramatic Arts

To study theatre in a liberal arts environment is to participate in the personal and collective quest for identity and meaning. We believe both our class work and our performances are a laboratory for examining, evaluating, and celebrating the human experience.

Students involved in the study and production of theatre are engaged in an interdisciplinary and multi-cultural learning experience. To "get inside" the works of dramatists as diverse in time, place and spirit as Shakespeare, Brecht, Zeami, Fornes, Sophocles, Churchill, Fugard, etc., means to ask oneself to enter into their vision, wrestle with their thoughts and feelings, understand their cultural context, and imagine their worlds into being. Learning how to use your intuitive and imaginative abilities is as important as cultivating your analytical

and research skills. And all of these are valuable learning strategies to acquire whether you devote your life to the theatre or not.

Wanting to create theatre requires vision, knowledge, and discipline. To that end the dramatic arts curriculum has been developed to encourage the student's analytical, critical, and theoretical thinking as well as their imaginal, emotional, and technical training necessary for artistic theatrical performance. While we are not a conservatory program, we do provide a solid foundation in theatre for students who wish to pursue their theatre studies in a graduate program or professional school.

Participation in theatrical productions at Macalester is available to all students at the college, whether they major in dramatic arts or not. Open auditions are conducted for productions at the beginning of each semester and technical positions are filled from a combination of experienced and inexperienced students who are willing to gain the requisite skills necessary to accomplish the tasks. Any non-major student working on a production may receive theatre practicum credit if he/she fulfills the basic requirements (see course listings). Because of the unique collaborative and experiential nature of this art form, all majors and minors in the program are required to participate in one production a semester while in residence.

Dance Program

The dance program emphasizes an interplay of the intellectual, physical, and emotional faculties found within each individual. Opportunities to gain technical skills, learn the art of performing, study the craft of choreography, engage in critical analysis, and experience working with others toward a common goal are offered within the curriculum.

The program welcomes all students whether they have had several years of training or little previous experience. Each individual chooses the extent to which he or she becomes involved.

The Macalester Dance Ensemble is an organization committed to increasing student performance, as well as choreographic and leadership skills. This student performing group is formed through fall auditions and presents two concerts each year. The performances feature work choreographed by students, faculty and guest artists.

The dance minor is designed to develop a student's expertise in a variety of movement styles, as well as educate the student in a comprehensive study of dance as an art form. The minor requires a general understanding of music, knowledge of the anatomy of the human body and how it functions, an ability to recognize and analyze differing choreographic viewpoints, and a sense of confidence in the creative process.

General Distribution Requirement

Dramatic Arts courses 18, 19, 20, 21, 41, and 51 fulfill the general distribution requirements in the fine arts; courses 52, 53, 62, 63, and 68 fulfill the general distribution requirements in the humanities.

Diversity Requirement

The courses in Dramatic Arts which satisfy the domestic diversity requirement are number 52 Feminist Theatre(s) and number 53 Black Theatre. The course which satisfies the international diversity requirement is number 68 Asian Theatres: Tradition, Continuity, and Change.

Major Concentration

The Dramatic Arts & Dance Department offers two majors: one in Dramatic Arts and the other a combined major in Dramatic Arts & Dance. Within the Dramatic Arts major, the department offers three types of programs: a) a major area of concentration for students intending to receive a liberal arts degree and/or planning to further their education in graduate study or a professional school in theatre, b) a minor in dramatic arts for those students who wish to combine their study in theatre with a major in another area, and c) a licensure major or minor area in dramatic arts in compliance with recently revised state licensure requirements for students who intend to teach in high school. Students wishing to major in Dramatic Arts or Dramatic Arts & Dance should try to take Dramatic Arts 20, 25, 35 in their first three semesters. They must pay particular attention to the History of Western Theatre requirement and fulfill those credits by their Junior year if possible.

All majors in Dramatic Arts take a core of ten courses. This core of courses gives them a foundation in the major disciplines of theatre: history, theory and criticism; acting, directing; design and technical theatre. Each student then chooses one additional course in his/her area of interest. Four Theatre Practicums must be accomplished during their Junior and Senior years. Majors in the program also complete a Senior Project which combines scholarship and performance as delineated in the department handbook. Examples of this might be researching and designing scenery for a major production, playing a lead role in a major production, or directing a show for the one-act play festival as part of the regular season. Students work closely with advisors in developing and executing their senior projects. The senior major capstone requirement in Dramatic Arts is satisfied by Dramatic Arts 220 Theatre Practicum Senior Project.

Major Program

A Dramatic Arts major includes eleven courses from within the department plus two electives from outside the department (one of which must be in dramatic literature; the other in another Fine Arts area: Dance, Music, Visual Art) which are approved by the student's advisor and the department. Required courses: 20, 25, 35, 54, 62, 63, 89; one of the following: 52, 53, 68; two of the Theatre Projects (51), plus at least one upper level course in an area of specialization as given below:

Acting Emphasis*: Directing Emphasis*:

Mask Improvisation Advanced Directing
Advanced Acting Advanced Acting

Design/Technical Theatre Emphasis

History/Theory/Criticism Emphasis:

Lighting Design Advanced Lighting Design Advanced Scene Design Electives in dramatic literature, history, and/or literary criticism

Majors should also consider other courses at the advanced level within the department to strengthen their area of emphasis.

*These students will also take one dance technique course in the dance program as a requirement outside Dramatic Arts.

Dramatic Arts & Dance Combined Major

The Dramatic Arts & Dance Combined Major offers a unique opportunity to students with interests in both art forms. The worlds of dance and theatre have undergone a metamorphosis, losing the sharp edges of their distinctiveness. Innovative performances are being presented in a variety of venues. The creative blending of movement, voice, text and music is emerging as a new art form. The Combined Major allows students the means to study the essence of both theatre and dance, as well as explore the ways in which they merge.

This Combined Major requires students to take eleven courses split between the two programs in the department, with two supporting courses from outside the department. The Dance portion of the major consists of the same courses as the Dance Minor, with the addition of two level 200 dance practicums. The Dramatic Arts portion of the major consists of the following courses: 20, 25, 35 (design/technical theatre emphasis) or 40 (acting/directing emphasis), 55, 63, and 89. Also required: two level 200 theatre practicums and a senior project with an emphasis in either dance or theatre.

Minor Concentration

A minor in dramatic arts will consist of six or more courses in the department with 20, 25, 62, 63, and one of the following: 52, 53, 68, and one Theatre Project 51 course, plus involvement in theatre productions for at least four terms completed with a satisfactory rating during their junior/senior years.

Minor in Dance

- 1. Eight technique and/or ensemble courses. Students should contact the dance instructor for advice concerning choice of technique classes.
- 2. Dramatic Arts 19, 21 or 41, Physical Education 61, Music 10.
- 3. Supporting courses recommended are Dramatic Arts 18, 20, 25, 40, and Humanities and Cultural Studies 27.

Departmental Expectations for All Dramatic Arts Majors and Minors:

- —all majors/minors will audition for the productions each semester
- —all majors/minors will work on one major production each semester in residence

- —all majors/minors will not perform in theatre outside the department without departmental approval
- —all sophomores as they declare their major in Dramatic Arts will meet with the faculty and staff to review their program of study and their proposed area of emphasis
- —all majors are required to complete a Senior Project with a satisfactory rating while in residence and before graduation (see department handbook for further explanation).
- —all senior majors will undergo, before graduation, a review/critique when they have completed their senior project

Teaching Licensure Programs

English Teaching Licensure Requirement

Students must take either Dramatic Arts 18 Theatre Arts, or 20 Acting Theory & Performance I in order to meet state requirements for prospective teachers of high school English and language arts.

Teaching Licensure Majors

- 1. Dramatic arts major: ten courses. Required courses: 18, 20, 25, 35, 54, 62, 63, and one of the following: 52, 53, 68, one Theatre Project (51), one upper level course in an area of specialization within the department and Communication Studies 16 or 24, plus involvement in a production each term in residence completed with a satisfactory rating. Students seeking this licensure should also be aware that the State requires one course in the popular arts: film, television, radio
- 2. Dramatic arts minor: required courses: 18, 20, 25, 62, 63, 68, and one credit in Theatre Projects 51, plus involvement in a production each term in residence completed with a satisfactory rating.

Additional Training Off Campus

For those qualified majors interested in an additional conservatory-type experience, there is the opportunity to attend an excellent national or international theatre program to supplement their education at Macalester. Two examples of such programs that our students have participated in would be the National Theatre Institute at the Eugene O'Neill Theatre Center in Waterford, Connecticut, or the British American Drama Academy in London, England. These programs provide semester long intensive training in theatre arts. Students who are approved for such a program of study can earn up to sixteen credits towards their major at Macalester.

Students also have the opportunity to take advantage of a number of other excellent international theatre programs to supplement their education at Macalester.

COURSES

18 THEATRE ARTS: AN INTRODUCTION

An introduction to the theory and practice of theatre as a performing art. This course examines the elements of acting, playwrighting, directing, and design as well as the actor-audience relationship through the experience of live performances, film/videotapes, guest lecturers, class readings, and demonstrations. Attendance at area theatre performances is an integral part of the course. The purpose of this course is to help the student gain an appreciation of role playing/performance/theatre as a basic element of culture. Acting and/or crew experience in a current production is required as a laboratory component of the course. Every year. (4 credits)

19 INTRODUCTION TO DANCE

A general study of the art of dance and its cultural contexts. Analysis of styles, performance critiquing, and ways of viewing and making works of art are studied with references made to the history of dance. Readings and class discussions are complemented by individual participation in the studio and attendance at concerts. Every spring semester. (4 credits)

20 ACTING THEORY & PERFORMANCE I

An introduction to the fundamental techniques of realistic acting. Through improvisation, physical and vocal exercises, text and character analysis, and scene studies, the student is introduced to the process of acting preparation and performance. Limited to 16 students. Every semester. (4 credits)

21 BEGINNING DANCE COMPOSITION

A study of choreography—the craft and art of making dances. The basic elements of space, time and energy are dealt with. Each student is actively involved in the creative process as choreographer and viewer. Either this course or Dramatic Arts 41 is required for a dance minor. Every fall semester. (4 credits)

25 TECHNICAL THEATRE

A demonstration of the importance of scenographic technology in the production of theatre. This course investigates the basic theories of how a design is executed, involving all aspects of theatre technology: staging methods, materials, construction, and drafting. In addition to the lectures, the class will have a studio/drafting lab once a week, plus outside class laboratory crew experience. Limited to 24 students. Fall semester. (4 credits)

35 FUNDAMENTALS OF 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 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 designer and the skills involved in mastering them. Prerequisite: Dramatic Arts 25 or permission of instructor. Every year. (4 credits)

40 MASK IMPROVISATION

Mask improvisation focuses on the important performance skills of imagination, spontaneity, and improvisation. In this course the actor learns much about himself/herself as a psychophysical being and techniques for transforming himself/herself into a character. Here the actor is not dealing with a written text, but is the playwright as well as the performer. Five masks are used in the training: neutral, beginning character, life, totem, and complex character. Enrollment limited to 12 students. Permission of the instructor. Every year. (4 credits)

41 INTERMEDIATE DANCE COMPOSITION

A continuation of the study of choreography. A juxtaposition of the dance elements involving more than one dancer. A look at the relationship of movement to music. Attendance at performances, followed by choreographic analysis will be an integral part of the process. Prerequisite, Dramatic Arts 21 or permission of the instructor. Every fall semester. (4 credits)

42 PLAYWRIGHTING

This practice-oriented course teaches the basic techniques of playwrighting. All its components, i.e. play analysis (both literature and performance), scene writing exercises, group discussion, and individual advisement, lead to the writing of each student's own play. Every year. (4 credits)

50 TOPICS

Topics courses focus on investigations into current questions in theatre history, dramatic literature, performance theory, or design/technical theatre. Recent topic courses have been Voice & Movement for the Actor, and Community-Based Theatre. Every year. (4 credits)

51 THEATRE PROJECTS

Theatre Projects bring together scholarship and performance to create a unique learning experience. A Theatre Project is based on subject matter suggested by the script chosen for production (i.e., an investigation of a particular historical period and its performance style, an examination of an important issue raised by the text, a deconstruction or recontextualization of a given script to reveal its contemporary relevance, etc.) or is the basis for the development of an original theatre piece. Students are involved in both research, and rehearsals. An important aspect of the course will be an evaluation of the subject matter gained through the subjective and objective methods of investigation involved in the project. In addition, students are expected to sign up for a one-credit practicum. Every year. (4 credits)

52 FEMINIST THEATRE(S)

This course seeks to define and examine Feminist Theatre by exploring the critical techniques, political positions, issues, explorations, and theatre practices of the many Feminisms. The class studies not only the written word (in plays and criticism) but also the variety of production styles, methods, and practitioners that have been labeled Feminist. Prerequisite, Sophomore standing or permission of the instructor. Alternate years, next offered Fall 2000. (4 credits)

53 BLACK THEATRE

This course is an overview of the development of theatre by and about Black Americans. This course clearly meets the criteria for Domestic Diversity. It examines the historical, social, political, and cultural context of African-American theatre. After investigating the roots of African-American theatre in African culture, performance modes, and social values, it focuses on a study of plays written by Black Americans in the 19th and 20th centuries. Prerequisite, Sophomore standing. Alternate years, next offered 1999–2000. (4 credits)

54 DIRECTING THEORY & PRODUCTION I

An introduction to the basic principles, skills, and methods of directing for the stage through emphasis on analysis and interpretation, director-actor communication, and stage composition. Laboratory experiences are integral to the course and consist of the in-class production of several short scenes. Prerequisite, Dramatic Arts 20, 25, 35 and junior standing or above. Permission of the instructor is also required. Enrollment limited to 12 students. Every year. (4 credits)

55 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 a basic grasp of lighting hardware as well. The first aim of the course is to make the student more aware of color and light around him/her every day. Demonstrations are an integral part of the lectures. Alternate years, next offered Spring 2001. (4 credits)

60 ACTING THEORY & PERFORMANCE II

Advanced work in characterization and additional acting techniques with continued focus on voice, movement, improvisation and textual analysis. A continuation of Acting Theory and Performance I, this course is designed to deepen the student's understanding of his/her instrument as well as develop an individualized working method. Included in the course is a consideration of style through scene work in other genres. Prerequisites, Dramatic Arts 20, sophomore standing, and permission of instructor required. Enrollment limited to 12 students. Every year. (4 credits)

$62\ HISTORY\ OF\ WESTERN\ THEATRE\ I\ (Beginnings\ to\ 1700)$

This course provides students with the beginnings of a solid foundation in the history of Western theatre. It will focus on four interrelated areas: theatre architecture, performance theory, dramatic literature, and criticism. Major units cover the origins of theatre, the phenomenon of the 5th century Greek theatre, Roman theatre, the rebirth of the theatre in the Medieval Church, and the development of Renaissance popular and court theatres. Alternate fall semesters, next offered fall 1999. (4 credits)

63 HISTORY OF WESTERN THEATRE II (1700 to the Present)

This companion course to Dramatic Arts 62 continues the study of Western theatre history. Major units of the course focus on the French Neo-Classical theatre, the Restoration theatre in England, Romanticism and the development of theatre for the growing middle classes, the birth of Realism, and the revolts against Realism. Finally, we look at the diversity of the Contemporary theatre and question the growth and impact of Interculturalism on the theatre of the future. Recommended prerequisite: Dramatic Arts 62. Next offered 2000. (4 credits)

64 DIRECTING THEORY & PRODUCTION II

In this course the students apply the theories and principles learned in Dramatic Arts 54, Directing Theory and Production I, by preparing projects for public performance. Class time is spent on the more complex directing problems such as working with the design/technical staff, directing for different space configurations, focusing and pacing productions, and directing non-realistic styles of theatre. The class also functions as a directing clinic dealing with questions raised by the individual student directors. This course has a restricted enrollment. Prerequisites, Dramatic Arts 54, 40 or 60, senior standing, and permission of the department. Every year. (4 credits)

65 ADVANCED LIGHTING DESIGN

Continuation of Dramatic Arts 55. Meets simultaneously with Dramatic Arts 55. Emphasis will be on furthering skills and techniques used in developing lighting design concepts. Projects are more complex and require more precision in their execution. Group discussion/critiques and field trips are included. Students' final projects will be a mock United Scenic Artist Lighting Design Exam. Prerequisite, Dramatic Arts 55 or permission of instructor. Alternate years, next offered spring 2001. (4 credits)

68 ASIAN THEATRES: TRADITION, CONTINUITY, AND CHANGE

This course introduces students to the rich heritage, theories, and practices of traditional and modern Asian theatres. Asian theatres challenge us with very different concepts about the nature of the theatrical event, performance styles, and the role of theatre in society. After some preliminary investigation about the possible origins of theatre in Asia, the main study focuses on an examination of selected theatres from India, China, and Japan. A study of each country's traditional theatre requires that we understand something of the cultural context in which the specific theatre form was created: their history, religious beliefs, and social mores. An important aspect of the course is our look at the impact of Western culture and modern representational theatre on the indigenous theatrical traditions. Additional time outside of the class hours may be necessary for viewing videotapes and/or workshop sessions. Alternate years, next offered spring 2001. (4 credits)

75 ADVANCED SCENE DESIGN

Continuation of Dramatic Arts 35. Meets simultaneously with Dramatic Arts 35. Emphasis will be on furthering skills and techniques used in developing a design concept and how those design concepts are presented in three dimensional models or color renderings (paintings). A design portfolio will be the outcome of this course. Prerequisite: Dramatic Arts 35 or permission of instructor. Every year. (4 credits)

89 SEMINAR: THEATRE AND SOCIETY

This seminar examines theatre and its relationship to society. The specific subject matter and focus of the seminar changes each year but considers such questions as: What is the purpose and function of theatre in society? How culture-specific are our theatre forms? What values are inherent in the content and context of our current theatre? How will theatre continue to speak to the need for diversity as well as community in the face of an emerging global culture? What will theatre be like in the 21st century? This course is designed for theatre majors, and examines many theoretical and critical issues through non-performance and performance research methods. Prerequisite: junior/senior standing. Every year. (4 credits)

95 TUTORIAL

Prerequisite, permission of the instructor. (4 credits)

96 INDEPENDENT PROJECT

For the advanced student capable of independent study requiring library research and/or experimental work in the theatre. Prerequisite, permission of the instructor. (4 credits)

97 INTERNSHIP

The department allows up to eight credits for approved internship experiences, which may be applicable to a major in 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. Internships are available to junior and senior majors with permission of the department. (4 credits)

98 PRECEPTORSHIP

Work in assisting faculty in the planning and teaching of a course, precepting or tutoring. Available only to seniors with permission of the instructor and the department. (4 credits)

Practicum Credit in Dramatic Arts

All theatrical production activity is open to all Macalester students. One credit may be earned by successful completion of one practicum experience. Students will sign a contract for either a 100 (non-majors only/pass-fail) or 200 (majors only/grade assigned) series practicum. Up to eight practicum credits may be earned. Students participating in productions may earn practicum credit in the following ways:

100 SERIES THEATRE PRACTICUM (non-majors only) (pass/fail)

Credit is earned by working a minimum of 45 hours during the semester on a department production. Non-majors may earn all practicum credits in one area or a combination of areas.

115 Theatre Practicum in Acting

116 Theatre Practicum in Costuming/Properties Construction

117 Theatre Practicum in Scenery/Lighting/Sound

Every semester. (1 credit)

200 SERIES THEATRE PRACTICUM (majors/minors only) (grade assigned)

Students with a major or minor concentration in Dramatic Arts are required to participate in departmental productions during the four semesters of their Junior/Senior years. The department believes that drama students should have the experience of studying and producing in all areas of theatre. Majors and minors are required to enroll in 216, 217, 220 and, in addition, may choose either

215 Theatre Practicum in Acting

216 Theatre Practicum in Costuming/Properties Construction

217 Theatre Practicum in Scenery/Lighting/Sound

218 Theatre Practicum in Advanced Production Techniques

220 Theatre Practicum Senior Project

Every semester. (1 credit)

Dance Technique Classes

Students may earn credit for participating in dance technique classes. Two credits are awarded upon the successful completion of two dance technique classes. Students may earn a maximum of eight credits, but cannot earn any additional credit for other physical education activity courses. Credit will not be awarded for the completion of a single dance technique class.

The technique classes are offered as follows: 122, 144 & 150, fall only; 112, 244 & 250, spring only; 344, 350 & 375, both semesters.

112 Jazz Dance

122 Haitian Dance

144 Modern Dance I

150 Ballet I

244 Modern Dance II

250 Ballet II

344 Modern Dance III

350 Ballet III

Dance Ensemble

Selected by auditions in early fall, the Ensemble members are expected to participate during both semesters as performers and technicians. Credit is earned as described above for dance technique classes. Students may register for an additional credit if choreographing for the Spring Concert.

375 Dance Ensemble

Practicum Credit in Dance

105 Dance Practicum

Any student can receive one credit for completing a minimum of 45 hours of tech such as costuming, running crew, sound operator, or stage manager.

200 SERIES DANCE PRACTICUM (Dramatic Arts & Dance Combined Majors only) (grade assigned)

Students with a Combined Major in Dramatic Arts and Dance are required to participate in departmental productions during the four semesters of their Junior/Senior years. It is expected that students will do one practicum every semester; two in Dance and two in Dramatic Arts. In addition, students are required to complete a Senior Project. (The Senior Project can be taken for one to four credits either as an Independent Study or as fulfilling the 208 Dance Practicum Senior Project requirement.)

205 Dance Practicum in Costuming/Sound/Lighting

206 Dance Practicum in Production Assistance

207 Dance Practicum in Performance

208 Dance Practicum Senior Project

Every semester. (1 credit)

East Asian Studies Program

Janet Carlson (Chemistry), Sears Eldredge (Dramatic Arts), Jerry Fisher (History and Communication Studies), Aiko Hiraiwa (Japanese), James Laine (Religious Studies), Susanna McMaster (Geography), Sarah Pradt (Japanese), Emily Rosenberg (History), Satoko Suzuki (Japanese), Yue-him Tam (Director, History)

East Asian studies is an interdisciplinary area studies program, offered in cooperation with the Associated Colleges of the Twin Cities (ACTC), which focuses primarily on China and Japan. Students achieve basic competence in either the Chinese or Japanese language, broad knowledge about both China and Japan, and experience living in one of these countries through approved participation in study away programs in China (Taiwan and Hong Kong included) or Japan. Program planning is done in consultation with the director, who can provide information about current course offerings, study away programs, and career orientation for majors.

Career Orientation for Majors in East Asian Studies

East Asian Studies as an interdisciplinary curriculum is designed both to meet the needs of those students who are preparing for advanced study in graduate and professional schools as well as those, who, upon graduation, intend to start a career in business, international trade, government or public service both at home or abroad. A good number of recent graduates have been admitted to and completed advanced degrees in East Asian Studies, history, anthropology, urban planning, linguistics, law, business administration, and international

studies. Our graduates are also in great demand of such fields as international trade and banking, investment, foreign service, law, translation, communication and education. Employment opportunities in China (Hong Kong and Taiwan included), Japan and other Asian countries for our graduates have been increasing as economic growth continues throughout the Asian Pacific Rim. The alumni network in Asia and in the United States has been helpful to our students in many ways. Career-oriented students are urged to consult the program director or the Alumni Office for information.

Major Concentration

A major in East Asian Studies is required to complete a minimum of 48 or more credits (twelve or more courses) focusing exclusively or primarily on East Asia according to the distribution specified below. Majors of East Asian Studies may choose to concentrate on either Chinese Studies or Japanese Studies, or not to have a specific sub-area concentration. They may also combine their area studies focus with disciplinary grounding in a separate academic field such as anthropology, economics, history, international studies, philosophy, and religious studies. A major in East Asian Studies with a sub-area concentration on Chinese Studies or Japanese Studies has to complete a minimum of 32 credits on the chosen sub-area. A major without a sub-area concentration may complete the 48 credits in any combination.

1. Language: four courses above the elementary level with 16 credits or more.

Majors are encouraged to take more than 4 semester courses above the elementary level in Chinese or Japanese, but up to 4 courses (16 credits) may be counted towards the language requirement. Elementary level language courses are not counted. One intensive course of 8 credits is counted as two semester courses (8 credits). Majors with concentration on Chinese Studies must take Chinese, while majors with concentration on Japanese Studies must take Japanese.

2. Area Studies Courses: Minimum of seven courses with 28 credits

Majors must complete a minimum of seven non-language courses (28 credits or more) focusing exclusively or primarily on East Asia from the following disciplines or departments. At least four of these courses must be taken at Macalester. Majors may reduce one area studies course by taking two supporting courses (see Supporting Courses for detail). Unless specified, majors may choose the required courses in any combination from the following:

- A. East Asian history: Majors are required to take at least one course on China and one course on Japan; these two courses must be taken at Macalester.
- B. East Asian literature, linguistics and advanced readings.
- C. East Asian religion and philosophy.
- D. East Asian arts, including fine arts, dramatic arts, performing arts and music.

- E. Social Sciences and Interdisciplinary Courses: Majors are also encouraged to take courses in social sciences and other disciplines, which cover East Asia substantially if not primarily or exclusively. For courses not listed under the current East Asian Studies Program, the permission of the program director is needed.
- 3. A minor or core concentration in an academic discipline offered in one of the departments of the college.
- 4. Study in China (Taiwan and Hong Kong included) or Japan for at least one academic semester on one of the programs approved by the college. Credits earned from courses taken at another institution may not be fully accepted to fulfill the Macalester requirements. Students should consult the East Asian Studies director before their registration abroad.
- 5. The capstone requirement in East Asian Studies may be satisfied by taking East Asian Studies Seminar (History 80) or by the writing and oral defense of a thesis. The East Asian Studies Seminar is a research seminar offered annually to junior and senior students. The thesis must be a research product from an independent project or an honors project approved by an advisor and the program director. Students writing a thesis are required to take the oral defense after the thesis is completed. In the oral defense there are at least three examiners, two of whom have not been the principal advisors of the thesis. If necessary, a scholar or expert outside Macalester may be invited to serve on this committee of examiners. This committee, not the principal advisor alone, determines whether the student has passed the thesis.
- 6. Supporting Courses: Majors may take supporting courses in which China or Japan or the whole of East Asia is an important and crucial part of the study. For the purpose of fulfilling concentration requirements, two supporting courses (8 credits) are counted as one area studies course (4 credits). Up to two supporting courses or 4 credits are counted toward concentration requirements.

In addition to the requirements above, graduating majors are required to submit two bound copies of their final papers for the East Asian Studies Seminar or their theses to the office of the East Asian Studies Program before their graduation. One of these copies may be deposited for public use at the College library. Graduating majors should get a copy of the style sheet from the program office.

Minor Concentration

There are two requirements for a minor concentration on East Asian Studies, consisting of at least seven semester courses (28 credits).

1. Language

Up to two Chinese or Japanese language courses (8 credits) are required and counted.

2. Area Studies Courses

Five or more non-language courses (20 credits) exclusively or primarily on East Asia in any combination that includes at least two history courses (one on China and one on Japan) taken at Macalester.

COURSES APPROVED FOR EAST ASIAN STUDIES CONCENTRATIONS:

The following courses in other departments may be counted toward the East Asian Studies major or minor:

Language

Japanese Language

- 11 Elementary Japanese I
- 12 Elementary Japanese II
- 31 Intermediate Japanese I
- 32 Intermediate Japanese II
- 51 Advanced Japanese I
- 52 Advanced Japanese II
- 71 Fourth Year Japanese I
- 72 Fourth Year Japanese II

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

Area Studies Courses

A. East Asian History

History

- 14 Introduction to East Asian Civilization
- 73 Media/Popular Culture in Postwar Japan
- 74 History of Traditional China
- 75 History of Modern China
- 76 History of Traditional Japan
- 77 History of Modern Japan

B. East Asia Literature, Linguistics & Advanced Readings

Japanese Language

- 50 Postwar Japanese Literature in Translation
- 50 Japanese Film
- 62 Analyzing Japanese Language
- C. East Asian Religions and Philosophy

Religious Studies

41 Religions of East Asia

D. East Asian Arts

Dramatic Arts

68 Asian Theaters: Tradition, Continuity, and Change

Art

76 Far Eastern Art

Supporting Courses

Religious Studies 24, Introduction to Non-Western Religions

Economics 25, Comparative Economic Systems (Same as International Studies 25)

Economics 35, Economics of The Transition (Same as International Studies 35)

Other course offerings in the program and in other humanities and social sciences departments vary from year to year. Please discuss relevant course offerings with the director of East Asian Studies.

Economics

Full Time Faculty: Julie Bunn, Karl Egge, J. Peter Ferderer, Gary Krueger, Karine Moe, Raymond Robertson, Vasant Sukhatme (Chair)

Part Time Faculty: T. Jeffery Evans, Sarah West (Mellon Postdoctoral Fellow)

Adjunct Faculty: Julia Friedman, Adolf Vandendorpe

The purpose of the department of economics 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 both to meet the needs of those students who are preparing for advanced study in graduate and professional schools as well as those who, upon graduation, intend to start a career, nationally or internationally, in business, government or public service. The optimal choice of electives, both in the department and outside of it, will differ depending on the direction in which the student is aiming. The department publishes a brochure (Career Paths) designed to help students make this choice. Students are urged to consult this brochure and discuss it with their departmental advisor before deciding on their major plan.

Program in Agricultural Economics

In 1977, with the help of a grant from Cargill Inc., a program in agricultural economics was established, designed to introduce students to the economics of agriculture and development. Under this program, several courses have been developed creating the opportunity 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.

Internship Program

The department actively collaborates with the Internship Office in creating offcampus internships, mostly with Twin Cities business firms. In some internships students receive payment for their work as well as academic credit.

The Bureau of Economic Studies

The Bureau provides support for faculty and student research. It sponsors visiting speakers and provides various means of contact between the college and the Twin Cities business community. It publishes a series of occasional papers and sponsors a student-run and student-edited *Journal of Economics*.

Honor Society

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

Study Abroad

The department actively collaborates with the International Center in creating opportunities for study abroad.

Economics Laboratory

A computer laboratory adjacent to department offices, one of the first on campus, is used for econometrics and other economics courses as well as by students working on individual projects. The lab is equipped with 21 Macintosh computers, new in 1997, with specialized spreadsheet and statistical software; computers are connected to the campus information network, through which students may also make use of internet resources.

General Distribution Requirement

All courses in the economics department satisfy the general distribution requirements in the social sciences with the exception of courses in investments and accounting (10, 13, 33) and courses in the 90s.

Diversity Requirement

Courses which satisfy the international diversity requirement are those numbered 25 and 35. Economics 50, African Americans and Economics, satisfies the domestic diversity requirement.

Major Concentration

The major concentration in economics requires a minimum of eight courses within the department plus the department's capstone experience and two required courses in mathematics. Required courses for the major are Economics 13, 19, 41, 51, and 61. In addition, the major requires a minimum of three elective courses: one course at the 20s level plus two courses above that level, at least one of which must be in the 50s or above. Math courses required for an economics major are Math 14 (Data Analysis and Statistics) or 27 (Elementary Statistics) and Math 21 (Calculus I), neither of which may be taken on an S/D/NC ("Pass/Fail") basis.

Topics Courses

Topics courses, which by college convention carry the number 50, may be taught at all levels of difficulty. Those for which only Economics 19 is prerequisite are the equivalent of 20s level courses for purposes of fulfilling the major requirements. Those for which a 20s level course is prerequisite are the equivalent of 30s level courses. Those for which Econ 51, 61, and/or 41 are prerequisite are generally classified as the equivalent of 50s, 60s, or even 70s level courses. Information on these classifications is included in Topics course descriptions or may be obtained from the department chairperson.

Capstone Experience

The capstone experience requirement in economics may be satisfied by any *one* of the following: (a) an approved course in the 70s; (b) an approved Topics course; (c) an independent project that includes a major paper; or (d) an honors thesis. (This capstone experience is *in addition to* the eight courses within the department required for the major and is to be undertaken during the senior year.)

Core Concentration

The core concentration in economics requires a minimum of six courses within the department and six supporting courses outside the department meeting the approval of the department chair and including Math 21 (Calculus I). Math 21 may not be taken on an S/D/NC ("Pass/Fail") basis.

The following three courses within the department are required: 19, 51, 61. The minimal number of three electives is subject to the following constraints: a) one must be in the 20s; b) neither of the other two may have a number below 30 and only one of them may have a number in the 90s.

Topics courses, carrying the number 50 by college-wide convention, will receive their departmental classification with respect to the core requirements at the time they are announced.

Course Numbering

The logic behind the departmental numbering of courses is as follows: courses in the 10s have no prerequisite; courses in the 20s have Economics 19 as the sole prerequisite; courses in the 30s and 40s have prerequisites other than 19 (and sometimes 19 as well) but not 51 or 61. The 50s category (apart from Topics courses numbered 50) contains Economics 51 (Intermediate Microeconomic Analysis) and applied courses which have 51 as a prerequisite; the 60s category contains Intermediate Macroeconomic Analysis (Economics 61) and applied courses which have 61 as a prerequisite; courses in the 70s are advanced courses, usually requiring both 51 and 61 as prerequisites. The category of 90s is reserved for special projects. Again, at least one course in the 20s should be taken before 41, 51, and 61.

COURSES

10 INVESTMENTS

The primary goal of this course is to enable students to become informed and intelligent investors in the area of stocks, bonds, and mutual funds. We will also attempt to answer the question: Is it possible to predict changes in stock prices or are they determined only by random events? Other topics covered include ethical investing, international investing, and green investing. Emphasis will be on group learning, oral presentations, and the case study approach. This course is intended for non-Economics majors and does not count for credit toward an Economics major. Every fall. (4 credits)

13 FINANCIAL ACCOUNTING

Accounting is the language of business. One of the objectives of this course is to learn that "language." The emphasis will be on understanding financial statements both for profit and non-profit organizations. International accounting, ethics and investment decisions are also covered. This course is designed for students who desire an understanding of the elements of accounting 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. (4 credits)

19 PRINCIPLES OF ECONOMICS

A one-semester introduction to the basic tools of 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. (4 credits)

21 INTRODUCTION TO INTERNATIONAL ECONOMICS

This course explores the theoretical foundations and empirical realities of international trade flows, commercial policies (tariffs, quotas, etc.) and international finance. The course emphasizes the welfare implications of international trade and commercial policies and links these to discussion of disputes over international trade agreements. The international finance portion of the course covers the foreign exchange market, balance of payments analysis and an introduction to open economy macroeconomics. Recommended for students majoring in international studies. Prerequisite, Economics 19. Every year. (4 credits)

22 ENVIRONMENTAL ECONOMICS AND POLICY

This course presents the elementary theories of environmental pollution (e.g., air, water and land pollution) and the economics of such global issues as climate change and biodiversity. The aim is to provide an understanding of the conditions determining whether markets do a good job in protecting the environment and biological resources, to explore potential areas for government intervention, and to employ economics in evaluating the relative effectiveness of alternative forms of government intervention in achieving particular objectives. Both local, state, national and global environmental issues and policy, and the linkages between them, are addressed. Prerequisite, Economics 19. Every year. (4 credits)

24 INTRODUCTION TO TAX POLICY

This course presents the major methods of taxation used by federal, state and local governments. These include taxes on personal and corporate income, sales, real and personal property, value added, consumption as well as so-called 'sin taxes'. Taxes are analyzed against the traditional goals of efficiency, horizontal and vertical equity, benefits received, revenue sufficiency and stability, and taxpayer acceptability. Prerequisite, Economics 19. Alternate years, next offered 2000–2001. (4 credits)

$25\ COMPARATIVE\ ECONOMIC\ SYSTEMS\ (Same\ as\ International\ Studies\ 25)$

This course examines the workings of economic systems from the perspective of the incentives facing the firm and consumer. The course provides an introduction to the economics of information and organization which is used to evaluate resource allocation under the specific institutional environment of different economic systems. Our understanding of the incentive system is then used to evaluate the overall economic system. The focus of the course is primarily on the U.S. economy, Japan and the former Soviet Union/Russia. As time permits the course may examine China, Germany and Central Europe. Prerequisite, Economics 19. Next offered spring 2001. (4 credits)

26 ECONOMICS OF GENDER

This course uses economic theory to explore how gender differences lead to different economic outcomes for men and women, both within families and in the marketplace. Topics include applications of economic theory to 1) aspects of family life including marriage, cohabitation, fertility, and divorce, and 2) the interactions of men and women in firms and in markets. The course will combine theory, empirical work, and analysis of economic policies that affect men and women differently. Prerequisite, Economics 19. Every year. (4 credits)

27 ADAM SMITH AND KARL MARX

The objective of this course is to study the lives and the original writings of two of the most important scholars in the history of economic thought. Adam Smith, the patron saint of laissez-faire capitalism, was the founding father of modern economics, as well as the intellectual predecessor of Marx. Marx's historical and political vision embraced an equally large panorama. Prerequisite, Economics 19. Alternate years, next offered spring 2000. (4 credits)

28 INDUSTRIAL ORGANIZATION

This course examines theories of firm behavior in the various industrial environments along the continuum from monopoly to perfect competition, with oligopoly and monopolistic competition in between. In view of its ubiquity, oligopoly receives special emphasis; the contributions of Bertrand, Chamberlin and Cournot are treated in detail. Attention is also given to more recent developments, such as the theory of contestable markets. Finally, application of the theory unfolds as the enforcement of antitrust laws is studied through a discussion of landmark judicial decisions. Prerequisite, Economics 19. Alternate years, next offered 2000–2001. (4 credits)

33 MANAGERIAL ACCOUNTING

Planning is the key to business success. How do firms plan for the future? Setting objectives and budgets. Evaluating and rewarding employee performance. Controlling inventory, cash budgeting, and capital budgeting. Extensive use of case studies and group work. Prerequisite, Economics 13 or instructor's permission. Spring semester. (4 credits)

35 ECONOMICS OF THE TRANSITION (Same as International Studies 35)

This course surveys the theoretic and empirical literature on Soviet-style central planning and the transition to a market economy. The economic history of central planning is examined with emphasis on the experience of the Soviet Union and its variants in Eastern Europe and China. The tool of analysis is the branch of economics known as the economics of organization and information, which will be used to analyze the operation, strengths, and limitations of central planning. The legacy of central planning forms the backdrop for an examination of the transition to a market economy. Prerequisites, Economics 19 and one 20s level Economics course; Economics 21 or 25 are recommended. Alternate years; next offered 1999–2000. (4 credits).

36 CAPITAL MARKETS

The structure, operation, regulation and economic role of financial markets and institutions; fundamental security analysis and present-value techniques; forecasts of earnings and analysis of yields on stocks and bonds; the portfolio theory and characteristic lines, betas and mutual-fund ratings; futures and options markets. Prerequisites, Economics 13 and 19. Every year. (4 credits)

41 INTRODUCTION TO ECONOMETRICS

This course investigates the methods economists use to test theories and conduct economic forecasts. This course will provide the student with the ability to design, conduct, and evaluate empirical work in economics and other social sciences. The primary focus of the course is on the final project that consists of a research paper that will integrate library research, economic theory, and econometric analysis. The course will take a "hands on" approach as much as possible with weekly use of the microcomputer in class. Prerequisites, Economics 19, any Economics course in the 20s, Math 14 or 27, and Math 21. Every semester. (4 credits)

50 TOPICS

Topics courses offered in recent years have included: Farm and Food Policy: Topics in Agricultural Economics; Law and Economics; Economics of Higher Education Policy; and African Americans and Economics. Information on topics courses to be offered in 1999–00 may be obtained from the Registrar or the department office. (4 credits)

51 INTERMEDIATE MICROECONOMIC ANALYSIS

Methodology of economic science; theory of consumer behavior; theory of the firm; market structure and price determination; factor markets and income distribution; general equilibrium analysis. Prerequisites, Economics 19, any Economics course in the 20s, and Math 21. Not open to first-year students except by permission of the instructor. Every semester. (4 credits)

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 often are included in the course. Prerequisites, Economics 13, 41 and 51. Every year. (4 credits)

58 ENTREPRENEURSHIP: NEW VENTURES

This course focuses on starting up new businesses. From how to write a business plan to analyzing marketing and finance alternatives, the emphasis is on discovering the common elements in successful, new ventures. Typically a theme for a particular year's class is employed. An analysis of research in entrepreneurship in new ventures is an important element of the course. Guest speakers, student team projects and presentations, and analyses of case studies also are used. Prerequisites, Economics 13 and 51. Next offered 1999–2000. (4 credits)

59 INTERNATIONAL ECONOMIC DEVELOPMENT

This course will apply the tools of economic analysis to gain an understanding of economic development problems and their solutions. Patterns of economic development in a historical and dynamic context will be examined. The central role of agriculture and the problem of technological change in agriculture will also be examined. Other topics will include neo-classical growth models, domestic and international economic policies, international trade, foreign aid, external debt, technology transfer, rural-urban migration and income distribution. Prerequisites, Economics 41 and 51. Fall semester. (4 credits)

61 INTERMEDIATE MACROECONOMIC ANALYSIS

This course develops in detail theories of the determination of national income, employment and the price level. The foundations and mechanics of neo-classical and Keynesian models of the aggregate economy are studied and modern syntheses of these approaches are explored. Considerable attention will be paid to current behavior of the national economy. Prerequisites, Economics 19, 51 (or permission of the instructor), and Math 21. Every semester. (4 credits)

66 MONEY AND BANKING

Money and monetary standards; the role of depository institutions within the financial system; depository institutions and the Federal Reserve as creators of money; monetary theory; aggregative models; unemployment and inflation; international finance. Prerequisite, Economics 61. Alternate years, next offered 2000–2001. (4 credits)

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, Economics 51 and 61. Alternate years, next offered 2000–2001. (4 credits)

72 THEORY OF INTERNATIONAL FINANCE

This is a course in open economy macroeconomics and international finance. Special emphasis is placed on the causes and consequences of the international financial system's evolution. The four major international monetary regimes of the twentieth century—the classical gold standard, the interwar gold-exchange standard, the Bretton Woods System, and the floating-rate dollar standard—are explored in chronological order as well as attempts at monetary union in Europe. Topics examined include: 1) exchange rate determination, 2) balance of payments, 3) macroeconomic adjustment, and 4) international monetary institutions. Case studies are used extensively. Prerequisites, Economics 51 and 61. Every year. (4 credits)

73 LABOR ECONOMICS

This course uses theoretical and empirical research to examine the economics of work from both the point of view of the firm and the worker. Economic tools will be used to analyze some of the important issues relevant to labor economics, such as labor force participation, the division of labor within the household, occupational choice, investments in education, minimum wage legislation, wage elasticities, employment-hours tradeoff, labor market discrimination, unions, and job search. Prerequisites, Economics 41, 51, 61. Every year. (4 credits)

74 ADVANCED ECONOMETRICS

This course will introduce advanced topics in applied econometrics. Among other topics, it will examine limited dependent variable models, vector autoregression and advanced time series

techniques, simultaneous equations models and the econometrics of panel data estimation. Although the emphasis will be on applied work, the course will also examine the underlying mathematical structure of these estimation methods. Prerequisites: Economics 41, 51, 61 and Math 21 and 36. Alternate years, next offered fall 2000. (4 credits)

75 MATHEMATICAL ECONOMICS

Mathematical treatment of selected topics in economic theory and finance. The first part consists of a mathematical treatment of compound interest, capital accumulation and amortization, present discounted value and rate of return, and the relationship of these topics to models of economic growth. The second part of the course deals with optimization, Lagrange multipliers, and operations research. Optional topics may vary from year to year. Prerequisites, Economics 51 and 61 (Math 22 recommended). Alternate years, next offered 2000–2001. (4 credits)

76 SELECTED TOPICS IN MICROECONOMICS

This course will extend the subject matter of Intermediate Microeconomics, considering both theory and selected applications in four broad areas: (1) Extensions of the theory of choice to considerations of risk and uncertainty, the expected utility hypothesis, and the economics of information; (2) Extensions of the competitive market model to examine the supply of exhaustible resources, airline regulation and deregulation, and rent controls; (3) Extensions of simple, undifferentiated oligopoly theory to examine product differentiation, game theory, and contestable markets; and (4) Extensions of the theory of factor markets to study discrimination in the labor market, the negative income tax, and the incidence of the social security payroll tax. Prerequisites, Economics 51 and 61. Alternate years, next offered spring 2001. (4 credits)

77 SELECTED TOPICS IN MACROECONOMICS

This course extends the subject matter of Intermediate Macroeconomics. It focuses on theoretical and empirical issues related to: 1) long-run economic growth, 2) equilibrium business cycle models, 3) the macroeconomics of imperfect competition (i.e., "New Keynesian" economics), 4) the macroeconomic policy debate, with emphasis on the application of game theory to monetary policy analysis, and 5) open economy macroeconomics. Prerequisites, Economics 51 and 61. Alternate years, next offered 1999–2000. (4 credits)

78 ECONOMICS OF PUBLIC POLICY

This course examines the role of economics in the adoption, implementation, and evaluation of public policies, focusing primarily on microeconomic policies: the provision of public goods, regulation, subsidization, and taxation. The course has two parts. The first deals with the use of economic theory in understanding and evaluating government policy decisions. Topics include the philosophical foundations of economic policy analysis, the rudiments of program evaluation techniques (including benefit-cost analysis), the rational actor approach to studying democratic decision-making processes, and the connections of the economic consequences of a program to its political support and opposition. The second applies these concepts to study several aspects of public policy, including budgeting, environmental protection, monopoly regulation and antitrust, income distribution programs, resource management, and/or international trade. The course is writing intensive as well as quantitative. Prerequisites, Economics 51 and 61. Alternate years, next offered 1999–2000. (4 credits)

96 INDEPENDENT PROJECT

Further study in fields of special interest. Readings, conferences, field work, reports. Prerequisites, Economics 51,61, and permission of the instructor. (4 credits)

97 INTERNSHIP

Work that involves the student in practical off-campus experiences with business, government, and non-profit organizations. Pass/No-Pass grading only. Prerequisites, Economics 51 and permission of the instructor. (1 to 4 credits)

98 PRECEPTORSHIP

Work in assisting faculty in the planning and teaching of a course and/or tutoring individual students. Pass/No-Pass grading only. Prerequisites, Economics 51, 61 and permission of the instructor. (4 credits)

Education

Full Time Faculty: Nancy Johansen, Ruthanne Kurth-Schai (Chair), Matthew Weinstein

Part Time Faculty: Nancy Dana, Karen Hackbart, Elizabeth Halden, Jacqueline McClees, Connie Morey, Rica Van

With an understanding that intelligent, caring, and creative teachers are crucial to the well-being of our society, Macalester College, through its education department, prepares students to become effective teachers across the age continuum from early childhood through young adulthood.

The combination of sound academic standards, broad liberal education, emphasis on subject preparation and thorough grounding in the study of education as an art, science, and mission results in the development of graduates of outstanding promise as teachers. Additionally, education courses provide opportunities for liberal arts students, regardless of academic or professional interests, to critically and creatively reflect on contemporary societal concerns regarding children and youth, and the status of national and international educational systems.

The curriculum offered by the education department is centered in four mutually supportive themes:

Social Advocacy: John Dewey stated, "Education is the fundamental method of social progress and reform." These words assume special significance at a time when there is widespread recognition that social and educational policies and practices designed to fulfill the needs and aspirations of young students are in crisis. In response, the curriculum is designed to promote social responsibility (including preparation for social service and social leadership) and cultural pluralism (including concern for gender, race, class, international and urban issues), especially as these commitments advance the social, political, and educational welfare of children and youth.

Life Span Development: In order to address the needs and aspirations of children and youth, the curriculum reflects current theory and research which articulates a developmental continuum of human learning, growth, change, crisis, and renewal. The study of human development is conducted in an inclusive and integrative manner, addressing patterns and processes across the domains of cognitive, affective, intuitive, social, physical, and moral growth, and throughout the age continuum from early childhood through young adulthood. The educational implications of individual variations in intellectual, emotional, and physical capabilities and factors related to gender, class, race, and cultural heritage are also addressed. Additionally, the interplay among developmental processes on personal, organizational, and societal levels is carefully considered.

Cultural Pluralism: The curriculum further reflects commitment to the concept of human diversity as a resource to schools and society. It is assumed that both special challenges and unique opportunities are associated with individual

variations in intellectual, emotional, and physical capabilities and factors related to gender, class, race, and cultural heritage. Students are expected to assess implications of their own cultural heritage, to grow in understanding and compassion as they explore the perspectives of others, and to act upon their growing awareness in supportive and life-enhancing ways.

Experiential Learning: The curriculum is further designed to ensure ongoing and developmentally appropriate opportunities for application, integration, and evaluation of educational theory and practice. In doing so the curriculum promotes understanding of development-in-context, thereby acknowledging the dynamic and complex constellation of factors and relationships which contribute to the educational process. A developmental sequence of field experience is integrated throughout education course work beginning with opportunities to develop observational skills, then to participate in activities which support instruction, and finally, to assume instructional roles. Each student's field work is structured to ensure opportunities to interact with students across the age spectrum from early childhood through adolescence before selecting an age for specialization. Field experiences are further structured to include experiences with exceptional students and work in pluralistic educational settings.

General Distribution Requirement

Education 35: Education and Social Change, Education 58: Science and Culture, and Education 59: Re-envisioning Education and Democracy, satisfy the general distribution requirement in social science. Education 39: Philosophy of Education fulfills the requirement in the humanities.

Licensure Programs

Macalester teacher education programs are approved and accredited by the Minnesota State Department of Children, Families and Learning and the Minnesota State Board of Teaching.

Candidates preparing for teaching are counseled by an advisor in education. In addition to the general graduation requirements, candidates complete a major concentration and the professional education sequence. Upon successful completion of the program and graduation, the College recommends candidates to the State Department of Children, Families and Learning for licensure. Students may also be recommended for licensure in other states upon satisfactory completion of the Minnesota requirements.

Licensure programs are offered in the following areas:

Pre-kindergarten Teaching: Licensure to teach pre-school children can be completed in combination with elementary licensure or separately. Any academic major or core concentration is acceptable.

Kindergarten/Elementary Teaching (K-6): Any academic major or core concentration is acceptable. The State of Minnesota, however, does specify some general education patterns. (See Education brochure).

Secondary Teaching (Grades 7–12): Students preparing for secondary school teaching usually choose major concentrations, although some core concentrations are acceptable. Macalester programs for secondary licensure include eleven disciplines: art (K–12), earth science (geology), English, French, German, Russian, life science (biology), mathematics, music (K–12), physical science (chemistry and physics), Spanish, and speech-theater arts.

There are also two interdisciplinary licensure programs—the general science core concentration, designed to prepare students to teach general science grades 5–9; and the social science major concentration, designed to prepare students to teach social sciences at the secondary school level.

Teaching English as a Second Language (K–12): Macalester is an approved licensing institution for teachers of English as a Second Language (TESL). Programmatic requirements specified by the Minnesota State Board of Teaching are satisfied by completing the professional education sequence and a series of linguistics courses offered at Macalester along with TESL courses offered through the ACM Urban Education Program in Chicago. Candidates for licensure must also demonstrate proficiency in a second language at a level sufficient to satisfy routine social demands and limited work requirements.

Coaching Athletics: For further information please consult listings under Physical Education.

All licensure requirements are subject to change at the discretion of state regulatory agencies. Students, therefore, should remain in close contact with their adviser in the Education Department.

Brochures providing information concerning program procedures and detailed descriptions of each certification area are available from the Education Office.

Licensure After Graduation

Persons seeking licensure who hold a baccalaureate degree from Macalester or another fully accredited college may apply for teacher education program admission. Candidates for elementary or secondary licensure are screened by a selection subcommittee of the Teacher Education Advisory Committee. If the candidate lacks required preparation or, in the case of secondary candidates, does not present a major comparable to the Macalester major, he or she will be required to take further courses. Upon satisfactory completion of the professional education sequence and student teaching requirements, licensure is recommended to the State. Persons interested in this program should consult with the director of the Early Childhood, Elementary or Secondary Program.

Teacher Placement

As part of the education department, the College operates a Teacher Placement Bureau which assists Macalester education graduates in finding teaching positions. The primary functions of the bureau are: (1) guiding teacher candidates through procedures for obtaining a teaching job, (2) keeping a

current file of the teacher's credentials, and (3) maintaining lists of available teaching positions. The responsibilities of the graduate are: (1) paying a placement fee and compiling credentials, (2) initiating contacts with prospective employers, and (3) informing the Teacher Placement Bureau when a position has been obtained. Materials helpful in preparing for placement are available at the Teacher Placement Bureau in the education department office.

Education Course Requirements

The education curriculum consists of four requirements categories:

Foundations courses involve students in the study of education as an interdisciplinary and integrative field of scholarly inquiry.

Curriculum and Instruction courses focus on the translation of educational theory into practice. Attention is devoted to models, methods, materials, and procedures appropriate for specific age groups and subject matter areas as required for teacher licensure. Opportunities to relate theory and practice through interaction with students and teachers in school settings is provided.

Student Teaching and Seminar is the program's culminating experience where educational theory and practice are fully integrated. Students assume full organizational, instructional, and evaluative roles in classroom settings guided and supported by college and school faculty.

The Teacher Education Seminar contributes to the capstone experience insuring full integration of program goals. Participation in specific seminars is required to comply with state certification guidelines.

Additional requirements: In addition to the required courses offered by the education department, teacher candidates are required to complete a course in developmental psychology (Psychology 28). Students intending to license on the pre-K level are required to take Sociology 32: The Institution of the Family. Education 58: Science and Culture is recommended for students seeking licensure in the sciences. Education 35: Education and Social Change, Education 59: Re-envisioning Education and Democracy, and other topics courses offered through the department are also strongly recommended.

Education Courses Required for ALL Licensure Programs:

- 30 Educational Psychology
- 39 Philosophy of Education
- 70 Teacher Education Seminar

Education Courses Specific to Level of Licensure:

Pre Kindergarten Education

- 40 Early Childhood Curriculum and Instruction
- 42 Early Childhood Education: Topics and Issues
- 67 Pre-Kindergarten Student Teaching and Seminar

Kindergarten/Elementary Education (K-6)

- 40 Early Childhood Education: Curriculum and Instruction
- 45 Reading/Children's Literature

- 46 Mathematics, Science, Health
- 47 Language Arts, Social Studies
- 48 Fine Arts in the Elementary School
- 65 Elementary Student Teaching and Seminar
- 66 Kindergarten Student Teaching and Seminar

Elementary Education (1-6)

- 45 Reading/Children's Literature
- 46 Mathematics, Science, Health
- 47 Language Arts, Social Studies
- 48 Fine Arts in the Elementary School
- 65 Elementary Student Teaching and Seminar

Secondary Education

- 51 Secondary Curriculum and Instruction
 - A Curriculum and Instruction class particular to license area specialization (specific course to be arranged with program director)
- 57 Reading and Literature for Young Adults (English majors only)
- 64 Secondary Student Teaching and Seminar

COURSES

30 EDUCATIONAL PSYCHOLOGY

An introduction to theory and research in educational psychology. Topics include learning theory, learner characteristics, intelligence, motivation, measurement and evaluation, and models of teaching appropriate for learners from early childhood through young adulthood. Students are required to complete observations in classroom settings. Fall and spring semesters. (4 credits)

32 EXPERIENCES IN EDUCATION

This course provides opportunities to explore, reflect upon, and contribute to life in contemporary urban classroom settings. Weekly placements will be arranged allowing students to work closely with teachers, educational support staff, and young people of the age group they desire (pre-school, elementary, or secondary levels). The experiential aspects of the course are complemented by readings, one late afternoon seminar session each week, and reflective writing. Prerequisites: Instructor's signature, completion of placement request form. Alternate years. (2 credits).

35 EDUCATION AND SOCIAL CHANGE

The study of education as a sociocultural tool for promoting change as required to create more just and humane environments in a rapidly changing, increasingly complex world. Contemporary opportunities for positive social change associated with gender, class, race, international, environmental, and youth development issues are addressed. Fall semester. (4 credits)

39 PHILOSOPHY OF EDUCATION (Same as Philosophy 39)

What is the nature and purpose of education? In what ways should educational institutions support, challenge, or transform predominant social values? What is ethical educational policy and practice? Such questions are considered in light of a variety of philosophic perspectives. Students will define a personal philosophy of education and assess its implications for current educational theory and practice in addition to their own educational development. Fall and spring semesters. (4 credits)

40 EARLY CHILDHOOD EDUCATION: CURRICULUM AND INSTRUCTION

Methods and materials appropriate to teaching and learning during the period from birth through kindergarten age. Required for students being licensed at the pre-kindergarten and/or kindergarten levels. (Students are required to complete a field experience in an early childhood setting.) Fall semester. (4 credits)

42 EARLY CHILDHOOD EDUCATION: TOPICS AND ISSUES

Special topics and issues specific to working with children from birth to kindergarten age, including infant and toddler development. Required for students being licensed at the pre-kindergarten level. Spring semester. (4 credits)

45 READING/CHILDREN'S LITERATURE

A study of current approaches to the teaching of reading, and a survey and critical analysis of literature for children. Students are required to complete a related field experience in an elementary school setting. Fall semester. (4 credits)

46 MATHEMATICS, SCIENCE

A study of various approaches to the teaching of mathematics, science and health in elementary schools. Students are required to complete a related field experience in an elementary school setting. Fall semester. (4 credits)

47 LANGUAGE ARTS, SOCIAL STUDIES

A study of current approaches to teaching the language arts and social studies in elementary schools. Students are required to complete a related field experience in an elementary school setting. Spring semester. (4 credits)

48 FINE ARTS IN THE ELEMENTARY SCHOOL

A study of current theory and practice in art, music and physical education in elementary self-contained classrooms. Not offered 1999–2000. (4 credits)

50 TOPICS

Occasional, often experimental, courses offered by instructors at their own initiative, or in response to student requests. Topics offered in 1999–2000 include *Race, Ethnicity, and Culture in Education*, and *Education in Japan*, a study of the role of educational institutions in these dimensions of identity and society. (4 credits)

51 SECONDARY CURRICULUM AND INSTRUCTION

Methods of instruction, classroom management and curricular design appropriate for teaching adolescents and young adults. Curricular issues specific to each secondary subject matter area are addressed in special curriculum seminars taken concurrently with this course. Students are required to complete a related field experience in a secondary school setting. Fall semester. (4 credits)

57 READING AND LITERATURE FOR YOUNG ADULTS

Literature written for and/or read by students in grades 7-12 is critically analyzed, and approaches to working with reading problems arising in content subjects are studied. Fall semester. (4 credits)

58 SCIENCE AND CULTURE

This class uses anthropological and cultural studies frameworks to examine the relationship between scientific knowledge and culture. Topics include the occupational lives of scientists; the transformation of scientific knowledge in schools, mass media, and museums; and the consumption practices of non-scientists, e.g., through the health care system and science fiction fan clubs. It also explores questions concerning the role of gender in scientific knowledge and colonialism in scientific practice. Fall semester. (4 credits)

59 RE-ENVISIONING EDUCATION AND DEMOCRACY (Same as Political Science 59)

Explorations of the theory and practice of education and democracy through collaborative research and development, service learning, and the design of innovative, principled, educationally and politically feasible solutions to significant educational policy problems. Spring semester. (4 credits)

64 SECONDARY STUDENT TEACHING AND SEMINAR

Student teaching in schools at the secondary level. Observation as well as actual student teaching. Includes participation in a weekly seminar. (Special requirements exist for art and music majors—see education department brochure.) Fall and spring semesters. (4 credits)

65 ELEMENTARY STUDENT TEACHING AND SEMINAR

Student teaching in schools at the elementary level. Observations as well as actual student teaching. Includes participation in a weekly seminar. (Special requirements exist for art and music majors—see education department brochure.) Fall and spring semesters. (4 credits)

66 KINDERGARTEN STUDENT TEACHING AND SEMINAR

Student teaching in schools at the kindergarten level. Includes observations in other kindergartens and participation in weekly seminar. Fall and spring semesters. (4 credits)

67 PRE-KINDERGARTEN STUDENT TEACHING AND SEMINAR

Student teaching in pre-kindergarten settings. Includes observations in several programs and participation in weekly seminar. Fall and spring semesters. (4 credits)

70 TEACHER EDUCATION SEMINAR I

A capstone experience designed to insure full integration of program goals and licensure requirements. Seminar topics include educating exceptional students (special education, gifted and talented, ESL), school health, drug education, educational technology and roles of parents, social services, businesses and community in supporting schools. Fall semester. (2 credits).

71 TEACHER EDUCATION SEMINAR II

A capstone experience designed to insure full integration of program goals and licensure requirements. Seminar topics include educating exceptional students (special education, gifted and talented, ESL), school health, drug education, educational technology and roles of parents, social services, businesses and community in supporting schools. Spring semester. (2 credits).

95 TUTORIAI

Because this requires a good deal of initiative and responsibility, students should already be admitted into one of the department's programs, and be at least juniors. Prerequisite, permission of the instructor. (4 credits)

96 INDEPENDENT PROJECT

Intended to allow students to conduct advanced study of a particular aspect of education. Prerequisite, permission of the instructor. (4 credits)

97 INTERNSHIF

Requires some background and expertise. Primarily for juniors and seniors. Prerequisite, permission of the instructor. (4 credits)

98 PRECEPTORSHIP

This involves teaching under supervision and requires that the student have demonstrated knowledge in the area, preferably by already having taken the course and receiving an A. Prerequisite, permission of the instructor. (4 credits)

English

Full Time Faculty: Joel Baer, Diane Glancy, Roy Kay, Stacey Margolis, Stuart McDougal (Chair), David Moore (International Studies/English), Wang Ping, Tanya Pollard, Sonita Sarker (Women's and Gender Studies/English), Robert Warde, David Wilson-Okamura

Part-Time Faculty: Peter Murray, Eleanor Courtemanche (Mellon Postdoctoral Fellow)

The English Department offers students the opportunity to encounter a wide range of engaging works of fiction, poetry and non-fictional prose from the British Isles and the United States, as well as from around the world. Students learn to interpret these works from a variety of theoretical perspectives and to develop their knowledge of literary history. In addition, students have opportunities to hone their skills as writers of expository and creative prose. The Department is especially committed to teaching works by women, African

Americans, Native Americans, and others that have been traditionally under represented in the curriculum.

General Distribution Requirement

All courses in the English department satisfy the general distribution requirement in the humanities except for courses numbered 10, 12, 35, 40, 41, 42, 43, 45, 80, 81, 82, 95, 96, 97, and 98. Courses numbered 12, 41, 42, 43, 80, 81, and 82 satisfy the requirement in fine arts. The course numbered 35 meets the requirement in social science.

Diversity Requirement

The courses in the English department which satisfy the domestic diversity requirement are those numbered 21, 51, 52, and 53. The courses which satisfy the international diversity requirement are those numbered 54, 55, 56, 57 and 59.

Major Concentration

The English major consists of a minimum of ten courses (40 credits) in English and a Capstone Experience. The courses are to be chosen in consultation with an English department advisor, and, with the restrictions noted below, distributed according to either Plan A or Plan B.

Plan A: Ten courses (40 credits) in English with the following requirements:

- 1. To provide a foundation for the further study of literature, one course (4 credits) selected from among the 20s courses. Any one of these courses serves as a *prerequisite for literature courses numbered 50 and above*. English 24, 25, 26 and 28 are especially recommended for students considering a major in English.
- 2. To encourage the study of literary history, two courses (8 credits) in British literature before 1900 to be selected from among the 60s courses or other relevant courses numbered 50 and above. A course taken to fulfill requirement (5) below may also be used to satisfy one of these two British literature requirements—however, a total of 10 courses (40 credits) is still required.
- 3. To encourage familiarity with our American literary heritage, one course (4 credits) in American literature before 1900 selected from among the appropriate courses numbered in the 70s or from other relevant courses numbered 50 and above.
- 4. To encourage study of the many emergent voices in twentieth century literature, one course (4 credits) from among the 50s courses or other relevant courses numbered 50 and above.
- 5. One culminating small-group course (4 credits), ordinarily taken as a senior, selected from among the 80s courses. When used to satisfy the requirement (#8 below) of a Capstone Experience, this course must be taken during the senior year at Macalester.

- 6. Each of the above requirements, with the possible exception of one of the two courses in (#2) as noted above, is to be fulfilled by a separate course.
- 7. The Capstone Experience requirement may be fulfilled by any one of the following *taken at Macalester as a senior*:
 - a. A course in the 80's sequence
 - b. An Honor's Project
 - c. An appropriate independent course developed in consultation with an English Department faculty member. Examples of such a project would be an extensive research paper on a literary subject, a portfolio of creative work, a cross-disciplinary project, or a presentation by means of performance, multimedia, or hypertext.

Stipulations applying to both the major and the minor:

Neither Advanced Placement credit for English 20 nor English 10 may be included in a major or minor concentration in English.

No more than two courses from those numbered in the 20s (8 credits) may be included in a major or minor concentration in English.

Only one cross-listed humanities and cultural studies course (English 30, 31, 32, 33) (4 credits) may be included in a major or minor concentration in English.

One preceptorship and one internship (for a maximum of eight credits) which is relevant to a student's work as an English *major* may be included in a major concentration in English. (An English *minor* may not include a preceptorship or an internship.)

Students seeking teaching licensure in English may include their second practice teaching unit/course (Education 64, 65, 66, or 67).

One course (4 credits) in the study of literature taught in a language department at Macalester other than English may be included as an elective in a major plan in English but not in a minor plan.

Plan B: Creative Writing Emphasis

English majors wishing to develop a concentration in English with an emphasis on creative writing are expected to fulfill the requirements for the English major as defined above (Plan A) and to utilize their departmental electives for five creative writing courses (20 credits). In addition to the extensive course offerings in creative writing, additional electives include Independent Study, Tutorials, and Internships (with, for example, one of the literary presses in the area). Note that English 12, Introduction to Creative Writing, *taken at Macalester* is the required prerequisite for all further creative writing courses included in an English major with a creative writing emphasis.

Minor Concentration

A minor in English consists of six related courses (24 credits). When developing a minor in English a student must also present a written rationale, developed in consultation with an English department advisor, which describes the

relationship and the focus of the six courses. The six courses may not include English 10; no more than two of the six may be numbered below 30, nor may an internship or preceptorship be one of the six. Typical minors might focus, for example, upon creative writing, studies in specific historical periods, genre studies (drama, poetry, fiction), women's or minority literature, writing and editing, or other concentrated areas of interest to the student. A minor plan must be filed no later than registration for the first semester of the senior year.

Women's and Gender Studies

The English department participates in the Women's and Gender Studies program, which is described elsewhere in this catalog. For courses offered by the English department appropriate for this program consult the special information issued by the director of the program and the detailed course descriptions (including seminars and topics courses) posted in the English department.

International Studies Major

The department also participates in the interdisciplinary International Studies major, which is described elsewhere in the catalog. Various courses, such as English 54, 55, 56, 57 and 59, can be incorporated into the major, depending upon a student's chosen focus.

Teacher Licensure

Students seeking licensure for secondary teaching should consult the appropriate faculty members in both English and Education for advice on current State of Minnesota requirements.

Writing Skills

All English courses include writing assignments, but the department suggests that new students choose writing courses according to the recommendations their advisors receive from the coordinator of the All-College Writing Program. College Writing courses (English 10) teach basic writing skills for writing across the curriculum. Other courses marked "W" on the class schedule will include writing instruction pertaining to each course's own requirements.

COURSES

Detailed descriptions of all courses—including reading lists, schedules of assignments, and writing requirements—are posted in the English department prior to each registration period. *These descriptions may be found on the bulletin board near the west end of the second floor of Old Main.* They are also to be found on the English department's web page.

Introductory Writing Courses

10 COLLEGE WRITING

Instruction and practice for writing in college. In all sections there will be class meetings for instruction and also individual conferences. In some sections some class meetings will be workshops —students will work collaboratively while researching, planning, drafting, revising, and editing their papers. Readings may be assigned to provide subject matter for papers, or students may be directed to write on topics from other courses they are taking. Specific course descriptions for each section of English 10 will be published with registration materials. This course does not satisfy the general distribution requirement in humanities or the requirements for the English major or minor. See also

the paragraph above on writing skills. This course is offered on an S/D/NC grading option. Every year. (4 credits)

12 INTRODUCTION TO CREATIVE WRITING

The focus of this course will be on the development of skills for writing poetry and short fiction through a close study of the techniques involved in these forms, analysis of model literary works, and frequent writing exercises. The course makes use of a basic prosody text, supplemented by anthologies of poetry and short stories. Students registering for this course should be able to demonstrate that they have done some previous writing of poetry or fiction, either through previous writing classes or on their own. This course must be completed *at Macalester* as a PREREQUISITE for the further study of creative writing at Macalester. Every year. (4 credits)

Introductory and Intermediate Courses

Note: Students must take one class from those numbered in the 20's as a PREREQUISITE for any course numbered 50 and above (Advanced Placement credit for English 20 does not fulfill this prerequisite). All twenties courses include instruction in writing. English 24, 25, 26, and 28 are especially recommended as introductory courses for students considering majoring in English.

20 STUDIES IN LITERATURE

A course in traditional and non-traditional literatures, each section of which will have a different focus, topic, or approach; recent offerings have examined the short story, major women writers, and new international writing. Every year. (4 credits)

21 AMERICAN VOICES

American literature contains a greater variety of voices than most other national literatures. Each section of this course explores some aspect of that wide range of voices and may include the writing of women, of minority groups, or of various sub-groups from the dominant literary culture. Consult the detailed course descriptions in the English department or on its web page for the content of individual sections. May occasionally be offered for 6 credits as a First Year Course. Every year. (4 credits)

24 POETRY

Study of a variety of poets, both past and present, including women and people of color. The course will develop skills of close reading as a basis for interpretation, familiarize students with poetic forms, and consider new approaches to literary study. Every year. (4 credits)

25 DRAMA

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 dramatic forms such as tragedy and comedy and the variety of new forms in modern drama. Alternate years. (4 credits)

26 NOVEL

A study of a small number of works selected to represent the variety of language and structure in this genre. The focus will be on both their characteristics as works of art and on the ways in which they respond to and, in turn, shape the society which gives them birth. Readings will include critical essays on specific novels and on narrative fiction in general. Every year. (4 credits)

28 LITERATURE IN CRITICAL PERSPECTIVES

A course in the theory and practice of literary study designed to prepare students for more advanced course work in English and for a lifetime of mature reading. This course develops skills in the close reading and interpretation of literature through discussion of and writing about 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. (4 credits)

30 THE MEDIEVAL AND RENAISSANCE WORLD (Same as Humanities and Cultural Studies 24)

Classics of European, including British, theology, philosophy, and literature, with some attention to corollary movements in art and architecture. Alternate years. (4 credits)

31 THE MODERN WORLD I (Same as Humanities and Cultural Studies 25)

Classics of European, including British, art, philosophy and literature from the 17th and 18th centuries. Alternate years. (4 credits)

32 THE MODERN WORLD II (Same as Humanities and Cultural Studies 26)

Classics of European, including British, literature and philosophy of the 19th and 20th centuries to World War I, with some attention to corollary movements in music and the arts. Alternate years. (4 credits)

 $33\ THE\ MODERN\ AND\ POSTMODERN\ WORLDS\ (Same\ as\ Humanities\ and\ Cultural\ Studies\ 27)$

Studies in the 20th century literature, arts, and philosophy of Europe and the Americas. Alternate years. (4 credits)

34 ETYMOLOGY AND THE ENGLISH LANGUAGE (Same as Linguistics 34)

This course is a study of the histories of English words, emphasizing the relation of Greek and Latin to contemporary English and the development of vernacular American English. Through the course students will learn how etymology operates as a branch of historical linguistics. Not offered 1999–00. (4 credits)

35 INTRODUCTION TO LINGUISTICS (Same as Linguistics 24)

This course provides a general introduction to the major questions students of language have been grappling with over the last 2,500 years: why do languages differ the ways they do? Why do they change over time? Why are all languages so easy for children to learn, and so hard for adults? Are there significant respects in which they are all the same? What distinguishes human languages from other modes of communication? What are grammatical rules, and where do they come from? Do they reflect properties of the human mind, of the natural world, or of the social order? Are languages like biological organisms (after all, they evolve, reproduce themselves, adapt, and become extinct)? Is there some correlation between the form of an utterance and the function for which it is used?

There is no prerequisite, but English majors are strongly advised to take a course in Old & Middle English Literature (English 60), Chaucer (English 61) or Shakespeare (English 62) prior to taking English 35. Every year. (4 credits)

40 WRITING THE RESEARCH PAPER

A course of class instruction and individual conferences designed for majors in the humanities and the social sciences, especially for those with a specific writing project in mind, such as an Honors thesis or a research paper in a current or future course. Each student will consult with the instructor on the sources of information, format, and style of writing appropriate to his or her field. Special attention will be given to the assembling, evaluation, and citation of sources, to the formulation and application of a thesis, and to the revising of the research paper. We will also consider the role of the computer in writing and research, the use of graphs and illustrations, the writing of scholarly book reviews, and the presentation of oral reports on research. Offered 1999–2000. (4 credits)

PREREQUISITES: Students may register for the more advanced Creative Writing courses (English 41, 42, 43, 80, 81, and 82) only after they have taken English 12 at Macalester.

41 SPECIAL TOPICS IN POETRY WRITING

This course will focus in a variety of ways on the development of skills for writing poetry, building on the work done in English 12. Depending on the instructor, it may approach the creative process through, for example, writing from models (traditional and contemporary), formal exercises (using both traditional and contemporary forms), or working with the poetry sequence (or other methodology selected by the instructor: see department postings for details). It will involve extensive readings and discussion of poetry in additional to regular poetry writing assignments. The course may be conducted to some extent in workshop format; the emphasis will be on continuing to develop writing skills. PREREQUISITE, English 12 (Introduction to Creative Writing) taken at Macalester. Every year. (4 credits)

42 SPECIAL TOPICS IN FICTION WRITING

This course will focus in a variety of ways on the development of skills for writing fiction, building on the work done in English 12. Depending on the instructor, it may approach the creative process

through, for example, writing from models of the short story (both classic and contemporary), working with the technical components of fiction (e.g., plot, setting, structure, characterization), or developing linked stories or longer fictions (or other methodology selected by the instructor; see department postings for details). It will involve extensive readings and discussion of fiction in addition to regular fiction writing assignments. The course may be conducted to some extent in workshop format; the emphasis will be on continuing to develop writing skills. PREREQUISITE, English 12 (Introduction to Creative Writing) taken at Macalester. Every year. (4 credits)

43 SCRIPTWRITING

The emphasis in this course is on written dialogue and dramatic action. The course is designed to produce brief scripts. PREREQUISITE, English 12 (Introduction to Creative Writing) taken at Macalester. Alternate years. (4 credits)

45 TEACHING WRITING

This course serves students preparing to become licensed teachers and students who want to become Preceptors or Writing Associates for faculty members. Prospective Writing Associates are students who have acquired recommendations from faculty members as being persons highly capable of learning how to assist other students to complete discipline-specific writing assignments successfully. In this course they will become practiced analysts and knowledgeable advisors for other students' writings. Subsequently, they will be titled Writing Associates, assistants (earning course credit or work/study monies) in courses for faculty members who plan to help their students become stronger writers by giving them instructions about normal expectations for writing in the discipline and then scheduling them to write and to rewrite 3 or 4 essays, reports, or papers. For all such writings, Writing Associates will serve as advisors/consultants. Alternate years. (4 credits)

Advanced Literature and Writing Courses

PREREQUISITES: Students may register for courses numbered in the 50's through the 90's only if they have previously taken a course numbered in the 20's (20–28). An Advanced Placement credit for English 20 does not fulfill this prerequisite.

50 TOPICS

Topics courses offer alternative and exploratory approaches to literary works and issues through, for example, interdisciplinary study, studies of single authors or groups of authors from several periods, or studies of recurrent themes in literature. These courses often reflect faculty members' interests in new approaches to literary study or new areas of study. Several topics courses are offered each year, and students should consult the detailed course descriptions in the English department prior to registration. Every year. (4 credits)

51 CONTEMPORARY WRITING BY WOMEN

A study of selected women writers from the second half of the twentieth century. Alternate years. (4 credits)

52 AFRICAN AMERICAN WRITERS OF THE U.S.

A study of selected African-American poets, dramatists, and fiction writers. This course may focus on a specific topic, such as recent fiction (e.g., Toni Morrison, Alice Walker, John Edgar Wideman) or may have an historical focus (e.g., the Harlem Renaissance). Every year. (4 credits)

53 NATIVE AMERICAN LITERATURE

A study of fiction and poetry by American Indian writers, e.g., N. Scott Momaday, Leslie Silko, James Welch, Louise Erdrich, Gerald Vizenor and others. This course is a study of voices built on an absence of place and identity. The voices are in the process of what Gerald Vizenor calls "Survivance." Alternate years. (4 credits)

54 PAN AMERICAN LITERATURE

A study of the poetry, short stories, and novels of both North and South America, primarily focusing on contemporary literature and including such writers as Carlos Fuentes (Mexico), Jorge Luis Borges (Argentina), Isabel Allende and Pablo Neruda (Chile), Gabriel García Márquez (Colombia), Derek Walcott (the Caribbean), and Adela Prado (Brazil). Some of the writings are political, dealing with issues of class, race, and gender, some deal with issues of internationalism, the family, and the

contemporary human condition. At times this course will be team-taught and cross-listed with the Spanish department. Alternate years. (4 credits)

55 AFRICAN LITERATURE

A study of the fiction and poetry of, primarily, Black writers from sub-Saharan Africa. The specific content of this course may vary. Alternate years. (4 credits)

56 ANGLOPHONE LITERATURE

A study of works written in English from English-speaking countries other than the U.S. and Great Britain. Countries whose literature might be examined in this course include Canada, India, Australia, South Africa, and the Caribbean. Alternate years. (4 credits)

57 WORLD LITERATURE IN TRANSLATION

This course will concentrate on major literary works from Africa, Asia, Europe, and Latin America. It may occasionally focus on a specific topic, such as existentialism, the literature of protest, or writings by women. Please consult the detailed course description posted in the English department. Alternate years. (4 credits)

58 FILM STUDIES

This course will focus on different topics from year to year. Possible topics include the Great Directors, Russian Film, French Film, Film and Ideology, and Images of Black Women in Hollywood films. Please consult the specific course description in the English department. Alternate years. (4 credits)

 $59\ 20\text{TH}$ CENTURY ANGLOPHONE WOMEN WRITERS: BRITAIN AND "ENGLISHNESS" (Same as Women's and Gender Studies 60)

The term "Anglophone Literature" refers to writings in English from countries connected to Britain either by imperial rule or by the presence of British immigrants, yet does not include England itself. This course extends the definition of that term to study England as a location of Anglophone Literature, as produced by this island's natives, immigrants, and cosmopolitans. Through an analysis of works by Virginia Woolf, Margaret Drabble, Doris Lessing, Suniti Namjoshi, Angela Carter, Ravinder Randhawa, among others, we will explore how concepts of nation, race, citizenship, gender, ownership of English as a language, and even the British literary canon are constructed. Offered every year. (4 credits)

60 OLD AND MIDDLE ENGLISH LITERATURE

Study of *Beowulf* and other Old English poetry (in translation); some attention to medieval lyrics, the poetry of dream vision, Chaucer's *Canterbury Tales*, and the rise of Arthurian romance and legends of the Holy Grail in both British and Continental versions. Alternate years. (4 credits)

61 CHAUCER

Study of *The Canterbury Tales* (read in Middle English), with a focus on the fourteenth century religious and literary milieu, issues of gender, class, and ethnicity, and past and present critical approaches to Chaucer. Alternate years. (4 credits)

62 SHAKESPEARE

Study of major plays of all genres—tragedy, history, comedy, and romance—with emphasis on the interpretation of the plays and on their contexts in the Elizabethan world. Consideration of the way the plays participate in the ideological debates of the period on such issues as gender, power, social class, and ethnicity. Films of the plays may supplement the reading of the texts. Every year. (4 credits)

63 AGE OF SATIRE

The theory and practice of satire from 1660 to 1800. Emphasis upon British writers such as John Dryden, Jonathan Swift, Alexander Pope, Samuel Johnson, Richard Brinsley Sheridan, and Jane Austen, with some attention to Voltaire and other continental writers. The course will examine how they attacked the evils and absurdities of their day and what value their work still has for readers and for satirists of today's society. Recent criticism of this period and satire in general will be considered. Alternate years. (4 credits)

64 THE BRITISH NOVEL IN THE EIGHTEENTH CENTURY

The rise of the novel as illustrated in the works of Aphra Behn, Daniel Defoe, Samuel Richardson, Henry Fielding, Laurence Sterne, Fanny Burney, Ann Radcliffe, Jane Austen, and others. Emphasis upon the writers' attitudes toward the social and spiritual values of early modern Britain and upon the great variety of forms and moods that invigorated the new genre. Alternate years. (4 credits)

65 THE ROMANTIC PERIOD

The works of writers such as William Blake, William Wordsworth, Samuel Taylor Coleridge, the Shelleys, Lord Byron, John Keats, William Hazlitt, Thomas De Quincey, and Charles Lamb in the context of the rapid cultural changes experienced in Great Britain between the French Revolution of 1789 and the Reform Bill of 1832. Emphasis on the distinctive responses of each writer to these changes, and on the nature of romanticism. Alternate years. (4 credits)

66 THE BRITISH NOVEL IN THE NINETEENTH CENTURY

The fiction of such authors as Jane Austen, Charles Dickens, William Thackeray, the Brontes, Elizabeth Gaskell, Anthony Trollope, George Eliot, George Meredith, and Thomas Hardy. Individual works will be discussed in relation to the society they mirror and as examples of the novel's evolving form and function. Alternate years. (4 credits)

67 THE VICTORIAN PERIOD

British literature from the 1830's to about 1900, emphasizing poetry and non-fiction prose by Alfred, Lord Tennyson, the Brownings, Matthew Arnold, the Rossettis, William Morris, Algernon Swinburne, Thomas Carlyle, John Stuart Mill, John Ruskin, Walter Pater, Oscar Wilde, and others. Attention is paid to social, economic, political and scientific developments of the age; Victorian music, painting and architecture are briefly examined. This course is usually taught in conjunction with History 53, and when it is, students will be required to register for both courses. Alternate years. (4 credits)

68 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 W. B. Yeats, James Joyce, D. H. Lawrence, Samuel Beckett, W. H. Auden, Iris Murdoch, Muriel Spark, and Salman Rushdie. Alternate years. (4 credits)

69 INDIVIDUAL BRITISH AUTHORS

A study of single authors, pairs of authors, or related groups of authors: e.g., John Milton, the metaphysical poets, Jane Austen, William Wordsworth and John Keats, the Pre-Raphaelites, the Bloomsbury group. Alternate years. (4 credits)

70 NINETEENTH CENTURY AMERICAN LITERATURE

Examines the development of American Literature from before the Civil War through the turn of the century. The course includes works by at least *four* writers, usually more, selected by the instructor for historical and comparative purposes. If two offerings of this course have significantly different reading lists, both may be taken for credit. Every year. (4 credits)

72 TWENTIETH CENTURY AMERICAN LITERATURE

Twentieth century literature through mid-century, including such writers as Gertrude Stein, Willa Cather, Robert Frost, T. S. Eliot, Ezra Pound, William Carlos Williams, Marianne Moore, Wallace Stevens, Langston Hughes, F. Scott Fitzgerald, Ernest Hemingway, Richard Wright, and William Faulkner, studied in their social/historical contexts. Alternate years. (4 credits)

73 CONTEMPORARY AMERICAN LITERATURE

A study of selected contemporary writers who illustrate different trends in fiction, poetry, and drama. May include such writers as James Baldwin, Joyce Carol Oates, Ralph Ellison, John Barth, Saul Bellow, Edward Albee, Anne Sexton, Robert Lowell, Allen Ginsberg, Adrienne Rich, August Wilson, and others who have published major work in recent decades. Alternate years. (4 credits)

74 INDIVIDUAL AMERICAN AUTHORS

A study of single authors, pairs of authors, or related groups of authors: e.g., Herman Melville; Mark Twain and Emily Dickinson; Henry James and his circle; William Faulkner and Flannery O'Connor; Ezra Pound and T. S. Eliot. Alternate years. (4 credits)

76 TWENTIETH CENTURY POETRY

An analysis of twentieth century poetry from such traditional figures as W. B. Yeats, T. S. Eliot, Ezra Pound, and Robert Frost through contemporary writers such as Adrienne Rich, Seamus Heaney, and Nikki Giovanni. This course will stress close analytical reading of individual poems. Alternate years. (4 credits)

77 TWENTIETH CENTURY DRAMATIC LITERATURE

Study of the development of modern drama from Ibsen to the present by reading and discussion of the major late nineteenth century and twentieth century European and American dramatists such as August Strindberg, Anton Chekhov, Federico Garcia Lorca, Eugene O'Neill, Samuel Beckett, Lillian Hellman, and August Wilson. Alternate years. (4 credits)

80 WRITING WORKSHOP: AUTOBIOGRAPHY AND THE PERSONAL ESSAY

A workshop that concentrates on the process of translating personal experience into literature. Students will write about their own lives, critique the work produced by other class members, and read published autobiographical pieces in an effort to understand some of the issues and challenges involved in the presentation of the self. PREREQUISITES, English 12 (Introduction to Creative Writing) and consent of the instructor. Alternate years. (4 credits)

81 WRITING WORKSHOP: POETRY

This creative writing workshop will center on poetry written by class members, with a strong secondary emphasis on the development of group critical skills. Through the presentation of new and revised work, critiquing of work-in-progress, and discussion of extensive readings in contemporary poetry, the workshop will focus on developing constructive criticism of the writing of participants. PREREQUISITES, English 12 (Introduction to Creative Writing) and consent of the instructor. Every year. (4 credits)

82 WRITING WORKSHOP: FICTION

This creative writing workshop will center on fiction written by class members, with a strong secondary emphasis on the development of group critical skills. Through the presentation of new and revised work, critiquing of work-in-progress, and discussion of extensive readings in contemporary fiction, the workshop will focus on developing constructive criticism of the writing of participants. PREREQUISITES, English 12 (Introduction to Creative Writing) and consent of the instructor. Every year. (4 credits)

84 CONTEMPORARY THEORY AND CRITICISM

This course will focus on current discussions among a range of literary theorists and critics. Such theories as feminism, cultural materialism, the new historicism, deconstruction, and psychoanalysis will be studied. The course will include readings in literature so that theory can be applied to specific works of fiction, drama, and poetry. Every year. (4 credits)

86 RESEARCH TOPICS IN LITERARY STUDIES

This small group course, normally limited to twelve juniors and seniors, will engage students with an ongoing research project by a faculty member. Students will work both with the faculty member and on their own, developing and carrying out individual research and writing projects paralleling the faculty member's research and writing that will serve as the focus of the course. Alternate years. (4 credits)

88 SEMINAR

Ordinarily limited to twelve junior and senior students and involving advanced and focused work in literary study. Seminars may deal, for example, with the work of a single author or a pair of authors, with groups of literary works related by a common theme or concern, or with some other specific area of literary study. Recent seminar topics have included Jane Austen, Henry Adams, William Faulkner, the American Literature of Vietnam, Irish Literature, and Metafiction. Interested students should consult the detailed course descriptions in the English department. Two seminars are offered every fall semester; one or two seminars are offered every spring semester. (4 credits)

95 TUTORIAL

Closely supervised individual or small group study in which a student explores a selection of texts differing from what is usually covered in the department's established courses. Prerequisites: sufficient preparation in English courses to provide the necessary context for the area of study chosen and permission of the instructor. Application must be made through the chair of the English department on a form available from the departmental office. (4 credits)

96 INDEPENDENT PROJECT

Production of original work, either scholarly or creative, of substantial length, such as an honors project, which may develop out of study done in English 95 or previous course work. 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 departmental office. (4 credits)

97 INTERNSHIP

Work in practical (usually off-campus) experiences that explore potential careers, apply an English major's skills, or make a substantive addition to the student's knowledge of literary issues. Prerequisites: sufficient preparation in courses to provide the necessary background, consent of the instructor and sponsor, and completion of an Internship Learning Contract (signed by the Director of Internships and the faculty sponsor). (1–4 credits.)

98 PRECEPTORSHIP

Work assisting a faculty member in planning and teaching a course. Prerequisite, invitation by a faculty member. (4 credits)

Environmental Studies Program

Aldemaro Romero (Director, Environmental Studies), Julie Bunn (Economics), Mark Davis (Biology), Richard Dunn (Geology), Chuck Green (Political Science), Susanna McMaster (Geography), James Stewart (History), Karen Warren (Philosophy), Wayne Wolsey (Chemistry)

Environmental Studies is an interdisciplinary program based on a holistic understanding of environmental issues occurring at the local, national, and global level. The program offers students tools and perspectives from the humanities, natural sciences, and social sciences to understand the causes and consequences of environmental problems and the knowledge to develop potential solutions.

The Environmental Studies Program offers a major.

General Distribution Requirement

Environmental Studies 33, Environmental Science, meets the general distribution requirement in the natural sciences.

Major Course Requirements (10 courses)

- —Environmental Studies 33, Environmental Science (open to all Macalester students)
- —Environmental Studies 50, Environmental Analysis and Problem-Solving (to be taken in the first semester of the junior year by all Environmental Studies majors; not open to other students).

- —Two of an approved set of Natural Science Courses: Biology 24 (Ecology), Geology 11 (Physical Geology), Chemistry 10 (Chemistry in Context), Geography 16 (Physical Geography)
- —Economics 19 Principles of Economics
- —An ethics course (Philosophy 19 or 29)
- —One additional Social Science course with prior approval by the Environmental Studies program director.
- —A statistics course (Mathematics 14 or 27)
- —Environmental Studies 97 (4 credit internship which includes a poster presentation to the Program)
- —Environmental Studies 88, Senior Seminar in Environmental Studies (open only to Environmental Studies majors).

In addition, all Environmental Studies majors must also major or core in an additional approved department.

The departments listed below are automatically approved. Students wishing to combine an Environmental Studies major with a major from a different department must obtain approval from the environmental studies director.

Natural Sciences Social Sciences/Humanities

Biology Anthropology
Chemistry Economics
Geology Geography
Physics History
Philosophy

Political Science

COURSES

33 ENVIRONMENTAL SCIENCE

This course provides the basic scientific knowledge and understanding of how our world works from an environmental perspective. This course provides a framework of knowledge into which additional information can be readily integrated over a lifetime of continued learning. Topics covered include, but are not limited to, general issues on the environment, basic principles of ecosystem function, human population growth, production and distribution of food, soil and soil ecosystems, pest and pest control, water resources and management, water pollution, hazardous chemicals, air pollution and climate change, pollution and public policy, biodiversity and its conservation, solid waste, energy resources, and sustainability. There are no prerequisites. It will be offered every other Fall/Spring semester. (4 credits)

50 TOPICS (4 credits)

The topics course "Environmental Analysis and Problem-Solving" is planned for Fall 1999. See our web page www.macalester.edu/~envirost for a full description.

88 SENIOR SEMINAR IN ENVIRONMENTAL STUDIES

In this seminar, students will explore the difficult and often controversial issues surrounding environmental problems. Through readings, discussions, guest speakers, field trips, independent research, writing, and oral presentations, students will develop a clearer understanding of the underlying causes and long term implications of some of the environmental problems facing the world today. Both local and global environmental problems will be examined in the seminar. Taking

advantage of the diverse academic backgrounds of the student participants, the seminar will bring together the knowledge, perspectives, and insights of the natural and social sciences and the humanities. Prerequisites, senior standing in the Environmental Studies major and permission of the instructor and satisfactory progress in the environmental studies major. Spring semester. (4 credits) 97 INTERNSHIP

This is an opportunity for students to work with professionals in the environmental field outside of academia. Students will work with a faculty sponsor and their site supervisor to develop a set of learning goals, strategies to meet these goals, and methods of evaluation for the internship, including the nature of the final product. An internship is an excellent way for students to apply knowledge learned in the classroom and laboratory, to learn more in an environmental area, and to explore career options. The internship may be undertaken during a semester or during the summer and must encompass 140 hours of work by the student. It is expected that the student will make a poster presentation of his/her experience. Prerequisite, sponsorship by a faculty member on the Environmental Studies Coordinating Committee. (4 credits)

French

Full Time Faculty: Anne Carayon, Françoise Denis, Annick Fritz-Smead, Virginia Schubert (Chair), Peter Shoemaker, Joëlle Vitiello

The study of French makes available to students not only the world of the great thinkers and writers of France, past and present, and the culture of France, but also enables students to explore the literatures and cultures of French Canada and other countries of Europe, Africa, the Caribbean and the Pacific Islands where French is the language of communication and artistic expression. A recent article in the British publication *Language Today* (Vol 2, Dec 97) ranks French second after English as the world's most influential language, as a global *lingua franca* and in the number of countries using the language.

The French Department has a four-fold academic objective: a) to prepare excellent majors, cores and minors in French language, culture and literature; b) to provide language competencies to non-French majors appropriate for study in their own fields, for future professional needs or for personal enrichment; c) to provide to all students the opportunity to acquire, as a part of a liberal arts education, the knowledge of the language, literatures and cultures of France and Francophone countries; d) to provide students with courses, taught in French or English, that address diverse disciplinary areas as they relate to France and the Francophone world.

A concentration in French is valuable in and of itself as a liberal arts major and may also be combined with other majors to enhance career opportunities. Recent French majors from Macalester have made careers in various fields such as foreign service, international banking and commerce, law, library science, translation, publishing, intercultural exchange, education, and special education. To prepare for these and other careers, graduates have gone on to graduate programs or to professional schools such as French language and literature, international relations, law, history, linguistics or teaching English as a second language. For over ten years the French Department has had an agreement with the French government which allows it to send two graduating seniors to be teaching assistants of English in French high schools.

The teaching of French is strongly supported by the presence of graduate assistants from France, Francophone students, a residential French House, the Humanities Resource Center with state-of-the-art audio, computer, video and laser disc equipment, daily international news broadcasts via satellite and a growing library of films on video cassette. All language courses, beginning with Elementary French, include an additional weekly session in which a small group of students works intensively with a graduate assistant from France. The French Department has a long term affiliation with the Humanities and Cultural Studies and Women's and Gender Studies programs.

Study Abroad

It has been shown that academic study accompanied by extended residence in a French-speaking country is extremely beneficial. Therefore the French Department requires such study for students completing a French major and core and recommends it for those doing a minor. Students may count up to two *French* courses from a semester long study abroad program toward a concentration in French if such courses are at the level of courses taken on campus toward a French concentration. A study abroad program and its courses must be approved in advance by the department. All additional courses necessary to meet departmental graduation requirements must be taken on campus. Before studying abroad students should have completed French 51, 52 and one course in the 60s as appropriate for their program.

Because study abroad programs vary widely in quality, focus and content, it is imperative that students consult with French Department faculty as they choose their program. Students from the French Department have participated in programs in France such as the University of Minnesota program in Montpellier and the critical studies (CIEE) and Columbia programs in Paris. Macalester students have enrolled in programs in Francophone Africa, for example, in Sénégal with the Minnesota Studies in Development (University of Minnesota), and in Cameroon and Madagascar with the School for International Training. In addition, students may participate in other study abroad programs for departmental credit with the permission of the department.

The French House

Students may apply for the privilege of living in the Macalester French House, where daily conversation and interaction with native French graduate assistants and other students of French both improve oral proficiency in French and develop 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 and by arrangement before registration for second semester so that they may begin at the appropriate level. Students who come to Macalester with AP, IB or with an unusual background in French are encouraged to see the Department Chair

before pursuing advanced studies in French in order to determine the appropriate level of entry. Students in French 11, 21, and 31 have the option, after conferring with their instructor, to take competency tests which would allow them to test out of the next immediate course.

Advanced Placement and International Baccalaureate

Please see the Registrar and the French Department chair to discuss credit for Advanced Placement and International Baccalaureate higher level exams in French. Credits received in the French Department through AP or IB examinations may not be used to meet the general distribution requirement.

General Distribution Requirement

All courses in the French Department satisfy the general distribution requirement in the humanities.

Diversity Requirement

The courses in the French Department which satisfy the international diversity requirement are those numbered 41, 51, 52, 61, 63, 66, 68, 73, 74, 75, 76, and 77.

Major Concentration

French

A major concentration in French consists of a minimum of nine courses beyond French 41 to include: a) three advanced language courses (51 and 52 or the equivalent and 83); b) two courses in civilization and culture (from the 60's listing) or the equivalent; c) two literature courses from the 70's listing, one of which must be 73, 74 or 75 or the equivalent; d) a senior capstone requirement, and e) an appropriate study abroad program as approved by the department beforehand.

The senior capstone requirement in French may be satisfied by successfully completing during the senior year one of the following courses to which will be added a research or creative component: 61, 68, 73, 74, 75, 76 or 83 or by completing a research, creative or honors project.

In addition, the student will choose three supporting courses according to the needs of his or her program. All majors, cores and minors are strongly urged to take History 54, The History of France. Other recommended courses are: a) for those students who intend to teach French, courses in humanities or history, a second language, English, linguistics; b) for students going into government work, law, business or allied fields, appropriate courses in political science, history, economics, and geography.

Core Concentration

A core concentration consists of six courses beyond French 41 among which are included: a) two advanced language courses (51, 52 or 83 or the equivalent); b) one civilization course from the 60's listing or the equivalent; c) one literature course from the 70's or the equivalent; d) a senior capstone

requirement (see above); e) an appropriate study abroad program as approved by the department beforehand.

Six additional courses are to be chosen from outside the department with the approval of the advisor and the department(s) concerned. Some acceptable patterns would be:

- 1. Six courses in the humanities and fine arts.
- 2. Six courses in English not including English 10.
- 3. Six courses in history, political science, and/or geography which are relevant to France and/or the Francophone world.

Minor Concentration

A minor concentration in French consists of five courses beyond French 41 to include 51, 52, one course in the 60's, and one course in the 70's.

Senior Assessment

Majors will be required, during the senior year, to demonstrate proficiencies in language, literature and culture by successfully completing a series of evaluations as outlined in departmental materials.

COURSES

ALL COURSES ARE TAUGHT IN FRENCH UNLESS OTHERWISE INDICATED.

Elementary and Intermediate Courses

11 FRENCH I

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. It includes an introduction to the cultural background of France and the Francophone world. Class sessions are supplemented by weekly small group meetings with a French graduate assistant. For students with no previous work in French. Every semester. (4 credits)

21 FRENCH II

Conducted entirely in French, this course continues the development of the skills of listening, speaking, reading, and writing, with increasing emphasis on the practice of reading and writing. It includes introduction to the cultural background of France and the Francophone world. Class sessions are supplemented by weekly small group meetings with a French graduate assistant. Prerequisite, French 11 or placement test or permission of instructor. Every semester. (4 credits).

31 FRENCH III

Conducted entirely in French, the aim of this course is to bring students to a point where they can use French for communication, both oral and written. At the end of this course students should be able to read appropriate authentic materials, write short papers in French and communicate with a native speaker. It consolidates and builds competencies in listening, speaking, reading and writing and includes study of the cultural background of France and the Francophone world. Class sessions are supplemented by weekly small group meetings with a French graduate assistant. Prerequisite, French 21 or placement test or permission of instructor. Every semester. (4 credits)

41 TEXT, FILM AND MEDIA

This course presents a study of the contemporary language and culture of France and the Francophone world through authentic materials including the French press, television, literature and film. It is conducted entirely in French. At the end of this course students should have attained a more sophisticated level of communication in French, the ability to use their skills in French for a variety of purposes including research in other disciplines, and a full appreciation of the intellectual challenge

of learning a foreign language and its cultures. Prerequisite, French 31 or placement test or permission of instructor. Every semester. (4 credits)

Two Credit Conversation Courses

43 FRENCH CONVERSATION

This course will provide students with an opportunity to work on oral French. It is designed primarily for students at the advanced intermediate level who are unable to take other French offerings, but who wish to keep up their spoken French. Discussions with the instructor and with Francophone assistants and tutors will deal with topics chosen from articles from the French press and television, videos and films. This class may not be counted for a major, core or minor in French. Prerequisite, French 31 or 550 on the placement exam or the permission of the instructor. Spring 2001. (2 credits)

44 ADVANCED FRENCH CONVERSATION

This course will provide advanced students of French an opportunity to work on oral French. It is designed primarily for students who are already at a high level of fluency, for example for those who have studied or lived in a French-speaking country, who wish to keep up their French and who are unable to take other French offerings. It will also give students an opportunity to remain in contact with the French-speaking world in all its aspects. This class may not be counted for a major, core or minor in French. Prerequisite: French 51 or 52, 610 on the placement exam or permission of the instructor. Spring 2001. (2 credits)

50 TOPICS

Courses numbered 50 are occasional courses, offered by instructors at their own initiative or in response to student requests. "A Mirror for Our Time: The Modernity of the Middle Ages" was taught in spring 1998. (4 credits)

Third Year Courses

51 ADVANCED ORAL EXPRESSION

This course is an intensive training in oral expression and corrective phonetics. Materials include news broadcasts from French TV, films and articles from the French and Francophone press. Grammar patterns that enhance communication will be studied. Class sessions are supplemented by small group meetings with French assistants and small conversation groups with Francophone tutors. Prerequisite, French 41, placement test or permission of instructor. Every semester. (4 credits)

52 WRITING ABOUT LITERATURE

This course is designed to develop the necessary skills for interpreting literature and for writing effectively in French. Students learn to do a close reading and analysis of a variety of literary works and to compose critical essays. The course also includes a study of selected grammatical patterns and stylistic techniques. Class sessions are supplemented by small group discussions with a Francophone tutor. Prerequisite, French 41 or placement test or permission of instructor. Every semester. (4 credits)

Civilization

61 FRANCOPHONE STUDIES

Introduction to the study of the texts and contexts of various Francophone countries. This course studies political, historical, linguistic, aesthetic, and literary issues of different Francophone areas in the world (West Africa, Canada, Europe, the Maghreb, the West Indies and/or Vietnam.) Materials used include: short stories, poetry, films, slides and articles from the press. The thematic emphasis of the class may vary by semester. Prerequisite, French 52 or permission of the instructor. Alternate spring semesters, next offered spring 2000. (4 credits)

63 CULTURAL TRENDS IN CONTEMPORARY FRANCE

A survey of current issues in contemporary France. The themes studied in this course include definitions of nation, culture, tradition and modernity and change in social, cultural, aesthetic and intellectual structures as well as immigration and diversity in France. Prerequisite, French 51 or placement test or permission of instructor. Fall 1999. (4 credits)

66 FRENCH CINEMA

A survey of French cinema from the thirties to the present. Through the works of directors such as Renoir, Camé, Cluzot, Truffaut, Godard, Tavernier, Varda (among others), the course will examine the style and themes in French cinema from Realism to Nouvelle Vague to Post-Modernism. The course is conducted in English with the possibility of receiving credit for a concentration in French if the reading and writing is done in French. Prerequisite for French credit, French 52 or permission of the instructor. Spring 2001. (4 credits.)

68 ART AND IDEAS IN FRENCH CULTURE (Same as Humanities and Cultural Studies 68)

The course studies the arts of France (art, architecture, music and literature) in their historical and intellectual settings. Topics and historical periods studied vary by semester. In Fall 1998 the emphasis was on the arts of contemporary France. Prerequisite French 52 or permission of instructor. Fall 2000. (4 credits)

Literature

73 HUMANISM, BAROQUE AND CLASSICISM

This course studies the literature of the 17th century in France. It focuses on the literary diversity of the so-called "classical period." Without neglecting the great works and authors of Classicism, it explores also the libertine and baroque currents of the time and the final questioning of the "classics" at the dawn of the 18th century. The reading list includes authors such as Descartes, Cyrano de Bergerac, Corneille, Pascal, Molière, Racine, Perrault etc. In a traditionally all-male French literary culture, it explores also the unique and asserting movement of the "Précieuses" as well as the birth of the French novel through the artistic creativity of women. Prerequisite, French 52 or permission of the instructor. Alternate fall semesters, next offered fall 1999. (4 credits)

74 LITERATURE OF THE ENLIGHTENMENT

This course studies literature of the 18th century in France as it relates to the themes of reason, liberty, authority, progress and *sensibilité*. Among the imposing figures of great writers and philosophers such as Montesquieu, Voltaire, Rousseau, Diderot etc., the course acknowledges the growing presence of women writers. They increasingly voice their claims for education, respect and more participation in the affairs of a world moving towards the French Revolution. Prerequisite, French 52 or permission of instructor. Alternate spring semesters, next offered spring 2000. (4 credits)

75 NINETEENTH CENTURY LITERATURE

This course emphasizes the two great literary genres of the century, poetry and the novel, as they were shaped by the artistic currents of romanticism, realism, naturalism and symbolism. Novelists studied may include Stendhal (*Le Rouge et le Noir*), Balzac (*La Peau de Chagrin*), Flaubert (*Mme Bovary*) and Sand ((*Indiana*)). Poets include the romantics (Musset, Vigny, Lamartine, Hugo and Desbordes-Valmore), the great bridge figure Baudelaire, and, from the end of the century, Verlaine, Mallarmé and Rimbaud. The theater is represented by the greatest drama of the romantic period, *Lorenzaccio* by Musset. Prerequisite, French 52 or permission of instructor. Alternate fall semesters, next offered fall 2000. (4 credits)

76 TWENTIETH CENTURY LITERATURE

Representative texts from the twentieth century are presented with their cultural background. The themes of difference and alienation will structure the study of the movements of Surrealism, Existentialism, the *nouveau roman*, the poetry of Négritude, and the works of Proust, Céline, Colette, Gide, Anouilh, Simone de Beauvoir and contemporary male and female authors from France and French-speaking cultures. Prerequisite: French 52 or permission of the instructor. Alternate spring semesters, next offered spring 2001. (4 credits)

77 WOMEN WRITING IN FRENCH

The course is a survey of literature written in French by women, from Christine de Pisan's texts around the "Querelle des femmes" to contemporary feminist writing by women such as Hélène Cixous and Julia Kristeva. Materials also include works by feminist women writers from various areas of the world who write in French. Recent courses included Assia Djebar (Algeria) and Mariama Bā (Sénégal). Taught in English with readings and papers in French for French credit. The course is approved for the Women's and Gender Studies Program. Prerequisite, French 52 for French credit. Alternate spring semesters, next offered spring 2001. (4 credits)

Advanced Language Course

83 ADVANCED STYLISTICS

Advanced work in stylistics leading to the development of a personal style in French and creative writing. The course is intended primarily for *advanced students* who have studied in a French-speaking country. Prerequisite: permission of instructor. Fall semester. (4 credits)

95 TUTORIAL

Prerequisite, permission of instructor. (4 credits)

96 INDEPENDENT PROJECT

Prerequisite, permission of instructor (4 credits)

97 INTERNSHIP

Prerequisites for internships are four courses in French among those designated for the completion of a major or core concentration. Study abroad is strongly recommended. The internship does not count toward the major. (4 credits)

98 PRECEPTORSHIE

Prerequisite, permission of instructor. (4 credits)

Geography

Full Time Faculty: David A. Lanegran, Susanna McMaster, Jerry Pitzl (Chair)

Part Time Faculty: Carol Gersmehl, George Latimer

The mission of the Geography Department is to advance the frontiers of geography through teaching, research and applications of geographic theories and insights in efforts to better understand global and regional situations and to resolve community issues. To achieve our goals the faculty and students engage in a variety of research projects, and we offer a range of courses for Macalester undergraduates, workshops and institutes for in-service teachers and informal learning activities for the community around us. Our department curriculum contains courses that convey knowledge of the ways human activity in space is organized and the interactions of human activities and 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, and appreciate the diversity of people and places, the integration of places on the surface of the earth, and the spatial processes that affect contemporary society. The geography department plays an active role in Macalester's Action Research initiatives.

Career Orientation

The study of geography prepares students to enter a wide range of planning and analytical careers, as well as the field of education. Students go on to graduate programs in architecture, business, geography, urban and regional planning, community development, and environmental management. In recent years, several graduates have gone into careers in cartography and Geographic Information Systems.

General Distribution Requirement

All geography courses satisfy the general distribution requirement in the social sciences except courses numbered 16, 96, 97 and 98. Geography 16 satisfies the general distribution requirement in the natural sciences.

Diversity Requirement

The course which satisfies the international diversity requirement is numbered 11.

Major Concentration

The geography major consists of eight required courses and a supporting minor in another department. The classes comprising the major will be selected in a manner that builds from the introductory classes to the advanced seminars: a) two foundation courses - Introduction to Geography 10 or Human Geography 11, and Physical Geography 16; b) two research methods courses - Cartography 25 and Discipline of Geography 78; c) three intermediate courses - e.g., Urban Geography 41, Regional Geography of the Post-Soviet Union 45; and d) one advanced seminar course, e.g., Environmental Impact Assessment 88. In addition, a facility in quantitative methods is required; Math 14 Data Analysis and Statistics is strongly recommended.

The senior capstone requirement in geography will be satisfied by completing one 88 level geography seminar.

The department supports four types of programs: urban and regional planning, physical geography and environmental management, international studies, and cartography/GIS. The intermediate and advanced courses taken by geography majors should concentrate in one or two of these areas.

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 10 or 11 and Geography 16 or 25, unless the student is excused by the department chair, and six complementary courses from other departments' courses selected by the student in consultation with the advisor 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 10 or 11, 16, 25, and one elective from the courses offered within the department. This course combination is especially appropriate for students planning to teach secondary social studies. 2) The land use planning minor consists of Geography 10 or 11, 25, 41, 88 (Urban Geography Field Seminar or Historical Geography of

Urbanization), and an internship in a planning agency. 3) The regional geography minor consists of Geography 10 or 11, 16, 25, and one regional geography course. 4) The cartography/GIS minor consists of Geography 10 or 11, 16, 25, 64, 65, and an internship in an agency working with cartographic or GIS communications. 5) The physical/environmental geography minor consists of Geography 16, 25, 32, 46, 64, 65 and an internship in an agency associated with environmental management.

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 10 (Concepts and Regions), 11 (Human), 16 (Physical), and 41 (Urban).

Internships

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

Further Preparation

To meet requirements for graduate study, students with majors or core concentrations in geography should select supplementary courses from the social sciences, the natural sciences, and the humanities and fine arts in consultation with their department advisors. It is also desirable that students preparing for graduate study take Geography 64 (Geographic Information Systems) and Geography 65 (Advanced Cartography) and at least two 88-level research seminars in the department.

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

The National Council for Geographic Education Award for Excellence of Scholarship is awarded to an outstanding senior majoring in Geography. The Geography Department Merit Award is presented to a student or students in recognition of significant contributions to the life of the department. In addition, exceptional 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. The Hildegard Binder Johnson Prize, named for the founder of the department, is awarded annually to outstanding students in geography.

COURSES

10 INTRODUCTION TO GEOGRAPHY: CONCEPTS AND REGIONS

This course will provide a comprehensive and wide-ranging overview of the discipline of geography. We will consider the basic concepts and skills necessary to begin the study of both individual places and regions in the world. Considerable attention will be paid to the holistic nature of geography and the need to understand the importance of physical processes as they relate to human occupancy and activity in a world regions context. Case method instruction is used in this course. No prerequisite. Materials fee. Every semester. (4 credits)

11 HUMAN GEOGRAPHY OF GLOBAL ISSUES

This course is an introduction to the global perspectives, basic concepts and fundamental questions of geography. It focuses on the ways through which all places on the earth are interconnected and how the human use of the earth's surface varies over space. Major topics covered will be the human perception of earth space and the ways people give order to space; the growth and distribution of human population; the localization and spatial characteristics of patterns of settlement and land use; geopolitics and colonialism; the geography of economic development and modernization; principles of the analysis of spatial diffusion; spatial aspects of retail marketing; the geographic analysis of issues in industrialized societies focuses on gender issues, racism, poverty, sport, and religion. No prerequisite. Every semester. (4 credits)

16 PHYSICAL GEOGRAPHY

A systematic introduction to the processes operating on the surface of the earth, their spatial variation, and their contribution to the spatial patterning of life on earth. The course stresses interactions among climate, landforms, soils and vegetation and, to a lesser extent, examines human interaction with the environment. No prerequisite. Every semester. (4 credits)

25 INTRODUCTION TO CARTOGRAPHY AND GEOGRAPHY INFORMATION

This course provides an introductory integrative experience with visualization and manipulation of geo-spatial data. Students will compare and evaluate both vector and raster digital geographic data commonly used in Geographic Information Science (e.g., DOQs, TIGER files, DEMs, and census boundaries). Course projects investigate scale, coordinate systems, and projection for geo-spatial data. Projects include classification of demographic data and analysis of point sample data. Three hours lab per week is required. Materials fee is required. Prerequisite, Geography 10 or 11 or 16 or permission of instructor. Every semester. (4 credits)

32 PEOPLE AND THE ENVIRONMENT

A seminar-style course examining how humans interact with their environment in an historical context and how the nature and consequences of their actions have evolved along with their technologies. The course focuses on natural resource use and contrasting conventional development with sustainable approaches to resource use. Prerequisite, Geography 16. Fall semester. (4 credits)

41 URBAN GEOGRAPHY

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 development and internal spatial structure of North American cities will be carried out. Much class time will be spent on discussion of contemporary urban problems such as segregation, unequal investment, and control of public space as well as attempts at their solution. This is intended for all students intending to major in Urban Studies. Field work required. No prerequisite. Fall semester. (4 credits)

42 REGIONAL GEOGRAPHY OF NORTH AMERICA

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 physical geography, human settlement, economic activity and land use. This course will deal with the geography of the United States and Canada, the roles each of these sovereign states play in the world community, their relationships one to the other, and their internal regionalization. Case method instruction is used in this course. No prerequisite. Spring semester. (4 credits)

45 REGIONAL GEOGRAPHY OF THE POST-SOVIET UNION

This course deals with the complexities of the geography of the world's largest set of states, the Post-Soviet Union. Discussions center on the growth and expansion of Russia in pre-revolutionary times and the solidification and demise of the Soviet Union in the 20th century. Particular attention is drawn to the physical setting, settlement patterns, population growth and composition, ethnic groups, economic patterns, relationships of the Post-Soviet Union with other regions of the world, and prospects for the future. Case method instruction is used in this course. No prerequisite. Alternate years. (4 credits)

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 people, geographical problems in economic development, regions of the world, etc. No prerequisite. (4 credits)

61 GEOGRAPHY OF WORLD URBANIZATION

This course is focused on the development of the global urban system. Primary topics include the rise of non-industrial cities in Africa and Asia, rise and expansion of the industrial urban network in Europe, colonial cities and the growth of "world cities," those large urban areas that are command and control points in the world economy. In addition, models of the internal spatial structure of cities in various parts of the world will be examined. Special emphasis will be given to the comparison of socialist and capitalist urban planning. Students will be responsible for conducting research on specific urban systems in different regions. Students are required to use the Internet for research. Class papers will be published on the Geography Department Home Page. Spring semester. (4 credits)

64 GEOGRAPHIC INFORMATION SYSTEMS: CONCEPTS AND APPLICATIONS

This course provides students with the basic concepts and principles essential in applying geographic information systems (GIS) to practical project development in such areas as natural resources management and urban studies. GISs involve the storage, search, manipulation, display, and analysis of spatial data. Topics covered in the course include data collection and input, data structures, data quality issues, visualization, spatial analysis and modeling, and application areas. Students will be required to develop GIS projects that provide them with valuable experience in project development, design, and implementation. Laboratory work is required. Materials fee is required. Prerequisite, Geography 25 and permission of instructor. Spring semester. (4 credits)

65 ADVANCED CARTOGRAPHY

This course uses computer tools to compare the logic and choices afforded by computer mapping software to produce thematic and reference maps and to perform spatial analyses. Currently, we employ ArcView software for detailed experience with digitizing, TIGER files, address coding, database creation and modification, census data, data collected at points, vector to raster conversion, and selected spatial analyses. Three hours lab per week is required. Materials fee is required. Prerequisites, Geography 25 and permission of instructor. Every Fall. (4 credits)

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. Case method instruction is used in this seminar. Prerequisite, geography major in the junior year; Interested geography cores should contact the department chair. Materials fee. Fall semester. (4 credits)

88 SEMINARS

Cities of the 21st Century

This capstone seminar in Urban Studies will focus on pressing issues and opportunities of North American cities. It will focus on a series of readings and guest lectures on the policy implications of trends in the urban conditions. Special emphasis will be given to geographic development, neighborhood conservation, suburbanization, political institutions and the role of special interest groups. In addition to participating in the seminar discussions students will be expected to do field work. Every year. (4 credits)

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; and factors in intra-urban residential mobility. Students will be expected to participate in group projects which may produce either a written report or a map. The seminar focuses on topics of special interest to local communities and is part of the Action Research Program. Prerequisite, Geography 41 or permission of the instructor. Alternate years, next offered fall 2000. (4 credits)

Historical Geography of Urbanization

A research methods course in which students will conduct inquires on 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. The seminar frequently produces studies of a neighborhood in cooperation with a local community. It is part of the Action Research Program. Prerequisite, Geography 41 or permission of the instructor. Alternate years, next offered fall 1999. (4 credits)

Environmental Impact Assessment

A seminar in the techniques of evaluating the impact of human activities on the physical, atmospheric, biotic, social and economic environments. Students will work as a group, applying principles and methods from a variety of academic disciplines to solve a common problem: analyzing the environmental effects of a proposed development scheme. The outcome of the course will be an environmental impact statement prepared by the group. Students will also explore the application of geographic information systems for environmental impact assessment. Prerequisite, Geography 16 or permission of the instructor. Alternate years, next offered spring 2000. (4 credits)

Themes in Contemporary Geography

An observer of developments in geography, especially human geography, during the last two decades will be struck by the number and variety of new conceptual approaches making their way into the discipline. From the first significant reactions by behavioralists in the early 1970s against geography's positivist focus, through the Marxist, humanistic and structuralist movements of the 1970s and 1980s, and more recently the incorporation of feminist thought and post-modernism, the discipline has undergone rapid and wide-ranging changes. The seminar will address selected contemporary themes in geography. Case method instruction is used in this seminar. Prerequisite, Geography 78, geography major. Materials fee. Spring semester. (4 credits)

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. (4 credits)

97 INTERNSHIP

Students work 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. Advanced planning is required through the Internship Office. Not more than one internship may be included toward the major or core concentration. (4 credits)

98 PRECEPTORSHIP (4 credits)

Geology

Full Time Faculty: John Craddock (Chair), Rick Dunn, Ray Rogers, Gerald Webers, Karl Wirth

Lab Supervisor: Jeff Thole

The introductory courses in geology (Geology 11 through 29) are designed to serve both the general college student and the science major. They provide an

appreciation of the scientific principles and techniques used to investigate planet Earth, and to inform students about the composition, materials, major processes, and history of the planet.

Students whose goal is a career in the earth sciences should plan to complete the regular departmental major. Interdepartmental cooperative programs with biology, chemistry, physics, mathematics, economics, and geography are available for those interested in interdisciplinary fields such as geochemistry, geophysics, paleontology, hydrogeology, environmental planning, remote sensing, or planetary geology.

Graduate study is a prerequisite for most professional work in the earth sciences. Our major program is designed to provide a broad and thorough background to prepare students for advanced work in any of the many fields of earth science. A geology major provides a foundation for other successful careers. In recent years some graduates have entered law school to prepare for employment in environmental or corporate law. Other majors have used geology as a stepping stone to the business world.

Geology participates in the environmental studies program. Many geology majors are in this interdisciplinary program.

Students have the opportunity to use an X-ray diffractometer, a scanning electron microscope with an energy dispersive analyzer, and an X-ray fluorescence unit as part of the Keck Lab. The geology computer lab has twelve PowerMac's and four Pentium PC's.

Many majors gain practical experience through Macalester's internship program, through honors projects, and through special research projects conducted with the guidance of individual faculty members. Recent projects include using satellite imagery to determine rock types, measuring contaminant movement to groundwater after a commercial pesticide application to the soil surface, study of the geochemistry and emplacement of mafic dikes, identification of trace fossils found in the Ellsworth Mountains of Antarctica, and a critical analysis of a sanitary landfill expansion proposal.

General Distribution Requirement

All courses in the geology department satisfy the general distribution requirement in the natural sciences and mathematics.

Major Concentration

The major concentration consists of the following courses: Geology 11, 12, 31, 32, 36, Chemistry 11 and 13, Mathematics 21 or 27, plus two lab courses in biology or physics. In addition, students must select at least three electives in geology, preferably upper-level (e.g., paleontology, petrology, geomorphology, geophysics) offerings, and are highly encouraged to take "Instrumental Methods" (2 credits). 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.

The senior capstone requirement in geology is satisfied by the completion of the Senior Seminar (Geology 88).

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, plus three appropriate geology electives. 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 geology electives.

Further Preparation

A course in physical chemistry is strongly recommended for those students preparing for graduate study in geology. A summer field course (taught by us with Beloit College) 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.

COURSES

11 PHYSICAL GEOLOGY

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 the solution of environmental problems. Required for environmental studies and geology majors. Local field trips. Three hours lecture and two hours lab per week. Fall 1999, spring 2000. (4 credits)

12 HISTORICAL GEOLOGY

An overview of the history of the earth for the past 4.5 billion years. Concepts and topics include: geologic time, plate tectonics, evolution of continents, oceans, ocean basins, atmosphere, and life, the physical development of North America, and evolution of life from simple forms through vertebrates to humans. Three hours lecture and two hours lab per week. Fossil collecting on field trip. Fall 1999, spring 2000. (4 credits)

15 OCEANOGRAPHY

An introduction to the marine environment covering such topics as the heat balance of the seas, oceanic circulation, the composition, configuration and origin of the sea floors, geochemical cycles, history of sea water, and marine ecology. The role of the oceans as a potential source of food and raw materials will be investigated. Next offered spring 2001. (4 credits)

29 PLANETARY GEOLOGY

An introduction to the composition and character of the planets, the evolution of the solar system, and the methods used in studying the solar system. Readings and discussions will include planetary formation; the geology of the Earth, Moon, Sun and other planets, atmospheres; remote sensing instruments and techniques; meteorites and comets; the role of impacts. Projects will involve the use of remote sensing data from several different planets and the examination of solar system materials. Field trip and final paper required. No prerequisites. Next offered spring 2001. (4 credits)

31 MINERALOGY

The relationships between symmetry, chemistry, physical and optical properties, and occurrence of minerals will be emphasized. General cosmochemistry, geochemistry and crystal growth will also be discussed. Laboratory projects include crystal morphology and symmetry, optical mineralogy, x-ray diffraction, wet chemistry, and the identification of common rock-forming minerals. Three hours lecture and four hours lab per week. Field trips. Prerequisite: Geology 11 and one course in chemistry or permission of instructor. Fall semester. (5 credits)

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 using hand samples and thin sections. Problem sets using graphical techniques in solving structural problems and map interpretation. Introduction to mapping techniques. Three hours lecture and four hours lab per week. Field trips. Prerequisites, Geology 11 and 12. Spring semester. (5 credits)

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, and depositional environments. Three hours lecture and two hours lab per week. Field trips. Prerequisite, Geology 12 or permission of the instructor. Spring semester. (5 credits)

40 GEOPHYSICS

Lecture and reading topics will include comparative planetary evolution, earth's physical fields (gravitational, magnetic, electrical), seismology, seismic interpretation, the geoid, rock magnetism and paleomagnetics, heat flow, earth structure and a discussion of exploration geophysical methods. Lab and lab project. Alternate fall semesters, next offered fall 1999. (5 credits)

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. *Instrumental Methods* will be offered in 1999–2000 for 2 credits. Also offered in 1999–2000 will be Hydrogeology, and Vertebrate Paleontology & Evolution. Recent topics courses include: The Geology of Iceland, The Geology of Southwestern United States, and The Geology of Hawaii (these courses were followed by a two-week field trip to the concerned area). (2–5 credits)

51 PALEONTOLOGY

Taxonomy, morphology, paleoecology and evolution of microfossils, 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 weekend field trip to southern Minnesota and Iowa. Prerequisite, Geology 12 or permission of the instructor. Alternate years, next offered fall 2000. (5 credits)

52 FIELD EXCURSION SEMINAR

The geology and geography of a region will be studied during a geologic field excursion to a region. The excursion will be preceded by a seminar course that includes readings and oral presentations. A student may take the seminar more than once for credit. Prerequisite: Geology 11 or permission of instructor. Alternate years. (2 credits)

53 GEOLOGICAL EXCURSIONS

This course focuses on the geology of a foreign country or a region of the U.S. It also includes a study of the geography and culture of the region. It is designed as a January course. One to one half weeks will be spent in developing background information, followed by a field excursion to the region for two to three weeks. The region to be studied will be different each year and a student may take the course more than once for credit. This course is offered on a pass/fail basis. Prerequisite: Permission of instructors. Every year. (2 credits)

61 GEOMORPHOLOGY

An environmentally-based study of geomorphology and glacial geology focused on the landforms and environmental issues of North America. Effects of climate, vegetation, and rock type on landscape development. Glacial climate and Pleistocene geology of North America. Application of geomorphic analysis to real environmental problems. Field trips. Prerequisite, Geology 11. Three hours lecture and two hours lab per week. Alternate years, next offered fall 1999. (5 credits)

65 PETROLOGY

The classification, occurrence, and origin of igneous, metamorphic, and sedimentary rocks. Emphasis will be on the relationships between lithology, geochemistry, and tectonic setting. Laboratory exercises include hand specimen identification, thin-section interpretation, textural analysis, major and trace element modelling, and SEM/EDS analysis. Three hours lecture and four hours lab per week. Field Trips. Prerequisite: Geology 31. Spring semester. (5 credits)

88 SENIOR SEMINAR

Junior and senior majors will participate with faculty and staff in readings, presentations, and discussions of recent publications related to a central theme (e.g. plate tectonics, global change, or mass extinctions). The historical and philosophical roots of geology will also be examined. Two hours per week. Field Trips. Prerequisite: permission of instructor. This course is offered on an S/D/NC grading option. Spring semester . (1 credit)

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 study 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. (1-4 credits)

96 INDEPENDENT PROJECT

Independent study of geologic problems or preparation of senior research thesis. Prerequisites, junior or senior standing and permission of the instructor. The department chair will determine if this course may be applied toward the major or core. (1-4 credits)

97 INTERNSHIP

Work that involves the student in practical off-campus experience. Consent of the department is required. The department chair will determine if this course may be applied toward the major or core. (1–4 credits)

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. (1–4 credits)

German Studies and Russian

Full Time Faculty: R. Ellis Dye, Birgitta Hammarberg (Chair), Rachel Huener, A. Kiarina Kordela, Rachel May, Tamara Mikhailova, Anke Pinkert, Linda Schulte-Sasse, James von Geldern

Part Time Faculty: Gisela Peters

German Studies

The German Studies program offers students an interdisciplinary approach to German literary, intellectual and cultural history, as well as to contemporary German-speaking countries. It examines a range of periods, cultural practices, and texts that include, yet go beyond, "literature" in the "high culture" sense of

the word. The program assumes that the study of language *is* the study of culture, and vice-versa; hence, while advanced courses are oriented toward a particular topic, they overlap and intertwine with the continued study of language. Within the major, students may concentrate on a particular facet of German culture such as literature, cinema, art or architecture, music, philosophy, sociology, politics or history (or a combination thereof). Courses in German Studies emphasize writing as well as speaking and attempt to develop students' sensitivity to language and its relationship to culture. Each semester the department also provides offerings in English directed at the broad Macalester community as well as departmental majors.

With over a hundred million native speakers, the German language is regaining its former pre-eminence as the language to know, especially in Central and Eastern Europe. More important than the number of native speakers is the reunited Germany's standing as an economic, cultural and political power. German Studies builds a foundation for graduate work in many academic fields that call for a thorough knowledge of German language, culture, and history. It also helps prepare students for employment in teaching, foreign service, the media, business, law, tourism, translation, publishing, and arts administration. When augmented by the required sequence of courses and training in the Education Department, the major in German Studies qualifies students for licensure to teach German in secondary schools. Since 1971, more than 50 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.

The German House

Students compete for the privilege of living in the Macalester German House, where daily conversation with a resident 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 German Studies program's social activities.

The German Study Abroad Program

Since 1969, Macalester College has maintained a spectacularly successful study abroad program in Germany and Austria. This program is open to non-majors as well as majors. Students with the requisite language skills (completion of Intermediate German II or the equivalent) may be admitted. The program includes:

- 1) a two-month term (January and February) of intensive language instruction at the Sprachinstitut in Tübingen, Germany (4 credits); and
- 2) in Vienna, Austria, courses at the Austro-American Institute (4 credits each, March through May): *German Literature (Lived Theater)*, *Austrian Cultural History (Austria's Multicultural Tradition)*, and *Austria and the European Union*. Additionally, students will select a course at the University of Vienna (March

through June) and a non-credit bearing Internship (June). All courses taught in German.

Further information on the Macalester German Study Abroad Program is provided by the Department and the Macalester International Center.

The Tübingen Exchange

Macalester has initiated a reciprocal exchange program with the University of Tübingen. 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 superior knowledge of the German language. Applicants should consult the Department of German Studies and Russian or the International Center regarding requirements for participation.

German Native Speaker

Students of German Studies are supported in attaining language skills with the assistance of Native Speakers, who live in the German House and lead laboratory conversation sessions for courses numbered 11, 12, 15, 21, and 22.

General Distribution Requirement

All courses in German Studies above 22 count toward satisfaction of the general distribution requirement in the humanities.

Diversity Requirement

German Studies courses numbered 31, 41, 55, 60, 63, 64, 65, 66, and 88 count toward satisfaction of the international diversity requirement.

Major Concentration

A departmental major in German Studies consists of:

a) 32 semester credits in German Studies above Intermediate German II, to include:

German Studies 41; at least two of the following: German Studies 63, 64, 65, and 66; and German Studies 88 as the senior capstone experience.

- b) 8 semester credits outside the German Studies Department which must include:
 - 1) One course providing an introduction to critical theory and approved by the Department. Preapproved courses include: Humanities 50 (Introduction to Humanities/Cultural Studies), English 28 or 84, International Studies 10, Political Science 37 or 38, Women's and Gender Studies 55 or 88.
 - 2) One other course with at least a 50% German Studies content in a field such as Anthropology, Art History, Dramatic Arts, Economics (e.g. 27), Geography, History (e.g. 64 or 67), Music, Philosophy, Political Science, or Religious Studies (e.g. 46).

c) Participation in the Macalester German Study Abroad program or its equivalent is also required.

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 Studies.

A core concentration consists of 24 semester credits beyond Intermediate German II, to include German Studies 31 and 41, plus 24 supporting credits outside of the German Studies Department. Eight of the outside credits must be selected from the supporting credits approved for a German Studies major (see description of major above).

Minor Concentration

A minor in German Studies consists of 20 semester credits beyond Elementary German II, to include German Studies 21 and 22 (or equivalent), 31 and 41.

COURSES

11 ELEMENTARY GERMAN I

Introduction to German language and culture. Emphasis on comprehension of oral and written contemporary German as well as developing elementary oral proficiency. The course emphasizes vocabulary recognition and acquisition within a variety of concrete contexts. Students develop facility with German within highly structured contexts. Contemporary culture in German-speaking countries provides the content of the course. For beginning students with no previous German language instruction. Three hours per week plus laboratory conversation hour. Every Fall. (4 credits)

12 ELEMENTARY GERMAN II

Continuation of introduction to German language and culture. Vocabulary acquisition continues within broader contexts. Emphasis on both oral and written production with continuing development of reading and listening skills. Students develop creativity and facility with the language using primarily concrete vocabulary within meaningful contexts. The course provides an introduction to extended reading in German as well. Three hours per week plus laboratory periods. Every Spring. (4 credits)

15 ACCELERATED ELEMENTARY GERMAN

An accelerated course which covers material and proficiency development normally covered in German Studies 11 and 12. The course is for students with prior experience with German who need a concentrated review or students with previous other foreign language background who wish to work at an accelerated pace. Every Fall. (4 credits)

21 INTERMEDIATE GERMAN I

This course is designed to help students increase their proficiency in the German language while emphasizing authentic cultural contexts. Through exposure to a variety of texts and text types, students develop oral and written proficiency in description and narration and develop tools and discourse strategies for culturally authentic interaction with native speakers. Cultural topics are expanded and deepened. Prerequisite, German Studies 12 or 15, or placement test, or consent of the instructor. Three hours per week plus conversation laboratory hour. Every semester. (4 credits)

22 INTERMEDIATE GERMAN II

The course aims to help students attain a comfort level with extended discourse in German within culturally appropriate contexts. Students develop the ability to comprehend authentic spoken German

on a variety of topics at length. They develop effective strategies for comprehending a variety of texts and text types. They gain increased facility with extended discourse, such as narrating and describing. Writing in German is also developed so that students can write extensively about familiar topics. Prerequisite, German Studies 21, or placement test, or consent of the instructor. Three hours per week plus laboratory periods. Every semester. (4 credits)

23 CULTURE COMPONENT FOR STUDY ABROAD

This course provides cultural preparation for students with advanced language skills who plan to study German language, literature and culture abroad. Emphasis on practical needs and everyday cultural understanding. Also an introduction to German cultural history. Taught in German. Every Fall. (2 credits)

31 GERMAN THROUGH THE MEDIA

Students continue enhancing their German language skills while exploring contemporary issues through media, ranging from television shows to commercials, films, magazines, newspapers and the Internet. At the end of the course students should be able to converse and write on a relatively sophisticated level about a variety of social and academic topics, and be comfortable reading or listening to contemporary German. Excellent preparation for study abroad. Prerequisite: German Studies 22, placement test or permission of instructor. Every semester. (4 credits)

41 INTRODUCTION TO GERMAN STUDIES

This course is designed to equip students for advanced study of German intellectual history and literature, as well as contemporary German-speaking societies. Students will gain competence in a variety of education/information media (including computer software and the Internet as well as library and film/television sources) while critically investigating important political, social and aesthetic questions in the German cultural context. These questions include the grounding of modern notions of the self and other, the function of narrative since the eighteenth century, what it has meant historically and means today to be "German," and Germany's role in the move toward European unification. The texts used to examine the relationships among literature, culture, history and contemporary society will include both literary and non-literary works by Kant, Lessing, Goethe, Kleist, Büchner, Marx, Nietzsche, Thomas Mann, Kafka, Ingeborg Bachmann, Christa Wolf, Peter Schneider, Aysel Özakin and others. Conducted in German. Prerequisite: German Studies 31, placement test, or permission of instructor. Every semester. (4 credits)

50 TOPICS

Offered Spring 2000: Love and Death in Literature and Music (4 credits)

55 GERMAN CINEMA STUDIES

Changing topics in German film. Possible topics include: Film and the Fantastic; Form and Gender in German and American Cinema; Cinema of the Weimar Republic; Nazi Cinema; Where am I in the Film? Students may register up to two times for courses numbered 55, provided a different topic is offered. No prerequisites. Taught in English. Every year. Fall 1999. (4 credits)

60 PROSEMINAR IN GERMAN STUDIES

Changing German Studies topics such as: German Nationalism and its Legacy; Kafka and German Expressionism; Jews and Germany; Karl Marx and the Development of Communism; The German Fairy Tale; Heroes and Lovers: Medieval German Literature; German Women in Transition; German Political Theater; Modernity and the Unconscious. Students may register up to two times for courses numbered 60, provided a different topic is offered. May be taught in German or in English. Offered Fall 1999: Nietzsche: Romantic, Modern, Postmodern; taught in English. Every year. (4 credits)

63 ROMANTICISM

Starting with Pre-romanticism and the *Sturm und Drang*, students in this course explore the writings of Goethe, Schiller, Hölderlin, Kleist and the members of the Romantic School (the Schlegels, Tieck, Clemens and Bettina Brentano, Karoline von Günderrode, Eichendorff and others). The course considers the effects of the Napoleonic wars on German literary culture as well as the influence of German Romanticism on the later romanticisms of France, England, Italy and on both the American transcendentalists and Edgar Allan Poe. Taught in German. Alternate years, next offered Fall 2000. (4 credits)

64 THE BIRTH OF MODERN GERMANY

This course explores German literature and thought during the Industrial Revolution as well as concomitant social and political events—the creation of the customs union, the drive for national unity and for a constitutional guarantee of civil rights, the revolutions of 1848 and the Communist Manifesto by Marx and Engels. We will critique the concept of realism and the project of representing reality in the arts. Among the thinkers and writers considered are Nietzsche, Heine, Droste-Hülshoff, von Ebner Eschenbach, Mörike, Keller, Storm and Gerhart Hauptmann (whose play "The Weavers" dramatizes the social effects of automation in the 1840's). Taught in German. Alternate years, next offered Fall 1999. (4 credits)

65 MODERNISM AND THE AVANT-GARDE

The course will be framed by an exploration of the terms modernism, avant-garde and, implicitly, postmodernism, all of which reflect differing (though sometimes overlapping) understandings of the relation between "high" art and mass culture. Similarly all are intertwined with historical, political, and economic developments, whether a world war, totalitarianism, or the influence of consumer capitalism. Proceeding from this reciprocal relationship, we will explore various aspects of the cultures of modernism and the avant-garde in the German-speaking world. Topics will include: expressionism and Kafka, Dada and surrealism, the "New Objectivity" and rise of cinema in the Weimar Republic, Brecht's epic theater, "high" modernism of figures like Thomas Mann, Hermann Hesse, Else Lasker-Schüler, culture criticism (e.g., Theodor Adorno's theory of modernism) and questions of canonization (the dominance of "high" culture in schools, universities, and museums). Taught in German. Alternate years, next offered Spring 2000. (4 credits)

66 POSTWAR GERMANY

The course will begin with an overview of National Socialism as a basis for understanding the cultural leap that Germany undertook following World War II. It will examine issues of *Vergangenheitsbewältigung* (coming to terms with the past), the economic miracle in West Germany, and the evolution and collapse of the German Democratic Republic. The course will conclude with opportunities and problems generated by reunification. We will look at texts by writers such as Handke, Kroetz, Plenzdorf, Strauß, Rinser, Morgner, Bachmann, and Wolf, as well as films and other media. Taught in German. Alternate years, next offered Spring 2001. (4 credits)

88 SENIOR SEMINAR IN GERMAN STUDIES

Designed as a capstone experience in German Studies, the seminar brings together fundamental questions engaged by the field of German Studies, and enhances students' understanding of the theories and methodologies informing contemporary scholarship. Part of the seminar will be devoted to study of an aspect of German Studies; students will then conduct independent research, which will serve as the basis of class discussions during the latter part of the semester. Changing topics may include: Faust in the Context of Modernity; Aesthetics, Ideology and Valuation of Art; The Greening of Europe; Centrality and Marginality in German Culture. Taught in German. Every year. Spring 2000. (4 credits)

95 TUTORIAL

Prerequisite, permission of the instructor. Limit to be applied toward the major or core will be determined in consultation with the department. (4 credits)

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. (4 credits)

97 INTERNSHIE

Prerequisite, permission of the instructor. Limit to be applied toward the major or core will be determined in consultation with the department. (4 credits)

98 PRECEPTORSHIP

Prerequisite, permission of the instructor. Limit to be applied toward the major or core will be determined in consultation with the department. (4 credits)

Russian

The Russian division of the department of German Studies and Russian offers students the opportunity to learn one of the world's most widely spoken languages. The Russian cultural heritage is vast and rich, including such writers as Dostoevsky, Tolstoy, Pushkin, Chekhov, Akhmatova, Pasternak, Solzhenitsyn, and Brodsky, as well as some of the world's most renowned composers, choreographers, filmmakers, and artists. Moreover, because of Russia's unique history and geographical setting, anyone who studies its language and culture has the opportunity to gain vital insights into some of the most important historical processes of our time. As Russia remakes itself and opens its borders to the rest of the world, graduates with a knowledge of Russian will have greater opportunities in government service, joint ventures in business, ecology, medicine, scientific research and many other areas.

The Macalester Russian program prepares students for graduate studies in the Slavic field and other disciplines, and augments their preparation in other departments for work in government or in the growing field of international commerce. It contributes to the program in Russian, Central and East European Studies, and can fruitfully complement studies in the humanities and international relations.

The Russian House

Students compete for rooms in the Macalester Russian House, where conversation with a resident native speaker and other students of Russian improves oral proficiency in Russian and develops increased understanding of Russian culture and society. Living in the Russian House is excellent preparation for a semester in Russia. The Russian House also hosts departmental events such as dinners, films and student performances.

Study Abroad for Students of Russian

Today the opportunities to travel, study and do research in the former Soviet Union and Eastern Europe are better than ever. After 2–3 years of Russian language study students may apply to the ACM, CIEE, ACTR, SIT and other programs in Russia, Ukraine, and Eastern Europe. For more information on these and other programs, consult with the Russian faculty and with the study abroad staff at the International Center.

General Distribution Requirement

All Russian courses above 41 satisfy the general distribution requirement in the humanities.

Diversity Requirement

Russian courses 41, 55, 61, 62, 64, 65 and 66 count toward the international diversity requirement.

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 the Department of Education, the major in Russian qualifies students for licensure to teach Russian in the secondary schools.

A major concentration in Russian consists of 36 semester credits beyond the elementary level, to include: (a) 21 and 22, 31, 32, 41; (b) 61 or 62; (c) Senior Seminar (88) or other senior capstone experience as approved by the department; and (d) Study Abroad program as approved by the department.

In addition, the department requires 20 supporting credits from other departments to enhance the student's knowledge of language, literature, and culture. Most students satisfy this requirement in the normal course of their curriculum. Consult your advisor.

Core Concentration

The core concentration in Russian studies consists of 24 semester credits in Russian language and literature beyond the first year, plus 24 supporting credits from other departments. Consult your advisor.

Minor Concentration

There are two separate Russian minors. The minor in Russian language consists of 16 language credits beyond the elementary level. The minor in Russian language and literature consists of any 8 language credits beyond the elementary level and any 8 Russian literature credits.

COURSES

Russian language classes (unless otherwise stated) are proficiency oriented, and aim at perfecting all four linguistic skills: speaking, listening, reading, and writing. Intermediate and Advanced courses are taught in Russian as much as possible. Most classes meet three times per week with an additional weekly class period devoted specifically to oral proficiency. These conversation classes are taught by Russian native speakers.

11 ELEMENTARY RUSSIAN I

A 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. Every fall. (4 credits)

12 ELEMENTARY RUSSIAN II

Continuation of Russian 11; further development of the same skills. Prerequisite, Russian 11 or consent of instructor. Every spring. (4 credits)

21 INTERMEDIATE RUSSIAN I

In the second year of Russian, students learn to operate in basic social and cultural environments. Conversational skills needed on the telephone, public transport and other daily situations, listening and reading skills such as television, newspapers and movies, and various modes of writing are studied. Prerequisite, Russian 12 or consent of the instructor. Every fall. (4 credits)

22 INTERMEDIATE RUSSIAN II

Continuation of Russian 21; further development of the same skills; added emphasis on reading and discussing simple texts. Students are usually prepared for study in Russia after they have completed Intermediate Russian II. Prerequisite, Russian 21 or consent of instructor. Every spring. (4 credits)

31 ADVANCED RUSSIAN I

Through study and discussion of particular topics in Russian life, students will build vocabulary and work on descriptive, narrative, and reading skills as well as the formalities of polite conversation. Prerequisite, Russian 22 or consent of instructor. Every fall. (4 credits)

32 ADVANCED RUSSIAN II

Continuation of Russian 31 with more emphasis on reading. Oral and written presentations build skills of argumentation and hypothesis, and expand vocabulary. Through an interactive computer program, students develop oral comprehension skills while learning about masterpieces of Russian art. Prerequisite, Russian 31 or consent of instructor. Every spring. (4 credits)

33 ADVANCED RUSSIAN CONVERSATION

Everyday spoken Russian as well as discussion of more abstract topics. Prerequisite, Russian 31 or consent of instructor. Not offered 1999–2000. (4 credits)

41A RUSSIA IN RUSSIAN—SPEAKING/LISTENING

Continuation of Russian 32, for students who have not yet studied in Russia. Advanced grammar with an emphasis on communicative skills (speaking, listening comprehension) and building vocabulary. Structured around topics in contemporary Russian life, as chosen by students. Should be taken in conjunction with 41B. Every fall. (2 credits)

41B RUSSIA IN RUSSIAN—READING/WRITING

Open to all students who have completed three years of college Russian. This is a reading and writing course designed to introduce various genres of literary Russian, including stories, news articles, and scholarly writing. Basics of Russian composition will be stressed. Every fall. (2 credits)

50 TOPICS

The subject matter of these courses will vary: departmental and interdisciplinary topics such as: Russian History through Russian Literature; Undoing Revolution; Dostoevsky and Gogol; and Orientalism and Empire (fall 1999). Every year. Most topics courses are taught in English. (4 credits)

55 RUSSIAN CULTURE

Survey of Russian culture from the Middle Ages through tsarist Russia up to the twentieth century. Art in Russia has always had social functions, and we will study the interaction of art, society, and politics throughout Russian history. Topics include religious icons and writing, St Petersburg and Westernization, the institution of censorship, art as political statement, and the modernist notion of "art for art's sake." Lectures, readings, and discussions in English. Every year. Spring 2000. (4 credits)

56 MASS CULTURE UNDER COMMUNISM

The politics and sociology of Soviet Russian culture from the October Revolution to the fall of communism. For each period in Soviet history, changes in the production and consumption of culture will be considered with specific examples to be discussed. Topics dealt with in the course include the role of mass media in society, popular participation in "totalitarian" societies, culture as a political tool. Popular films, newspapers and magazines, songs, radio and TV programs, etc., will serve to analyze the policies that inspired them and the popular reactions (both loyal and dissenting) they evoked. No prerequisites; taught in English. Alternate years, next offered Spring 2001. (4 credits)

61 NINETEENTH CENTURY RUSSIAN LITERATURE IN TRANSLATION

An introduction to the great literary tradition that gave the world Dostoevsky and Tolstoy. Readings will include prose, poetry, drama, and literary criticism, and 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. Russian drama is represented by Gogol, Ostrovsky, and Chekhov. Lectures, readings, and discussions in English; Russian majors may read some assignments in Russian. No prerequisites. Every fall. (4 credits)

62 TWENTIETH CENTURY RUSSIAN LITERATURE AND CULTURE IN TRANSLATION

A survey of Russian literary responses to revolution, repression, dissent, and *glasnost*. Readings and discussions of representative authors from such disparate movements as Symbolism, Socialist Realism, literature of dissent, and fantastic prose, including Bely, Bulgakov, Solzhenitsyn, and Tertz. The great twentieth-century tradition in poetry will also be covered, including Mayakovsky, Akhmatova, Pasternak, and Brodsky. Lectures, readings, and discussions in English; Russian majors may read some assignments in Russian. No prerequisites. Every spring. (4 credits)

64 CULTURE AND REVOLUTION (Same as International Studies 64)

This course examines the relationship between cultural and political change during three very different revolutions: in France of 1789, Russian 1917, and the more recent events in Iran. How do people change when governments are overturned? How do revolutions shape the consciousness of their citizens? Do people understand events as revolutionaries intend them to? To answer these questions, we will examine symbols and political ideologies, mass media outreach, education and enlistment, changing social identities, the culture of violence, popular participation and resistance, as well as other issues. Readings will include ideas that inspired the revolutions, including Voltaire and Rousseau, Marx and Lenin, Khomeini and the Koran. We will read contemporary accounts, both sympathetic and antagonistic, and look at popular culture to see how events were understood. Fashion and etiquette, comics and caricatures, movies and plays are among the materials used. Taught in English. Alternate years, next offered fall 2000. (4 credits)

65 TRANSLATION AS CROSS-CULTURAL COMMUNICATION (Same as International Studies 65)

When communication takes place across language barriers, it raises fundamental questions about meaning, style, power relationships, and traditions. This course treats literary translation as a particularly complex form of cross-cultural interaction. Students will work on their own translations of prose or poetry while considering broader questions of translation, through critiques of existing translations, close comparisons of variant translations, and readings on cultural and theoretical aspects of literary translation. Advanced proficiency in a second language required. Next offered spring semester 2001. (4 credits)

$66\ THE$ RUSSIAN RELIGIOUS EXPERIENCE (Same as Religious Studies 66)

Beginning with a forced conversion to Byzantine Christianity in the tenth century, Russians have led one thousand years of a rich and contradictory religious life. This millennium of experience should offer students of both religion and Russian a unique outlook on their subjects. For students interested in religion, Russian Orthodoxy offers a non-western perspective on the Christian experience, which poses questions that other traditions do not: in the close cooperation between church and autocracy that flourished until the Bolshevik Revolution; in the savage repression suffered by the faithful after 1917; and in the rich tradition of dissent that resisted both. For students of Russian, the religious experience offers new insights into a country that was officially atheist for seventy years. We will be looking not only at the texts and structures of the faith, but also at the heresies that undermined it. Paganism and witchcraft thrived alongside deep piety; state regulation struggled with sectant movements ranging from the Milk-Drinkers to Self-Castrators. Orthodoxy exerted a profound influence on Russia's great writers: on the fierce believer Dostoevsky, and on the apostate Tolstoy. Vigorously repressed by the Soviet state, Russian Orthodoxy once again is alive, and struggling to define itself in the post-Soviet era. In English. Alternate years, next offered fall 1999. (4 credits)

88 SENIOR SEMINAR

Seminars on selected topics in Russian language, literature, or culture, designed to serve as an integrative capstone experience for majors. This year's topic is "The Silver Age." Conducted in Russian. Prerequisite, Russian 41 or approval of instructor. This course can be taken by advanced students before their senior year, and may be repeated for credit with a new seminar topic. Every spring. (4 credits)

95 TUTORIAL

Prerequisite, permission of the instructor. Limit to be applied toward the major or core will be determined in consultation with the department. (4 credits)

96 INDEPENDENT PROJECT

Prerequisite, permission of instructor. Limit to be applied toward the major or core will be determined in consultation with the department. (4 credits)

97 INTERNSHIP

Prerequisite, permission of instructor. Limit to be applied toward the major or core will be determined in consultation with the department. (4 credits)

98 PRECEPTORSHIP

Prerequisite, permission of instructor. Limit to be applied toward the major or core will be determined in consultation with the department. (4 credits)

Russian, Central and East European Studies

The department participates in the Russian, Central and East European Studies program (for details see relevant section).

Greek

See Classics

History

Full Time Faculty: David Itzkowitz, Teresita Martínez-Vergne, Peter Rachleff (Chair), Emily Rosenberg, Norman Rosenberg, Paul Solon, James Stewart, Yuehim Tam, Peter Weisensel

Part Time Faculty: Mahmoud El-Kati, Jerry Fisher

The department of history offers courses in the development of ideas and institutions in different eras and areas. Courses in history contribute to general education and the understanding of an individual's place in society. Furthermore, they contribute to the preparation of students for graduate education in history and allied fields: teaching, law, business, the ministry, international relations, and library and archival work.

The history department participates in many interdisciplinary programs and majors including African American Studies, Comparative North American Studies, Women's and Gender Studies, Urban Studies, Latin American Studies, Legal Studies, and International Studies programs. For details, consult the appropriate descriptions elsewhere in the catalog.

General Distribution Requirement

All history courses fulfill the general distribution requirement in the humanities.

Diversity Requirement.

The courses in the history department which meet the domestic diversity requirement are: 19 (when taught by Stewart), 24, 31, 32, 42, 45, 47, 49 and 50, Jews in America. The courses in the history department which meet the international diversity requirement are: 10, 11, 14, 51, 52, 54, 55, 56, 57, 58, 59, 60, 62, 64, 65, 66, 67, 68, 69, 70, 73, 74, 75, 76, 77, and 80.

Major Concentration

A history major is planned in consultation with a student's advisor and comprises no fewer than ten (40 credits) nor more than twelve (48 credits) history courses. The ten may include one internship if it is approved by a history department member. Independent study and preceptorship in history may not be counted among the ten courses but may be supplements to them up to a maximum total of twelve. Courses completed for college credit prior to matriculation at a collegiate level institution, such as Advanced Placement or International Baccalaureate courses, may not be used in completion of a major. Except with consent of the department, the major will include no more than two introductory level courses. All history majors are strongly encouraged to take History 79: "The Study of History," which examines the different approaches and analytical frameworks of historical scholarship. All history majors must take either History 80 or 90, an advanced course in which a major research paper is written, or prepare an honors project in History. A history major must take one course in each of three geographic areas. The department normally offers courses in the following geographic areas: United States, Europe, Latin America, and East Asia. We are able to offer courses in the following geographic areas occasionally: the Middle East/Islamic World, and Africa. In addition, a history major must take at least one course that deals primarily with the history of a period prior to 1800, and at least one course that deals primarily with the period since 1800. Students are expected to plan to acquire skills necessary for their particular fields of study, such as paleography, cartography, statistics, and foreign languages, in consultation with their departmental advisor. Six supporting courses will also be designated in consultation with the advisor.

The senior capstone experience requirement in history may be satisfied by the following: Successful completion of either History 80 or 90 or participation in the Honors Program in history.

Minor Concentration

A minor in history consists of six courses chosen with the assistance of the student's departmental advisor. Not more than three of these may be introductory level courses.

COURSES

Introductory Courses (10–19)

Courses numbered 10–19 are designed principally for first-year students 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 and to prepare themselves for higher levels of work in social sciences and humanities. 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 and oral exercises which are critically evaluated by the instructor. Although students are expected to absorb and master essential information, these courses emphasize critical thinking and writing rather than memorization.

10 DISCOVERING WORLD HISTORY

An introductory survey treating all periods, regions, and peoples, but focusing on contact and exchange between empires, civilizations, and cultures as peoples encountered one another throughout history in a process which accelerated dramatically at the beginning of the modern era and ultimately made the very activity of studying World History possible in our own time. Offered every year. (4 credits).

11 INTRODUCTION TO EUROPEAN HISTORY

A one semester introduction to the study of European history focusing on a selected period; designed primarily for lower division students who have no previous college-level background in this general field. Offered every semester. (4 credits)

14 INTRODUCTION TO EAST ASIAN CIVILIZATION

This course introduces the cultures and societies of China, Japan and Korea from the earliest times to the present day. Primarily an introductory course for beginners in East Asian Civilization, this course considers a variety of significant themes in religious, political, economic, social and cultural developments in the region. Every year. Next offered Fall 1999 (4 credits)

17 MODERN SPANISH AMERICA

This course will explore the trajectory of three Spanish American nations in the nineteenth and twentieth centuries, focusing in each case on political developments (e.g., the course of Liberalism in Mexico), economic structures (e.g., the dependence of Cuba on sugar), and U.S. policies (e.g., military intervention in Central America). The tools used to understand the processes of one country can be readily applied to other areas. Every year. Next offered Fall 1999. (4 credits)

19 AMERICAN CIVILIZATION

A topical analysis of United States history stressing the historical antecedents of selected contemporary issues, designed primarily for underclassmen who have no previous college-level background in this general field. Every year. (4 credits)

Intermediate Courses (20-79)

Courses numbered 20–79 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 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 first-year students only with the instructor's permission.

Intermediate Courses in American and Latin American History (21-49)

21 AMERICAN LABOR RADICALISM

Probes the history of labor radicalism as a specific current within the stream of social and political thought and movements, up to the rank and file movements of the 1970's and 1980's. Along the way we explore the Knights of Labor and the populists of the Gilded Age, the Socialists and Communists and other radicals of the Great Depression. Particular attention is paid to the experiences and contributions of women and racial and ethnic minorities. Alternate years. Next offered Spring 2000. (4 credits)

22 U.S. WOMEN'S AND GENDER HISTORY

This class surveys historical topics relating to women and gender in American history. It emphasizes critical thinking, participatory investigations, development of writing skills, and historical interpretation. The particular topics covered will vary each year. Every year. (4 credits)

23 HISTORY OF THE AMERICAN ENVIRONMENT

This course develops a historical analysis of the transformation of American ecosystems and landscapes within the context of ongoing economic development. The course emphasizes topical and chronological inquiries into such matters as natural resource development, environmental degradation and renewal, "nature" as an aesthetic and scientific construct and the relationships between ecology, race and power. The chronological boundaries of the course reach from 1600 through the 1970's. Prerequisite, one basic course in U.S. history. Alternate years. Next offered Spring 2000. (4 credits)

24 AFRO-AMERICAN HISTORY: SLAVERY, EMANCIPATION, AND RECONSTRUCTION

This course explores the Afro-American experience from the villages of West Africa to the cotton plantations of the antebellum South. Considers West African social structure and culture, the international slave trade, the development of racism, the development of American slavery, the transformation of Afro-American culture over more than two centuries, the struggle, the possibilities of reconstruction, and the ultimate rise of share-cropping and segregation. Alternate years. Next offered Fall 2000. (4 credits)

25 HISTORY OF BRAZIL

This course will provide a broad understanding of the elements specialists consider relevant to the study of Brazil. Through the work of anthropologists, economists, historians, and novelists, we will gain a wide perspective on social groups in the colonial period, political thought during the empire, and economic growth in the twentieth century. We will bring these themes up to date by exploring the myths that have developed around them and that persist to this day: the absence of racial distinctions, the sporadic necessity of military rule, and the unchangeable nature of underdevelopment. Alternate years. Next offered Fall 1999. (4 credits)

26 WOMEN IN LATIN AMERICA

The objective of this course is to identify the elements that define the experience of women in Latin America and that make their livelihood different from that of men and from that of women in other parts of the world. Among the themes we will explore are: race and ethnic background; rural and urban contexts; the influence of the Catholic church; political mobilization and incorporation into the revolutionary struggle; and the formation of feminist organizations. We will read books and articles by historians, anthropologists, political activists, and the "voiceless." Alternate years. Next offered Spring 2001. (4 credits)

27 THE CARIBBEAN

This course will trace the historical trajectory of several Caribbean islands as early colonies and during slavery through the experiences of Spanish settlers, other Europeans, African slaves, British West Indian planters, Creole bourgeoisies, metropolitan administrators, and so on. This largely chronological account will provide the basis from which to examine post-colonialism at the end of the term. Alternate years. Next offered Fall 2000 (4 credits).

28 THE POLITICS OF FOOD IN LATIN AMERICA

The premise of this course is that food shortages and malnutrition are caused, not by natural forces, but by human action. Latin America, like other areas of the world, has witnessed the competition for the control of food resources among various indigenous and external groups. The native populations, the first Europeans, Creoles, market forces, and U.S. foreign policy have—at different times and in conjunction with each other or with natural happenings—altered the patterns of production and consumption and manipulated the distribution of goods. The equation of food-power, a central theme in many countries in their search for social justice, will be the focus of this course. Alternate years. Next offered Spring 2000. (4 credits)

29 COLONIAL SPANISH AMERICA

This course examines the way Europeans, Native Americans, Africans, and their descendants viewed each other and the institutions that guided their reading of situations up to the early nineteenth century. We will explore the arenas in which dominant and subordinate players in colonial society—crown, settlers, slaves, workers, women—acted, interacted and reacted: agricultural estates, urban centers, mining towns, religious hierarchies, the legal system, and so on. We will also become acquainted with the different processes—economic, political, social, and cultural—that culminated in the struggle for independence in the Spanish colonies in the New World. Next offered Spring 2000. (4 credits)

30 WOMEN AND WORK IN U.S. HISTORY

An historical overview of women's changing experiences with work—both paid and unpaid—from the mercantilist economy of colonial times to the "post-industrial" era of the late 20th century. This course is designed primarily for students who have no previous college-level background in U.S. history. Approved for Women's and Gender Studies. Alternate years. Next offered Spring 2001. (4 credits)

31 BLACK, WHITE AND RED IN AMERICAN HISTORY

This course investigates the origin of "races" in the "New World" by examining the process of colonization, the development of slavery and other labor systems and the ongoing struggles between peoples from widely separated parts of the world who found themselves together in North America; Africans, European Colonists and American Indians. Prerequisite, one basic course in U.S. history. Alternate years. Next offered Fall 2000. (4 credits)

32 IMMIGRATION AND ETHNICITY IN U.S. HISTORY

An overview of U.S. history as seen through the experiences of newly arriving and adjusting immigrant groups. This course is designed primarily for students who have no previous college-level background in U.S. history. Alternate years. Next offered Fall 1999. (4 credits)

33 INTRODUCTION TO THE HISTORY OF THE U.S. WORKING CLASS

This course traces the development of the U.S. working class—men and women, native-born and immigrants, black and white—from the artisan era to the post-industrial age. This course is designed primarily for students who have no previous college-level background in U.S. history. Alternate years. Next offered Spring 2001. (4 credits)

34 U.S. FOREIGN RELATIONS IN THE TWENTIETH CENTURY

This course examines cultural, economic, and strategic patterns that have made up U.S. foreign relations from the War of 1898 to the present. Drawing on a diversity of texts and perspectives about the role of the United States in the world, it explores the variety of discourses that have shaped America's role in the world, such as imperialism, anti-imperialism, self-determination, isolationism, internationalism, race, and anti-communism. It considers the domestic setting of U.S. policy and global influence; sets a broad context of non-governmental global connections; and discourses various international and domestic perspectives on U.S. foreign policy. Every year. Next offered Fall 1999. (4 credits)

41 THE 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. Prerequisite, one basic course in U.S. history. Alternate years. Next offered Spring 2001. (4 credits)

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. Prerequisite, one basic course in U.S. history. Alternate years. Next offered Fall 1999. (4 credits)

$43\ \mathrm{ORIGINS}\ \mathrm{OF}\ \mathrm{SUPER}\ \mathrm{SOCIETY},\ \mathrm{U.S.},\ 1890-1945$

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 culture, including gender roles and race relations. 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. Alternate years. Next offered Spring 2001. (4 credits)

44 U.S. SINCE 1940

This course, which will primarily consider themes in cultural history, will pay particular attention to representations of daily life by the mass media, especially by the Hollywood film industry and television. It will also emphasize the role of cultural and social theories—including those associated with post-structuralism, feminism, critical race and critical legal studies, and cultural studies—in the writing of recent U.S. history. Thus, a major focus of this course will be on critical, historically-grounded readings of visual texts from the period since 1940. Every other year. Next offered Fall 1999. (4 credits)

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, and the visibility of the ghetto, etc. are major themes. Every year. Next offered Fall 1999. (4 credits)

46 THE ELECTRONIC MEDIA IN AN INTERNATIONAL AGE (Same as Communication Studies 46)

This course examines the structures, politics, economics, and program content of AM and FM radio, over-the-air television, cable television, and satellite television from a historical and international/multinational/multicultural perspective. The editorial practices and programming goals of news gathering and distribution receive special attention. Ethical questions, such as the rights of minorities and less developed countries to resist the dominance of powerful media interests as opposed to the rights of individuals to see and hear what they choose, are examined. Prerequisites: Sophomore status; sufficient knowledge of a language, other than English, to comprehend radio and television broadcast in that language; analytic and writing skills necessary to do focused research and analysis. Fall semester. (4 credits)

47 SPORTS IN THE AFRO-AMERICAN COMMUNITY

The course deals with an historical impression of African-Americans in American sports beginning with a background from the 19th century. This study examines social facts about group and individual participation, and touches on several major themes: the struggle to overcome discrimination; independent community sports programs; the impact of African-Americans in post-war sports and American society, and from the playing fields to the front office will also be surveyed. Every year. Next offered Spring 2000. (4 credits)

$48\ \mathrm{THE}$ FORMATION OF INDUSTRIAL AMERICA, 1830-1890

This course probes in thematic fashion the political, social, and economic impact of the industrial revolution upon American society. Principal topics of discussion include the transformation of work (from the artisan to the factory system), the transformation of the community into the modern city, and the transformation of American political institutions. Topics of major concern include the impact of the industrial revolution on both gender roles and race relations. Alternate years. Next offered Fall 2000. (4 credits)

49 AFRO-AMERICANS AND THE TRANSFORMATION OF THE CITY: 1890-1945

This course investigates two mutually influencing transformations of 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 ghettoes in major northern cities; the internal life of those ghettoes, from gender roles to the development of new cultural forms; and the development of new political and social ideas within these communities. Alternate years, next offered Spring 2001. (4 credits)

50 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: Peoples and Cultures of Africa, Race and Gender in Early America, American Legal "Reelism," Jews in America, and Gender and Class in Early Modern Europe. (4 credits)

Intermediate Courses in European History (51 – 70)

51 TUDOR-STUART ENGLAND

A survey of English life, politics and society in the days of the Tudor and Stuart monarchs. The course will focus on a number of major themes including the emergence of the English nation; the struggle between royal and parliamentary authority; the English roots of the American tradition; and the relation of social structure, religious belief and political action. Alternate years. Next offered Fall 1999. (4 credits)

52 MODERN BRITAIN

The development of English politics and society from the time of George III to the 20th century. Among the topics to be considered are: the transition from rural to urban society; the American

Revolution; the rise and decline of Britain as world leader; Victorian and Edwardian society; England and Ireland; and the future of Britain in the modern world. Alternate years. Next offered Spring 2000. (4 credits)

53 THE VICTORIANS

A study of the culture, politics, social conditions, and artistic developments of Victorian England (1837–1901) through an examination of a number of documents (novels, plays, memoirs, government reports, etc.) of the period. This course is usually taught in conjunction with English 67, and, when it is, students will be required to register for both courses. Alternate years. Next offered spring 2002. (4 credits)

54 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 the time will be spent on the great era between 1429 and 1815. Alternate years. Next offered 2000-2001 (4 credits)

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, Bolshevism, Soviet Marxism-Leninism, the socialism of Mao Tse-Tung, and the significance to socialism of the collapse of the USSR 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. Next offered fall 1999. (4 credits)

56 RENAISSANCE/REVOLUTION: FORGING MODERN EUROPEAN CIVILIZATION (Same as Humanities and Cultural Studies 56)

Were Renaissance Europeans the "first born sons of the modern world?" How and why did Europe modernize in a series of cultural movements that transformed first Europe then the world between 1300 and 1800 BCE? What cultural myths and metaphors were used by Europeans to explain this process, what is implied by them, and which best explains their seeming triumph: Renaissance? Reformation? Reconnaissance? Revolution? We address these questions narratively, surveying the social and cultural history of Europe from the high middle ages to the beginnings of the modern era focusing on the relationship between material and cultural change within the process of modernization. Alternate years. Next offered fall 1999. (4 credits)

57 EMPIRES

This course will survey the evolution of modern European empires from their inception in the mid-19th century to their aftermath in the 1980's and 1990's. The course will be organized topically, separate modules being devoted to theory and reasons for empire, imperial administration, race and segregation in the colonies, cultural and economic exploitation of colonies, European culture and imperialism, indigenous anti-colonial movements and decolonialization, and the issue of colonialism's role in globalization. Materials will be drawn from the experiences of the British, French, German, Dutch and Russian empires. Lectures, class discussions, films. Essay exams prepared outside of class and quizzes. Next offered spring 2000. (4 credits)

58 EUROPE SINCE 1945

A survey of European history from the end of World War Two to the present, emphasizing social and economic history and including both western Europe and the former socialist republics of eastern Europe. The course is built on the hypothesis that Europe constitutes a social and political entity as well as a geographic one. Among the topics for study the course will include a comparison of European post-WWII reconstruction (East and West), Europe's power decline in a global context, Europe as a tool and a participant in the Cold War, political trends and their roots in social and economic change, and the origins and European-wide implications of the collapse of the socialist states of eastern Europe. Alternate years. Next offered Spring 2001. (4 credits)

59 THE EXPERIENCE OF WAR

A study of the origins, conduct and legacy of war taught on a comparative basis through scholarly and artistic sources as well as primary documents. The course will focus on three major wars: the Peloponnesian Wars, the Hundred Years' War, and the wars of 20th century Europe. Alternate years. Next offered Spring 2001. (4 credits)

60 STATE AND SOCIETY IN TSARIST RUSSIA

A survey of the development of Russian social and political institutions from Peter the Great (1682–1724) to 1917. The course will explain the growth of the tsar's authority, the origins and outlooks of Russia's major social/gender groups (nobility, peasants, merchants, clergy, women, minorities, Cossacks) and the relations which grew up between the tsar and his society. The course will conclude with an appraisal of the breakdown of the relationship in 1917. Alternate years. Next offered 2000–2001. (4 credits)

62 HISTORY OF THE SOVIET UNION AND ITS SUCCESSORS

A survey of Russian, Soviet and post-Soviet history from the Russian Revolution to the present. Topics include the Bolshevik revolution of 1917, Bolshevik rule and its tsarist heritage, Soviet "monocratic" society under Lenin and Stalin, dissent in the USSR, the "command economy" in the collapse of Communist political power, and national consciousness as an operative idea in the Commonwealth of Independent States. Alternate years. Next offered Fall 1999. (4 credits)

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, Germany between the U.S. and the USSR and German's significance in post Cold War Europe. Alternate years. Next offered Fall 2000. (4 credits)

65 JEWISH HISTORY (Same as Religious Studies 63)

An examination of the history of the Jewish people from the time of emancipation in the late 18th century to the present. The major theme will be the development of new forms of Jewish self-identity as the self-contained communities of the pre-emancipation period begin to dissolve. Among the topics to be considered are the relationship between Jewish communities and the "outside world", pressures from within and without the Jewish community for assimilation, antisemitism, the holocaust, Zionism and the birth of Israel, and the position of the Jews in the world today. Alternate years. Next offered Fall 1999. (4 credits)

66 EUROPE IN THE AGE OF UPHEAVAL AND REVOLUTION

A study of European politics, culture and society during the years (1780–1850) 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, and the growth of new ideologies. Alternate years. Next offered Spring 2001. (4 credits)

67 HISTORY OF THE HOLOCAUST

In this course we will examine the Holocaust as an historical phenomenon. We will try to understand what brought it about, how it was experienced by those who lived through it (and those who did not survive) and how the event continues to affect the world today. Alternate years. Next offered Fall 2000. (4 credits)

68 HISTORY OF THE RULE OF LAW

A survey of the historical origins and institutional evolution of what has come to be celebrated as "the rule of law not men" stressing traditions which dominated Europe by the 18th Century and were globalized by western imperialism and the creation of supra-national institutions thereafter. Offered every year (4 credits)

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. Alternate years. Next offered Fall 1999. (4 credits)

70 HISTORY OF 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. Next offered 2000. (4 credits)

Intermediate Courses in Non-Western History (73-79)

73 MEDIA/POPULAR CULTURE IN POSTWAR JAPAN

This course examines the Japanese media and popular culture in the post WWII era from an historical perspective. The structure and political economy of the media is analyzed as well as the nature and content of popular culture as it is shaped by, and reflected in, the mass media. Prerequisites: analytic and writing skills necessary to do focused research and analysis, and basic computer skills. Alternate years. Next offered Fall 1999. (4 credits)

74 HISTORY OF TRADITIONAL CHINA

A study of the traditional culture and society of China from earliest times to the 18th century, when the impact of the West was strongly felt. The course will be based on detailed study of selected significant themes in Chinese history. Lecture/discussion format. Every year. Next offered Fall 1999. (4 credits)

75 HISTORY OF MODERN CHINA

A study of leading institutions and movements of 19th and 20th century China. Major emphases include the impact of Western imperialism, and transformation of peasant society through revolution, the rise of Mao Tse-Tung, and the Great Proletarian Cultural Revolution. Special attention will be given to U.S.-China relations. Every year. Next offered Spring 2000. (4 credits)

76 HISTORY OF TRADITIONAL JAPAN

A survey of the major political, social, religious, intellectual, economic and artistic developments in Japan from earliest times to the opening of Japan in the 1850s. It also examines Japan's relations with her close neighbors, Korea and China. Alternate years. Next offered Spring 2000. (4 credits)

77 HISTORY OF MODERN JAPAN

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. Alternate years. Next offered Fall 1999. (4 credits)

Advanced Courses and Independent Studies (79-99)

Courses numbered 79 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 or other special skills.

79 THE STUDY OF HISTORY

This advanced course is recommended for majors and students serious about the study of history. It examines the various forms of analysis used by historians through a study of different kinds of historical texts and sources. It provides an opportunity for students to develop the skills and habits of thinking essential to practicing the discipline of history. This course invites students to address some of the myriad of questions and controversies that surround such historical concepts as "objectivity,"

"subjectivity," "truth," "epistemology," and thereby to develop a "philosophy" of history. At the same time, it stresses the acquisition of such historical tools as the use of written, oral, computer and media sources and the development of analytical writing skills. Offered every year. (4 credits)

80 EAST ASIAN STUDIES SENIOR 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; and The City and the Village in 20th Century China and Japan. This course is often taught as an interdisciplinary course and as such is cross listed with other departments. Every year. Being offered Spring 2000. (4 credits)

90 SPECIAL ADVANCED STUDIES

Recent 90 courses have included Americans Debate the Decision for War, 1931–1941; War and Peace in Renaissance Europe; Studies in Modern Japan; Nineteenth-century European Revolutions; Cold-War America; Revolutionary China; Studies in Jewish History; The Hispanic Caribbean; The U.S. Civil War; and Minnesota History. Every year. (4 credits)

95 TUTORIAL (4 credits)

96 INDEPENDENT PROJECT (4 credits)

97 INTERNSHIP

A student may register for an internship with any member of the department. History internships must have explicit historical content. The student, the faculty sponsor, and the site supervisor will negotiate a Learning Agreement which specifies the student's goals, means of achieving them, and the manner in which the internship will be evaluated. A standard internship will involve ten hours per week and earn four credits. Only one internship can be counted toward a history major. Every semester. (4 credits)

98 PRECEPTORSHIP (4 credits)

Humanities and Cultural Studies

James von Geldern (Director, German Studies and Russian), Frank Adler (Political Science), Françoise Denis (French), Ellis Dye (German Studies and Russian), Martin Gunderson (Philosophy), Leola Johnson (Communication Studies), Jim Laine (Religion), Joy Laine (Philosophy), Michal McCall (Sociology), Stuart McDougal (English), Anna Meigs (Anthropology), David Chioni Moore (International Studies and English), Andrew Overman (Classics), Sarah Pradt (Japanese), Jeremiah Reedy (Classics), Mayra Rodriguez (Art), Norm Rosenberg (History), Sonita Sarker (English and Women's and Gender Studies), Virginia Schubert (French), Linda Schulte-Sasse (German Studies and Russian), Beth Severy (Classics), Paul Solon (History), Clay Steinman (Communication Studies), Anne Sutherland (Anthropology), Joëlle Vitiello (French), Robert Warde (English), Matthew Weinstein (Education)

The Humanities has been traditionally defined as the study of all that human beings have made and valued. Most Humanities programs study the great texts, themes, and accomplishments of the Western tradition. They seek to cultivate appreciation of the human enterprise and the genius of human production and creativity. Humanities courses traditionally look at a particular stream of the Western creative tradition in detail, with a focus on pivotal periods in the development of that tradition— the classical world, the Middle Ages, the Renaissance, the Enlightenment— and on certain themes in the development

of that tradition, such as art and architectural forms, myths and narratives, ideas of freedom, virtue, and citizenship, and the encounter of human and divine.

Cultural Studies has developed in response to what traditional Humanities programs seemed to leave out. It has broadened the categories of cultural analysis to include other traditions, and takes a more critical stance towards artifacts by focusing on the means of cultural production, adding concerns such as the following:

- —Analysis of commercial and popular culture.
- —Material expressions of knowledge and culture such as clothing, crafts, food and signs that traditional humanists tend not to consider artistic texts.
- —Critiques of the dominant tradition from perspectives associated with social outsiders.
- —Explicitly political and social analyses of the same texts studied in Humanities curricula.
- —Attention to systems of meaning and attendant issues of power and persuasion.

The joint project of Humanities and Cultural Studies is the close study of cultural artifacts using a variety of approaches from classical to contemporary. The major is designed to give students familiarity with a cultural heritage featuring a breadth of geographic and historic experience; a working knowledge of the methodologies and analytic tools deployed by historians and critics of culture; the ability to explicate and critique a specific body of culture characterized by depth of knowledge and analysis; and the opportunity to appreciate and enjoy culture, and produce original works of criticism.

General Distribution Requirement

All courses in Humanities and Cultural Studies satisfy the requirement in humanities except 96 and 97.

Diversity Requirement

The courses in Humanities and Cultural Studies which meet the international diversity requirement are numbered 21, 22 and 56.

Major Concentration

(These courses are agreed upon by the student, the Humanities and Cultural Studies director, and the instructor).

Students take a progression of fourteen courses that integrate as well as differentiate the humanities and cultural studies approaches, beginning with introductory exposure to a range of critical views and culminating in a senior capstone that will involve sharing ideas and research. The introductory course, Humanities and Cultural Studies 10, will cover the history of various conceptions of culture, broadly defined, from classical to contemporary approaches, acquainting students with issues of continuing debate. Beginning

students are expected as well to establish a broad foundation of cultural knowledge by taking at least two courses covering a chronological period from ancient times to the Enlightenment (approximately the eighteenth century), and two courses from the Enlightenment to modern times; as well as at least two courses studying the theory and philosophy of culture. On the intermediate level, all students are required to complete a six-course focus, concentrating on one textual form, period or theme. In the senior capstone, students working on an independent project would share their scholarship, integrating what they have learned in the program, emphasizing the discipline of their focus. The capstone requirement may be satisfied by taking Humanities and Cultural Studies 88, or by completing an independent project in consultation with the program director. The capstone will lead to a focused examination of cultural artifacts that critiques at a higher level many issues first raised in the introductory course.

Talk to your Humanities and Cultural Studies advisor to see which of many available courses will serve your interests best, and put together a concentration plan.

Focus Plans

The following course clusters are examples of the focuses that constitute the intermediate stage of the Humanities and Cultural Studies major, combining a broad knowledge with a sophisticated set of analytical tools for an in-depth look at one aspect of culture. Majors can use any of these example concentrations, or put together one themselves. A concentration consists of six courses—note that for any of these concentrations, other courses are available as well.

Colonial and Postcolonial Culture
Anthropology 62, Culture and Globalization
English 54, Pan-American Literature
English 55, African Literature
English 59, 20th Century Anglophone Women Writers
(Same as Women's and Gender Studies 60)
French 61, Francophone Studies
History 29, Colonial Spanish America
International Studies 50, Postcolonial Criticism
Music 31, African Music
Political Science 63, Development Politics

Women's and Gender Studies 65, Exile in Women's Writing & Film (Same as English 50)

Representation and Society

Anthropology 41, Race, Race Privilege, Whiteness
Anthropology 66, Nationalism and the Modern World (Same as Political Science 66)
Classics 55, The Art, Archaeology, and Topography of Ancient Rome
Communication Studies 76, Critical Social Theory and the Media
Linguistics 23, Advertising and Propaganda
Political Science 33, Redescribing Power
Religious Studies 52, Gender, Caste and Deity in India
Sociology 35, Images of Women in the Middle East
Spanish 69, Antagonists/Protagonists: Theater and Society

Comparative Literature and Criticism

Communication Studies 76, Critical Social Theory and the Media

English 28, Literature in Critical Perspectives

French 41, Text, Film and Media

French 52, Writing about Literature

German Studies 65, Modernism and the Avant-Garde

Japanese 50, Postwar Japanese Literature

Russian 61, 19th Century Russian Literature in Translation

Spanish 54, Introduction to Literary Analysis

Spanish 65, Modern Latin American Literature in its Socio-Political Context

Women's and Gender Studies 55, Advanced Feminist Theories

Communication Studies 28, Film Analysis: Formalist and Feminist

Communication Studies 49, History of Film Since 1941

English 50, Exile in Women's Writing and Film (Same as Women's and Gender Studies 65)

English 58, Film Studies

French 41, Text, Film and Media

French 66. French Cinema

German Studies 55, German Cinema Studies History 44, The U.S. Since 1940

Japanese 50, Japanese Film

Russian 56, Mass Culture Under Communism

Renaissance

Art 61 History of Art II

Art 65, Renaissance Art

English 61, Chaucer English 62, Shakespeare

French 73, Humanism, Baroque and Classicism

Humanities and Cultural Studies 24, Medieval and Renaissance World (Same as English 30) Humanities and Cultural Studies 25, Modern World I (Same as English 31)

Humanities and Cultural Studies 56, Renaissance and Revolution: Forging Modern European

Civilization (Same as History 56)

Music 42, Western Music of the 17th and 18th Centuries

Religious Studies 46, Thought of the Reformation

Modernism

Art 61, History of Art II

Communication Studies 48, History of Film, 1894-1941

Dramatic Arts 63, History of Western Theater II (1700 to Present)

French 76, Twentieth Century Literature

German Studies 64, The Birth of Modern Germany

German Studies 65, Modernism and the Avant-Garde

Humanities and Cultural Studies 26, Modern World II (Same as English 32) Humanities and Cultural Studies 27, Modern and Postmodern Worlds (Same as English 33)

Russian 62, 20th Century Russian Literature in Translation

Spanish 65, Modern Latin American Literature in its Socio-Political Context

Spanish 68, Modernity in Spain (1800-1930)

COURSES

10 INTRODUCTION TO HUMANITIES AND CULTURAL STUDIES

This course introduces students to salient themes and theories in the study of textual and non-textual expression, focusing on how and to what purpose cultural artifacts are valued and interpreted. Offered yearly. (4 credits)

21 THE ANCIENT WORLD I: GREECE (Same as Classics 21)

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. Alternate years. (4 credits)

22 THE ANCIENT WORLD II: ROME (Same as Classics 22)

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. Alternate years. (4 credits)

24 THE MEDIEVAL AND RENAISSANCE WORLD (Same as English 30)

Classics of European theology, philosophy, and literature, with some attention to corollary movements in art and architecture. Alternate years, next offered Fall 2000. (4 credits)

25 THE MODERN WORLD I (Same as English 31)

Classics of European art, philosophy, and literature from the 17th and 18th centuries. Alternate years, next offered 1999–2000. (4 credits)

26 THE MODERN WORLD II (Same as English 32)

Classics of European literature and philosophy of the 19th and 20th centuries to World War I, with some attention to corollary movements in music and the arts. Alternate years, next offered 1999–2000. (4 credits)

27 THE MODERN AND POSTMODERN WORLDS (Same as English 33)

Studies in the 20th century literature, arts, and philosophy of Europe and the Americas since World War I. Alternate years, next offered 1999-2000. (4 credits)

50 TOPICS

Recent examples include: Film and the Fantastic, Modernity and the Unconscious: What Does God Do When He is Dead?, Love and Death in Literature and Music, Pagans and Christians, Classical Women-Feminist Theory, Western Architecture: Theory and History. (4 credits)

56 RENAISSANCE/REVOLUTION: FORGING MODERN EUROPEAN CIVILIZATION (Same as History 56)

Were Renaissance Europeans the "first born sons of the modern world?" How and why did Europe modernize in a series of cultural movements that transformed first Europe then the world between 1300 and 1800 BCE? What cultural myths and metaphors were used by Europeans to explain this process, what is implied by them, and which best explains their seeming triumph: Renaissance? Reformation? Reconnaissance? Revolution? We address these questions narratively, surveying the social and cultural history of Europe from the high middle ages to the beginnings of the modern era focusing on the relationship between material and cultural change within the process of modernization. Alternate years. Next offered fall 1999. (4 credits)

68 ART AND IDEAS IN FRENCH CULTURE (Same as French 68)

The course studies the arts of France (art, architecture, music, and literature) in their historical and intellectual settings. Conducted in English. Alternate years, next offered Fall 2000. (4 credits)

88 SENIOR SEMINAR

For example: Arthur and Gwenevere in Text and Image. (4 credits)

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. (4 credits)

97 INTERNSHIP

No more than one may be used toward the major. (4 credits)

The following courses are approved for use on a Humanities and Cultural Studies major:

Anthropology 41, Race, Race Privilege, Whiteness

Anthropology 62, Culture and Globalization

Art 50, Images in Consumer Society

Art 52, Women in Art

Art 60, History of Art I

Classics 60, Introduction to Classical Art

Communication Studies 34, Cultural Studies and the Media

Communication Studies 48, History of Film, 1894-1941

Communication Studies 50, Blackness and the Media

Dramatic Arts 122, Haitian Dance

Education 58, Science and Culture

English 28, Literature in Critical Perspectives

English 59, 20th Century Anglophone Women Writers

English 65, The Romantic Period

French 41, Text, Film and Media (in French)

French 50, Paris: Art, Literature History

French 52, Writing about Literature

German Studies 55, German Cinema Studies

German Studies 60, Nietzsche: Romantic, Modern, Postmodern

German Studies 63, Romanticism

History 50, Popular Culture in African Cities

History 50, 20th C. American Legal "Reelism"

History 57, Empires

International Studies 64, Culture and Revolution

Japanese 50, Images of Masculine and Feminine in Japanese Culture

Japanese 50, Japanese Film

Japanese 50, Postwar Japanese Literature

Japanese 50, Postwar Japanese Literature in Translation

Music 31, African Music

Political Science 37, Contemporary Political Theory

Russian 50, The Pleasures of Empire

Russian 61, 19th Century Russian Literature

Sociology 42, Representing the Social

Sociology 47, Images in Consumer Society

Spanish 54, Introduction to Literary Analysis

Spanish 68, Modernity in Spain (1800-1930)

Spanish 69, Antagonists/Protagonists: Theater and Society

Individually Designed Interdepartmental Major

See the section on graduation requirements for the description and requirements of this major concentration.

International Studies

Dean of International Studies and Programming: Ahmed Samatar Program Advisors: Igor Zevelev (International Studies), Terry Boychuk (Sociology), Antonio Dorca (Spanish), John Haiman (Linguistics), Birgitta Hammarberg (German Studies and Russian), David Itzkowitz (History), James Laine (Religious Studies), Andrew Latham (Political Science), David Moore (International Studies), Gerald Pitzl (Geography), Linda Schulte-Sasse (German Studies and Russian), Vasant Sukhatme (Economics), Anne Sutherland (Anthropology), Joëlle Vitiello (French), Robert Warde (English), Karen Warren (Philosophy)

The international studies major provides an understanding of transnational and intercultural relations through interdisciplinary work across departments in the social sciences and humanities. It includes curricular, experiential, and skills components which together are designed to give students:

- 1. familiarity with geographical, cultural, political, economic, and historical approaches to global issues;
- 2. working knowledge of the methodologies central to the participating social science and humanities departments;
- 3. an international experience through an appropriate study abroad program;
- 4. competency in a second language, at least equivalent to six courses of college-level work.

General Distribution Requirement:

International Studies 25 and 35 fulfill the general distribution requirement in social science. International Studies 64 and 65 fulfill the general distribution requirement in humanities. Also, courses approved for the International Studies major but offered through other departments may satisfy the general distribution requirements as specified by those departments.

Diversity Requirement:

All courses in international studies meet the international diversity requirement except those numbered 96 and above.

Major Concentration:

Students plan their major in consultation with their international studies advisor, and they choose between the two emphases described below.

Option I. International Studies Major: Social Science Focus

- A) International Studies 10 or 11, Introduction to International Studies.
- B) 6 courses drawn from one of the following departments: Anthropology, Economics, Geography, Political Science, or Sociology. These courses should be chosen with an eye to the international focus of the major.

- C) 3 courses with primary international content drawn from the four social science departments not chosen in "B," and to include courses from at least two departments.
- D) 3 courses with primary international content drawn from these departments: Art, Communication Studies, Dramatic Arts and Dance, English, History, Linguistics, Music, Philosophy, Religious Studies, and the Foreign Languages.
- E) Competency in a foreign language at the following level: French 51 and 52, German Studies 31, Japanese 52, Portuguese through Spanish 25 (*Brazil Today*), Russian 32, or Spanish 51 and 52. Students may meet the competency requirement in a language not regularly offered at the College. In such a case they must demonstrate an equivalent ability in that language, as confirmed by the Dean of International Studies and Programming with appropriate consultation.
- F) One semester of study abroad on a program that focuses at least in part on political and economic processes in an international context, or on the cultural, geographical, and social characteristics of a particular world region and its human populations.
- G) A capstone experience of either a Senior Seminar in International Studies or an independent project developed under appropriate supervision and with the approval of the Dean of International Studies and Programming.

Option II. International Studies Major: Humanities Focus

- A) International Studies 10 or 11, Introduction to International Studies.
- B) 6 courses drawn from one of the following departments: English, French, German Studies and Russian, History, Linguistics, Philosophy, Religious Studies, or Spanish. These courses should be chosen with an eye to the international focus of the major.
- C) 3 courses with primary international content drawn from three additional departments, either among those listed under "B," or from the Departments of Art, Communication Studies, Dramatic Arts and Dance, or Music.
- D) 3 courses with primary international content drawn from these departments: Anthropology, Economics, Geography, Political Science, and Sociology.
- E) Competency in a foreign language at the following level: French 51 and 52, German Studies 31, Japanese 52, Portuguese through Spanish 25 (*Brazil Today*), Russian 32, or Spanish 51 and 52. Students may meet the competency requirement in a language not regularly offered at the College. In such a case they must demonstrate an equivalent ability in that language, as confirmed by the Dean of International Studies and Programming with appropriate consultation.
- F) One semester of study abroad on a program that focuses at least in part on the history, religions, literature, arts, or philosophies of a particular world region.

G) A capstone experience of either a Senior Seminar in International Studies or an independent project developed under appropriate supervision and with the approval of the Dean of International Studies and Programming.

The 14 courses offered for both concentrations (Social Science and Humanities) must include:

- 1) no more than two introductory courses among the six courses in "B" above;
- 2) no more than three introductory courses among the six courses in "C" and "D" above; and
- 3) no more than one internship.

Courses taken to satisfy the language requirement may not be included among the fourteen courses that comprise the major plan, except in cases where the central department under "B" is French, German Studies and Russian, or Spanish. In these cases language work above the intermediate level may be counted among the necessary six courses. Courses taken during study abroad may count, when appropriate, toward the major.

Policy on International Students

All students for whom English is a second language are exempt from the language requirement. International students meet the study abroad requirement by completing a semester at Macalester.

Note: Selected departments in the College offer majors with an international studies emphasis. Such majors are designed for students who do not wish to pursue a full-scale international studies major, but who wish to introduce a significant international component into their disciplinary work. Consult departmental listings or the Dean of International Studies and Programming for further information.

COURSES

Introductory Courses

Open to first year students

10 INTRODUCTION TO INTERNATIONAL STUDIES: GLOBALIZATION

Globalization is upon us. This amounts to unprecedented levels and degrees of cultural interpenetration and civilizational encounter that spare hardly anyone. Most of what animates this condition claims an ancestral line of some historical depth. However, it is the contemporary intensity, velocity, reach, and mutations of these forces that seem to suggest the onset of a new "world time" — one replete with stunning contradictions, pregnant with acute perils and enabling promises. This course introduces students to the phenomenon of globalization by posing these questions, among others: (a) What is globalization, and how does one study it? (b) What are the principal forces (e.g., social groups, ideas, institutions and habits, and ecological circumstances) that shaped and continue to propel it? and (c) What are the critical and concrete consequences of globalization, and how are we to respond effectively? Every fall, open to first and second-year students. (4 credits)

11 INTRODUCTION TO INTERNATIONAL STUDIES: LITERATURE AND GLOBAL CULTURE

One of the most significant trends of the twentieth century has been "globalization:" the shrinking of distances, the greater interpenetration of all the world's peoples, and the rise, perhaps, of a so-called global culture. Yet it is too simple to say, "it's all a big mix," for the questions of how the mixing is done, and who has what stakes in it, are complex. The study of literature illuminates these questions. By reading important recent texts, this course tackles "world" questions: what does it mean to be from

a certain place? what is a culture? and who are we in it? We'll try at all times to link two poles of literary response: our personal reading, and the text in dialogue with the world. Texts will be drawn from U.S. multicultural literature, narratives of sea and space, reflective fictions, and a range of theoretical readings. Every spring, open to first- and second-year students. (4 credits)

Intermediate Courses

25 COMPARATIVE ECONOMIC SYSTEMS (Same as Economics 25)

This course examines the workings of economic systems from the perspective of the incentives facing the firm and consumer. The course provides an introduction to the economics of information and organization which is used to evaluate resource allocation under the specific institutional environment of different economic systems. Our understanding of the incentive system is then used to evaluate the overall economic system. The focus of the course is primarily on the U.S. economy, Japan and the former Soviet Union/Russia. As time permits the course may examine China, Germany and Central Europe. Prerequisite, 19. Next offered spring 2001 (4 credits)

35 ECONOMICS OF THE TRANSITION (Same as Economics 35)

This course surveys the theoretic and empirical literature on Soviet-style central planning and the transition to a market economy. The economic history of central planning is examined with emphasis on the experience of the Soviet Union and its variants in Eastern Europe and China. The tool of analysis is the branch of economics known as the economics of organization and information, which will be used to analyze the operation, strengths, and limitations of central planning. The legacy of central planning forms the backdrop for an examination of the transition to a market economy. Prerequisites, 19 and one 20s level Economics course; 21 or 25 are recommended. Alternate years; next offered 1999–2000. (4 credits).

50 TOPICS

Selected topics in globalization. Recent topics courses include: Global Cities, and International Human Rights. (4 credits)

62 POSTCOLONIAL THEORY (Same as Political Science 62)

Traces the development of theoretical accounts of culture, politics and identity in Africa, South Asia, the Caribbean and related lands since the 1947–1991 decolonizations. Readings include Fanon, Said, Walcott, Ngugi and many others, and extend to gender, literature, the U.S., and the post-Soviet sphere. The course bridges cultural, representational, and political theory. Prior internationalist and/or theoretical coursework strongly recommended. Alternate years; next offered spring 2000. (4 credits)

64 CULTURE AND REVOLUTION (Same as Russian 64)

This course examines the relationship between cultural and political change during three very different revolutions: in France of 1789, Russian 1917, and the more recent events in Iran. How do people change when governments are overturned? How do revolutions shape the consciousness of their citizens? Do people understand events as revolutionaries intend them to? To answer these questions, we will examine symbols and political ideologies, mass media outreach, education and enlistment, changing social identities, the culture of violence, popular participation and resistance, as well as other issues. Readings will include ideas that inspired the revolutions, including Voltaire and Rousseau, Marx and Lenin, Khomeini and the Koran. We will read contemporary accounts, both sympathetic and antagonistic, and look at popular culture to see how events were understood. Fashion and etiquette, comics and caricatures, movies and plays are among the materials used. Alternate years, next offered fall 2000. (4 credits)

65 TRANSLATION AS CROSS-CULTURAL COMMUNICATION (Same as Russian 65)

When communication takes place across language barriers, it raises fundamental questions about meaning, style, power relationships, and traditions. This course treats literary translation as a particularly complex form of cross-cultural interaction. Students will work on their own translations of prose or poetry while considering broader questions of translation, through critiques of existing translations, close comparisons of variant translations, and readings on cultural and theoretical aspects of literary translation. Advanced proficiency in a second language required. Spring semester. (4 credits)

Advanced Courses

Students should have at least two courses in international studies including International Studies 10 or 11, or the permission of the instructor.

88 SENIOR SEMINAR: UNIVERSALISM: LITERATURE, CULTURE, PHILOSOPHY

Rapid globalization in all areas of modern life raises afresh the age-old question of universalism: do we live in one world or many? This course reviews a series of classic inquiries into the politically, culturally, and philosophically charged notion of the universal, with an emphasis on contemporary thought in many traditions. Ranging across works in world-historical studies, Russia's "Eurasian" school, theories of *Weltitieratur*, debates over the universal in the Americas and the Caribbean, contemporary writing on global culture, and recent work in global business, we will ask: in whose interest is the universal? is there any local left? does global mean homogeneous? is today's "unification" new, or only an acceleration of millennia-old processes? is it possible to be cosmopolitan? is there any center left, and if so, who or what occupies it? A course less about research or fact than about thought. Prerequisite: senior standing. Next offered in 1999–2000. (4 credits)

89 SENIOR SEMINAR: PERSPECTIVES ON WORLD ORDER

Almost no one denies that the end of the Cold War eliminated a highly conspicuous and draining bifurcation of international society. However, with the subsidence of the astonishments that accompanied this historic event, new and contentious arguments about the nature and direction of post-Cold War transnational life come to the fore. For some, the situation is seen as the disappearance of an aberration, the winning of a wager, and the return of the "natural" processes of modernization and progress, undergirded by free markets and liberal democracy and pioneered by Europe. Others take a counter-view, and read the demise of the Cold War as a moment of truth: the unveiling of a deeper, more complicated and multi-faceted divide—one that requires fundamental rethinking as well as reconstitution of the order of the world. This senior seminar interrogates these and other interpretations of the interregnum and their correlative visions. Prerequisite: senior standing. Every spring. (4 credits)

96 INDEPENDENT PROJECT

This is an opportunity for advanced students to pursue further study in a particular aspect of International Studies. Usually conducted in a tutorial format, an independent project must begin with the submission of a brief proposal to the supervising faculty member and the Dean of International Studies and Programming. Prerequisites: International Studies 10 or 11 and Junior standing. (4 credits)

97 INTERNSHIP

The internship is a rare occasion for students to take advantage of special situations where the intellect meets practical experience in international affairs. Any student who intends to undertake an internship must first enlist the sponsorship of one faculty and an on-site supervisor. Together, these three persons should agree on the specific objectives of the project as well as a procedure to gauge progress towards a satisfactory closure. The internship can be taken up during a semester or summer no earlier than sophomore standing. Prerequisites: International Studies 10 or 11, sophomore standing, sponsorship by a member of the faculty associated with International Studies coupled with the approval of the Dean of International Studies and Programming. (4 credits)

Japan Studies

Sears Eldredge (Dramatic Arts), Jerry Fisher (History and Communication Studies), Aiko Hiraiwa (Japanese), Tomoko Hoogenboom (Japanese), Sarah Pradt (Japanese), Satoko Suzuki (Japanese), Yue-him Tam (Director, History)

The purpose of the Japan studies major is to help students understand Japanese culture, both in the past and the present, through an historical and thematic study of its language, literature, history, religions, and arts. The major concentration 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 a research 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, business, international trade, and public and foreign service.

Program Planning

The key to a coherent Japan Studies major for each individual is careful planning by the student with the assistance of his or her advisor or the Japan Studies director. Students are urged to consult with the Japan Studies director to select an appropriate advisor.

Programs in Japan

Macalester has three official overseas studies programs in Japan. Two are located in Tokyo at leading private universities, Waseda University and Sophia University. The third is a unique sister school relationship with Miyagi Kyoiku University, a Japanese national university located in Sendai. In addition, Macalester students study in Japan at a variety of other Japanese institutions. Students are advised to consult with the Japan Studies director 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 advisor. It consists of at least twelve courses to include Intermediate and Advanced Japanese Language (Japanese language 31–32, 51–52), History of Traditional Japan (History 76), History of Modern Japan (History 77), Media/Popular Culture in Postwar Japan (History 73), East Asian Studies Seminar (History 80), two courses on Chinese history or East Asian history, and other courses focusing primarily or exclusively on Japan, which are approved by the program director. Majors are also required to participate in an overseas program in Japan approved by the director of the Japan Studies program for the duration of at least one academic term. No more than four courses (16 credits) above the elementary level in the Japanese language may be counted toward a major.

The senior capstone requirement in Japan Studies may be satisfied by taking East Asian Studies Seminar (History 80) or successful completion and defense of a thesis on a topic approved by the student's advisor.

The twelve courses constituting the major will be selected with the assistance of the student's advisor and with the approval of the program director. Among the courses most likely to be included are the following:

Japanese Language and Literature

- 31 Intermediate Japanese I
- 32 Intermediate Japanese II
- $50\ \mathrm{Images}$ of Masculine and Feminine in Japanese Culture
- 50 Postwar Japanese Literature in Translation
- 50 Japanese Film
- 51 Advanced Japanese I
- 52 Advanced Japanese II

62 Analyzing Japanese Language

71 Fourth Year Japanese I

72 Fourth Year Japanese II

95 Tutorial

History

14 Introduction to East Asian Civilizations

73 Media/Popular Culture in Postwar Japan

74 History of Traditional China

75 History of Modern China

76 History of Traditional Japan

77 History of Modern Japan

80 East Asian Studies Seminar

Religious Studies

41 Religions of East Asia

Dramatic Arts

68 Asian Theatres: Tradition, Continuity, and Change

Art

76 Far Eastern Art

Independent Project and other Topics Courses may also be included:

Japanese Language 96 Independent Project in Japanese Language

History 50 Topics in East Asian History

Religious Studies 50 Topics in East Asian Religion

In addition to the above courses students may present independent 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.

Special arrangements may also been made 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 director. Course offerings in the program vary from year to year. Please discuss relevant course offerings with the Japan Studies director.

Minor Concentration

A minor concentration consists of seven courses chosen in consultation with the director. Two courses in Japanese language and two courses in East Asian history are required among these seven courses.

Japanese Language Program

Full Time Faculty: Sarah Pradt (Acting Director), Satoko Suzuki (Program Director), Tomoko Hoogenboom

Part Time Faculty: Aiko Hiraiwa

The Japanese Language Program offers students the opportunity to study a language and a literature which can open the doors to understanding the rich cultural heritage of Japan as well as examining the intellectual, economic,

political and social structures of one of the modern world's most dynamic nations. The objectives of the Japanese Language Program are: a) to provide a firm foundation for those contemplating graduate level work in Japanese language and literature as well as related subjects; b) to provide language training for non-Japan Studies majors for study in their own related fields, for travel and for professional needs; c) to provide all students with the opportunity to broaden their liberal arts education through the study of an Asian language and culture.

The Japanese Language Program does not offer a concentration. Students who focus on Japanese language usually major or minor in Japan Studies.

Career Orientation for Japanese Language Specialists

Recent graduates who have focused their studies on Japanese language and literature are in great demand in fields such as education, international banking and commerce, law, foreign service, studio and design art and journalism. Others have gone on to professional schools or to graduate programs in Japanese language and literature, linguistics and teaching English as a second language, history, economics and international business.

Programs In Japan

See the Japan Studies listing in this catalog.

General Distribution Requirement

All courses in the Japanese language program satisfy the general distribution requirement in the humanities.

Diversity Requirement

The courses in the Japanese language program which satisfy the international diversity requirement are 51, 52, 62, 71 and 72.

COURSES

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. Fall semester. (4 credits)

12 ELEMENTARY JAPANESE II

 $Continuation \ of \ 11. \ Prerequisite, \ Japanese \ 11 \ or \ its \ equivalent. \ Spring \ semester. \ (4 \ credits)$

31 INTERMEDIATE JAPANESE I

Continuation of 12. While the emphasis is placed on listening and speaking skills, students continue their study of kanji and begin to work with short texts. Prerequisite, Japanese 12 or its equivalent. Fall semester. (4 credits)

32 INTERMEDIATE JAPANESE II

Continuation of 31. Prerequisite, Japanese 31 or its equivalent. Spring semester. (4 credits)

50 TOPICS

Topics courses for 1999–2000 are *Images of Masculine and Feminine in Japanese Culture* in the fall semester and *Japanese Film*, *Education in Japan*, and *Postwar Japanese Literature in Translation* in the spring semester. (4 credits).

51 ADVANCED JAPANESE I

Continuation of Japanese 32. Emphasizes continued development of conversation skills, while not neglecting the development of reading skills. Prerequisite, Japanese 32 or permission of instructor. Fall semester. (4 credits)

52 ADVANCED JAPANESE II

Continuation of Japanese 51. Emphasizes strong development of reading and writing skills. Prerequisite, Japanese 51 or permission of instructor. Spring semester. (4 credits)

62 ANALYZING JAPANESE LANGUAGE (Same as Linguistics 62)

Our perception is greatly influenced by the language we use. Without knowing, we limit ourselves to thinking that our current perspective is the only way by which to view ourselves and the world. By analyzing Japanese, students can experience perceptual and cultural systems that are different from their own. At the same time, students may also discover that there are certain qualities that are common even in "exotic" languages such as Japanese.

What is the difference between subject and topic (Topic marker, which is not used in English, is prominent in Japanese)? Why can't you translate into Japanese "he is cold" word for word? How do women talk differently from men? In what kind of occasion should we use honorific language? What is "in-group" as opposed to "out-group" and how is that societal distinction reflected in language? This course offers answers to these questions that students of Japanese commonly have. Prerequisite, Japanese 32, 35, or permission of instructor. Spring semester. (4 credits)

71 FOURTH YEAR JAPANESE I

The course aims at the acquisition of advanced level proficiency. Tasks involving four skills (speaking, listening, reading and writing) are incorporated in the course content. Students are given opportunities to develop abilities to narrate and describe, to understand main ideas and most details of connected discourse on a variety of topics beyond the immediacy of the situation, to read prose several paragraphs in length, dealing primarily with factual information, and to write routine social correspondence and join sentences in simple discourse of at least several paragraphs in length on familiar topics. In addition, students will be taught language use that is sociolinguistically appropriate in specific situations. Prerequisite, Japanese 52 or permission of instructor. Fall semester. (4 credits)

72 FOURTH YEAR JAPANESE II

The course is a continuation of Fourth Year Japanese I. It aims at the acquisition of advanced level proficiency. Tasks involving four skills (speaking, listening, reading and writing) are incorporated in the course content. Students are given opportunities to understand the main ideas of extended discourse, to read texts which are linguistically complex, and to write about a variety of topics. Prerequisite, Japanese 71 or permission of instructor. Spring semester. (4 credits)

95 TUTORIAL

Prerequisite, permission of the instructor. Tutorials may be arranged for special kanji study or for supervised reading. Fall and spring semesters. (1-4 credits)

96 INDEPENDENT PROJECT

Prerequisite, permission of the instructor. (4 credits)

98 PRECEPTORSHIP

Prerequisite, permission of the instructor. (4 credits)

Latin

See Classics

Latin American Studies Program

Fabiola Franco (Spanish), Galo González (Spanish), Leland Guyer (Spanish), Teresita Martínez-Vergne (Coordinator, History), James Stewart (History)

Deriving from Western and non-Western traditions, Latin America is defined by rich and multiple historical processes, economic paths, political trajectories, and cultural developments. Because of the complexity that comes from its pre-Columbian past, centuries of colonial domination, and national identities constructed out of native, African, and European cultural elements, Latin America continues to hold the attention of foreign governments, the business world, travelers, artists, novelists, and intellectuals.

The Latin American Studies Program exists for two primary reasons. (1) We are aware that knowledge does not exist in isolation from or unrelated to other knowledge. We believe that the interconnectedness of disciplines and the variety of world views that define Latin American studies are fundamental to the breadth and depth of comprehension that is important in a changing world. (2) A major in Latin American Studies is excellent preparation for graduate and professional schools, careers and personal enrichment.

The program is built upon the foundation of a departmentally based curriculum that provides intellectual coherence. This disciplinary-based concentration is enriched with a multidisciplinary component in Latin American subjects. All students fulfill language and literature requirements in accordance with their particular interests and goals. Majors also complete a capstone experience that involves advanced research.

Students admitted to the Latin American Studies Program must design a 13-course major. These courses are divided into three areas.

I. The Disciplinary Focus—6 Courses

(of which no more than two may be at the introductory level)

These classes are normally selected from one of the following fields of study:

- a) Anthropology
- b) Economics
- c) Geography
- d) History
- e) Political Science
- f) Religion
- g) Sociology
- h) Spanish

A student may also make a case for a six-course concentration in a department other than those listed above, though such concentrations will be viewed as exceptions and must be accompanied by a persuasive rationale. When working in departments that offer courses with a specific focus on Latin America, students must include these courses as part of their six-course plan.

II. The Multidisciplinary Requirement (Related Studies)—4 Courses

(of which no more than one may be at the introductory level)

Courses submitted to fulfill this requirement cannot be drawn from the department chosen for the six-course disciplinary focus; they must deal with Latin America, and they may not include language or literature classes.

III. The Language Requirement—3 Courses

Students must attain proficiency in Spanish and/or Portuguese. *One course* must be chosen from the following language courses: Spanish 51, Visions of Hispanic World: Oral Expression; Spanish 52, Visions of Hispanic World: Written Expression; or Spanish 21, Intensive Portuguese; and *two courses* in Latin American literature. Since these latter courses are taught in Spanish, students choosing Portuguese to fulfill their language requirement should take Spanish 25 (Brazil Today), and one independent study in Brazilian literature.

It is advisable that students majoring in Latin American Studies acquire proficiency in both languages. Those who do so may combine any three of the courses described above to fulfill this part of the major, though their choices must include no more than one advanced language class.

The Capstone Experience

To meet this requirement students choose *one* of the following: a) any senior seminar with Latin American content; b) an independent project on a Latin American topic that includes a major paper; or c) an honors thesis with a Latin American focus. The capstone course will be included among the thirteen courses required for the major, as delineated above. It may form a part of the needed work for Requirements I, II, or III, depending on the nature of the experience in question.

Study Abroad Requirement

A semester of study abroad in Latin America is required of all students. International students from this region must fulfill the requirement in a country other than their own. Normally, a maximum of two courses from a semester of study abroad may be included as part of the 13-course major, and a maximum of four courses from a year of study abroad. In certain cases, a student may be allowed to apply a larger number of courses to the major, but such additional credits must be approved on an individual basis, and for compelling reasons. Study abroad work may be incorporated into Requirements I, II, or III, as appropriate.

Additional Requirements

- 1) No course used to meet one requirement can be used for another.
- 2) A maximum of *one* internship may be included in the major.
- 3) Students choosing a six-course concentration in Spanish to fulfill Requirement I will meet a set of demands under Requirements II and III that differs somewhat from the seven-course pattern described above. These

students must take Spanish 21 (Intensive Portuguese) to fulfill the language component of the program, supplemented by *six* multidisciplinary courses. These six courses may (but need not) include Spanish 25 (Brazil Today) or an independent study on Brazilian literature, or both.

For further details see the program faculty.

Legal Studies Program

Martin Gunderson (Philosophy), Michal McCall (Sociology), Paul Solon (History), Norman Rosenberg (Director, History)

This minor is available to students who complete a major or a minor in the affiliated departments of Philosophy, Psychology, Sociology, Political Science, or History. It is designed to give students a broad, yet structured, academic grounding in interdisciplinary approaches, within the liberal arts, to the study of law and legal culture.

Requirements

- 1. Completion of a major or a minor in one of the "affiliated departments"—Philosophy, Political Science, Sociology, or History.
- 2. With the assistance of a Legal Studies adviser from the affiliated department in which they are seeking a major or a minor, students will select six courses from those approved by the Legal Studies Steering Committee for their minor in Legal Studies. No more than two courses under the 90 level may be selected from any single department. It is vital to consult with an adviser affiliated with Legal Studies since the Program will be offering a variety of special topics courses that count toward the minor.
- 3. One of the six required courses may be an internship related to the field of Legal Studies. This internship must be selected in consultation with the Director or one of the affiliated faculty listed above.

COURSES

50 TOPICS

Topics courses allow students to explore special issues in Legal Studies from inter-disciplinary perspectives. Typically, these courses will be cross-listed with one of the affiliated departments. (4 credits)

96 INDEPENDENT PROJECT

All individual projects require the approval of the Director of the Legal Studies Program. Fall and spring semesters. (4 credits)

97 INTERNSHIP

All internships require approval of the Director of the Legal Studies Program. Fall and spring semesters. (4 credits)

Courses in Affiliated Departments:

History: 44 U.S. Since 1940 50 Special Topics in Legal History: The Rule of Law 20th Century American Legal "Reelism" 96 Independent Study in Legal History

Philosophy:

- 25 Ethics
- 50 Special Topics in Philosophy and Law
- 73 Philosophy of Law
- 96 Independent Study in Philosophy and Law

Political Science:

- 50 Special Topics in Politics and Law
 - The Rule of Law
- 56 U.S. Constitutional Law and Thought
- 57 U.S. Civil Rights and Civil Liberties
- 77 Contemporary Legal Problems
- 88 Research Seminar in Law and Theory
- 96 Independent Study in Politics and Law

Sociology:

- 16 Deviance and Social Control
- 50 Special Topics in the Sociology of Law
- 96 Independent Study in the Sociology of Law

Linguistics Program

John Haiman (Director), Sarah Dart, Satoko Suzuki (Japanese)

As far as we know, language is unique to the human species. It is by far the most complex behavior of which human beings are capable. But at the same time, unlike the ability to play master chess or perform on the parallel bars, it is democratically distributed among all human beings.

Both philosophical speculation on language (e.g. Plato's *Cratylus*), and the scientific study of its form (e.g. Panini's *Astadhyayi*) are very old. With fitful interruptions, the study of language has been pursued by philosophers and grammarians for well over two millennia. In the nineteenth century, linguistic science became the indispensable adjunct of prehistory and archaeology, while in the first part of the twentieth century, it became one of the branches of ethnography as well. Within the last thirty years, the formal study of language structure initiated by Noam Chomsky has made linguistics a central discipline, together with computer science and psychology, of the emerging discipline of cognitive science; the study of meaning, and its relationship to linguistic form, have made linguistics, together with rhetoric and literary theory, the major discipline in semeiotics; and the study of language in its social context, revolutionized by the work of William Labov, has made linguistics a branch of quantitative sociology as well.

Linguistics therefore has a vital relation not only to all the humanities and social sciences, but also to branches of mathematical theory and evolutionary biology. It is the cross-roads discipline par excellence. The raw data of linguistics—spoken and written language—are all around us. Moreover, as native speakers of at least one language, all human beings are expert on language. Yet paradoxically, the interpretation and analysis of these data are still a matter of invigorating controversy. The last word has not been spoken on

the issues raised in the *Cratylus*, and the ideal grammar of any language is no closer to our grasp than it was to Panini, whose Sanskrit grammar is still recognized as "one of the greatest monuments of the human intellect". As language is the most democratically distributed human cognitive capacity, so linguistics is the most accessible of the sciences. Students are invited to contribute to and enrich with their ideas, this tradition of inquiry.

In addition to its contribution to a humanistic and scientific education, linguistics offers students tools for the learning and the teaching of all languages and careers based on this, and for the pursuit of post-graduate studies in fields as disparate as electrical engineering and the law.

General Distribution Requirement

All linguistics courses currently satisfy the general distribution requirement in the social sciences.

Diversity Requirement

The course in linguistics which meets the international diversity requirement is numbered 62. The course in linguistics which satisfies the domestic diversity requirement is numbered 36.

Major Concentration

- 1. Ten foundation courses in linguistics, one of which must be Linguistics 87, Field Methods in Linguistics.
- 2. Students are required to achieve proficiency in a second language, where "proficiency" and "language" are defined as a) native fluency in a natural language other than English; or b) completion of six semesters of a language offered at Macalester; or c) equivalent competence in any natural language, as assessed by a set of written tests involving translation into and out of the target language, and composition in the language; or d) completion of a full sequence of courses in a computer programming language.

The senior capstone requirement in linguistics may be satisfied by taking Linguistics 87, Field Methods in Linguistics.

Core Concentration

- $1. \ Six foundation \ courses \ in \ linguistics, one \ of \ which \ must \ be \ Linguistics \ 28, \ Linguistic \ Analysis.$
- 2. Six supporting courses from other departments.

Minor Concentration

1. Six foundation courses in linguistics.

COURSES

21 LANGUAGE AND GENDER

As social beings, we humans order our existence along the many dimensions which link us together and distinguish us from each other. One of the most salient of these is gender, whose roots lie in

biological sex distinctions. Since language is the primary symbolic system by which we express our experiences, it is no surprise that language and gender interact in intricate ways in the social life of human beings.

This course explores the relationship between language, gender, and society. Do men and women use language differently? How do these differences vary across cultures? In what ways do they reflect and/or maintain gender roles in society? In examining these questions, we will concentrate on linguistic approaches developed to deal with these issues, while at the same time drawing on insights from anthropology, sociology, psychology, and women's studies. No prerequisites. Fall semester. (4 credits)

23 ADVERTISING AND PROPAGANDA

One of the functions of language is to persuade: in advertising, this function is of course overt. North Americans on the whole are far more exposed to commercial advertising, arguably the most sophisticated propaganda in human history, than to the cruder versions we imbibe in church and school, or associate with Nazi Germany or Orwell's 1984. On this subject, we are experts: hip to the "white noise" on TV, on packages, and in glossy magazines. Yet surprisingly, we are unable to tune it out completely.

The main purpose of this course is to apply the concepts and techniques of linguistic semantics to the analysis of advertising and the ideology which it both nurtures and reflects. What is the semeiotic function of Ronald MacDonald and The Great Root Bear? Why did so many otherwise rational Americans believe that the person most likely to blow up the world was Muammar (Who?) Khaddafy? What are the propaganda consequences of the collapse of the Evil Empire? Why are we fascinated by Madonna and bored by Cesar (Who?) Chavez? Why do women buy beauty products endorsed by models who look like toothpicks? Why are advertisements which make fun of themselves so relatively recent, and why are they so effective?

Having learned to analyze successful propaganda in a variety of media, students are expected to produce a TV commercial in favor of some hard-to-sell (typically, "virtuous") policy or product. There are no prerequisites. Spring semester. (4 credits)

24 INTRODUCTION TO LINGUISTICS (Same as English 35)

This course provides a general introduction to the major questions students of language have been grappling with over the last 2,500 years: why do languages differ the ways they do? Why do they change over time? Why are all languages so easy for children to learn, and so hard for adults? Are there significant respects in which they are all the same? What distinguishes human languages from other modes of communication? What are grammatical rules, and where do they come from? Do they reflect properties of the human mind, of the natural world, or of the social order? Are languages like biological organisms (after all, they evolve, reproduce themselves, adapt, and become extinct)? Is there some correlation between the form of an utterance and the function for which it is used?

There are no prerequisites: but this course is the prerequisite for almost every higher level course within the Linguistics major. Fall semester. (4 credits)

25 THE SOUNDS OF LANGUAGE

Nearly all natural languages are spoken. Biological properties of the human ear, pharynx, larynx, tongue, and lung impose limits on the sounds of human languages, which can be studied from both a biological and an acoustic point of view. (Comparative anatomical study of early hominid remains provides us with some of our best evidence for the evolution of language.)

In this course you will be trained to produce and recognize (almost) all the sounds which human languages make use of, and to develop a systematic way of analyzing and recording them. You will also be introduced to the sound spectrograph, which translates acoustic signals of frequency, amplitude, and duration into visible, quantifiable images. Exercises in a variety of dialects of English, and in a variety of foreign languages, some familiar, and some totally exotic, are also featured. (This course is especially recommended for students of foreign languages.) No prerequisites. Fall semester. (4 credits)

26 ENGLISH SYNTAX

This course deals with the formal properties of discourse organization above the word level. Using local English as our test case, we introduce and refine the conceptual apparatus of theoretical syntax:

syntactic, semantic, and pragmatic categories, the ways they are coded in English, phrase structure rules and recursion, semantic and pragmatic motivations for formal structures, movement rules, anaphora, and dependence relations. Some properties of English are (probable) language universals. No prerequisite. Two years in every three. Next offered Fall 2000. (4 credits)

27 PHONOLOGY

Although no two utterances ever sound exactly the same, speakers of a language don't function like tape recorders; they overlook distinctions to which mechanical recording devices are sensitive, and they "hear" contrasts which are objectively not there. What we (think we) hear is a product of what our grammar tells us; speakers of English and speakers of Swahili thus inhabit different perceptual worlds. Unlike phonetics, phonology may be seen as a branch of psychology.

This course examines the nature of the complex links between these rather abstract language-specific perceptual worlds and the real world of actual sounds, concentrating on 'natural' links and processes common across languages. Prerequisite, Linguistics 25, *Sounds of Language*. Two years in every three. Next offered Spring 2001. (4 credits)

28 LINGUISTIC ANALYSIS

The first prerequisite to understanding a linguistic message is the ability to decipher its code. This course is training in the decoding of grammar. Through practice in problem-solving, you will develop expertise in the grammatical systems of a wide sample of the world's language types. Prerequisites, Linguistics 24, *Introduction to Linguistics*. Two years in every three, next offered Fall 1999. (4 credits)

29 LANGUAGE AND ALIENATION

We are living in the midst of an "irony epidemic," where two of the most frequently used expressions in current American English are "like" (as in "Do you, like, wanna leave?") and "whatever" (as in "And I'm like, whatever"). Both of these are literally advertisements that words are not the real thing (at best, they are "like" it), and that they don't matter (since "whatever") you say is equally a matter of indifference).

This course takes as its point of departure the description of sarcasm and irony in spoken American English, and proceeds to an investigation of how the peculiar message of sarcasm ("I don't mean this") is conveyed in other languages, and in the media. Sarcasm is only one linguistic expression—possibly the very simplest—of what is known as "the divided or performing self": others include affectation, the prevalent banter known as "just kidding," gobbledygook, posturing or grandstanding, euphemism, doublespeak, simple politeness, and ritual language, some of which have been extensively described in one or more languages, some of which are scientifically unstudied. (Banter, for example is particularly widespread among academics, both students and teachers, and nothing whatsoever has been written about how it works, and why it is so common.) In fact, it is more than likely that some "divided self" discourse genres have not even been named, although they are thoroughly familiar.

Not surprisingly, the study of cheap talk connects intimately with aspects of pop culture. More surprising, however, is the idea that the cheapness of talk is not only a currently recognized property of our language, but that it might serve to define the very essence of human language in general and offer insights into the origins and nature of our ability to speak at all.

Although the course will reach a high level of abstraction, where design features of language such as displacement and grammaticalization are discussed, there are no prerequisites. Two years in every three, next offered Fall 1999. (4 credits)

31 BILINGUALISM

Bilingualism is not a field in itself, but a social phenomenon that can be examined from the points of view of different disciplines. Topics covered will include (but not be limited to) the sociological aspects of diglossia and biculturalism and their political consequences, the effects of bilingualism on language structure (linguistics), and cognitive function (psychology), the acquisition (and loss) of two or more languages by children and adults, bilingual education programs, and the sociolinguistic phenomenon of code-switching in discourse. No prerequisites. Two years in every three. Next offered Fall 1999

34 ETYMOLOGY AND THE ENGLISH LANGUAGE (Same as English 34)

This course is a study of the histories of English words, emphasizing the relation of Greek and Latin to contemporary English and the development of vernacular American English. Through the course students will learn how etymology operates as a branch of historical linguistics. Not offered 1999–00. (4 credits)

35 LANGUAGE CHANGE

All languages constantly evolve. In the relatively short time (about 1,200 years) that English has been written, both the written and spoken forms have changed beyond recognition, and they continue to do the same today, in spite of the best intentions of the linguistics faculty and other guardians of the public weal. This course concentrates on how languages change and why; internal and external factors which cause, accelerate, or inhibit language change; recurrent patterns of change; genetic classification of languages; and the origin of language. No prerequisites. Two years in every three. Next offered fall 1999. (4 credits)

36 SOCIOLINGUISTICS

Deals with language shift and maintenance in the USA and Europe and presents basic concepts in the understanding of relationships between social and linguistic phenomena. Also explores the microlevel study of language performances, dealing with gender, class, nationalism, regional and occupational matters as they relate to how people use language. No prerequisites. Two years in every three. Next offered spring 2001. (4 credits.)

50 TOPICS

Past offerings include: Spoken and Written Language; Metaphor; Freedom, Speech and Action. (4 credits)

56 EXPERIMENTAL PHONETICS

This course concentrates on the acoustic structure of the speech signal, using the sound spectrograph to measure familiar (and phonologically simple) coded features like duration, amplitude, timbre, voicing, nasalization, aspiration, and syllabicity. The sound spectrograph is also the only means for the study of uncoded or partially coded aspects of the speech signal, such as speaker's age, gender, personality, mood, and even stance towards his/her message. Students are expected to write a research paper on a topic of their choosing, analyzing data they have collected and recorded. Prerequisite, Linguistics 25, Sounds of Language. Next offered spring 2000. (4 credits)

62 ANALYZING JAPANESE LANGUAGE (Same as Japanese 62)

Our perception is greatly influenced by the language we use. Without knowing, we limit ourselves to thinking that our current perspective is the only way by which to view ourselves and the world. By analyzing Japanese, students can experience perceptual and cultural systems that are different from their own. At the same time, students may also discover that there are certain qualities that are common even in "exotic" languages such as Japanese.

What is the difference between subject and topic (Topic marker, which is not used in English, is prominent in Japanese)? Why can't you translate into Japanese "he is cold" word for word? How do women talk differently from men? In what kind of occasion should we use honorific expressions? What is "in-group" as opposed to "out-group" and how is that societal distinction reflected in language? This course offers answers for these questions that students of Japanese commonly have. Prerequisite, Japanese 32, Japanese 35, or permission of instructor. Spring semester. (4 credits)

64 PHILOSOPHY OF LANGUAGE (Same as Philosophy 64)

A study of a broad range of topics in order to understand why the study of language has mattered so much to twentieth century philosophy. Topics will range from more technical problems (theories of meaning and reference; proper names, definite descriptions, and empty reference terms; synonymy and analyticity; universals and natural kinds) to broader questions including both the variety of human discourse and the relationship between language, thought, and reality (language games; speech acts; private languages; poetic and metaphorical uses of language; language and social change; non-Western theories of meaning). Readings typically include writings by Russell, Wittgenstein, Austin, Quine, Searle, Kripke, Davidson, and Rorty. Prerequisites, Philosophy 20 and 31 or permission of the instructor. Alternate years, next offered fall 2001. (4 credits)

72 PSYCHOLOGY OF LANGUAGE (Same as Psychology 72)

An examination of psychological factors that affect the comprehension of oral and written language. Topics include the origin of language, how language can control thought, the role of mutual knowledge in comprehension, and principles that underlie coherence in discourse. Includes readings from psycholinguistics, philosophy, sociolinguistics, gender studies, social psychology, and especially from cognitive psychology. Emphasis is placed on current research methods so that students can design an original study. Prerequisites: Psychology 37, or two Linguistics classes, or permission of the instructor. Spring semester. (4 credits)

87 FIELD METHODS IN LINGUISTICS

The vast majority of the world's languages cannot be learned from textbooks or programmed tapes. They have never even been recorded. In this course, which is required for all linguistics majors, students meet with one or more bilingual speakers of a language unknown to them, and attempt by means of elicitation and analysis of texts to understand its structure. Prerequisite, Linguistics 24 Introduction to Linguistics plus at least ONE of Linguistics 26, English Syntactic OR Linguistics 27 Phonology OR Linguistics 28, Linguistic Analysis. Spring semester. (6 credits)

96 INDEPENDENT PROJECT

Prerequisite, permission of the instructor. Limit of one may be applied toward the major unless the student is carrying out an honors project. (4 credits)

98 PRECEPTORSHIP

Prerequisite, permission of the instructor. (4 credits).

Mathematics and Computer Science

Full Time Faculty: David Bressoud (Chair), Susan Fox, Thomas Halverson, Joan Hutchinson, Daniel Kaplan, Richard Molnar, Daniel O'Loughlin, Wayne Roberts, Karen Saxe, G. Michael Schneider, Stan Wagon

Part Time Faculty: David Ehren, Daniel Schwalbe

Separate brochures, one for Mathematics and one for Computer Science, are available from the Department or our Web site. The brochures describe the full range of activities in the department, the sequencing of courses for the next few years, special faculty interests, and the activities of recent graduates.

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, operations research, statistics, or computer science
- careers involving applied mathematics in the natural sciences, social sciences, business or industry
- -elementary and secondary school teaching

Students and faculty in the department cooperate in sponsoring programs including guest speakers, films, student presentations, and social and recreational occasions. Macalester has an established student chapter of the Association for Computing Machinery and active chapters of Pi Mu Epsilon, the national honor society for mathematicians, and Upsilon Pi Epsilon, the national honor society for computer scientists.

Placement

Entering students who have studied calculus in high school and who wish to enroll in a course more advanced than Calculus I should consult the department of mathematics about choices among Mathematics 22, 26, 27, 36, 37. Students with weak high school preparation in mathematics are encouraged to consult with the Math Counselor in the Learning Center.

Mathematics Major/Core/Minor with Statistics Emphasis

Students interested in statistics who wish to pursue careers in the natural sciences, social sciences, or business and industry should consider the option of earning a mathematics minor/core with statistics emphasis. Those who wish to pursue graduate work in operations research, statistics, or in an area of another discipline which makes heavy use of statistics (such as biostatistics, econometrics, etc.) should consider the option of a mathematics major with statistics emphasis.

Non-majors/cores/minors who anticipate completing a senior capstone or honors project with a large statistical component are encouraged to take Math 27 and Math 34.

General Distribution Requirement

All courses in the mathematics department satisfy the general distribution requirements of the natural sciences and mathematics except courses numbered 19, 96 and 97. Mathematics 16 is especially appropriate for those students not needing specialized skills or training in mathematics.

Diversity Requirement

The course in the mathematics department that satisfies the international diversity requirement is 50, Life and Mathematics of Srinivasa Ramanujan.

Major Concentration

Students considering a major frequently need help in understanding what one does with a particular major, or how a major fits together with their interests. To provide better guidance, to encourage students to see that the major consists of more than a sequence of individual courses, and to establish for each student a basis for evaluating progress by means that go beyond classroom tests, all students considering a major in the department are strongly encouraged to fill out as early as possible a planning form available from the department secretary.

Requirements for a major in mathematics are:

1. Mathematics 26, 36, 37, and at least 20 semester credits from courses numbered 40–96. Majors are strongly encouraged to take Mathematics 26 before taking a course at the 40-level. At least one 4-credit course must be numbered 51–59 and at least one numbered 60–79. The 60- or 70-level course must be taken at Macalester.

- 2. Computer Science 20 or 23 or an equivalent course.
- 3. All students majoring in mathematics must take and complete the 1 credit class Mathematics 89, Senior Capstone Seminar, each semester of their senior year in which they are in residence. (Note: Double majors in mathematics and computer science only need to take one capstone seminar—either Mathematics 89 or Computer Science 89.) In addition, as part of the capstone experience students will write a senior paper and present the results at a departmental conference. This paper will commonly be an extension of a project report or paper previously written for a mathematics course. It may, however, take the form of an honors paper or other independent work that has prior departmental approval.

Students preparing for graduate work in mathematics should include courses 56, 57, and some of 71, 73, 76, 77 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 44, 51, and at least one of 68, 75, 78.

Students wishing to be licensed for secondary education in Minnesota must complete the major as described above. Specific requirements within the major are in flux. See Professor David Bressoud for current requirements.

Requirements for a major with a statistics emphasis are:

- 1. Computer Science 20 or 23 or equivalent. Mathematics 26, 27, 34, 36, 37, 44, 51, and at least 12 semester credits from courses numbered 40–96. Majors are strongly encouraged to take Computer Science 20 and to take Mathematics 26 before taking a course at the 40-level. At least one 4-credit course must be numbered 60–79. The 60- or 70-level course must be taken at Macalester. It is recommended that students opting for a major with statistics emphasis take Mathematics 57 and Mathematics 78 as their 60- or 70-level course.
- 2. All students majoring in mathematics with statistics emphasis must take and complete the 1 credit class Mathematics 89, Senior Capstone Seminar, each semester of their senior year in which they are in residence. (Note: Double majors in mathematics and computer science only need to take one capstone seminar—either Mathematics 89 or Computer Science 89.) In addition, as part of the capstone experience students will write a senior paper and present the results at a departmental conference. It is strongly recommended, although not required, that this paper be of a statistical nature. This paper will commonly be an extension of a project report or paper previously written for a mathematics course. It may, however, take the form of an honors paper or other independent work that has prior departmental approval.

Core Concentration

Requirements for a core in mathematics are:

1. Mathematics 26, 36, 37 and at least 8 semester credits from courses numbered 41-78 or 96.

- 2. Computer Science 20 or 23 or an equivalent course.
- 3. Six relevant courses in a related field or fields.

Requirements for a mathematics core with statistics emphasis are:

- 1. Computer Science 20 or 23 or equivalent; Mathematics 27, 34, 36, 44, and 51. Students are encouraged to take Computer Science 20 to fulfill the computing requirement.
- 2. Six relevant courses in a related field or fields.

Students preparing for graduate work or for a career that makes heavy use of statistics are encouraged to become involved in the statistics consulting center.

Minor Requirements

Requirements for a minor in mathematics are:

- 1. Mathematics 26, 36, 37 and at least 8 semester credits from courses numbered 41-78 or 96.
- 2. Computer Science 20 or 23 or an equivalent course.

Requirements for a mathematics minor with statistics emphasis are:

- 1. Computer Science 20 or 23 or equivalent; Mathematics 27, 34, 36, 44, and 51. Students are encouraged to take Computer Science 20 to fulfill the computing requirement
- 2. One elective from courses designated by the department as qualifying for statistics emphasis.

Students preparing for graduate work or for a career that makes heavy use of statistics are encouraged to become involved in the statistics consulting center.

COURSES

In addition to the regular courses listed below, the faculty supports a wide range of individualized topics offered as either Topics courses or Independent Reading courses. In recent years these have included: Parallel Algorithms, Natural Language Processing, LISP, Knot Theory, Decision Analysis, and Newton's *Principia* and the Scientific Revolution.

14 DATA ANALYSIS AND STATISTICS

An introduction to basic concepts of data analysis and statistics in the spirit of liberal arts. Emphasis on data analysis, model assumptions, and interpreting results. Use of the computer integrated throughout. Examples and techniques drawn primarily from the social sciences. Major topics: uncertainty/variation, data acquisition, graphical techniques, descriptive statistics, exploratory versus confirmatory analysis, statistical inference. Recommended for students in humanities/fine arts/social sciences and/or those not planning to pursue careers in quantitative analysis; prospective economics majors are encouraged to take Mathematics 27. Students who successfully complete this course can not receive credit for Mathematics 27. Prerequisite: High school algebra. Every semester. (4 credits)

16 MATHEMATICS—ITS CONTENT AND SPIRIT

An introduction to heuristics of problem solving, predicated on the idea that the same approaches are applicable whenever we are confronted with a problem. Familiar number systems are examined from a more mature vantage point that points out similarities and differences with other systems: modular arithmetic, 2×2 matrices, and axiomatic systems in algebra. 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. Spring semester. (4 credits)

19 CALCULUS SUPPLEMENT

This course can only be taken while a student is enrolled in Mathematics 21. It provides supplemental instruction in algebra and trigonometry, including polynomials and rational functions, equations and inequalities, systems of linear equations, trigonometric functions and identities, and inverse functions; Mathematics 19 does not fulfill the general distribution requirement in natural science and mathematics. Graded S/D/NC. Permission of instructor required. Every semester. (2 credits)

21 CALCULUS I

An intuitive treatment of the differential and integral calculus of one variable. Applications in the social, behavioral and physical sciences. A placement exam is given in the first week of class to determine if a student should also enroll for Mathematics 19. Credit may not be earned in Mathematics 21 if credit for Mathematics 22 or Mathematics 37 has previously been successfully earned. Every semester. (4 credits)

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. Credit may not be earned in Mathematics 22 if credit for Mathematics 37 has previously been successfully earned. Prerequisite, Mathematics 21. Every semester. (4 credits)

25 COMPUTATIONAL SCIENCE (same as Computer Science 25)

Computational Science is concerned with the design and development of computational models of real-world systems. These models can then be studied via computational experiments much as actual physical systems are studied empirically. This course introduces students to modeling techniques, the analysis of different modeling methods, topics from numerical analysis, scientific visualization and graphical display, scientific libraries, and parallel and high-performance computing. Students will work in teams to design models and conduct computational experiments. Prerequisites: Computer Science 20 or equivalent. Every Spring. (4 credits)

26 DISCRETE MATHEMATICS

An introduction to the basic techniques and methods used in combinatorial problem-solving. Includes basic counting principles, induction, logic, recurrence relations, and graph theory. Every semester. (4 credits)

27 ELEMENTARY STATISTICS

An introduction to concepts in statistics at a deeper quantitative level than Mathematics 14. Focus on applications drawn primarily from economics, biological sciences, and physical sciences using advanced statistical software. Major topics: basic probability, data acquisition, graphical exploration and presentation, data transformations, simulations, one- and two-variable inferential techniques. Recommended for students pursuing quantitatively-based careers. Students who have successfully completed Mathematics 14 can not receive credit for Mathematics 27. Prerequisites: Mathematics 21 or Mathematics 26 or permission of instructor. Every semester (4 credits)

34 APPLIED MULTIVARIATE STATISTICS

An introduction to multivariate statistical analysis. Emphasizes rationales, applications, and interpretations using advanced statistical software. Examples primarily from economics, education, psychology, sociology, political science, biology and medicine. Topics may include: one-way/two-way ANOVA, multivariable correlation, multiple regression, discriminant analysis, factor analysis, cluster analysis, and multidimensional scaling. Prerequisite: Mathematics 27 or permission of instructor. Alternate spring semesters, next offered spring, 2000. (4 credits)

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, Mathematics 22 or Mathematics 26. Every semester. (4 credits)

37 MULTIVARIABLE CALCULUS

Solid analytical geometry, partial derivatives, multiple integrals. Prerequisite, Mathematics 22. Every semester. (4 credits)

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 nonlinear techniques. Prerequisite, Mathematics 37. Spring semester. (4 credits)

43 DYNAMICAL SYSTEMS

Discrete- and continuous-time dynamics, emphasizing a geometrical approach. Linear and nonlinear dynamics, stability, bifurcation analysis, chaos, attractors, fractals. Applications and examples will be drawn from fields where nonlinearity and qualitative solutions are important, such as biology and physics. Prerequisites, Mathematics 22 and 36. Alternate fall semesters, next offered fall, 2000. (4 credits)

44 APPLIED PROBABILITY

An introduction to basic probability concepts: sample spaces, probability assignments, random variables, conditional probability, independence, discrete and continuous distributions, functions of random variables, expectation, transforms and moment-generating functions, some basic probability processes, discrete-state Markov processes, and some fundamental limit theorems. Additional topics may include decision analysis and reliability theory. Prerequisite, Mathematics 22 (recommended but not required: Mathematics 37). Alternate fall semesters, next offered fall, 2000. (4 credits)

46 NUMBER THEORY

An introduction to the properties of and unsolved problems about the integers (whole numbers). This course is built around the problem of proving that a large integer is prime or finding its factorization into primes. Topics include: divisibility and prime numbers, the Euclidean algorithm, modular arithmetic, quadratic residues, continued fractions, and public-key cryptosystems. Prerequisite, Mathematics 26. Alternate fall semesters, next offered fall 2000. (4 credits)

47 THEORY OF COMPUTATION (Same as Computer Science 47)

A discussion of the basic theoretical foundations of computer science as embodied in formal models and descriptions. The course will cover finite state automata, regular expressions, formal languages, Turing machines, computability and unsolvability, and the theory of computational complexity. Introduction to alternate models of computation and recursive function theory. Prerequisite, Computer Science 24, Mathematics 26. Spring semester. (4 credits)

48 NUMERICAL ANALYSIS (Same as Computer Science 48)

An introduction to techniques for finding numerical solutions to mathematical problems. Topics to be covered include the general theory of iteration, approximation theory, error estimation, interpolation, solution of nonlinear equations, numerical integration and differentiation, solution of ordinary differential equations. Prerequisite, Mathematics 36, Computer Science 20 or 23. Alternate spring semesters, next offered spring 2001. (4 credits)

49 ADVANCED SYMBOLIC LOGIC (Same as Philosophy 49)

A second course in symbolic logic designed to extend methods and pick up on issues coming out of Introduction to Symbolic Logic (Philosophy 20). Topics include second order logic, basic set theory, metatheoretic results (soundness, consistency, completeness of first order logic), incompleteness of arithmetic, model logic, and intuitionistic logic. Prerequisite: Mathematics 26. Offered alternate years. (4 credits)

50 TOPICS IN MATHEMATICS

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. On an occasional basis. (4 credits)

51 MATHEMATICAL STATISTICS

An introduction to the mathematical theory of statistics: sampling distributions, estimation, hypothesis testing, regression. Emphasis on the theory underlying statistics, not on applications. Prerequisites: Mathematics 27, Mathematics 44. Alternate spring semesters, next offered spring, 2001. (4 credits)

53 MODERN GEOMETRY

Topics in modern elementary geometry include geometric transformations, Euclidean and non-Euclidean geometry, Hilbert's axioms, the parallel postulate and its history, and hyperbolic geometry. Possible additional topics are dissection problems and areas of computational geometry, such as art gallery theorems. Alternate spring semesters, next offered spring 2000. (4 credits)

56 ALGEBRAIC STRUCTURES

Introduction to abstract algebraic theory with emphasis on finite groups, rings, fields, constructibility, introduction to Galois theory. Prerequisite, Mathematics 22 and 36. Spring semester. (4 credits)

57 REAL ANALYSIS I

Basic theory for the real numbers and the notions of limit, continuity, differentiation, integration, convergence, uniform convergence, and infinite series. Prerequisite, Mathematics 37. Fall semester. (4 credits)

59 COMBINATORICS

Advanced counting techniques. Topics in graph theory, combinatorics, graph theory algorithms, and generating functions. Applications to other areas of mathematics as well as modeling, operations research, computer science and the social sciences. Prerequisites, Mathematics 26, Computer Science 20 or 23 or the equivalent. Alternate spring semesters, next offered spring 2000. (4 credits)

All 60- and 70-level courses will involve some independent student work such as oral presentations, papers, or computer projects.

68 CONTINUOUS APPLIED MATHEMATICS

Transformations and their applications. Topics selected from among: the Fourier transform and applications in partial differential equations and signal and image processing; the Laplace transformation in control theory; wavelet theory. Prerequisites, Mathematics 36 and either 41 or 43. Alternate spring semesters, next offered spring 2001. (4 credits)

71 THEORY OF FUNCTIONS OF A COMPLEX VARIABLE

Algebra of complex numbers, analytic functions, the Cauchy-Riemann equations, Cauchy's theorem, the Cauchy integral formula, Taylor and Laurent series, the residue theorem, and conformal mapping. Prerequisite, Mathematics 57 or 68. Alternate spring semesters, next offered spring 2000. (4 credits)

73 INTRODUCTION TO TOPOLOGY

An introduction to the topology of Euclidean, metric, and abstract spaces, with emphasis on continuous mappings, separable spaces, separation axioms, and metrizable spaces. Additional topics may include homotopy theory, homology theory, and approximation theory. Prerequisite, Mathematics 57. Alternate fall semesters, next offered fall 2000. (4 credits)

75 DISCRETE APPLIED MATHEMATICS (Same as Computer Science 75)

Topics in applied mathematics chosen from: cryptography; complexity theory and algorithms; integer programming; combinatorial optimization; computational number theory; applications of geometry to tilings, packings, and crystallography; applied algebra. Prerequisites, Mathematics 36 and 59 and Computer Science 23. Alternate fall semesters, next offered fall 2000. (4 credits)

76 TOPICS IN MODERN ALGEBRA

Topics in algebra to be chosen from: group representations; algebraic coding theory and finite fields; Galois theory; algebraic and transcendental numbers; ring theory; applied algebra. Prerequisite, Mathematics 56. Alternate fall semesters, next offered fall 1999. (4 credits)

77 REAL ANALYSIS II

A continuation of Real Analysis I including discussion of basic concepts of analysis with particular attention to the development of the Riemann and Lebesgue integrals. Introduction to metric spaces,

Fourier analysis. Prerequisite, Mathematics 57. Alternate spring semesters, next offered spring 2001. (4 credits)

78 MATHEMATICAL MODELING

Draws on the student's general background in mathematics to construct models for problems arising from such diverse areas as the physical sciences, life sciences, political science, economics, and computing. Emphasis will be on the design, analysis, accuracy, and appropriateness of a model for a given problem. Case studies will be used extensively. Specific mathematical techniques will vary with the instructor and student interest. Prerequisites, Mathematics 41, 43 or 48, and Computer Science 23. Alternate fall semesters, next offered fall 1999. (4 credits)

89 SENIOR CAPSTONE SEMINAR

Working with their capstone supervisor, seminar coordinators, and other faculty, students will discuss their capstone project, make presentations of their progress, critique the work of other students, and participate in the activities of the seminar. These activities will include instruction and discussion of strategies for research, writing, and presentation. The scheduled times will include both group meetings with other seminar participants as well as individually arranged meetings with the student's capstone supervisor. (1 credit)

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 mathematics not available through the regular offerings. (1–4 credits)

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. (1–4 credits)

97 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. Internships are offered only as pass/fail (S, D, NC Option). (4 credits)

98 PRECEPTORSHIP (4 credits)

Computer Science

Program Coordinator: G. Michael Schneider

Two basic principles underlie the teaching of computer science at Macalester. The first is that the program stresses the fundamental principles of computer science—theory of computation, algorithms, data structures, language design, and computer organization—rather than programming or the applications of computer technology. A computer science graduate from Macalester will be well prepared for either advanced study or research and development work in industry. Second, the program is firmly committed to the principles and ideals of a liberal arts education. A computer science concentration includes both technical requirements as well as extensive course work in the humanities, social sciences, and fine arts. An important goal of the program is to produce graduates who are self-educators and life-long learners, characteristics that are so important in a rapidly changing discipline.

Students wishing to take a computer science course have a number of options. For those who do not plan to major, core, or minor in computer science there

are two service courses available which do not assume any prior background. Computer Science 15, Introduction to Computing and Its Applications, is an introductory survey course. It provides a broad overview of the discipline, including the historical development of information technology, hardware and software issues, artificial intelligence, databases, networking, and social and ethical issues of computing and technology. This course would be appropriate for students in all fields, especially those in the humanities and social sciences. The second service course is Computer Science 20, Introduction to Scientific Programming. This course teaches students how to program in both a procedural language, such as C/C++, and in a symbolic system such as Mathematica. Students then use these languages to solve a range of interesting numerical and scientific problems. This course would be extremely appropriate for students studying in any of the physical sciences, natural sciences, or certain quantitative fields within the social sciences, such as economics, mathematics education, or geography. Finally, students planning to major, core, or minor in computer science, or planning to take additional courses, should begin their studies with Computer Science 23, Computer Science I. This is the required first course for all students planning to complete further coursework in the discipline.

General Distribution Requirement

All courses in the computer science program numbered below 50 satisfy the general distribution requirement in the natural sciences and mathematics.

Major Concentration

Requirements for a major in computer science are:

- 1. The two introductory computer science courses 23 and 24. (Students who have completed an Advanced Placement computer science course in high school and have successfully passed the AP examination may be considered for departmental credit in computer science. Consult the program coordinator for additional information.)
- 2. The four intermediate computer science courses 30, 40, 42 and 47
- 3. A minimum of three advanced elective courses selected from the following list, at least one of which must be computer science 60, 62, 65, 70, 72, or 88:

Computer Science

- 48 Numerical Analysis
- $50\ \mathrm{Topics}$ in Computer Science
- 55 Operating Systems and Computer Architecture
- 58 Computer Graphics
- 60 Design of Computer Networks
- 62 Principles of Compiler Design
- 65 Introduction to Artificial Intelligence
- 70 Parallel Processing
- 72 Functional Programming and Formal Semantics
- 75 Discrete Applied Mathematics
- 88 Senior Seminar in Computer Science
- 96 Independent Project (Only one independent project may be applied toward a computer science major.)

With permission of the computer science faculty, other courses may be used to satisfy the advanced elective course requirement. Furthermore, courses taken at one of the other ACTC colleges may, with advance approval of the department, be used to satisfy computer science program requirements, except for the senior level course numbered 60–88 which must be completed at Macalester.

- 4. All students majoring in computer science must take and complete the 1 credit class Computer Science 89, Senior Capstone Seminar, each semester of their senior year in which they are in residence. (Note: Double majors in mathematics and computer science only need to take one capstone seminar—either Mathematics 89 or Computer Science 89.) In addition, as part of the capstone experience students will write a senior paper and present the results at a departmental conference. This paper will commonly be an extension of a project report or paper previously written for a computer science course. It may, however, take the from of an honors paper or other independent work that has prior departmental approval.
- 5. Mathematics 21, 26 and a third mathematics course chosen from the following list: Mathematics 22, 27, 36, or 49

In addition to the three required mathematics courses, students are strongly encouraged to include some of the following courses as part of their elective program: Mathematics 27 (Elementary Statistics), Mathematics 36 (Linear Algebra), Mathematics 44 (Applied Probability), Mathematics 49 (Advanced Symbolic Logic), Mathematics 51 (Mathematical Statistics), and Mathematics 78 (Mathematical Modeling). Students who plan to attend graduate school in computer science are also encouraged to take more than the minimum number of computer science electives as well as additional supporting work in related disciplines.

In order to ensure orderly progress through the curriculum, introductory courses (Computer Science 23, 24) and intermediate courses (Computer Science 30, 40, 42, 47) should be completed before a student enrolls in advanced electives or begins an independent project. Departmental approval in advance is required to apply an independent project toward a computer science concentration.

For the typical computer science major, the first two years of study in the department will generally look something like this:

Year 1: Computer Science 23, 24, Mathematics 26, a calculus course, electives

Year 2: Computer Science 30, 40, 42, 47, a calculus course or another mathematics course, electives

However, there is a good deal of flexibility in the computer science program, and a student's exact schedule will be determined only after consultation with his or her major advisor.

The following courses are not required of computer science students. They are listed here because their subject matter relates to computer science, and they

may be of interest to computer science majors, cores, and minors when selecting courses to satisfy distribution requirements or when coordinating work in computer science with study in related disciplines.

Communication Studies

46 The Electronic Media In An International Age

47 Computer Mediated Communication

Music

53 Electronic Music

Philosophy

20 Introduction to Symbolic Logic

60 Philosophy of Science

61 Philosophy of Mathematics

Physics

38 Digital Electronics

42 Electronics

Political Science

49 Science, Technology, and Politics

Religious Studies

58 Science and Religion

67 Technology and Ethics

Core Concentration

Requirements for a core concentration in computer science are:

- 1. Computer Science 23, 24, 30, 40
- 2. Two courses chosen from either Computer Science 42, 47 or those listed as options for the computer science major
- 3. Six relevant courses in a related field or fields that are approved by your computer science core advisor

Minor Concentration

Requirements for a minor concentration in computer science are:

- 1. Computer Science 23, 24, 30, 40
- 2. Two courses chosen from either Computer Science 42, 47 or those listed as options for the computer science major

COURSES

15 INTRODUCTION TO COMPUTING AND ITS APPLICATIONS

This is an introductory survey course for students who are not planning further study in computer science. It assumes no prior experience in the field, and it is designed to provide students with a broad overview of the discipline of computer science. It addresses the historical development of information technology; applications of computers in areas such as modeling, databases, telecommunications, and graphics; software design and development, computer organization, artificial intelligence, and the social and ethical implications of computers and technology. No prerequisites. Every semester. (4 credits)

20 INTRODUCTION TO SCIENTIFIC PROGRAMMING

This is an introductory programming course intended primarily for students majoring in the physical, natural, and social sciences. It focuses on how to use computing and high level programming

languages to solve scientific problems. The course assumes no prior background or experience in either programming or computer science. Topics to be covered include programming in a high-level procedural language such as C/C++, or Java problem solving using a symbolic computational package such as Mathematica, efficiency and benchmarking, floating point representations, error propagation and analysis, and data visualization. Students will write programs to solve a number of numerical and scientific problems and work on at least one larger project drawn from a scientific field of their own choice. Prerequisite: One term of calculus or Mathematics 26. Every fall. (4 credits)

23 COMPUTER SCIENCE I

This is the required introductory course for majors, cores, and minors, and assumes no prior coursework in computer science. The class will introduce students to fundamental issues in computer science in addition to programming. Topics will include: algorithms and algorithm design, designing data representations, procedural and data abstraction as problem solving tools, recursion, and the analysis of algorithms for efficiency and correctness. The course will focus on the evaluation model of computation using the functional programming language Scheme. Students will study examples of applications across the breadth of computer science. Students who have completed Computer Science 24 may not take this course for credit. No prerequisites. Every semester. (4 credits)

24 COMPUTER SCIENCE II

This course continues the presentation of the fundamental concepts of computer science begun in Computer Science 23. It introduces the procedural model of computation, formal problem specification, object-oriented design, and a deeper investigation of the analysis of algorithms for efficiency and correctness. The course also includes a study of advanced data types such as lists, trees, graphs, and sets. Students will study the advantages and disadvantages of different data structures, and will explore their applications across computer science. Prerequisite: Computer Science 23. Every semester. (4 credits)

25 COMPUTATIONAL SCIENCE (Same as Mathematics 25)

Computational Science is concerned with the design and development of computational models of real-world systems. These models can then be studied via computational experiments much as actual physical systems are studied empirically. This course introduces students to modeling techniques, the analysis of different modeling methods, topics from numerical analysis, scientific visualization and graphical display, scientific libraries, and parallel and high-performance computing. Students will work in teams to design models and conduct computational experiments. Prerequisites: Computer Science 20 or equivalent. Every Spring. (4 credits)

30 COMPUTER SYSTEMS ORGANIZATION

This course familiarizes the student with the internal design and organization of computers. Topics include number systems, internal data representations, logic design, microprogramming, the functional units of a computer system, memory, processor, and input/output structures, instruction sets and assembly language, addressing techniques, system software, and non-traditional computer architectures. Prerequisite, Computer Science 23. Fall semester. (4 credits)

40 ALGORITHM DESIGN AND ANALYSIS

An introduction to the design and analysis of algorithms with an emphasis on non-numeric problems. Issues which will be discussed include iterative, recursive, and parallel algorithms, divide and conquer methods, dynamic programming, searching and sorting, graph algorithms and geometric algorithms. An introduction to the concept of NP-completeness. Prerequisites, Computer Science 24, Mathematics 26. Fall semester. (4 credits)

42 PRINCIPLES OF PROGRAMMING LANGUAGES

A study of modern high-level programming languages, including formal representation of syntax and semantics, control structures, data and procedural abstraction, parallelism, exception handling, functional and object-oriented programming, and non-procedural languages. It will also introduce some basic techniques in language translation including lexical analysis, parsing, and code generation. Concepts will be illustrated using a wide range of existing languages. Prerequisites, Computer Science 24, 30. Spring semester. (4 credits)

47 THEORY OF COMPUTATION (Same as Mathematics 47)

A discussion of the theoretical foundations of computer science as embodied in formal models and descriptions. The course will cover finite state automata, regular expressions, formal languages, Turing machines, computability and unsolvability, and the theory of computational complexity; introduction to alternate models of computation and recursive function theory. Prerequisites, Computer Science 24, Mathematics 26. Spring semester. (4 credits)

48 NUMERICAL ANALYSIS (Same as Mathematics 48)

An introduction to techniques for finding numerical solutions to mathematical problems, Topics to be covered include the general theory of iteration, approximation theory, error estimation, interpolation, solution of nonlinear equations, numerical integration and differentiation, solution of ordinary differential equations. Prerequisites, Computer Science 23, Mathematics 36. Alternate spring semesters, next offered spring 2001. (4 credits)

50 TOPICS IN COMPUTER SCIENCE

Topics of interest to students in the field of computer science but which are not part of the regular curriculum. When the course is offered, the topic and prerequisites for that semester will be announced and posted prior to registration. On an occasional basis. (4 credits)

55 OPERATING SYSTEMS AND COMPUTER ARCHITECTURE

The basic principles related to the design and architecture of operating systems. Concepts to be discussed include sequential and concurrent processes, synchronization and mutual exclusion, processor scheduling, time-sharing, multiprogramming, multitasking, and parallel processing. Memory management techniques. File system design. Security and protection systems. Performance evaluation. Prerequisite, Computer Science 30. Alternate spring semesters, next offered spring 2001. (4 credits)

58 COMPUTER GRAPHICS

Basic two- and three-dimensional graphics techniques. Topics include 2D and 3D modeling, clipping and windowing, polygon filling, text generation, 3D parallel and perspective projections, hidden surface/line removal, and curve interpolation. Class members develop device-independent 2D and 3D graphics packages consistent with current graphics standards. Several types of graphics devices will be discussed and used. Prerequisites: Computer Science 24 and either Mathematics 36, 37, or consent of instructor. Alternate fall semesters, next offered fall 2000. (4 credits)

60 DESIGN OF COMPUTER NETWORKS

This course investigates basic principles for designing and implementing both local area networks (LANs) and wide-area networks (WAN). It will look at 1) physical layer protocols, including transmission media, analog vs. digital communications, and interface design, 2) data link layer protocols, for point-to-point and contention-based message passing, 3) network layer protocols, for routing, congestion control, and inter-network communication, and 4) transport protocols, for creating error-free end-to-end channels. Each of these concepts will be illustrated using actual communication protocols such as RS-232, ISDN, Ethernet, ATM, and TCP/IP. The course will also take a brief look at higher level application issues including security (e.g. encryption, authentication), network management, name servers, and multimedia protocols such as JPEG and MPEG. Prerequisites: Computer Science 30 and 40. Alternate spring semesters, next offered spring 2000. (4 credits)

62 PRINCIPLES OF COMPILER DESIGN

The principles, techniques, and theory underlying the design of compilers and language translators. Topics will include lexical analysis, symbol tables, a variety of parsing algorithms, automated scanner and parser generation, representation and generation of intermediate code, machine code generation, and code optimization. Prerequisites, Computer Science 30, 42, and 47, or consent of instructor. Alternate fall semesters, next offered fall 1999. (4 credits)

65 INTRODUCTION TO ARTIFICIAL INTELLIGENCE

An introduction to the basic principles and techniques of artificial intelligence. Topics include problem solving methods, heuristic search, knowledge representation, logic, and automated reasoning. Concepts will be further demonstrated through the study of applications of AI such as natural language processing, task planning, robotics, machine learning, perception, and game playing.

Discussion of philosophical issues. Prerequisites, Computer Science 40 and 42, or consent of instructor. Alternate fall semesters, next offered fall 2000. (4 credits)

70 PARALLEL PROCESSING

An introduction to the field of parallel processing and the three major subareas of parallel architectures, parallel languages, and parallel algorithms. Topics include SIMD and MIMD systems, private memory and shared memory designs, dataflow architectures; issues in parallel language design such as process creation and management, message passing, synchronization, and deadlock; the design and formal analysis of parallel algorithms in areas such as sorting, searching, numerical methods, and graph theory. Students will design and implement software for an actual parallel processing system. Prerequisites, Computer Science 30 and 40, or consent of instructor. Alternate fall semesters, next offered fall 1999. (4 credits)

72 FUNCTIONAL PROGRAMMING AND FORMAL SEMANTICS

Introduction to the functional paradigm of programming languages, declarative programming, and formal semantics. Discussion of higher order functions and functions as first class objects, abstractions and polymorphism, infinite structures, equational reasoning and pattern matching, lambda calculus and the reduction paradigm of computation, semantics, and programs as specifications. Topics may also include implementation of functional languages, continuations and lazy evaluation, and parallelism. The theoretical material of the course will be supplemented by laboratory work in modern functional languages. Prerequisites, Computer Science 42, 47, or consent of instructor. Alternate spring semesters, next offered spring 2000. (4 credits)

75 DISCRETE APPLIED MATHEMATICS (Same as Mathematics 75)

Topics in applied mathematics chosen from: cryptography; complexity theory and algorithms; integer programming; combinatorial optimization; computational number theory; applications of geometry to tilings, packings, and crystallography; applied algebra. Prerequisites, Math 36 and 59 and Computer Science 23. Alternate fall semesters, next offered fall 2000. (4 credits)

88 SENIOR SEMINAR IN COMPUTER SCIENCE

Advanced topics in specialized areas of computer science. The course will be taught as a seminar and will involve discussion of original research articles, student projects, and oral presentations. When the course is offered, the topic and prerequisites for that semester will be announced and posted prior to registration. Spring semester. (4 credits)

89 SENIOR CAPSTONE SEMINAR

Working with their capstone supervisor, seminar coordinators, and other faculty, students will discuss their capstone project, make presentations of their progress, critique the work of other students, and participate in the activities of the seminar. These activities will include instruction and discussion of strategies for research, writing, and presentation. The scheduled times will include both group meetings with other seminar participants as well as individually arranged meetings with the students capstone supervisor. (1 credit)

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 computer science not available through the regular offerings. (1-4 credits)

96 INDEPENDENT PROJECT

Individual project including library research, conferences with instructor, oral and written reports on independent work in computer science. 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. (1–4 credits)

97 INTERNSHIP

Available to junior and senior students with declared cores or majors in computer science. Arrangements must be made prior to registration, and departmental approval and supervision is required. For additional information about internships and how they are administered, refer to the section of the catalog entitled Individualized Learning. (1–4 credits)

98 PRECEPTORSHIP

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. (1–4 credits)

Music

Full Time Faculty: J. Michele Edwards, Edouard Forner, Carleton Macy, Mark Mazullo

Part Time Faculty: Donald Betts, Jan Gilbert, Peter Sowah Mensah, Robert Peterson (Acting Chair)

Director of Choral Activities: Robert L. Morris

Studio Faculty: Stella Anderson (viola and string methods), Barbara Brooks (introductory piano), Thomas Cravens (electric guitar/electric bass/jazz improvisation), Christine Dahl (piano), Susan DeJong (flute), Lynn Erickson (trumpet), Robert Ford (Pipe Band drum instructor), Richard Gaynor (brass methods), Rachel Green (oboe), Brian Grivna (saxophone/jazz improvisation), Catherine Hart (highland dance), Florence Hart (highland dance), Michael Hauser (flamenco guitar), Camilla Heller (cello), Mark Henderson (woodwind methods), Phil Hey (jazz drumming) Andrew Hoag (bagpipes/Director of Piping), Joseph Holmquist (percussion and percussion methods), Mary Budd Horozaniecki (violin and string methods), Robert Jamieson, (gamba), Winston Kaehler (harpsichord/organ), Ellen Lease (jazz piano), Caroline Lemen (horn), Paul Maybery (tuba), Sowah Mensah (African drums and xylophones/African flute/African voice), Laura Nichols (voice), Celeste O'Brien (piano), Derrick Pennix (voice), Sue E. Roberts (trombone/baritone horn), John Roth (guitar/mandolin/mandola), Jennifer Rubin (string bass), Bridgett Stuckey (harp), Charles Ullery (bassoon), David Whetstone (Sitar/East Indian improvisation)

The music department offers many opportunities for general students and for students interested in music as a concentration. All performing ensembles and all courses are open to majors and non-majors alike, although some courses carry prerequisites. For the music major, core, or minor, a careful balance between theory/ composition, history/literature and performance is maintained. Students electing a music concentration may emphasize performance, composition, or music history/literature. A senior project in one of these areas is required of majors and recommended for cores and minors. The major concentration provides preparation for graduate study in music, public school licensure, and many music-related jobs and professions. Major, core and minor concentrations prepare students for lifelong enjoyment of music through the study of appropriate skills, repertoire, and performance practice.

For further information about faculty and ensembles, please access the Music Department web page at http://www.macalester.edu/~music.

Performance

Performing ensembles are open to students by audition without regard for music major, core or minor status. These groups include the large vocal and instrumental ensembles, chamber music groups in the Western concert tradition, and other ensembles performing a spectrum of musical styles: African Music Ensemble, Flying Fingers (traditional American folk music), Mac Jazz (big band jazz), Collegium Musicum Macalestri (early music), New Music Ensemble (improvised music), the Highland Pipe Band and Dancers, and the Mac Jazz Workshop jazz combo. Additional chamber ensembles such as string quartets and flute ensembles are formed in response to student interest. Students are also involved as soloists, conductors, and managers for the ensembles. Special performance projects such as dance concerts requiring live and electronic music, opera, and musical theater are scheduled as opportunities arise.

The superb acoustics of the Janet Wallace Concert Hall provide one of the best centers for musical performance in the Twin Cities. Student soloists and ensembles, and numerous other local, national and international artists perform there regularly throughout the year.

Studio instruction in voice, piano, harpsichord, organ, guitar, all standard orchestral instruments, jazz improvisation, African drumming, and other non-western instruments, is available to all students in the College. Studio instruction is with our regular full-time faculty or studio faculty. These instructors are all active professional musicians.

The fee for 12 half-hour lessons is \$290.00 (fee is subject to change). Music majors, cores and minors will receive a 90% fee waiver for one set of half-hour lessons per semester. Enrollment in Theory II is considered a tentative commitment to being a music major, core or minor. The faculty encourages advanced students to take hour-long lessons. Music majors, cores and minors, preparing for senior recitals, must take full hour lessons. They will receive a 90% fee waiver for the full hour. *NOTE*: A limited amount of financial assistance is available to those students not eligible for fee waivers to help pay for studio instruction. See Professor Forner for information.

General Distribution Requirement

All courses in the music department satisfy the general distribution requirement in the fine arts *except* Music 70, 71, 72, 73, 74, 88, 97 and some topics as designated by the department. Credit accumulated through ensemble performance and studio instruction does not satisfy the distribution requirement.

Certain courses are particularly appropriate for the general student. These include Music Appreciation, Electronic Music, Women Making Music, African Music, Basic Musicianship, Music of Black Americans, Jazz and Social Issues, and various Topics courses. Other courses, while open to all students, do require certain levels of music skills. Students interested in upper level courses should consult the instructor concerning specific prerequisites.

Diversity Requirement

The international diversity requirement may be satisfied by completing Music 31, African Music. The domestic diversity requirement may be satisfied by completing either Music 55, Music of Black Americans, or Music 57, Jazz and Social Issues.

Senior Capstone Projects

The music department requires of its majors, and strongly recommends to its cores and minors that they undertake senior projects involving recital performance, composition and/or music research as a culminating activity. The department strongly encourages all majors to include performance as a soloist as part of the presentation of this project. A student may register for Music 88 (Senior Project) to receive credit for preparation. (The senior project satisfies the senior capstone requirement). Following the completion of the senior project, the presenting student will meet with selected faculty for an *exit review* which will include discussion of their project presentation, their achievements within the department, and their future directions.

Piano Proficiency Requirement

Each music major/core/minor will be required to pass a test of piano proficiency. Piano skills should be developed as rapidly as possible for they are indispensable to the study of music. Because they are required, "Piano Proficiency" lessons receive a 90% fee waiver for a maximum of 4 semesters. Fee-waived piano proficiency lessons are not to extend beyond the 3rd year. Required skills include the ability to:

- * Sight-read a hymn.
- * Perform a piece such as a slow movement of a sonatina or a piece from Bartoks' Mikrokosmos, Vol. 2.

This test (shown as Music 300) should be taken by the end of the third year.

Major Concentration

A major will consist of 44 semester hours in courses, plus studio instruction, ensembles and piano proficiency.

Music 13, or admission to a higher level within the theory program, is considered entrance into the program. Both Music 13 and Music 14 should be taken during the first year if possible, and no later than the second year, since these courses are prerequisites for most of the other required music courses. History-literature courses should begin after completion of Music 13 and 14.

- 1. Major concentration in music must include:
 - * Music 13, 14, 23, 24, 42, 43, 44 Additional music electives may be substituted for Music 13 and 14 if a student can demonstrate equivalent competency.
 - * One course from among the following: Music 31, 51, 53, 55, 57 or designated topics courses

- * Studio instruction on the primary instrument or in voice during each semester of residence as a major
- * Ensemble performance during each semester of residence as a major, with at least 4 semesters in a "large" ensemble (see Music Ensembles)
- * A senior capstone project in music
- * Piano proficiency Exam (Music 300)

A normal music major track for course work will be:

- * year 1: Music 13, 14, and elective
- * year 2: Music 23, 24, one of 42, 43, 44, electives
- * year 3 and 4: two of 42, 43, 44, electives, senior project
- * (with careful planning, a music major can be completed in 3 years)
- 2. Major concentration in music for teacher licensure:
 - * Music 13, 14, 23, 24, 42, 43, 44, 70, 71, 72, 73, and 74. Additional music electives may be substituted for Music 13 and 14 if a student can demonstrate equivalent competency.
 - * One course from among the following: Music 31, 51, 53, 55, 57 or designated topics courses
 - * Basic proficiency on the guitar and the recorder
 - * Piano proficiency which, in this case, includes the ability to play simple piano accompaniments encountered in "educational" instrumental and vocal solo literature, and, for vocal specialists, typical choral literature accompaniments
 - * Studio instruction on a primary instrument or voice corresponding to instrumental or vocal licensure track, and ensemble performance during each semester of residence as a music major, with at least four semesters in a "large" ensemble (see Music Ensembles)
 - * Vocal pedagogy
 - * Experience with a World Music other than the Western European tradition. This requirement may be satisfied by taking Music 31, a designated topics course, or through successful, semester-long participation in a representative performing group such as the African Music Ensemble, or through a semester or more of studio instruction in a non-Western instrumental or vocal musical tradition such as sitar.
 - * A Senior Project in the form of a recital which demonstrates advanced solo ability in the area of performance emphasis:
 - —instrumental licensure students must perform on at least one instrument of the keyboard, percussion, string, or wind families;
 - —vocal licensure students must perform as a vocalist and demonstrate advanced solo performance as a vocalist, keyboardist, or guitarist.
 - * (vocal licensure only): Demonstrate the ability to accompany a vocal ensemble on a keyboard instrument
 - * Demonstrate the ability to organize, rehearse, and conduct small and large performance ensembles

The department strongly recommends independent study in advanced conducting taken as a tutorial (Music 95) for students in the music education program.

Please see the Education Department listings for appropriate course requirements outside the Music Department.

Note that:

- * Music 70, 71, 72, and 73, and Vocal Pedagogy should be taken before student teaching.
- * Student teaching should be taken during the fourth year, or as part of the reduced-fee postgraduate professional semester.
- * Students interested in music education should confer with the department chair (MU 108) for further details.

Core Concentration

A core will consist of 24 semester hours in courses and 24 semester hours in supporting courses, studio instruction and ensemble participation, and the Piano Proficiency Exam.

Music 13 should be taken no later than the fall of the 3rd year. Core concentrations must include:

- * Two theory courses from Music 13, 14, 23, 24.
- * Two literature courses from Music 42, 43, 44.
- * A minimum of four semesters of studio instruction and four semesters of ensemble performance, of which 2 semesters must be in a "large" ensemble (see *Music Ensembles*).
- * 24 semester hours in supporting courses outside the department approved by the student's music department advisor.
- * Piano Proficiency Exam (Music 300).

Minor Concentration

A minor will consist of 28 semester hours in courses, studio instruction and ensemble participation, and the Piano Proficiency Exam.

Music 13 should be taken no later than the fall of the 3rd year. Minor concentrations must include:

- * Two theory courses from Music 13, 14, 23, 24
- * Two courses, approved by the student's music department advisor, selected from among: Music 10, 31, 42, 43, 44, 51, 55, 57 or designated topics courses. At least one of these courses must be taken from Music 42, 43 or 44.
- * Studio instruction for four semesters.
- * Ensemble participation for a minimum of four semesters, two of which must be in a "large" ensemble (see Music Ensembles).
- * Piano Proficiency Exam (Music 300).

COURSES

10 MUSIC APPRECIATION

Focuses on listening to music and making sense of what we hear. Explores diverse musical styles and cultures with an emphasis on concert music of the western world, placing the music within cultural-historical frameworks. Fall semester. (4 credits)

12 BASIC MUSICIANSHIP

Basic elements of music including scales, intervals, basic music reading and writing skills, ear training and some keyboard. The course is especially designed for the general student and will operate at a slower pace than Theory I. Spring semester. (4 credits)

13 THEORY I—ELEMENTARY THEORY

Pitch, meters, scales, modes, keys, intervals, triads and seventh chords, elementary diatonic harmony, composition of melody and bass lines; melodic and rhythmic dictation and solfeggio; elementary keyboard skills. Students should already be proficient at reading music. Three lectures and one eartraining/keyboard lab per week. Fall semester. (4 credits)

14 THEORY II - ADVANCED THEORY

Continuation of written harmony through extended alteration of tertian harmony and modulation; analysis and composition of simple musical forms; continuation of dictation and solfeggio; keyboard harmony. Prerequisite, Music 13 or permission of the instructor. Three lectures and one eartraining/keyboard lab per week. Spring semester. (4 credits)

23 CONTEMPORARY THEORY

Study of compositional techniques of 20th century music with emphasis on analytical skills and composition; continuation of dictation and solfeggio; Prerequisite, Music 14 or permission of the instructor. Fall semester. (4 credits)

24 FORM AND ANALYSIS

Analysis of musical forms and musical development techniques with emphasis on music of the common practice period; advanced harmonic ear training. Prerequisite, Music 14 or permission of the instructor. Spring semester. (4 credits)

31 AFRICAN MUSIC

Study of music in various African traditions within a social and historical context. Interrelationships between music and society (function, context, structure, gender roles, political considerations). Instruments, life-cycle rites, genres, musical organizations, traditional musicians, contemporary popular music. Fall semester. (4 credits)

42 WESTERN MUSIC OF THE 17TH AND 18TH CENTURIES

Study and analysis of music written during the baroque and classical eras, including stylistic developments and representative works. Questions of performance practice and the relationship between music and culture will also be addressed. Prerequisite, Theory II or permission of the instructor. For general students, permission of the instructor. Fall semester. (4 credits)

43 WESTERN MUSIC OF THE 19TH CENTURY

Study and analysis of music written from the late 18th to the 20th century focusing on the stylistic shift from classicism to romanticism, including music from Beethoven to Mahler. Prerequisite, Theory II or permission of the instructor. For general students, permission of the instructor. Spring semester. (4 credits)

44 20TH-CENTURY MUSIC LITERATURE

Study and analysis, focusing on the western concert tradition and including experimental works. Prerequisite, Contemporary Theory (Music 23), or permission of the instructor. For general students, permission of the instructor. Spring semester. (4 credits)

50 TOPICS

Examination of special topics of interest to faculty and students. Recent topics have included *Folk Music of the American South*, and *Rock Music Seminar*. (4 credits)

51 WOMEN MAKING MUSIC

An investigation of the activities/roles/contributions of women making music, primarily in western culture—women as performers, teachers, consumers, scholars, and sponsors as well as composers. Music from the 20th century will receive greater attention than earlier music; blues, jazz and popular music will be included along with concert music. Incorporates analytical approaches of feminist

criticism and cultural studies. Prerequisite, 2nd year standing. Alternate years, next offered spring 2000. (4 credits)

53 ELECTRONIC MUSIC

History and development of electronic music. Investigation of the psychology of sound perception and principles of musical form. Incorporates techniques of composition, individual and group projects in the electronic music studio, weekly composition assignments, self-assessment techniques and development of criteria for evaluation. Studio techniques will include tape manipulation, analog and digital synthesis, sampling, computer control, and sound processing. Prerequisite, permission of the instructor. Spring semester. (4 credits)

55 THE MUSIC OF BLACK AMERICANS

A survey of historical root and present synthesis musics in African-American culture. Extensive reading, aural/oral experience is a part of the course. Music literacy is helpful, but not required. Alternate years, fall semester. (4 credits)

57 JAZZ AND SOCIAL ISSUES

This course studies the history and development of Jazz music in America within the socio-economic and political context of the society. Models for analysis address the meaning and significance of Jazz music in American society. Students will think and write about music in cross-cultural perspective. Class sessions will include guest lectures, live musical demonstrations, group projects; students will complete listening assignments, and papers. Spring semester. (4 credits)

61 COMPOSITION

Instruction in composition starting with exercises in motific and harmonic manipulation of materials, and leading to directed composition for available performers. Meetings will be as a group and as individuals. Composers will have at least two works performed on scheduled evening concerts. Alternate years, next offered fall 1999. (4 credits)

70 WOODWINDS METHODS

Playing and arranging for woodwind instruments. Class sessions will include practical instruction and discussion of most instruments in the woodwind family, culminating with a performance. Music education students will be given special assignments concerning instructional methods and method books. Prerequisites, ability to read music, permission of the instructor. Alternate fall semesters, next offered fall 2000. (2 credits)

71 PERCUSSION METHODS

Playing and arranging for percussion instruments. Class sessions will include practical instruction and discussion of most instruments in percussion family, culminating with a performance. Music education students will be given special assignments concerning instructional methods and method books. Prerequisites, ability to read music, permission of the instructor. Alternate fall semesters, next offered fall 2000. (2 credits)

72 STRING METHODS

Playing and arranging for string instruments. Class sessions will include practical instruction and discussion of the instruments in the string family, culminating with a performance. Music education students will be given special assignments concerning instructional methods and method books. Prerequisites, ability to read music, permission of the instructor. Alternate fall semesters, next offered fall 2001. (2 credits)

73 BRASS METHODS

Playing and arranging for brass instruments. Class sessions will include practical instruction and discussion of the instruments in the brass family, culminating with a performance. Music education students will be given special assignments concerning instructional methods and method books. Prerequisites, ability to read music, permission of the instructor. Alternate fall semesters, next offered fall 2001. (2 credits)

74 CONDUCTING

Emphasizes basic techniques, including beat patterns, baton techniques, score preparation and rehearsal techniques. Prerequisite, permission of the instructor. Offered every other year. Next offered fall semester 1999. (4 credits)

88 SENIOR PROJECT

Intensive guided preparation for the presentation of a project involving recital performance, composition and/or music research. Prerequisite, permission of the instructor. Fall or spring semester. (up to 4 credits)

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

95 TUTORIAL

Tutorials are available for advanced study. Typical areas include counterpoint, composition, advanced choral or instrumental conducting, orchestration, and research. Arrangements for tutorials must be made with the faculty supervisors concerned. See the Independent Study section of this catalog. (1 to 4 semester hours)

96 INDEPENDENT PROJECT

See the Independent Study section of this catalog. (1 to 4 semester hours)

97 INTERNSHIP

See the Independent Study section of this catalog. (1 to 4 semester hours)

98 PRECEPTORSHIP

See the Independent Study section of this catalog. (1 to 4 semester hours)

Performance Studies; Ensemble participation and studio instruction.

- 1) Students can receive credit for successful completion of a sequence of studio instruction, including a brief Performance Review at the end of each semester and/or ensemble participation. Credit is given in the following manner:
 - * Credit will be issued for blocks of 2 or more consecutive semesters of the same activity.

 Consecutive semesters are usually fall-spring, but may be spring-fall in unusual circumstances.
 - * Credit for a single semester of studio instruction or ensemble participation is not awarded.
 - * Interruption of a sequence due to participation in an approved Study Abroad program is not considered a discontinuity.
- 2) Performance studies will be graded as follows:
 - * Students with music major/core/minor concentrations and those receiving fee waivers or department assistance will be graded A/B/C/D/NC.
 - * General students will be graded S/NC in studio instruction unless they request a letter grade upon registration; general students in ensemble studies will receive a letter grade.
 - * A student must earn a grade of A,B,C,D, or S for each term to receive credit for the course.

Students receiving fee waivers or assistance for studio instruction must receive a grade of A,B,C or S each term, or they will be required to pay the entire fee for the instruction.

- 3) A student may receive no more than 8 credits for performance studies *toward graduation*, but no limit is placed on continued participation. Continued participation will appear on a student's transcript, but will not fulfill Macalester graduation requirements.
- 4) Credit for performance studies does not satisfy general distribution requirements.

The grade a student receives for credit bearing performance studies is computed in the student's cumulative GPA when a block of 2 semester credits is completed.

Music Ensembles

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

"Large" ensembles are Symphonic Band, Symphony Orchestra, Mac Jazz Band, Festival Chorale, Concert Choir, and African Ensemble.

Students with a major concentration in music are expected to participate in ensembles during their tenure at Macalester (generally eight semesters). Four of these semesters of ensemble participation

must be in "large" ensembles. The department believes that music students should have the experience of performance in an ensemble conducted in the western tradition as part of their training. For this reason, majors are required to participate for at least 2 of the required 4 semesters in Symphonic Band, Symphony Orchestra, Festival Chorale, or Concert Choir.

NOTE: For students majoring in music the Jazz Band and African Ensemble may fulfill only two of the necessary four semesters of participation in "large" ensembles.

Students with major concentrations in music are also expected to take studio instruction in their performance area during each semester of residence as a major.

Students with a core or minor in music should participate in ensembles for four semesters and in "large" ensembles for two semesters. They are also expected to take studio instruction for a minimum of four semesters.

111,112 SYMPHONIC BAND

Readings, preparation and performance of concert band literature, on campus and in the community. (1 credit)

113,114 SYMPHONY ORCHESTRA

Readings, preparation and performance of orchestral literature, on campus, in the community and on tour. (1 credit)

115,116 MAC JAZZ BAND

An ensemble of the standard big band instrumentation. Preparation and performance of classical and contemporary big band jazz. Performances in concert and club situations, at festivals and on tour. (1 credit)

117,118 PIPE BAND

Instruction in the pipes and drums. Performances in events and competitions at Macalester, in the community, and nationally (1 credit)

119,120 HIGHLAND DANCE

Instruction in traditional Scottish Highland dances. Performances at Macalester and in the community. $(1\,\mathrm{credit})$

121,122 INTRODUCTORY PIANO/PIANO FOR PROFICIENCY

Intended for students with little or no prior experience at the piano, and for those students needing to develop sufficient piano skills in order to pass the departmental piano proficiency test. (1 credit)

123.124 FESTIVAL CHORALE

Preparation and performance of major choral works often with professional orchestra. Performances in the community as well as on campus. (1 credit)

125,126 CONCERT CHOIR

A select group of singers. Presentation of chamber music with and without accompaniment; performances on campus, in the community and on domestic and international tours. (1 credit)

127,128 AFRICAN MUSIC ENSEMBLE

The Macalester African Music Ensemble performs traditional African music using voices and authentic instruments including drums, xylophones, flutes, bells and rattles, mbiras and gourds. The ensemble performs music reflecting a variety of African musical occasions and situations. (1 credit)

215,216 MACALESTER CHAMBER MUSIC ENSEMBLES

A variety of chamber ensembles will be formed, each with a faculty coach. Rehearsal and performance schedules vary. These ensembles differ in size and kind, depending on the performers available. Students interested in forming a chamber ensemble should contact a faculty member. (1 credit)

221,222 OTHER ENSEMBLES

Including but not limited to:

Collegium Musicum: Collegium Musicum Macalestri specializes in instrumental and vocal music from the Medieval period through the Baroque. The Collegium players perform on college and personal

collections of viols, recorders, crumhorns, kortholts, harpsichord, psaltry, harp, rebec, cornetto, sacbut, and a variety of percussion instruments.

New Music Ensemble: The MNME performs improvised and partially improvised music and is open to all interested performers. The ensemble members create their own pieces and perform in formal concerts, dance recitals, outdoor Earth Day presentations, art galleries, and sudden opportunity situations

Mac Jazz Workshop: The jazz workshop concentrates on creating combo arrangements with plenty of space for student soloists. Ensemble members are encouraged to write their own material.

Flying Fingers: The Flying Fingers is a student-led ensemble performing "down-home" folk music from the Scotch/Irish tradition and its developments in America.

Student interest often leads to the formation of additional ensembles; string quartets, piano trio, flamenco, flute, vocal, trombone and saxophone ensembles are recent examples. (1 credit)

Three additional, well-established student-led ensembles deserve mention even though participants do not receive credit: The Sirens (women) and the Trads (men) specialize in the performance of a cappella vocal music in a variety of popular styles; The Voices of Tamani specializes in music of the Gospel tradition.

Performance Instruction (Studio and Class)

Studio instruction may be taken by any Macalester student in voice, piano, harpsichord, organ, guitar, standard orchestral instruments and some non-western instruments. The department houses a 56-rank Aeolian Skinner pipe organ, 26 Steinway pianos and two harpsichords; there is also a limited collection of orchestral instruments which may be rented by students for a nominal fee, currently \$25.00 per semester.

Studio instruction fees are listed elsewhere in this catalog. Macalester will pay 90% of instruction fees on the major instrument or voice for students with major, core or minor concentrations in music. A bulletin describing the studio instruction program in detail may be obtained from the music department coordinator (Room 103).

101,102 PRIVATE STUDIO INSTRUCTION

Studio instruction in instrument or voice. (1 credit)

105,106 VOCAL PEDAGOGY

Offered as independent study for music education students with special emphasis on the problems of teaching voice. Students will be given special assignments concerning instructional methods for solo and group instruction, and method books. Offered as needed. (1 credit)

300 PIANO PROFICIENCY EXAMINATION (Passing grade of "S" only)

This is a non-credit course number used to document a music major/core/minor as having passed the required piano proficiency examination.

Neuroscience

Full Time Faculty: Lin Aanonsen (Director, Biology), Lynda LaBounty (Psychology), Jan Serie (Biology), Eric Wiertelak (Psychology)

Part Time Faculty: Elizabeth Jansen (Biology)

Neuroscience is an interdisciplinary field, which focuses on the study of the behavioral and biological aspects of nervous system function. It is a field with foundations in psychology, biology, and chemistry but also draws from other disciplines including computer science, physics, mathematics, philosophy, and linguistics. Over the last few decades neuroscience has grown in its scope, depth and representation at graduate and undergraduate institutions. During this time, we have witnessed an astonishing accumulation of knowledge and

theory about the workings of the brain. Even with this wealth of information, many consider the human brain to be one of the last great frontiers in science. Due to the importance of this discipline and its rapid growth, the National Science Foundation and the Congress of the United States declared the 1990s the "Decade of the Brain".

The neuroscience major provides strong basic training in biology, chemistry, mathematics and psychology. With this interdisciplinary foundation, students are able to study and investigate the microscopic structure of the brain and its biological processes as well as the role of the brain in numerous behavioral processes. The neuroscience major also draws naturally from the social sciences and humanities and students can take selected courses from these areas. Thus, the major offers focus while drawing from rich and growing course offerings in diverse areas.

All students in this major take basic courses in biology, chemistry, psychology, and mathematics, as well as intermediate and advanced courses in neuroscience. Students are required to become involved in a research project while they are at Macalester. There are numerous research opportunities with faculty in biology, psychology and chemistry, as well as opportunities at other institutions. The major is completed with a focus in one of two areas: a cellular/molecular emphasis or a psychology emphasis. The rationale for having two tracks within this major is to provide the appropriate preparation for diverse career paths in neuroscience. A neuroscience major with a cellular/molecular emphasis provides appropriate training for biomedicallyrelated careers such as graduate study in neuroscience and other cellular/molecular graduate programs (eg. molecular biology, biochemistry, developmental biology) or medical school. The neuroscience major with a psychology emphasis provides the appropriate background for graduate study in areas such as behavioral neuroscience, physiological psychology, developmental psychology, and neuropsychology.

Major Concentration

The neuroscience major consists of two primary components: I. Completion of a set of courses in neuroscience required for all neuroscience majors and II. an emphasis in cellular/molecular studies OR psychology depending on the interests and future goals of the student. The courses required for all neuroscience majors include introductory courses in the areas of biology, chemistry and psychology, three intermediate level neuroscience courses, an advanced seminar on a neuroscience-related topic, a neuroscience-related course outside of the natural sciences, one mathematics course and one semester of organic chemistry. The senior capstone experience in neuroscience is satisfied by successful completion of an approved research experience and the Senior Seminar in Neuroscience.

Specific Requirements for the Neuroscience Major

The following introductory level courses are prerequisites for many of the intermediate and advanced level courses for the major. You are encouraged to take these courses during your first or second year at Macalester.

Psychology 10: Introduction to Psychology

Biology 21: Cell Biology Biology 22: Physiology

Chemistry 11: General Chemistry I Chemistry 13: General Chemistry II

1. The following intermediate level courses are required:

Psychology 36: Principles of Learning and Behavior

Chemistry 37: Organic Chemistry I

Biology 62/Psychology 62: Cellular & Molecular Neuroscience

Psychology 63: Physiological Psychology

Biology 67: Neuroanatomy

2. One advanced seminar course is required. Examples include:

Biology 86/Psychology 86: Seminar in Neuropharmacology Psychology 82 Research Topics in Neuroscience Biology 83: Seminar in Endocrinology Biology 50: Seminar in Molecular Evolution

3. One neuroscience-related course outside the natural sciences is required. This course may be chosen from the following list or could be an approved course not listed here.

Computer Science 65: Introduction to Artificial Intelligence

Philosophy 27: Bioethics

Philosophy 62: Philosophy of Mind
Psychology 22: Drugs and Society
Psychology 24: Psychological Disorders
Psychology 28: Developmental Psychology
Psychology 31: Perception and the Senses
Psychology 50: an approved topics course

4. One mathematics course, which should include a calculus or statistics course chosen from the following list, is required:

Mathematics 27: Elementary Statistics

Mathematics 21: Calculus I

Psychology 49: Experimentation and Statistics

5. Completion of a research experience is required. Taking an approved Independent Project (Neur 96), an approved non-credit research experience at Macalester or at another institution or one of the following courses can meet this requirement:

Biology 75: Research in Neuroscience

OR one of the following courses upon approval by the Program Director

Psychology 60: Directed Research

Biology 72: Research in Developmental Biology

Biology 73: Research in Immunology Biology 77: Research in Physiology

- 6. Two semesters of Senior Seminar in Neuroscience are required.
- 7. An emphasis in Cellular/Molecular studies *OR* Psychology depending on the interests and future goals of the student. The requirements for each emphasis are stated below.

Cellular/Molecular Emphasis

Students with a cellular/molecular emphasis may want to consider a core in either Biology or Chemistry since most of the requirements for these cores will be met by taking the following courses.

A. Two additional Biology courses chosen from the following list, or an approved course not listed here.

Genetics
Animal Ecology
Immunology
Electron Microscopy
Biochemistry

Biology 64: Comparative Physiology Biology 69: Developmental Biology

B. Two additional chemistry courses which must include

Chemistry 38: Organic Chemistry II

AND either

Chemistry 58: Biochemistry

OR

Chemistry 55: Physical Chemistry

C. Two physics courses:

Physics 21 & 22: Introductory Physics

OR

Physics 26 & 27 Principles of Physics

Psychology Emphasis

Completion of a Psychology major is required for a Neuroscience emphasis in Psychology (see requirements for a Psychology major in this catalog). Depending on the choices made by the student, many of the courses required for the Psychology major will be "double-counted" since a number of the courses are already listed as courses required of all Neuroscience majors.

COURSES

Neuroscience Courses for Non-Majors

Biology 12 THE ENCHANTED CORTEX: A JOURNEY THROUGH THE BRAIN

Psychology 26 BRAIN, MIND, BEHAVIOR

Neuroscience Courses for Majors

88 SENIOR SEMINAR IN NEUROSCIENCE

This seminar consists of student-run discussions of papers relevant to the study of neuroscience and major seminar presentations of student research projects. Open to senior, neuroscience majors.

Students must register for the course in both the fall and spring semesters. Prerequisites: Cellular and Molecular Neuroscience (Biology 62/Psychology 62) and Physiological Psychology (Psychology 63) or permission of the instructor. Fall and spring semesters. (1 credit) S/NC grading only.

96 INDEPENDENT PROJECT

This course provides an opportunity to do independent research or study on a topic in the field of neuroscience. This may be done with a faculty member at Macalester or at another college or university under direct supervision. Students must have the appropriate academic background, including appropriate course work before an independent study will be approved. Prerequisite: sponsorship by a Neuroscience Program faculty member. (4 credits)

98 PRECEPTORSHIP

This preceptorship offers an opportunity for advanced students to become more intensely involved in neuroscience courses by assisting faculty with teaching, particularly in intensive, laboratory settings. Prerequisite: permission of the instructor. (4 credits)

Philosophy

Full Time Faculty: Janet Folina, Martin Gunderson (Chair), Karen J. Warren, Henry West

Part Time Faculty: Joy Laine

Philosophy explores the most fundamental and general questions concerning the nature of knowledge, reality and values. It engages in analysis of the logic of valid arguments, applicable to all rational thought, and in the study of the methodology and basic concepts of other academic disciplines. Philosophy is thus central to the liberal arts. Macalester is unusual in offering courses dealing not only with the tradition of Western philosophy, but also with Asian philosophy, offering a major concentration with an Asian philosophy component or an interdisciplinary core concentration in Asian philosophy. Philosophy lends itself to interdisciplinary programs such as legal studies, women's and gender studies, environmental studies, international studies, and various other possibilities. Requiring the development of skills in critical thinking, a concentration in philosophy is excellent background for careers in teaching, law, religion, public service, and almost any other area in which critical analysis and precise expression are required.

General Distribution Requirement

All courses in the philosophy department meet the general distribution requirement in the humanities except 35 (which meets the distribution requirement in social science), 39, 49 (which meets the distribution requirement in the natural sciences and mathematics), and 67.

Diversity Requirement

The courses in the philosophy department that satisfy the international diversity requirement are those numbered 36, 50 (Life and Mathematics of Srinivasa Ramanujan), and 55.

Major Concentration

A major in philosophy consists of a minimum of nine departmental courses, which must include the following:

Two of the following introductory/intermediate courses: 19 Critical Thinking, 20 Introduction to Symbolic Logic, or 49 Advanced Symbolic Logic; 25 Ethics; 30 Ancient and Medieval Philosophies; 31 Modern Philosophy; at least one of the following advanced courses: 60 Philosophy of Science, 62 Philosophy of Mind, 64 Philosophy of Language, or 86 Wittgenstein Seminar; and 89 Senior Seminar.

In addition, majors in philosophy are required to write a senior paper to be submitted to an undergraduate student journal, though it is not required that the paper be accepted for publication. The paper is due at the end of February and a copy should be given to the department chair. The department chair may waive requirements in exceptional circumstances.

A major in Asian philosophy consists of a minimum of nine courses, which must include Philosophy 20 Introduction to Symbolic Logic (or 19 Critical Thinking); 25 Ethics; 31 Modern Philosophy; 36 Indian Philosophies; 38 Philosophy of Religion; 89 Senior Seminar; 96 Independent Project on a topic in Asian Philosophy; and Religious Studies 24 Introduction to Non-Western Religions. Asian philosophy majors are encouraged to take supporting courses in History and Religious Studies such as those listed below under the description of a core concentration.

The senior capstone requirement in philosophy may be satisfied by Philosophy 89, Senior Seminar, and the senior paper in philosophy.

Core Concentration

A core concentration in philosophy is an interdepartmental program with a core of six courses in philosophy and six supporting courses in other departments approved by an advisor in the philosophy department. Philosophy 25 Ethics, and either 15 Problems of Philosophy or 31 Modern Philosophy are required. Philosophy 19 Critical Thinking or 20 Introduction to Symbolic Logic, 30 Ancient and Medieval Philosophies, and 89 Senior Seminar are highly recommended, but individual programs which do not include these may be worked out with the assistance of an advisor. Some examples of philosophy core concentration patterns are the following:

Asian Philosophy: A core in Asian philosophy will typically include the following courses: Philosophy 15 or 31; 25; 36 Indian Philosophies; 38 Philosophy of Religion; and Religious Studies 24 Introduction to Non-Western Religions. Supporting courses could include Anthropology 11 Cultural Anthropology, 56 Peoples and Cultures of South Asia; Art 76 Far Eastern Art; Comparative North American Studies 45 Living on the Edge: The Asian American Experience; Dramatic Arts 68 Asian Theatres; History 14 Introduction to East Asian Civilization, 74 History of Traditional China, 75 History of Modern China, 76 History of Traditional Japan, 77 History of Modern Japan; Philosophy 62 Philosophy of Mind; Religious Studies 40 Religions of India, 41 Religions of

East Asia, 52 Gender, Caste, and Deity in India; or a study away program in India, China, or Japan.

Political Philosophy: Philosophy courses in addition to 25 and either 15 or 31 could include Philosophy 24 Western Political Thought, 55 History and Philosophy of Socialism, 73 Philosophy of Law, and supporting courses from economics and political science.

Cognitive Science: Philosophy courses in addition to 25 and either 15 or 31 could include Philosophy 20 Introduction to Symbolic Logic, 35 Philosophy of Psychology, 49 Advanced Symbolic Logic, 60 Philosophy of Science, 62 Philosophy of Mind, or 64 Philosophy of Language, with supporting courses from Computer Science, Linguistics and Psychology.

Feminist Philosophy: Philosophy courses in addition to 25 and either 15 or 31 could include 19 Critical Thinking or 20 Introduction to Symbolic Logic, 29 Feminism and Environmental Ethics, 68 Feminist Philosophy, and 96 Independent Project with supporting courses in women's and gender studies.

A core concentration in philosophy is appropriate for interdepartmental programs in environmental studies, women's and gender studies, and international studies. Descriptions of these programs can be found elsewhere in the catalog.

Minor Concentration

A minor in philosophy consists of five courses in the department approved by an advisor in the philosophy department, including Philosophy 25 Ethics, and either 15 Problems of Philosophy or 31 Modern Philosophy.

COURSES

15 PROBLEMS OF PHILOSOPHY

An introduction to philosophy through topics found in classical philosophical writings, such as the nature of truth and knowledge, mind and body, freedom and determinism, right and wrong, and the existence of God. Course content varies from instructor to instructor. Specific course descriptions will be available in the department prior to registration. Every semester. (4 credits)

19 CRITICAL THINKING

A course which focuses on key skills involved in critical thinking (recognizing and evaluating arguments, assumptions, implications, definitions, analogies, generalizations, predictions, value claims) and on the use of critical thinking in different kinds of reasoning (moral reasoning, legal reasoning, scientific reasoning, aesthetic reasoning, narrative or rhetorical reasoning). Topics include the nature of arguments, formal and informal fallacies, problem-solving, the interplay between critical and creative thinking, and the study of arguments as they occur in both everyday and philosophical contexts. Through exercises, problem-sets, and short essays, the overall aim is to improve students' reasoning and argumentative writing skills. No prerequisite. Every fall. (4 credits)

20 INTRODUCTION TO SYMBOLIC LOGIC

An introduction to formal methods for evaluating deductive arguments. Topics include formal fallacies, decision procedures, translation of arguments to argument forms, and natural deduction proofs in propositional and predicate logic. No prerequisite. Every year, next offered spring 2000. (4 credits)

24 WESTERN POLITICAL THOUGHT

An examination of Western political theory and philosophy from the ancient Greek to the modern age. Not offered 1999–2000. (4 credits)

25 ETHICS

An alternative introduction to philosophy, concentrating on normative philosophical concepts and issues, such as the nature of value, duty, right and wrong, and the good life, with applications to selected problems of personal and social behavior. Every semester. (4 credits)

27 BIOETHICS

Bioethics deals with a variety of ethical issues arising in the context of medical care and biomedical research. These issues include informed consent, euthanasia, reproductive rights, confidentiality, and the distribution of health care resources. The course uses ethical theory to shed light on issues in medicine and issues in medicine to illuminate ethical theory. No prerequisite. Alternate years, next offered fall 1999. (4 credits)

29 FEMINISM AND ENVIRONMENTAL ETHICS

A course which addresses a variety of issues in environmental ethics from a feminist, particularly ecofeminist, point of view: the nature of environmental ethics; the alleged connections between the twin dominations of women and nature; the place of ecological feminism in any responsible feminism, environmentalism or environmental ethics; the contributions of feminist ethics to environmental ethics; the impact of Black and Third World feminism on environmental ethics; the relevance of contemporary scholarship in feminist philosophy of science, ecological science, postmodernism, and feminist theology to ecofeminism and environmental philosophy. No prerequisites. Next offered fall 1999. (4 credits)

30 ANCIENT AND MEDIEVAL PHILOSOPHIES (Same as Classics 30)

A study of major philosophers of ancient Greece, Rome and the medieval period. Every fall. (4 credits)

31 MODERN PHILOSOPHY

A study of the 17th and 18th century philosophers, including the Empiricists, Rationalists, and Kant. Every spring. (4 credits)

35 PHILOSOPHY OF PSYCHOLOGY (Same as Psychology 35)

An introduction to the history and systematic development of contemporary viewpoints in psychology. Among the topics considered are so-called primitive thought, ancient Greece, mind-body problems, structuralism, functionalism, phenomenology, animal psychology, social psychology, behaviorism, Gestalt psychology, psychoanalysis, existentialism, humanism, hermeneutics, deconstructionism, and cognitive psychology. Every fall. (4 credits)

36 INDIAN PHILOSOPHIES

An introductory study of some of the great philosophers and philosophical problems of the Indian philosophical tradition with a focus on Buddhist and Hindu philosophical debate that endured from the time of the Buddha to around 1000 CE. Topics will include the role of philosophy in the Indian intellectual and religious tradition; Indian logic; the relationship between philosophy and practice (yoga, meditation); what counts as knowledge (pramana theory); ultimate truth versus conventional truth; Buddhist/Hindu debate on the nature of persons, rebirth and karma; competing theories of reality (momentariness, emptiness, non-dualism, realism) and methodologies of cross-cultural philosophy. Students will learn the basic Sanskrit terminology of Indian philosophy and will work with primary source material in translation. Every year, next offered spring 2000. (4 credits)

38 PHILOSOPHY OF RELIGION

Philosophical analysis of problems in religion and theology such as arguments for the existence of God and the nature of religious knowledge. Alternate years, next offered 2000–2001. (4 credits)

39 PHILOSOPHY OF EDUCATION (Same as Education 39)

An analysis of the nature and purpose of education. In what ways should educational institutions support, challenge, or transform predominant social values? What is ethical educational policy and practice? Such questions are considered in light of a variety of philosophic perspectives. Students will define a personal philosophy of education and assess its implications for current educational theory and practice in addition to their own educational development. Every semester. (4 credits)

49 ADVANCED SYMBOLIC LOGIC (Same as Mathematics 49)

A second course in symbolic logic which extends the methods of logic. A main purpose of this course is to study logic itself — to prove things about the system of logic learned in the introductory course.

This course is thus largely logic about logic. Topics include second order logic and basic set theory; soundness, consistency and completeness of first order logic; incompleteness of arithmetic; Turing computability; modal logic; and intuitionistic logic. Prerequisite: Philosophy 20, Mathematics 26, or permission of instructor. Alternate years, next offered spring 2001. (4 credits)

50 TOPICS

Courses, not regularly offered, which are designed to meet student interest in something not in the list of catalog courses. Recent offerings have been: Free Will and Human Action; Dangerous Speech; Philosophy of the Emotions; Hobbes, Locke, Rousseau; Freedom, Speech and Action. Courses for 1999–2000 will include Nietzsche: Romantic, Modern, Postmodern; History of Western Women Philosophers; and The Philosophy and Mathematics of Srinivasa Ramanujan (4 credits)

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, and others will be read and discussed. Alternate years, next offered fall 1999. (4 credits)

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, 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 must enroll in both History 55 and Philosophy 55 and receive credit for each course. Alternate years, next offered fall 1999. (4 credits for each course, for a total of 8 credits)

60 PHILOSOPHY OF SCIENCE

Philosophy of science is the study of the fundamental processes, principles, and presuppositions of the natural sciences. Topics include science versus pseudoscience, scientific explanation, change in science, the philosophy of space and time, theories of confirmation, and the realist/anti-realist debate over whether science offers us objective truth. Prerequisite: Philosophy 20 and some background in philosophy, or permission of instructor. Alternate years, next offered spring 2000. (4 credits)

61 PHILOSOPHY OF MATHEMATICS

An examination of the logical and philosophical foundations of mathematics, with some emphasis on the history of twentieth century mathematics. Topics include mathematical truth, mathematical reality, and mathematical knowledge. Prerequisite, Philosophy 20 and some background in philosophy or permission of instructor. Alternate years, next offered 2000–2001. (4 credits)

62 PHILOSOPHY OF MIND

Materialism, rather than solving the problem of mind, consciousness and intentionality, has spawned numerous philosophical perplexities. This course will examine a variety of philosophical problems associated with contemporary models of the mind (mind/body dualism: mind/brain identity theories; behaviorism; functionalism and artificial intelligence; eliminative naturalism and folk psychology; anticonstructive naturalism; biological or constructive naturalism). The course will also look at contemporary philosophical accounts of personhood and personal identity, particularly narrative accounts of the self. Readings will typically include Paul and Patricia Churchland, Antonio Damasio, Daniel Dennett, Owen Flanagan, Derek Parfit, Marya Schechtman, John Searle and Kathleen Wilkes. Prerequisite, Philosophy 15 or 31, or permission of instructor. Alternate years, next offered 2000–2001. (4 credits)

64 PHILOSOPHY OF LANGUAGE (Same as Linguistics 64)

What is language and what is it for? What makes a series of sounds into a meaningful sentence? What makes a sentence true? Why is language always changing? This course will introduce students to ways in which twentieth century philosophers have attempted to provide answers to such questions. Since the philosophy of language has been so crucial to contemporary philosophy, this course also serves as an introduction to twentieth century philosophical thought. Topics will range from more technical problems (theories of meaning, reference and truth; synonymy and analyticity; universals and natural

kinds; private languages) to broader issues examining the relationship between language and culture (language games; radical interpretation; social change). Readings typically include writings by Ludwig Wittgenstein, W.V. Quine, John Searle, Donald Davidson, Richard Rorty, Michel Foucault, and bell hooks. Prerequisite, Philosophy 31, or permission of instructor. Alternate years, next offered fall 1999. (4 credits)

67 PEACE STUDIES (Same as Political Science 67)

An interdisciplinary approach to the problems of intrapersonal, interpersonal and institutional conflict and social violence. Topics will include: definitions of "peace," ethical appraisal of war and violence, pacifism and nonviolence, conflict resolution, psychological and anthropological views on aggression, causes of war, militarism, nuclearism, the relationship of violence to contemporary social problems and interrelationships among peace, ecology and feminism. Alternate years, next offered 2000–2001. (4 credits)

68 FEMINIST PHILOSOPHY

A course which explores various positions and topics in feminist philosophy, with particular emphasis on ethics, epistemology, political philosophy, and philosophy of science. Topics include: the nature of feminist philosophy; feminist theories and theorizing; conceptions of the self, moral agency, knowledge, reason and the body, sexuality, liberty, justice, the public/private split, the state, and nature. Prerequisite, Philosophy 19 or 20, and 15 or 31. Next offered spring 2000. (4 credits)

73 PHILOSOPHY OF LAW (Same as Political Science 73)

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. Alternate years, next offered 2000–2001. (4 credits)

86 SEMINAR: WITTGENSTEIN

A course which examines the philosophy of Ludwig Wittgenstein and several other twentieth century philosophers. The central texts of the course are the *Tractatus Logico-Philosophicus,Philosophical Investigations*, and *On Certainty*. In addition the course will consider the logical atomism of Bertrand Russell and several more recent anti-realist programs such as those of Michael Dummett and Crispin Wright. Prerequisites, Philosophy 20, Philosophy 31, or permission of instructor. Alternate years, next offered 2000–2001. (4 credits)

88 SEMINAR: TOPICS

A study of some movement, philosopher or problem in the tradition of Western philosophy. Primarily for juniors or seniors doing a core or major in philosophy. Prerequisite, permission of the instructor. Offered on an occasional basis. (4 credits)

89 SENIOR SEMINAR

A capstone experience in philosophy for majors, cores and others with sufficient background. Topics may include: realism vs. anti-realism, relativism and skepticism, the mind-body problem, free will and determinism, and personal identity. The topics will be addressed from various points of view, involving all members of the department in some of the instruction. One aim of the course is for participants to get an overview of their concentration in philosophy by examining the fruitfulness of various ways of doing philosophy. It is also an opportunity for seniors to present for discussion their senior papers, written for this or for some other course. Prerequisite, philosophy major or core and senior status, or permission of instructor. Every fall. (4 credits)

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 (4 credits)

96 INDEPENDENT PROJECT (1-4 credits)

97 INTERNSHIP (1-4 credits)

98 PRECEPTORSHIP (4 credits)

Physical Education

Full Time Faculty: Douglas Bolstorff

Full Time Staff: Irv Cross (Director), Vanessa Seljeskog (Assoc. Dir.), Tom Cross, Dennis Czech, Steve Hauser, Tina Johnson, Curt Kietzer, John Leaney, Morrey Nellis, Mary Orsted, Matt Parrington, Bob Pearson, Martin Peper, Steph Schleuder, Julie Young

The department of physical education provides students the opportunity to prepare for 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, (NCAA Division III). Varsity sports for men include baseball, basketball, cross country, football, golf, Nordic skiing, soccer, swimming and diving, tennis, and indoor and outdoor track and field. Varsity sports for women include basketball, cross country, golf, Nordic skiing, soccer, softball, swimming and diving, tennis, indoor and outdoor track and field, and volleyball.

Club sports include crew, fencing, ice hockey, rugby, ultimate frisbee, men's volleyball and water polo.

Intramural competition is available in a wide variety of sport activities throughout the school year. Team sports have men's, women's and co-ed schedules. Individual sports have men's and women's singles, doubles tournaments and co-ed doubles tournaments.

Coaching Preparation

A coaching preparation program is offered through the Physical Education Department in conjunction with the Education Department. Completion of this program prepares students (any discipline) to coach varsity athletic teams. The core courses for coaching preparation are: Physical Education 51, 61, 71, 81, and Education 30.

COURSES

50 TOPICS

Examination of subject matter of special interest to students and/or faculty. Variable material each term. (4 credits)

51 ANATOMY AND CARE AND PREVENTION OF ATHLETIC INJURIES

Human anatomy with particular attention given to the structure of the skeletal and muscular systems. Care and prevention of athletic injuries will be studied in relation to the human anatomy including awareness of available modalities and experience in strapping. This is followed by additional first aid procedures plus acquisition of techniques of basic life support (CPR card). Fall semester. (4 credits)

61 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. A brief review of human anatomy and physiology will precede the main content of the course. (Physical Education 51 recommended). Spring semester. (4 credits)

71 PSYCHOLOGY AND TECHNIQUES OF SPORTS AND COACHING

An examination of the theory and techniques of coaching, including topics of coaching philosophy, motivation, general coaching practices, and current issues and problems in athletics. This will be followed by an intense study of specific coaching techniques of a particular sport(s). Spring semester. (4 credits)

81 COACHING PRACTICUM

Supervised field experience for coaching in an interscholastic or intercollegiate setting. Includes participation in on-campus seminars. Fall and spring semesters. (2 credits)

96 INDEPENDENT PROJECT

Junior and senior students may undertake individual projects involving library and/or laboratory research. Prerequisite, faculty sponsorship and departmental approval. (4 credits)

97 INTERNSHIP (4 credits)

Activity Courses

A variety of activity classes are offered. Four semester credits are awarded when a student has completed four different courses, one of which must be Physical Education 101. Grading for all activity courses is on an S-NC basis. Dance classes from the dramatic arts and dance department may also be counted toward the credit option. A maximum of four semester credits may be earned through these activity classes. Physical Education activity classes may be taken as a fifth class for no additional charge

Water Activities

233 Swim for Fitness
234 Water Polo
333 Lifeguard Training
335 Water Safety Instructor

Lifetime Activities

101 Personal Health and Wellness	143 Ballroom Dance
103 Running	145 Self Defense
104 Low Impact Aerobics	141 Cross Country Skiin
105 Aerobics I	146 Karate I
106 Step Aerobics	147 Fencing I
110 Basketball	148 Tae Kwon Do
113 Conditioning	205 Aerobics II
116 Racquetball I	206 Yoga I
117 Soccer Skills	223 Badminton II
120 Racquetsports	224 Tennis II
123 Badminton I	243 Ballroom Dance II
124 Tennis I	246 Karate II
125 Weight Training	247 Fencing II
126 Golf	306 Yoga II
127 Strength Training for Body Shaping	

Miscellaneous

196 Independent Study—Students with instructor sponsorship may design their own activity course.

201 Topics—New activity courses that have not yet become a regular offering of the department

Physics and Astronomy

Full Time Faculty: James Doyle (Chair), James Heyman, Sung Kyu Kim, Nathaniel Longley, Raymond Mikkelson, Kim Venn

Laboratory Supervisor: Brian Adams

The Department of Physics and Astronomy offers courses that treat experimental, theoretical, philosophical and historical developments in the search to understand our physical universe. In addition to the physics major program, the department's curriculum is also designed to support the needs of two other groups of students.

Non-science majors who want to study the conceptual foundations of physics and astronomy should consider Physics 11, Contemporary Concepts, and Physics 13, Modern Astronomy.

Science majors who seek a physics foundation for advanced science studies should consider the three-term sequence of introductory physics, Physics 26, Principles of Physics I; Physics 27, Principles of Physics II; and Physics 31, Modern Physics. This sequence uses calculus; at a minimum Physics 26 requires concurrent registration in Calculus I. These courses also serve as prerequisites for advanced courses leading to the physics minor, core and major concentrations.

In addition, Physics 21-22 is a two-term sequence in introductory physics, which does not assume a working knowledge of calculus. These courses are regularly offered only in the Macalester summer physics institute directed by Sung Kyu Kim.

General Distribution Requirement

All courses in the physics and astronomy department except some topics courses and those numbered 96, 97 and 98 count toward satisfaction of the general distribution requirement in the natural sciences.

Major Concentration

The major concentration in physics provides a rigorous study of many topics in the field of physics that are fundamental for every scientific and technological discipline. The physics major is particularly appropriate for students wishing to pursue graduate study in physics, astronomy, engineering, medicine and related areas, as well as for those seeking positions in technology-oriented business and industry. For example, a double major in physics and computer science would be excellent preparation for graduate study in computer engineering.

The minimum requirements for the physics major are 33 physics credits. These include the six physics courses numbered 26, 27, 31, 43, 44 and 61, an advanced laboratory experience (e.g., 53, 55, 88, 96, or 97), additional elective credits from physics courses numbered above 31, and completion of the senior capstone. All physics majors are expected to develop the computer skills necessary to obtain solutions for meaningful problems. Students not intending to qualify for graduate work in physics or astronomy may elect, with departmental approval, to substitute other courses numbered above 31 for Physics 43, 44 and 61.

Students intending to pursue graduate study in physics, astronomy, engineering or other closely related disciplines should consult with a department faculty

advisor to consider which advanced elective courses would be most appropriate for their career goals. For example, preparation for graduate study in physics should include Physics 34, 42, 68 and 81 and mathematics at least through multi-variable calculus, differential equations and linear algebra. Note that many graduate programs require proficiency in either a foreign language or a computer language.

The senior capstone requirement in physics and astronomy may be satisfied by participation *as a senior* in the Physics Seminar (Physics 89) and completion of an approved four-credit advanced laboratory experience, such as Physics 53, Physics 55, an independent research project or a senior honors thesis.

Students expecting to complete a major concentration in physics are urged to make early contact with the department for help in evaluating advanced placement options and for assistance in planning course selections. A typical schedule for the first two years for a student without advanced placement follows:

First Year		Sophomore Year		
Fall Term	Spring Term	Fall Term	Spring Term	
Physics 26	Physics 27	Physics 31	Physics 42	
Mathematics 21	Mathematics 22	Mathematics 37	Physics 34	
elective	elective	elective	Mathematics 41	
elective	elective	elective	elective	

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. Sixteen credits in physics are granted to physics majors who complete the program.

Engineering

Macalester does not offer engineering courses. However, students who desire to pursue engineering as a career may earn a graduate degree in an engineering field after graduation from Macalester or they may complete a cooperative 3–2 engineering program at the University of Minnesota or Washington University.

Core Concentration

The core concentration offers students a wide breadth of choice in course selection, as might be desired by students preparing to teach physics in secondary schools or planning interdisciplinary work in biophysics, geophysics, chemical physics or similar fields. The requirements for a physics core consist of six courses in the department, including Physics 31, Modern Physics, plus six additional courses normally from the area of the natural sciences and mathematics. Courses outside these areas may be selected with departmental approval. For the core concentration in physics the student should complete mathematics through Calculus II and be able to use a computer to obtain solutions for meaningful problems.

Minor Concentration

The minor in physics consists of Physics 26, 27, 31 and an elective in physics numbered above 31.

COURSES

11 CONTEMPORARY CONCEPTS

This course is specifically designed for the liberal arts student who desires an essentially non-mathematical, yet wholly faithful, acquaintance with the fundamental concepts of contemporary physics. Topics include special relativity, curved space-time and black holes, the Big Bang universe, light, quantum theory, and elementary particles. These are presented so as to demonstrate the power of "pure thought" and scientific creativity at its best. The underlying assumption of the course is that physics approached as a way of thinking can be vitally relevant and challenging to students of all intellectual persuasions. Three lectures per week in fall and spring. No prerequisites. Offered fall and spring semesters. (4 credits)

13 MODERN ASTRONOMY

This course discusses topics of current interest in astronomy and the physical concepts that lead to our understanding of the Universe. There are three main sections: the Solar System, Celestial Light and Stars, and Galaxies and the Universe. Lectures include the formation of the Sun and planets, properties of stars and stellar remnants (like black holes and supernovae), characteristics of our Milky Way and other galaxies, and the formation and fate of the Universe. Basic algebra and trigonometry are recommended. No prerequisites. Offered fall and spring semesters. (4 credits)

20 ASTRONOMICAL TECHNIQUES

This laboratory course provides active exercises in astronomical measurement techniques, including telescope and other observations of the night sky (as weather permits). The course is ideal for students who desire hands-on observing experience to complement Physics 13, Modern Astronomy, or as a background for advanced observing projects. Prerequisites: concurrent or previous registration in Physics 13 or Physics 26. Fall semester, 1999. (2 credits)

21 INTRODUCTORY PHYSICS I

Mechanics, heat and sound, including laboratory experiments and extensive demonstrations. Daily lectures and help sessions, three two-hour laboratories per week. Summer Physics Institute only (June 12–July 7, 2000). (4 credits)

22 INTRODUCTORY PHYSICS II

Electricity and magnetism, light and optics, modern physics, including laboratory experiments and extensive demonstrations. Daily lectures and help sessions, three two-hour laboratories per week. Summer Physics Institute only (July 10–August 4, 2000). (4 credits)

26 PRINCIPLES OF PHYSICS I

A study of motion, including Newton's Law of Motion, conservation of energy and momentum, rotational kinematics and dynamics, oscillations, waves in elastic media and thermal properties of matter. Minimum prerequisite: concurrent registration in Calculus I. Three lectures and one two-hour laboratory per week. Fall semester. (4 credits)

$27\ \mathsf{PRINCIPLES}$ OF PHYSICS II

A study of electric charge and currents, electric and magnetic fields, electromagnetic waves, and geometrical and physical optics. Minimum prerequisites: Physics 26 and concurrent registration in Calculus II. Three lectures and one two-hour laboratory per week. Offered Fall and Spring semesters. (4 credits)

31 MODERN PHYSICS

This course provides an introductory treatment of the exciting foundations of modern microscopic physics, including special relativity, quantum theory, atomic structure, nuclear structure and elementary particles. The primary goal of the course is to build the solid theoretical foundation in microscopic physics necessary for advanced studies in nearly all science disciplines. In addition to the theoretical treatment of the topics there will be laboratory exercises, which recreate the spirit and

excitement of the pioneering experiments. Minimum prerequisites: Physics 27. Three lectures, one three-hour laboratory per week. Fall semester. (4 credits)

34 OPTICS

Principles of optics and wave phenomena, including the fundamental properties of light, geometrical optics, polarization, interference and diffraction. Laboratory includes basic optical experiments and an independent project. Recent independent projects have included: holography, fiber-optics communications, microwave optics and telescope building. Prerequisites: Physics 27 or consent of instructor. Three lectures and one three-hour laboratory per week. Normally offered alternate years, next offered spring semester, 2000. (4 credits)

38 DIGITAL ELECTRONICS

This course is a survey of fundamental ideas and methods used in the design and construction of digital electronic circuits such as computers. Emphasis will be on applying the theoretical aspects of digital design to the actual construction of circuits in the laboratory. Topics to be covered include basic circuit theory, transistor physics, logic families (TTL, CMOS), Boolean logic principles, combinatorial design techniques, sequential logic techniques, memory circuits and timing, and applications to microprocessor and computer design. Prerequisite: Calculus II and permission of instructor. Three lectures and one three-hour laboratory per week. Alternate Spring semesters, next offered spring 2001. (4 credits)

40 OBSERVATIONAL ASTRONOMY

This is an advanced course in the modern observational techniques used by astronomers. Computational image-processing techniques are used to study stars, nebulae, and galaxies. Topics include exercises and an individual research project using the Macalester Observatory facilities. Prerequisites: Physics 20 or Physics 31. One three-hour class/week. Normally offered alternate years, next offered spring semester 2001. (2 credits)

42 ANALOG ELECTRONICS

This course is an introduction to the fundamentals of electric circuits, diodes, transistors and integrated circuits and their use in analog circuits such as power supplies, amplifiers, analog filters, oscillators and feedback control circuits. Students will also be introduced to Fourier methods of signal processing and to the PSpice circuit simulation software. Applications of these techniques to signal conditioning and analog/digital conversion, including basic parallel-port microcomputer interfacing will be included. Prerequisite: Physics 27. Three lectures and one three-hour laboratory per week. Alternate Spring semesters, next offered spring 2000. (4 credits)

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 electromagnetic waves in free space. Special emphasis is placed on boundary value problems and other useful mathematical techniques. Prerequisites: Physics 27 and Math 37, Multi-variable calculus. Three lectures per week. Fall semester. (4 credits)

44 ELECTROMAGNETIC THEORY II: MATERIAL MEDIA

This course extends the treatment of Physics 43 to the electromagnetic properties of matter, especially the solid state, and the properties of electromagnetic waves and radiation. The treatment of electromagnetism within the special theory of relativity is also covered. Prerequisite: Physics 43. Three lectures per week. Spring semester. (4 credits)

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, Solid State Physics, Black Hole Physics, Solving Physics Problems with *Mathematica* and a Current Issues in Physics Seminar. (2–4 credits)

53 SEMICONDUCTOR AND THIN-FILM PHYSICS

This is an Advanced Laboratory course in the science and technology of semiconductors, with emphasis on thin-film semiconductors. The focus is on practical laboratory experience, with collateral

readings and discussions to cover the relevant theory. Topics include deposition methods, structural characterizations, and optical and electrical characterization of thin films and semiconductor devices. A wide variety of general experimental techniques will be surveyed including vacuum technology, lock-in detection, digital oscilloscope applications, signal-to-noise optimization, and data analysis techniques. Prerequisite: Physics 31 or Chemistry 56. Normally offered in alternate years. Next offered fall 2000. (4 credits)

55 OPTICAL AND RESONANCE SPECTROSCOPY

This Advanced Laboratory course treats experimental techniques in visible, infrared, and magneticresonance spectroscopy to investigate the physics of solids and molecules. Practical laboratory work, plus discussions, readings and problem sets to cover the relevant theory. The experiments and techniques explored in this course are central to physics, physical chemistry and biophysics. Prerequisite: Physics 31 or Chemistry 56 or consent of the instructor. Two three-hour sessions/week. Normally offered in alternate years. Next offered fall term 1999. (4 credits)

60 ASTROPHYSICS

This course covers advanced topics in astrophysics. It includes spectroscopy of stars, the interaction of light and matter in stellar atmospheres and interstellar medium, nucleosynthesis and the interior of stars, the structure of the Milky Way galaxy and the evidence for dark matter, properties and the formation of different types of galaxies, large-scale structure of the Universe, and observational tests of cosmology. Prerequisites: Physics 13 and Physics 31, or consent of the instructor. Three hours/week. Normally offered alternate years, next offered spring semester, 2001. (4 credits)

61 MECHANICS

The fundamental principles of classical mechanics are discussed and applied to problems of contemporary interest. Topics include: charged particle motion in electromagnetic fields, oscillations and resonance, central force motion including the Kepler problem and Rutherford scattering, Lagrangian and Hamiltonian formulations of classical dynamics, symmetry and conservation laws, non-inertial reference frames, rigid body dynamics and applications, and an introduction to non-linear dynamics. Prerequisites: Physics 27 and mathematics through differential equations. Three lectures and problem discussions per week. Spring semester. (4 credits)

$68\,\mathrm{THERMAL}$ PROPERTIES OF MATTER

This course explores the equilibrium and kinetic properties of many-particle systems such as gases, liquids, and solids. The fundamental notions of entropy, temperature, and the Boltzmann relation are rigorously derived from statistical mechanics, and are used to develop other thermodynamic ideas such as chemical potential and free energy. The theory is applied to classical and quantum systems, including photon gases (black-body radiation), Bose-Einstein condensation, fermion systems such as metals and neutron stars, classical ideal gases, vibrations in solids (phonons), chemical reactions, semiconductors, and transport phenomena. Prerequisites: Physics 31 and Mathematics 37. Three lectures per week. Alternate years, next offered fall semester 1999. (4 credits)

81 QUANTUM MECHANICS

The course rigorously covers many fundamental concepts of non-relativistic quantum mechanics, including the Heisenberg uncertainty principle and Pauli exclusion principle, single- and multiparticle stationary states in one, two and three dimensions, and quantized angular momentum and spin. Schrodinger equation solutions for atomic and nuclear systems are studied, using differential equation, matrix and perturbation techniques. Prerequisites: Physics 31 and mathematics through differential equations. A familiarity with linear algebra is also helpful. Three lectures a week. Fall semester. (4 credits)

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. Prerequisites: senior standing and departmental approval of the project prior to registration. Every year. (4 credits)

89 PHYSICS SEMINAR

This seminar discusses current topics in physics, astronomy and related fields. It satisfies part of the senior capstone requirement for the physics major. Readings will be assigned as preparation for each seminar meeting. Each student will make a presentation and lead the discussion for at least one

seminar session. Faculty and visitors may also make presentations and lead discussions. S/D/NC grading. One hour/week. Spring semester. (1 credit)

96 INDEPENDENT PROJECT

Independent reading and experimentation by arrangement. Prerequisite: a faculty sponsor and the department chair must approve a written proposal prior to registration. Every semester. (4 credits) 97 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. Every semester. (4 credits) 98 PRECEPTORSHIP (4 credits)

Political Science

Full Time Faculty: Franklin Adler (Chair), Bruce Baum, David Blaney, Charles Green, Duchess Harris, Andrew Latham, Ahmed Samatar

Urban Studies: George Latimer

Political science emphasizes making connections between the theory and practice of politics. Concerns range from perennial philosophical issues regarding justice, equality, and freedom to practical political matters such as conflict resolution, collective decision-making, and public policy. Numerous situations and opportunities are provided to consider how theoretical understandings of politics can inform political action and how participation in politics offers the basis for understanding it. In addition to course work in classroom settings, there are opportunities for field work, independent study, internships, and study away. A variety of courses are offered, distributed across four subfields: U.S. politics, international politics, political theory and comparative politics.

General Distribution Requirement

All courses in the political science department satisfy the general distribution requirements in the social sciences except for some courses numbered 50, 97 and 98 (consult department chair).

Diversity Requirement

The course in the political science department which satisfies the domestic diversity requirement is numbered 42. The courses which satisfy the international diversity requirement are numbered 62, 63 and 64.

Major Concentration

The normal requirements for a major concentration consist of nine courses:

- (a) Political Science 24 and two other Foundations courses (Political Science 20, 21 or 26).
- (b) a research methods course (Political Science 30 or Sociology 41), for which Math 14 or its equivalent is a prerequisite, and is required for all majors.

- (c) at least three intermediate courses (numbered 31–69);
- (d) two advanced courses or seminars (numbered 70–89);

The senior capstone requirement in political science may be satisfied by the following: Successful completion of a Political Science 88 Senior Research Seminar or through independent projects approved by department faculty and chair

The department strongly recommends completion of an internship, study of a foreign language, and use of study away opportunities. Political science majors should plan their programs of study in close consultation with their department advisors.

Minor Concentration

A minor concentration is five courses normally including two Political Science Foundation courses and one advanced course or seminar is strongly recommended. Consult department advisors and chair.

Interdepartmental Programs

Interdepartmental Studies: Political Science Department actively cooperates with a number of Interdepartmental Programs including: International Studies, Legal Studies, Environmental Studies, Women's and Gender Studies, and Urban Studies. Consult both department and program advisors.

COURSES

Foundation courses

$20\ {\rm FOUNDATIONS}$ OF U.S. POLITICS

An analysis of the major ideas, actors, institutions and processes that shape the formulation and execution of public policy in the United States. Every semester. (4 credits)

21 FOUNDATIONS OF COMPARATIVE POLITICS

A survey of theories and methods employed in comparative political analysis. Every year. (4 credits)

24 FOUNDATIONS OF POLITICAL THEORY

An examination of the evolution of fundamental western political ideas from the Greeks to the present. Every semester. (4 credits)

26 FOUNDATIONS OF INTERNATIONAL POLITICS

Analysis of the international/global environment, major problems and the theories and models of international relations. Every semester. (4 credits)

Intermediate courses:

30 EMPIRICAL RESEARCH METHODS

Strategies and tactics of design, observation, description and measurement in contemporary political research. Required for the major. Prerequisites, at least one Political Science Foundations course and Mathematics 14 or equivalent introductory statistics. Every year. (4 credits)

(Courses listed 31-39 . Can be applied to the major and require Political Science 20 or 24 as a prerequisite.)

31 CONSTRUCTING POLITICAL THEORIES

Strategies and tactics of contemporary political representation and explanation. Construction and assessment of empirical and formal theories and models. Alternate years, next offered 2000–2001. (4 credits)

33 REDESCRIBING POWER

Power as a critical constitutive factor in politics is examined from a diversity of theoretical perspectives and in a variety of settings; from the pluralist, elitist, structural, Marxist, feminist, and postmodern; from theories of the state to the micropolitics of everyday life. One of the Foundation courses as prerequisite. Alternate years, next offered spring 2001. (4 credits)

35 AMERICAN POLITICAL THOUGHT

A study of selected writings and topics in political thought of the United States. Political Science 20 recommended. Alternate years, next offered fall 1999. (4 credits)

37 CONTEMPORARY POLITICAL THOUGHT

Transition in the nature of domination from manifest coercion to cultural hegemony. The course will focus on Critical Theory, principally Marcuse and Habermas, but will also consider Marx, Weber, Freud, Gramsci, Lukacs and Foucault. Every year. (4 credits)

38 FEMINIST POLITICAL THEORY

Analysis of contemporary feminist theories regarding gender identity, biological and socio-cultural influences on subjectivity and knowledge, and relations between the personal and the political. Every year. (4 credits)

(Courses numbered in the 40s can be applied to the required major and assume at least one of the Foundation course as a prerequisite.)

41 POLITICAL PARTICIPATION

Analysis of institutions and procedures such as parties and elections, and also informal activities such as social movements, interest groups, and community action. Alternate years, next offered 2000–2001. (4 credits)

42 RACE, ETHNICITY, AND POLITICS

Analysis of racial and ethnic factors and their implications for political processes and public policy. Every year. (4 credits)

46 URBAN POLITICS

American urban politics, emphasizing urban policy problems, planning and decision-making. Political Science 20 recommended. Every year. (4 credits)

47 POLICY ISSUES

Analysis of selected policy concepts, problems and processes. Special emphases will be announced each time the course is scheduled and may include such broad topics as human rights, social policy, environmental policy, educational policy, budget policy, labor policy, and health policy. Political Science 20 and 30 are recommended. Every year. (4 credits)

49 SCIENCE, TECHNOLOGY, AND POLITICS

Analysis of relationships between science, technology, and politics. Includes such topics as environment, health/medicine, technology transfers, and research and development policies. Prerequisite, consent of instructor. Alternate years, next offered 2000–2001. (4 credits)

50 TOPICS

Selected issues and special topics. (4 credits)

(Courses listed 51–59 can be applied to the major and one of the Foundation courses as a prerequisite.)

56 U.S. CONSTITUTIONAL LAW AND THOUGHT

Analysis of Supreme Court policies with regard to the allocation of national governmental powers and federalism, using case-based study, policy analysis, and legal theory. Political Science 20 and 35 recommended. Every year. (4 credits)

57 U.S. CIVIL RIGHTS AND CIVIL LIBERTIES

Analysis of Supreme Court policies on individual rights and liberties and their legal implications, using case-based study, policy analysis and legal theory. Political Science 20 and 35 recommended. Every year. (4 credits)

59 RE-ENVISIONING EDUCATION AND DEMOCRACY (Same as Education 59)

Explorations of theory and practice of education and democracy through collaborative research and development, service learning, and the design of innovative, principled, educationally and politically feasible solutions to significant educational policy problems. Offered spring semester yearly. (4 credits)

(Courses listed in the 60s can be applied to the major and one of the Foundation courses as a prerequisite)

62 POSTCOLONIAL THEORY (Same as International Studies 62)

Traces the development of theoretical accounts of culture, politics and identity in Africa, South Asia, the Caribbean and related lands since the 1947–1991 decolonizations. Readings include Fanon, Said, Walcott, Ngugi and many others, and extend to gender, literature, the U.S., and the post-Soviet sphere. The course bridges cultural, representational, and political theory. Prior internationalist and/or theoretical coursework strongly recommended. Alternate years; next offered spring 2000. (4 credits)

63 DEVELOPMENT POLITICS

Analysis of theories, patterns, and policies of development in the Third World with emphasis on North-South political-economic and cultural relationships. Political Science 21 recommended. Every year. (4 credits)

64 POLITICAL ANTHROPOLOGY (Same as Anthropology 64)

Analysis of political structures and activities in diverse world societies. Emphases on pre-literate cultures, but societies examined range from hunting and gathering bands to agricultural tribes in industrial states. Alternate years, next offered 2000–01. (4 credits)

65 FOREIGN POLICY

Analysis of influence patterns in foreign policy-making and issues on the foreign policy agenda past and present. Prerequisite, Political Science 26 recommended. Every year. (4 credits)

66 NATIONALISM AND THE MODERN WORLD (Same as Anthropology 66)

Nationalism is a culturally-based political phenomenon that has, in recent years, taken on a renewed lease of life. Course will focus on a theoretical understanding of nationalism, drawing on the perspectives of anthropology, history and political science, which students will use to develop seminar papers. Cases to be considered include Zionism/Israeli nationalism, the disintegration of Yugoslavia, the rise of militant Hindu nationalism in India and the vicissitudes of the nationalist project on the African Continent. Students will be expected to present preliminary drafts of their own papers on various aspects of nationalism at the end of the seminar. This seminar is not open to first year students. Alternate years, next offered 1999–2000. (4 credits)

67 PEACE STUDIES (Same as Philosophy 67)

An interdisciplinary approach to the problems of international conflict and social violence. Topics will vary 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 relationships of violence to other social problems. Political Science 26 recommended. Alternate years, next offered 2000–2001. (4 credits)

68 GLOBAL POLITICAL ECONOMY

Traces the evolution of (global) political economy as a peculiarly modern way of understanding and organizing (global) social life. Particular attention will be paid to how the distinction between the political and the economic is drawn and implemented in interconnected ways within nation-states and in international society. Course includes a detailed study of one of the key components of the international political economy: international trade, international finance, technological processes, etc. Political Science 26 recommended. Every year. (4 credits).

69 GLOBAL GOVERNANCE

This course is about the ideas, institutions, processes and structures through which global politics are organized. The course has three broad goals. First, it is designed to provide an introductory overview of the structures and dynamics of global governance. Second, the course is intended to raise issues related to power and justice in the global political economy. Finally, the course will focus on the impact of "globalization" on the nature of world politics. Every year (4 credits)

Advanced Courses

(Courses listed 70-89 are advanced courses and seminars, two of which are normally needed for completion of the major).

Open to juniors and seniors. Subject to completed prerequisites or consent of instructor.

70 INTERNATIONAL CONFLICT AND RESOLUTION

Exploration of the role of conflict, violence, terrorism, and war in international politics; research on theory and practice of conflict resolution. Prerequisites, Political Science 63 or 26 and at least one additional course from the 60s course cluster. Every year. (4 credits)

72 POLITICAL DEVELOPMENT

Political development in a comparative perspective, advanced analysis of First, Second, and Third World systems' problems and development processes. Prerequisites, Political Science 24 and at least one course from the 60s course cluster. Alternate years, next offered fall 2000. (4 credits)

73 PHILOSOPHY OF LAW (Same as Philosophy 73)

An analysis of fundamental legal concepts and 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. Alternate years, next offered spring 2001. (4 credits)

74 POLICY ANALYSIS AND EVALUATION

Critical examination of the concepts, approaches, and methods in the design and evaluation of public policy. Prerequisites, Political Science 30 or Sociology 41 or Economics 41 and at least one course from the 40s and 50's course cluster or Political Science 65. Every year. (4 credits)

76 POLITICAL EXPLANATION

Advanced studies in political theory and philosophy. Prerequisites, Political Science 30 and at least one other course from the 30s course cluster. Political Science 21 or 24 recommended. Alternate years, next offered 2000–2001. (4 credits)

77 CONTEMPORARY LEGAL PROBLEMS

Advanced research in legal processes and problems. Prerequisite, either Political Science 56 or 57. Alternate years, next offered 2000–2001. (4 credits)

79 POLITICAL CHANGE

Advanced research on political change at all levels from international/global systems transformations to national, regional, and local cultural, social economic, and political change. Prerequisites, Political Science 30 and at least two intermediate courses, or consent of instructor. Alternate years, next offered 2000–2001. (4 credits)

88 RESEARCH SEMINAR

Topics in advanced political research. Done in small groups with intensive faculty supervision. Prerequisite, consent of instructor. Every semester. (4 credits)

95 TUTORIAL (4 credits)

96 INDEPENDENT PROJECT (4 credits)

 $97\ \textsc{INTERNSHIP}$ (limit of $2\ \textsc{toward}$ major) (4 credits)

98 PRECEPTORSHIP (4 credits)

Psychology

Full Time Faculty: Kendrick Brown, Lynda LaBounty, Brooke Lea, Joan Ostrove, Jack Rossmann (Chair), Jaine Strauss, Eric Wiertelak

Part Time Faculty: Roxane Gudeman, Charles Torrey, Gerald Weiss

The psychology department seeks to foster a scientific approach to the study of behavior and experience. The department offers a broad curriculum to serve both those students who will later do graduate work in psychology or related fields 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 professional applications in such fields as personnel/human resources, industrial/organizational psychology, counseling, school psychology, experimental psychology, behavioral neuroscience, social work, and clinical psychology. Whether or not students intend to continue their formal education in psychology, they encounter a broad course of study in which emphasis is placed upon the application of scientific method to the complex problems of 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 that are most characteristic of contemporary psychology. Laboratory activity, observation in non-laboratory environments, internships and independent projects are included in the curriculum, and students are encouraged to use these opportunities wherever possible in their educational program.

General Distribution Requirement

All courses in the psychology department satisfy the general distribution requirement in the social sciences except those that are largely biological, (26, 62, 63), or topical (50, 88, 95-98). Psychology 26, 62 and 63 satisfy the natural science requirement.

Diversity Requirement

The courses in psychology which satisfy the domestic diversity requirement are 38, and 50, Psychology of Prejudice and Racism.

Major Concentration

The major in psychology consists of ten courses. The distribution of courses presented for a major should conform to the following pattern:

- * 10 Introduction to Psychology;
- * 49 Experimentation and Statistics (Beginning in the fall of 2000, Math 14 or Math 27 must be completed prior to taking Psychology 49);

* Three other courses at the intermediate level, at least one of which must be from Group A and at least one of which must be from Group B.

Group A

- 26—Brain, Mind & Behavior
- 31—Sensation and Perception
- 36—Principles of Learning and Behavior
- 37—Cognitive Psychology

Group B

- 24—Psychological Disorders
- 25—Aging and Adult Development
- 28—Developmental Psychology
- 30—Personality
- 33—Individual Differences
- 39—Social Psychology

Other intermediate level courses include:

- 22—Drugs and Society
- 23—Industrial-Organizational Psychology
- 32—Behavior Modification
- 34—Psychology of Gender
- 35—History & Systems of Psychology
- 38—Psychology of Pluralism.
- * 59 Directed Research in Psychology;
- * Three courses at the advanced level (courses numbered in the 60's, 70's, 80's or 90's) at least one of which must be a senior seminar.
- * One other psychology course (Courses numbered in the 50's may be counted toward the major only with departmental permission.)

No more than one 90's course can count towards the major. The senior capstone requirement in psychology may be satisfied by any Senior Seminar (88).

Minor Concentration

Students minoring in psychology must complete the introductory course Psychology 10, Math 14 or Math 27 or Psychology 49, and four additional courses beyond the introductory level, selected in consultation with a member of the department. At least one of these courses must be an advanced course (numbered in the 60's, 70's or 80's). Topics courses and courses numbered in the 90's may not be included in the minor except with departmental permission.

Further Preparation

Students concentrating in psychology, particularly those considering graduate work in psychology or related fields, are urged to take courses in the social sciences, biology, computer science, linguistics, mathematics, and philosophy. Individual programs to meet special needs or interests may be discussed with members of the department.

COURSES

Introductory Course

10 INTRODUCTION TO PSYCHOLOGY

An introduction to psychological perspectives on problems and processes of behavior and experience, surveying such topics as motivation, learning, intelligence, perception, emotion, thought, social processes and language. Recommended for students with no previous exposure to academic psychology who seek a general overview of the field. Lecture and laboratory components. Fall and spring semesters. (4 credits)

Intermediate Courses

The introductory course, Psychology 10 is required for admission to all intermediate courses unless otherwise specified. Other prerequisites may be listed.

22 DRUGS AND SOCIETY

Topics covered include: social and legal history of drug use and abuse in America including ethnicity and chemical use; pharmacology of mood altering chemicals; chemical dependence and treatment; and drugs used in treating mental illness. Classes will consist of a mixture of lecture, film, discussion, role plays, etc. Next offered in 2000–2001. (4 credits)

23 INDUSTRIAL/ORGANIZATIONAL PSYCHOLOGY

This course will examine issues in personnel psychology (personnel decisions, training, and performance appraisal); organizational psychology (job satisfaction, work motivation, leadership, and communication); and the work environment (organizational development and work conditions). Spring semester (4 credits)

24 PSYCHOLOGICAL DISORDERS

This course will examine the phenomenology, etiology, and treatment of the major forms of psychological disorders, including schizophrenia, affective disorders, anxiety disorders, and personality disorders. We will critically evaluate theories and research derived from biological, genetic, psychological, family, and social-cultural perspectives. Spring semester. (4 credits)

25 AGING AND ADULT DEVELOPMENT

An overview of theory and research related to human development beyond adolescence. The course will focus on the biological, cognitive, and social processes that influence human behavior later in life. Next offered in 2000–2001. (4 credits)

26 BRAIN, MIND, BEHAVIOR

An investigation of current knowledge of the nervous system as applied to the understanding of human perception, cognition, learning, emotion, development and personality. Spring semester. (4 credits)

28 DEVELOPMENTAL PSYCHOLOGY

Psychology from the perspective of the causes and correlates of human development. Cognitive, social, emotional and behavioral development are examined from biological, functional, social and diverse cultural perspectives. The process of discovery in developmental psychology is explored as the uses of experimental, observational and case analysis techniques are reviewed. Prerequisite: Psychology 10 or Education 30 or permission of the instructor. Fall and spring semesters. (4 credits)

30 PERSONALITY

This course will survey the major approaches to understanding personality, including motives, traits, the sense of self, and social context. Strategies for both assessing and changing personality will also be explored. Recent contributions, criticisms, and research will be addressed. Fall and spring semesters. (4 credits)

31 SENSATION AND PERCEPTION

Processes involved in gathering and using sensory information, with emphasis on vision and hearing. Through readings, lectures, demonstrations, and discussion, the course introduces alternative research methods (e.g. psychophysical, physiological) and theoretical approaches (e.g. constructivist,

computational, ecological) in the study of sensation and perception. Next offered in 2000-2001. (4 credits)

32 BEHAVIOR MODIFICATION

An overview of the major principles, methods and uses of behavior modification and behavior therapy. Treatment approaches to specific clinical problems and applied areas (e.g. autism, classroom control, sexual dysfunction and alcoholism) will be covered. In addition, an experience in self-behavior analysis and self-control technology is included in the course. Prerequisite: Psychology 24 or permission of instructor. Fall semester. (4 credits)

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, gender, and social class. Emphasis will be on measurement of psychological characteristics and on the genetic and environmental bases of human variation. Next offered in 2000–2001. (4 credits)

34 THE PSYCHOLOGY OF GENDER

An examination and critique of psychological theories, methods and research about gender. Social, situational, individual and biological explanations of gender similarities and differences and their development during the life cycle will be explored. Class members will compare alternative—often contradictory—explanations of the selected phenomena. Case examples will come from the areas of social development, social relationships, moral reasoning, sexual orientation, cognition, identity formation, language and personality. A subtheme will be the embeddedness of psychological theories and research about gender in history, culture and society. Prerequisite: Psychology 10 or permission of the instructor. Spring semester. (4 credits)

$35\ {\rm HISTORY}$ AND SYSTEMS OF PSYCHOLOGY (Same as Philosophy 35)

An introduction to the history and systematic development of contemporary viewpoints in psychology. Among the topics considered are so-called primitive thought, ancient Greece, mind-body problems, structuralism, functionalism, phenomenology, animal psychology, social psychology, behaviorism, Gestalt psychology, psychoanalysis, existentialism, humanism, hermeneutics, deconstructionism, and cognitive psychology. Fall semester. (4 credits)

36 PRINCIPLES OF LEARNING AND BEHAVIOR

This course provides an in-depth introduction to the principles and methods used in the study of how behavior changes as a function of experience. The emphasis will be on classical and operant conditioning principles and procedures, which have become the standard research technologies used in biomedical, psychopharmacological, and other animal laboratory research areas. The laboratory component is designed to give students experience with behavioral technology and data collection and analysis. Spring semester. (5 credits)

37 COGNITIVE PSYCHOLOGY

A survey of the experimental analysis of the mind. Topics include attention, memory and forgetting, problem solving, creativity, reasoning, and language. Special emphasis is given to the study of discourse comprehension and reading. Fall semester. (4 credits)

38 THE PSYCHOLOGY OF PLURALISM: IDENTITY IN A MULTICULTURAL SOCIETY

This course examines the psychological effects of social diversity on our lives as individuals and as group members. Topics include: 1) gender, ethnicity, social class and other group memberships; 2) the perception of others; 3) social identity formation and change in relation to self; 4) in-group/outgroup relations in relation to identity; and 5) social change to reduce intergroup tensions. Finally, the class will consider how psychology as a discipline might change to become more relevant and sensitive to questions of diversity. Next offered in 2000–2001. (4 credits)

39 SOCIAL PSYCHOLOGY

This course will survey the ways in which social phenomena influence the thoughts, feelings, and behavior of individuals. The major theories, experiments, and issues associated with social psychology will be examined. Sample topics include love, aggression, conformity, attitudes, prejudice, persuasion, obedience, and attribution. Fall semester. (4 credits)

49 EXPERIMENTATION AND STATISTICS

This course is an introduction to the basic principles of research in psychology. We focus on how to design and execute experiments, analyze and interpret results, and write research reports. Students conduct a series of experiments in different areas of psychology (e.g., social, personality, cognitive) which illustrate basic design and methods of analysis. Prerequisite: Psychology 10, an intermediate course, and sophomore standing; or permission of instructor. Fall and spring semesters. (4 credits)

Topics Courses

Unless otherwise indicated, or unless departmental permission is granted to the student, topics courses do not count toward a major in psychology.

50 TOPICS

Examination of a topic of general interest from the viewpoint of behavioral science. Topics change annually, and those being offered in 1999–2000 include: Health Psychology and Prejudice and Racism. The department also plans to offer a 2 credit January course in Australia during January 2000.

59 DIRECTED RESEARCH IN PSYCHOLOGY

Students are involved and guided in conducting research within specific content areas designated by the supervising faculty. Research may be conducted individually or in small groups depending on the content area. Research groups meet regularly for presentation of background material, discussions of common readings, and reports on project status. Directed research is to be taken in the junior year and is open only to declared majors. Students will be assigned to sections by the supervising faculty. Prerequisites: Psychology 10, Psychology 49, and an intermediate course. Fall and spring semesters. (4 credits)

Advanced Courses

Admission to any advanced course requires upperclass (junior or senior) status or permission of instructor in addition to meeting the prerequisites listed for that course.

62 CELLULAR AND MOLECULAR NEUROSCIENCE (Same as Biology 62)

An introduction to the nervous system. While particular emphasis is placed on the molecular and cellular components of the nervous system, these components are the foundation for the analysis of various sensory systems. Discussion topics include neurotransmitters and neuromodulators, the physiology and molecular biology of receptors, and the synapse. The laboratory will be used to introduce two major research techniques in neuroscience. These techniques will be used in independently designed research projects which will be performed during the last third of the semester. Prerequisites: Biology 21 or permission of instructor. Three hours of lecture and one four-hour laboratory per week. Spring semester. (5 credits)

63 PHYSIOLOGICAL PSYCHOLOGY

An examination of the role of the nervous system in the control of behavior. While the course features a systems approach to the investigation of sensory and perceptual mechanisms, molecular and cellular components of the nervous system will also be discussed in the context of course topics. Particular emphasis is given to the nature of learning and memory processes, motivation, emotion, homeostasis, cognition, and human neuropsychology. The laboratory will be used for a variety of instructor-demonstrative and student-participatory research and laboratory activities in behavioral neuroscience. Prerequisites: Psychology 26 or Biology 12 or Biology 22. Fall semester (5 credits)

72 PSYCHOLOGY OF LANGUAGE (Same as Linguistics 72)

An examination of psychological factors that affect the comprehension of oral and written language. Topics include the origin of language, how language can control thought, the role of mutual knowledge in comprehension, and principles that underlie coherence in discourse. Includes readings from psycholinguistics, philosophy, sociolinguistics, gender studies, social psychology, and especially from cognitive psychology. Emphasis is placed on current research methods so that students can design an original study. Prerequisites: Psychology 37, or two Linguistics classes, or permission of the instructor. Spring semester. (4 credits)

74 CLINICAL AND COUNSELING PSYCHOLOGY

This course examines specific applications of psychological principles to the mental health field, focusing on strategies for therapeutic intervention. We will pay particular attention to the issues raised

by traditional clinical practice, such as ethics, the politics and economics of mental health, and cultural biases, and consider alternatives to mainstream clinical services, including non-Western healing, nonprofessional helpers, primary prevention, and self-help. Prerequisites: Psychology 24 and one other intermediate level course in psychology. Psychology 32 is recommended. Fall and spring semesters. (4 credits)

75 PSYCHOLOGICAL MEASUREMENT

An overview of technical and methodological principles in test and attitude scale development; historical, social, ethical and legal considerations in measurement; and analyses of frequently used tests and inventories of general intellectual level, aptitude, achievement, personality, and interests. Prerequisites: junior or senior standing, plus Psychology 49 or the equivalent. Spring semester. (4 credits)

86 SEMINAR IN NEUROPHARMACOLOGY (Same as Biology 86)

This is an advanced course that will focus on the study of drugs used to alter the central nervous system. The course will begin with basic pharmacological principles and then concentrate on the various uses of drugs to alter brain neurochemistry. Topics for discussion will include the pharmacological treatment of schizophrenia, depression, pain, anxiety and generally, the neurochemical basis of behavior. In addition to discussion of the use of drugs for clinical purposes, a significant amount of time will be spent on the use of "drugs of abuse" (e.g. cocaine, marijuana, LSD). While the focus of the course will be on the biochemical mechanisms of these drugs, an effort will be made to investigate and discuss the sociological ramifications of drug use. Prerequisites: Psychology 62 (Biology 62), Psychology 63, junior or senior standing or permission of the instructor. Next offered in 2000–2001. (4 credits)

88 SEMINAR

Senior seminars examine a variety of topics. Open to junior and senior major and minor concentration students.

Gender and Mental Health

This seminar examines the role of gender in the epidemiology, diagnosis, and treatment of mental illness. In addition to surveying the general relationship between sex roles and "deviant" behavior, we will explore in detail the psychological, social, and biological aspects of disorders that are markedly more prevalent in one sex (e.g., depression, substance use, premenstrual syndrome, eating disorders). Prerequisite: Psychology 24. Next offered in 2000–2001. (4 credits)

Psychology Goes to the Theatre

Psychology as a source of insight into the theater experience, and vice versa. Theatrically, we will be concerned with actors and audiences; psychologically, with cognition, action, emotion, personality, and social behavior. Readings will come from the literature of both disciplines. Students will prepare frequent position papers for discussion, as well as submitting a reflective paper at the end of the term. Open to senior (and perhaps junior) majors in Psychology or in Dramatic Arts. Dramatic Arts majors need not have taken any previous psychology courses. Instructor's signature required. Next offered in 2000–2001. (4 credits)

Intelligence

This seminar will explore historical approaches to defining and understanding human intelligence, examine current models of intelligence and possible applications of those models, assess various measures of mental abilities, and review contemporary controversies surrounding the concept of intelligence. Fall semester. (4 credits)

Cultural Psychology

In this seminar we will explore cultural variation in the journey from infancy through adulthood; cultural construals of the self in relation to other; the development and use of culturally and situationally specific forms of cognitive, behavioral and social expertise; and the emergence of individual and group identities in social worlds that includes contrasting others. As we focus on these topics, we will simultaneously assess the promise of various psychological theories and methods in furthering the goals of cultural psychology. Fall semester. (4 credits)

Hormones and Behavior

This course will focus on the hormonal mechanisms of behavior in animals (including homo sapiens). Following an introduction to the fundamentals of both psychoneuroendocrinology and

neuroethology, a series of topics will be explored, with a particular emphasis placed on those behaviors most directly mediated by hormonal activity (such as aggression, sexual and reproductive behaviors, stress responses, etc.) Next offered in 2000–2001. (4 credits)

Community Psychology

This course focuses on the theory and practice of community psychology. We begin with an examination of traditional clinic-based mental health, focusing on basic helping skills, stages of therapeutic intervention, culturally-sensitive therapy, and ethical mandates and dilemmas. We then turn to community psychology: the promotion of psychological well-being within a social context. Topics include community consultation, empowerment models, primary and secondary prevention, and systems assessment. In addition to typical seminar activities, students will participate in a service-learning experience (for a minimum of five hours each week) to gain direct understanding of the course concepts. Prerequisites: Psychology 24 or Psychology 32. Fall semester. (5 credits)

African American Psychology

African American psychology represents a break from more traditional, Eurocentric perspectives that often misrepresent African Americans' psychological experiences in the United States. This course will examine the theoretical bases, empirical research, and intervention strategies that African American psychologists have proposed to address the specific issues of the African American community. Topics include African philosophy, deconstruction, self and community, family structure, mental and physical health, and identity. Spring semester. (4 credits)

Lives in Context: Psychology and Social Structure

This seminar will explore the relationship between individual lives and broad social systems. We will read theory, research, and biographical/autobiographical work about the implications of gender, social class, race, historical context, physical ability, etc., on psychological experience; on attitudes, expectations, and relationships; and on personal and social change. Spring semester. (4 credits)

Research Topics in Cognition

The investigation of selected areas of theory and research and their implications for the understanding of mental processes. Study will include examination of research methods and group and individual research. Recent topics have included Imagery, Memory, and Thinking, Problem Solving and Decision Making. A student may register more than once for this course if the topics differ. Prerequisite, Psychology 31 or 37 or permission of instructor. Next offered in 2000–2001. (4 credits)

Research Topics in Neuroscience

The investigation of selected areas of contemporary research and their implications for the understanding of brain processes. Study will include the examination of research methods and group and independent research. Topics will be announced annually and will include such areas as Neural Mechanisms in Behavior, and Neuropsychopharmacology. A student may register more than once for this course if the topics differ. Prerequisite: Psychology 63 or permission of the instructor. Permission granted routinely to junior and senior majors in psychology and in other fields closely associated with neuroscience. Spring semester. (4 credits)

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. (4 credits)

96 INDEPENDENT PROJECT

Prerequisite, permission of the instructor. (4 credits)

97 INTERNSHIP

Prerequisite, permission of the instructor. (4 credits)

98 PRECEPTORSHIP

Prerequisite, permission of the instructor. (4 credits)

Religious Studies

Full Time Faculty: Ann Braude, Paula Cooey, Jeanne Halpern Kilde, James Laine (Chair), Anthony Pinn, Calvin Roetzel

Part Time Faculty: Rabbi Barry Cytron, Rabbi Bernard Raskas

The courses of the department of religious studies focus on the study of Christianity and Judaism in both their historical and contemporary expressions, and on the major non-Western religious traditions. While the introductory courses are broad in scope, they seek to be selective enough to allow an indepth encounter with source documents through historical understanding. Methods of instruction include not only lectures and seminars but also opportunities for independent study and individual instruction. The program of the department aims to serve not only students whose academic specialization is religious studies but also students who seek courses that can help unlock the religious dimensions encountered in other disciplines.

Courses offered by the department fall into five general areas: (1) American religious history, (2) modern Christian thought, (3) non-Western religions, (4) Jewish Studies, and (5) biblical studies. The courses in American religious history explore the experiences, accents and thought that have informed, and continue to inform, all aspects of American life. This area ranges broadly and includes a study of women and religion, Native American religious expression, and important aspects of the Black religious experience. The courses in modern Christian thought deal with the interaction between the theological tradition and secular modes of belief and meaning in the scientifictechnological, post-Medieval world, and with the way a theological development like liberation theology addresses pressing social issues. The non-Western area introduces students to the great religious traditions of Asia, and offers detailed studies of individual traditions, such as Islam or Hinduism, and important topics such as gender, caste and deity. A broad range of courses in Jewish Studies (e.g., 20, 34, 42) are offered each year by both continuing and part-time faculty. The courses in the biblical area offer both introductory and specialized study of the source documents of Judaism and Christianity, and issues of ongoing concern such as the quest for the historical Jesus, and end-ofthe-world movements.

Religious studies is a broadly interdisciplinary investigation that takes its place among the humanities, and majors typically enter a broad range of vocations. Students planning to do post-graduate work in religion and who plan either to teach, or to train for either the parish ministry or rabbinate, will profit from an exposure to religious studies at the college level. In recent years increasing numbers of students not planning post-graduate work in religion have majored in religious studies. The double major, minor, and core concentrations often enhance and enrich areas of study from all divisions of the college.

General Distribution Requirement

All courses in the religious studies department satisfy the general distribution requirement in the humanities except for courses numbered 95, 96, 97, and 98.

Diversity Requirement

The courses in the religious studies department which satisfy the international diversity requirement are numbered 24, 33, 40, 41, 52, 63, and 66. The courses which satisfy the domestic diversity requirement are numbered 26, 27, 28, 29, 36, 37, 43, 50 (Asian American Religions), and 60.

Major Concentration

The major concentration in religious studies consists of eight courses in religion, and two courses in history, philosophy or English. In order to encourage breadth in understanding students majoring in religious studies are required to take at least one course in three of the five areas of the department's offerings. Reading proficiency in at least one foreign language is advised for students contemplating graduate study in religion. 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 and also helps the department faculty to assess its program. Majors, preferably in their senior year, are required to take the disciplinary seminar, Approaches to the Study of Religion, which is offered annually.

The general college-wide capstone requirement in a major is satisfied by 69, Approaches to the Study of Religion.

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" (see above) is also 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. To assure diversity, students minoring in religious studies are required to take a course in at least two areas of the department's offerings.

COURSES

20 INTRODUCTION TO HEBREW SCRIPTURES (OLD TESTAMENT)

A study of the Hebrew Scriptures in translation in their literary, historical, and religious dimensions. Special attention will be given to the historical and cultural forces that provide the context in which Israel and her literature developed. Fall semester. (4 credits)

21 INTRODUCTION TO THE NEW TESTAMENT

The historical critical study of the rise of Christianity and the literature of the movement viewed against its Jewish and Greek background and its expression in the Hellenistic world. Spring semester. (4 credits)

24 INTRODUCTION TO NON-WESTERN RELIGIONS

An introduction to the study of non-Western religious traditions in South and East Asia (Hinduism, Buddhism, Taoism, Confucianism, and Shinto). Open to everyone but especially appropriate for first and second year students. Every year. (4 credits)

26 RELIGION IN AMERICA

The social and intellectual history of religion in the United States through the year 1900, with an emphasis on popular religious movements. The social and economic correlates of religious developments will be analyzed as well as the impact of Christian values on American institutions. Fall semester. (4 credits)

27 AMERICAN RELIGION IN THE TWENTIETH CENTURY

An explanation of the variety of religious expressions in the twentieth century United States, considering both innovation and continuity in religious thought and practice. The course will include movements that respond to specific aspects of modern America, such as the Nation of Islam and the Moral Majority, as well as religious groups introduced through immigration, which have had to adapt traditions to a new setting. Prerequisite: none, although Religious Studies 26 is recommended. Spring semester. (4 credits)

28 AFRICAN AMERICAN RELIGIONS

Understanding religion as the quest for ultimate orientation, this course will examine several expressions of African American religiosity. Students will explore the origin, development, belief structure, and practice of traditions such as Black Christianity, the Nation of Islam, Vodun (Voodoo), Santeria, Spiritual Churches, and Black Humanism. The goal of this course is to acquaint students with the complex nature of African American religious expression. Alternate years, next offered 2000–2001. (4 credits)

29 BLACK CHRISTIAN CHURCHES IN THE UNITED STATES

Although the religious experience of African-Americans is not limited to Black churches, these churches have played a major role in the survival of the Black community. In addition to addressing the religious questions forced by a "Christian" yet oppressive society, these churches have also responded to the educational, social, and economic concerns of a community in need. In part, to understand the African-American community, one must understand Black churches. This course introduces students to the history, theology, and practices of the historically Black denominations. Alternate years, next offered 2000–2001. (4 credits)

33 ISLAM

An introduction to the religion of Islam in its cultural context. Major emphasis will be given to the belief-system and historical development of the classical orthodox tradition in the Middle East, but contemporary Islam and Islam outside the Middle East will also be considered. Alternate years, next offered 2000–2001. (4 credits)

34 INTRODUCTION TO JEWISH LIFE AND THOUGHT

This course will survey Judaism's basic beliefs and practices, from the Bible to the present day, through examination and discussion of religious and social literature created by the Jewish people. Not offered 1999–2000. (4 credits)

$36~\mathrm{BLACK}$ RELIGIOUS THOUGHT I: 1829-1915

Using primary texts, this course will examine religious themes and imagery contained in the writings of Black thinkers. Framed in time by David Walker's *Appeal* (1829) and the death of Henry McNeal Turner (1915), the readings also include works by Maria Stewart, Frederick Douglass, Anna Cooper, and Ida B. Wells. This course seeks to introduce students to the religious thought of 19th and early 20th century Black America. Students will also explore connections between this thought and prevailing "secular" concerns of that period. Prerequisite: permission of the instructor. Fall semester. (4 credits)

37 BLACK RELIGIOUS THOUGHT II: 1915-1993

Using primary texts, this course will examine religious themes and imagery contained in the writings of Black thinkers. The course explores writings by W.E.B. DuBois, Nella Larsen, Richard Wright, James Baldwin, Martin Luther King, Jr., Malcolm X, James Cone, Alice Walker, Delores Williams, and Cornel

West. This course seeks to introduce students to the religious thought of 19th and early 20th century Black America. Students will also explore connections between this thought and prevailing "secular" concerns of that period. Prerequisite: permission of the instructor. Spring semester. (4 credits)

38 CATHOLICISM

A study of the religious tradition of Roman Catholicism. Some attention will be given to the theology and historical development of the Roman Catholic Church, but major emphasis will fall on the relationship of the Catholic religion to various Catholic cultures, including Ireland, Mexico, Poland and the United States. Next offered 2000–2001. (4 credits)

40 RELIGIONS OF INDIA

An intermediate level course on the popular, classical and contemporary religious traditions of South Asia. Topics include Advaita Vedanta and yoga, popular devotionalism, monastic and lay life in Theravada Buddhism, the caste system, Gandhi and modern India. Prerequisite: Religious Studies 24 or permission of instructor. Next offered fall 1999. (4 credits)

41 RELIGIONS OF EAST ASIA

An intermediate level course on popular, classical and contemporary religious traditions of China and Japan. Topics include Confucian thought, Taoist classics, sectarian Buddhism, popular religion, Zen. Prerequisite: Religious Studies 24 or permission of the instructor. Fall semester. (4 credits)

42 WOMEN IN JUDAISM

An investigation of the understanding of women in biblical and Talmudic traditions and their social, economic, and teaching impact on Jewish communities ancient and modern. The course will also explore some aspects of feminist theory (e.g., Judith Plaskow, *Standing Again at Sinai: A Dream or A Nightmare*), and its implications for interpreting rabbinic and biblical materials, and for understanding the role of women in modern Judaism. Not offered 1999–2000. (4 credits)

43 NATIVE AMERICAN RELIGIOUS TRADITIONS

This course will focus on the spiritual traditions of the Lakota people. Lakota history and tradition will serve as background for discussion of legal, political, and theological issues related to Native American religious practices. Prerequisite: permission of the instructor. Not offered 1999–2000. (4 credits)

44 READINGS IN INTERTESTAMENTAL LITERATURE

A study of intertestamental literature, political history, forms of religious expression, Jewish institutions and mythic perception of the world behind the New Testament. The course will include extensive readings in the relevant primary materials and assistance with the development of research and writing skills. Not offered 1999–2000. (4 credits)

45 PAGANS, CHRISTIANS, AND JEWS IN CLASSICAL ANTIQUITY: CULTURES IN CONFLICT (Same as Classics 45)

This course studies the interaction of Jewish, Christian, and pagan cultures, and the protracted struggle for self-definition and multi-cultural exchange this encounter provoked. The course draws attention to how *the other* and cultural and religious difference are construed, resisted, and apprehended. Readings include Acts, Philo, Revelation, I Clement, pagan charges against Christianity, *Adversus loudaios* writers, the *Goyim* in the Mishna, and apologetic literature. Alternate years. (4 credits)

$46\,\mathrm{THE}$ THOUGHT OF THE REFORMATION

A study of the Reformation as a revolution in Christian thought. The course will concentrate on an understanding of key writings of Luther, Zwingli, 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. Fall semester. (4 credits)

47 RELIGION AND POPULAR CULTURE

Using the work of cultural studies and religious studies scholars, students examine the way religion (themes such as sin and salvation) is analyzed by and represented in forms of contemporary cultural expression. Elements of popular culture addressed may include music (e.g., rap), film, and various cultural icons (Madonna, for example). Not offered 1999–2000. (4 credits)

48 TWENTIETH CENTURY CHRISTIAN THOUGHT

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, Lindbeck, liberation theology, feminist theology, Vatican II, process theology, and the impact of post-modern thought. Not offered 1999–2000. (4 credits)

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. Courses for 1999–2000 will include Jesus in History, Exodus as Revolution, The Pursuit of the Millennium, The Religious Thought of Martin Luther King, Jr. and Malcolm X, Ethics and the Jewish Tradition, and Introduction to Liberation Theologies. (4 credits)

52 GENDER, CASTE AND DEITY IN INDIA

An advanced seminar on social structures in India and their relation to religious ideology. Prerequisite: Religious Studies 40 or previous work in Indian religions. Not offered 1999–2000. (4 credits)

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, de Beauvoir, Kierkegaard, Buber, Bultmann, will be read and discussed. Alternate years, next offered fall 1999. (4 credits)

56 THE DIALOGUE WITH 'PROGRESS'

The belief in Progress represents an essential feature of the Modern World. This course explores the origins of this distinctive Western concept, especially its ambiguous ties with the religious tradition, its rise to dominance in the Enlightenment and the 19th century. Assessment will be made of its role in the secularization of the West. We will also examine the critiques of "Progress" in the aftermath of the French Revolution, in Romanticism, and in relation to key events of the 20th century, especially World Wars I and II, the ecological crisis, the collapse of the Soviet Union, and the question of "post-modernism." Not offered 1999–2000. (4 credits)

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 (Kuhn, Lakatos, and feminist criticism). Not offered 1999–2000. (4 credits)

60 WITCHES, SEERS, AND SAINTS

Is religion oppressive to women, or is it empowering? This seminar will investigate how specific types of religious roles reinforce or conflict with gender roles in the historical experience of American women. Seminar format. Prerequisite: permission of the instructor. Not offered 1999–2000. (4 credits)

63 JEWISH HISTORY (Same as History 65)

An examination of the history of the Jewish people from the time of emancipation in the late 18th century to the present. The major theme will be the development of new forms of Jewish self-identity as the self-contained communities of the pre-emancipation period begin to dissolve. Among the topics to be considered are the relationship between Jewish communities and the "outside world," pressures from within and without the Jewish community for assimilation, antisemitism, the holocaust, Zionism and the birth of Israel, and the position of the Jews in the world today. Alternate years, next offered fall 1999. (4 credits)

65 THE LETTERS OF PAUL (ROMANS)

A study of the literary composition, form, function, context and theological concerns of Romans, one of the letters of Paul. 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: Religious Studies 20 or 21 or permission of the instructor. Enrollment limited. Alternate years, next offered spring 2000. (4 credits)

66 THE RUSSIAN RELIGIOUS EXPERIENCE (Same as Russian 66)

Beginning with a forced conversion to Byzantine Christianity in the tenth century, Russians have led one thousand years of a rich and contradictory religious life. This millennium of experience should offer students of both religion and Russian a unique outlook on their subjects. For students interested in religion, Russian Orthodoxy offers a non-western perspective on the Christian experience, which poses questions that other traditions do not: in the close cooperation between church and autocracy that flourished until the Bolshevik Revolution; in the savage repression suffered by the faithful after 1917; and in the rich tradition of dissent that resisted both. For students of Russian, the religious experience offers new insights into a country that was officially atheist for seventy years. We will be looking not only at the texts and structures of the faith, but also at the heresies that undermined it. Paganism and witchcraft thrived alongside deep piety; state regulation struggled with sectant movements ranging from the Milk-Drinkers to Self-Castrators. Orthodoxy exerted a profound influence on Russia's great writers: on the fierce believer Dostoevsky, and on the apostate Tolstoy. Vigorously repressed by the Soviet state, Russian Orthodoxy once again is alive, and struggling to define itself in the post-Soviet era. Alternative years, next offered fall 1999. (4 credits)

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. Not offered 1999–2000. (4 credits)

69 APPROACHES TO THE STUDY OF RELIGION

An advanced seminar required for religious studies majors, open to cores and minors. Both classic and contemporary theories on the nature of religion and critical methods for the study of religion will be considered. Prerequisites: two courses in religious studies and permission of the instructor. Spring semester. (4 credits)

95 TUTORIAL

Prerequisite, permission of the instructor. (4 credits)

96 INDEPENDENT PROJECT

Prerequisite, permission of the instructor. (4 credits)

97 INTERNSHIP

Prerequisite, permission of the instructor. A maximum of one internship may be applied toward the major or core concentration. (4 credits)

98 PRECEPTORSHIP

Prerequisite, permission of the instructor. (4 credits)

Russian

See German Studies and Russian

Russian, Central and East European Studies

Birgitta Hammarberg (German Studies and Russian), Gary Krueger (Director, Economics), Rachel May (German Studies and Russian), Jerry Pitzl (Geography), James von Geldern (German Studies and Russian), Peter Weisensel (History), Igor Zevelev (International Studies)

The Russian, Central and East European Studies program explores internationalism through a multidisciplinary inquiry into the specific area

encompassing Russia, Central and Eastern Europe. This exploration includes language proficiency and knowledge of the history, culture and society of one or more countries of the region in a broad global context. The program is designed to meet student interest for area expertise in the context of a broader global perspective.

The major requires completion of 12 courses, one semester study abroad in one of the countries of the RCEE region, and completion of a capstone requirement. Students must complete four semesters, not counting the introductory year, (or equivalent) in one of the languages of the region (Russian, Ukrainian, Polish, Serbo-Croatian, Czech, Slovak, Hungarian or the Baltic languages). As the attainment of fluency in Slavic languages is a lengthy process, students are strongly encouraged to take a third year of language instruction in their chosen language.

In order to place specific knowledge of the RCEE region into global context, students are required to take one of the introduction to International Studies courses (International Studies 10 or 11) before their junior year and seven elective courses specific to the region. Four of the seven electives must be from Russian, Central and East European Studies approved courses in either the Social Science Division or the Humanities Division. In addition to the four courses from their chosen division, majors must take one Russian, Central and East European Studies approved course from outside their major division. The remaining two courses may be in either track. Language courses beyond the fourth semester will count towards fulfillment of the humanities track requirements. The capstone requirement may be fulfilled in one of two ways: either through an approved thesis, sponsored by one of the participating faculty members, or through the successful completion of the senior seminar, Russian, Central and East European Studies 88. All Russian, Central and East European Studies seniors are strongly encouraged to take International Studies 88 or 89 as a complement to their capstone.

Two of every three years the Russian, Central and East European Studies program sponsors a Visiting International Faculty member which greatly contributes to the program offerings and allows students direct contact with faculty that work and live in one of the countries of the region. Also, as a member of the Associated Colleges of the Twin Cities (ACTC), Macalester students may also enroll in approved courses in any of the ACTC colleges. Majors should contact their advisor or the program director for a full list of ACTC approved courses.

COURSES

88 SENIOR SEMINAR IN RUSSIAN AREA STUDIES

This seminar is an interdisciplinary research seminar which adopts a thematic approach to examining one or more of the countries of the former Soviet Union and East/Central Europe. This course satisfies the capstone requirement for Russian, Central and East European Studies majors. Interested students in related disciplines such as International Studies are encouraged to enroll. Prerequisites: Senior status or consent of instructor. Fall Semester 1999. (4 credits)

Russian, Central and East European Studies Approved Courses Regularly Offered On The Macalester Campus

Economics

- 25 Comparative Economic Systems (Also listed as International Studies 25)
- 35 Economics of the Transition (Also listed as International Studies 35)

Geography

45 Regional Geography of the Post Soviet Union

History

- 55 History and Philosophy of Socialism
- 60 State and Society in Tsarist Russia
- 62 History of the Soviet Union and its Successor States
- 65 Jewish History (also listed as Religious Studies 63)

Political Science

63 Socialist Systems

Russian

- 21, 22 Intermediate Russian I, II
- 31, 32 Advanced Russian I, II
- 41A, B Russia in Russian
- 50 Topics: including Russian Religion, Revolutions; the Roots of Russian Nationalism
- 55 Russian Culture
- 56 Mass Culture Under Communism
- 61 19th Century Russian Literature in Translation
- 62 20th Century Russian Literature and Culture in Translation
- 64 Culture and Revolution (also listed as International Studies 64).
- 65 Translation as Cross Cultural Communication (also listed as International Studies 65)
- 88 Senior Seminar (humanities track only).

Additional Russian language courses subject to approval by Director of the Russian, Central and East European Studies program.

Sociology

Full Time Faculty: Terry Boychuk, Mahnaz Kousha (Chair), Michal M. McCall, Michael Obsatz, Sal Salerno

Sociology is an empirical discipline which studies human social life in all its variety. The Macalester Department of Sociology offers courses which focus on the family, the global economy, formal work organizations, social problems, medicine, advertising, racial and ethnic relations, and social class and gender hierarchies, and presents various theoretical frameworks and research methodologies for understanding social life. Students are encouraged to do their own empirical studies by the department's emphasis on theoretical, data gathering, data analysis and writing skills.

Courses in sociology contribute to the general education and prepare students for graduate education in sociology or careers in related fields: teaching, law, business, government, service occupations, helping professions, community organizing, and research.

The Sociology Department participates in the Women's and Gender Studies Program, Legal Studies, Comparative North American Studies, Environmental Studies, Urban Studies, and the International Studies Program. For details concerning these programs, consult the appropriate descriptions elsewhere in this catalog.

General Distribution Requirement

Sociology courses 10, 12, 14, and 16 satisfy the general distribution requirement in the social sciences.

Diversity Requirement

The course which satisfies the domestic diversity requirement is Sociology 23, Sociology of Race/Ethnicity. The course which satisfies the international diversity requirement is Sociology 35, Images of Women in the Middle East.

Major Concentration

A sociology major is planned in consultation with a member of the sociology department faculty and must include at least nine courses: An introduction to sociology (10, 12, 14, or 16); Theories of the Subject (40) or Theories of Power (48); Science and Social Inquiry (41); Representing the Social (42); Senior Research Seminar (88); and four electives.

The senior capstone requirement in sociology may be satisfied by taking the Senior Research Seminar (88).

Core Concentration

A core concentration in sociology is planned in consultation with a member of the sociology department faculty and must include at least six sociology courses, chosen to complement the student's major.

Minor Concentration

A minor in sociology consists of five courses selected with the assistance of a faculty member in the department. The selection is expected to complement the student's major.

COURSES

Introductory Courses:

10 INTRODUCTION TO SOCIOLOGY

Sociology is the study of social behavior. The founding theorists of the discipline—Karl Marx, Max Weber and Emile Durkheim—observed, and developed opposing interpretations of, the social transformations accompanying the great revolutions of the European political economy between the sixteenth and nineteenth centuries: the transition from agrarian, householding economies to industrial-capitalist ones; and the reinvention of political governance stemming from the collapse of feudal politics and the ascendancy of the modern bureaucratic state. The first half of this course surveys the theoretical and empirical contributions of these classical figures to sociological perspectives on modern society. The second half of the class assembles an overview of contemporary sociological research on the life course—from cradle to grave. Topics include the childhood socialization, the sociology of education, social trends in marriage and parenting, the changing workplace, and lastly, the sociology of aging and death. Fall 1999. (4 credits)

12 ISSUES AND PROBLEMS IN U.S. SOCIETY

This class links personal experiences with broader cultural perspectives. Students analyze and question the cultural and structural forces that have shaped and continue to shape their lives. Special

attention will be given to social justice, cultural assimilation, race, class, feminism, family, education, work, and the mass media. Every year. (4 credits)

14 THE POLITICAL ECONOMY OF FOOD

This class looks at the way food is produced and distributed in the global economy, and considers alternatives proposed by advocates and practitioners of sustainable agriculture. Every Spring. (4 credits)

16 DEVIANCE AND SOCIAL CONTROL

Social control is the reproduction of the culture of dominant groups in a society. Deviance and innovation are responses by dominant groups to subordinate group cultures and efforts to change the dominant culture. Dominant social groups create deviance by making the rules whose infraction constitutes deviance and by applying those rules to particular people and labeling them outsiders. This course focuses on rule making and enforcement, on the social construction of rule-breaking as either deviance or innovation, and the powerful discourses, including law and medicine, which embody the culture of dominant groups. Fall 1999. (4 credits)

Intermediate Courses:

20 SOCIAL INEOUALITY

Describing and explaining social inequality constitute two of the principal motivations for doing sociology. This course provides an overview of the key concepts and theories which have informed sociological perspectives on the nature and origins of inequality. The class readings, lectures and assignments examine three, broadly focused topics. The first section of the course surveys the essential contributions of two classical sociologists—Karl Marx and Max Weber—to ongoing debates over the contours and causes of social inequality. The second component of the course explores contemporary revisions to classical theories of inequality accompanying the transformation of the political economies of the advanced industrial democracies in the twentieth century. The concluding weeks invite sustained attention to gender and racial inequality—past, present and future. Spring semester, 2001. (4 credits)

23 SOCIOLOGY OF RACE/ETHNICITY

This course studies the historical and contemporary social situation of racial and ethnic groups in American society, including African Americans, Native Americans, Asian Americans, Latinos, and European Americans. Prerequisite: an introductory Sociology course. Every year. (4 credits)

25 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 the videotapes are used. Guest speakers are also invited. Students present papers during class time and have opportunities to visit funeral homes. They will also explore their own attitudes and feelings toward death and dying. Prerequisite: an introductory Sociology course. Next offered in Fall 1999. (4 credits)

27 HUMAN SEXUALITY

This course will explore human sexuality in a psycho-social context. Through discussion, research, and guest presentations, we will learn about the personal sexual world of the individual and impersonal social forces beyond the control of the individual. Topics to be covered include: male and female response cycles; pornography; child bearing and contraception; sexual dysfunction; sexual desire; erotic responsiveness; male and female role expectations; body consciousness; premarital, marital and extramarital sexuality; sexual deviance; and sexual attitudes in American culture. Student presentations, attendance, research papers required. Prerequisite: an introductory Sociology course. Fall 1999. (4 credits)

32 THE INSTITUTION OF THE FAMILY

This course examines the family as a social institution and explores different configurations of families, gender issues, racial/ethnic and social class differences and communication within families. Lecture, discussion, video and student presentations. Volunteer work required. Prerequisite: an introductory Sociology course. Required for pre-kindergarten licensure. Fall 1999. (4 credits)

35 IMAGES OF WOMEN IN THE MIDDLE EAST

This class explores the realities of women's lives in the Middle East. Issues such as the role of women in Islam and the Middle East, their portrayal in the West, nationalism, and feminism, power and patriarchy will be emphasized. Prerequisite: an introductory Sociology course. Spring 2001. (4 credits)

40 THEORIES OF THE SUBJECT

In recent years, the place of human beings in social theories has changed from "the individual," "the social actor," or "the self" to "the subject." In this class we will read a number of social theorists to discover how and where they place the subject. We will begin with four 19th century theorists, each of whom founded a theoretical tradition: Karl Marx (critical theory), Emil Durkheim (structuralism), Max Weber (action theory/social constructionism) and Sigmund Freud (psychoanalytic theory). We will consider each of these traditions and end with a consideration of post-structuralist and post-colonial theorists like Julia Kristeva, Michel Foucault, Jacques Derrida, Stuart Hall and Trinh Mihn-ha. Fall 2001. (4 credits)

41 SCIENCE AND SOCIAL INQUIRY

This course provides a general introduction to the logic of scientific inquiry and to the varieties of methodological approaches employed in the service of advancing sociological discourse about human behavior. Class readings, assignments, and discussions explore diverse topics, including the nature of sociological theory, deductive and inductive logic, the derivation of hypotheses from theoretical statements, and the protocols for gathering empirical evidence and for drawing inferences from research findings to substantiate theoretical claims. The course has three overarching objectives. The first is to provide students with the critical and analytical tools to interpret and evaluate empirical research. The second is to familiarize students with the acknowledged strengths and weaknesses of different research designs. The third is to develop skills for constructing sociological arguments and for communicating them in a clear, concise, and compelling manner. Spring 2001. (4 credits)

42 REPRESENTING THE SOCIAL

This class introduces the research methods and analytic techniques used by qualitative researchers (also called fieldworkers and ethnographers): participant observation, interviewing and use of documents. Students will read exemplary, book-length studies and will conduct qualitative research. The focus will be on formal work organizations. Prerequisite: Sociology 40 or permission of the instructor. Every year. (4 credits)

43 SEMINAR IN APPLIED SOCIOLOGY

In this class, students will apply what they have learned in other required classes to the study of work places and other forms of social organization. Registration must be accompanied by a field component that applies sociological theory in fields such as social research, counseling, social work, or education. Journal entries will be kept and submitted, as well as a final paper integrating the internship experience and theories of society. Prerequisite: Sociology 40. Fall 1999. (4 credits)

Advanced Sociology Courses

46 URBAN SOCIOLOGY

The course looks at the culture of city life, how public space is negotiated/contested and how communities and neighbors are made and unmade. Urban Sociology utilizes an interdisciplinary perspective to look at the politics of space in the urban environment. Issues such as multiculturalism, identity and gender politics and the ways residents, community organizers, cultural workers and foundations interface with businesses, city officials, and developers to affect neighborhood and community change. Class sessions have a field or experiential component in addition to lecture and discussion. This component requires participants to visit selected sites as well as participate in dialogues with local artists, cultural workers and community organizers who will visit the class. There will be both individual and team community based research projects. Prerequisite: an introductory Sociology course or instructor's permission. Spring 2000. (4 credits)

47 IMAGES IN CONSUMER SOCIETY

The marketplace and the commodity/image system of advertising are the major institutions in contemporary consumer society. They orient our identities and our culture (attitudes, values and rituals) more and more toward the world of commodities. In this course we will explore the origins of consumer society in the 1890s concurrent with the evolution of the design industry. We will examine

the production of commodity images and their effects on gender socialization, politics, visual art, children's play and households. We will also explore the environmental consequences of continuous economic growth, the goal of consumer society. Students will study shopping and commodity use through observation, critique and interviewing, and will learn to "speak the language" of commodity images. Working in groups or individually, students will produce art books as term projects. Prerequisite: Sociology 40 or Art 66. Fall 2001. (4 credits)

48 THEORIES OF POWER

Michel Foucault's theories of power required social theorists to reconsider 19th century theories of power. In this class we will read 19th and 20th century theories of power, beginning with Karl Marx and Max Weber and ending with Michel Foucault and various "post-structuralist" and "post-colonial" theorists. Fall 1999. (4 credits)

50 TOPICS (4 credits)

60 MEDICAL SOCIOLOGY

This course provides an overview of sociological research on medical care. Class readings, lectures and assignments survey four broadly focused topics. The first is to explore the diverse cultural foundations of medical knowledge and to examine the relative contributions of medical practices to the health and well-being of individuals. The second part of the class provides a detailed look at the historical emergence and evolution of the American medical profession and the corresponding development of the American hospital industry. The third section calls attention to social processes governing entrance into the medical profession—medical school attendance, internships and residencies, and the social mechanisms which channel physical efforts to establish a medical practice. The fourth and final component of the course sheds light on the latest transformations of the American health care system—the ongoing remaking of medical politics, the proliferation of new forms of health care organizations and markets, and the changing patterns of medical practice. Prerequisite: an introductory Sociology course or permission of the instructor. Spring 2002 (4 credits)

61 SOCIAL CHANGE

This course examines the nature of social change by exploring specific topics including social and political movements, world systems, colonialism and revolution. Attention is paid to the ways in which social institutions (especially economic and political institutions) are interconnected. Prerequisite: Sociology 40 or junior or senior standing. Spring 2002. (4 credits)

63 SOCIOLOGY OF THE U.S. WORKING CLASS

The American labor movement has a rich and complex history. In recent years documentary and feature film makers have revisited this history in films that re-examine critical moments in the history of workers' struggles. Films like John Sayles' "Matewan," Charles Burnett's "Killer of Sheep," and Tony Buba and Ray Hendersons' "Struggles in Steel" are a few examples. These films speak to a dimension of experience absent in much of the literature on working class culture and community. They are especially noteworthy for their exploration of the ways that racism impacts working class life. While the course revolves around feature and documentary films, readings and discussion are integral to the course. The class will draw on a diverse literature as a means of both contexualizing the issues raised by the medium of film and as a means of drawing attention to issues absent or not well represented in the medium. The course provides a basis for understanding and critically evaluating the culture and politics of the labor movement. Prerequisite: Sociology 20 or instructor's permission. Fall 1999. (4 credits)

64 CONVENTIONAL IMAGES OF ASIANS AND ASIAN-AMERICANS

The class studies the representations of Asian and Asian Americans in the U.S. media. The course concentrates on both classic and more contemporary feature films produced in the U.S. We will examine issues of ethnicity and national identity within the larger political, economic and historical contexts. Issues of racism, gender, and interracial dynamics as social constructs will be explored with particular attention to historical and political events. Discussions and screening emphasize the creation of new images, the representation of new groups, and the perpetuation of stereotypes as they relate to larger, international events. Prerequisite: junior or senior standing, or permission of the instructor. Spring 2001. (4 credits)

66 SOCIOLOGY OF IMMIGRATION

This class develops a sociological analysis of immigration. The course explores the experiences of diverse immigrant groups. We will start by exploring the roots of human migration throughout history. The goal is to promote a broad understanding of the reasons behind human immigration in different historical epochs, to compare the patterns of migrating groups, and to explore the ecological impacts of migration. Current conceptualizations of race, ethnicity, nationalism, class, and gender will be re-examined in relation to the emerging transnational experiences of the more recent immigrant groups in Europe and Asia. Prerequisite: Junior or senior standing, or permission of the instructor. Fall 2000. (4 credits)

73 ADVANCED TOPICS IN RACE/ETHNICITY AND GENDER

This course is a comparative examination of different world cultures and race and ethnic groups. The idea is to theoretically understand the social forces, the political and economic contexts, and the cultural complexities that have shaped the experiences of different cultures and ethnic groups. Prerequisite: Junior or senior standing, or permission of the instructor. Fall 2001. (4 credits)

88 SENIOR RESEARCH SEMINAR

This seminar offers students the opportunity to make an empirical contribution to sociological knowledge. The department strongly encourages students to combine an honors project with their enrollment in the class. First, seminar participants are required to formulate a research question of their choice, to identify the potential theoretical significance of their proposed empirical study, and to provide a literature review and synopsis of existing research on their selected topic. Second, students will specify a research strategy for making observations and for recording and interpreting their empirical findings. And, the final moments of the course will be devoted to in-class presentations of completed projects. This seminar underscores the relevance of diverse approaches to generating insight into human behavior. Participants may locate their research within any one of the rich and varied currents of sociological thought. Students may also chose among a broad array of research methodologies to guide their research, including field research, social surveys, experiments, historical and comparative sociology, content analysis, or textual analysis. Prerequisite: Sociology 40, 41, 42 and senior standing. Every fall. (4 credits)

89 SENIOR THESIS

Senior majors who are enrolled in the honors program may register for senior thesis credit. Every year. (4 credits)

95 TUTORIAL

The Sociology tutorial consists of closely supervised student research. It is open to students who have had Sociology 41 and 42. Students planning to write a senior honors thesis are encouraged to register for a tutorial during their junior year, with the permission of a faculty member who agrees to supervise. Every semester. (4 credits)

96 INDEPENDENT PROJECT

Closely supervised independent study with a faculty member. Students may explore, through reading and writing or independent research, an area of knowledge not available through regular course offerings or more advanced study in an area covered by the curriculum. Permission of a faculty member of the department is required for registration. Every semester. (4 credits)

97 INTERNSHIP

Internships involve students in practical (usually off-campus) experience, allow in-depth study of the structure of particular organizations, and/or develop career skills. Registration requires permission of a Sociology department faculty member and an on-site supervisor. Every semester. (4 credits)

98 PRECEPTORSHIP

Preceptors assist sociology department faculty members in planning, organizing, and teaching courses. Registration requires permission of the faculty member and previous completion of the course. Every semester. (4 credits)

Spanish

Full Time Faculty: Linda Burdell, Antonio Dorca, Fabiola Franco, Galo González (Chair), Leland Guyer

Part Time Faculty: Juanita Garciagodoy, David Sunderland

Spanish is the fourth most spoken language in the world, with over three hundred million native speakers spread out on four continents and in over 25 nations, including the United States. It is the language of Nobel Prize winning writers, world-renowned artists, internationally recognized actors and actresses, as well as innumerable politicians, scientists, designers, explorers and economic experts. With Hispanic peoples the fastest-growing minority population of the United States, Spanish is also often the language of our neighbor next door. It is heard in the supermarket, on the air waves, in television broadcasts and advertisements, movies and songs.

The mission of the Spanish Department at Macalester is threefold. First, by teaching language skills, we enable our students to graduate with a strong proficiency in Spanish, one that makes them comprehensible to native speakers, and allows them to interact through the four language skills of speaking, listening, reading and writing. Second, we strive to refine critical thinking. Our students should be able to approach a variety of texts and generate fruitful questions and interpretations of them, informed by cultural and critical perspectives. Third, we offer a variety of courses that examine a broad range of cultural and historical patterns to ensure that our students will be conversant with issues pertinent to the Spanish-speaking world.

Career Orientation for Spanish Majors

Recent Spanish majors from Macalester College have gone on to graduate work in Spanish language and literature, comparative literature, linguistics, Latin American area studies and social welfare. Some have begun careers in Spanish elementary and secondary education, bilingual or special education, the foreign service, banking, and commerce. Others have joined the Peace Corps or Vista. Many have combined their Spanish major studies with complementary majors such as Economics, Political Science, Anthropology, and History. Others go on to graduate school in diverse fields: International Studies, Latin American Studies, International Business, and Education.

The Spanish House

The Spanish Department sponsors a residence next to the campus for students who are interested in living in a Spanish-speaking environment. Residents commit themselves to speaking only Spanish while in the house. A native speaker supervises the house and organizes various activities. Residence is intended for students who have achieved at least an intermediate level of proficiency and want to maintain and improve it.

Study Abroad

It has been shown that academic study and extended residence in a Spanishspeaking country is very useful for our students. Up to two courses from study away programs per semester may be counted toward the Spanish major, core or minor. All additional courses necessary to meet departmental graduation requirements must be taken on campus. Any additional courses taken abroad may be applied to general distribution requirements.

Macalester College has prepared students for study abroad in numerous programs and countries. Many students have selected the following: The Associated Colleges of the Midwest (ACM) Costa Rica program consists of a fall Latin American studies program and a spring tropical field study program in natural and social sciences. The Institute for International Education of Students (IES) program in Spain provides for a broad range of study in Madrid. Universitas Castellae in Valladolid offers a year round study abroad program. The Higher Education Consortium for Urban Affairs (HECUA) program in Guatemala/Colombia/Ecuador offers several courses of study. The fall term is South American Urban Affairs (SAUS) and the spring term is Culture and Society in Latin America (CASLA). In addition, HECUA has a spring program of Community Internships in Latin America (CILA) in Quito, Ecuador.

General Distribution Requirement

All courses in the Spanish department satisfy the general distribution requirement in the humanities.

Diversity Requirement

Courses in the Spanish department that satisfy the international diversity requirement are: 25, 54, 62, 65, 66, 68 and 69.

Two Year Language Requirement

Students fulfill the requirement by completing one of the following: 1. A score of 620 or higher on the SAT II test with listening component upon entrance to the program. 2. A score of 620 or higher on Macalester's Placement Test. Placement test may be taken only once. 3. A score of 4–5 or higher on the advanced Placement Test. 4. Successful completion of Macalester's Spanish 32 or equivalent with the minimum grade of C.

Students earn credit for Spanish 11 and 12 by scoring 6–7 or higher on the International Baccalaureate Exam. These students will still need to fulfill the above guidelines for the Two Year Language Requirement.

Major Concentration

A major in Spanish consists of a minimum of nine courses beyond 31. Courses required for the major are Spanish 52, 54, 62, 65 or 66 and 88. Successful completion of Spanish 88 fulfills the senior capstone requirement. The major must contain two courses with emphasis on Peninsular literature, and two courses with emphasis on Latin American literature. It is recommended that Spanish 54 be successfully completed before taking other literature courses. Spanish 25 (Brazil Today) may be applied toward the Spanish major.

In addition, students majoring in Spanish are required to complete successfully one term of a study abroad program. The Spanish Department reserves the right to waive this requirement under exceptional circumstances.

Five supporting courses must be chosen according to the student's academic and professional plans.

Core Concentration

The core consists of six Spanish courses beyond 31, four of which must be literature or topics courses taught in Spanish. Spanish 25, Brazil Today, may count toward the core concentration. Six supporting courses are chosen from a related area.

Minor Concentration

The minor consists of five courses beyond 31, including at least two literature courses. Spanish 25 (Brazil Today) may be included among the five required courses.

COURSES

10 ACCELERATED BEGINNING SPANISH

Accelerated Spanish 10 meets the goals of Elementary Spanish I and II (Spanish 11 and 12) in one semester. It covers pronunciation, grammar essentials, conversation and reading. This course is appropriate for students with significant prior experience in Spanish or another appropriate language and for students who are highly self-motivated and able to learn foreign languages quickly. Successful completion allows enrollment in Intermediate Spanish. Registration in the course is contingent on instructor's approval. Three class hours a week plus two hours of tutorial. Every semester. (5 credits)

11, 12 ELEMENTARY SPANISH I AND II

Pronunciation, grammar essentials, conversation and reading. Three class hours a week plus one hour of tutorial. Minimal introduction to history and culture of hispanophone countries. Every semester. (4 credits each course)

30 ACCELERATED INTERMEDIATE SPANISH

Accelerated Spanish 30 meets the goals of Intermediate Spanish I and II (Spanish 31 and 32) in one semester. It extends and deepens awareness and use of linguistic functions in Spanish, and it introduces the history and culture of Hispanophone countries. This course is appropriate for students with significant prior experience in Spanish and for students who are highly self-motivated and able to learn foreign languages quickly. Successful completion allows enrollment in 50's level courses in Spanish. Registration in the course is contingent on instructor's approval. Three class hours per week plus two hours of tutorial. Every semester. (5 credits)

31, 32 INTERMEDIATE SPANISH I AND II

Extends and deepens awareness and use of linguistic functions in Spanish. Formal introduction to history and culture of hispanophone countries. Prerequisite: Spanish 12 or the equivalent. Every semester. (4 credits each course)

50 TOPICS

Topics courses offer a variety of themes and approaches not found in our regular course offerings. Topics courses planned for 1999–2000 are: Modern Brazilian Literature and the Emergence of National Identity; Gabriel García Márquez's Works; and Narrating Cultural Identity. Recent topics courses: Exploring the Hispanic World; Breaking Stereotypes of Latin American Women in Film and Fiction; Questions of Identity in Latin America; the Family as History: The Stories of Latinos in the US; Avant-Garde in the Hispanic World; Spanish Plays: From Page to Stage; Art and Craft of Literaty Translation; Peru and Ecuador: Literature of Subversion (1960–1990); Contemporary Mexican Women's Fiction; Contemporary Spanish Film; Latin American Women: Those Who Are (Or Should

Be) Leaders; On Love and Other Demons; Spanish Women Writers After 1975; Portuguese Conversation and Composition; and Cinema Brasileiro. Prerequisite: varies. (4 credits)

51 VISIONS OF THE HISPANIC WORLD: ORAL EXPRESSION

This is a third year course parallel to Visions of the Hispanic World: Written Expression. Primarily designed to improve oral communication, it serves as a bridge to upper division courses. Conversations are based on cultural and literary topics. Class activities vary according to the instructor but usually include five to fifteen minute presentations, interviews with native speakers, commentary on videos and movies, short stories, plays and short novels. It often involves extensive reading appropriate to the level. Prerequisite: Spanish 32 or instructor's approval. Every semester. (4 credits)

52 VISIONS OF THE HISPANIC WORLD: WRITTEN EXPRESSION

This is a third year course parallel to Visions of the Hispanic World: Oral Expression. It is primarily designed to strengthen the student's written proficiency and his or her awareness of grammar intricacies in relation to writing. It serves also as a bridge to upper division courses. Compositions and short essays on contemporary topics are an essential component of the course. Creativity and originality are rewarded, but not at the expense of linguistic accuracy. Class activities vary according to the instructor but usually include writing strategies and self-correction exercises. It often involves extensive reading appropriate to the level. Prerequisite: Spanish 32 or instructor's approval. Every semester. (4 credits)

54 INTRODUCTION TO LITERARY ANALYSIS

A course in the theory and practice of analysis and interpretation of literature designed to prepare students for more advanced courses in Hispanic literatures. This course develops skills for the close reading and interpretation of literature through discussion of poetry, fiction, drama, and essay. It also assists students in developing skills and style for writing in Spanish. Prerequisite: 51, 52 or consent of the instructor. Every semester. (4 credits)

62 SELF AND SOCIETY IN MEDIEVAL/GOLDEN AGE SPAIN

This course introduces students to a detailed analysis of some major works in poetry, theater and prose of Spanish Medieval and Golden Age writers. It focuses on the evolution of Spanish as a literary language, while examining numerous texts recognized as masterworks of Spanish Literature, including Don Quixote. Analysis through class discussions, papers, and complementary readings, as well as some film versions of the texts are included. Prerequisite: 54 or consent of the instructor. Spring semester. (4 credits)

65 MODERN LATIN AMERICAN LITERATURE IN ITS SOCIO-POLITICAL CONTEXT

The course focuses primarily on the modern literature of Latin America, exploring the socio-political conditions that gave rise to it and identifying its exceptional characteristics. Readings and assignments in this course vary according to different instructors. Prerequisite: 54 or consent of the instructor. Alternate spring semesters, next offered fall 2000. (4 credits)

66 CONTEMPORARY VOICES OF LATIN AMERICA

A systematic analysis of exceptional Spanish American fiction, essay, poetry and/or drama. Special attention is given to discussion, research and writing skills. Authors and readings for this course vary according to each instructor. Prerequisite: 54 or consent of the instructor. Spring semesters, next offered spring 2000. (4 credits)

67 NARRATING THE HISPANIC WORLD

Study of some of the most prominent modern novelists of Spain and Latin America. Past authors studied have included Unamuno, Cela, Delibes, Rulfo, Fuentes, and García Márquez. Prerequisite: 54 or consent of the instructor. Alternate years, next offered spring 2001. (4 credits)

68 MODERNITY IN SPAIN (1800-1930)

Masterpieces of Spanish literature from the 19th Century, Modernism and Avant-Garde. Authors studied are Pérez Galdós, Ortega y Gasset, and García Lorca, among others. Prerequisite: 54 or consent of the instructor. Fall semester. (4 credits)

69 ANTAGONISTS/PROTAGONISTS: THEATER & SOCIETY

This course intends to familiarize the student with major social and artistic trends in theater. Emphasis is placed on textual analysis with complementary lectures on literary tradition. Prerequisite: 54 or consent of the instructor. Alternate years, next offered fall 2000. (4 credits)

88 SENIOR SEMINAR

A capstone course that explores in depth a shifting field of topics. It helps students relate the subjects they have studied in their major field and assists students in demonstrating their familiarity with Hispanic cultures and in methods of analysis and presentation, culminating in the preparation and presentation of a major research project. It is primarily a discussion course that relies heavily on individual as well as collective effort. Required for Spanish majors and those who are writing honors projects in the department. Prerequisite: 54 plus at least two literature courses offered in the Spanish Department or consent of the instructor. Fall semester. (4 credits)

95 TUTORIAL

Prerequisite, permission of instructor. (4 credits)

96 INDEPENDENT PROJECT

Not available to substitute regularly offered courses. Prerequisite: permission of instructor. (4 credits) 97 INTERNSHIP

Prerequisites: four courses in Spanish numbered 31 or above and consultation with the instructor. (4 credits)

98 PRECEPTORSHIP

Preceptorships give students the opportunity to observe and practice teaching skills. Available to highly accomplished students. Most require some background reading and training in foreign language teaching. Prerequisite, permission of the instructor. (4 credits)

Portuguese Courses

21 INTENSIVE PORTUGUESE

Intensive instruction in speaking, understanding, writing and reading Portuguese. Brazilian usage emphasized. Prerequisite: advanced standing in Spanish or permission of the instructor. Spring semester. (4 credits)

25 BRAZIL TODAY

Brazil Today is a course that reviews many of the recent events and forces that have helped to shape Brazil. Attention is given to history, geography, cinema, literature, art, and issues of race, gender and behavior as they lead toward of a fuller understanding of contemporary Brazil. The course is taught in Portuguese. Prerequisite: Portuguese 21 or the equivalent. Alternate years, next offered fall 2000. (4 credits)

Urban Studies

Chuck Green (Political Science), David Lanegran (Director, Geography), Peter Rachleff (History), George Latimer (Urban Studies)

The urban studies major is directed toward students who are interested in urbanization and interdisciplinary perspectives on 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, and an experiential portion which will give students first-hand contact with aspects of the city new to them. A third, additional skills portion will provide students with tools which will enable them to make an effective contribution to research or management. The Urban Studies Program is home to Macalester's Action Research initiative and strongly endorses Service Learning. Most courses listed in the major have action research or service learning components.

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, history, geography, political science or sociology.

B. This core will be supplemented by at least six courses from the following list excluding courses taken as a part of the core. Students will be encouraged to take other courses on the list. Consult departmental listings for information on course frequency. Topics courses with an urban emphasis may be included with consent of the director. All majors are required to take the senior seminar, Cities of the 21st Century.

Anthropology

30 Ethnographic Interviewing

Geography

- 41 Urban Geography
- 61 Geography of World Urbanization
- 88 Cities of the 21st Century 88 Urban Geography Field Seminar
- 88 Historical Geography of Urbanization

- 19 American Civilization
- 43 Origins of Super Society, U.S., 1890-1945
- 45 The Black Experience Since World War II
- 49 Afro-Americans and the Transformation of the City: 1890-1945

Political Science

- 30 Empirical Research Methods (depending upon research topic)
- 42 Race, Ethnicity, and Politics
- 46 Urban Politics
- 59 Reinvisioning Education and Democracy (Same as Education 59)
- 74 Policy Analysis and Evaluation

Sociology

- 23 Sociology of Race/Ethnicity
- 46 Urban Sociology
- 63 Sociology of US Working Class
- 66 Sociology of Immigration

Experiential Aspect

All urban studies students will be required to serve a four-credit internship in government, a social agency, a community or neighborhood organization or a private business firm. Participation in the Chicago Urban Studies 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 director.

Technical Competency

Urban studies majors should attempt to master several of the following communication and technical skills. With their advisors 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 communication studies 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 student cores.

The senior capstone requirement in urban studies is satisfied by taking Cities of the 21st Century.

Women's and Gender Studies

Full-Time Faculty: Sally Caudill (Communication Studies), Beth Cleary (Dramatic Arts and Dance), Sarah Dart (Linguistics), J. Michele Edwards (Music), Ruthann Godollei (Art), Duchess Harris (Political Science), Mahnaz Kousha (Sociology), Teresita Martínez-Vergne (History), Anna Meigs (Director, Anthropology), Karine Moe (Economics), Jean Ostrove (Psychology), Peter Rachleff (History), Emily Rosenberg (History), Sonita Sarker (Women's and Gender Studies and English), Beth Severy (Classics), Clay Steinman (Communication Studies), Jaine Strauss (Psychology), Joëlle Vitiello (French), Karen Warren (Philosophy), Matthew Weinstein (Education)

Part-Time Faculty: Roxane Gudeman (Psychology), Jan Binder (Women's and Gender Studies), Ann Martinez (Women's and Gender Studies), Linnea Stenson (Women's and Gender Studies)

The Women's and Gender Studies Program offers an interdisciplinary major and minor. The goal is to provide students with a deepening level of expertise in using feminist and gender theories as they relate to the study of literature, history, society, science, technology, and the arts. The program provides students with the opportunity, informed by theory, to study the experiences of women of various races, classes and cultures, and to examine gender as an analytic category and social construction. Both men and women are welcome and encouraged to explore this interdisciplinary program.

Courses approved for program credit are listed below. The program may offer additional courses each semester. Please check with the registrar or the program office. The following guidelines are used for inclusion of courses: courses that make use of new scholarship on women and gender and in which the central perspectives come out of scholarship that is generally identified with feminist theory.

General Distribution Requirement

All courses offered by the Women's and Gender Studies Department satisfy the general distribution requirement in the humanities except 10, 50 and 89 through 98. Women's and Gender Studies 10 satisfies the social science distribution requirement. Courses approved for Women's and Gender Studies concentrations but offered through other departments meet the general distribution requirements of that department.

Diversity Requirement

The courses in Women's and Gender Studies which satisfy the domestic diversity requirement are numbered 10 and 30. The courses which satisfy the international diversity requirement are numbered 20, 25, 55, 60, 65, and 88.

Major Concentration

A major concentration, planned in consultation with an advisor chosen from the Faculty list above, is comprised of no fewer than 12 approved Women's and Gender Studies courses (48 credits). These courses:

- 1. should include offerings in at least three separate departments in at least two divisions:
- 2. may consist of no more than four (16 credits) from any single instructor or any single department other than Women's and Gender Studies;
- 3. may consist of no more than 8 credits of independents and 4 credits of internship.
- 4. can include up to the equivalent of 8 semester credits from a study abroad program.
- 5. must include introductory, intermediate, and advanced level courses; and
- 6. must include the capstone experience.

The capstone experience will be fulfilled by enrollment in the Senior Seminar (Women's and Gender Studies 88 or 89), taught each year.

Minor Concentration

The minor concentration consists of six approved Women's and Gender Studies courses (24 credits), including the senior seminar (Women's and Gender Studies 88 or 89). These courses must be distributed among at least three separate departments and come from more than one division. The fit of these courses should be planned with the adviser.

COURSES

Introductory Courses

 $10~\mathrm{RACE}$ AND CLASS IN AMERICAN FEMINISM: INTRODUCTION TO WOMEN'S AND GENDER STUDIES

This class will present an interdisciplinary introduction to the variety of feminist perspectives in the United States. It will deal with race and class as well as gender divisions, contrasting diverse perspectives on work, family, and sexuality. The goal of the course is to develop through reading, writing, discussion, and self-examination an understanding of the controversies and debates over gender categories and definitions. Materials from history, feminist theory, film, and literature are included. Every year. (4 credits)

20 INTERNATIONAL PERSPECTIVES ON GENDER, RACE AND CLASS: INTRODUCTION TO WOMEN'S AND GENDER STUDIES

Through an interdisciplinary and comparative study of selected countries in Europe, Africa, Asia and the Americas, this course creates the basis for an understanding of the ways in which gender roles are established, and how these affect the individual in the realms of education, media, politics, work, sexuality and family. On the basis of texts drawn from psychology, art, film, history, music, and literature, it analyzes theories of femininity and masculinity as constructed in specific racial, cultural, socio-economic, and political situations, and discusses their impact on lifestyles, both traditional and alternative. Every year. (4 credits)

25 INTRODUCTION TO FEMINIST THEORIES

This course is a survey of the various categories of feminist theorizing on issues in education, politics, economics, sexuality, gender, nationalism, ethnicity, creativity, and categorization itself. It clarifies the meanings of terms such as Liberal, Marxist, Socialist, Existential, Psychoanalytical, Radical, Postmodern, Postcolonial Feminisms, with texts drawn from literature, philosophy, film, music, and cultural studies, and ranging from Mary Wollstonecraft to Cherrie Moraga. Every year. (4 credits)

30 INTRODUCTION TO LESBIAN AND GAY STUDIES

This course will examine the newly emerging discipline of Lesbian and Gay Studies. Some of the topics that will be covered in the course content include the essentialist versus constructionist debates and the implications for each, understanding histories of sexuality, problems of theorizing and politicizing collective differences, theories of camp, the history of sex policing and political resistance, the politics of AIDS, and the future of the discipline. Work for the course includes, but is not limited to, readings, in-class discussion, small group/collaborative work, written assignments. For final projects students are encouraged to choose a topic of interest and examine its intersection within their other field of study. Every year. (4 credits)

Intermediate Courses

Intermediate level courses require sophomore standing or any previous women's and gender studies course.

50 TOPICS

Examination of special topics of interest to faculty and students. Previous topics include: African-American Women's History and the Politics of Representation; Feminism, Science, and Society; and others. Every semester. (4 credits)

55 ADVANCED FEMINIST THEORIES

Out of the wide spectrum of theories—Liberal, Marxist, Socialist, Existential, Psychoanalytical, Radical, Postmodern, Postcolonial, Deconstructionist, Poststructural—this class focuses on one or two theories. It investigates the nuances in writings of selected major theorists, on such issues as gender politics, class, sexuality, canonicity, history, and the body. This detailed analysis is supported by art, film and music. Students are encouraged to link the ideas generated in this discussion to issues in other disciplines, and to use theory as an analytical tool for a better understanding of the categories of gender that shape the lives of men and women in various ways across time and cultures. This class has a prerequisite of at least one class in women's and gender studies, or Introduction to Feminist Theories (Women's and Gender Studies 25). Every year. (4 credits)

$60\ 20\text{TH}$ CENTURY ANGLOPHONE WOMEN WRITERS: BRITAIN AND "ENGLISHNESS" (Same as English 59)

The term "Anglophone Literature" refers to writings in English from countries connected to Britain either by imperial rule or by the presence of British immigrants, yet does not include England itself. This course extends the definition of that term to study England as a location of Anglophone Literature, as produced by this island's natives, immigrants, and cosmopolitans. Through an analysis of works by Virginia Woolf, Margaret Drabble, Doris Lessing, Suniti Namjoshi, Angela Carter, Ravinder Randhawa, among others, we will explore how concepts of nation, race, citizenship, gender, ownership of English as a language, and even the British literary canon are constructed. Offered every year. (4 credits)

65 "EXILE" IN WOMEN'S WRITING AND FILM

Dislocation can be either voluntary or enforced, and does not always involve geographical displacement. In discussing political and/or intellectual isolation, this course will consider a range of concepts that include those of territories and margins, of membership in communities and alienness, of longing for "home" or constructions of new ones. It will, furthermore, analyze the impact of the various forms of boundary-crossings in the writings of women from New Zealand, India, the Caribbean, England, and certain countries in Africa, as these are expressed in both literature and film. Not offered 1999–2000. (4 credits)

Advanced Courses

88 SENIOR SEMINAR: METAPHORS OF SPACE AND POSITION

Traveling across continents and cultures, this course is an interdisciplinary investigation of the ways in which various concepts of space influence ideologies of gender. How do these gender ideologies, in turn, intersect with multiple definitions of sexuality, race, and ethnicity? In exploring these questions and related issues such as cartographies, dislocations and "border" identities, we will study women's re-definitions of spatial maps in the literatures, films, and the fine arts of Britain, the Caribbean, West Africa, India, and the U.S. This study will be based on feminist literary and cultural theory (modernism, surrealism, poststructuralism, and postmodernism). The issues in this seminar are related ultimately to the student's "location," personally and/or professionally, at the threshold of the future, in search of a space of his/her own. One substantial research paper and a formal oral presentation on its ideas are the primary assignments. Prerequisites: at least three courses approved for credit in Women's and Gender Studies, and senior standing or permission of the instructor. Every year. (4 credits)

89 SENIOR SEMINAR: TOPICS

Capstone or integrative experience centering on a topic that will vary from year to year. The focus will be to develop a deeper understanding of theory in relationship to women's and gender studies. Prerequisites: at least three courses approved for credit in Women's and Gender Studies, and senior standing or permission of the instructor. Every year. (4 credits)

Independent Studies

All independent study courses require permission of a Women's and Gender Studies faculty sponsor. The number of independent studies which can be applied toward the major or minor will be planned with the Women's and Gender Studies advisors.

96 INDEPENDENT PROJECT

Individual projects are supervised by women's and gender studies faculty. Prerequisites: at least two courses approved for credit in Women's and Gender Studies. Every semester. (4 credits)

97 INTERNSHIP

Internships, supervised by women's and gender studies faculty, bring together theoretical and practical concerns that are primarily connected with women or have feminism as their central perspective. An internship outline plan will be developed individually between the student and the faculty sponsor. Prerequisites: at least two courses approved for credit in Women's and Gender Studies. Every semester. (4 credits)

98 PRECEPTORSHIP (4 credits)

COURSES APPROVED FOR WOMEN'S AND GENDER STUDIES CONCENTRATIONS

In addition to courses offered directly through the Women's and Gender Studies program, the following courses are approved for use on Women's and Gender Studies concentration plans. Approval is based on specific syllabi and faculty; please consult with the program director for questions about approval. Consult the program office for approved courses from previous years.

Humanities

Classics

27 Women in Classical Antiquity

English (The following courses *may* be approved depending on specific syllabi and faculty. Please consult the program office.)

- 21 American Voices
- 51 Contemporary Writing by Women
- 52 African American Writers of the U.S.

77 Women Writing in French

History

- 22 United States Women's and Gender History
- 26 Women in Latin America
- 30 Women and Work in U.S. History 44 U.S. Since 1940

Philosophy

- 25 Ethics (K. Warren)
- 29 Feminism and Environmental Ethics
- 81 Advanced Feminist Philosophy

Religious Studies

- 42 Women in Judaism
- 52 Gender, Caste and Deity in India

Fine Arts

52 Women in Art

Dramatic Arts and Dance

52 Feminist Theatre(s)

51 Women Making Music

Social Science

Anthropology 49 Feminist Perspectives in Anthropology

Communication Studies

- 28 Film Analysis: Formalist and Feminist
- 44 Gender and Communication
- 50 Feminism, Representation, and Film.

Economics

26 Economics of Gender

Education

58 Science As Culture

Linguistics

21 Language and Gender

Political Science

88 Feminist Legal Theory and Practice

Psychology

34 Psychology of Gender

88 Seminar: Gender and Mental Health

Sociology

31 Genders and Societies

35 Images of Women in the Middle East 73 Advanced Topics in Race/Ethnicity and Gender

Natural Science and Mathematics

Biology

17 Women, Health and Reproduction

Special Programs

Study Abroad and Domestic Off-Campus Study

Macalester College has a long tradition of providing significant opportunities for students to build an international and intercultural perspective into their college education through international or domestic off-campus study.

Under current policy, students may propose participation in any off-campus study programs sponsored by an accredited, degree-granting U.S. college or university, an officially recognized degree-granting institution in another country, or a program which has a special credit-granting relationship with Macalester.

Acting on behalf of the Faculty Curriculum Committee, all proposals for off-campus study during the regular academic year are evaluated by the Study Away Review Committee (SARC). SARC reviews the credit-worthiness of each proposal, the student's preparation for the experience, and the degree to which the program promises to extend and enrich the student's Macalester degree program. SARC's endorsement must be obtained the semester before participating in a program.

Although there are limits on the number of students who pursue off-campus study each academic year, in recent years the demand has not reached that limit and Macalester has been able to support all qualified and well-prepared students who submit compelling off-campus study proposals.

Who May Participate?

Except as noted below, currently enrolled Macalester students who have completed one full year of study at Macalester and are in good academic standing are eligible to propose off-campus study. It is important to note, however, that students must also meet the eligibility requirements of the off-campus programs themselves.

Transfer students who entered Macalester as a second semester sophomore may receive a maximum of 18 credits for off-campus study. They may also receive credit for January programs. Transfer students who entered as first semester juniors may only receive credit for January programs.

The tuition benefits extended to Adult Scholars and students on the Dependent Tuition Assistance Program may not be applied to off-campus study.

Non-immigrant visa and asylee status students are eligible for off-campus study, but they may not apply financial aid to international off-campus study programs unless participation in such a program is mandated by a formally declared major.

Students on academic or social probation may propose off-campus study, but must be off probation before participation in the proposed program is scheduled to begin.

Registration, Academic Credit, Grades, and Financial Aid

Students whose proposals are approved by SARC must register at Macalester for their off-campus study programs in order to receive Macalester credit. All courses from semester and academic year off-campus study programs, including failed courses, are posted to the Macalester transcript. All grades for those courses are factored into the Macalester cumulative grade point average.

Academic credit earned for off-campus study programs meets general education requirements for graduation, but this does not guarantee that it may be applied towards distribution and/or departmental requirements. As part of the proposal process, students are required to consult with the appropriate academic offices to ascertain how their off-campus study credit will apply towards their degree programs.

With the exceptions noted above, students whose proposals are approved by SARC may apply eligible financial aid to program costs. While the vast majority of financial aid is portable, it is important to note that certain aid programs such as work-study do not apply to off-campus study. In the case of work-study, Macalester presently offers limited supplemental scholarships to offset that lost income. The International Center also offers on an annual basis several merit-based scholarships and awards for international off-campus study.

Except for a number of direct exchange agreements with foreign universities and consortial programs, Macalester does not charge its own tuition for off-campus study programs. Macalester instead charges a nominal administrative fee and substitutes the program fee set by the program sponsor for Macalester tuition. As a result of this policy, all program fees must be billed through Macalester in order for students to receive credit for their off-campus study program.

Application Process

There are two steps to applying for off-campus study: 1) proposing a program for Macalester approval, and 2) applying to the program sponsor for admission. With rare exceptions, these two steps are independent of each other and have separate deadlines. It is the student's responsibility to ascertain the relevant deadlines and to provide the required materials by those deadlines.

Detailed information on both steps is articulated in the *Handbook for Off-Campus Study*, and assistance with each is available at the International Center. Since careful planning is required and timing is often critical, students are advised to start exploring their off-campus study options with the Study Abroad Coordinator as early as possible in their Macalester careers.

International Student Program

The International Student Program serves the educational, cross-cultural, and personal development needs of Macalester's international students. Its goals are to integrate international students into all aspects of college life, to help them participate in and contribute to Macalester's high quality liberal arts education, and to assist them in applying their learning to their own lives and cultural

contexts. In working toward achieving these goals, the International Student Program provides the following services:

- * advising on immigration and other U.S. regulations and laws. Students see the International Student Program Coordinator for questions and authorizations related to off-campus work, traveling outside the U.S., and any other changes to their course of study while at Macalester.
- * assistance to students in filing their mandatory U.S. tax returns.
- * a Pre-Orientation which precedes the all new student orientation and emphasizes immigration regulations and cultural issues. To facilitate intercultural learning, faculty and staff discuss various elements of U.S. life and culture.
- * a fall semester mentoring relationship which involves first year students with U.S. and international upper-class students. This program organizes topical discussions for students throughout the semester.
- * an on-going relationship between international students and families from the Twin Cities community. Through on- and off-campus events, hosts acquaint students to life in the U.S.
- * a variety of on-going events related to international students' experiences and learning, such as workshops on international careers or discussions on international issues.
- * consultations with faculty and staff on immigration, cultural, and learning issues related to international students. The International Student Program Coordinator also works with other offices to develop events that facilitate international and intercultural learning among international and U.S. students.

Other Programs for International Understanding

The International Center, the International Studies major, and the Macalester International Organization offer programs throughout the year designed to focus attention on international affairs, global issues, and intercultural relations. These include lectures, panel discussions, films, various cultural events, the International Roundtable, International Week events, and special orientation and advising sessions for study abroad participants and international students.

The International Center also maintains a small library of materials on international study, work abroad, volunteer opportunities, internships, and graduate school programs in international affairs. Its staff members represent a broad range of international experience and are available to guide members of the Macalester campus community to international resources.

The World Press Institute (WPI) provides an opportunity for ten professional foreign journalists to study, work, and travel in the United States annually. The Institute's program is designed to give its participants the background necessary for accurate interpretation and reporting of U.S. affairs. It is funded by U.S. corporations, foundations, individuals, and Macalester College. WPI journalists are encouraged to become involved in the academic and social life of the

college while in the Twin Cities and are frequently invited by faculty members to share their experiences and observations with students in the classroom.

Pre-Professional and Professional Programs

The Pre-Law Program

Martin Gunderson (Adviser, Philosophy)

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 a wide variety of departments which emphasize a broad liberal arts perspective. Opportunities are available for a few students each year to secure internships in a legal setting.

The Premedical Program

Advisors: Lin Aanonsen (Coordinator, Biology), Rebecca Hoye (Chemistry), Darlane Kroening (Learning Center), Laurence Savett, M.D. (Biology), and Jan Serie (Biology)

Students interested in premedical studies should consult one of the premedical advisors very early in their first year for academic advice and also contact Lin Aanonsen to be included on the Health Professions mailing list. Students should also refer regularly to the new health professions web page (www.macalester.edu/~hlthpro/). This web page is still undergoing revision, but will eventually be the hub of information on health professions activities at Macalester.

Premedical students at Macalester may major in any discipline and concurrently complete all premedical requirements. A science major is *not* a prerequisite for admission to medical school. Most medical schools require the following courses: Chemistry 11 and 13, Chemistry 37 and 38, Biology 21, 22 and 23, Physics 21 and 22, or 26 and 27 and two courses in English. At the University of Minnesota Medical Schools, the "English" requirement can be satisfied by a number of literature, writing and/or speech courses, and need not be listed as an English course. This requirement varies so widely that you should consult your premedical advisor before making a decision about courses you decide to take that may satisfy premedical requirements. Biochemistry (Biology/Chemistry 58) is a prerequisite at a growing number of medical schools including the *University of Minnesota* (Minneapolis and Duluth campuses) and the *Mayo Medical School*. Courses in the social sciences, humanities and mathematics are also required for admission to some medical schools.

Premedical advisors 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. The biology

department also has a physician, Dr. Laurence Savett, who assists in premedical advising. In addition, Dr. Savett offers a course entitled, "Seminar in the Humanism of Medicine," which is open to juniors and seniors. Regular forums and seminars are presented 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 eight students to participate in health profession internships following their junior year. Student recipients of this competitive award may arrange to work in a clinic, hospital, or other medical facility under the direct supervision of medical personnel.

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 course work required, see the art department section of this catalog.

The Cooperative Program in Liberal Arts and Engineering

Danny Kaplan (Adviser, Mathematics)

An arrangement between Macalester and both the University of Minnesota and Washington University in 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 either university in five years—the first three to be spent at Macalester and the latter two in the respective engineering program. 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 104 semester hours as well as all other graduation requirements.

The Cooperative Program in Liberal Arts and Nursing

Lin Aanonsen (Adviser, Biology)

An arrangement between Macalester and Rush University of Rush-Presbyterian-St. Luke's Medical Center in Chicago makes it possible for a student to earn both a B.A. degree from Macalester and a B.S. degree in nursing from Rush University in five years—the first three spent at Macalester and the final two years at Rush University. This is a combined academic program; the student does not transfer schools or formally apply to Rush, but matriculates through an affiliation agreement. When the requirements on the Macalester campus have been completed successfully, the student continues the program at Rush University.

Details of the program at Rush are given in that school's catalog and can be obtained from Lin Aanonsen. While at Macalester the student must satisfy the following requirements:

Biology

22 Physiology or equivalent course at an ACTC school Human anatomy (independent study) or an equivalent course at an ACTC school 52 Microbiology

Chemistry

11, 13 General Chemistry I and II 37 Organic Chemistry I

Humanities

Four courses in humanities, of which two must be in English composition.

Social Science

Four courses, of which one must be Developmental Psychology (Psych 28). Though not required, it is recommended that these courses be selected from the departments of psychology, sociology or anthropology.

Mathematics

14 or 27, Data Analysis and Statistics, or Elementary Statistics one additional college level mathematics course

Distribution Requirements at Macalester:

The Macalester-Rush student is required to complete Macalester's distribution requirements as described in the Graduation Requirements section of this catalog.

General Requirements:

The Macalester-Rush student must earn 96 semester hours of credit in courses at Macalester, have a minimum GPA of 2.75, and complete a major at Macalester, as well as all other graduation requirements.

Other Curricular Opportunities

Associated Colleges of the Twin Cities (ACTC)

According to an agreement among Augsburg College, Hamline University, the College of St. Catherine, the University of St. Thomas and Macalester, students may take one course per semester 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 University 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. Students should contact the Registrar's Office for information on registration procedures and acceptability 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 Macalester has approved the course. Macalester students should contact the Registrar's Office for information on registration procedures and acceptability of credit.

Honor Societies

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.

Other National Honor Societies

The following departments sponsor national honor societies:

Claraniatana	Lata Ciana a Di
Chemistry—	Iota Sigma Pi
	Phi Lambda Upsilon
Classics—	Eta Sigma Phi
Communication Studies—	Lambda Pi Eta
Computer Science—	Upsilon Pi Epsilon
Economics—	Omicron Delta Epsilon
French—	Pi Delta Phi
Geography—	Gamma Theta Upsilon
German Studies—	Delta Phi Alpha
History—	Phi Alpha Theta
Mathematics—	Pi Mu Epsilon
Political Science—	Pi Sigma Alpha
Psychology—	Psi Chi
Sociology—	Alpha Kappa Delta
Spanish—	Sigma Delta Pi

Student Support Services

Student Affairs

Student Affairs is an important part of the Macalester student experience. While many of these services provide for immediate day-to-day needs in areas such as health and housing, the goal of Student Affairs is to offer a variety of programs and services which enhance and supplement students' academic experience. The offices and programs described below provide opportunities for students to grow as individuals, to develop a greater sense of interdependence, as well as independence. Programs and activities are designed to encourage the balance of individuality and responsibility.

The Macalester College Student Government provides official representation for students in College governance, coordinates student action and allocates the student activity fees. The legislative body meets regularly throughout the year providing a forum for the expression of student opinions.

Macalester students have created over sixty organizations, and new ones are formed based on student interest. Student organizations are chartered through MCSG. Some of the organizations include: Adelante!, Latino students' group; Amnesty International; the Black Liberation Affairs Committee (B.L.A.C.); Queer Union; the Macalester International Organization (M.I.O.); Mac Christian Fellowship; Mac Conservatives; Mac Jewish Organization; Mac Peace and Justice Coalition; Feminists in Action (F.I.A.); MACTION, the community service organization; Macalester Ecological Society (MECOS); Activities and Campus Entertainment (A.C.E.); and Mac-Ultimate, frisbee.

Music performance groups include the Concert Choir and Festival Chorale, Symphony Orchestra, Symphonic Band, Jazz Band and ensembles, the Flying Fingers (a folk music instrumental group), Pipe Band and Highland Dancers, chamber ensembles, Andean Music Ensemble, African Music Ensemble, and men's and women's *a capella* singing groups. Speech and Theatre groups include the Drama Club, the Debate Group and Macalester Forum, and the Organized Improvisation group.

Student media includes: the Mac Weekly newspaper, the Chanter literary magazine, WMCN-FM radio, the Banshee women's journal, and several other periodic publications.

Macalester's sports and recreation program is extensive, including intercollegiate, intramural, club, and recreational activities. Intercollegiate athletic programs compete in the MIAC and NCAA Division III. Men compete in baseball, basketball, cross-country, football, golf, soccer, cross country skiing, swimming, tennis, and track and field. Women compete in basketball, cross-country, golf, soccer, cross country skiing, softball, swimming, tennis, track and field, and volleyball. Club sports currently include crew, fencing, field hockey, lacrosse, men's volleyball, rugby, ultimate frisbee, and water polo.

Dean of Students

The Dean of Students serves as the chief student affairs officer of the College. The Dean is concerned primarily with the general welfare and collegiate life of all students. The office is responsible for the Campus Center, Campus Programs, Campus Grievance Procedures and the Mediation Process, Career Development Center, Chaplain, Community Service, Disability Services, Health Services (health education, medical, and psychological), New Student Orientation, Residential Life, Student Government, Media and Student Organizations. The Dean and Assistant Dean assist in answering any student or parent question related to College policies or procedures, and provide ombudsman services to students who have a specific problem or inquiry. The office maintains the personal records of all current students and alumni for eight years after graduation. The Dean serves as an *ex officio* member of the Academic Standing Committee.

Campus Center

The staff of the Campus Center are responsible for reservations across campus for meeting and activity spaces. They also manage the summer conference program.

A new campus center facility, which will house the dining area, post office, print shop, retail store, service offices and meeting spaces, will open in the summer of 2001.

Campus Programs

The staff of Campus Programs works with students, faculty, and staff to provide a varied program of co-curricular activities. Recognizing that most of a student's day is spent outside of the classroom, the Campus Programs staff works to encourage cultural, educational, social, and recreational programs that supplement the classroom experience. Student organizations at Macalester, with advice from the Campus Programs staff, provide a variety of activities for all members of the College community. Staff in this area are also responsible for first-year orientation and training opportunities in leadership, multiculturalism and group dynamics.

Career Development Center

Shaping one's intellectual, vocational and personal pursuits is a dynamic, lifelong process. The Career Development Center assists students and alumni with the broad range of tasks and decisions related to career, education, and employment issues. The Center also services the employing and higher education community by assisting them with their recruiting needs.

Among some of the more common student/alumni issues addressed by the Career Development Center are: choosing a major, finding summer, part-time, or full-time employment, deciding on and applying to graduate/professional school, doing a job search and the mechanics of that search, career decision-making, building an experience base to support a strong professional beginning, developing a personal and professional network and applying a liberal arts degree to the workplace.

A comprehensive system of resources has been developed by the counseling staff of the Career Development Center to address those and the other issues presented by students and alumni. Services offered include: one-on-one or group counseling, workshops, interest inventories, handouts, an extensive alumni network, a comprehensive career resource library, job listings, on-campus recruiters, job fairs, senior newsletter, computer-accessible employment resources, collaborations with other colleges and campus offices, other resources/services as requested by students, staff, faculty, and employers. A Web page has been developed for additional access (http://www.macalester.edu/cdc/).

The Career Development Center counselors serve as advocates and as a resource for students, addressing personal, academic and professional concerns encountered by students during their four years at Macalester and beyond. This support, combined with extensive opportunities to connect with alumni, employers, and graduate/professional schools, provides Macalester students with excellent opportunities to meet personal goals and put their degree to work.

Chaplaincy

The College is Presbyterian by tradition. The Chaplain, Associate Catholic and Jewish Chaplains seek to offer support to students, faculty and staff of all faiths through their programming as well as by actively cooperating with religious communities within the Twin Cities. Believing that the religious dimension is an essential part of education and values formation, Macalester College offers many opportunities for growth in religious understanding and expressing religious faith. The Office of the Chaplain provides leadership in addressing issues of social, ethical and religious importance. It works with academic departments and student organizations to address these issues, particularly MACTION, which promotes community service, and The Council on Religious Understanding, which fosters interfaith dialogue in the College community. The Chaplaincy also provides pastoral counseling and appropriate professional referrals on-campus and off-campus.

The Weyerhaeuser Memorial Chapel houses the Chaplain and Associate Chaplains. The Chapel also provides activity space for the Macalester Christian Fellowship, Macalester Peace and Justice Coalition, Mac Catholics, and other student groups. The Muslim Students Association, in association with the Chaplaincy, maintains a mosque in the Chapel for weekly prayers and other activities. Other traditions are celebrated on the campus regularly, and close relations are maintained with churches and religious leaders in the Twin Cities.

Community Service Office

The Community Service Office exists to promote an ethic of lifelong service to others. The office encourages weekly volunteering based on a philosophy of respect for others and reciprocal learning. The college holds that academic excellence is closely related to the college principle of service to others. Viewing the local community as an extension of the classroom, coursework

provides the context for the service-learning experience. Each semester several professors offer a service-learning option in their course.

Nearly 50% of Macalester students volunteer in some capacity during a given semester. The office develops relationships with local non-profit organizations and schools that utilize volunteers. A clearinghouse maintained in the office provides information on over 300 diverse community opportunities where students can provide service. The office also offers college vans for use by service groups sponsored by the college. Many students enjoy volunteering with their peers on a college sponsored service project on a one-time and/or weekly basis. The issue areas with the highest number of volunteers are: tutoring, economic justice, the environment, women's issues and English as a Second Language.

Students who are eligible for a financial aid award can apply to earn their award through the Off-Campus Student Employment Program. OCSE students work in local non-profit organizations and meet as a group monthly for training and reflection. The program is open to sophomores, juniors and seniors. A limited number of positions are available each year. Students find that the positions provide them with a significant amount of time (8–12 hours per week) and resources to devote to a community issue. Interested students should pick up an application in the Community Service Office.

The Community Service Office is a resource to any individual, student group, academic department, or college office that would like to develop a service program. A diversity of volunteer options and service entry points are provided in order to fully integrate service to others into the fabric of the college.

Winton Health Services

Health Services provides a range of preventive and primary health care and education for Macalester students. Medical care, counseling, and health promotion are partnerships where students and professionals share commitment. Staff provide opportunities for students to gain the knowledge and develop the skills and attitudes necessary to make healthy lifestyle choices and to achieve personal and academic success.

Specific services provided include:

Counseling and Psychological. Short-term counseling services are offered. This includes personal counseling, crisis intervention, consultation with faculty, staff and students, educational programming and referral to on-campus and off-campus resources.

Medical. Out-patient ambulatory care for virtually any general medical problem is offered, including diagnosis and treatment for sick and injured students, with referral to other medical services as appropriate.

Health Promotion. Information, activities, events, resources, and referrals are offered to help students identify health choices and adapt new behaviors for a healthier lifestyle and community. Classroom presentations, small group

workshops, student training, class project and literature resources are a few of the strategies employed.

Staff. The staff of Macalester Health Services includes a licensed psychologist and mental health counselors, a nurse practitioner, RNs, and Certified Health Education Specialist, as well as experienced support staff. A consulting physician is available one afternoon each week. Full staffing and services are available only during the academic school year; administrative services are available 12 months a year.

Requirements/Fees To insure the best health care possible, students **must** have a current health record and physical on file in Health Services before services can be provided. Additionally, Macalester College and the State of Minnesota require that immunization requirements be met in order to be enrolled for classes.

There are no charges for medical, psychological or education services provided by Health Services; students are charged only for laboratory services, immunizations, medications, and transportation to other medical facilities. Any medical, surgical or psychological services incurred outside the Health Services are the student's responsibility. All records and services provided are confidential.

Insurance

Macalester College strongly recommends that all students acquire and maintain comprehensive personal health insurance. Information on health insurance plans and supplemental accident insurance is available from the Business Office and Health Services.

Residential Life

Living on campus is an important part of a Macalester education. Macalester's residence halls provide students with opportunities to meet and interact with people very different from themselves, participate in new activities and learn how to manage the College environment. For this reason, the College expects all entering students to live on campus for two consecutive years.

Students live in 9 residence halls and 5 language houses located on the campus. Many halls include active clusters of students involved in academic theme communities and residential classes. Residence hall communities are broken down into primarily first and second year student living areas and then, upperclass living areas.

Macalester's residential life staff include full-time, professional Hall Directors who are graduates of Master's degree programs in Student Personnel. These staff coach, train and supervise the team of undergraduate paraprofessionals who provide direct services to our students. Hall Directors are expected to be visible involved members of their residential communities and our student staff are campus leaders. All members of the staff are expected to work in collaboration with students, faculty and staff to provide opportunities and support to residents.

Opportunities for student involvement abound within the residence halls. Student governance in the halls is handled through Hall Councils. Hall Councils provide students with leadership opportunities in program and event planning, budget management, decision making and the creation and revision of policy. In addition, students are expected to be active in a variety of committees including food service advisory groups, weekend programming committees, facilities renovation task forces, etc.

Food Service

Macalester's dining services program is provided through contract service by Bon Appetit. Students who live in the residence halls are required to participate in a food service plan. Residential Life staff and members of the Food Service management team work together to provide a high quality food program in a pleasing dining atmosphere. Kagin Dining Commons is the main dining room for students.

Academic Services

Computing

CIT, the office of Computing and Information Technology, coordinates the development and use of computer, network and telecommunications resources at Macalester. These resources include the campus-wide local area network, Internet connections, general-use desktop computing facilities, administrative and faculty computers, the College switchboard, and telephone systems. CIT maintains centralized servers for file storage, printing and electronic mail, as well as a Help Desk and locally-produced documentation for important features of these services. CIT offers a range of short classes focusing on productivity software (such as spreadsheets, HTML editors and Web browsers) and effective use of the network.

Computers are used extensively throughout the curriculum, and Macalester provides student access to computer resources both for academic research/course work and for individual explorations. The College furnishes approximately 350 desktop computers for student use; roughly 85 of these are available for general student use, in staffed computer labs located on the third floor of the Humanities building and in the basement of DeWitt Wallace Library. Both labs support a mixture of Apple Macintosh and Windows PC workstations, as well as scanners and networked printers.

The remainder of student-use computers are dispersed through 19 academic departmental facilities dedicated to discipline-specific instructional objectives. These facilities include UNIX, Macintosh and PC laboratories in the Department of Mathematics and Computer Science, where students are taught introductory and advanced courses in programming (currently emphasized languages include C++, Java, Mathematica, Scheme and Prolog) as well as many other aspects of computer use and design. The Department of Economics uses a Macintosh-based teaching classroom to help students master econometrics, statistics and other mathematical tools. The Department of Psychology utilizes

clusters of Macintoshes and PCs to aid students in quantitative methods and cognition. The Department of Biology maintains one teaching classroom and a number of small computer clusters to help students visualize and experiment with ideas presented in class. One of the laboratories in the Physics and Astronomy Department is equipped with microcomputers to permit real-time experimentation, and the observatory relies on high-end UNIX workstations to gather and analyze astronomical data. Other academic uses of information technologies include mathematical modeling, CAD and 2-D print design, computational/statistical analysis, interactive multimedia language learning and musical composition.

Use of computers in support of Macalester's educational objectives is assisted by a wide range of facilities and initiatives. CIT maintains two computer classrooms for use by any instructor. These rooms are equipped with high-end PC and Macintosh computers, high-resolution data projectors and whiteboards. All academic classrooms are equipped with data ports so that faculty may connect laptop or desktop computers to the network for instructional use. Several classrooms in academic buildings have been designated as "presentation" classrooms, and are fully equipped with projection and presentation devices, computers, laptop connections and specialized lighting controls. Major grants from the Andrew W. Mellon Foundation support faculty development of new classroom teaching approaches, augmented and strengthened with instructional technologies.

The College operates a high-speed local area network connecting all academic and administrative buildings, and the permanent residence halls. This network provides excellent capabilities for accessing the Internet. Students' personally-owned computers are allowed to be connected to the network, which supports the most common modern network standards for both Windows and Macintosh computers. Permanent residence halls are wired with one port per pillow.

In addition to the residence hall network connections, students are provided with voicemail boxes, access to a central e-mail server, access to file and print servers, networked storage space and accounts to utilize these services. The College's connection to the Internet gives students the capability to create their own Web pages. To encourage individual ownership of desktop computers, the College operates the Computer Store, through which students, faculty and staff can purchase computers, software and accessories at academic discounts.

Off-campus users may explore Macalester's resources and programs on the World Wide Web at http://www.macalester.edu using any Web browser.

Learning Center

The Learning Center helps students at all levels of attainment enhance the skills that a college education demands. Free one-to-one assistance by professionals and peers in a variety of areas is available to all Macalester students. Group and individual assistance is available in mathematics, biology, chemistry, writing, reading for speed and comprehension, general vocabulary development, general learning skills and time management, among others. Assistance is also available to students preparing for graduate school examinations and writing

such things as graduate school applications, capstone papers, honors projects, applications for scholarships and study-abroad opportunities, as well as for students who have documented learning disabilities.

Library And Media Services

Macalester's library is located adjacent to Old Main at the center of campus. Completed in 1988 at a total cost of \$15 million, it represents the state-of-the-art in college library design. The library is second-to-none in its provisions for study facilities (one-third of the student body can be accommodated), traditional library collections (450,000 volume capacity) and new information technologies.

The library collections include nearly 450,000 volume-equivalents and nearly 1,600 current subscriptions to journals and newspapers. A networked online catalog provides access to Macalester library holdings as well as those of six other nearby institutions: a total of more than two million volumes. In addition, the library offers a full range of online indexes, access to fulltext articles and over 150 journals in electronic fulltext, networked access to a wide range of Internet resources, an interlibrary loan service to obtain books and articles owned by other institutions, and a bibliographic instruction program to aid students in their research. The library's rare books and archives section features strengths in early twentieth century American authors, including a nationally prominent collection of Sinclair Lewis first editions. The library is open 106 hours per week and remains open until midnight five days per week. However, through our networked services, resources such as electronic reserves and online fulltext allow access to library resources 24 hours per day. More information on the library and available networked resources will be found on our web pages at www.macalester.edu/~library.

Media Services and the Humanities Resource Center provide educational media technology to support the Macalester academic program. In 1992, these departments, along with Computing Services and Information Technology, moved to state-of-the-art facilities in the new Humanities/Technology Center.

Video production, sound systems, photographic services and a full range of audiovisual equipment and materials are accessible to all students and faculty. In addition, new technologies such as international TV reception, satellite teleconferences, and an interactive language laboratory are now available. Media Services has a rapidly growing collection of over 2,000 films, videocassettes and videodiscs, which are accessible through the online catalog. More information about media services will be found on our web pages at www.macalester.edu/~media.

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 fall and spring term final examination

schedules; endorses teacher licensure applications; evaluates transfer credits; acts upon applications from students not seeking a degree from Macalester; issues transcripts and statements certifying full-time attendance and/or good academic standing; and certifies to the faculty those students eligible for graduation.

Multicultural Affairs at Macalester

In December of 1998, the college developed a Plan of Action entitled "Advancing our Multicultural Agenda" for this area of campus life.

The Council for Multicultural Affairs will be established to provide guidance and coordination for college initiatives related to multiculturalism. It is a faculty, staff and student group staffed by a Director and Assistant Director. The responsibility for the multicultural agenda is shared by all members of the college community and co-curricular offerings in this area are sponsored by departments across the campus.

The multicultural affairs program includes initiatives to augment college services for Native American, African American, Hispanic and Asian American students. The program offers a range of activities, support for student organizations, a mentor program for new students of color and a Cultural Center which provides a "home away from home" and a flexible programming space.

Macalester is committed to providing an undergraduate experience that prepares students to enter the multinational world of today.

Services for Students with Disabilities

The College is committed to providing for the needs of all enrolled or admitted students. Students who have disabilities under Section 504 of the Rehabilitation Acts of 1973 and the Americans with Disabilities Act of 1990 should seek available assistance and make their needs known to the Disability Services Coordinator whose office is located in Winton Health Services. The College will make every effort for reasonable accommodations in providing the same opportunities for program and physical access to students with disabilities.

Scholarships and Special Endowed Funds					

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 juniors and seniors—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 followed by the year in which it was established, the name and 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, Class of 1911, who contributed a substantial majority of the funds.

Endowed Scholarships

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, \$3,715.

Edna Ahrens Indian Scholarship Fund (1964). Established by Edna A. Ahrens of Hutchinson, Minnesota, through a deferred gift for students of American Indian lineage. Principal, \$31,438.

Hugh S. Alexander (1957). Established by friends and former students of Dr. Alexander, professor of geology at Macalester (1906–48). Principal, \$4,166.

The Alexander International Education Fund (1964). Established by Hugh S. Alexander, Macalester Class of 1899, his wife, Florence A., and his daughter, Vida R., Class of 1927. Principal, \$155,506.

Isabelle Strong Allen (1962). Established by John W. Leslie, chairman of the board, Signode Steel Strapping Company, Chicago, Illinois. Principal, \$17,500.

Charles and Ellora Alliss and George and Wilma Leonard Minnesota Charler 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.

Alumni Memorial (1958). Established by former Macalester students. Principal, \$19,978.

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.

Chester A. Anderson Endowed Scholarship (1988). Endowed by Dr. Chester A. Anderson, Class of 1941, this scholarship is to be awarded to a second year student majoring in science with an interest in premedical education. The student should be an American citizen with a grade point average of 3.0 or higher. Principal, \$75,000.

William R. Angell Foundation Biology Scholarship (1957). Established by the foundation in Detroit named for the president of Continental Motors Corporation, Muskegon, Michigan. For students majoring in biology. Principal, \$17,400.

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 students majoring in history, with preference given to international students and those interested in Middle East studies. Principal, \$16,360.

David G. Baird (1967). Established by the Winfield Baird Foundation at the suggestion of New York banker David G. Baird. Principal, \$262,500.

Julian B. Baird (1967). Established by the First National Bank of St. Paul to honor its former president who served as Under Secretary of the Treasury under President Eisenhower. Principal, \$25,240.

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 J. Bell (1988). Established by the family and friends of the Reverend Doctor Bell, alumnus and trustee of Macalester College, to commemorate his life of service to humanity. Principal, \$40,020.

Violet Olson Beltmann (1967). Established by Albert A. Beltmann, Macalester Class of 1923, founder and former president, Beltmann North American Van Lines, St. Paul, in memory of Violet Olson Beltmann, Class of 1920. To be awarded to students majoring in chemistry. Principal, \$98,569.

William Benton (1957). Established by the chairman of the board of Encyclopedia Britannica and former United States Senator and Assistant Secretary of State. For students of unusual ability who plan a career in government. Principal, \$26,000.

Roger Blakely Endowed Scholarship (1998). Established through a bequest made by Dr. Roger Blakely, Class of 1943, a professor in the English department of Macalester College for over forty years, the scholarship will be awarded to one Macalester student at the sophomore year and above who is majoring in English and demonstrates academic excellence and financial need as defined by the College. Principal, \$87,830.

Samuel and Evelyn Borshay Endowed Scholarship (1989). In honor of Samuel and Evelyn Borshay for their life-long commitment to family values, self-development and growth through higher education. To be awarded to a junior or senior pursuing interdisciplinary studies in physical, mental, and emotional wellness; and who is planning a career dedicated to helping others in the fields of human services, gerontology, and wellness education. Principal, \$25,000.

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, \$33,368.

George R. and Herman Brown (1975). Established by The Brown Foundation, Inc., Houston, Texas, and George and Wilma Leonard, Macalester Class of 1927. Principal, \$30,015.

Charles S. and Virginia Bryan Endowed Scholarship (1997). Established by Donald G. Bryan through a bequest in his will in memory of his parents, Charles S. Bryan, Class of 1919, and Virginia Bryan. Principal, \$95,467.

Ivan C. and Delores Fahey Burg Endowed Scholarship (1990). Established by family, friends, and students in memory of Ivan C. Burg, Class of 1934, who was a professor of journalism and director of the news bureau at Macalester from 1937–1969. To be awarded to a student who is interested in a journalism career. Principal, \$16,875.

Burlington Northern Foundation (1967). Established by the Northern Pacific Railway Company of St. Paul. Principal. \$25,000.

Dr. Bonnie Busse Memorial Scholarship (1999). Established in memory of Dr. Bonnie Busse, Class of 1948, this scholarship will reward students who aspire to enter the field of teaching and demonstrate academic excellence. Principal, \$50,000.

John S. Campbell (1959). Established by Mr. Campbell, Macalester Class of 1913 and former president of Malt-O-Meal Company of Minneapolis. Principal, \$28,250.

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.

Dale Carnegie Memorial (1959). Established by Dorothy Carnegie, president of Dale Carnegie and Associates, Garden City, New York. Principal, \$38,000.

Mike Carr Endowed Scholarship (1986). Established by Michael L. Carr, Class of 1973, in appreciation of his Macalester experience. To be awarded to a student, working within any area of study, needing financial assistance. First consideration is to a Native American, with preference to those whose home is on a reservation. Principal. \$28,006.

Eleanor Wallace Caswell Scholarship (1989). Established by Sara Knapp in memory of her sister, Eleanor Wallace Caswell. To be awarded to any Macalester College student needing financial aid. Principal. \$50,000.

Chemical Bank (1967), Established by the Chemical Bank of New York City, Principal, \$25,000.

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.

Glenn Clark (1963). Established by friends and alumni in memory of Professor Clark, chairman of the English department and track coach at Macalester (1912–44). Principal, \$114,434.

Class of 1927 (1957). Established by members of the Macalester Class of 1927. Principal \$6,190.

 ${\it Class~of~1932}~(1982).$ Established by members of the Macalester Class of 1932 at their 50th reunion. Principal, \$33,771.

Class of 1936 (1987). Established by members of the Class of 1936 in celebration of their fiftieth reunion; preference given to a student from Minnesota needing financial assistance, who otherwise would not be able to receive a Macalester education. Principal, \$12,267.

Class of 1938 (1989). Awarded to a worthy student from a middle-income family. Principal, \$11,000.

Class of 1960 (1960). Established by members of the Macalester Class of 1960. Principal, \$2,500.

Class of 1962 (1962). Established by members of the Macalester Class of 1962. Principal, \$3,039.

Class of 1963 (1963). Established by members of the Macalester Class of 1963. Principal, \$4,151. Class of 1966 (1966). Established by members of the Macalester Class of 1966. Principal, \$2,688.

Class of 1967 Ray F. Livingston Memorial (1967). Established by members of the Macalester Class of 1967 in memory of Ray F. Livingston, professor of English (1956–67). Principal, \$1,112.

 $A.L.\ Cole\ (1957).$ Established by the vice president and director of the Reader's Digest Association, Inc. Principal, \$36,000.

Edwin V. Coulter (1961). Established by Multi-Clean Products, Inc., St. Paul, Minnesota, to honor its president. Principal, \$14,250.

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.

Charles A. Dana (1962). Established by the industrialist. Awarded only to students in the upper three classes of the College. Principal, \$50,000.

Victoria David Memorial (1960). Dr. David, orthopedic surgeon, Houston, Texas, Macalester Class of 1913. Principal. \$26,000.

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.

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 judgement of the department have attained the highest degree of excellence. Principal, \$129,405.

Harland DeBoer Family Scholarship (1988). Established by the Harland DeBoer family. This scholarship shall be awarded in amounts designated by the financial aid office with first preference for junior or senior student(s) of good character and pursuing studies in the fields of religious ministry, medicine, psychology or education. Principal, \$5,000.

Richard J. Dennis Endowed Scholarship (1987). Established by Michael L. Carr, Class of 1973, in appreciation and honor of Richard J. Dennis, humanitarian and founder of the Roosevelt Center for American Policy Studies in Washington, D.C. To be awarded to an upperclassman with a strong interest in public service majoring in international studies, political science or economics. Principal, \$22,500.

Walter H. and Lydia Juenemann Deubener (1964). Established by the Deubener-Juenemann Foundation and named for Mr. and Mrs. Deubener, who developed the paper shopping bag. Principal, \$49,100.

Walter F. Dillingham (1957). Established by the Honolulu industrialist. Principal, \$25,000.

Cleveland E. Dodge (1959). Established by Mr. Dodge, a director of Phelps Dodge Corporation, copper company, New York City. Principal, \$28,500.

Daniel W. and Helen M. Doty (1975). Established by Margaret M. Doty, dean of women and professor of English (1920–60) in memory of her parents. Principal, \$35,759.

Margaret M. Doty (1960). Established by Miss Ann Elizabeth Taylor, Macalester Class of 1910, Austin, Minnesota. Principal, \$15,943.

The John M. Dozier Endowed Scholarship (1974). Established by members of the Macalester Board of Trustees in tribute to John M. Dozier, Macalester Vice President (1966–1974), to be awarded on the basis of merit to students expecting to major in economics and related arts of business administration. Students may be nominated for the Dozier Endowed Scholarship by the faculty of the department of economics using criteria of demonstrated competence, achievement, class standing, and interest in a career in financial or business administration. Principal, \$47,826.

Carl and Margaret Dreves (1963). Established by Mr. Dreves, a retired St. Paul businessman. Principal, \$27.711

Carl A. and Katharine D. Dreves (1965). Established by Mr. Dreves on Mrs. Katharine D. Dreves' seventy-fifth birthday. Principal, \$25,000.

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, \$17,565.

Edward Eastman, Lawrence H. McCoy and Wyllie E. Ramsey (1998). Established by Cecil E. McCoy in honor of her father, Edward Eastman, her husband, Lawrence H. McCoy, and her sister, Wyllie E. Ramsey. To be awarded to a student who demonstrates financial need and is seeking career goals in the fields of education or chemistry or demonstrates a special interest in the fields of education or chemistry. Principal, \$191,980.

Charles Edison (1957). Established by the former governor of New Jersey, former Secretary of the Navy, and son of the 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 1960, 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, \$15.500.

Field Enterprises Educational Corporation Scholarship Fund (1959). Established by Marshall Field, Jr. Principal, \$60,000.

Harvey S. Firestone, Jr. (1960). Established by the former chairman of the Firestone Tire and Rubber Company. Principal, \$20,400.

Arthur S. Flemming (1971). Established by students, trustees, faculty, staff, alumni, and friends to honor Macalester's eleventh president (1968–71). To be awarded to a Minnesota freshman from a minority group. Principal, \$17,808.

Clark and Alice Fletcher Scholarship Fund (1992). Established in 1992 by Kingston Fletcher and Sara Fletcher Luther in honor of their parents. Clark Fletcher served with distinction as a trustee of Macalester College from 1935 to 1943. Principal, \$49,991.

Fredrickson Family Scholarship Fund (1991). Established by the estate of Larry R. Fredrickson, Class of 1966, and memorial gifts from family and friends, to assist rural Minnesota students, that are coming from locations in Minnesota outside the Twin Cities and surrounding suburban metropolitan area, in furthering their education based on their academic achievements. Principal, \$183,845.

Louis Daniel Frenzel, Jr., Endowed Scholarship (1986). Established by former students to honor Dr. Frenzel, professor of biology at Macalester from 1957 to 1969. Awarded to a third or fourth year student chosen by the biology faculty to participate in special programs of field biology during the summer. Principal, \$24,903.

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.

John Galt (1988). Established by a financial aid recipient from the Class of 1973; for students majoring in physics or mathematics, in good academic standing with a grade point average of at least 3.0.

Principal \$57,000

Bernard F. Gimbel (1963). Established by the chairman of the board of Gimbel Brothers, Inc., New York City. Principal, \$25,200.

William T. Grant (1956). Established by the chain store executive of New York City. For a student of outstanding academic achievement. Principal, \$20,000.

Mary Schultz Gray and Ward Gray Endowed Scholarship (1986). Established by a bequest from Mary Schultz Gray in recognition of her interest in the future of Macalester College and of the service to the college by her husband Ward Gray, Class of 1922. Principal, \$165,100.

 $\label{lem:main_problem} \textit{Arthur E. Griffiths} \ (1960). \ Established by Mr. Griffiths, Candlewood Isle, Connecticut, and Sarasota, Florida. Principal, \$15,400.$

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, \$47,025.

John W. Hanes (1957). Established by the New York and North Carolina financier and former Securities Exchange Commissioner and Under Secretary of the Treasury. Principal, \$22,500.

Dr. Russell B. Hastings Scholarship Fund (1989). Established by Dr. and Mrs. Russell B. Hastings, their family, and friends in honor of Dr. Russell B. Hastings, professor emeritus in physics at Macalester College. To provide support for a high ranking physics student recommended by the physics department faculty. Principal \$14,325.

William Randolph Hearst Endowed Scholarship (1991). The William Randolph Hearst Endowed Scholarship Fund, established in 1991 through a grant from The Hearst Foundation, Inc., supports financially disadvantaged Macalester undergraduates by reducing the loan component, and thereby increasing the direct grant portion of their financial aid packages. Principal, \$100,000.

G.L. Heegaard (1960). Established by the Minneapolis industrialist, who was a student at Macalester's Baldwin Academy. Principal, \$16,800.

G.L. Heegaard Memorial (1965). Established by William, Roger, John, David, and Peter Heegaard in memory of their grandfather. Principal, \$5,000.

William R. Heegaard and John C. Heegaard (1982). Established by William, Roger, David, and Peter Heegaard in memory of their father, William, and their brother, John. Principal, \$10,029.

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, \$28,000.

Richard F. and Sylvia S. Hockel (1977). Established by Mr. and Mrs. Richard F. Hockel of Champlin, Minnesota, a fiftieth anniversary gift to Mr. Hockel's Class of 1927. Principal, \$34,075.

Kenneth L. and Martha Holmes (1977). Established by family and friends in memory of Kenneth L. Holmes, professor of history and chairman of the history department (1925–61), and his wife. Principal. \$16.798.

IBM (1965). Established by International Business Machines Corporation, to be awarded to students majoring in mathematics. Principal, \$40,000.

International Paper Company (1963). Established by the International Paper Company, New York City. Principal, \$27,500.

Genevieve H. Jenkins Macalester College Fund (1985). Established through a bequest in the will of Roland G. Jenkins. For students who plan to study in the field of cancer or cardiac research. Principal, \$41,550.

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, \$21,940.

Howard Johnson (1958). Established by the chain restaurant executive of New York City. Principal, \$65,600.

Eric Johnston (1958). Established by the motion picture executive. Principal, \$17,500.

Richard U. Jones (1959). Established by alumni and friends in memory of Richard U. Jones, dean of the College (1917–36) and chairman of the chemistry department (1903–41). Principal, \$20,352.

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, \$24,377.

Julia Elizabeth Kagin Endowed Scholarship (1998). Established by Julia E. Kagin, Class of 1937. Awarded to a senior student majoring in religious studies. Principal, \$71,542.

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, \$23,570.

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.

James R. Kirby (1960). Established by Mr. Kirby, educator from Casper, Wyoming, Class of 1951. Principal, \$6,900.

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.

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.

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, \$37,360.

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.

Wilma F. Leonard (1958). Established by George P. Leonard, Class of 1927, Stinson Beach, California, in honor of his wife. Principal, \$41,563.

Walter A. Lienke (1961). Established by his bequest and supplemented by the members of his family and friends. To be awarded to a student majoring in music. Principal, \$9,560.

Gerald G. Line Scholarship (1988). Established by Michael L. Carr, Class of 1973, in honor of Gerald G. Line, an outstanding and inspiring teacher of high school social studies for over twenty years in the Saint Paul Public Schools. To be awarded to a minority student, working with any area of study, needing financial assistance. Principal, \$22,300.

P. Lorillard Company (1963). Established by the New York tobacco manufacturers. Principal, \$36,000.

Henry R. Luce (1962). Established by the founder of Time, Life and Fortune magazines. Principal, \$54.600.

 $3M\ (1967).$ Established by the Minnesota Mining and Manufacturing Company of St. Paul. Principal, $\$25{,}000.$

Macalester-Plymouth United Church (1965). Established by the Session of Macalester Presbyterian Church, St. Paul. Principal, \$5,115.

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, \$16,788.

William H. and Helen Hoye Mahle (1964). Established by Mr. and Mrs. William H. Mahle, Classes of 1936 and 1934. Principal, \$24,469.

Henry K. Makino (1991). Established by Henry K. Makino, Class of 1947, of Minneapolis, Minnesota by a bequest from his estate and numerous personal friends. For scholarships to be awarded annually to Macalester students majoring in any field of fine arts, religion and/or chemistry. Principal, \$26,995.

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.

Matthews Memorial, Alice and Alberta (1981). Established through a bequest from Alice M. Matthews, a friend of Macalester College. Principal, \$268,916.

Anne Wunderlich McClure (1965). Established by George P. and Wilma Fox Leonard of the San Francisco area. Principal, \$269,365.

Robert and Elizabeth McKechnie Endowed Scholarship (1987). Established by Dr. Marian E. McKechnie, Class of 1950, in memory of her parents, Robert and Elizabeth McKechnie. Awarded to a student needing financial aid; with preference given to a student majoring in history. Principal, \$12,500

The McKnight Foundation Minority Scholarship (1975). Established by the Foundation for Black, Spanish-speaking, or Native American students. Principal, \$310,313.

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.

Dorothy M. Michel Memorial Endowed Scholarship (1976). Established by family, alumni and friends in memory of Dorothy M. Michel, chair of the women's physical education department (1946–68). Preference given to male or female students of sophomore, junior or senior status participating in athletics. Principal, \$5,236.

Jeremiah Milbank (1962). Established by Mr. Milbank, a New York City corporation executive. Principal, \$26,000.

Roger Milliken (1962). Established by the president of Deering-Milliken, Inc., textile manufacturers. Principal. \$15.520.

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.

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.

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.

David Strong Nicholson (1977). Established by family and friends in memory of David Strong Nicholson, trustee of Macalester (1972–77). Awarded to a freshman in residence. Continued for four years with satisfactory academic progress. Principal, \$84,876.

The Jean Stoneman Nippoldt Endowed Scholarship (1997). Established through a gift from Bert Nippoldt, Class of 1944, in memory of his deceased wife on the occasion of her 50th Reunion. The Jean Stoneman Nippoldt Endowed Scholarship Fund will provide financial assistance to students expressing a career interest in community and/or social service. Principal, \$56,820.

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.

Norwest Bank of St. Paul, N.A. (1964). Established by the Norwest Bank of St. Paul, N.A. Principal, \$15,000

Dorothy Flint Novak (1932). Established by Milan V. Novak, Ph.D., M.D., Class of 1929, in honor of his wife on the occasion of her selection for Macalester College Alumni "Distinguished Citizen" citation. Principal, \$15,000.

Duane D. Nowlin Endowed Scholarship (1988). Established by Dr. Duane D. Nowlin to provide general scholarship assistance for Macalester students. Principal, \$30,000.

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, \$101,966.

Catherine L. O'Brien (1958). Established by the chairman of the board of Stanley Home Products, Westfield, Massachusetts. Principal, \$17,500.

Erna O'Gordon Endowed Scholarship (1989). Established by Clarence O'Gordon, Class of 1913, in honor of his wife, Erna O'Gordon. To be awarded annually to students in need of financial aid. Principal. \$79.216.

Ordway Family (1958). Established by John G. and Richard Ordway of St. Paul. Principal, \$15,000.

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.

Mary Gwen Owen Endowed Scholarship Fund (1968). Established in honor of Mary Gwen Owen by the Drama Choros and Drama Choros Alumni at the Gwen Day celebrations on the eve of her retirement from the department chairmanship and as teacher at Macalester after forty years. To be awarded to a student needing financial aid; with preference given to a student majoring in drama or speech. Principal, \$16,564.

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, \$3,896.

The Parent 1988 Resident Advisor Scholarship (1989). Established anonymously by the parents of a 1988 graduate in grateful recognition of the positive influence of the resident advisor system on their daughter. Principal, \$35,217.

J. Falconer Paterson and Katherine K. Paterson Scholarship (1996). Established through the estate of Katherine K. Paterson to assist needy students, with a preference given to those students interested in entering optometry as a profession. Principal, \$353,014.

Peavey Company Foundation (1966). Established by the Minneapolis-based grain firm. Principal, \$25,000.

Edward J. Peterson, Jr. 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, \$24,265.

Polk Foundation (1968). Established by the Polk Foundation with preference given to men majoring in the behavioral sciences. Principal, \$125,000.

David C. Primrose (1956). Established by his family, friends, and former students in memory of Professor David C. Primrose, 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, \$9,200.

Eugene C. Pulliam (1958). Established by the Indiana and Arizona newspaper publishers. Principal, \$38.100.

 ${\it Gordon~W.~Reed}~(1964).~Established~by~Gordon~W.~Reed,~chairman~of~the~board~of~Texas~Gulf~Producing~Company~of~New~York~City.~Principal,~\$20,131.$

Ralph and Antoinette Reinhold (1961). Established by Mr. Reinhold, New York City publisher. Principal, \$20,175.

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, \$43,050.

Miriam Ritter Endowed Scholarship Fund (1996). Established by Miriam Gottenberg Ritter, Class of 1948. To be awarded to a student at the sophomore year and above with first preference given to a student who hails from Indiana and demonstrates financial need as defined by the College. If this first preference cannot be met, a student who hails from Minnesota and demonstrates financial need as defined by the College will receive the award. Principal, \$100,780.

Edith Rock Memorial Endowed Scholarship (1987). Established by the Rock family in memory of their sister, Edith, Class of 1926. Her Macalester education prepared her for a long and dedicated life in public service. To be awarded to a worthy student needing financial assistance. Principal, \$14,695.

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.

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.

Sara Lee Corporation (formerly Consolidated Foods Corporation) (1967). Established by the New York food processing and distributing company. Principal, \$25,000.

David Sarnoff (1959). Established by the Radio Corporation of America in honor of its chairman of the board. Principal, \$25,000.

Harry Scheman (1961). Established by the founder of the Book-of-the-Month Club. Principal, \$16,000.

George E. Scotton (1963). Established anonymously by an alumnus of the College to honor a fellow member of the Class of 1921. Mr. Scotton directed Macalester's admissions office for thirty years. Awarded to an outstanding scholar and athlete. Principal, \$24,487.

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.

Boyd C. Shafer Endowed Scholarship (1987). Established by Michael L. Carr, Class of 1973, to honor Dr. Boyd C. Shafer, James Wallace Professor of History (1963–72) and chairman of the department. To be awarded to an upperclassman with an interest in European or international history. Professor Shafer, scholar, educator and advisor, taught the importance of international understanding and had a lasting impact on his students. Principal, \$23,575.

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, \$65,000.

Chester H. Shiflett (1966). Established by former students and friends to honor Professor Shiflett on his retirement as professor of chemistry (1929–1966). To be awarded to a student majoring in chemistry. Principal, \$28,086.

Frank M. Smith (1958). Established by the chairman of Capital Cities Broadcasting Corporation, New York City. Principal, \$15,537.

Dorothy and Robert T. Stevens (1963). Established by Robert T. Stevens, president of J.P. Stevens and Company, Inc., textile manufacturers, New York City. Principal, \$25,000.

Admiral Lewis L. Strauss (1960). Established by friends of Admiral Strauss in appreciation of his distinguished public career and his commencement address (1960) at Macalester. Principal, \$14,125.

Dwight Stuessy (1957). Established by alumni, friends and members of the 'M' Club in memory of Dwight Stuessy, Macalester athletic director (1946–57). Principal, \$15,677.

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, \$7,363.

Ruth and Vernon Taylor (1961). Established by Ruth and Vernon Taylor Foundation, San Antonio, Texas. Principal, \$40,000.

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 Hugo W. Thompson, professor of philosophy (1943–68), for students from minority backgrounds. Principal, \$8,496.

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 (Native American or African-American) or, on occasion, for an international student. Principal, \$29,585.

Marcia Brady Tucker Foundation, Inc. (1963). Established by Carl Tucker, Jr., newspaper publisher, Mt. Kisco, New York. Principal, \$15,000.

Charles J. Turck (1958). Established by alumni and friends of Macalester's ninth president (1939–58). Principal, \$15,495.

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, \$7,800.

Arthur R. Upgren Scholarship (1997). Established by James B. McComb, Class of 1961, in honor of Arthur R. Upgren, former F.R. Bigelow Professor of Economics at Macalester from 1957 through 1965. Principal, \$11,871.

John Van Winkle Endowed Scholarship (1988). Established by family and swim team members in memory of John Van Winkle, national swimming champion during the years 1962–1966. Preference given to a member of the men's or women's swim team. Principal, \$15,267.

Kurt E. Volk (1961). Established by Kurt E. Volk Foundation, Bridgeport, Connecticut. Principal, \$16,000.

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 Memorial Endowed Scholarship (1981). Established by friends of DeWitt Wallace, a great benefactor of Macalester College, at the time of his death. To be used for students needing Financial Aid. Principal, \$16,572.

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, \$36,295.

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.

Frances M. and Milton G. Walls (1961). Established by Dr. and Mrs. Milton G. Walls, St. Paul. Principal, \$14,000.

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, \$25,262.

F. Earl and Ruth H. Ward (1965). Established by students, friends and colleagues of professor F. Earl Ward, long-time professor (1926–63) and former chairman of the department of English. To be awarded to an upperclass English major nominated each year by the English department. Principal, \$18,500.

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, \$15,100.

White-Olds (1960). Established by Dr. F. Laurence White and his wife, Dorothy Olds White, Macalester Class of 1923, missionary educators, in memory of their parents. Principal, \$16,263.

Grace B. Whitridge (1956). Established by former students of Miss Whitridge, professor of drama and speech at Macalester (1900–41). Preference is given to a student in speech. Principal, \$13,337.

Mabel Wicker (1970). Established through a bequest in the will of Miss Wicker, Class of 1904, a public school teacher. Principal, \$17,757.

Olive Berglund Will and Virginia Will Martin Endowed Scholarship (1987). Established by Buel R. Will in honor of former Macalester faculty member, Olive Berglund Will, and his daughter Virginia Will

Martin. To be awarded to a full-time student who is a United States citizen and who maintains a 3.0 grade point average. Principal, \$25,000.

J.B. Williams Company, Inc. (1966). Established by the New York City drug manufacturing firm. Principal \$25,000

Margaret Mohr Winters Endowed Scholarship (1990). Established by the Rev. and Mrs. Frank Mohr, Jr. in honor of their daughter Margaret Mohr Winters, Class of 1980. Preference given to sophomore(s), junior(s), or senior(s) with a strong academic record who demonstrate financial need and who have declared any combination of a major and minor in any of the humanities and natural sciences. Principal, \$46,098.

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, \$250,076.

Winton Excellence Scholarships at Macalester (1966). Established by Helen Winton Jones, David Winton, and Charles J. Winton, Jr. Students from the Minnesota Iron Range are given preference. Principal, \$37,500.

Stella Louise Wood (1964). Established by the alumnae of Miss Wood's School of Macalester, for students interested in elementary education. Principal, \$14,245.

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.

Elizabeth M. Wyman (1980). Established by Mr. and Mrs. J. Humphrey Wilkinson in honor of their granddaughter, Elizabeth M. Wyman, Class of 1975. Principal, \$84,062.

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, \$42,085.

Mary S. and Thomas E. Young (1961). Established by Mr. and Mrs. Young, financiers, Portland, Oregon. Principal, \$21,000.

Annually Contributed Scholarships

The Charles and Ellora Allis Educational Foundation. An educational trust created by the will of Charles Clifford Allis of Gull Lake, Minnesota, provides scholarships each year for undergraduate students, preferably Minnesota residents in the upper 40 percent of their class.

Farmers Insurance Groups. 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.

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.

3M Undergraduate Liberal Arts Scholarship. Established by 3M to be given to undergraduate students, with preference 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. A cash award given to a student who demonstrates special excellence in ethnographic research.

Margaret Mead Distinguished Service Award. A 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. A cash award established by colleagues, family and friends of the late professor and given to a senior majoring 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, Class of 1973, to provide awards for achievement in art.

Theresa Luksan Memorial Endowed Prize in Art (1985). Established by family and friends in memory of Theresa Luksan, Class of 1983. The prize will be used to purchase a work of art from the student exhibit each spring. Faculty members of the art department will choose a piece that will best enhance the permanent collection. Open to all media.

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.

American Cyanamid Endowed Prize. Established for upperclass students who are preparing for entrance into medical school.

Ruth and Vernon Taylor Summer Opportunities Fund (1967). To provide meaningful summer experiences for pre-medical students studying at Macalester.

O.T. and Kathryn Walter Award. Established by former students of Dr. O.T. Walter, chair of biology for forty-one years. Designated for pre-medical students who show promise of success in the field of medicine.

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.

Twin Cities Chapter of the American Institute of Chemists. Medallion awarded to an outstanding senior planning a career 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.

The Chemical Rubber Company. Handbook awarded for outstanding achievement in freshman chemistry

General Electric Foundation Endowed Prize. Established for students majoring in chemistry.

John Howe Scott Prize in Chemistry. Established by friends in memory of Professor Scott. To be awarded at Honors Convocation to a chemistry major chosen by the chemistry faculty.

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. A cash award to a student who shows the greatest proficiency in Greek, Latin, or ancient history.

COMMUNICATION STUDIES

George Rowland Collins Endowed Prize (1971). Established by Mrs. Gladys Reutiman Collins, Class of 1919, in honor of her husband, Dr. G. Rowland Collins, Class of 1916, who was dean of the school of business at New York University. Mrs. Collins was associate professor of psychology and assistant director of student services at Macalester from 1947–1960. The prize is awarded annually to students who excel in extemporaneous speaking and/or rhetorial criticism.

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.

The Roger K. Mosvick Endowed Prize in Communication Studies. Established by former students of Dr. Roger K. Mosvick, Judge Jack Mason '60 and Mr. James Fahlgren '60, in recognition of Dr. Mosvick's many contributions to the Department of Communication Studies and his over forty years of service to Macalester College. A cash prize is awarded each year to the senior student majoring in Communication Studies who has throughout his or her career best demonstrated academic excellence in this field of study. The recipient is chosen each spring by a majority of the full-time faculty of the department.

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.

DANCE

David J. Wick Endowed Prize for Choreographic Commitment. Established by David J. Wick, Class of 1991. A cash award given to a student who shows enthusiasm, creativity and sincerity towards dance to help defray the cost of creating and producing a major choreographic work.

EAST ASIAN/JAPAN 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.

ECONOMICS

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.

Robert L. Bunting Prize in Economics (1984). Established with gifts from colleagues and friends of Robert L. Bunting, who taught in the department of economics and business from 1969 through 1984. He held the F.R. Bigelow Professorship of Economics at Macalester. The prize is awarded annually to an outstanding graduating senior who likely will undertake graduate work in economics and/or business, has an abiding interest in political economy, and will pursue an academic career.

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.

Richard E. Eichhorn Prize (1995). Established to honor Richard E. "Dick" Eichhorn, Class of 1951, Macalester alumnus, Trustee, and generous contributor to College programs in entrepreneurship. The prize is to be awarded annually by department of economics faculty to a graduating senior who has demonstrated both outstanding overall scholarship and a particular commitment to and talent for entrepreneurship. This prize was established in part with contributions from previous winners of a

department prize for entrepreneurship as well as gifts from department faculty, alumni, and friends of Dick Eichhorn.

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.

Mike McEwen Prize. Established in his memory in 1993 by Mike McEwen's 1977 Finance classmates, this prize is awarded annually to an outstanding scholar-athlete majoring in Economics.

Meiselman Endowed Prize, David. Established by an anonymous donor to honor Dr. David Meiselman, who taught in the department of economics from 1966 through 1971. The prize is awarded annually to a graduating senior for outstanding accomplishment in macroeconomic theory or policy.

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.

EDUCATION

Anstice Abbott Award. Established by the national Wood's School Alumnae Association for students interested in elementary education licensure.

Richard B. Dierenfield Endowed Prize for Education (1982). Established by J.W. Fahlgren, Class of 1960. To honor Richard B. Dierenfield, professor and chair of the department of education, who served Macalester College from 1951 to 1988. A cash prize awarded to a senior student who has shown outstanding potential as a teacher in the secondary school.

Mary Whitcomb Fahlgren Endowed Prize. Established in 1986 by James W. Fahlgren, Class of 1960. A cash prize awarded to a senior student who has shown outstanding potential as a teacher in the secondary school.

Alma M. Robinson Education Prize (1992). This prize is awarded and named in honor of Alma M. Robinson, Class of 1956, who devoted her life to teaching and is established by her husband, Robert, and their friends and family. This prize is to be awarded annually to a Macalester student pursuing a career in teaching.

Stella Louise Wood Award. Established by the alumnae of Miss Wood's School of Macalester for students interested in elementary education licensure.

ENGLISH

Bennett Cerf Endowed Prize. Established by the chairman of Random House Book Publishers for students majoring in English literature.

The Gateway Prize for Excellent Writing. Endowed by the family of Wallace F. Janssen, Class of 1928, in honor of the students who wrote for that magazine in the 1920's and 30's. A cash prize is awarded annually for the best paper by a student in any course offered by the college. The paper, selected by a committee of faculty and students, will be judged for originality, content, clarity and effectiveness of presentation.

Ray Livingston and Jack Patnode Endowed Prize in English. Established by an anonymous donor to honor two former members of the Macalester English department. A cash award for a graduating senior who has made a special contribution as an English major.

Wendy Parish Poetry Award. Established in 1978 by Stanley and Marian Parish and the English department in memory of Wendy, Class of 1972. Awarded to a student who best exemplifies a commitment to poetry and excellence in writing.

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 F. Earl Ward, long-time professor (1926–63) and former chair of the department of English. Awarded to an upperclass English major.

Ardis Hillman Wheeler Prize for International Study. A prize established by family and friends in honor of Ardis Hillman Wheeler, Class of 1938, who devoted her life to the teaching of English, first to refugees after World War II and later in the Minnesota public schools. To be awarded annually to one or more prospective English majors for assistance with international study.

ENVIRONMENTAL STUDIES

Environmental Studies Student Prize. A cash award for academic excellence in multi-disciplinary studies of the environment.

FRENCH

Hélène Peters Prize for Study in a French-speaking Country. Established by alumni, colleagues, and friends in honor of Dr. Helene Peters, Professor Emerita of French and founder of the French Study Abroad Program. A cash award to a deserving student with a concentration in French for study in a French-speaking country.

Borghild K. Sundheim Endowed Prize. Established by alumni, colleagues, and friends in memory of Dr. Sundheim, professor and chair of the department of French (1927–67). Awarded to a French major.

GEOGRAPHY

Hildegard Johnson Prize in Geography. Established in 1984 by the founder of Macalester's geography department. Awarded by the faculty of the department of geography to a student majoring in that department, based on their demonstrated competence and interest in 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 qualifies the student for acceptance into Phi Beta Kappa and includes a distinguished record in German studies.

German Book Prizes. An annual book award, provided by the German Embassy, to members of the graduating class with a major or core in German.

HISTORY

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.

Case Prize in Western History. Established by Leland D. Case, Class of 1922. An annual award of \$150 to a student for original research 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.

Kathleen Rock Hauser Prize in Women's History. Established by the Women Historians of the Midwest and by Dr. Donald and Mrs. Irene Rock in memory of Kathleen Rock Hauser, Class of 1962. An award of \$200 to a student who has made a significant undergraduate contribution to women's history.

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.

Elmer Smith Fund (1994). Established by Thomas B. Copeland, Class of 1972, author of Elmer Smith's, Class of 1910, biography, The Centralia Tragedy of 1919: Elmer Smith and the Wobblies. A cash award

to be given to a student or students in the history department to support student research, travel to conferences and the cost of research materials. Awards will be made by the history department.

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

Vera Wendt Memorial European Union Travel Prize. Established by Hans W. Wendt, a former professor, in memory of his sister. The award will be given to a meritorious student for travel expenses related to academic study in Europe, on an alternating basis: Year One, to a student arranging for study in Germany, and Year Two, to one arranging for study in any country that is a member of the European Union. The student is selected by the International Center.

INTERNATIONAL STUDIES

The Eugene Craven Endowed Prize for International Travel and Study. Established by Sharon Ellies Craven, Class of 1966, in memory of her husband, Class of 1963. To be awarded to a meritorious student who has not previously traveled abroad and who wishes to pursue study outside the United States

Mark Greenleaf Johnson Memorial Travel 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.

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. Walter A. Lienke Endowed Prize. Established by testamentary bequest. An award of \$100 to the outstanding student majoring in music.

 ${\it Mildred Phillips Kindy Endowed Prize.} \ {\it Established by Miss Ann Elizabeth Taylor, Class of 1910, in memory of her classmate.} \ {\it 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 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 by the faculty of the music department to recognize performance, academic work, and service.

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.

Wrean Family Prize. Established by the William H. Wrean Family. One prize each to be awarded to a member of the women's soccer team, women's volleyball team, and women's basketball team whose personal conduct, skills, cooperation, and leadership have made the greatest contribution to the success of the team as a Macalester College activity.

Dorothy Michel Award. Established by family, alumni and friends in memory of Dorothy Michel, chair 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 Stuessy Endowed Prize. Established by alumni, friends, and members of the 'M' Club in memory of Dwight 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 1950–83. A silver bowl awarded to a female senior athlete who has established a leadership role and better than average academic standing.

PHYSICS AND ASTRONOMY

 ${\it Russell~B.~Hastings~Book~Award.}~Book~awards~for~outstanding~service~to~departmental~activities~instructional~program.}$

POLITICAL SCIENCE

Hubert H. Humphrey and Walter F. Mondale Endowed Award in Political Science. Established to honor, respectively, a former member to 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 has had debate and speech experience and has been active in the College community.

PSYCHOLOGY

The Walter Mink Endowed Prize. Established by Walter Mink, a professor in the psychology department at Macalester College for 38 years. To be awarded to a senior who has a strong academic record and has also provided outstanding service to the department, the College, or the broader community.

The Patterson Nominee Award. To be awarded to Macalester College's nominee for the Minnesota Psychological Association D.G. Paterson Award, an outstanding undergraduate psychology major in Minnesota who intends to pursue a career in psychology.

RELIGIOUS STUDIES

Robert A. Caine Memorial Prize. Established by family and friends in memory of Robert A. Caine, who served as pastor of Presbyterian churches in Red Wing and Duluth, Minnesota and in Rochester, New York, as executive for the Synod of Minnesota, and as a trustee of Macalester College. Awarded for scholarships to seniors for graduate work in religious studies.

Jewish Studies Award. A cash award to a senior in religious studies for academic excellence in Jewish studies

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 judgement of the department have attained the highest degree of excellence.

Mary Frances Johnstone Kagin Memorial Endowed Scholarship. Established by her husband, Dr. Edwin Kagin, relatives and friends. To be awarded to a student planning a full-time church vocation for use during the sophomore year.

Edwin Kagin Endowed Scholarship. Established by Dr. and Mrs. William H.A. Watson and other former students and friends of Dr. Kagin, professor of religion (1926–52). Awarded to a junior who is preparing for a church vocation.

SOCIOLOGY

Beny-Rinder-Swain Prize in Sociology. Awarded to a senior major for outstanding written work in the area of Applied Sociology.

SPANISH

Donald L. Fabian Endowed Prize. Established by an anonymous donor in recognition of Dr. Donald L. Fabian's service to Macalester College during his tenure in the Spanish department. The prize is to be awarded annually to an outstanding graduate Spanish major who either intends to enter graduate school in an area directly related to his or her Spanish major or to pursue a career upon graduation that closely involves the significant use of the Spanish language.

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.

MISCELLANEOUS

The American Can Company Foundation Endowed Prize for Minority Students (1987). A cash award given to an outstanding sophomore minority student.

Hispanic Endowed Prize for Excellence (1987). A cash award to a Hispanic senior woman who has demonstrated outstanding academic achievement.

Franklin and Mollie Steudle Endowed Prize (1989). In honor of Frank and Mollie Steudle for their life long commitment to family values and community service. To be awarded to a senior with distinguished work in interdisciplinary studies in physical, mental, and emotional wellness; who is active in community service, working with the elderly and planning a career dedicated to helping others.

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 (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.

 $\it B.C.$ Gamble Student Loan (Gamble-Skogmo Foundations) Fund (1962). Established by the Gamble-Skogmo Foundations. Principal, \$2,092.

Jennie Hodgmann (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.

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.

Memorial Loan Fund. Established through gifts to the College, it is used specifically for loans to student for college expenses. Principal, \$12,560.

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 per cent) 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.

Howard W. Paulsen Endowed Loan Fund (1993). Established by Howard W. Paulsen, Class of 1934, through his estate. The earnings of the principal fund are to be made available as a student loan fund to needy students of social work or education. Principal, \$26,750.

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.

Chester R. Schmidt Revolving Loan Fund (1964). For students in need of financial aid. Principal, \$9,472.

Senior Loan Fund (1961). This fund has been created by Messrs. DeWitt Wallace, Charles B. Thomes, 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 or 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, \$13,929.

Richard Aronson '72 and Bruce Fisher '71 Endowed Fund for Gay, Lesbian, Bi and Transgender Student Programming (1996). Richard Aronson, Class of 1972, and Bruce Fisher, Class of 1971, have established this fund to enable Macalester to broaden and improve gay, lesbian, bi and transgender student programming including but not restricted to the activities of the student organization, currently named Queer Union. Principal, \$26,775.

Helen Samuelson Berger Endowed Book Fund (1993). Established by Helen Samuelson Berger, Class of 1928, to purchase books in art or related subjects. Principal, \$10,000.

Thomas E. Critchett Fund (1991). The fund shall support "programs and students in the areas of English and to encourage students to pursue careers in education" as directed by Thomas Critchett, Class of 1979. To these ends, the Provost and the English department will encourage such areas as student/faculty collaborative research and special research and seminars. Proposals in literature shall be approved by the Provost upon the recommendation of the English department.

Wallace and Mary Lee Dayton Endowed Presidential Discretionary Fund. Given to the college in partial fulfillment of the William and Flora Hewlett Foundation's challenge grant to establish an Endowed Presidential Discretionary Fund. This fund supports innovative curriculum and faculty development opportunities and other new initiatives considered by the president to be of high priority to the college. Principal, \$150,000.

Wallace and Mary Lee Dayton Knight Foundation Endowed Fund. Given to the college to match the Knight Foundation's challenge grant, the income to be used for curriculum revision to incorporate minority perspectives and scholarship on American minorities into the curriculum. Principal, \$101,608.

Ethel Wagner DeLong Memorial Fund. Established in memory of Ethel Wagner DeLong, Class of 1943, a singer and music enthusiast, to provide support for voice instruction for non-music majors at Macalester College. Principal, \$7,600.

Bruce E. Fisher Memorial Fund (1996). Established by Morris and Natalie Fisher to honor their son, Bruce E. Fisher, Class of '93. Half of the income of the fund will be used by the history department to support the research of history majors writing papers for the senior history seminar. The remaining income will be used by the athletic department to enhance the ultimate frisbee club's travel program through special trips outside of the region. Principal, \$13,941.

William A. Grey Memorial Endowment. Established through life income trusts by Dr. William A. Grey. Principal, \$15,800.

Ronald M. and Margaret S. Hubbs Endowment Fund. Established by Ronald M. and Margaret S. Hubbs, friends of the college, to purchase books published by small quality presses such as Coffeehouse Press, Graywolf Press, Milkweed Editions and New Rivers Press, among others. This gift ensures that Macalester students and faculty will have access to the alternative literary voices represented by Minnesota's small presses. Principal, \$25,000.

Keith Ironside Memorial Endowed Fund. Established by the Ironside family in memory of Keith Ironside, Class of 1931. The annual proceeds of this fund are to be used in support of the basic sciences at the discretion of the college. Principal, \$8,500.

Judaic Studies Program Endowment (1993). This fund was created to support the religious studies department curriculum to offer courses that will generate a deeper understanding among the student body of Jewish life, culture and history and the ways each of these has profoundly influenced Western culture and history. Such a program will offer Jewish and non-Jewish students a deep intellectual encounter with the Jewish experience, encourage international understanding and meaningful interfaith dialogue. Principal, \$51,283.

The Konhauser Mathematics Activities Fund. The family and friends of Joe Konhauser, for 23 years a member of the faculty and for 12 years chair of the department of mathematics, have established this fund in his memory. It is intended that proceeds of this endowment should support those activities that, in the judgement of the faculty of the department, will strengthen the mathematics program at Macalester. These activities may well be outside of what the college normally supports, including for example distinguished visiting speakers, a symposium, or small accouterments to enhance the seminar room or other rooms used by the department. It is our intention in establishing this fund that it be used to supplement rather than to substitute for funds that the college would normally spend in support of the departmental program. Principal, \$20,355.

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.

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 \$147,696.

Lepp-Andersen Memorial Endowment Fund (1991). Established by merging an endowed fund created in 1991 to honor former chair of the geology department, Henry Lepp, who died in 1990; and a generous commitment made by Ruth Andersen, Class of '73, to honor her husband, Mark Andersen, Class of '74, who died in 1996. Income from the fund will support the operation of the Lepp Museum; the program to send students to summer field camp; and the geology computer laboratory through the purchase of new computing and peripheral equipment. Principal, \$28,232.

Marbrook Endowment Fund. Established by the Marbrook Foundation and Dr. and Mrs. Edward Brooks, Jr., 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. \$150.527.

G. Theodore Mitau Junior Faculty Sabbatical Fund. Established by the Lucius N. Littauer Foundation in memory of the late G. Theodore Mitau, former professor of political science at Macalester College. The

income is to be used to support a one-semester sabbatical and summer stipend for promising junior faculty members in the social sciences who have successfully completed their third year evaluations and are preparing themselves for tenure review. Principal, \$253,622.

Angie Skinner Discretionary Fund. Given to the college in partial fulfillment of the William and Flora Hewlett Foundation's challenge grant to establish an Endowed Presidential Discretionary Fund. This fund supports innovative curriculum and faculty development opportunities and other new initiatives considered by the president to be of high priority to the college. Principal, \$100,000.

James R. Smail Natural History and Science Gallery Fund. (1997) Established by alumni and the friends and family of Jim Smail. Funds will be used to support the Smail Gallery including costs of bringing in outside exhibits from other organizations such as the Smithsonian or the Science Museum of Minnesota. Principal, \$18,687.

Weatherhead Foundation Crew Program Endowment Fund, The. Established by The Weatherhead Foundation to support the Macalester College Crew Program. Principal, \$24,000.

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, Crowdus 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).
- G. Theodore Mitau Professorship of the Social Sciences (1996). Established through a gift by Timothy A. Hultquist, Class of '72, Chair of Macalester's Board of Trustees, and his wife Cynthia Mealhouse Hultquist, the professorship provides compensation and a stipend for scholarly activities. Preference will be given to a member of the political science or economics department. The faculty member will hold the professorship for a set term after which another faculty member will be appointed.

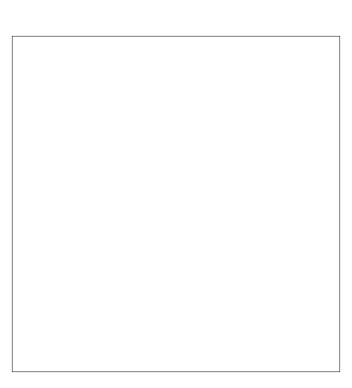
Edward John Noble Professorship in Economics. Established by a gift from the estate of Edward John Noble and supplementary gifts from the IBM Corporation and DeWitt Wallace.

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.

Directories



Administration

Senior Staff of the College

President Michael S. McPherson, B.A., M.A., Ph.D. Daniel J. Hornbach, B.S., M.S., Ph.D. Provost Vice President for Administration Craig H. Aase, B.A., M.B.A. ('70) and Treasurer Vice President for College Richard Allen Ammons, B.A., M.B.A. Advancement Joel G. Clemmer, B.A., M.A., M.L.S. Vice President for Library and Information Services Director of Human Resources Lora A. Conroy, B.A., M.A. Director of Athletics and Irvin Cross, B.S. Physical Education Dean of Students Laurie B. Hamre, B.A., M.A. Assistant to the President and Alexander G. (Sandy) Hill, B.A. ('57) Secretary to the Board of Trustees Assistant to the President Roberto N. Ifill, A.B., M.A., M.Ph., Ph.D. and Director of the Council for Multicultural Affairs

Lorne T. Robinson, B.A.

Emeriti/Emeritae Faculty

Professors Emeriti/Emeritae

Dean of Admissions and

Financial Aid

(Dates in parentheses indicate years of first appointment at and official retirement from Macalester.)

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.

Jean K. Archibald. *Adjunct Associate Professor (1966–86); B.S., Simmons College, 1939.* John C. Bachman. *Professor of Physical Education (1967–89); B.S., Springfield College, 1950; M.S., Springfield College, 1951; Ed.D., University of California, Berkeley, 1960.*

Duncan Hall Baird. Professor of Political Science (1961–88); B.A., Yale University, 1939; LL.B., University of Michigan, 1942; M.A., University of Minnesota, 1960; Ph.D., University of Minnesota, 1960.

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 M. Berry. Professor of Sociology (1946–74); A.B., Pasadena College, 1931; M.A., College of Pacific, 1932; Ph.D., University of Southern California, 1960.

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.*

Edward Brooks, Jr. Professor of Classics (1964–89); A.B., Harvard University, 1944; M.A., University of Minnesota, 1962; Ph.D., University of Minnesota, 1967.

Robert Logan Bunting. F.R. Bigelow Professor of Economics (1969–84); M.A., University of Chicago, 1948; Ph.D., University of Chicago, 1958.

Anthony Caponi. Professor of Art (1949–91); B.S., University of Minnesota, 1948; M.Ed., University of Minnesota, 1949.

Robert Jay Dassett, Jr. Professor of Spanish (1947–83); B.A., University of Minnesota, 1939; B.S., University of Minnesota, 1942; M.A., University of Minnesota, 1953.

Richard Bruce Dierenfield. *Professor of Education (1951–88); B.A., Macalester College, 1948; M.Ed., Macalester College, 1951; Ed.D., University of Colorado, 1958.*

Dorothy Dodge. James Wallace Professor of Political Science (1955–1996); B.A., University of Minnesota, 1949; M.A., University of Minnesota, 1950; Ph.D., University of Minnesota, 1955.

William P. Donovan. *Professor of Classics* (1966–92); A.B., Washington University, 1951; M.A., Washington University, 1952; Ph.D., University of Cincinnati, 1961.

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.*

Eddie P. Hill. O. T. Walter Professor of Biology (1964–99); B.A., Nebraska State Teachers College, 1952; M.A., Colorado State College, 1957; Ph.D., University of Nebraska, 1962.

Thomas E. Hill. *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.*

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.*

Howard F. Huelster. Associate Professor of English (1949–90); B.A., Macalester College, 1949; M.A., University of Minnesota, 1958.

Charles R. Johnson. Associate Professor of French (1969–88); B.A., Phillips University, 1949; M.A., George Peabody College, 1958; M.A., University of Arizona, 1968; Ph.D., University of Arizona, 1974.

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.*

Patricia L. Kane. *DeWitt Wallace Professor of English (1947–91); B.A., Macalester College, 1947; M.A., University of Minnesota, 1950; Ph.D., University of Minnesota, 1961.*

Alvin J. King. Professor of Music (1967–87); B.Mus., Yale University, 1948; M.Mus., University of Colorado, 1950; D.Mus.A., University of Colorado, 1966.

Allan Marshall Kirch. *Professor of Mathematics and Computer Science (1968–92); A.S., Joplin Junior College, 1956; B.A., University of Minnesota, 1958; M.A., University of Minnesota, 1960; Ph.D., University of Minnesota, 1967.*

Ralph J. Lundeen. *Professor of Physical Education, Director of Athletics (1954–83); B.S., University of Minnesota, 1946; M.Ed., University of Minnesota, 1947.*

George Moses. Professor of Journalism (1969–80); B.A., University of Minnesota, 1937; M.A., University of Minnesota, 1969.

W. Scott Nobles. DeWitt Wallace Professor of Speech Communication (1969–92); B.A., Southeastern Oklahoma State College, 1947; M.A., Western Reserve University, 1948; Ph.D., Louisiana State University, 1955.

Hélène Nahas Peters. *Professor of French (1961–89); M.A., University of Toulouse, France, French-1939, English-1949; Ph.D., University of Minnesota, 1954.*

Jean Probst. Instructor in Mathematics (1950–93); B.A., Macalester College, 1949; M.A., University of Minnesota, 1973.

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.*

Karl C. Sandberg. DeWitt Wallace Professor of French (1968–92); 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 (1966–97); B.A., University of Minnesota, 1959; Ph.D., University of Minnesota, 1966.

William Saltzman. Professor of Art (1966–83); B.S., University of Minnesota, 1940.

John R. Schue. Professor of Mathematics and Computer Science (1962–99); B.A., Macalester College, 1953; Ph.D., Massachusetts Institute of Technology, 1959.

Emil John Slowinski. DeWitt Wallace Professor of Chemistry (1964–88); B.S., Massachusetts State College, 1946; Ph.D., Massachusetts Institute of Technology, 1949

Fred B. Stocker. Professor of Chemistry (1958–1996); B.S., Hamline University, 1953; M.S., University of Minnesota, 1955; Ph.D., University of Colorado, 1958.

Claude A. Welch. O. T. Walter Professor of Biology (1969–83); B.S., Michigan State University, 1948; Ph.D., Michigan State University, 1957.

Hans W. Wendt. Professor of Psychology (1968–93); B.A., University of Hamburg, Germany, 1949; Ph.D., University of Marburg, Germany, 1952.

Franz Xavier Westermeier. Associate Professor of German (1947–77); B.A., University of St. Thomas, 1941; M.A., University of Minnesota, 1955.

David B. White. Elizabeth Sarah Bloedel Professor of Philosophy (1948–87); B.A., Northeastern Oklahoma State University, 1937; M.A., Oklahoma State University, 1939; Ph.D., University of the Pacific, 1959.

M. Glen Wilson. Professor of Speech and Dramatic Arts (1968–86); B.S., West Virginia University, 1948; M.A., West Virginia University, 1949; Ph.D., Ohio State University, 1957.

Full Time Faculty

(Date in parentheses indicates year of first appointment at Macalester College.)

Linda Aanonsen. Associate Professor of Biology (1989); B.S., Edgewood College, 1978; Ph.D., University of Minnesota, 1987.

Franklin H. Adler. DeWitt Wallace Professor of Political Science (1996); B.A., Antioch College, 1967; M.A., University of Chicago, 1968; Ph.D., University of Chicago, 1980.

Karin Aguilar-San Juan. Assistant Professor of Comparative North American Studies and Sociology (1999); B.A., Swarthmore College, 1984; M.A., Brown University, 1995.

Joel H. Baer. Associate Professor of English (1966); A.B., University College (NYU), 1960; M.A., Princeton University, 1965; Ph.D., Princeton University, 1969.

David Lynn Blaney. Associate Professor of Political Science (1994); B.A., Valparaiso University, 1980; M.A., University of Denver, 1983; Ph.D., University of Denver, 1990.

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.

Terry Boychuk. Assistant Professor of Sociology (1996); B.A., Carleton College, 1986; M.A., Princeton University, 1990; Ph.D., Princeton University, 1994.

Ann Braude. Associate Professor of Religious Studies (1994); A.B., Vassar College, 1977; M.A., University of Chicago, 1978; M.Phil., Yale University, 1983; Ph.D., Yale University, 1987.

David M. Bressoud. *DeWitt Wallace Professor of Mathematics and Computer Science* (1994); B.A., Swarthmore College, 1971; M.A., Temple University, 1975; Ph.D., Temple University, 1977.

Kendrick T. Brown. Assistant Professor of Psychology (1998); B.A., Mount Union College, 1993; M.A., University of Michigan, 1996; Ph.D., University of Michigan, 1998

Julie A. Bunn. Assistant Professor of Economics (1992); B.A., Occidental College, 1979; M.A., Stanford University, 1985; Ph.D., Stanford University, 1993.

Linda Burdell. Visiting Assistant Professor of Spanish (1997); B.A., Kalamazoo College, 1975; M.A., University of Michigan, 1977; M.A., University of Kansas, 1989; Ph.D., University of Kansas, 1994.

Janet L. Carlson. Associate Professor of Chemistry (1978); B.A., Hamline University, 1974; Ph.D., Stanford University, 1978.

Sally Caudill. Visiting Assistant Professor of Communication Studies (1996); B.A., Northern Michigan University, 1991; M.A., University of South Florida, 1993; Ph.D., University of Georgia, 1998.

Donald Dennis Celender. Edith M. Kelso Professor of Art (1964); B.F.A., Carnegie Institute of Technology, 1956; M.Ed., University of Pittsburgh, 1959; Ph.D., University of Pittsburgh, 1964.

Adrienne E. Christiansen. Associate Professor of Communication Studies (1990); B.A., University of Kansas, 1982; B.A., University of Kansas, 1984; M.A., University of Kansas, 1987; Ph.D., University of Minnesota, 1990.

Beth Cleary. Associate Professor of Dramatic Arts and Dance (1993); B.A., Middlebury College, 1983; M.A., University of California, Berkeley, 1991; Ph.D., University of California, Berkeley, 1994.

Paula M. Cooey. Margaret W. Harmon Professor of Religious Studies (1999); B.A., University of Georgia, 1968; M.T.S., Harvard Divinity School, 1974; Ph.D., Harvard University, 1981.

John P. Craddock. Associate Professor of Geology (1989); B.A., Macalester College, 1980; M.S., University of Michigan, 1983; Ph.D., University of Michigan, 1988.

Sarah N. Dart. Assistant Professor of Linquistics (1996); B.A., Pitzer College, 1979; M.A., University of California, Los Angeles, 1983; Ph.D., University of California, Los Angeles, 1991.

Mark A. Davis. Professor of Biology (1981); A.B., Harvard College, 1972; Ed.M., Harvard University, 1974; Ph.D., Dartmouth College, 1981.

Françoise E. Denis. Associate Professor of French (1993); Licence, Université Catholique de Louvain, 1964; M.A., University of Minnesota, 1978; Ph.D., University of Minnesota, 1986.

Antonio Dorca. Assistant Professor of Spanish (1994); B.A., Universitat Autónoma de Barcelona, 1987; Ph.D., University of California, Davis, 1993.

James R. Doyle. Associate Professor of Physics (1992); B.S., University of Michigan, 1981; Ph.D., University of Colorado, 1989.

R. Ellis Dye. DeWitt Wallace Professor of German (1966); B.A., University of Utah, 1960; M.A., Rutgers University, 1963; Ph.D., Rutgers University, 1966.

J. Michele Edwards. *Professor of Music with dual appointment in Women's and Gender Studies (1974); B.M., University of Iowa, 1967; M.A., University of Iowa, 1971; D.M.A., University of Iowa, 1983.*

Karl Albert Egge. F.R. Bigelow Professor of Economics (1970); B.A., University of Montana, 1965; M.A., Ohio State University, 1967; Ph.D., Ohio State University, 1973.

Sears A. Eldredge. Professor of Dramatic Arts (1986); B.A., Barrington College, 1958; M.F.A., Boston University of Fine Arts and Applied Arts, 1966; Ph.D., Michigan State University, 1975.

J. Peter Ferderer. Associate Professor of Economics (1996); B.A., University of Saint Thomas, 1983; M.A., Washington University, 1985; Ph.D., Washington University, 1989.

Janet M. Folina. Associate Professor of Philosophy (1989); B.A., Williams College, 1982; M. Phil., St. Andrew's University, 1983; Ph.D., St. Andrew's University, 1986.

Daphne Rainey Foreman. Assistant Professor of Biology (1995); B.S., University of Minnesota, 1985; Ph.D., University of Colorado, 1992.

Louis Edouard Forner. Professor of Music (1970); B.A., Stanford University, 1955; M.A., Stanford University, 1956.

Susan E. Fox. Assistant Professor of Mathematics and Computer Science (1995); B.A, Oberlin College, 1990; M.S., Indiana University, 1993, Ph.D., Indiana University, 1995.

Fabiola Franco. Associate Professor of Spanish (1981); B.A., Teachers Training College (Colombia), 1963; M.A., University of Minnesota, 1970; Ph.D., University of Minnesota, 1979.

Diane Glancy. Associate Professor of English (1988); A.B., University of Missouri, 1964; M.A., Central State University of Oklahoma, 1983; M.F.A., University of Iowa, 1988.

Ruthann Godollei. Associate Professor of Art (1991); B.F.A., Indiana University, 1981; M.F.A., University of Minnesota, 1983.

Galo F. González. Associate Professor of Spanish (1986); B.A., University of California, Berkeley, 1975; M.A., University of California, Los Angeles, 1977; Ph.D., University of California, Berkeley, 1985.

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.

Alvin D. Greenberg. *Professor of English (1965); B.A., University of Cincinnati, 1954; M.A., University of Cincinnati, 1960; Ph.D., University of Washington, 1963.*

Martin Gunderson. Professor of Philosophy (1973); B.A., Macalester College, 1968; M.A., Cornell University, 1971; Ph.D., Cornell University, 1972.

Arjun Guneratne. Assistant Professor of Anthropology (1995); A.B., Dartmouth College, 1985; M.A., University of Chicago, 1987; Ph.D., University of Chicago, 1994

Leland R. Guyer. *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.

John Haiman. Professor of Linguistics (1989); B.A., University of Toronto, 1967; Ph.D., Harvard University, 1971.

Thomas M. Halverson. Assistant Professor of Mathematics and Computer Science (1993); B.A., Saint Olaf College, 1986; M.A., University of Wisconsin, Madison, 1988; Ph.D., University of Wisconsin, Madison, 1993.

G. Birgitta Hammarberg. DeWitt Wallace Professor of Russian (1983); Diplom, Handelshogskolan vid Abo Akademi, Finland, 1964; A.M., Purdue University, 1977; Ph.D., University of Michigan, 1982.

Duchess Harris. Assistant Professor of Political Science (1998); B.A., University of Pennsylvania, 1991; Ph.D., University of Minnesota, 1997.

Becky Heist. Senior Instructor in Dramatic Arts and Dance (1980); B.F.A., University of Utah, 1973. M.F.A., University of Illinois, 1996.

James N. Heyman. Assistant Professor of Physics (1994); A.B., Williams College, 1985; Ph.D., University of California, Berkeley, 1992.

Daniel J. Hornbach. DeWitt Wallace Professor of Biology (1984); B.S., University of Dayton, 1974; M.S., University of Dayton, 1976; Ph.D., Miami University, 1980.

Rebecca C. Hoye. Assistant Professor of Chemistry (1995); B.A., Bucknell University, 1973; M.A., Harvard University, 1975; Ph.D., University of Minnesota, 1981

Rachel Huener. Instructor of German (1995); B.A., St. Olaf College, 1980; M.A., Northwestern University, 1982.

Joan P. Hutchinson. *Professor of Mathematics and Computer Science* (1990); B.A., Smith College, 1967; M.A., University of Pennsylvania, 1971; Ph.D., University of Pennsylvania, 1973.

David C. Itzkowitz. Professor of History (1974); B.A., Amherst College, 1965; M.A., Columbia University, 1966; Ph.D., Columbia University, 1972.

Nancy Johansen. Professor of Education (1961); A.A., Stephens College, 1949; B.S., Wisconsin State College, 1954; M.A., University of Minnesota, 1956; Ph.D., University of Missouri, 1965.

Leola Aletha Johnson. Assistant Professor of Communication Studies (1998); B.A., Ohio State University, 1973; M.A., University of Kentucky, 1976; Ph.D., University of Minnesota, 1990.

Daniel T. Kaplan. Assistant Professor of Mathematics and Computer Science (1996); B.A., Swarthmore College, 1981; M.S., Stanford University, 1982; M.S., Harvard University, 1986; Ph.D., Harvard University, 1989.

Roy Kay. Assistant Professor of English (1997); B.A., Hamline University, 1982; M.A., Boston University, 1985, Ph.D., University of Geneva, 1996.

Daniel R. Keyser. Associate Professor of Dramatic Arts (1978); B.A., Hanover College, 1972; M.F.A., University of Wisconsin, 1975.

Sung Kyu Kim. Professor of Physics (1965); B.A., Davidson College, 1960; A.M., Duke University, 1964; Ph.D., Duke University, 1965.

Aglaia Kiarina Kordela. Assistant Professor of German (1999); B.A., University of Athens, Greece, 1991; M.A., University of Pittsburgh, 1994; Ph.D., Cornell University, 1998.

Mahnaz Kousha. Associate Professor of Sociology (1991); B.A., Iran-Tehran, 1978; M.S., University of Kentucky, 1981; M.S., University of Kentucky, 1985; Ph.D., University of Kentucky, 1990.

Gary J. Krueger. Associate Professor of Economics (1989); B.A., University of Illinois, 1981; M.S., University of Wisconsin, Madison, 1986; Ph.D., University of Wisconsin, Madison, 1989.

Ruthanne Kurth-Schai. Associate Professor of Education (1986); B.S., University of Minnesota, 1976; M.S., Indiana University, 1978; Ph.D., University of Minnesota, 1984.

Lynda LaBounty. Associate Professor of Psychology (1973); B.A., Eastern Washington State College, 1963; M.S., Eastern Washington State College, 1968; Ph.D., University of California, San Diego, 1971.

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Stella Anderson, Violin/Viola

Barbara Brooks, Introductory Piano/Piano

Thomas Cravens, Electric Bass/Electric Guitar/Jazz Improvisation

Christine Dahl, Piano

Susan DeJong, Flute

Lynn Erickson, Trumpet

Robert Ford, Pipe Band Drum Instructor

Rachel Green, Oboe

Brian Grivna, Jazz Improvisation/Saxophone

Shelley Hanson, Clarinet

Catherine Hart, Highland Dance

Florence Hart, Highland Dance

Michael Hauser, Flamenco Guitar

Camilla Heller, Cello

Lawrence Henry, Staff Accompanist

Phil Hey, Jazz Drums

Andrew Hoag, Director of Piping

Joseph Holmquist, Percussion

Mary Horozaniecki, Violin

Robert Jamieson, Gamba

Winston Kaehler, Harpsichord/Organ

Ellen Lease, Jazz Piano

Caroline Lemen, French Horn

Paul Maybery, Tuba

Sowah Mensah, African Flute/African Percussion/African Voice

Laura Nichols, Voice

Celeste O'Brien, Piano

Derrick Pennix, Voice

Sue E. Roberts, Euphonium/Trombone

John Roth, Classical Guitar/Finger Style Guitar/Mandola/Mandolin

Jennifer Rubin, Bass

Bridgett Stuckey, Harp

Charles Ullery, Bassoon

David Whetstone, East Indian Improvisation/Sitar

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.

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.

Higher Education Consortium for Urban Affairs (HECUA): A consortium of Upper Midwest colleges and universities providing off-campus learning programs for undergraduates.

Pew Midstates Science and Mathematics Consortium: A consortium of nine liberal arts colleges and two research universities (Washington University and the University of Chicago) that sponsors collaborative programs for faculty and students to enhance science and mathematics education supported by the Pew Charitable Trusts.

Accreditations, Approvals and Memberships

Accredited by: North Central Association of Colleges and Secondary Schools.

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 and Graduation Statistics 1998–1999

Enrollment, Fall Term 1998

	Men	Women	Total
Degree Seeking Students	765	993	1758
Non-Degree Seeking Students	12	21	33
Total	777	1014	1791

Racial/Ethnic Background—Fall Term 1998

	Number of	Percentage of
	Students	Student Body
White American	1386	77.4
International	201	11.2
Asian American	82	4.6
Black American	65	3.6
Hispanic American	52	2.9
American Indian	5	0.3
Total	1791	100.0

Students By Age—Fall 1998

	Number of	Number of	
	Part-Time	Full-Time	Percentage of
	Students	Students	Student Body
Under 18	15	44	3.3
18-19	4	811	45.5
20-21	9	773	43.7
22-24	16	105	6.7
25-29	5	3	0.4
30-34	1	0	0.1
35-39	1	0	0.1
40-49	4	0	0.2
50-64	0	0	0.0
65 and over	0	0	0.0
Total	55	1736	100.0

Geographical Distribution, Fall Term 1998

	Number of	Percentage of
	Students	Student Body
Ramsey County (Minnesota)	71	4.0
Hennepin County (Minnesota)	141	7.9
Minnesota (outside Twin Cities)	264	14.7
U.S.(excluding Minnesota)	1114	62.2
Foreign Countries	201	11.2
Total	1791	100.0

Home States of Students—Fall 1998

Ohio-35 Alabama-2 Kentucky-12 Alaska-6 Louisiana-1 Oklahoma-5 Arizona-14 Maine-17 Oregon-47 Pennsylvania-22 Arkansas-3 Maryland-35 California-42 Massachusetts-56 Puerto Rico-2 Colorado-26 Michigan-29 Rhode Island-6 Connecticut-17 Minnesota-476 South Carolina-1 Delaware-2 Mississippi-1 South Dakota-15 District of Columbia-12 Missouri-25 Tennessee-10 Montana-18 Texas-30 Florida-8 Nebraska-16 Utah-5 Georgia-13 Hawaii-7 New Hampshire-6 Vermont-19 Idaho-5 New Jersey-16 Virginia-13 New Mexico-6 Washington-48 Illinois-80 Indiana-24 New York-72 Wisconsin-142 Iowa-68 North Carolina-5 Wyoming-3 Kansas-14 North Dakota-17

Home Countries of Foreign Students by Citizenship—Fall 1998

Argentina-3 Greece-1 Portugal-1 Romania-3 Armenia-1 Guatemala-1 Austria-1 Senegal-2 Hungary-1 Bahamas-12 India-9 Sierra Leone-1 Bangladesh-3 Iran-1 Slovakia-2 Bhutan-1 South Africa-4 Israel-2 Bolivia-3 Italy-1 South Korea-1 Bosnia-1 Jamaica-11 Spain-2 Sri Lanka-2 Brazil-4 Japan-14 Bulgaria-3 Jordan-1 Swaziland-1 Canada-9 Kenya-2 Sweden-12 Cayman Islands-1 Lebanon-1 Switzerland-1 China-1 Madagascar-1 Tanzania-3 Colombia-2 Mauritius-3 Thailand-4 Turkey-5 Costa Rica-1 Nepal-4 Croatia-1 Netherlands-3 Uganda-1 Cyprus-8 New Zealand-2 United Kingdom-6

Denmark-3 Norway-9 Venezuala-1
Ecuador-1 Pakistan-2 Yugoslavia-1
Egypt-1 Peru-3 Zaire-1
Germany-2 Philippines-2 Zimbabwe-6
Ghana-4 Poland-1

Class of 1998 B.A. Degrees by Department/Program

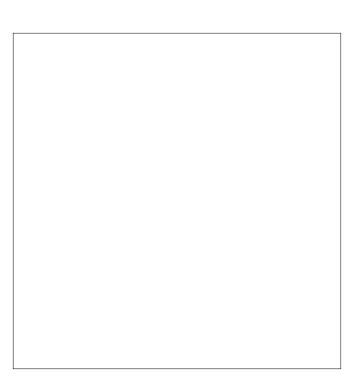
(includes double majors) Anthropology-21 International Studies-22 Japan Studies-3 Art-17 Biology-47 Latin American Studies-4 Chemistry-14 Linguistics-2 Classics-6 Mathematics-18 Communication Studies-20 Music-8 Computer Science-10 Neuroscience-7 Dramatic Arts-8 Philosophy-19 East Asian Studies-7 Physics-4 Economics-43 Political Science-28 Psychology-44 English-44 **Environmental Studies-9** Religious Studies-14 French-6 Russian-4 Geography-15 Russian, Central, East European Studies-2 Geology-6 Sociology-9 Spanish-12 German Studies-12 History-31 Urban Studies-11 Individually Designed-6 Women's and Gender Studies-7

Graduation Rates

(Definition of student cohorts and computational methods determined by the Student Right-to-Know Act)

Six year graduation rate:

For all freshmen entering the college in 1992	78%
For all freshmen entering the college in 1991	79%
For all freshmen entering the college in 1990.	80%
For all freshmen entering the college in 1989	79%



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Additional Information/Useful Telephone Numbers

appropriate offices listed below.	,
Admissions Office	(651) 696-6357 (800) 231-7974 ublications, and
Financial Aid Office	
Bursar's Office	(651) 696-6161 r business
Office of Student Academic Records and the Registrar	(651) 696-6200

Information about Macalester College is available by contacting one of the

(Registration information, transfer credit policy, and requests for transcripts.)

Address written correspondence to the appropriate office or department at Macalester College, 1600 Grand Avenue, St. Paul, Minnesota 55105.